COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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June 19, 2007

IN REPLY PLEASE
REFER TO FILE: PD-1

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

Dear Supervisors:

TEMPLE AVENUE TRAIN DIVERSION PROJECT
HIGHWAYS-THROUGH-CITIES–RESOLUTION NO. 3902
CITY OF POMONA
TRANSFER OF SURPLUS FLOOD CONTROL DISTRICT PROPERTY
AUTHORIZE APPROPRIATION ADJUSTMENT
SUPERVISORIAL DISTRICT 1
4 VOTES

IT IS RECOMMENDED THAT YOUR BOARD:

1. Acting as a responsible agency for the Temple Avenue Train Diversion Project, consider the enclosed Negative Declaration prepared and adopted by the Alameda Corridor-East (ACE) Construction Authority as lead agency and approved by the California Transportation Commission on October 30, 2003, together with any comments received during the public review process, and the Finding of No Significant Impact determination by the Federal Highway Administration on September 30, 2002; certify that the Board has independently considered and reached its own conclusions regarding the environmental effects of the project as shown in the Negative Declaration, and adopt the Mitigation Monitoring Plan for the project.

2. Adopt the enclosed Resolution, finding that the acquisition of right of way from the Los Angeles County Flood Control District (District) for the Temple Avenue Train Diversion Project, within the City of Pomona, is of general County interest and providing that County-aid shall be extended for this purpose in the amount of $332,000. The necessary funds are available in the First Supervisorial District's Road Construction Program, included in the Fiscal Year 2006-07 Proposition C Local Return Fund Budget.

3. Approve the enclosed Appropriation Adjustment in the Fiscal Year 2006-07 Proposition C Local Return Fund Budget to transfer $332,000 from the Services and Supplies appropriation to the Other Charges appropriation. This action is needed to provide sufficient funding for the acquisition of right of way from the District required for the Temple Avenue Train Diversion Project.

IT IS FURTHER RECOMMENDED THAT YOUR BOARD ACTING AS THE GOVERNING BODY OF THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT:

4. Declare the fee interest in South San Jose Creek, Parcels 10EX, 11EX, 14EX, 15EX, 16EX, 17EX, 18EX, 27EX, 31EX, and 33EX (34,890 square feet), located southeast of Pomona Boulevard along the northwest boundary of the Union Pacific Railroad right of way between Temple Avenue and South Humane Way, in the City of Pomona, to no longer be required for the purposes of the District.

5. Authorize the transfer of Parcels 10EX, et al., to ACE Construction Authority for the Temple Avenue Train Diversion Project.

6. Instruct the Chairman to sign the enclosed Quitclaim Deed and authorize delivery to the Grantee.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The ACE Construction Authority, on behalf of the City of Pomona, is proceeding with the Temple Avenue Train Diversion Project. The proposed project will eliminate the Union Pacific Railroad Company at-grade crossings at Temple Avenue and Pomona Boulevard by constructing a new track adjacent to the existing Union Pacific Railroad Company tracks to the east. The tracks to the east are already grade separated at Temple Avenue.

The proposed new track will require the acquisition of right of way owned by the District along San Jose Creek. Your Board's approval of the enclosed Resolution will authorize the expenditure of County Highways-Through-Cities funds in the City of Pomona for the acquisition of the right of way from the District. This will enable the District to transfer its fee interest in South San Jose Creek Parcels 10EX, et al., to ACE for the project.

The District acquired the fee title to Parcels 10EX, et al., as part of the land needed for the construction of the South San Jose Creek project. Construction has been completed, and the subject parcels lie outside of the right of way required for the flood control channel and are surplus.

Implementation of Strategic Plan Goals

This action meets the County Strategic Plan Goal of Service Excellence, as the Temple Avenue Train Diversion Project will improve traffic flow for the residents of the City and nearby unincorporated County areas who travel on Temple Avenue and Pomona Boulevard.

FISCAL IMPACT/FINANCING

The fair market value of the South San Jose Creek Parcels 10EX, et al., is $332,000. Funding for this transaction is available in the First Supervisorial District's Road Construction Program, included in the Services and Supplies appropriation of the Fiscal Year 2006-07 Proposition C Local Return Fund Budget. Upon your approval of the enclosed Appropriation Adjustment, sufficient funding will be available in the Other Charges appropriation of the Fiscal Year 2006-07 Proposition C Local Return Fund Budget for the acquisition of right of way.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

Section 1680 of the California Streets and Highways Code provides that the board of supervisors of any county, may by a resolution adopted by a four-fifths vote of its members, determine that the acquisition of rights of way for the separation of any railroad/street grade crossing is of general county interest and that county-aid shall be provided for that purpose.

As required by California Government Code Section 65402(c), a notification of the proposed sale was submitted to the City of Pomona's Planning Division for its report as to conformance with the adopted General Plan. By letter dated May 15, 2007, it was deemed by the City of Pomona's Planning Division that the proposed sale conforms to its General Plan.

The enclosed Resolution has been approved as to form by County Counsel.

ENVIRONMENTAL DOCUMENTATION

In extending the above-described aid and in authorizing the sale of the parcels, the County and District, respectively, are acting as a responsible agency for the Temple Avenue Train Diversion Project. The ACE Construction Authority as the lead agency has prepared an initial study, consulted with the County and District, and adopted a negative declaration for this project on July 26, 2001. The project will not have a significant effect on the environment.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

There will be no impact on current services.

CONCLUSION

Enclosed are an original and one duplicate of the Quitclaim Deed. Please have the original and duplicate signed by the Chairman and acknowledged by the Executive Officer of the Board. Please return the executed original to Public Works and retain the duplicate for your files.

Please return one adopted copy of this letter and a certified copy of the Resolution to Public Works.

Respectfully submitted,

FOR: DONALD L. WOLFE
Director of Public Works

MER:abc
C071078
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Enc. 4

cc: Auditor-Controller (Accounting Division - Asset Management)
Chief Administrative Office
County Counsel

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY
NEGATIVE DECLARATION (CEQA)

Pursuant to: Division 13, Public Resources Code

Description

The Temple Avenue Train Diversion Project would virtually eliminate through freight train use of the former Southern Pacific (SP) railroad tracks, now owned by the Union Pacific (UP), at the existing Pomona Boulevard and Temple Avenue grade crossings. The Project is proposed to reduce train noise and vehicular traffic congestion and improve safety at the Temple Avenue grade crossing. Construction of the proposed Project is anticipated to occur over 18 months to two years.

Determination

The Alameda Corridor-East Construction Authority prepared the Initial Study. On the basis of this study, it is determined that the proposed Project will not have a significant effect on the environment for the following reasons:

1. With the elimination of through freight train use of the existing Temple Avenue at-grade rail crossing, the Project will improve vehicular safety and reduce vehicular air emissions.
2. The Project would require the taking of California State Polytechnic University (Cal Poly) at Pomona lands currently under agricultural use. The ACE Construction Authority proposes to mitigate the effects of the taking of University agricultural lands by developing a mitigation and compensation plan in coordination with Cal Poly. A private at-grade crossing would be developed to permit agricultural workers to cross the new rail connection.
3. The Project will incorporate current seismic design standards to withstand seismic ground shaking that would result from a maximum credible earthquake.
4. The Project will reduce the risk of upset or accidents by providing a grade separation between public roadways and an operating rail line or by substantially reducing rail/vehicular at-grade conflicts.
5. Sampling is recommended to characterize hazardous waste potential of soil generated by clearing and grading. A health and safety plan, waste management plan, sampling and analysis plan, and work plan for remediation of any hazardous waste encountered will be prepared and implemented prior to construction.
6. The Train Diversion Project would substantially reduce noise at Cal Poly student housing and residences along Valley Boulevard but increase noise levels at the Lanterman Development Center (LDC). Measures are proposed to mitigate noise impacts at the LDC, including such measures as sound and vibration insulation, relocation of sensitive facilities, and noise walls. Measures are also proposed to reduce intermittent localized vibration impacts during construction.
7. The Project would not result in any displacements of existing residences, businesses or other uses.
8. The Project vicinity is developed and does not include habitat for any species identified as a sensitive, special status, or candidate species.

Rick Richmond
Chief Executive Officer
Alameda Corridor East Construction Authority

7/26/01
Date

FEDERAL HIGHWAY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT
FOR
Alameda corridor East, Temple and Ramona crossings in the
City of Los Angeles, Los Angeles County, California

The Federal Highway Administration (FHWA) has determined that the proposed Project will have no significant impact on the human environmental. This Finding of No Significant Impact is based on the attached Environmental Assessment (EA) and incorporated technical report, which have been independently evaluated by the FHWA and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. These documents provide sufficient evidence and analysis that an Environmental Impact Statement (EIS) is not required. The FHWA assumes responsibility for the accuracy, scope, and content of the attached EA and incorporated technical reports.

9/30/02
Date

Gary N. Hamby
Division Administrator
Federal Highway Administration

Alameda Corridor East Project
Temple Avenue Train Diversion or Grade Separation Project
Southern Pacific Line
In Los Angeles County, California

Initial Study / Environmental Assessment

State of California
Department of Transportation

And

U.S. Department of Transportation
Federal Highway Administration

And

Alameda Corridor East Construction Authority

Pursuant to: 42 U.S.C. 4332(2)(c)
And
49 U.S.C. 303

Ronald Kosinski — 12-28-00
for Raja Mitwasi — Date
Deputy District Director
California Department of Transportation

3-7-01
Michael Ritchie — Date
Division Administrator
Federal Highway Administration

Rick Richmond — 12/20/00
Rick Richmond — Date
Chief Executive Officer
Alameda Corridor East Construction Authority

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1. PURPOSE AND NEED

1.1 PURPOSE OF THE PROPOSED PROJECT

The Temple Avenue Train Diversion or Grade Separation Project on the former Southern Pacific Line is one element of the overall Alameda Corridor East (ACE) Program. The purpose of this Project is to reduce traffic congestion, enhance safety, reduce air pollution emissions, and reduce noise impacts.

1.2 NEED FOR THE PROPOSED PROJECT

Increases in vehicle and rail freight traffic in the Los Angeles region have increased the potential for traffic delay and associated accidents at railroad grade crossings throughout the San Gabriel Valley over the last decade. Expected regional and national economic growth, together with increased international trade, will increase the train traffic through the San Gabriel Valley another 67 percent by 2020. 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 Valley. Expected vehicle delay at these 55 railroad grade crossings would increase by 186 percent between 1994 and 2020. Vehicle queues caused by the trains would increase by 57 percent on average, with resulting queues as long as 1,200 feet.

In response to these anticipated future conditions, the San Gabriel Valley Council of Governments (SGVCOG) adopted the Alameda Corridor East (ACE) Program, which includes a number of grade crossing improvement projects at various locations along both the former Southern Pacific Railroad line and the Union Pacific Railroad line in the San Gabriel Valley between downtown Los Angeles and the Los Angeles County line, a distance of some 35 miles. The Temple Avenue Train Diversion or Grade Separation Project is one of the proposed projects resulting from nine months of consultant 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 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 in the previous paragraph), 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.

1.3 SCOPE OF THIS ENVIRONMENTAL ANALYSIS

1.3.1 History of the Alameda Corridor East Program

The San Gabriel Valley Council of Governments (SGVCOG) established the ACE Construction Authority for implementation of the ACE Program projects, including a "Jump Start" program (installation of traffic control devices), a series of roadway widenings, and various grade separations. The Temple Avenue Train Diversion or Grade Separation Project is one component of this program.

1.3.2 Relation of this Document to Environmental Analysis of Other ACE Projects

ACE projects include: safety and signalization improvements, median barriers, street widenings, and grade separations of rail right-of-way and highway/roadways, such as the Temple Avenue Train Diversion or Grade Separation Project. Individual environmental documents (Categorical Exemptions/Exclusions or Initial Studies/ Environmental Assessments) have been prepared for logical grouping or for individual components, given that the groupings or individual components: (1) are distant from each other, spanning 35 miles from downtown Los Angeles to the San Bernardino County line on two distinct rail lines, (2) have logical termini and specific project boundaries within which the component or grouping will be constructed, (3) have construction limits that do not overlap for the individual or grouped project components, (4) 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), (5) would not preclude consideration of another project component or alternatives to that component, and (6) will generally be constructed during different time frames.

Environmental impacts of the Temple Avenue Train Diversion or Grade Separation Project are evaluated in this document. This Project has logical termini and specific Project boundaries, as discussed in the Project Description and shown on Figure 1. Its construction limits do not overlap with those of other ACE projects. It has independent utility, and would not preclude consideration of other project components. In general, the combination of individual ACE components would not involve collective adverse impacts, except for potential collective impacts during the construction phase. The simultaneous closure of two or more proximate grade crossings for construction work could cause collective traffic impacts and congestion due to the loss of local traffic carrying capacity across the railroad line. However, the schedule for the ACE Program does not include simultaneous construction work on proximate grade crossings and therefore these potential collective impacts will not occur.

2. DESCRIPTION OF THE PROJECT ALTERNATIVES

There are three Temple Avenue Project alternatives: (1) the Temple Avenue Train Diversion Project, (2) the Temple Avenue Grade Separation Project, and (3) the No-Build Alternative.

2.1 TEMPLE AVENUE TRAIN DIVERSION PROJECT, SP LINE

The Train Diversion Project would virtually eliminate through freight train use of the existing Temple Avenue at-grade crossing of the former Southern Pacific tracks (SP tracks), now owned by the Union Pacific Railroad (UPRR). As shown in Figure 1, this would be accomplished by constructing a rail connection between the SP tracks and UP tracks that run roughly parallel to the SP tracks, approximately 150 meters (500 feet) to the south. The UP tracks are already grade separated from Temple Avenue. The rail connection between the two sets of tracks would be located southwest of the Route 57/ Temple Avenue interchange. The 1,460-meter (4,800-foot) connection would diverge from the SP tracks approximately 1.6 kilometers (1 mile) south of the Valley Boulevard/ Pomona Boulevard intersection, cross California State Polytechnic University at Pomona (Cal Poly) agricultural fields and connect with the eastern UP tracks 450 meters (1,500 feet) south of the Temple Avenue crossing. This connector would require a 15-meter (50-foot) wide right-of-way. By switching rail traffic to this eastern line, through freight trains would use the existing Temple Avenue undercrossing on the UP line; however, a small number of trains would continue to use the SP tracks for local deliveries.

2.2 TEMPLE AVENUE GRADE SEPARATION PROJECT, SP LINE

The Temple Avenue Grade Separation Alternative would depress Temple Avenue about 9 meters (30 feet), beginning at the Temple Avenue/Pomona Boulevard intersection, approximately 150 meters (490 feet) east of the tracks, as shown in Figure 2. The depressed segment of Temple Avenue would extend approximately 300 meters (980 feet) west of the tracks. A two-way loop connector would be constructed to provide for turning movements between Temple Avenue and Valley Boulevard. The connector from Temple Avenue would begin approximately 200 meters (650 feet) west of the undercrossing and curve north and east to connect with Valley Boulevard directly opposite University Parkway, which currently ends in a cul-de-sac at the SP tracks. Structures supporting the railroad tracks and Valley Boulevard would span Temple Avenue at grade. During construction of the Valley Boulevard Bridge, a temporary detour would be constructed in a parking area in the southwest quadrant of Temple Avenue and Valley Boulevard. This parking area is part of the adjacent California Polytechnic University at Pomona. (Cal Poly) student housing complex. Construction of the detour would require the removal of a six-foot-high wall between the student housing parking area and Valley Boulevard. At completion of the Project, the area would be restored to parking use and the six-foot-high wall replaced. Also during construction, University Parkway would be extended across the SP rail line at a new, temporary rail crossing, and would extend across Valley Boulevard to a temporary detour road in the

northeast quadrant of Valley and Temple Boulevard. (The drawings at the end of this document show the construction sequencing for the Grade Separation Alternative.)

2.3 NO-BUILD ALTERNATIVE

The No-Build Alternative would consist of all existing projects and programmed transportation improvements in the area, without the proposed Temple Avenue Train Diversion or Grade Separation Project.

Figure a - Train Diversion Alternative (overall track schematic)

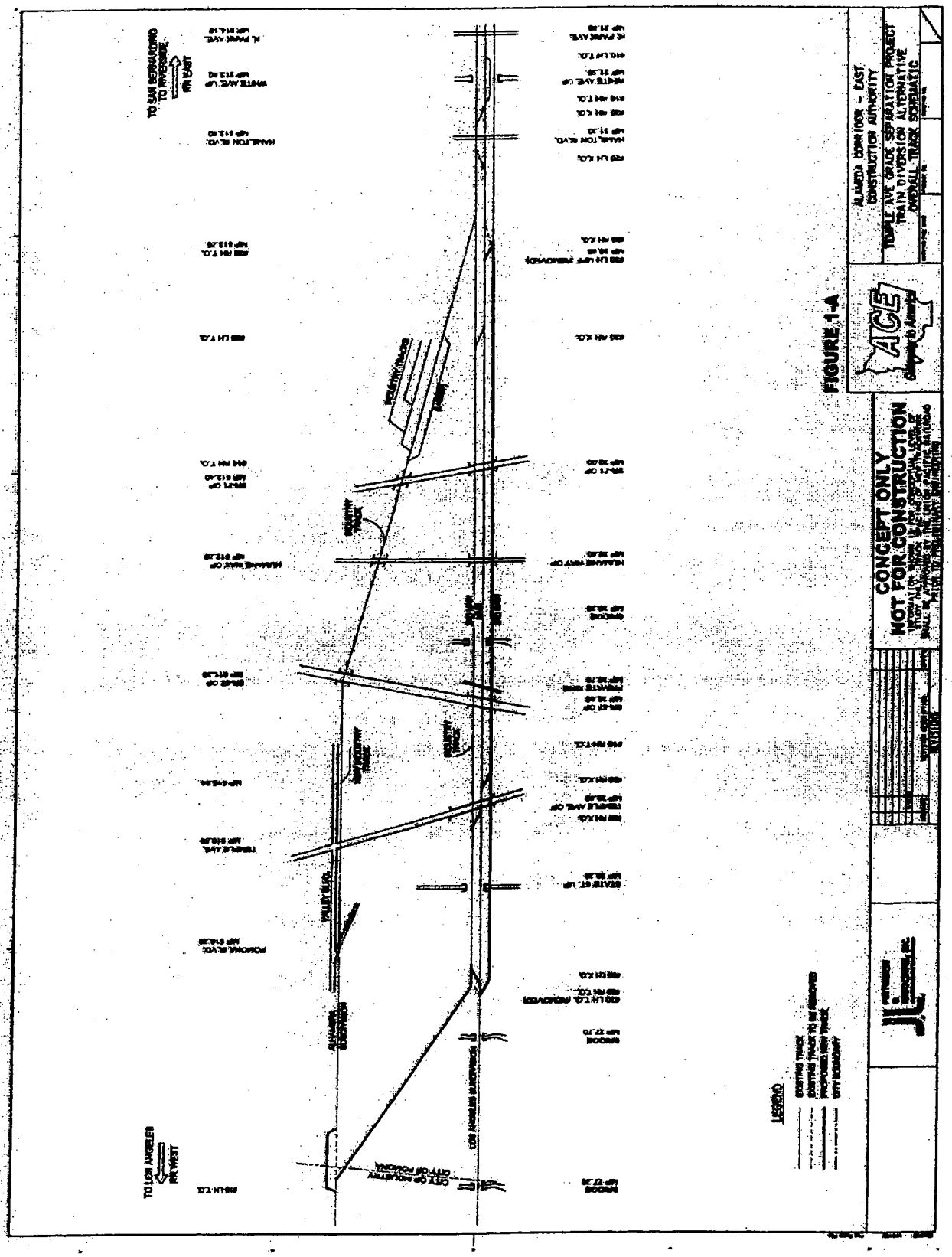

Figure b - Train Diversion Alternative (details at west end)

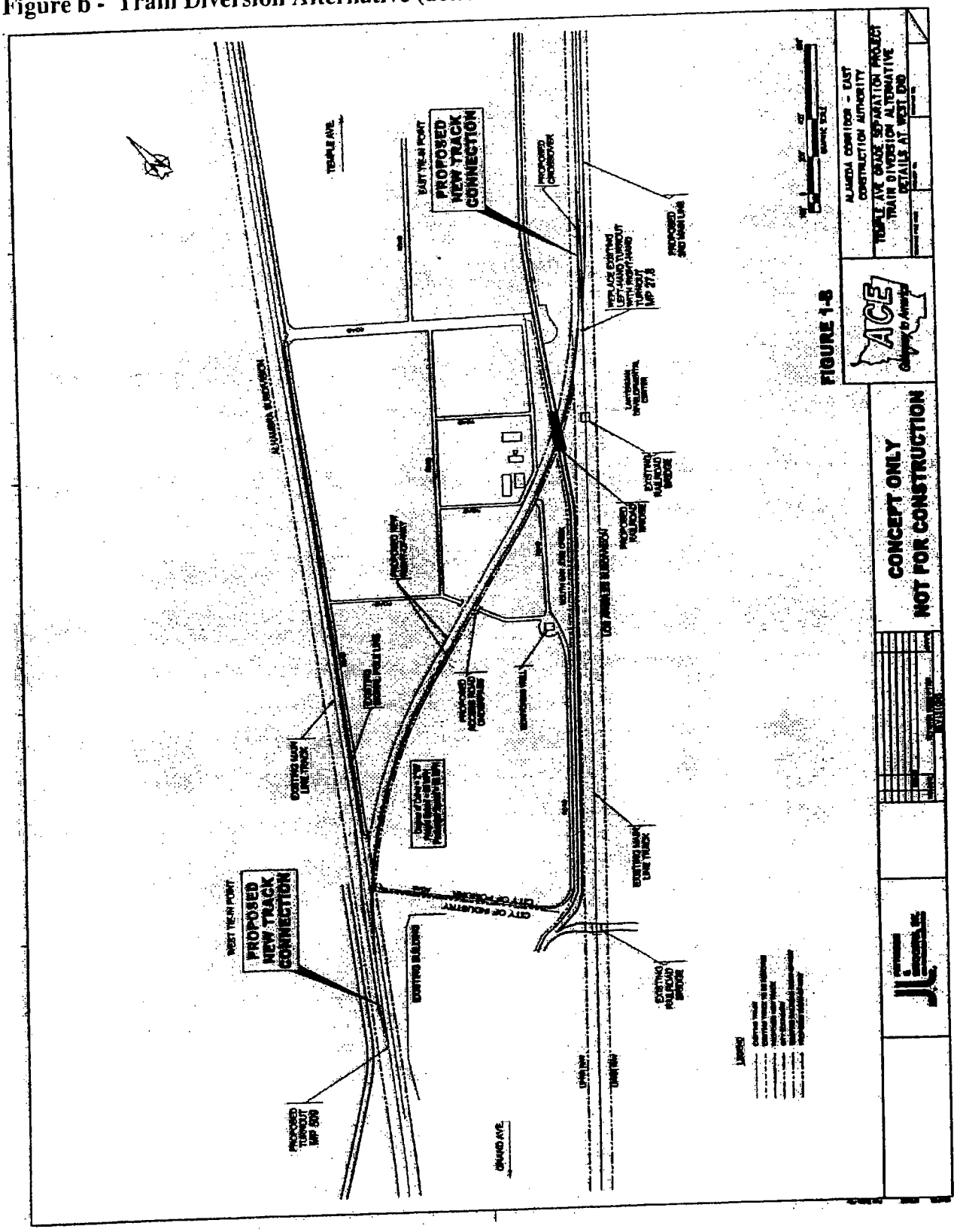

Figure c - Temple Avenue Separation - Conceptual Engineering Design

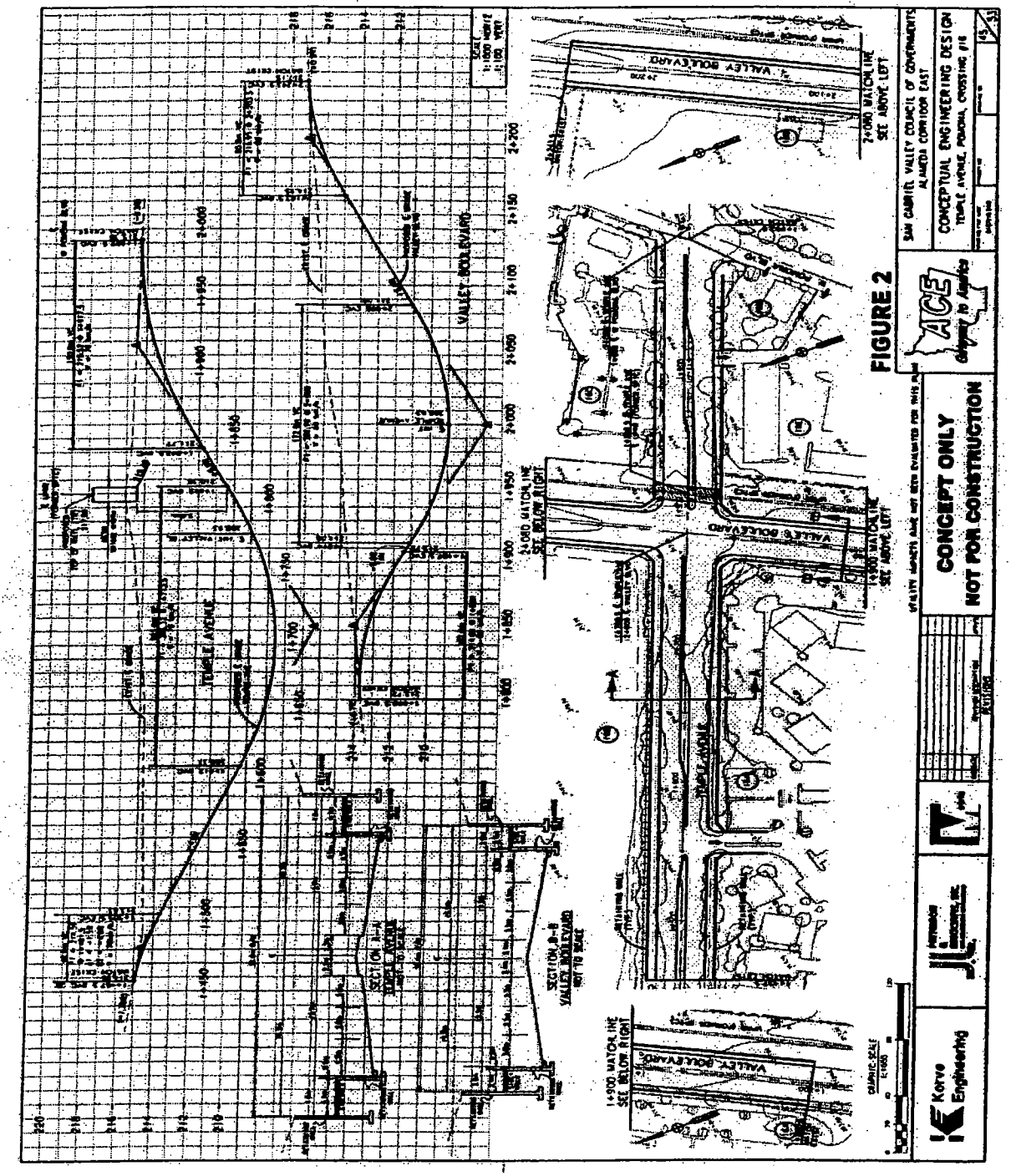

Figure d - Temple Avenue Grade Separation Detour Plans - Phase 1

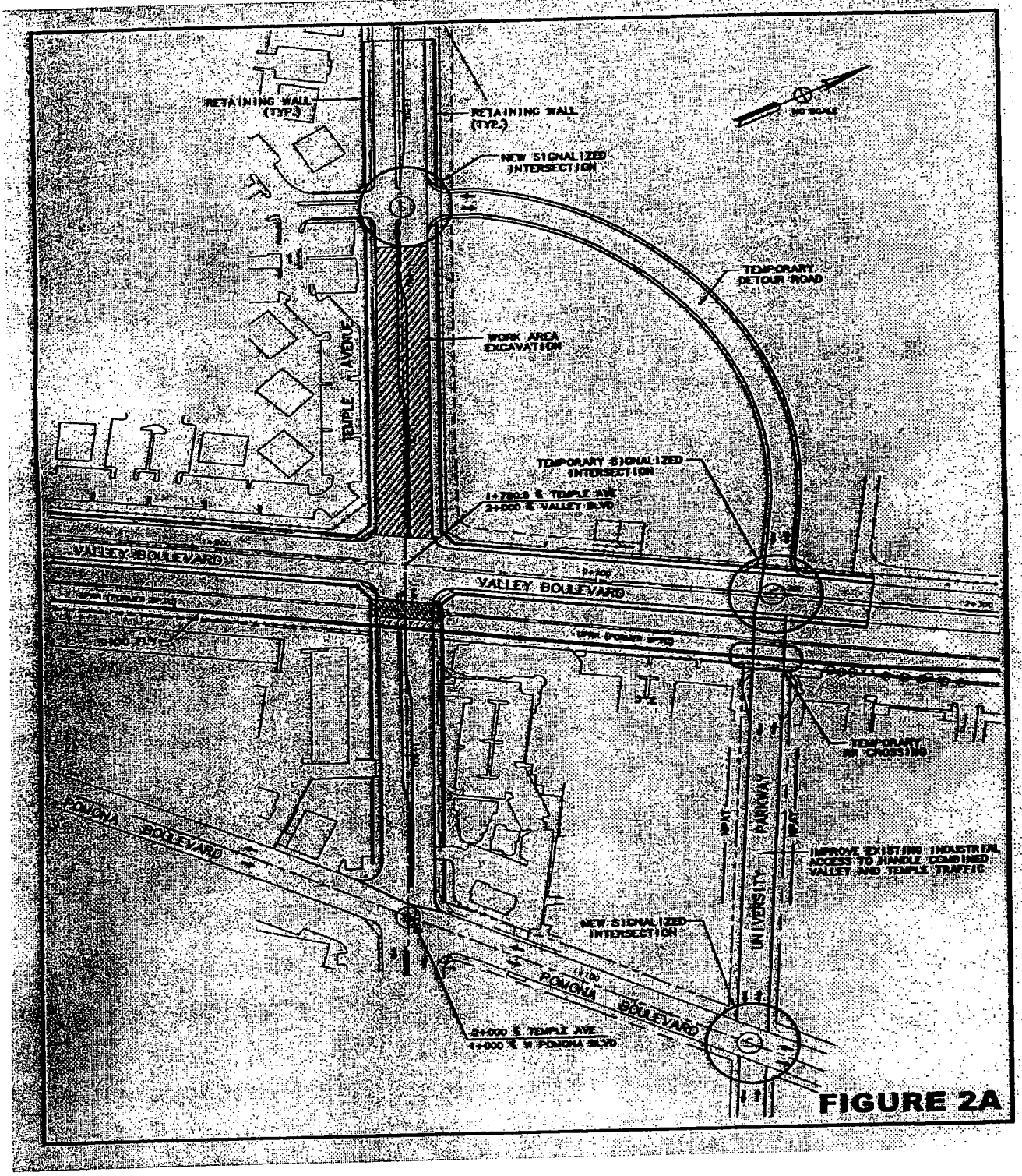

Figure e - Temple Avenue Grade Separation Detour Plans - Phase 2

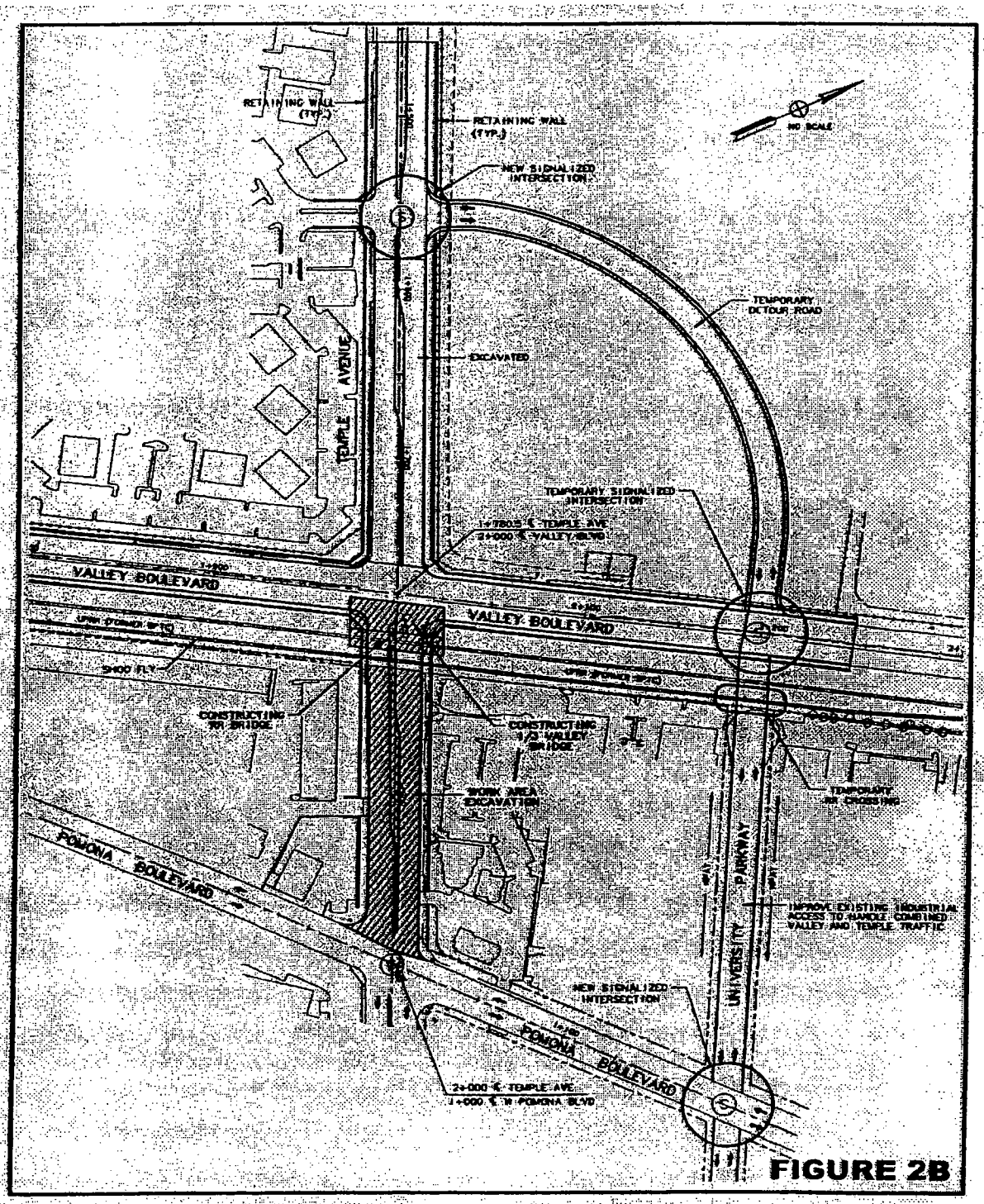

Figure f - Temple Avenue Grade Separation Detour Plans - Phase 3

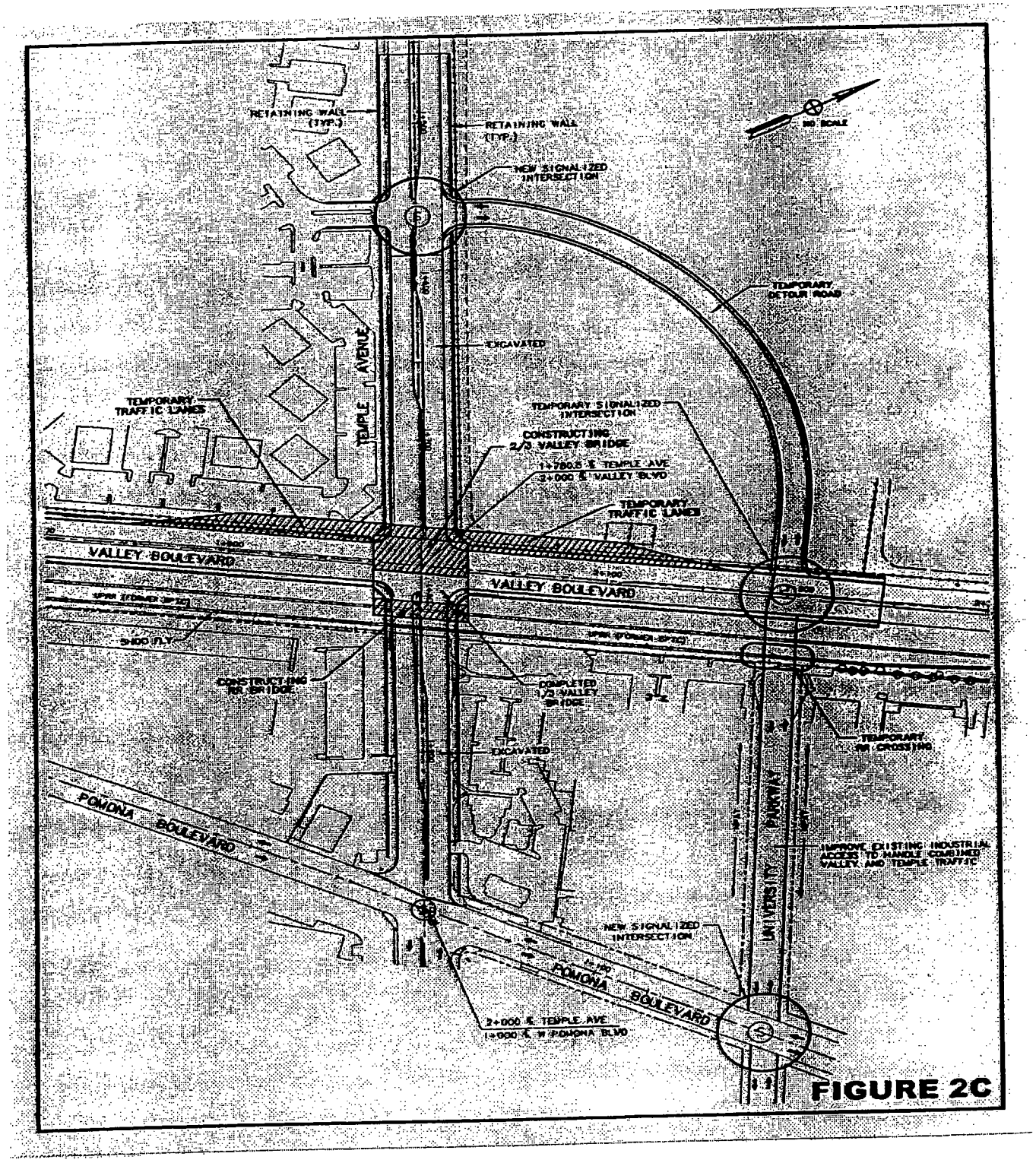

Figure g - Temple Avenue Grade Separation Detour Plans - Phase 4

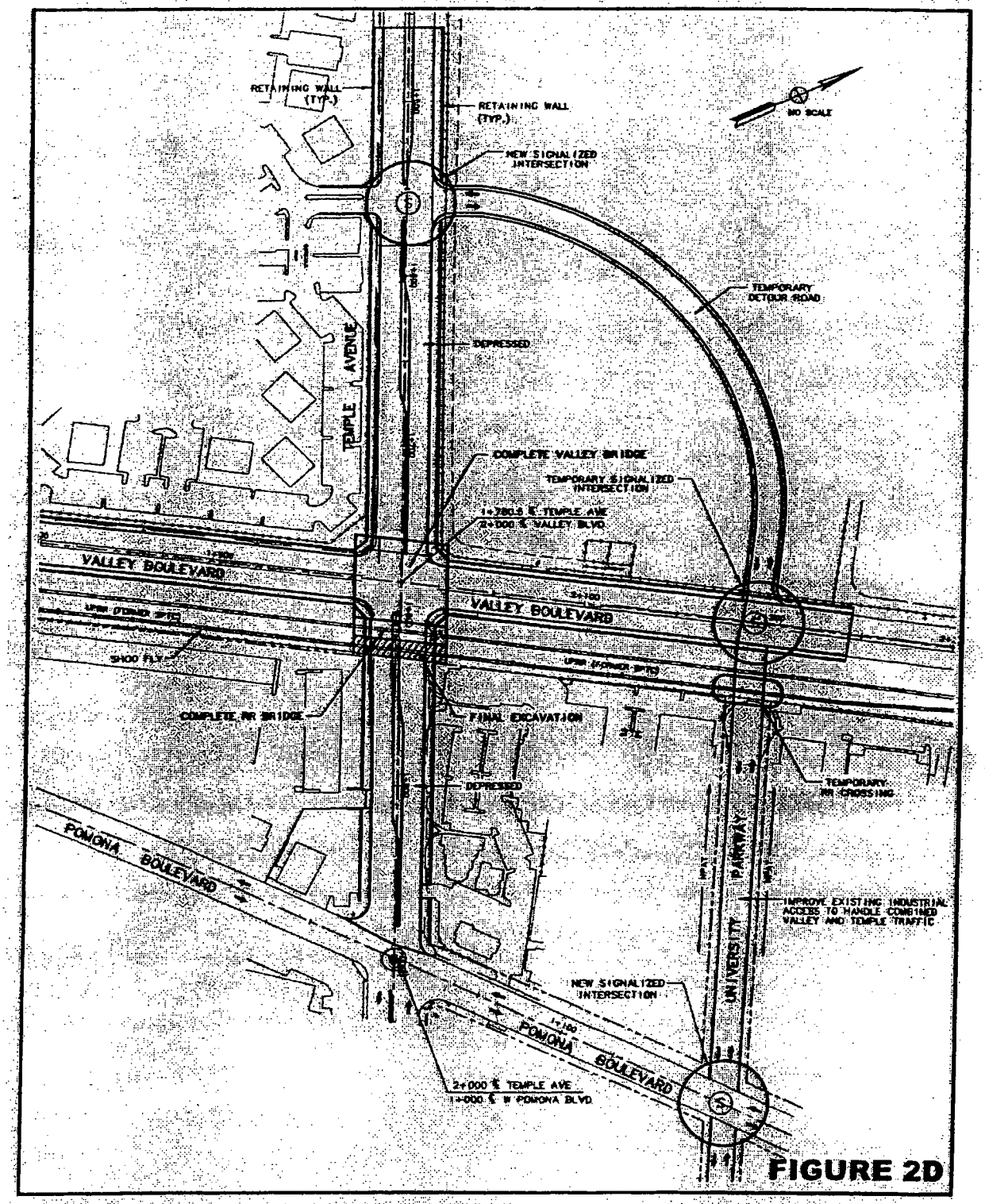

Figure h Temple Avenue Grade Separation Detour Plans - Final Condition

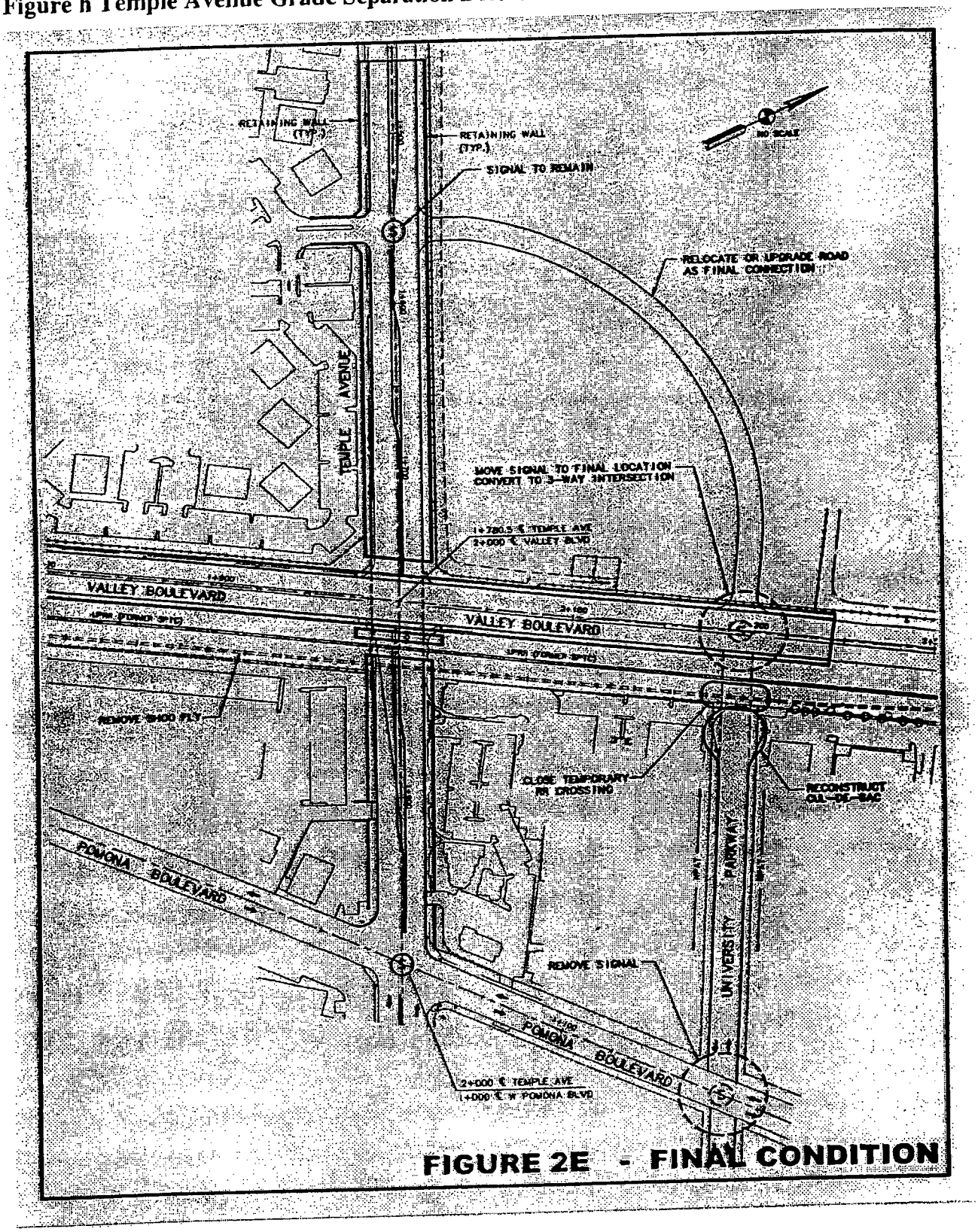

FIGURE 2E - FINAL CONDITION

3. AFFECTED ENVIRONMENT

3.1 TOPOGRAPHY AND GEOLOGY

The Project site is located in the low-lying plains of the San Gabriel Valley, approximately 8 kilometers (5 miles) from the San Jose Hills. Existing data show that surficial soils in the project area consist of sands, silts and clay. The presence of clayey soils in the area indicates a possibility that expansive soils may be present. No unique geologic or physical features, or mineral resources, are located in the project area.

3.2 SEISMICITY

The Project is located in a seismically active area. Active and potentially active faults are listed in Table 3.2-1. The distances are based on estimates from the Los Angeles/San Bernardino county lines, about 7.2 km (4.5 miles) east of the Temple Avenue site. None of these faults crosses proposed improvements.

Table 3.2-1
Characteristics of Active and Potentially Active Faults that May Affect the Project Area

Fault	Distance to Fault (km.)	Distance to Fault (miles)	Maximum Credible Earthquake
Sierra Madre	5.5	3.5	7.5
Indian Hill	4	2.5	7
San Jose A	1.5	1	6.75
Red Hill	9.5	6	7
Duarte	17.5	11	7.5
Cucamonga	14.5	9	7
San Andreas-Hwy 166 to Cajon Pass	30.5	19	8.25
Elsinore A (Whittier)	18.5	11.5	7.5
Chino	11	7	6.5
San Jacinto-Lytle Creek to Claremon	29	18	7.5
Hollywood	39	24.5	7.5
San Andreas-Cajon Pass to Salton S	33	20.5	7.5
Rialto-Colton	24	15	6.6
San Fernando	57	35.5	7.5
Elysian Park Thrust	37.5	23.5	6.75
Eagle Rock-San Rafael	38.5	24	6.75
Elsinore B	53	33	7.5
Banning	46.5	29	6.9
San Gabriel B	54.5	34	7.5
Raymond	28	17.5	6
Santa Monica	65	40.5	7.25
Verdugo Fault	47	29.5	6.75
Grass Valley-Summit Valley	37.5	23.5	6.75

Table 3.2-1
Characteristics of Active and Potentially Active Faults that May Affect the Project Area

Fault	Distance to Fault (km.)	Distance to Fault (miles)	Maximum Credible Earthquake
Cleghorn	34.5	21.5	6.6
San Gorgornio	80	50	7.5
San Andreas-N Branch	49	30.5	7
Malibu Coast	87	54.5	7.5
Newport-Inglewood A	50.5	31.5	7
Norwalk	26.5	16.5	6

Source: Group Delta Consultants, September 1999

3.3 HAZARDOUS WASTE

A Phase I Investigation was conducted to identify and evaluate potential hazardous waste sites and environmental factors that may have impacted the soil and groundwater quality at the project site.

Two sites (1/4-mile west and less than 1/2-mile southwest from the Temple Avenue/SP crossing, respectively) have been identified which have volatile organic compound (VOC) contamination at or above the Maximum Contaminant Level (MCL) as designated by Region 9 United States Environmental Protection Agency (USEPA). One Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site is located approximately 1/4-1/2 mile northwest of the Temple/SP grade crossing. According to the environmental database report, the site is currently not on the National Priority List (NPL), and has been given a Low status.

A site identified to have released hazardous substances is located approximately 1/4-1/2 mile northwest of the Temple/SP grade crossing. According to the environmental database report, the site does not require Department of Toxic Substances Control (DTSC) action, but has been referred to the Regional Water Quality Control Board (RWQCB). Another site was identified to have released hazardous substances approximately 1/2-1 mile east of the Temple/SP grade crossing, but does not require DTSC actions.

A leaking underground storage tank (LUST) has been identified to be located approximately 1/4-1/2 mile north northwest of the Temple/SP grade crossing. However, the site has been signed off, and remedial action completed or deemed unnecessary.

Other possible environmental sites of concern within one-mile of the Temple/SP grade crossing include a site with Resource Conservation Recovery Act (RCRA) corrective action activity; sites where hazardous substances have been accidentally released; sites having possible contamination; and solid waste/landfill facilities.

Groundwater in the vicinity of the Temple Avenue/Valley Boulevard grade crossing is estimated to be less than 6 meters (20 feet) below ground surface.

3.4 BIOLOGICAL RESOURCES

The project vicinity consists primarily of urbanized areas and farmland. Other unpaved areas in the vicinity consist of planting strips along roadways and maintained railroad right-of-way. A biological resources survey was conducted and no areas of riparian habitat or other sensitive natural community were identified in the project area, and there is no habitat suitable for any special status or candidate species. The results of the biological survey are documented in the Biological Resources and Water Quality Technical Study, Alameda Corridor – East. There are no wildlands or natural landmarks within or adjacent to the project area.

3.5 WETLANDS

The U.S. Army Corps of Engineers (USACOE) has jurisdiction over wetlands and other waters of the United States, through Section 404 of the Clean Water Act. Hydrophytic vegetation, wetland hydrology and hydric soils all must be present to qualify a site as a jurisdictional wetland (Environmental Laboratory 1987) as defined in Section 404 of the Clean Water Act. The USACOE requires that: (1) impacts to wetlands be avoided; (2) unavoidable impacts be minimized to the maximum extent practicable; and (3) when unavoidable, impacts be mitigated to achieve no-net-loss of wetland functions and values.

The California Department of Fish and Game (CDFG) focuses on minimizing and otherwise mitigating adverse effects on wetland communities that provide wildlife habitat through section 1600, et seq., of the State Fish and Game Code (Streambed Alteration Agreement). All USACOE wetlands are CDFG wetlands; however, CDFG wetlands also include habitat with hydrophytic vegetation regardless of whether the habitat meets the hydrology or hydric soils criteria. CDFG's requirements regarding avoidance and mitigation of impacts are identical to the USACOE requirements listed above.

The biological resources survey did not identify any potentially jurisdictional wetlands or other waters of the U.S. in the vicinity of the Temple Avenue Train Diversion project or the Grade Separation Alternative. South San Jose Creek, a concrete-lined flood control channel, would be crossed by the Train Diversion project. This concrete-lined channel runs roughly next to and on the north side of the UP right of way, and there is no associated riparian habitat.

3.6 AIR QUALITY

The federal Clean Air Act of 1970 resulted in the adoption of federal air pollutant standards, known as National Ambient Air Quality Standards (NAAQS), for pollutants including carbon monoxide (CO), ozone (O_3), sulfur oxides (Sox), nitrogen oxides (Nox), and fine particulate matter (PM_{10}). Areas exceeding federal NAAQA are identified and designated as nonattainment areas. The state air pollutant standards are known as the California Ambient Air Quality Standards (CAAQS), and are generally more stringent than the NAAQS. Federal and state standards are shown in Table 3.6-1.

Table 3.6- 1 Ambient Air Quality Standards

(page 1 of 2)

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		Federal Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	0.12 ppm (235 µg/m³)	Same as Primary Standard	Ethylene Chemiluminescence
	8 Hour	—		0.08 ppm (157 µg/m³)		
Respirable Particulate Matter (PM_{10})	Annual Geometric Mean	30 µg/m³	Size Selective Inlet Sampler ARB Method P (8/22/85)	—	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	24 Hour	50 µg/m³		150 µg/m³		
	Annual Arithmetic Mean	—		50 µg/m³		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		65 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean			15 µg/m³		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m³)	Non-dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m³)	None	Non-dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)				
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	—	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.25 ppm (470 µg/m³)		—		
Lead	30 days average	1.5 µg/m³	AIHL Method 54 (12/94) Atomic Absorption		Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³		
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	—	Fluorescence	0.030 ppm (80 µg/m³)	—	Pararosaniline
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (365 µg/m³)	—	
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	1 Hour	0.25 ppm (655 µg/m³)		—	—	
Visibility Reducing Particles	8 Hour (10 am to 6 pm, PST)	In sufficient amount to produce an extinction coefficient of 0.23 per kilometer — visibility of ten miles or more (0.07 — 30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 percent. Method ARB Method V (8/18/89)		No Federal Standards		
Sulfates	24 Hour	25 µg/m³	Turbidimetric Barium Sulfate-AIHL Method 61 (2/76)			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Cadmium Hydroxide STRacan			

See footnotes on next page...

California Air Resources Board (1/25/99)

Table 3.6-1 Ambient Air Quality Standards

(page 2 of 2)

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM_{10}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

   In addition, Section 70200.5 lists vinyl chloride (chloroethene) under "Ambient Air Quality Standards for Hazardous Substances." In 1978, the California Air Resources Board (ARB) adopted the vinyl chloride standard of 0.010 ppm (26 $\mu g/m^3$) averaged over a 24-hour period and measured by gas chromatography. The standard notes that vinyl chloride is a "known human and animal carcinogen" and that "low-level effects are undefined, but are potentially serious. Level is not a threshold level and does not necessarily protect against harm. Level specified is lowest level at which violation can be reliably detected by the method specified. Ambient concentrations at or above the standard constitute an endangerment to the health of the public."

   In 1990, the ARB identified vinyl chloride as a Toxic Air Contaminant and determined that there was not sufficient available scientific evidence to support the identification of a threshold exposure level. This action allows the implementation of health-protective control measures at levels below the 0.010 ppm ambient concentration specified in the 1978 standard.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. For $PM_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 mm of mercury. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. New federal 8-hour ozone and fine particulate matter standards were promulgated by U.S. EPA on July 18, 1997. The federal 1-hour ozone standard continues to apply in areas that violated the standard. Contact U.S. EPA for further clarification and current federal policies.

California Air Resources Board (1/25/99)

The proposed project is located within the South Coast Air Basin (SCAB). The Los Angeles County portion of the SCAB has been designated as a state and federal attainment area for sulfur dioxide. For nitrogen dioxide its state designation is attainment, and the federal designation is unclassified/attainment. This area is designated as a federal and state non-attainment area for CO, O_3, and PM_{10}.

The South Coast Air Quality Management District (SCAQMD) monitors air quality conditions at 37 locations throughout the SCAB. Conditions in the project area are best reflected by monitoring data from the Pico Rivera monitoring station. Table 3.6-2 illustrates the number of violations recorded at this monitoring station during the 1992-1994 period. Air quality from this period is used because the traffic study prepared for this IS/EA uses 1994 as the base year.

Table 3.6-2
1992-1994 Air Quality Criteria Pollutant Violations

Pollutant	Standard		Number of Days above Standard					
			1992		1993		1994	
	Fed.	State	Fed.	State	Fed.	State	Fed.	State
Ozone	0.12 ppm (hourly)	0.09 ppm (hourly)	45	101	33	76	21	63
Carbon Monoxide	9 ppm (8 hour avg.)	9.0 ppm (8 hour avg.)	0	0	0	0	0	1
Nitrogen Dioxide (1)	N/A	0.25 ppm (hourly)	N/A	1	N/A	1	N/A	0

Notes
Ppm = parts per million
(1) There is no federal daily standard for NO_2. Thee federal NO_2 standard is an annual arithmetic mean of 0.053 ppm. There is therefore no information available regarding number of days above the standard.
Source: Terry Hayes Associates, September 1999

3.7 NOISE AND VIBRATION

3.7.1 Noise

Specialized metrics have been developed to measure noise. The loudness of sound is associated with its sound pressure level, most commonly measured in decibels (dB). Through a process known as "A-weighting," measurement of loudness is adjusted to account for the range of sounds audible to the human ear. This "A-weighted" decibel measurement is written "dBA." For areas with primarily daytime use that are not more 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). 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 10dB applied to those noises occurring during nighttime (10 PM to 7 AM; 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}).

A noise survey was conducted in August 1999 for several Alameda Corridor East projects, including the Temple Avenue Grade Crossing Alternative. A supplemental noise analysis was prepared for the Temple Avenue Train Diversion in May 2000. The noise survey documents the existing noise environment in the various project areas and provides 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 Temple Avenue Grade Crossing and Train Diversion project area, and includes a general discussion of the observed noise environment at relevant measurement sites. Detailed results of the noise measurements are included in the Noise and Vibration Technical Reports. The major noise sources during the noise monitoring were traffic on Valley Boulevard and trains on the SP tracks. Projections of noise impacts that would result from the project alternatives are provided in Section 4.7.

Train Noise

The formulas used to model train noise are given in the Federal Railroad Administration (FRA) draft manual *High-Speed Ground Transportation Noise and Vibration Assessment* (FRA, 1998). Noise monitoring included short-term (20 to 30 minute) measurements and long-term (24 to 48 hour) measurements at two sites relevant to the proposed Temple Avenue build alternatives. These locations are shown in Table 3.7-1. Based on FRA draft noise impact criteria, the noise survey made a comparison of train noise exposure caused by the project with noise exposure prior to construction of the project, using the Day-Night Average Noise Level (L_{dn}) noise metric. Data from long-term measurements were used to separate train noise from other noise.

Highway Noise

The Caltrans highway noise prediction computer model, SOUND32, PC Version 1.41, was used for the vehicular traffic noise computations (Caltrans, 1983). This model is based on the highway traffic noise prediction method specified in FHWA-RD-77-108 (FHWA, 1978). In order to determine the noise levels generated by vehicular traffic, the SOUND32 computer program requires traffic volumes, speeds, and roadway grade adjustments. These inputs were obtained, and the SOUND32 model was run, as described in more detail in the Noise Technical Report.

Existing Noise

Measurements of the existing noise environment were performed at two locations: (1) at 3667 Valley Boulevard near the intersection of Valley Boulevard and Temple Avenue, and (2) in the Lanterman Development Center (LDC) near Building 3. The noise measurement results are summarized in Table 3.7-1.

Table 3.7-1
Noise Monitoring Results

Location	Start Date	Duration	Day-Night Average Level, L_{dn} (dBA)		
			Measured	Trains Only	Without Trains
1. 3667 Valley Boulevard	8/03/99	48 hours	77	75	72
2. Building 3, Lanterman Development Center	12/13/99	24 hours	76	75	62

Noise sensitive land uses near the Valley/Temple intersection include Cal Poly student housing, mobile home parks, and a single-family residential development. The major noise sources during the noise monitoring were traffic on Valley Boulevard and trains on the SP tracks.

Because of the grade crossings at Temple Avenue and at Pomona Boulevard, most trains sound their horns as they pass these areas. The maximum levels of horn noise often exceeded 100 dBA at the measurement site. The measured L_{dn} over a 48-hour period was 77 dBA. Without the trains on the SP tracks, the L_{dn} would have been 72 dBA.

The second noise monitoring site was within the LDC near Building 3, which is used as a dormitory. The measured L_{dn} over a 24-hour period was 76 dBA, which was almost entirely due to the existing train traffic on the UP tracks. Without the trains, L_{dn} would have been approximately 62 dBA. Because the UP tracks are entirely grade separated as they pass through the project area, train horns are not sounded on this track on a regular basis. The measurement at Building 3 should be representative of the remainder of the LDC with appropriate adjustments for the attenuation of train noise with distance from the tracks and acoustic shielding from intervening buildings. A total of 36 train events were identified from inspection of the sound level time history, which is approximately 10 more trains than the 1994 base average daily train volumes (See Table 3.7-2).

Table 3.7-2
1994 Freight and Passenger Train Traffic (SP/UP)

	Southern Pacific		Union Pacific		Total	
	Freight	Passenger	Freight	Passenger	Freight	Passenger
1994	33	0	16	12	49	12

Source: Korve Engineering, 1996

Another area with the potential of being adversely affected by noise from the proposed Train Diversion Alternative is the residential development in Diamond Bar. For the noise assessment, it was assumed that noise within the residential area is dominated by the existing freight and passenger train traffic on the UP tracks.

3.7.2 Vibration

Ground-borne vibration is generated by both motor 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.

Measurements of freight train induced ground-borne vibration were performed at Building 3 of the LDC. Building 3 is located approximately 80 feet from the main east-west Union Pacific track linking Southern California with points to the east. Building 3 is of particular concern since it is used as a residence for developmentally-challenged adults, and vibration from the additional train traffic during the nighttime hours could interfere with the residents' sleep. Building 3 is a one story building that appears to be slab-on-grade construction. The walls are approximately 10 inches thick. For security reasons, all the windows are sealed and ventilation is provided by the heating and air conditioning system.

Freight train vibration measurements were performed on the afternoon of July 12, 2000. Four high-sensitivity seismic accelerometers were used, three outside the building and one inside the building. The indoor accelerometer was located on the bedroom floor directly inside one of the windows. All of the accelerometers were mounted in the vertical direction. The outdoor accelerometers at 30 and 50 feet from the tracks were mounted on stakes driven into the ground, the 80 foot accelerometer was mounted on the concrete sidewalk, and the indoor accelerometer was attached to the linoleum floor. The acceleration signals were recorded using a Teac Model RD135 8-channel digital audio tape recorder.

A total of four freight trains passed during the measurements, two on the far track in the westbound direction and two on the near track in the eastbound direction. The second westbound train decelerated and stopped directly in front of the measurement site and was not included in the data analysis.

The recorded acceleration signals were analyzed to obtain time history charts of the rms[1] vibration velocity level as each train passed the measurement site. The maximum vibration levels as the locomotives and rail cars passed and the average levels as the rail cars passed were read off these charts and are tabulated in Table 3.7-3. The measurement results show that the maximum levels of freight train vibration inside Building 3 are just above the threshold of human perception and are well below the 72 VdB threshold for acceptable vibration inside residential buildings. This is consistent with observations in the field that the train vibration was only barely perceptible. The measurements and field observations show that ground-borne vibration generated by freight train traffic on the Union Pacific tracks is only barely perceptible inside Building 3. The measured interior vibration levels were all well below criteria used for acceptable vibration of residential buildings.

[1] Root mean square (rms) is square root of the average of the squared vibration amplitude. All of the vibration analysis is based on an rms time constant of 1 second.

Table 3.7-3.
Measured Vibration Velocity Levels at Lanterman Development Building 3

Train # and Direction	Speed, mph	Length	Accel. Position	RMS Vibration Velocity Levels, VdB*			Comments
				Locomotive	Rail Car		
				Max	Max	Avg	
1 West Bound	25 to 30	3 locos 78 cars	30 ft	72	74	70	No maximum for locomotives, train accelerating
			50 ft	68	71	67	
			82 ft	70	72	69	
			inside	65	66	62	
3 East Bound	15 to 20	3 locos 97 cars	30 ft	78	72	69	Train accelerating
			50 ft	72	68	65	
			82 ft	78	71	69	
			inside	65	62	58	
4 East Bound	30 to 35	3 locos 71 cars	30 ft	77	74	72	Relatively constant speed
			50 ft	72	69	68	
			82 ft	78	75	71	
			inside	67	64.5	61	

* RMS Vibration velocity levels using a decibel reference of 1 µin/sec, abbreviated VdB

3.8 WATERWAYS AND HYDROLOGY

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 San Gabriel River Watershed, to which stormwater captured on the site ultimately flows. The concrete-lined South San Jose Creek flood control channel would be crossed by the Train Diversion project. There are no areas of 100-year floodplain in the project area. No large bodies of water are present in the vicinity of the project, and the project site is more than 45 kilometers (28 miles) from the Pacific Ocean coastline. Based on existing data, depth to groundwater is estimated as 6 meters (20 feet).

3.9 WATER QUALITY

The federal Clean Water Act, as amended, requires projects that disturb more than two hectares (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.

3.10 HISTORIC AND CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act of 1966 (the Act) requires federal agencies to take into account the effects of their activities and programs on historic properties. Guidelines for implementing Section 106 requirements are promulgated by

the Advisory Council on Historic Preservation (ACHP) in "Protection of Historic Properties" (36 CFR Part 800). State of California cultural resource regulations are provided in the California Environmental Quality Act (CEQA; PRC Division 13, Sections 21000-21178); archaeological and historical resources are specifically treated under Sections 21083.2 and 21084.1, respectively.

An Area of Potential Effects (APE) for archaeological and historical architectural resources was delineated in accordance with implementing regulations of the Advisory Council on Historic Preservation. The APE limits for archaeological resources are defined as the project footprint (Area of Direct Impact). The APE for historic/architectural resources includes one parcel beyond the limits of construction.

3.10.1 Archaeological Resources

Six cultural resource investigations have been conducted in the project vicinity, and there is one recorded archaeological site within a 0.5-mile radius of the project location. Archaeological work for the present project included an archival records search and a pedestrian survey. No archaeological features or prehistoric or historical deposits were encountered during the field investigation.

3.10.2 Historic and Architectural Resources

An historical architectural survey was performed and an Historical Architectural Survey Report (HASR) prepared to evaluate the potential for the proposed project to affect buildings and structures that appear to be eligible for listing on the National Register of Historic Places or the California Register of Historical Resources. The HASR was prepared in compliance with applicable sections of the National Historic Preservation Act and implementing regulations of the Advisory Council on Historic Preservation for federally-funded undertakings and their impacts on historic properties. It also complies with applicable sections of the California Public Resources Code.

Three properties are located in the APE, one of which was constructed before 1955. This property was fully evaluated and does not appear to meet the eligibility criteria for listing in the National Register of Historic Places. The HASR concluded that there were no properties or structures within the APE of the two build alternatives that met the criteria for listing in either the National Register or the California Register.

3.10.3 Paleontological Resources

A paleontologic resources literature review and mitigation plan were prepared for the Alameda Corridor - East program, including the Temple Avenue Train Diversion Project. Recent alluvial sediments have been mapped in the project area and are considered to have low paleontologic sensitivity; however, these sediments overlie the highly fossiliferous Puente Formation that has high potential to contain significant resources. Fossil vertebrates of Pleistocene age have been recovered from Pleistocene older alluvium throughout the Los Angeles Basin and inland Southern California.

3.11 VISUAL RESOURCES

The existing visual environment in the vicinity of the proposed Temple Avenue Train Diversion project is characterized by institutional, agricultural, residential, industrial, and transportation uses, including existing freight rail lines. The Lanterman Development Center, a large institutional facility, is located near the Temple Avenue crossing of the UP. Cal Poly maintains agricultural fields in the project area. There are residential uses north of the SP tracks, and industrial uses are generally clustered along the railroad right-of-way.

The existing Temple Avenue grade crossing of the SP tracks (location of the Temple Avenue Grade Separation Alternative) is immediately east of Valley Boulevard, which runs parallel to the SP tracks. The visual environment in the vicinity of the Temple Avenue/Valley Boulevard intersection includes strip commercial shopping complexes located to the east and Cal Poly property to the west, with the railroad right-of-way located across Valley Boulevard. Student housing is located southwest of the project area. Trees and other landscape vegetation are planted along Temple Avenue.
No scenic resources were identified in the project area.

3.12 LAND USE

The location of the Temple Avenue Train Diversion project is an area with institutional, agricultural, residential, and industrial land uses. A large institutional facility, the Lanterman Developmental Center, is located near the Temple Avenue crossing of the UP. The Lanterman Center is federally certified and licensed according to California laws to provide acute, skilled, and intermediate care to clients who are profoundly or severely developmentally disabled. The number of residents on the Lanterman campus, as of July 1, 1999, was 696. The campus includes administrative and support services (similar to those necessary for the operation of a small city), medical ancillary services, central program services (including employment skills, education and library services, recreation programs), and a research center. Cal Poly maintains fields in agricultural uses at the site of both the Grade Separation and the Train Diversion Alternatives. There are residential uses west of the SP tracks, and industrial uses are generally clustered along the railroad right-of-way.

The existing Temple Avenue grade crossing of the SP tracks (location of the Temple Avenue Grade Separation Alternative) is in the City of Pomona and is immediately to the east of Valley Boulevard, which runs parallel to the SP tracks. Strip commercial shopping complexes are located on the northeast and southeast quadrants of the Temple Avenue/Valley Boulevard intersection. Cal Poly owns all property on the northwest and southwest quadrants of the intersection, with the railroad right-of-way located across Valley Boulevard. The northwest property is vacant and used by the University for various agricultural or animal husbandry programs. The property to the southwest has student housing and is surrounded by a stucco wall approximately 4 feet high.

3.13 SOCIAL AND ECONOMIC

Demographic characteristics of the affected environment are derived from the 1990 U.S. Census, Southern California Association of Governments (SCAG) County Projections, and California Department of Finance.

For the purposes of the socioeconomic evaluation, the term study area refers to Census Tracts 4024.02, 4024.03 and 4032.00, which encompass the proposed limits of the Temple Avenue Train Diversion and Grade Separation Alternatives and include portions of the City of Pomona that surround the immediate project area. Data for the study area are compared to overall conditions for Los Angeles County and the City of Pomona.

3.13.1 Population

The 1990 population for the study area was 10,314 as shown below in Table 3.13-1. In 1990, the population in the City of Pomona was 131,723 and is estimated at 147,700 for the year 2000.

Table 3.13-1
Population Growth Projections

	1990[1]	2000[2]	2020[3]
Los Angeles County	8,863,164	9,884,300	12,249,100
City of Pomona	131,723	147,700	N/A
Study Area	10,314	N/A	N/A

[1] 1990 U.S. Census
[2] California Department of Finance
[3] SCAG, 1998 RTP Adopted Forecast, April 1998

An ethnic profile of the existing population was derived from 1990 Census data. The racial categories used include White, Black, American Indian/Eskimo/Aleutian, Asian/ Pacific Islander, and Other. Persons of Hispanic origin were sampled separately for the Census and are included in more than one ethnic category. Ethnic composition for Los Angeles County, City of Pomona and the study area are shown in Table 3.13-2. Total study area percentages for the Black, American Indian/Eskimo/Aleutian and Other population categories are comparable to those of Los Angeles County and the City of Pomona. The study area has a higher percentage of the White population category than either the county or City of Pomona. Asian/Pacific Islanders in the county constitute 11 percent, higher than the City of Pomona and the study area. The Hispanic population in the City of Pomona is 51 percent, higher than the county and the study area.

Table 3.13-2 Ethnic Composition						
	Los Angeles County		City of Pomona		Study Area	
White	5,035,103	57%	75,113	57%	6,913	67%
Black	992,974	11%	19,013	14%	1,154	11%
Amer. Ind/Esk./Aleut	45,508	<1%	745	<1%	33	<1%
Asian/Pac. Isl.	954,485	11%	8,791	7%	495	5%
Other	1,835,094	21%	28,061	21%	1,719	17%
Hispanic	33,512,142	38%	67,533	51%	4,555	44%
Total	**8,863,164**	**100%**	**131,723**	**100%**	**10,314**	**100%**
Source: 1990 U.S. Census Data						

3.13.2 Housing

Household characteristics for Los Angeles County, City of Pomona and the study area are shown in Table 3.13-3.

Table 3.13-3 Household Characteristics						
	Los Angeles County		City of Pomona		Study Area	
Total Housing Units	3,163,343		38,466		3,171	
Single-Family	1,745,663	55%	25,846	67%	1,688	53%
Multi-Family	1,325,270	42%	10,303	27%	871	27%
Mobile Homes	55,730	2%	11,836	5%	569	18%
Other	36,680	1%	481	1%	43	1%
Owner Occupied	1,440,830	46%	20,929	54%	1,883	59%
Renter Occupied	1,548	49%	15,514	40%	962	30%
Total Housing Units Vacant	173,791		2,023		325	
1990 Year Census Vacancy Rate	5%		5%		10%	
Housing Units for Sale	27,721	1%	398	1%	44	1%
Housing Units for Rent	94,465	3%	976	3%	184	6%
Persons per Household	2.91		3.52		1.00/2.96/3.58	
Median Housing Value	$226,400		$134,200		$113,400/129,100	
Median Year Structure Built	1960		1963		1967/1971	
Median Gross Rent	$626		$592		$814/821	
Median Household Income	$34,965		$32,132		$32,909/36,784	
%Household Below Poverty Level	11%		14%		10%	
Source: 1990 U.S. Census Data						

3.13.3 Employment

Employment by industry for Los Angeles County, City of Pomona and the study area are shown in Table 3.13-4.

Table 3.13-4
Employment by Industry

	Los Angeles County	City of Pomona	Study Area
Employed Persons 16 Years and Over	4,203,792	55,571	4,414
Agriculture, Forestry and Fisheries	54,215	1,377	82
Mining	6,911	115	9
Construction	246,580	4,241	326
Manufacturing	861,337	14,611	963
Transportation, Communications, and Other Public Utilities	289,005	3,577	270
Wholesale Trade	213,097	2,539	246
Retail Trade	647,951	8,585	644
Finance, Insurance, and Real Estate	327,998	3,214	287
Services	1,435,797	15,391	1,391
Public Administration	120,901	1,921	196

Source: 1990 U.S. Census Data

The City of Pomona offers diverse economic resources and a thriving business community. The newly renovated Los Angeles County Fairplex has become a business attraction for international trade shows and conventions. There are 19 financial institutions in Pomona, including banks, savings and loans, and credit unions. Pomona Valley Hospital Medical Center and the Casa Colina Hospital for Rehabilitative Medicine provide health care services in the city. Major educational facilities include California State Polytechnic University, Pomona, Western University of Health Sciences, DeVry Institute of Technology and Westech College. Employment within the study area is generally reflective of the industrial, retail and service business environment found in the surrounding areas of the City of Pomona. Employment at the Lanterman Development Center includes administrative, medical and central program services connected with an institutional facility for the developmentally disabled.

3.13.4 Transportation

The existing Temple Avenue grade crossing of the SP tracks (location of the Temple Avenue Grade Separation Alternative) is located in the City of Pomona immediately to the east of Valley Boulevard, which runs parallel to the SP Tracks. Temple Avenue is an arterial roadway that runs generally east-west through the City of Pomona. Temple Avenue has an interchange with the Orange Freeway (Route 57) approximately 1,200 meters (4,000 feet) to the east of the UP track. Valley Boulevard and West Pomona Boulevard cross the SP tracks approximately 600 meters (2,000 feet) south of Temple Avenue. Traffic data obtained in 1994 show that Temple Avenue functioned at level of service (LOS) A in the vicinity of the project, indicating free-flowing traffic conditions.

4. ENVIRONMENTAL EVALUATION

The checklist on the following page was used to identify physical, biological, social and economic factors that might be affected by the proposed Project alternatives. In many cases, the background studies performed in connection with the Project clearly indicate the Project will not affect a particular item. A "NO" answer in the first column documents this determination. Where there is a need for clarifying discussion, an asterisk (*) is shown next to the answer. If the answer in the first column is "YES", then it is known that there would be an environmental impact. A detailed discussion of the answers follows the checklist.

Several technical studies were conducted to provide background information and to assist in evaluating the environmental consequences of the proposed project. These are listed below, and are incorporated by reference into this document.

- Air Quality Technical Report
- Biological and Water Quality Technical Study
- Draft Relocation Impact Report
- Geotechnical Report
- Hazardous Waste Mitigation Measures Study
- Historic Architectural Survey Report
- Historic Properties Survey Report
- Negative Archaeological Survey Report
- Noise and Vibration Assessment
- Paleontologic Resources Literature Review and Mitigation Plan
- Phase I Environmental and Geotechnical Site Assessment
- Traffic Technical Memorandum

Technical reports are available for review under separate cover at:

Alameda Corridor East Construction Authority
4900 Rivergrade Road, Suite A120
Irwindale, CA. 91706

Table 4.0- 1
Environmental Evaluation Checklist

		YES OR NO BEFORE MITIGATION	IF YES, IS IT SIGNIFICANT AFTER MITIGATION
PHYSICAL. Would the proposal (either directly or indirectly:			
1	Appreciably changes the topography or ground surface relief features?	NO*	
2	Destroy, cover, or modify any unique geologic or physical feature?	NO	
3	Result in the loss of availability of a known mineral resource or locally important mineral resource recovery site that would be of value to the region and the residents of the state?	NO	
4	Result in unstable earth surfaces or increase the exposure of people or property to geologic or seismic hazards?	NO*	
5	Result in or be affected by soil erosion or siltation (whether by water or wind)?	YES	NO
6	Result in an increased use of fuel or energy in large amounts or in a wasteful manner?	NO*	
7	Result in an increase in the rate of use of any natural resource?	NO*	
8	Result in the substantial depletion of any nonrenewable resource?	NO*	
9	Violate any published federal, state or local standards pertaining to hazardous waste, solid waste, or litter control?	NO*	
10	Modify the channel of a river or stream or the bed of the ocean or any bay, inlet, or lake?	NO	
11	Encroach upon a floodplain or result in or be affected by floodwaters or tidal waves?	NO	
12	Adversely affect the quantity or quality of surface water, groundwater, or public supply water supply?	NO*	
13	Result in the use of water in large amounts or in a wasteful manner?	NO	
14	Affect wetlands or riparian vegetation?	NO	
15	Violate or be inconsistent with federal, state, or local water quality standards?	NO*	
16	Result in changes in air movement, moisture, or temperature, or any climatic conditions?	NO	
17	Result in an increase in air pollutant emissions, adverse effects on or deterioration of ambient air quality?	NO*	
18	Result in the creation of objectionable odors?	NO	
19	Violate or be inconsistent with federal, state, or local air standards or control plans?	NO*	
20	Result in an increase in noise levels or vibration for adjoining areas?	YES	NO
21	Result in any Federal, State, or local noise criteria being equal or exceeded?	NO*	
22	Produce new light, glare, or shadows?	YES	NO
BIOLOGICAL. Would the proposal result in (either directly or indirectly):			
23	Change in the diversity of species or number of any species of plants (including trees, shrubs, grass, microflora, and aquatic plants)?	YES	NO
24	Reduction of the numbers of or encroachment upon the critical habitat of any unique, threatened or endangered species of plants?	NO	
25	Introduction of new species of plants into an area, or result in a barrier	NO	

Table 4.0- 1
Environmental Evaluation Checklist

		YES OR NO BEFORE MITIGATION	IF YES, IS IT SIGNIFICANT AFTER MITIGATION
	to the normal replenishment of existing plants?		
26	Reduction in acreage of any agricultural crop or commercial timber stand, or affect prime, unique, or other farmland of State or local importance?	YES	NO
27	Removal or deterioration of existing fish or wildlife habitat?	NO	
28	Change in the diversity of species, or numbers of any species of animals (birds, land animals, including reptiles, fish, and shellfish, benthic organisms, insects, or microfauna)?	NO	
29	Reduction of the numbers of or encroachment upon the critical habitat of any unique, threatened or endangered species of animals?	NO	
30	Conflict with any applicable habitat conservation plan, natural community conservation plan or other approved local, regional or state habitat plan?	NO	
31	Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	NO	
SOCIAL AND ECONOMIC: Would the proposal (either directly or indirectly):			
32	Cause disruption of orderly planned development?	NO*	
33	Be inconsistent with any elements of adopted community plans, policies, goals, or the California Urban Strategy?	NO*	
34	Be inconsistent with a Coastal Zone Management Plan?	NO	
35	Affect the location, distribution density, or growth rate of the human population of an area?	NO*	
36	Affect lifestyles, or neighborhood character stability?	NO*	
37	Affect minority, elderly, handicapped, transit-dependent, or other specific interest group?	YES	NO
38	Divide or disrupt an established community?	NO*	
39	Affect existing housing, require the acquisition of residential improvements, or the displacement of people, or create a demand for additional housing?	NO*	
40	Affect employment, industry or commerce, or require the displacement of businesses or farms?	NO*	
41	Affect property values or the local tax base?	NO	
42	Affect any community facilities (including medical, educational, scientific, recreational, or religious institutions, ceremonial sites, or sacred shrines)?	YES	NO
43	Affect public utilities, or police, fire, emergency, or other public services?	NO*	
44	Have a substantial impact on existing transportation systems or alter present patterns of circulation or movement of people and/or goods?	NO*	
45	Generate additional traffic?	NO*	
46	Affect or be affected by existing parking facilities or result in demand for new parking?	YES	NO
47	Expose people or structures to a significant risk or loss, injury or death involving wildland fires, including where wildlands are adjacent to	NO	

Table 4.0- 1
Environmental Evaluation Checklist

		YES OR NO BEFORE MITIGATION	IF YES, IS IT SIGNIFICANT AFTER MITIGATION
	urbanized areas or where residences are intermixed with wildlands?		
48	Involve a substantial risk of an explosion or the release of hazardous substances in the event of an accident, or otherwise adversely affect overall safety?	NO*	
49	Result in alterations to waterborne, rail, or air traffic?	NO*	
50	Support large commercial or residential development?	NO*	
51	Affect a significant archeological or historic site, structure, object, or building?	NO	
52	Affect wild or scenic rivers, or natural landmarks?	NO	
53	Affect any scenic resources or result in the obstruction of any scenic vista or view open to the public, or creation of an aesthetically offensive site open to public view?	NO*	
54	Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours, and temporary access, etc.)?	NO*	
55	Result in the use of any publicly-owned land from a park, recreation area, or wildlife and waterfowl refuge?	NO	
MANDATORY FINDINGS OF SIGNIFICANCE			
56	Does this project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant, or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	NO*	
57	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure will into the future.)	NO*	
58	Does the project have environmental effects 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. It includes the effects of other projects which interact with this project, and together, are considerable.	NO*	
59	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	NO*	

4.1 GEOLOGY AND SOILS (#1, #4, #5)

Because the project site is in the low-lying plains of the San Gabriel Valley, the potential for damage from landsliding would be low. Existing data show that surficial soils in the project area consist of sands, silts and clay, indicating some potential for encountering expansive soils. The proximity (8 kilometers or 5 miles) to the San Jose Hills, where clayey formation sedimentary rock is present, indicates some increased likelihood that expansive soils may be present. Soil testing will be conducted during the final design phase, and should localized expansive soils be identified, they will be addressed by the project design. Expansive soils will not be used as structure or permeable backfill.

As shown in Table 3.1-1 there are active and potentially active faults that may affect the project. None of these faults crosses the proposed improvements, and surface fault rupture at the project site is not likely. A seismic event on faults listed in Table 3.1-1 or other known or unknown active faults could cause structure damage to project facilities. Damage from seismic-related ground failure, including liquefaction or seismic settlement, could be localized to widespread at the project site. The potential for liquefaction is low, as a review of existing data indicates that material below groundwater in the project area consists of fine to medium silty sand. Appropriate geotechnical design techniques would be implemented to address the potential for seismically induced ground liquefaction and settlement. Design of the project will incorporate current seismic design standards to withstand seismic ground shaking that would result from a maximum credible earthquake.

Since native material consists of non-cemented granular material, both cut and fill slopes would be subject to erosion. Standard erosion control Best Management Practices will be used to minimize erosion during construction. For the Grade Separation Alternative, retaining walls will be designed and constructed for long-term slope stabilization. Where appropriate erosion prevention planting will be used in conjunction with a geofabric.

Mitigation

For the Train Diversion Alternative, ACE will conduct, with Union Pacific's approval, a structural analysis of the existing trestle railroad bridge to ensure the safety and integrity of the structure.

4.2 NATURAL RESOURCES (#6, #7, #8)

The Temple Avenue Train Diversion and Grade Separation Alternatives would reduce or eliminate traffic delays, representing a long-term reduction in fuel consumption. Petroleum fuel and other non-renewable natural resources (gravel, sand, iron) would be used during construction. Long-term maintenance of the project would require negligible amounts of these resources. Short-term impacts of this project are out-weighed by long-term energy savings.

4.3 HAZARDS AND HAZARDOUS MATERIALS (#9)

A database search was conducted to identify potential hazardous waste sites that may affect the project. Two sites (1/4-mile west and less than 1/2-mile southwest from the Temple Avenue/SP crossing, respectively) have been identified to have volatile organic compound (VOC) contamination at or above the Maximum Contaminant Level (MCL) as designated by Region 9 United States Environmental Protection Agency (USEPA).

One Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site is located approximately 1/4-1/2 mile northwest of the Temple/SP grade crossing. According to the environmental database report, the site is currently not on the National Priority List (NPL), and has been given a Low status.

A site identified to have released hazardous substances is located approximately 1/4-1/2 mile northwest of the Temple/SP grade crossing. According to the environmental database report, the site does not require Department of Toxic Substances Control (DTSC) action, but has been referred to the Regional Water Quality Control Board (RWQCB). Another site was identified to have released hazardous substances approximately 1/2-1 mile east of the Temple/SP grade crossing, but does not require DTSC actions.

A leaking underground storage tank (LUST) has been identified to be located approximately 1/4-1/2 mile north northwest of the Temple/SP grade crossing. However, the site has been signed off, and remedial action completed or deemed unnecessary.

Other possible environmental sites of concern within one-mile of the Temple/SP grade crossing include a site with Resource Conservation Recovery Act (RCRA) corrective action activity; sites where hazardous substances have been accidentally released; sites having possible contamination; and solid waste/landfill facilities.

Mitigation

Extended excavation is not anticipated for the Train Diversion project. Soil disturbance will most likely include some clearing and grading. In addition, some fill may be used to ensure the material is sufficiently stable to support the rail line.

For the Grade Separation Alternative, at least two shallow boring locations should be investigated at the Temple/SP grade crossing to evaluate soil generated by clearing and grading. Sampling intervals should be 0.15-m, 0.6-m, and 1.5-m. The six samples should be analyzed for metals and TPH. At least two samples should be analyzed for VOCs and SVOCs. At least one of the samples should be analyzed for organochlorine pesticides and PCBs. WET and TCLP analysis should be performed when indicated.

Any groundwater discovered during construction of the Temple Avenue Grade Separation Alternative would be sampled and analyzed for dissolved metals, TPH, VOCs, and SVOCs.

These mitigation measures would be conducted prior to excavation and include preparation of all relevant and appropriate plans (e.g. Health and Safety, Waste Management, Sampling and Analysis Plan, and other required plans). Excavated soil would be stockpiled on-site as interim storage, until it can be categorized as hazardous or non-hazardous based on the analytical results. Once categorized, the soil should be transported to the appropriate facilities for disposal.

4.4 WATERWAYS AND HYDROLOGY (#12)

Maximum excavation for the Temple Avenue Grade Separation Alternative would be approximately 9 meters (30 feet) and may encounter groundwater, which is estimated to be at a depth of about 6 meters (20 feet). If groundwater is encountered, temporary (construction-phase) and permanent dewatering systems would be included in the project. This would involve the removal of minor amounts of groundwater and would not substantially deplete groundwater supplies.

Dewatering systems would include the following:

- One or more sump pumps.
- Highly permeable retaining wall backfill, and retaining wall subdrain systems.
- A highly permeable pavement subgrade layer, and a pavement subdrain system.
- Using high-strength, low-permeability concrete for retaining walls and pavements.
- Designing pavement and retaining wall systems for hydrostatic lateral and uplift forces in the event of sump pump failure.

The Project Alternatives would not substantially increase the area of impervious surface in the vicinity, and drainage facilities would be of adequate size to manage surface runoff and avoid flooding on- or off-site.

While the Project Alternatives are not located in a 100-year flood hazard zone, a potentially significant adverse impact due to flooding could occur during heavy storm evens at the low point under the railroad of the depressed roadway for the Temple Avenue Grade Separation Alternative. A drainage and pump system to remove the water from the roadway would be included in the design to completely eliminate or minimize this impact to a level of less than significant.

Adverse impacts to the use of south San Jose Creek as a flood control channel could occur during construction of the Train Diversion Alternative if soil or construction debris are allowed to enter the concrete-lined creek channel. Impacts could also occur downstream from potential blockage of stream flow, or fouling of runoff retention and distribution structures due to soil or debris transport.
Adequate soil erosion controls and containment structures for construction debris will be installed to keep construction-related materials from entering the creek during project construction and operation. In addition, best management practices will be implemented during construction of the new bridge and railroad over the creek to minimize the

potential for pollutants entering the washes. Waste materials will be contained on site and disposed of as required by local ordinances. Implementation of these measures would eliminate or minimize this impact to a level of insignificance.

4.5 WATER QUALITY (#12, 15)

The Project Alternatives would not generate wastewater discharge and would not violate any water quality standards. In the event contaminated groundwater is encountered during construction of the Grade Separation Alternative, it would be disposed of in accordance with federal and state regulations. Because construction of the Project Alternatives would disturb more than 2 hectares (5 acres) of land, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared and would identify construction-period Best Management Practices to reduce water quality impacts. The SWPPP would be submitted to the Regional Water Quality Control Board for approval.

The Grade Separation Alternative would include drainage facilities that would tie into the existing storm water system. These facilities would not substantially alter the existing drainage pattern. For both alternatives, a drainage plan would be developed in coordination with Cal Poly.

Volumes of storm water runoff with the project would not exceed the capacity of existing or planned drainage systems, and the long-term operations of the project would not create substantial additional sources of polluted runoff.

4.6 AIR QUALITY (#17, #19)

As demonstrated in the Alameda Corridor East Air Quality Technical Report, the proposed project would result in reduced emissions of carbon monoxide (CO), reactive organic gases (ROG), and nitrogen oxides (NO_X), which would be consistent with the objectives of the South Coast Air Basin Air Quality Management District (SCAQMD). The reduced emissions result from vehicles not having to wait for passing trains. The local reductions in CO, ROG, and NO_X would benefit the sensitive receptors (residences) in the project area.

The long-term effects of the Grade Separation Alternative would include reductions in CO and ROG. During construction, residential units adjacent to the project would be exposed to construction-related emissions, which would be at levels below the SCAQMD thresholds with the exception of PM_{10}. These effects will be short-term and mitigated to the extent practicable and would not amount to substantial pollutant concentrations.

For the Train Diversion project, based on U.S.EPA's Industrial Source Complex Model calculations, CO, NO_x and PM_{10} levels would be below California Ambient Air Quality Standards (CAAQS) at the State Lanterman Development Center; therefore no violations are expected to occur on or adjacent to the Lanterman complex. Table 4.6-1 shows the projected train emission levels for the Train Diversion project.

Table 4.6- 1
Estimated Co, No_x, and PM_{10} Concentrations at Lanterman Development Center With Temple Avenue Alternative 2

Year	Receptor ID	Carbon Monoxide (CO)		Nitrogen Oxide (NO_X)		Particulate Matter (PM_{10})	
		1 hr CAAQS = 23 mg/m^3		1 hr CAAQS = 470 ug/m^3		24 hr CAAQS = 50 ug/m^3	
		No Project	Project	No Project	Project	No Project	Project
2010	A	0.009	0.016	38.27	70.65	0.83	1.81
2010	B	0.014	0.033	59.17	138.65	1.23	2.98
2010	C	0.018	0.045	75.58	191.45	1.36	3.46
2010	D	0.009	0.023	38.96	102.78	0.80	1.89
2010	E	0.013	0.037	55.97	155.01	1.10	2.73
2010	F	0.016	0.042	69.95	179.25	1.32	3.39
2020	A	0.010	0.018	41.93	77.80	0.77	1.73
2020	B	0.015	0.036	64.68	152.91	1.13	2.85
2020	C	0.019	0.050	82.40	211.17	1.25	3.32
2020	D	0.010	0.027	42.46	113.39	0.74	1.81
2020	E	0.014	0.041	60.94	171.02	1.01	2.62
2020	F	0.018	0.047	76.26	197.76	1.22	3.25

Source: Terry A. Hayes Associates, ISC Model, October 2000.

Because the project would enhance safety by eliminating an existing highway/railroad grade crossing, it is exempt from the requirement to determine conformity with the State Implementation Plan, per 40 CFR 93.126.

4.7 NOISE IMPACTS (#20, #21)

4.7.1 Train Noise

Train Noise Impact Criteria

The criteria in the draft FRA manual *High-Speed Ground Transportation Noise and Vibration Impact Assessment* (FRA, 1998) were used to assess existing and future noise impacts from train noise. These criteria are basically the same as those in the FTA Guidance Manual Transit Noise and Vibration Impact Assessment (FTA, 1995). They are founded on well-documented research on community reaction to noise and are based on change in noise exposure using a sliding scale. The amount 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.

Category 3: Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches.

L_{dn} is used to characterize noise exposure for residential areas (Category 2). The maximum 1-hour L_{eq} during the period that the facility is in use is used for other noise sensitive land uses such as school buildings (Categories 1 and 3).

There are two levels of impact included in the FTA criteria, as shown in Figure 4.7-1. The interpretation of these two levels of impact are summarized below:

- **Severe**: Severe noise impacts are considered "significant" as this term is used in the National Environmental Policy Act (NEPA) and implementing regulations. Noise mitigation will normally be specified for severe impact areas unless there is no practical method of mitigating the noise.
- **Impact** (sometimes referred to as 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 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 4.7-1, Table 4.7-1 and Table 4.7-2. For residential areas, the horizontal axis in Figure 4.7-1 is the existing L_{dn} without any Project noise and the vertical axis in is the L_{dn} caused by the Project. The same information is given in tabular format in Table 4.7-1. Table 4.7-2 gives the information from Table 4.7-1 in terms of the allowable increase in cumulative noise exposure (noise from existing sources plus project noise) as a function of existing noise exposure. The amount the 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 Project decreases. So, 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 4.7-2. For a Category 1 or 2 site with an existing ambient noise level of 50 dBA, 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 55 dBA would reach "impact" levels with an increase of 3 dBA.

Figure 4.7- 1
Noise Impact Criteria For Rail / Transit Projects

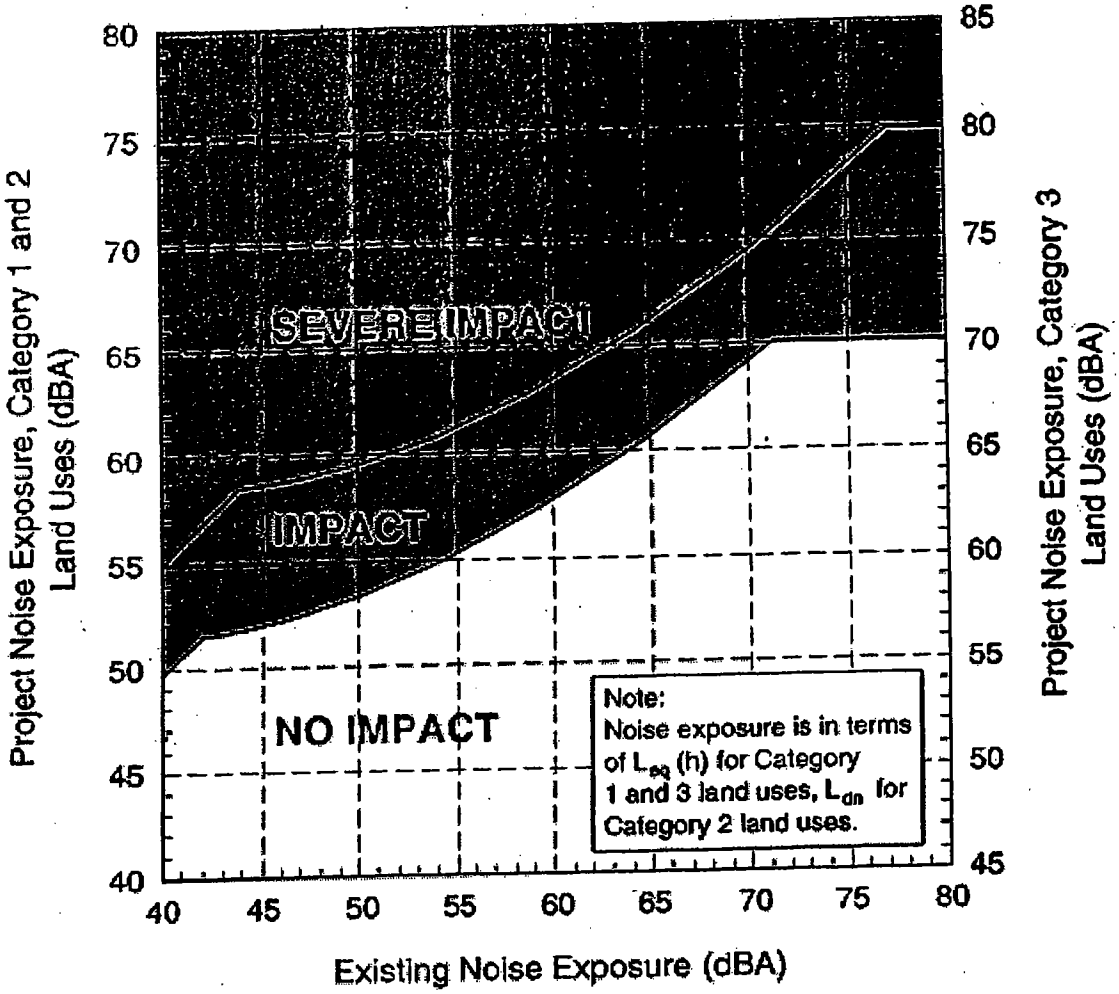

Table 4.7-1
FTA Noise Impact Criteria

Existing Noise Exposure L_{eq} or L_{dn} (1)	Project Noise Exposure Impact Thresholds, L_{dn} or L_{eq} (1) (all noise levels in dBA)			
	Category 1 or 2 Sites		Category 3 Sites	
	Impact	Severe Impact	Impact	Severe Impact
<43	Amb.+10	Amb.+15	Amb.+15	Amb.+20
43-44	52	58	57	63
45	52	58	57	63
46-47	53	59	58	64
48	53	59	58	64
49-50	54	59	59	64
51	54	60	59	65
52-53	55	60	60	65
54	55	61	60	66
55	56	61	61	66
56	56	62	61	67
57-58	57	62	62	67
59-60	58	63	63	68
61-62	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
72-73	66	71	71	76
74	66	72	71	77
75	66	73	71	78
76-77	66	74	71	79
>77	66	75	71	80

Note:

(1) 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.

Category Definitions:

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.

Category 3: Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches.

Table 4.7-2
Increases In Cumulative Noise Levels Allowed by FTA Criteria

Existing Ambient Noise Level, L_{eq} or L_{dn} (1)	Allowable Cumulative Noise Level Increases, L_{eq} or L_{dn} (1) (all noise levels in dBA)			
	Category 1 and 2 Sites		Category 3 Sites	
	Impact	Severe Impact	Impact	Severe Impact
45	8	14	12	19
46	7	13	12	18
47	7	12	11	17
48	6	12	10	16
49	6	11	10	16
50	5	10	9	15
51	5	10	8	14
52	4	9	8	14
53	4	8	7	13
54	3	8	7	12
55	3	7	6	12
56	3	7	6	11
57	3	6	6	10
58	2	6	5	10
59	2	5	5	9
60	2	5	5	9
61	1.9	5	4	9
62	1.7	4	4	8
63	1.6	4	4	8
64	1.5	4	4	8
65	1.4	4	3	7
66	1.3	4	3	7
67	1.2	3	3	7
68	1.1	3	3	6
69	1.1	3	3	6
70	1.0	3	3	6
71	1.0	3	3	6
72	0.8	3	2	6
73	0.6	2	1.8	5
74	0.5	2	1.5	5
75	0.4	2	1.2	5

Notes:

(1) 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.

Category Definitions:

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.

Category 3: Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches.

Train Noise Impacts

Noise from freight trains is generally divided into two components: (1) the noise from steel wheels rolling on steel rails, and (2) exhaust and fan noise from the locomotives. Wheel/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 and is largely independent of speed. Note that 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 draft manual *High-Speed Ground Transportation Noise and Vibration Assessment* (FRA, 1998). Table 4.7-3 summarizes the reference levels used in the formulas. The reference levels in Table 4.7.3 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.

Table 4.7-3
Reference Values Used in Formulas for Train Noise

Locomotive Noise (two locomotives)	
Throttle Setting	Notch 6
Distance from track centerline	100 ft
Ground Type	Soft
Maximum Sound Level (L_{max})	90.4 dBA
Freight and Passenger Car Noise (6,000 ft of rail cars)	
Speed	40 mph
Speed dependence	30*log*(speed)
Distance from track centerline	100 ft
Ground Type	Soft
Average Sound Level (L_{eq})	76.6 dBA

Because the noise generating mechanisms are the same for freight and passenger or commuter trains, the reference values in Table 4.7-3 are applicable to both freight and passenger trains. However, there can be substantial differences in the noise generated by the freight and passenger trains because: 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 long and be powered by two locomotives. The Amtrak and Metrolink passenger trains have been assumed to be an average of 600 feet long and to be powered by one locomotive. In

developing the projections, it was further assumed that 70% of passenger and freight train operations would be during the daytime hours of 7 AM to 10 PM, with the remainder during the nighttime hours of 10 PM to 7 AM.

Noise at highway/rail at-grade crossings has the same train noise as other sections of track plus, at most grade crossings, the much higher noise of train horns. Train operators are required to sound the locomotive horn in a long-long-short-long sequence starting 1/4 mile prior to all crossings. Train horns are required by FRA regulations to have a warning device that creates a minimum sound level of 96 dBA at 100 feet in front of the locomotive. Many locomotives trains have horns that generate sound levels of 105 to 110 dBA at 100 feet.

Because train horns are much louder than other types of train noise, adverse noise effects at grade crossings occur at substantially greater distance from the tracks than on normal line sections more than 1/4 mile away from grade crossings.

The FRA is presently studying noise impacts of proposed changes to regulations of horn sound levels and the requirements for sounding horns at grade crossings. The study is being performed by Parsons Transportation Group and Harris Miller Miller & Hanson. The noise model of train horn noise at grade crossings developed in the FRA study has been used to estimate community noise near the Alameda Corridor East grade crossings. Following is the procedure used to estimate noise from train horns:

1. The average SEL is 106 dBA at a grade crossing where train horns are used. This is at a distance of 100 feet from the tracks with no intervening buildings or features that provide acoustic shielding. This SEL value is somewhat lower than the national average used in the FRA study. The lower value is more consistent than the noise monitoring results than the national average.
2. The SEL is independent of train speed and varies as 15 log distance from the tracks.
3. Uniform acoustic shielding was assumed for all areas the amount of shielding only depending on the type of track as follows:
   - At grade track: 3 dBA at 200 ft and then an additional 1.5 dB at each 200 foot interval up to 1000 ft.
   - Elevated track: 1.5 dB at 400 ft and an additional 1.5 dB at each 200 foot interval up to 1000 ft.
   - Track in deep trench: 10 dB shielding by the trench and an additional 1.5 dB shielding at 600, 800 and 1,000 foot. Train horn noise is uniform over the 1/4 mile horn zone prior to each at-grade crossing.

Applying this approach, under projected 2020 conditions, the No-Build Alternative would have train noise impacts at 32 receptors. The Grade Separation Alternative would reduce

this number of train noise impacts to 9 receptors.[2] With the mitigation measures as described below, there would be no receptors with noise impacts under the Train Diversion Alternative.

For the Train Diversion Alternative, the only project-related change in noise levels would be related to the diversion of traffic from the SP to the UP tracks. Neither the Grade Separation Alternative nor the Train Diversion Alternative are assumed to cause an increase or decrease in total combined train traffic levels for the two rail lines. Projected freight and passenger train traffic for the years 2010 and 2020 are shown in Table 4.7-4.

Table 4.7-4
Freight and Passenger Train Traffic (SP/UP) 2010 and 2020

	Southern Pacific		Union Pacific		Total	
	Freight	Passenger	Freight	Passenger	Freight	Passenger
2010	46	8	22	12	68	20
2020	51	10	24	12	75	22

Source: Korve Engineering, 1999

For the Train Diversion Alternative, noise impacts are based on a comparison of the noise without the diversion (the No-Build Alternative) to noise with the Train Diversion, assuming the same volume of trains for both cases. That is, the noise with the Train Diversion Alternative for future years 2010 and 2020 is compared to the estimates of No-Build noise for the same years.

The noise projections for the Train Diversion Alternative were calculated using the noise model described above. For the Train Diversion Alternative and the No-Build Alternative, the freight train and passenger train noise levels were calculated separately using the source levels, train lengths, and numbers of locomotives. Noise projections were made at the following representative noise sensitive receptors in the project area:

- **Cal Poly Student Housing and Residential Areas along Valley Boulevard:** The SP mainline tracks run along the east side of Valley Boulevard approximately 150 feet from the closest student housing building. The proposed connection would virtually eliminate trains on the SP tracks in this area.
- **Lanterman Development Center Building 3:** A dormitory in the Lanterman Development Center (LDC) that is 100 feet to the east of the existing UP mainline tracks. This receptor also represents the other buildings in the LDC to the east of the tracks.
- **Lanterman Development Center Client Housing:** Residential housing to the west of the existing UP mainline. The nearest residences are located 200 feet from the existing UP mainline.

[2] Noise and Vibration Impacts Assessment Report, Alameda Corridor East.

- **Rustic Camp:** A nature area located at the southern part of the LDC complex. The Rustic Camp area borders the UP right of way and the closest camp structures are 300 feet from the UP mainline tracks.
- **Lanterman Housing and School Complex:** This area has a housing complex and the school complex. The closest residential building is 500 feet from the UP tracks.
- **Richardson Park:** This open, natural area is used by the LDC for both recreational purposes and for the treatment of clients. The Southwest corner has a large covered patio with tables (for picnics and classes) and several swing sets and playground equipment, all of which is in an area of numerous large shade trees. The UP mainline tracks run along the fence line and immediately adjacent to the covered patio and play area.
- **Diamond Bar Residential Development:** This residential area is located on the east side of the UP mainline tracks approximately 1,500 feet south of the LDC boundary. The nearest residences are located 500 feet from the UP mainline tracks.

After identifying the noise sensitive receptors in the project area, the noise sources and their respective distances to each of the receptors were identified. The main sources of noise in the project area would be freight and passenger trains on the UP mainline, the SP mainline, and the proposed train diversion.

Noise projections were developed for the existing (1994) train volumes (See Table 3.7-2) and the projected year 2010 and 2020 train volumes (See Table 4.7-4) for the following two cases: (1) the No Build - this is the baseline condition for each of the project years without the proposed diversion, and (2) the Train Diversion Alternative.

The noise projections for the two cases are summarized in Table 4.7-5. The results for each representative receptor are discussed below.

Cal Poly Student Housing and other Residential Areas along Valley Boulevard: For both of the Train Diversion and Grade Separation Alternatives, train noise would no longer be a factor at the Cal Poly Student Housing and other residential land uses (e.g., mobile home parks) along Valley Boulevard.

Lanterman Development Center Building 3: The increase in train volume from the rail line diversion would cause noise levels to increase by 3 to 4 dBA. The projected levels of train noise exceed the impact thresholds by approximately 3 dBA. Mitigation to eliminate the projected noise impact should provide a minimum of 5 dBA attenuation to ensure that the noise impact criteria are not exceeded.

Lanterman Development Center Client Housing: The levels of train noise at the staff housing on the west side of the UP tracks are lower than at Building 3 because they are farther from the tracks. However, the projected noise levels with the rail line diversion would exceed the noise levels for the No Build Case by 3 to 4 dBA and exceed the noise impact thresholds by about 2 dBA.

Table 4.7-5
Project Noise Levels
L_{dn} (dBA)[1]

	Case 1 No Project[2]			Case 2 Train Diversion Project[2]		
Location	**1994**	**2010**	**2020**	**1994**	**2010**	**2020**
1. Cal Poly Student Housing	75.7 (0.4)[3]	77.0 (0.3)	77.5 (0.2)	*No train noise*		
2. Lanterman Dormitory (Building #3)	69.0 (1.1)	70.5 (1.0)	70.9 (1.0)	***73.1***	***74.7***	***75.1***
3. Lanterman Staff Housing	65.4 (1.4)	67.1 (1.2)	67.5 (1.2)	***68.6***	***70.2***	***70.7***
4. Rustic Camp	64.3 (1.5)	64.5 (1.5)	64.9 (1.4)	63.5	65.0	65.5
5. Lanterman Development Housing and School Complex	62.6 (1.7)	64.1 (1.5)	64.5 (1.5)	61.1	62.6	63.1
6. Diamond Bar Residential Development	64.3 (1.5)	64.5 (1.5)	64.9 (1.4)	62.2	63.6	64.0
7. Richardson Park[4]	58.6 (5.1)	59.8 (4.7)	60.2 (4.6)	58.6	60.1	60.5

Notes:
(1) The noise projections are shown to the tenth of a decibel since noise impact can occur with small noise level increases. Although the absolute values are not accurate to the fraction of a decibel, the projected noise level increases area. Show the values to the tenth of a decibel avoids confusion caused by round-off error.
(2) Numbers in bold and italics represent "impact" for the Train Diversion Alternative.
(3) Numbers in parentheses are the increase over the No-Project noise levels that would result in noise impact.
(4) Richardson Park is a Category 3 property that is not more sensitive to nighttime noise. As a result, noise exposure is based on L_{eq} rather than L_{dn}. In addition, the impact criteria are different for Category 3 properties than for Category 2 (residential) properties.

Lanterman Development Center Rustic Camp: With the Train Diversion, the projected year 2010 and year 2020 train noise levels would be increased by less than 1 dBA compared to the No-Project conditions. This increase is below the FRA/FTA impact threshold. This overall minimal increase is because existing eastbound trains on the SP line currently sound their horns before the Pomona Boulevard and Temple Avenue crossings, and this horn blowing would be eliminated with the proposed diversion track.

Richardson Park: With the Train Diversion, the projected year 2010 and year 2020 train noise levels in the center of the area (250 feet from the tracks) would be increased by less than 1 dBA compared to the No-Project conditions, and this increase is below the FRA/FTA impact threshold. This overall minimal increase is because the existing eastbound trains on the SP line currently sound their horns before the Pomona Boulevard and Temple Avenue crossings, and this horn blowing would be eliminated with the proposed diversion track. However, in the areas in close proximity to the track (near the fence or at the Covered patio & play area), it is reasonable to expect a slightly larger increase in noise than that expected in the middle of the field.

Diamond Bar Residential: As with the Rustic Camp, for the Train Diversion Alternative, noise impact in the Diamond Bar residential area for projected year 2010 and year 2020 train noise levels would be increased by less than 1 dBA compared to the No-Project conditions, and this increase is below the FRA/FTA impact threshold. This is again due to the fact that existing eastbound trains on the SP line currently sound their horns before the Pomona Boulevard and Temple Boulevard crossings, and this horn blowing would be eliminated with the proposed diversion track.

In summary, the Train Diversion Alternative would substantially reduce noise along Valley Boulevard but would increase noise levels within the LDC. The beneficial and adverse noise impacts and mitigation options for the Train Diversion Alternative are discussed below for each group of noise sensitive receptors that could be affected by the diversion.

Lanterman Development Center North of State Street and East of Tracks: This area includes dormitories, outdoor work areas, classrooms, offices, and other functions of the LDC. Building 3, which appears to be the closest building to the tracks, is approximately 100 feet from the tracks. Existing trains on the UP mainline tracks currently are the primary noise source for areas within about 300 feet from the tracks. The projected increase in rail traffic from the Train Diversion Alternative onto the UP mainline tracks is projected to result in a 3 to 4 decibel noise level increase in this area. Noise mitigation options include construction of a sound wall parallel to the tracks starting north of State Street and running up to 1,000 feet to the northeast, or sound insulation of particularly sensitive buildings. The sound wall would need to extend to a minimum of 12 feet above the top of rail.

Lanterman Development Center Housing North of State Street and West of Tracks: Because the buildings in this area are farther from the train tracks, existing and projected levels of train noise at these buildings are about 4 decibels lower than at Building 3, which is on the opposite side of the tracks. However, as with Building 3, the increase in rail traffic from a Train Diversion is projected to cause a 3 to 4 decibel noise level increase in this area. Noise mitigation options include a 400- to 500-foot long sound wall along the west side of the tracks, with a minimum height of 12 feet above the top of rail, or sound insulation of five buildings. Sound insulation would consist of improved windows, caulking, and weather stripping of air leaks, and providing air conditioning so windows would not need to be opened for ventilation.

Lanterman Development Center South of State Street: Most of the buildings adjacent to the tracks in this area are used for maintenance, storage, athletic activities, or other activities that are relatively insensitive to noise. One exception is the Audiology Building. Mitigation options for this building include: (1) moving the audiology activities to a more suitable location, (2) constructing a sound wall between the audiology building and the tracks, and/or (3) improving the sound insulation of the audiology building. With mitigation for the Audiology Building, the noise projections for the Train Diversion Alternative do not trigger the requirement for additional noise mitigation. Noise impact is not projected for the housing area and school complex. Other areas south of State Street are used for facilities maintenance, outdoor client work areas (recycling, car washing) and open space used for client treatment and general recreation (i.e.,

Richardson Park). Selective noise mitigation measures (sound walls) are proposed below for the more noise sensitive areas.

Lanterman Development Center Rustic Camp: The Rustic Camp is located at the southern end of the LDC, east of the tracks. It is used for recreational and client treatment purposes and has been evaluated using the thresholds for residential land uses. The Train Diversion Alternative would bring additional train traffic within approximately 200 feet of the north end of the Rustic Camp. Noise impacts are projected at the Rustic Camp if train horns are to be sounded before the proposed private grade crossing on the Cal Poly Pomona agricultural land for the train diversion. However, the Train Diversion Project will include a grade separation for agricultural equipment at this location, so train noise with the projected year 2010 and 2020 train volumes would be relatively unchanged from existing noise levels at the Rustic Camp. Limited noise mitigation is proposed below for the portion of the Rustic Camp likely to be most affected by the Train Diversion.

Diamond Bar Residential: The Diamond Bar residential area is located east of the tracks approximately 1,500 feet south of the LDC. As with the Rustic Camp, noise impacts would occur if train horns were to be sounded for the proposed private grade crossing on the rail line diversion. However, a grade separation is proposed for this location, which eliminates this impact.

Cal Poly Student Housing and Residential Along Valley Boulevard: The train noise along the SP tracks is currently the largest noise source for the Cal Poly Student Housing and residential areas (including several mobile home parks) along Valley Boulevard. Traffic noise is also a significant noise contributor in this area. The Train Diversion Alternative would substantially reduce the trains on the SP tracks in this area and would, therefore, significantly reduce noise levels.

Summary of Noise Mitigation

The Train Diversion Alternative is projected to cause noise impact at the LDC. Noise mitigation options include:

- **Sound walls.** Placing noise barriers between the source (trains) and the receivers would reduce the noise levels for all the affected receivers. To be effective, sound walls must block the direct line between the source and the receiver. When the train horn is not blowing, the primary noise sources on freight trains are the locomotive engine noise and the noise of steel wheels rolling on steel tracks (wheel/rail noise). Because wheel/rail noise is generated close to the tracks, relatively low barriers can be quite effective at reducing the levels of wheel/rail noise. However, the noise exposure from the locomotive engine and exhaust is usually equal to or greater than the wheel/rail noise. Locomotive noise is at an equivalent height of 8 to 10 feet, which means that sound walls must usually be a minimum of 12 feet above the above the top of rail to effectively control train noise.
- **Building sound insulation:** Sound insulation can be effective at reducing the noise levels inside specific buildings. Sound insulation usually consists of improved weather stripping and caulking, and either replacing or improving the windows and

doors. No treatment is needed on sides of buildings that face away from the tracks. Improved sound insulation can be a cost-effective mitigation measure when a limited number of buildings would need mitigation, mitigation is not required for outdoor spaces, the affected buildings are spread out, or there is some reason that sound walls are not a practical or feasible mitigation option.

- **Facility Relocation.** One option is to relocate an affected facility to a new, more-distant location away from the rail line.

Recommended noise mitigation measures for this project are:

- Up to 1,000 feet of sound wall along the east side of the UP tracks, north of State Street. The top of the wall would need to be a minimum of 12 feet above the top of rail. The specific height and location of the wall will be determined during the final design of the connection.
- Either a 400- to 500-foot-long sound wall along the west side of the UP tracks north of State Street or sound insulation of five buildings. As for the wall on the east side, the wall on the west side would need to be a minimum height of 12 feet above the top of rail.
- For the Audiology Lab:
  (1) Moving the audiology activities to a more suitable location, or
  (2) Constructing a sound wall between the audiology building and the tracks; improving the sound insulation of the audiology building and the audiology testing enclosures; installing vibration isolators on the testing enclosures; if necessary to accomplish noise and vibration mitigation, the testing enclosures could be replaced.

As an additional noise mitigation, ACE has committed that any addition of trackwork that may be needed near the LDC would be located on the west side of the tracks, away from Building 3. Existing tracks would not be moved closer to LDC buildings.

While other areas within the LDC do not exceed the FRA/FTA threshold criteria, the LDC staff have stated that the noise of the additional passing trains would have a detrimental effect on clients at the LDC, particularly in those areas near the rail line. LDC staff believe that increased noise would adversely affect LDC programs in the vicinity of Building B6, the Rustic Camp, and Richardson Park. Two program activities at Building B6 -- a vehicle washing area and a recycling area – would benefit from the construction of a sound wall up to 480 feet long adjacent to Building B6 and the tracks. The effectiveness of client treatment and recreational activities conducted at Rustic Camp and Richardson Park would also be maintained by constructing up to 400 feet and 600 feet of sound walls in these respective areas. Each of these three areas is used frequently by LDC clients with special needs and heightened sensitivity to noise episodes caused by trains passing. Each of these areas is used for work training, treatment or recreational purposes. For these reasons the above mitigations are recommended.

4.7.2 Traffic Noise

Traffic Noise Impact Criteria

Peak hourly L_{eq} is normally used to evaluate noise impacts from roadways. When peak hourly noise level is reduced to an acceptable level, the hourly noise levels of other hours of the day will also be below the acceptable noise limit. Hourly L_{eq} is used by the FHWA and Caltrans to conduct noise studies and design noise mitigation/abatement measures, such as sound walls.

Noise Abatement Criteria (NAC) established by the FHWA in the "Procedures for Abatement of Highway Traffic Noise and Construction Noise" (23 CFR Part 772, 1997) and criteria adopted by Caltrans in the "Traffic Noise Analysis Protocol" (Caltrans, 1998) are used to determine the peak hour noise impacts for this project. The FHWA noise abatement criteria are reproduced in Table 4.7-6.

Table 4.7- 6
Noise Abatement Criteria

Activity Category	Noise Abatement Criteria (dBA) Leq	Description of Activity Category
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.

Source: 23 CFR Part 772, 1997

The noise abatement criteria levels in Table 4.7-6 represent a balance between what may be desirable for the various land use activities and what may be achievable. For residential land uses, parks, schools, and hospitals, the outdoor peak hour L_{eq} criterion is 67 dBA and the interior noise criterion is 52 dBA. Local jurisdictions normally do not have specific requirements for evaluating peak hour traffic noise impacts. Local jurisdictions normally have traffic generated L_{dn} limit of 65 dBA for the outdoor residential and other sensitive land uses.

According to the noise abatement criteria adopted in the Caltrans Traffic Noise Analysis Protocol, when traffic noise impacts have been identified, noise abatement measures must be considered. Traffic noise impacts occur when one or more of the following occur: (1) a substantial noise increase; (2) predicted noise levels approach or exceed NAC. A noise

increase is considered by Caltrans to be substantial when the predicted noise levels with the project exceed existing noise levels (L_{eq}) by 12 dBA. A traffic noise impact will also occur when predicted future noise levels approach within 1 dBA, or exceed the Noise Abatement Criteria (Table 4.7-3).

For this project, abatements for traffic noise have been considered when predicted future peak hour traffic L_{eq} levels from the proposed project are 66 dBA or higher or when the predicted traffic L_{dn} levels exceed 65 dBA.

Additionally, the Caltrans protocol states that if a traffic noise impact is found to be a significant adverse environmental effect, all reasonable and feasible noise abatement measures shall be identified and implemented. The abatement must provide a substantial noise reduction, defined as a minimum of 5 dBA for the impacted receivers, to be considered feasible. Greater noise reductions are encouraged as long as they can be achieved under the reasonableness guidelines. The overall reasonableness of noise abatement is determined by considering a multitude of factors.

Highway Noise Impacts

The Grade Separation Alternative would have some impacts during construction due to traffic noise. Construction phase noise impacts and mitigation measures are described in Section 4.16-2.

4.7.3 Ground-borne Vibration

Vibration Impact Criteria

Ground-borne vibration is usually characterized in terms of the vibration velocity level in decibels using a reference quantity of 1 micro-inch/second abbreviated as VdB. Common sources of perceptible building vibration are freight trains, construction equipment, and activities within buildings, such as people walking and building heating and ventilating equipment. Typical vibration levels and the human response are:

- **Threshold of perception:** The threshold of human perception is approximately 65 VdB. As discussed below, field measurements showed that the maximum freight train vibration levels inside Building 3 are in the range of 65 to 67 VdB.
- **Threshold of annoyance:** Many people find vibration between 70 and 75 VdB to be annoying if the vibration occurs at night when they are sleeping and background activities are at a minimum. Higher vibration levels are usually acceptable if the vibration events only occur a few times per day or occur during daytime hours.
- **Threshold of damage:** Most criteria for acceptable building vibration are based on minimizing the potential for damage from construction activities such as blasting and pile driving. The most restrictive vibration limits applied to fragile historic buildings are in the range of 95 to 100 VdB, well above what most people find annoying. The measured freight train vibration levels at Building 3 were all well below the threshold for damage.

Criteria for acceptable levels of ground-borne vibration from train operations are based on experience with rail transit systems. The threshold for vibration impact included in the Federal Transit Administration (FTA) guidance manual *Transit Noise and Vibration Impact Assessment* depends upon the land use and how often the vibration events occur. The FTA limit for residential land uses is 72 VdB plus an adjustment that is applicable when, as is often the case with commuter or freight rail systems, there are relatively few vibration events per day. The vibration limit applies to the maximum vibration levels generated by the trains. For heavily used freight rail corridors, the 72 VdB impact threshold is usually applied for vibration from the rail cars and with higher limits sometimes used for locomotives. Because most trains usually have a few rail cars that generate vibration levels that are as high or higher than the locomotive vibration, the 72 VdB limit usually determines whether or not there is impact.

Please note that the criteria are applicable inside buildings and are not applicable to outdoor spaces. This is because annoyance from ground-borne vibration is almost exclusively limited to people inside the buildings affected by the vibration.

Vibration Impacts

Vibration measurement data at Building 3 on the LDC are provided in Section 3.7.2. The threshold of human perception for vibration is approximately 65 VdB, and field vibration measurements showed that the maximum freight train vibration levels inside Building 3 are in the range of 65 to 67 VdB. These measured interior vibration levels were only barely perceptible and were all well below the criteria used for acceptable vibration of residential buildings. Based on these measurements, an increase in the train volume on the UP tracks would not cause vibration impacts at LDC Building 3.

LDC staff have reported that the passing of trains impairs the functionality of the Audiology Lab, Building B-7. In addition to the train noise discussed in section 4.7.1, ground vibrations originating from the passing trains are reported to affect the Lab. LDC staff report that ground vibrations are transmitted into the Audiology Lab hearing test chamber, and they either distort the test results or adversely affect the behavior of the person being tested. Although vibration data were not obtained at the Audiology Lab, the vibration data from Building 3 support the statement that vibration may affect testing operations. Although no building damage is expected, the impact of increased train traffic would be an increase in the frequency and amount of time that the lab must stop testing due to interference from the trains.

Vibration Mitigation

To assure that vibration levels from a passing train are not be increased at Building 3, ACE has committed that any addition of trackwork that may be needed near the LDC would be located on the west side of the tracks. Existing tracks would not be moved closer to the east side of the LDC, which includes Building 3 and the Audiology Lab.

Unlike the impact at Building 3, the impacts of trains on the hearing tests conducted at the Audiology Lab appear to require mitigation. Two mitigation options are recommended for the reported cumulative impacts of noise and ground vibration at the Lab:

(1) Moving the audiology activities to a more suitable location, or

(2) Improving the sound insulation properties of the building and the testing enclosure, and providing vibration isolators on the testing enclosure.

4.8 VISUAL (#22)

The addition of a new rail connector between existing freight train mainline tracks (or development of a depressed roadway and bridges under the Temple Avenue Grade Separation Alternative) would not significantly affect or alter scenic vistas in the project area. Construction of the Train Diversion project would add a 1,460-meter rail segment across existing agricultural land. This generally at-grade segment would be built between two existing rail lines – the old SP Line that parallels Valley Boulevard, and the UP line that runs parallel to and south/east of the SP line – so the Train Diversion would not introduce a new visual or aesthetic element into the area. The Temple Avenue Grade Separation Alternative would involve construction of major physical structures, but these structures would be aesthetically compatible with the major roadways, current rail line, commercial developments, and walls surrounding the Cal Poly student housing. In addition, a major part of these structures (e.g., retaining walls) would be below the current grade.

With the Train Diversion project, locomotive train lights would intermittently be directed at portions of the LDC (i.e., for northeast-bound trains at night). Such lights would not shine directly on residential uses at the LDC. In addition, existing vegetation on the Lanterman Center would serve to mitigate this impact. Standard roadway lighting would be included for the Temple Avenue Grade Separation Alternative.

4.9 VEGETATION AND WILDLIFE+ (#23, #26)

No rare, threatened, or endangered plants, animals, or their potential habitat were present in the vicinity of the proposed Temple Avenue Grade Separation Alternative. However, the retaining wall proposed with this alternative would pass through the center of all trees along Temple Avenue, and may damage and/or remove some trees. These trees, which include sycamore, palm, magnolia, and mulefat, are pruned and are limited to the width of the median strip. Although there are an estimated 35 trees present that may provide roosting habitat, it is unlikely that these particular trees would provide suitable nesting habitat for migratory birds.

There are no significant biological impacts expected to occur from the implementation of the Train Diversion Alternative. As estimated 22 mature trees and 30 to 40 scrub trees would be removed by implementation of the Train Diversion Alternative and associated

sound walls, as proposed in the noise mitigation section. It is unlikely that these particular trees would provide suitable nesting habitat for migratory birds, and some are in the process of being removed by LDC. Loss of ruderal vegetation along the sides of the roadbed on both rights-of-way would not result in substantial impacts.

Even though major adverse impacts are not anticipated for wildlife and vegetation for either the Grade Separation or Train Diversion Alternatives, ACE will develop and implement a landscaping plan for the project. Potential agricultural impacts and mitigation measures are discussed in Section 4.11-3.

4.10 LAND USE AND PLANNING (#32, #33, #35, #50)

The proposed project is consistent with the Pomona Comprehensive General Plan, helping to provide for future vehicle travel demand by developing a UP railroad route that either avoids or is grade-separated at Temple Avenue. The area where the Train Diversion project would connect to the UP tracks is an open field designated by the General Plan as an Open Space and Conservation area. This land is used for agricultural purposes and the majority of the property would continue under this use, even with the Train Diversion project in place. The area surrounding the project is already developed. The project would enhance safety and traffic operations by eliminating an existing grade crossing of a railroad track in a fully developed urban area. It would not affect location, distribution, density or growth rate of the human population, and it would not support large commercial or residential development.

4.11 SOCIOECONOMICS (#36, #37, #38, #39, #40, #41, #42)

4.11.1 Displacements

Neither the Train Diversion Alternative nor the Grade Separation Alternative would result in any displacements. Shopping center complexes on both sides of Temple Avenue south of Valley Boulevard and north of Pomona Boulevard would have modifications to their existing access under the Temple Avenue Grade Separation Alternative, but no existing uses would be displaced.

4.11.2 Neighborhood Impacts

The proposed project is not anticipated to affect the existing community cohesion of the neighborhood. No business or residential properties would be displaced as a result of either the Temple Avenue Train Diversion or Grade Separation Alternatives. The project would reduce traffic congestion and provide for safer vehicular travel.

Both alternatives would divide agricultural fields. These farmland impacts and proposed mitigation measures are described below in Section 4.11.3.

4.11.3 Farmland Impacts

Both build alternatives would require the taking of Cal Poly, Pomona land currently under agricultural use. A Farmland Conversion Rating Form (Form AD-1006) was prepared and sent to the Natural Resources Conservation Service (NRCS), in accordance with the Farmland Protection in accordance with the Farmland Protection Policy Act. The NRCS returned its determination regarding impacts to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on September 8, 2000; a copy of the Rating Form is appended to this document. NRCS is responsible for measuring the relative value of affected farmland using a numerical scale and returning the Farmland Conversion Rating Form within 45 days after it receives the form. If the NRCS rating of the value of converted farmland exceeds a threshold value of 160, the ACE Construction Authority is required to consider alternatives to avoid converting farmland in accordance with NRCS recommendations. NRCS has determined that the impact rating threshold is not applicable to this project. In any case, the ACE Construction Authority proposes measures to mitigate the impacts of these farmland conversions as described in the following paragraph.

The Train Diversion project would require the direct conversion of 1.6 hectares (4 acres) of farmland while the Grade Separation Alternative would require the direct conversion of 1.2 hectares (3 acres) of farmland. Both alternatives would divide agricultural fields. During coordination meetings, Cal Poly has expressed concern regarding farmland impacts associated with the proposed railroad realignment through University property. For either alternative, ACE would coordinate with Cal Poly, Pomona to develop a mitigation and compensation plan to minimize impacts to University farmland.

For the Train Diversion project, the ACE Authority will provide for access from one side of the tracts to the other via a grade-separated crossing. The ACE Authority will also design and implement, in consultation with Cal Poly, a reconstructed water development (well, punp, electrical connection), water distribution system, and irrigation system for the agricultural property south of the Train Diversion alignment. For security and safety, the train diversion alignment will also be fenced.

For the Temple Avenue Grade Separation, the construction of the loop connector across the northwest quadrant of the Temple Avenue/Valley Boulevard intersection may render approximately 1.2 hectares (3 acres) of that field infeasible for continued agricultural use. As with the Train Diversion Alternative, Cal Poly will be reimbursed for the loss of this agricultural land.

4.11.4 Environmental Justice

The proposed project has been developed in accordance with Title VI of the Civil Rights Act of 1964, as amended and Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The Executive Order, dated February 11, 1994, calls on Federal agencies to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately higher adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The U.S.

Department of Transportation (DOT) has published a Final DOT Order to establish procedures for use in complying with EO 12898 for its operating administrations. The proposed Order defines key terms and provides guidance for identifying and addressing disproportionately high and adverse impacts to low income and minority populations. If disproportionately high and adverse impacts would result from the proposed action, mitigation measures or alternatives must be developed to avoid or reduce the impacts, unless the agency finds that such measures are not practicable. Impacts and benefits of transportation projects result from the physical placement of such facilities, and also from their ability to improve or impede access to neighborhoods or portions of the region.

As described in Section 3.13, the study area percentages for the Black, American Indian/Eskimo/Aleutian, Other and Hispanic population categories are comparable to those of Los Angeles County and the City of Pomona. The study area has a higher percentage of the White population category than either the county or the city, and lower percentages of Asian/Pacific Islanders.

In 1990, the study area household median income for Census Tracts in the study area was $32,909 and $36,784. These incomes are comparable to county and city averages and are substantially higher than the Department of Health and Human Services guideline of $17,050 for a family of four that defines the poverty level for the Department of Transportation's Order on Environmental Justice. (The 1990 average household size for the study area Census Tracts was 3.58, 2.96 and 1.00.)

Based on the information presented above, the study area has relatively average percentages of minority or low-income persons as compared with the City of Pomona and County of Los Angeles. Such populations are not disproportionately represented among those who would live adjacent to the project; therefore, no minority or low-income populations in the study area have been identified that would be adversely effected by the proposed project as specifically required by E.O 12898 regarding environmental justice. The Train Diversion project has the potential to cause noise/vibration impacts at the Lanterman Development Center for the developmentally disabled as described in Section 4.7. Mitigation measures are proposed to reduce these noise impacts.

4.12 PUBLIC UTILITIES, POLICE, FIRE, EMERGENCY, OR OTHER PUBLIC SERVICE (#43)

Diverting most of the through freight train traffic from an existing at-grade rail crossing or providing a grade separation would enhance response times for fire, police, and other emergency services, by enabling emergency vehicles to cross the railroad tracks in the project area while trains are passing through. The project would have no effect on schools, parks, or other community facilities or services. Noise/vibration and air quality impacts to the Lanterman Development Center are described in Sections 4.6 and 4.7. The project would have no effect on wastewater treatment requirements; it would not generate new demand for water or wastewater service. The project would include the construction of new storm water drainage facilities to serve the grade-separated roadway. These facilities would be located within the roadway right-of-way, and would drain into the

public storm water system. Ongoing project operations would not generate solid waste. During construction, the contractor will be required to remove any on-site waste and dispose of it in accordance with federal, state, and local regulations.

Public utilities in the immediate vicinity of the project will be affected if their relocation becomes necessary as a result of either the grade separation or the diversion. ACE will coordinate with any affected utility companies in the value engineering and design reviews to facilitate any necessary relocation work. ACE will work with affected utility companies to make use of available right of way for relocations, or provide new easements or right of way as necessary. To the extent feasible, relocation of utilities will be scheduled to either precede construction or occur simultaneously. Coordination of utility relocations will minimize service disruptions during construction. Any disruptions to service would be temporary and intermittent in nature and would affect small pockets of customers, each of whom would be notified in advance. No significant adverse effects would occur.

Mitigation

Special attention will be paid by ACE to avoiding disruption of older utility lines and facilities, such as sewer trunks and electrical lines. ACE shall also assure that: (1) any interruption in electricity, natural gas, drinking water, sewer service, or other essential utilities will be minimized, and that (2) the primary access for emergency vehicles to the Lanterman Development Center is neither blocked nor obstructed, except for short periods of time at night. ACE will assure that adequate emergency service equipment is located on both sides of the tracks during such short periods. Those impacted by unavoidable service or access disruptions will be notified in advance.

4.13 TRANSPORTATION AND TRAFFIC (#44, #45, #46, #49)

The Train Diversion project would not generate additional roadway traffic in the project area. The long-term impacts of both alternatives on transit and vehicular traffic would generally be positive because of the reduction or elimination of traffic delay at the Temple Avenue grade crossing, however the Grade Separation Alternative would have short-term adverse impacts as described in Section 4.16.4. The project build alternatives would not result in alterations to waterborne or air traffic.

4.13.1 Parking

The construction of the Train Diversion project would not result in the loss of any parking. The Temple Avenue Grade Separation Alternative would result in a temporary loss of parking during construction. During this time the Valley Boulevard Bridge would be constructed, and a Cal Poly student housing parking lot in the southwest quadrant of the Temple Avenue/Valley Boulevard intersection would be used for routing detour traffic. This would result in the temporary displacement of 53 parking spaces. A parking survey conducted at 6 PM on a Friday evening showed that only 8 of these spaces were in use. There are several other parking lots available in the vicinity, and it is expected that

parking capacity will be adequate during Phase 3 of construction. On-street parking would also be removed on University Parkway during use of that roadway for a detour route. Based on field reviews, sufficient off-street parking is available for use during the construction period.

4.14 PUBLIC SAFETY (#48)

The Grade Separation Alternative would enhance safety by removing an existing at-grade crossing. The Train Diversion Alternative would also have beneficial effects by eliminating most through-freight traffic on the Temple Avenue and Pomona Boulevard at-grade crossings of the SP tracks. Under existing conditions, hazardous materials may be transported on the existing railroad line or public roadways in the project area. The project would not involve new routine transport, use, or disposal of hazardous materials, and it would not result in any change to existing routine transport, use or disposal of such materials. An approved health and safety plan would be required to be in effect to address any hazardous materials handling during construction activities. Potential impact would be less than significant.

4.15 HISTORIC AND CULTURAL RESOURCES (#51)

The Historic Architectural Survey Report (HASR) report concluded that there are no properties within the Area of Potential Effects (APE) that appear to meet the criteria for listing in either the National Register or the California Register. A negative finding Historic Properties Survey Report has been prepared and transmitted to the State Historic Preservation Officer for concurrence.

No archaeological features or prehistoric or historical deposits were encountered, and no impacts are anticipated in the immediate area of either build alternative. If, however, buried cultural materials were encountered during construction, work in the area will halt until a qualified archaeologist can evaluate the find.

As described in Section 3.10, the paleontologic resources literature review and mitigation plan indicated that the underlying rock formation has high potential to contain significant paleontological resources. General "Prior to Construction" mitigation measures will be implemented for this project, including worker education and briefing of construction inspectors. A qualified paleontologist will be retained to monitor earthwork in areas where excavation is expected to extend below a depth of five feet below the surface. Monitoring will commence at the outset of excavation activities (occurring below a depth of five feet) and will continue until such point that field examination of sediments exposed by excavation warrants reduction of monitoring, from oversight of all deep excavation to periodic spot-checking. This determination will be made by the paleontologist. Sediments yielding remains of marine or terrestrial vertebrates will be screened in the field to determine the potential for the recovery of significant resources and the efficacy of more detailed sampling. Sediments yielding invertebrate remains will be screened in the field, and sampled only in those cases where significant data are likely to be yielded. If significant fossils are recovered, the following measures will be taken:

- Stabilization, documentation and reburial of resources that cannot safely be recovered or otherwise preserved (e.g., avoided).
- Preparation of recovered paleontologic resources to a point of identification and permanent preservation, including stabilization of large remains and screen washing of fossiliferous sediments to recover significant microfossil remains.
- Preservation and curation of recovered significant paleontologic resources at a qualified professional repository such as the San Bernardino County Museum.

It is not anticipated that construction will disturb any human remains; however, if such remains were encountered during construction, work in the area must halt until the County coroner has been notified and a qualified archaeologist can evaluate the find.

4.16 CONSTRUCTION (#54)

Construction of either of the build alternatives would result in temporary impacts associated with air quality, noise and vibration, and traffic disruptions. Construction impacts and mitigation measures are described in the following sections.

4.16.1 Construction-Period Air Quality

During construction, emissions of particulate matter less than 10 microns in diameter (PM_{10}) are projected to exceed South Coast Air Quality Management District (SCAQMD) criteria for PM_{10}. This impact would be short-term and would be mitigated by the use of construction Best Management Practices (BMPs), listed below, although even with the implementation of the BMPs the project would still violate the SCAQMD threshold for PM_{10} during construction.

Construction Best Management Practices for Air Quality:

- Project contractors shall maintain mobile and stationary equipment in proper working running order. This will reduce emissions of ROG, NO_X, and PM_{10} approximately five percent. Construction equipment should use low sulfur fuels as practicable.
- SCAQMD Rule 403- Fugitive Dust will apply to the construction phase of the project. Contractors shall water actively graded sites to reduce fugitive dust emissions. On-site stockpiles of dirt or debris shall be covered or watered twice daily/ Watering should be adequate to eliminate visible dust plumes. Site access points shall be swept or washed within 30 minutes of visible dirt deposition on any public roadway. These measures will reduce emissions approximately 50 percent.
- Travel speeds on unpaved surfaces shall be kept to below 15 miles per hour. Haul trucks shall be covered and two feet of freeboard shall be left between the top of the load and the top of the truck bed.
- Ballast shall be wetted as it is unloaded from haul trucks to reduce dust emissions. This measure would reduce dust from ballast at least 50 percent.

- Construction operations on any unpaved surfaces shall be suspended when winds exceed 25 miles per hour.
- Non-potable water shall be used for construction activities as feasible.
- Project contractors shall use asphalt paving materials that comply with SCAQMD's Rule 453 regarding compliant paving material.

The project is located in a nonattainment area for ozone, CO, and PM_{10}. The temporary increase in PM_{10} during project construction, described above, would not result in cumulatively considerable net increases of PM_{10}. The project would not result in cumulatively considerable net increases of any criteria pollutant for which the project region is in non-attainment. The long-term effects of the project under either build alternative would include a reduction in CO and ROG due to reduced vehicular idling while waiting for trains.

During construction of the Grade Separation Alternative, residential units adjacent to the project would be exposed to construction-related emissions, which would be at levels below the SCAQMD thresholds with the exception of PM_{10}. These effects will be short-term and mitigated to the extent practicable and would not amount to substantial pollutant concentrations.

4.16.2 Construction Noise

Construction noise and vibration vary greatly depending on the construction process, type and condition of equipment used, and layout of the construction site. Estimates of construction noise and vibration were made using available data on noise emissions of construction equipment from the FTA Guidance Manual and recent experience with major construction projects.

The Grade Separation Alternative would have some impacts during construction due to traffic noise. The existing 6-foot-high property wall around the Cal Poly Student Housing provides some noise insulation, but would be temporarily removed during construction. Noise levels at this housing site would be as high as 69 dBA without mitigation. Construction of an 8-foot temporary wooden wall would mitigate this noise impact.

Construction noise for either alternative would be subject to the City of Pomona noise ordinance, which does not allow nighttime construction. Construction would occur during daytime hours unless nighttime construction is found to be preferable (e.g., less disruptive to traffic and business) and the contractor develops an approach to nighttime construction that is approved by local officials. Construction noise impacts will be mitigated by requiring the contractor to adhere to the following noise control requirements, which will be included in the construction specifications:

- Construct an 8-foot high temporary wooden wall on the east side of the Cal Poly Student Housing during the Valley Boulevard construction and excavation.

- Perform construction in a manner to minimize noise. The contractor will be required to select construction processes and techniques that minimize noise levels wherever practical. Examples may include mixing concrete off-site instead of on-site, and using hydraulic tools instead of pneumatic impact tools where feasible.
- Use equipment with effective mufflers. Diesel motors are often the major noise source on construction sites. Contractors will be required to employ equipment fitted with the most effective commercially available mufflers.
- Perform construction in a manner to maintain noise levels below specific limits at noise sensitive land uses.
- Perform noise monitoring to demonstrate compliance with the noise limits.
- Minimize construction activities during evening, nighttime, weekend and holiday periods.
- Select haul routes that minimize intrusion to Cal Poly and Lanterman Development Center areas.

4.16.3 Construction Vibration

It is expected that ground-borne vibration from construction activities would result in only intermittent localized intrusion. To minimize the potential for annoyance or damage from construction vibration, the following mitigation measures will be implemented:

- The contractor will be required to avoid using processes that create high vibration levels less than 250 feet from any residence.
- Vibration monitoring will be required during vibration-intensive activities.
- The hours of vibration intensive activities such as pile driving will be limited to weekdays during daytime hours.

4.16.4 Construction-Period Traffic

During construction of the Grade Separation Alternative, a detour would be constructed across a parcel owned by CSU-Pomona currently in agricultural use. University Parkway, a cul-de-sac on the west side of Pomona Boulevard, would be extended across the railroad tracks via a temporary grade crossing as part of the detour. A new intersection would be created for the detour route at Valley Boulevard north of the current Temple Avenue/Valley Boulevard intersection. Valley Boulevard would maintain its through traffic with either staged construction or temporary roadways through the construction area. After construction is completed, the detour route across the CSU Pomona parcel would become a permanent roadway to permit turning movements between Temple Avenue and Valley Boulevard. University Parkway would return to a cul-de-sac terminating at the railroad tracks. Existing access points for two parcels would also be removed, as a result of the roadway depression.

Based on analysis of construction detour traffic and shown on Table 4.16-1, intersection levels of service in 2003 are projected to remain acceptable at LOS D or better, provided all detour intersections are signalized.[3]

Double left-turn and right-turn lanes were assumed for the turning movements required to convey the Temple Avenue traffic through the construction detour. Correspondingly, the University Parkway and the construction detour loop were assumed to be striped for four through lanes. At the intersection of University Parkway and Pomona Boulevard, no additional turning lanes were assumed for the west approach—the four-lane cross section is maintained to give a combined left-right lane and a right-turn lane.

Construction Traffic Mitigation Measures

The following mitigation measures would be implemented to reduce vehicular traffic impacts of constructing the Grade Separation Alternative (the Train Diversion project would not have construction phase impacts beyond normal construction traffic handling):

- The ACE Construction Authority (the "Authority") will coordinate construction with other major public or private construction projects within a one-mile radius of its project and schedule its construction contracts to minimize overlapping traffic impacts.
- Bridge construction that requires street closure will be scheduled so that crossings serving as alternate travel routes will remain open.
- The Authority will provide the public and transit users advance notice of proposed transit reroutes and any other changes in stops and service; bus route detours will minimize the number of bus stop changes. In most cases, buses would follow the designated detour for other traffic.
- The Authority will notify local residents and businesses through construction signage in advance of proposed construction activity having a significant traffic impact.
- Contractors will be required to prepare and implement traffic handling plans approved by the City of Pomona. Plans will identify detour routes, signing and barricade locations, turnarounds at street closures and other traffic control elements.
- The Authority shall provide the public transportation providers and emergency service providers advance notice of construction activity affecting their services.
- The Authority will coordinate with the City of Pomona to provide the public advance notice of proposed traffic detours and their duration.
- For the Train Diversion Alternative, haul trucks will be required to exit west out of the Lanterman Development Center and will not be allowed to pass through the east side of the Center.

[3] The existing unsignalized intersection of Temple Avenue/Poly Vis was projected to operated at LOS F in the 2003 AM peak hour under No-Build conditions. Given that detour traffic would further degrade the level of service of the intersection, it was assumed to be signalized for all alternatives.

Table 4.16-1
Peak Hour Volume/Capacity (V/C) Ratio and Level of Service (LOS)

Intersection	Year							
	2003 No Build		2003 Detour		2020 No Build		2020 Build	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
AM Peak Hour								
Temple/Pomona	13.1	B	9.8	B+	22.8	C	22.8	C
Temple/Valley[1]	17.1	C+	*	*	29.9	D+	*	*
University/Pomona[2]	**	**	32.9	D	**	**	**	**
"University" (Loop Rd.)/Valley[3]	*	*	18.8	C+	*	*	14.1	B
Temple/Poly Vis/Loop Road[4]	4.0	A	6.1	B+	4.4	A	17.9	C+
PM Peak Hour								
Temple/Pomona	14.0	B	11.8	B	26.5	D+	26.5	D+
Temple/Valley[1]	13.9	B	*	*	30.4	D+	*	*
University/Pomona[2]	**	**	33.8	D	**	**	**	**
"University" (Loop Rd.)/Valley[3]	*	*	14.5	B	*	*	15.1	C+
Temple/Poly Vis/Loop Road[4]	3.7	A	5.8	B+	4.1	A	10.7	B

1 Does not include railroad crossing delay.
2 Intersection assumed to be signalized for detour condition.
3 Intersection assumed to be signalized because unsignalized intersection is projected to operate at LOS "F."
4 Intersection assumed to be signalized because unsignalized intersection is projected to operate at LOS "F" in 2003 AM peak under No-Build conditions.
*Intersection does not exist under this alternative.
**Unsignalized local access intersection not affected by the proposed project in this alternative.

Source: Parsons Transportation Group, 2000; Korve Engineering, San Gabriel Valley Grade Crossing Study, 1997, and additional traffic counts.

4.17 IMPACTS ON THE QUALITY OF THE ENVIRONMENT

The project has no potential to reduce substantially the habitat of fish or wildlife species or cause populations to drop below self-sustaining levels, nor would it threaten to eliminate a plant or animal community or reduce the number or restrict the range of special status or candidate plant or animal species. As described in Section 4.15, the project also has no potential to eliminate or cause adverse effects to properties that are important examples of national or California history or prehistory.

4.18 SHORT-TERM USES OF MAN'S ENVIRONMENT VERSUS LONG-TERM PRODUCTIVITY (#57)

The long-term effects of the project include enhanced safety, reduced traffic congestion, improvements in air quality, and reductions in train noise. These effects all point toward improvements in productivity and in the human environment. Short-term uses of the environment include the use of construction materials and energy to construct the grade separation and loop connector road, and construction-related impacts including dust and emissions, construction noise and vibration, possible erosion, and traffic impacts. Construction-period impacts will be mitigated as described in Section 4.16.

4.19 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Implementation of the proposed project would involve the irreversible or irretrievable commitments of the following resources: fossil fuels, labor, roadway construction materials (such as cement, aggregate, asphalt), railroad construction materials (such as steel and ballast). Construction of the project would involve the commitment of public funds. The achievement of project benefits, described in Section 4.18, would not be possible without the commitment of these resources. These benefits are expected to outweigh the proposed commitment of resources.

4.20 CUMULATIVE IMPACTS (#58)

When taken into consideration with other components of the Alameda Corridor East program, this project would result in regional benefits described in Section 4.18. As explained in the project description, this project is one element of the overall Alameda Corridor East (ACE) Program. ACE elements currently include: safety and signalization improvements, median barriers, street widenings, and grade separations of rail right-of-way and highway/roadways. The combination of individual ACE components would not involve collective adverse impacts, except for potential collective impacts during the construction phase. The simultaneous closure of two or more proximate grade crossings for construction work could cause collective traffic impacts and congestion due to the loss of local traffic carrying capacity across the railroad line. However, the schedule for the ACE Program does not permit simultaneous construction work on proximate grade crossings and therefore these potential collective impacts will not occur.

4.21 EFFECTS ON HUMAN BEINGS (#59)

The long-term effects of the project would be beneficial, as described in Section 4.20. Construction impacts would be temporary, and commitments to mitigate these effects have been made in the foregoing sections of this document. The project would not cause substantial adverse effects on human beings.

5. CONSULTATION AND COORDINATION

The Alameda Corridor East (ACE) Construction Authority has coordinated extensively with the City of Pomona, Cal Poly, Pomona, and the Lanterman Developmental Center (LDC) in developing the project alternatives for the Temple Avenue project. This outreach has included coordination meetings with the city, university, and LDC staffs and presentation to city council members. A Final Public Outreach Plan for the Alameda Corridor East Program was approved by ACE on October 19, 1999, including input and changes offered by City of Pomona staff.

The final in a series of four ACE Community Open House meetings was held in Pomona for the Temple Avenue Grade Separation and Train Diversion alternatives for both business owners and residents of the surrounding community. The meeting was conducted on October 18, 2000 at the Shilo Hilltop Suites and was attended by approximately 77 persons. Those who attended were provided an Open House Guide in English or Spanish explaining the information available at display stations. Additional information such as Project Fact Sheets, graphic display boards illustrating both the Temple Avenue Train Diversion and the Temple Avenue Grade Separation alternative, impacts and mitigations for each alternative, information on Property Acquisition, and public comment forms were available to each attendee.

Staff at each Information Display Station briefed attendees using large graphic and informational boards. Attendees were able to ask questions and were encouraged to submit written comments on the Public Comment form.

A total of eleven written public comments were submitted and ACE staff and consultants summarized the concerns or opinion expressed by the participants who visited each display station. Public comments primarily supported the Train Diversion project. Meeting attendees will be notified of the availability of the Temple IS/EA for further public comment, upcoming meetings in their area, and will be kept generally informed about the project.

Open house comments were summarized and reviewed internally with the environmental, engineering, and public outreach staff for the Alameda Corridor East Program. In response to these comments, changes were made to the engineering plans and/or environmental documents as appropriate.

MAILING LIST FOR NOTICE OF AVAILABILITY FOR TEMPLE AVENUE INITIAL STUDY/ ENVIRONMENTAL ASSESSMENT

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Yolanda Hernandez
1547 W. Phillips Blvd.
Pomona, CA 91766

Jessie Gonzales Sr.
3825 Valley Blvd.
Space 33
Walnut, CA 91789

Court Montrose
3825 Valley Blvd. Space 6
Walnut, CA 91789

Richard & Mary Pelletier
3825 Valley Blvd. Space 13
Walnut, CA 91789

John P. Sulkey Sr. & Nancy
3825 Valley Blvd. Space
43
Walnut, CA 91789

Mark Sibus
3825 Valley Blvd. Space 51
Walnut, CA 91789

Judith Martin
3825 Valley Blvd. Space 4
Walnut, CA 91789

John Rehrmonn
27 La Sierra Drive
Pomona, CA 91766

Victor Rollings
City of Pomona
505 S. Garey Avenue
Pomona, CA 91766

Councilman Elliott Rothman
City of Pomona
505 S. Garey Avenue
Pomona, CA 91766

June Wentworth, Mayor
City of Walnut
21201 La Puente Road
Walnut, CA 91789-2018

LA County of Public Works
Bill Winter
900 South Freemont
Alhambra, CA 91801

Congressman David Drier
28th District
112 North 2nd Avenue
Covina, CA 91723

George Hunter
City of Pomona
505 S. Garey Avenue
Pomona, CA 91766

Amin Khalili
12 Stagecoach Drive
Phillips Ranch, CA 91766

Shirley Robinson
3667 Valley Blvd. Space 82
Pomona, CA 91768

Mark Lillig
3825 Valley Blvd.
Walnut, CA 91789

Rebecca Waldman
3825 Valley Blvd. Space 56
Walnut, CA 91789

Mary Slover
3825 Valley Blvd. Space 45
Walnut, CA 91789

Mike Hurrer
Taline Hurrer
3745 Valley Blvd. #164
Walnut, CA 91789

Joe & Diane Jacobacci
3745 Valley Blvd. #2
Walnut, CA 91789

Meg Loomis
3745 Valley Blvd. #65
Walnut, CA 91789

Mrs. Raymond L. Pellum
3667 Valley Blvd.
Space 175
Pomona, CA 91768

David & Margaret Rogers
3745 Valley Blvd. Space 137
Walnut, CA 91789

Rick Butler
130 Atlantic Street
Pomona, CA 91768

Nelsa Lilly
Clinton Lilly
3467 Valley Blvd. #6
Pomona, CA 917768

Connie Miramontez
186 University Parkway
Pomona, CA 91768

Robert Pinney
3667 W. Valley Blvd.
Pomona, CA 91768

Office of Environmental Compliance
US Department of Energy
1000 Independence Ave
SW Rm. 4G-064
Washington, DC 90585

Environmental Clearance Officer
Department of Housing & Urban Development
450 Golden Gate Avenue
San Francisco, CA 94102

Donald & Particia Collins
3825 Valley Blvd. Space 14
Walnut, CA 91789

Rene Berlin
MTA
One Gateway Plaza
Los Angeles, CA 90012

Federal Transit Administration
Region 9
201 Mission Street Ste. 2210
San Francisco, CA 94105

EIS Coordinator Region 9
Environmental Protection Agency
75 Hawthorne Mail Code CMD-2
San Francisco, CA 94105-3901

Robert Sterling
Lanterman Developmental Center
3530 W. Pomona Blvd.
Pomona, CA 91769

Robert Huff, Mayor
City of Diamond Bar
PO Box 4243
Diamond Bar, CA 91765

Edward S. Cortez, Mayor
City of Pomona
505 S. Garey Avenue
Pomona, CA 91766

Senator Bob Margett
59th District
55 E. Huntington Drive
#120
Arcadia, CA 91106

Assemblymember Gloria Negrete-McLeod - 61st District
4459 Palo Verde St. Suite 108C
Montclair, CA 91763

Michael D. Antonovich
Mayor, LA County Supervisors
500 W. Temple Street Suite 869
Los Angeles, CA 90012

Steven & Maria Carlson
3825 Valley Blvd.
Space 37
Walnut, CA 91789

John W. Jones
3825 Valley Blvd. #32
Walnut, CA 91789

Luis Sierra
3825 Valley Blvd. #11
Walnut, CA 91789

Tim Kinley
505 S. Garey
Pomona, CA 91766

Julie Murry
5 Los Coyotes Drive
Phillips Ranch, CA 91766

SCAG
818 W. 7th Street 12th Floor
Los Angeles, CA 90012

Timothy Gosney
Lagerloff, Senecal, Bradley, Gosney & Kruse
301 S. Lake Avenue
10th Floor
Pasadena, CA 91101-4108

H. Jess Senecal
Lagerloff, Senecal, Bradley, Cosney & Kruse
301 S. Lake Avenue 10th Floor
Pasadena, CA 91101-4108

Wally Zimmerman
Southern California Edison
1241 S. Grand Avenue
Santa Ana, CA 92705

Valerie Hersler
3667 W. Valley Blvd. #177
Pomona, CA 91768

Kathryn Hood
3667 W. Valley Blvd. #66
Pomona, CA 91768

Irene Kirn
3530 Pomona Blvd.
Pomona, CA 91768

Walnut Hills
3745 Valley Blvd.
Pomona, CA 91768

Sherry Kohler
Acting Executive Director
Lanterman Developmental Center
3530 W. Pomona Blvd.
Pomona, CA 91769

Central California Livestock Inc.
Pomona, CA 427
Walnut, CA 91789

Wayne Melevdrez
11527 Valle Vista Road
Lakeside, CA 92040

Japanese Village Plaza Ltd.
1201 N. Pacific Avenue #202
Glendale, CA 91202-3828

Janet Morningstar
McCormick, Kidman & Behrans
695 Town Center Drive Suite 400
Costa Mesa, CA 92626

Affected Properties:

California State Polytechnic University, Pomona
Mailing: Dr. Edwin A. Barnes III
Associate Vice President for Executive Affairs, Office of the President
Pomona, CA 91768

Lanterman Developmental Center
Mailing: Sherry Kohler
Acting Executive Director
3530 West Pomona Boulevard
P. O. Box 100
Pomona, CA 91769

3560 W. Temple Avenue
Pomona, CA 91768-4303
Mailing: Japanese Village Plaza Ltd.
1201 N. Pacific Avenue # 202
Glendale, CA 91202-3828

3427 Pomona Boulevard
Pomona, CA 91768-3260
Mailing: Central California Livestock Inc.
P. O. Box 427
Walnut, CA 91788-0427

3423 Pomona Boulevard
Pomona, CA 91768-3237
Mailing: Central California Livestock Inc.
P. O. Box 427
Walnut, CA 91788-0427

Federal, State, and Local Elected Officials

U.S. Senators of California

U.S. Representatives of San Gabriel Valley

San Gabriel Valley State Senators

San Gabriel Valley State Assembly Members

City Council of City of Pomona

Federal Agencies

Federal Railroad Administration
801 "I" Street, Suite 466
Sacramento, CA 95814

State Agencies

Director, Office of Planning & Research
State Clearinghouse
P. O. Box 3044
1400 10th Street, Room 122
Sacramento, CA 95812-3044

Daniel Abeyta
Acting State Historic Preservation Officer
Dept. of Parks & Recreation
1416 9th Street
P. O. Box 942896
Sacramento, CA 95814

Department of Toxic Substance Control
Planning & Environmental Section
400 P Street, 4th Flr.
P. O. Box 806
Sacramento, CA 95812-0806

James Panella
California Public Utilities Commission
State Building
505 Van Ness Avenue, Sect. 2A
San Francisco, CA 94102

Chief, Environmental Planning
Project Development and Management
Department of General Services
400 "P" Street, Suite 3460
Sacramento, CA 95814

Cal-EPA Department of Toxic Substances Control
Don Johnson
1011 Grandview Avenue
Glendale, CA 91201

Native American Heritage Commission
915 Capitol Mall, Rm. 364
Sacramento, CA 95814

Executive Director
California Transportation Commission
1120 N. Street, P.O. Box 942873
Sacramento, CA. 94273

California State Regional Water Quality Control Board
101 Centre Plaza Drive
Monterey Park, California 91754-2156

California Air Resources Board
1102 "Q" Street/P.O. Box 2815
Sacramento, CA 95812

Regional and Local Agencies

Southern California Association of Governments
818 W. Seventh Street, 12th Floor
Los Angeles, Ca. 90017-3435

Nicholas Conway, Executive Director
San Gabriel Valley Council of Governments
3871 East Colorado Boulevard, Ste. 101
Pasadena, CA 91107-3970

METROLINK
Environmental Review Officer
700 South Flower Street
Los Angeles, CA 90017

South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, California 91765

William Winter
Program Development Division
Los Angeles County Department of Public Works
900 South Fremont Avenue, 11th Floor
Alhambra, Ca. 91803-1331

Douglas Dunlap
City Manager
City of Pomona
505 S. Garey Avenue
Pomona, CA 91760

Noelia Chapa
Assistant City Manager
City of Pomona
505 S. Garey Avenue
Pomona, CA 91760

Darren Madkin
Deputy City Manager
City of Pomona
505 S. Garey Avenue
Pomona, CA 91760

Victor Rollinger
Director of Public Works/Engineering
City of Pomona
505 S. Garey Avenue
Pomona, CA 91760

Individuals and Firms

Bill Wimmer
Union Pacific Railroad
1416 Dodge Street
Omaha, NB 68179

Adrian Morales
Southern California Indian Center, Inc.
13252 Garden Grove Boulevard, Ste. 100
P.O. Box 2550
Garden Grove, CA. 92842-2550
Ernest P. Salas
Gabrielena/Tongva Tribe
514 East Main Street
San Gabriel, CA 91766

Anthony Morales, Chairperson
Gabrielena / Tongva Tribal Council
P.O. Box 693
San Gabriel, CA. 91778

6. REFERENCES

Technical Reports

The following technical reports document environmental studies conducted for the Temple Avenue Grade Separation project.

Alameda Corridor - East Air Quality Technical Report, Terry A. Hayes Associates, September 1999, with March 2000 Addendum.

"Traffic Analysis of the Grade Separation on the Former SPTCo. Mainline at Temple Avenue, Pomona," Technical Memorandum, Parsons Transportation Group, March 14, 2000.

Biological and Water Quality Technical Study, Alameda Corridor - East, Parsons Engineering Science, September 1999 (Revised March 2000).

Draft Geotechnical Report: Alameda Corridor - East, Group Delta, September 1999.

Hazardous Waste Mitigation Measures Study: Alameda Corridor - East, Parsons Engineering Science, March September 1999.

Historic Architectural Survey Report: Nine Grade Separations within the Alameda Corridor - East Project (Crossings # 14, 16, 17, 18, 19, 20, 21, 22, and 24), JRP Historical Consulting Services, March 2000.

Historic Properties Survey Report, Alameda Corridor - East, Temple Avenue Grade Separation, Parsons Transportation Group, April 2000.

"Lanterman Development Vibration Measurements," Technical Memorandum by Hugh Saurenman, Harris Miller Miller & Hanson, July 25, 2000.

"Mitigation Measures Study, ACE Rail Line Temple Avenue Train Diversion Alternative," Parsons Engineering Science, March 2000.

Negative Archaeological Survey Report: Alameda Corridor – East, Temple Avenue Grade Separation Location 16, Greenwood and Associates, March 2000.

Noise and Vibration Assessment, Alameda Corridor - East, Parsons Transportation Group, September 1999 (Revised March 2000).

"Noise Analysis, Proposed Temple Avenue Connection Between SP and UP Mainline Tracks," Technical Memorandum by Hugh Saurenman, Harris Miller Miller & Hanson, May 2, 2000.
Paleontologic Resources Literature Review and Mitigation Plan: Alameda Corridor - East, Section of Paleontology - San Bernardino County Museum, August 1999.

"Pollutant Concentration at the Lanterman Development Center Associated with Temple Avenue Alternative 2," Technical Memorandum by Terry Hayes, Terry A. Hayes Associates, October 26, 2000.

Phase I Environmental and Geotechnical Site Assessment, MAA Engineering Consultants, May 1999.

Other References

City of Pomona Comprehensive General Plan, City of Pomona.

[1] Terry A. Hayes, Terry A. Hayes Associates, Memorandum regarding "Pollutant Concentrations at the Lanterman Development Center Associated with Temple Avenue Alternative 2," May 31, 2000.

"Noise and Vibration Impacts Assessment Report, Alameda Corridor East," September 1999. Submitted to Parsons Engineering Science, Inc.

The existing unsignalized intersection of Temple Avenue/Poly Vis was projected to operate at LOS F in the 2003 AM peak hour under No-Build conditions. Given that detour traffic would further degrade the level of service of the intersection, it was assumed to be signalized for all alternatives.

PROGRAM FOR REPORTING AND MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL MITIGATION MEASURES

TEMPLE AVENUE TRAIN DIVERSION PROJECT

The project includes other standard mitigation measures as discussed in Section XVIII of the Negative Declaration.

1.0 **Program Management**

1.1 After adoption of environmental mitigation measures by the Board of Supervisors, the Department of Public Works shall designate responsibility for monitoring and reporting compliance with each mitigation measure. Responsibility for monitoring and reporting compliance with mitigation measures, if any, shall be designated by Public Works as appropriate.

1.2 To facilitate implementation and enforcement of this program, Public Works shall ensure that the obligation to monitor and report compliance with environmental mitigation measures is required by all project-related contracts between the County and A/E, prime construction contractor, and any other person or entity who is designated to monitor and/or report compliance under this program during the preconstruction and construction phases.

1.3 Public Works as appropriate, shall take all necessary and appropriate measures to ensure that each project-related environmental mitigation measure, which was adopted, is implemented and maintained.

2.0 **Preconstruction**

2.1 Public Works is responsible for incorporating mitigation measures into project design and confirming in writing that final construction drawings include all design-related mitigation measures.

2.2 Public Works is responsible for incorporating mitigation measures and confirming in writing that final construction drawings include all design-related mitigation measures.

3.0 **Construction**

3.1 Public Works or prime construction contractor for project and/or for project-related off-site improvements is responsible for constructing and/or monitoring the construction of mitigation measures incorporated in final construction documents and reporting instances of noncompliance in writing.

3.2 Public Works or prime construction contractor for project and/or for project-related off-site improvements is responsible for implementation and/or monitoring the implementation of mitigation measures affecting methods and practices of construction (e.g., hours of operation, noise control of machinery) and reporting instances of noncompliance in writing.

3.3 Public Works is responsible for monitoring compliance of prime construction contractor(s) with responsibility set forth in 3.1 above and reporting noncompliance in writing.

4.0 **Project Operation**

4.1 After completion and final acceptance of the project, Public Works is responsible for monitoring and maintaining compliance with adopted mitigation measures which affect project operation

SEM:

P:\PDPUB\EP&A\EU\SAMPLE FORMS\MND\5A-BOARD LETTER.DOC

RESOLUTION NO. 3902

WHEREAS, the Alameda Corridor – East (ACE) Construction Authority is proposing to construct the Temple Avenue Train Diversion Project ("Project"), which project will eliminate the Union Pacific Railroad Company ("UPRR") at-grade crossings at Temple Avenue and Pomona Boulevard, in the city of Pomona, by constructing a new track adjacent to existing UPRR tracks to the east, which are already grade separated at Temple Avenue.

WHEREAS, the Project will include the construction of railroad bridges across State Street and San Jose Creek, in the city of Pomona, and the construction of the said bridge across San Jose Creek will require the acquisition of right of way owned by the Los Angeles County Flood Control District ("Flood Control District Property");

NOW, THEREFORE, THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES HEREBY RESOLVES, that the acquisition of right of way from the Los Angeles County Flood Control District necessary for the Project, within the City of Pomona, is of general County interest and that County aid shall be extended for this purpose, in the form of payment of the acquisition cost of the Flood Control District Property, of $332,000, from the Proposition C Local Return Fund.

The foregoing Resolution was adopted on the _____day of _____, 2007, by the Board of Supervisors of the County of Los Angeles and ex-officio of the governing body of all other special assessment and taxing districts, agencies, and authorities for which said Board so acts.

SACHI A. HAMAI
Executive Officer of the
Board of Supervisors of the
County of Los Angeles

By_____
Deputy

APPROVED AS TO FORM

RAYMOND G. FORTNER, JR.
County Counsel

By_____
Deputy

BA-FORM

COUNTY OF LOS ANGELES

REQUEST FOR APPROPRIATION ADJUSTMENT

DEPARTMENT OF PUBLIC WORKS

DEPT'S. NO. 690

June 6, 2007

AUDITOR-CONTROLLER.

THE FOLLOWING APPROPRIATION ADJUSTMENT IS DEEMED NECESSARY BY THIS DEPARTMENT. WILL YOU PLEASE REPORT AS TO ACCOUNTING AND AVAILABLE BALANCES AND FORWARD TO THE CHIEF ADMINISTRATIVE OFFICER FOR HIS RECOMMENDATION OR ACTION.

ADJUSTMENT REQUESTED AND REASONS THEREFOR

FISCAL YEAR 2006-07

4-VOTE BUDGET ADJUSTMENT

SOURCES		USES	
PW - Proposition C Local Return Fund		PW - Proposition C Local Return Fund	
CN9 - PW - 2000 - 47000	$332,000	CN9 - PW - 5500 - 47000	$332,000
SERVICES AND SUPPLIES		OTHER CHARGES	
DECREASE APPROPRIATION		*INCREASE APPROPRIATION*	
TOTAL	**$332,000**		**$332,000**

JUSTIFICATION

This adjustment is necessary to provide sufficient appropriation in Other Charges to purchase the right of way from the Flood Control District for the Temple Avenue Train Diversion Project.

(Control No. 07-15)

DONALD L. WOLFE, Director

CHIEF ADMINISTRATIVE OFFICER'S REPORT

REFERRED TO THE CHIEF ADMINISTRATIVE OFFICER FOR---	**ACTION**	**APPROVED AS REQUESTED**	**AS REVISED**
	RECOMMENDATION		
			CHIEF ADMINISTRATIVE OFFICER
AUDITOR-CONTROLLER	**BY**	**APPROVED (AS REVISED): BOARD OF SUPERVISORS**	
NO.		**BY**	
			DEPUTY COUNTY CLERK

ORIGINAL

RECORDING REQUESTED BY
AND MAIL TO:

Alameda Corridor-East Construction
Authority
4900 Rivergrade Road, Suite A120
Irwindale, CA 91706
Attention Mark Mendoza

Space Above This Line Reserved for Recorder's Use

THIS DOCUMENT IS EXEMPT FROM DOCUMENTARY TAX PURSUANT TO SECTION 11922 OF THE REVENUE & TAXATION CODE.

THIS DOCUMENT IS EXEMPT FROM RECORDING FEES PURSUANT TO SECTION 27383 OF THE GOVERNMENT CODE.

Assessor's Identification Numbers:
8707-016-901, 903, and 906 (Portions)
8707-017-901,902, 903, 905, and
906 (Portions)
8710-013-900 and 903 (Portions)

QUITCLAIM DEED

For a valuable consideration, receipt of which is hereby acknowledged, the LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, a body corporate and politic, does hereby remise, release, and forever quitclaim to the ALAMEDA CORRIDOR-EAST CONSTRUCTION AUTHORITY, on behalf of the San Gabriel Valley Council of Governments, a California joint powers authority, all its right, title, and interest in and to the real property in the City of Pomona, County of Los Angeles, State of California, described in Exhibit A attached hereto and by this reference made a part hereof.

EXCEPTING AND RESERVING all oil, gas, petroleum, and other hydrocarbons and minerals, but without the right of entry to the surface of said land.

Dated _____

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT,
a body corporate and politic

By_____
Chairman, Board of Supervisors of the
Los Angeles County Flood Control District

(LACFCD-SEAL)

ATTEST:
SACHI A. HAMAI, Executive Officer
of the Board of Supervisors
of the County of Los Angeles

By_____
Deputy

SOUTH SAN JOSE CREEK 10EX
Includes Parcels 11EX, 14EX, 15EX, 16EX,
17EX, 18EX, 27EX, 31EX, and 33EX
34-RW 69.2, 69.3, 70.1, 70.2, and 70.3
S.D. 1 M0623004

OG:bw
P/CONF/OG-QD SN JSE CK 10EX

NOTE: Acknowledgement form on the reverse side.

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On January 6, 1987, the Board of Supervisors for the County of Los Angeles and ex officio the governing body of all other special assessment and taxing districts, agencies, and authorities for which said Board so acts adopted a resolution pursuant to Section 25103 of the Government Code that authorized the use of facsimile signatures of the Chairman of the Board on all papers, documents, or instruments requiring the Chairman's signature.

The undersigned hereby certifies that on this ____ day of _____, 20_____, the facsimile signature of _____, Chairman of the Board of Supervisors of the LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, was affixed hereto as the official execution of this document. The undersigned further certifies that on this date a copy of the document was delivered to the Chairman of the Board of Supervisors of the LOS ANGELES COUNTY FLOOD CONTROL DISTRICT.

In witness whereof, I have also hereunto set my hand and affixed my official seal the day and year above written.

SACHI A. HAMAI, Executive Officer
of the Board of Supervisors
of the County of Los Angeles

By_____
Deputy

(LACFCD-SEAL)

APPROVED AS TO FORM

RAYMOND G. FORTNER, JR.
County Counsel

By_____ for Mark Yamai
Deputy

APPROVED as to title and execution,

_____, 20_____.

DEPARTMENT OF PUBLIC WORKS
Mapping & Property Management Division

Supervising Title Examiner

By_____

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in the real property conveyed by the Quitclaim Deed dated _____, from the Los Angeles County Flood Control District, a body corporate and politic, to the Alameda Corridor-East Construction Authority, on behalf of the San Gabriel Valley Council of Governments, a California joint powers authority, is hereby accepted by the undersigned on behalf of the Governing Board pursuant to authority conferred by that certain Joint Powers Agreement dated _____, and the grantee consents to the recordation thereof by its duly authorized officer.

Dated_____ _____

Name: _____

Title: _____

EXHIBIT A

SOUTH SAN JOSE CREEK 10EX
Includes: Parcels Nos. 11EX, 14EX, 15EX, 16EX,
17EX, 18EX, 27EX, 31EX, and 33EX
34-RW 69.2, 69.3, 70.1, 70.2, and 70.3
A.P.N. 8707-016-901, 903 and 906,
8707-017-901, 902, 903, 905 and 906,
8710-013-900 and 903 (Portions)
T.G. 640 (C2, C3 and D2)
I.M. 129-337
S.D. 1
M0623004

LEGAL DESCRIPTION
(Quitclaim of portions of fee)

PARCEL 10EX (A.C.E. Parcel No. D-16 I-PE):

That portion of that certain parcel of land in Rancho San Jose, as shown on map recorded in Book 2, pages 292 and 293, of Patents, in the office of the Registrar-Recorder/County Clerk of the County of Los Angeles, described as Parcel No. 10A in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book D6400, page 911, of Official Records, in the office of said Registrar-Recorder/County Clerk, within the following described boundaries:

Beginning at the most easterly corner of said Parcel No. 10A; thence South 38°57'32" West along the southeasterly line of said parcel, a distance of 404.63 feet to the most southerly corner of said parcel; thence North 51°02'28" West along the southwesterly line of said parcel to a line parallel with and 15.00 feet northwesterly, measured at right angles, from said southeasterly line; thence North 38°57'32" East along said parallel line, a distance of 400.77 feet to the northeasterly line of said parcel; thence South 65°28'36" East along said northeasterly line, a distance of 15.49 feet to the point of beginning.

Containing: 6,041± square feet

PARCEL 11EX (A.C.E. Parcel No. D-16 J-PE):

Those portions of those parts of above-mentioned Rancho San Jose, described as Parcels Nos. 11A and 11C in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book D6285, page 312, of above-mentioned Official Records, within the following described boundaries:

Beginning at the most easterly corner of said Parcel No. 11C; thence South 38°57'32" West along the southeasterly lines of said Parcels Nos. 11C and 11A, a distance of 539.03 feet to the most easterly corner of above-mentioned Parcel No. 10A; thence North 65°28'36" West along the northeasterly line of said last-mentioned parcel, a distance of 15.49 feet to a line parallel with and 15.00 feet northwesterly, measured at right angles, from said southeasterly line; thence North 38°57'32" East along said parallel line, a distance of 540.46 feet to the generally easterly boundary of said Parcel No. 11C; thence South 60°14'55" East along said generally easterly boundary, a distance of 15.20 feet to the point of beginning.

Containing: 8,096± square feet

PARCEL 14EX (A.C.E. Parcel No. D-16 O-PE):

Those portions of those parts of Parcel 2, Parcel Map No. 3267, as shown on map filed in Book 42, page 100, of Parcel Maps, in the office of the above-mentioned Registrar-Recorder/County Clerk, described as Parcels Nos. 14A and 14B in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book D6343, page 940, of above-mentioned Official Records, within the following described boundaries:

Beginning at the most southerly corner of said Parcel No. 14B, said corner being a point in the northwesterly side line of that certain 100-foot wide strip of land designated as Los Angeles & Salt Lake R.R. CO. R/W on said map; thence North 44°29'19" West along the southwesterly line of said last-mentioned parcel, a distance of 15.10 feet to a line parallel with and 15.00 feet northwesterly, measured at right angles, from that certain course having a length of 99.36 feet in said northwesterly side line; thence North 38°57'32" East along said parallel line, a distance of 97.38 feet to the beginning of a tangent curve concentric with and 15.00 feet northwesterly, measured radially, from that certain curve having a radius of 2,914.90 feet in said northwesterly side line; thence northeasterly along said concentric curve through a central angle of 2°40'31", an arc length of 136.80 feet to a point on a non-tangent curve concave to the northwest and having a radius of 394.83 feet, a radial of said last-mentioned curve to said last-mentioned point bears South 38°22'43" East; thence northeasterly along said last-mentioned curve through a central angle of 17°36'36", an arc length of 121.35 feet to a point on a non-tangent curve concave to the southeast and having a radius of 2,929.90 feet, said last-mentioned curve being concentric with and 15.00 feet northwesterly, measured radially, from said curve having a radius of 2,914.90 feet; thence northeasterly along said last-mentioned concentric curve through a central angle of 00°50'06", an arc length of 42.70 feet to the northeasterly line of said Parcel No. 14A; thence South 35°17'37" East along said northeasterly line, a distance of 15.23 feet to a point on said curve having a radius of 2,914.90 feet, a radial of said last-mentioned curve to said last-mentioned point bears North 45°13'06" West; thence southwesterly along said last-mentioned curve, through a central angle of 5°49'22", an

arc length of 296.24 feet; thence South 38°57'32" West 99.11 feet to the point of beginning.

Containing: 5,523± square feet

PARCEL 15EX (A.C.E. Parcel No. D-16 T-PE):

That portion of that part of the above-mentioned Rancho San Jose, described as Parcel No. 15B in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book D6327, page 912, of above-mentioned Official Records, within the following described boundaries:

Beginning at the most southerly corner of said Parcel No. 15B; thence North 35°17'37" West along the southwesterly line of said last-mentioned parcel, a distance of 15.00 feet to a point on a curve concentric with and 15.00 feet northwesterly, measured radially, from that certain curve having a radius of 2,914.90 feet in the southeasterly line of said parcel, a radial of said concentric curve to said point bears North 34°45'02" West; thence northeasterly along said last-mentioned curve through a central angle of 2°09'06", an arc length of 110.03 feet to the northeasterly line of said parcel; thence South 35°17'37" East along said northeasterly line, a distance of 15.02 feet to said curve having a radius of 2,914.90 feet; thence southwesterly along said last-mentioned curve through a central angle of 2°09'46", an arc length of 110.03 feet to the point of beginning.

Containing: 1,651± square feet

PARCEL 16EX (A.C.E. Parcel No. D-16 U-PE):

That portion of that part of Parcel 4, as shown on map filed in Book 77, page 13, of Record of Surveys, in the office of the above-mentioned Registrar-Recorder/County Clerk, described as Parcel No. 16B in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book D6472, page 882, of above-mentioned Official Records, within the following described boundaries:

Beginning at the most southerly corner of said Parcel No. 16B; thence North 35°17'37" West along the southwesterly line of said last-mentioned parcel, a distance of 15.02 feet to a point on a non-tangent curve concentric with and 15.00 feet northwesterly, measured radially, from that certain curve having a radius of 2,914.90 feet in the southeasterly line of said last-mentioned parcel, a radial of said concentric curve to said point bears North 32°35'56" West; thence northeasterly along said last-mentioned curve through a central angle of 1°53'48", an arc length of 96.99 feet to the northeasterly line of said last-mentioned parcel; thence South 34°47'24" East along said northeasterly line, a distance of 15.04 feet to said curve having a radius of 2,914.90

feet; thence southwesterly along said last-mentioned curve through a central angle of 1°54'14", an arc length of 96.86 feet to the point of beginning.

Containing: 1,454± square feet

PARCEL 17EX (A.C.E. Parcel No. D-16 V-PE):

That portion of that part of above-mentioned Parcel 4 of above-mentioned Record of Surveys, described as Parcel No. 17B in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book D6361, page 886, of above-mentioned Official Records, within the following described boundaries:

Beginning at the most southerly corner of said last-mentioned Parcel No. 17B; thence North 34°47'24" West along the southwesterly line of said last-mentioned parcel, a distance of 15.04 feet to a point on a curve concentric with and 15.00 feet northwesterly, measured radially, from that certain curve having a radius of 2,914.90 feet in the southeasterly line of said last-mentioned parcel, a radial of said concentric curve to said point bears North 30°42'08" West; thence northeasterly along said last-mentioned curve through a central angle of 2°33'32", an arc length of 130.86 feet to the northeasterly line of said last-mentioned parcel; thence South 34°02'10" East along said northeasterly line, a distance of 15.08 feet to said curve having a radius of 2,914.90 feet; thence southwesterly along said last-mentioned curve through a central angle of 2°34'06", an arc length of 130.66 feet to the point of beginning.

Containing: 1,961± square feet

PARCEL 18EX (A.C.E. Parcel No. D-16W-PE):

Those portions of those parts of Parcels 1 and 2, as shown on map filed in Book 77, page 13, of above-mentioned Record of Surveys, described as Parcel No. 18B in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book D6524, page 427, of above-mentioned Official Records, within the following described boundaries:

Beginning at the most southerly corner of said Parcel No. 18B; thence North 34°02'10" West along the southwesterly line of said last-mentioned parcel, a distance of 15.14 feet to a point on a non-tangent curve concentric with and 15.00 feet northwesterly, measured radially, from that certain curve having a radius of 2,914.90 feet in the southeasterly line of said last-mentioned parcel, a radial of said concentric curve to said point bears North 26°09'06" West; thence northeasterly along said concentric curve through a central angle of 3°28'43", an arc length of 177.88 feet; thence South 22°40'23" East along a radial line of said last-mentioned curve, a distance of 15.00 feet to said southeasterly line; thence southwesterly along said southeasterly

line through a central angle of 3°26'16", an arc length of 174.90 feet to the point of beginning.

Containing: 2,646± s.f.

PARCEL 27EX (A.C.E. Parcel No. D-16 Z-PE):

That portion of that part of Parcel 3, as shown on map filed in Book 77, page 13, of above-mentioned Record of Surveys, described as Parcel No. 27B in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book D6361, page 893, of above-mentioned Official Records, within the following described boundaries:

Beginning at the most southerly corner of said Parcel No. 27B; thence North 34°02'10" West along the southwesterly line of said last-mentioned parcel, a distance of 15.08 feet to a point on a non-tangent curve concentric with and 15.00 feet northwesterly, measured radially, from that certain curve having a radius of 2,914.90 feet in the southeasterly line of said parcel, a radial of said concentric curve to said point bears North 28°08'36" West; thence northeasterly along said concentric curve through a central angle of 1°59'30", an arc length of 101.84 feet to the northeasterly line of said last-mentioned parcel; thence South 34°02'10" East along said northeasterly line, a distance of 15.14 feet to said southeasterly line; thence southwesterly along said southeasterly line through a central angle of 2°00'07", an arc length of 101.85 feet to the point of beginning.

Containing: 1,528± square feet

PARCEL 31EX (A.C.E. Parcel No. D-16 R-PE):

Those portions of those parts of Parcel 4, Parcel Map No. 3587, as shown on map filed in Book 43, page 11, of above-mentioned Parcel Maps, described as Parcels Nos. 31A and 31B in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book D6353, page 377, of above-mentioned Official Records, within the following described boundaries:

Beginning at the most southerly corner of said Parcel No. 31A; thence North 35°17'37" West along the southwesterly line of said last-mentioned parcel, a distance of 15.23 feet to a point on a curve concentric with and 15.00 feet northwesterly, measured radially, from that certain curve having a radius of 2,914.90 feet in the southeasterly line of said last-mentioned parcel, a radial of said concentric curve to said point bears North 45°10'01" West; thence northeasterly along said concentric curve through a central angle of 3°15'49", an arc length of 166.89 feet to the northeasterly line of said Parcel No. 31B; thence South 35°17'37" East along said northeasterly line, a distance of 15.10 feet to the southeasterly line of said Parcel No. 31B; thence

southwesterly along said last-mentioned southeasterly line through a central angle of 3°16'51", an arc length of 166.91 feet to the point of beginning.

Containing: 2,503± square feet

PARCEL 33EX (A.C.E. Parcel No. D-16 S-PE):

Those portions of those parts of Parcels 1, 2 and 3 of above-mentioned Parcel Map No. 3587, described as Parcel No. 33B in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book D6400, page 901, of above-mentioned Official Records, within the following described boundaries:

Beginning at the most southerly corner of said Parcel No. 33B; thence North 35°17'37" West along the southwesterly line of said last-mentioned parcel, a distance of 15.10 feet to a point on a curve concentric with and 15.00 feet northwesterly, measured radially, from that certain curve having a radius of 2,914.90 feet in the southeasterly line of said last-mentioned parcel, a radial of said concentric curve to said point bears North 41°54'12" West; thence northeasterly along said concentric curve through a central angle of 7°09'10", an arc length of 365.76 feet to the northeasterly line of said last-mentioned parcel; thence South 35°17'37" East along said northeasterly line, a distance of 15.00 feet to said southeasterly line; thence southwesterly along said southeasterly line through a central angle of 7°11'23", an arc length of 365.77 feet to the point of beginning.

Containing: 5,487± square feet

APPROVED AS TO DESCRIPTION

_____

COUNTY OF LOS ANGELES

By _____

SUPERVISING CADASTRAL ENGINEER III
Mapping and Property Management Division

This real property description has been prepared in conformance with the Professional Land Surveyors Act. The signatory herein is exempt pursuant to Section 8726 of the California Business and Professions Code.