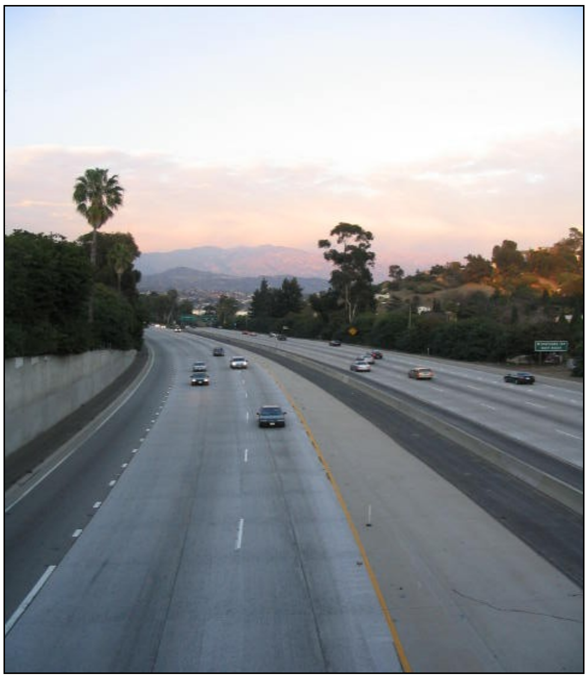
State Route 2
Freeway Terminus Improvement Project

(Branden Street to Oak Glen Place Overcrossing)
Los Angeles County, California
District 7-LA-02
Post Miles 13.5/15.0
EA 205500

Technical Studies



Prepared by the
California Department of Transportation
and the
Los Angeles County Metropolitan Transportation Authority

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by the Department under its assumption of responsibility pursuant to 23 United States Code 327.

Metro

Caltrans

April 2009

WATER QUALITY TECHNICAL REPORT

for the

SR-2 Freeway Terminus Improvement Project

EA 205500

3rd Draft

September 2008

Prepared for:

Los Angeles County Metropolitan Transportation Authority
California Department of Transportation
Federal Highway Administration

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Contents

page

Figures

Tables

Acronyms

BMPs	best management practices
CWA	Clean Water Act
DWR	California Department of Water Resources
EPA	U.S. Environmental Protection Agency
General Construction Permit	NPDES General Permit for Discharges of Storm Water Runoff associated with Construction Activities
GWR	groundwater recharge
I-5	Interstate 5
LADWP	Los Angeles Department of Water and Power
LARWQCB	Los Angeles Regional Water Quality Control Board
Metro	Los Angeles County Metropolitan Transportation Authority
MS4 Permit	NPDES General Permit for Municipal Small Storm Sewer Systems
MS4s	Municipal Small Storm Sewer Systems
NOI	notice of intent
NPDES	National Pollutant Discharge Elimination System
PCE	tetrachloroethylene
PM	post mile
Porter-Cologne	Porter-Cologne Water Quality Control Act of 1969
PSR/PDS	Project Study Report/Project Development Study
REC1	contact water recreation
REC2	non-contact water recreation
RWQCB	regional water quality control board
SR-2	State Route 2
SUSMP	Standard Urban Stormwater Mitigation Plan
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TCE	trichloroethylene
TDS	total dissolved solids
TMDL	Total Maximum Daily Load
WARM	warm freshwater habitat
WDRs	waste discharge requirements
WET	wetland habitat
WILD	wildlife habitat

Executive Summary

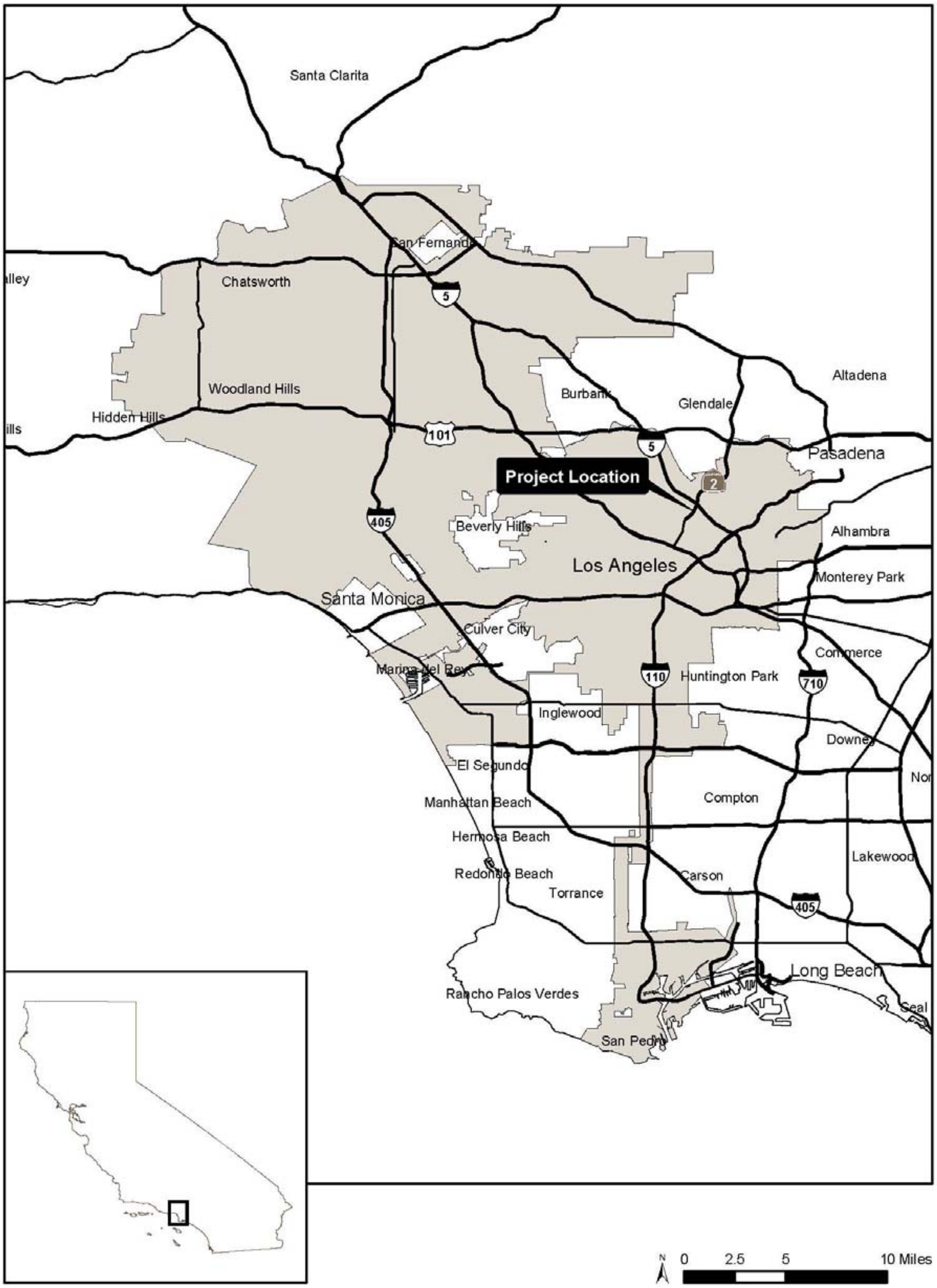
The Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the California Department of Transportation (Caltrans) and the Los Angeles Department of Transportation (LADOT), proposes to modify the southern terminus of the Glendale Freeway, also known as State Route 2 (SR-2). The project site is located in the City and County of Los Angeles (see Figures 1 and 2).

The purpose of the project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses.

Construction activities related to the proposed build alternatives (Alternatives B through E) would involve earth-disturbing activities, thereby creating the potential for construction-related impacts. Discharges of sediments and construction-related contaminants to the city's storm drain system could eventually enter surface waters with little or no treatment. As a result, impacts from the build alternatives would be considerable. However, implementation of mitigation measures would abate those effects.

The proposed build alternatives would result in increases in impervious surfaces and surface water runoff from the project. Increased runoff could potentially contribute to increased contaminant loading, trash, in particular, for the storm drain system and, thus, the Los Angeles River. According to the municipal stormwater discharge NPDES permit issued to the City of Los Angeles, redevelopment projects that would create more than 5,000 square feet of new impervious surfaces are considerable to a degree that mitigation of potential stormwater impacts is required. As a result, impacts from the build alternatives would be considerable. However, implementation of mitigation measures that address stormwater management through the life of the project would abate those effects.

Figure 1: Project Vicinity Map



Source: Jones & Stokes, 2007.

Figure 2: Project Location Map

Source: Jones & Stokes, 2007.

Description of the Project

Project Location

The project is located on SR-2 between I-5 and Glendale Boulevard in the City of Los Angeles in Los Angeles County (see Figure 1). This segment of the SR-2 extends approximately 1.5 miles and is bordered by residential developments and community parks. The area is urbanized and situated between Silver Lake Reservoir and Tommy Lasorda Field of Dreams to the west, Elysian Park and housing developments to the southeast, and the Los Angeles River and I-5 to the north. The Los Angeles River is located approximately 2 miles north of the project site (see Figure 2).

Project Description

The purpose of the project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses.

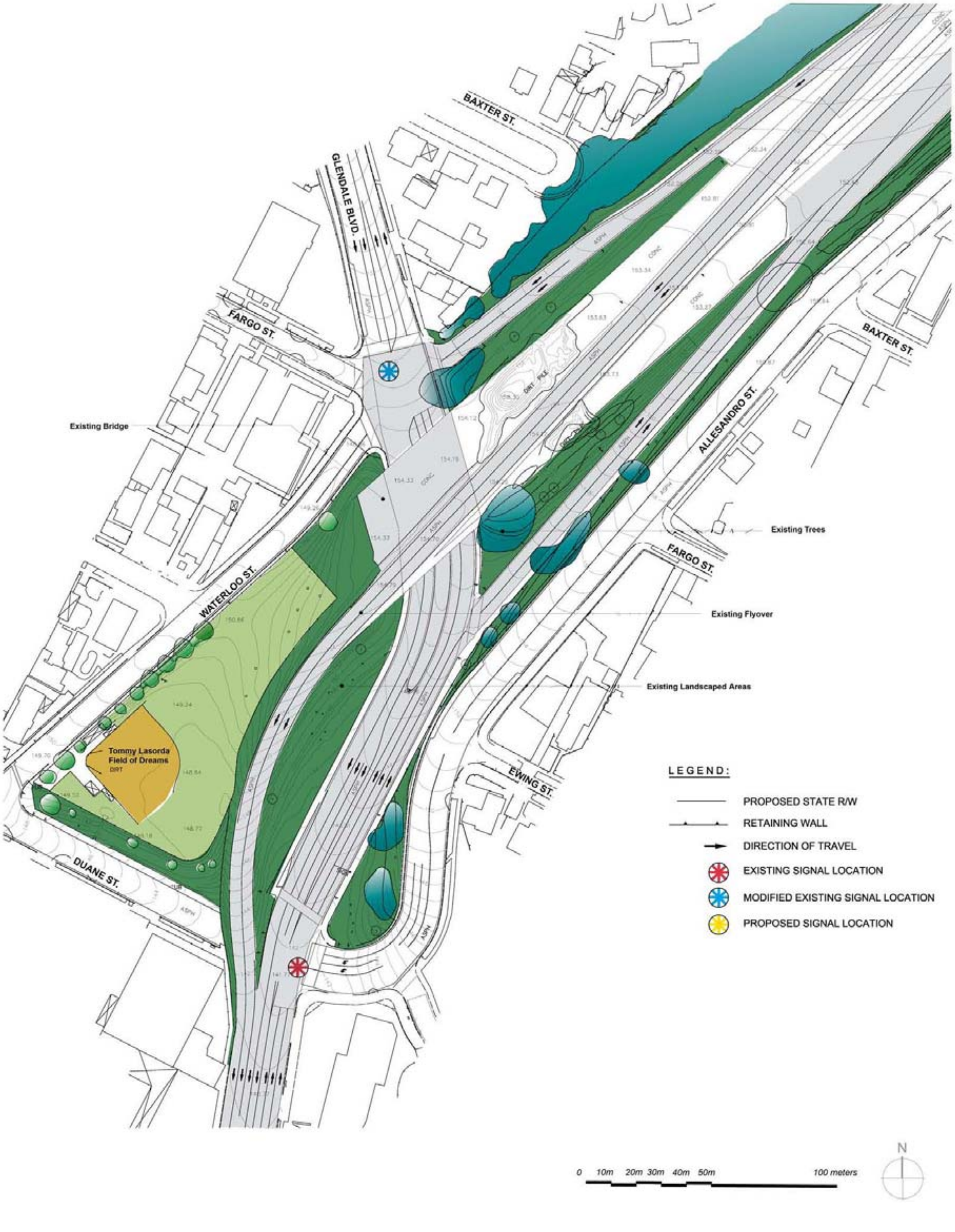
There are six proposed alternatives for the SR-2 Freeway Terminus Improvement Project, including the No-Build Alternative. The proposed project site is generally located between Clifford Street to the south and Oak Glen Place to the north. The six proposed alternatives are summarized as follows and shown in Figures 3 through 8 below:

- No-Build Alternative – Existing Conditions,
- Alternative A – Widen Existing Ramps,
- Alternative B – Realign Ramps East/Retain Partial Bridge and Flyover,
- Alternative C – Realign Ramps East/No Bridge,
- Alternative D – Realign Ramps East, Retain Bridge and Flyover, and
- Alternative E – Realign Ramps East, Retain Bridge and Flyover, Relocate Retaining Wall.

Project History

SR-2 was originally planned and constructed in 1959 to connect I-5 with U.S. 101 through the neighborhoods of Silver Lake and Echo Park. In 1962, as a result of local community opposition, the full-buildout plan was rescinded and construction was halted at the present SR-2 terminus near Glendale Boulevard and Duane Street, thus creating traffic congestion along Glendale Boulevard and Alvarado Street.

Figure 3. No Build Alternative (Baseline Alternative)



Source: Melendrez, 2006.

Figure 4. Alternative A (Widen Existing Ramps)

Source: Melendrez, 2006.

Figure 5. Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge)

Source: Melendrez, 2006.

Figure 6. Alternative C (Realign Ramps East – Remove Flyover and Bridge)

Source: Melendrez, 2006.

Figure 7. Alternative D (Realign Ramps East – Retain Flyover and Bridge)

Source: Melendrez, 2006.

Figure 8. Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining Wall)

Source: Melendrez, 2006.

There have been three relevant studies concerning the terminus of SR-2, also known as the Glendale Freeway, where the freeway transitions to a conventional highway (major arterial). Metro prepared a study in 1992 to develop a course of action regarding future traffic and transportation plans for the Glendale Freeway and Glendale Boulevard. This included a review of existing traffic conditions and proposed transportation improvements, evaluation of those improvements, and recommendations for implementation of the improvements.

In 1994, the Glendale Boulevard Corridor Preliminary Planning Study – Phase II was completed by Metro and LADOT. The study analyzed existing constraints and opportunities within the corridor and developed urban design strategies and conceptual transportation measures to improve conditions along Glendale Boulevard. A list of recommended short-term and long-term measures, including alternative reconfigurations for the SR-2 terminus, was presented.

In January 2002, a Project Study Report/Project Development Study (PSR/PDS) was completed. The study addressed proposed reconstruction of the southern terminus of the Glendale Freeway. The build alternatives ranged from widening the ramps in the existing interchange configuration to realigning the ramps to tie into Glendale Boulevard in a new configuration. The request for additional design alternatives stemmed from community review of the PSR/PDS. To accommodate the community's request, Metro is undertaking this study and proceeding with the next project step of developing the environmental document and project approval.

Environmental Setting

This section describes the current geography at and surrounding the study area and provides information on existing surface water occurrences and water quality conditions.

The project study area is located in a very urbanized region of the County of Los Angeles. The project site is currently developed with industrial and residential buildings but is used primarily as a traffic thoroughfare. The proposed project is located within a 2-mile radius of the Los Angeles River, Silver Lake Reservoir, and MacArthur Park Lake. Although these hydrological resources are within the vicinity of the project site, there are no hydrological resources identified within the project limits.

Surface Water Occurrence

The project site is located in the Los Angeles River watershed. It is one of the largest watersheds within the region and encompasses approximately 824 square miles. About 40 percent of the watershed (approximately 324 square miles) is forest or open space, while the remaining area is highly developed and urbanized (Los Angeles Regional Water Quality Control Board [LARWQCB] 2004). The Los Angeles River is approximately 55 miles long and begins in the Santa

Monica, Santa Susana, and San Gabriel Mountains. The river passes through the San Fernando Valley and downtown Los Angeles, then converges with Rio Hondo. The river passes through heavily developed industrial, commercial, and residential zones and is surrounded by freeways, railways, and major commercial and government buildings (LARWQCB 2004). The main tributaries to the Los Angeles River include the Tujunga Wash, Burbank Western Channel, the Arroyo Seco, Rio Hondo, and Compton Creek (LARWQCB 2004).

Due to several major flood events at the start of the 20th century, most of the river was lined with concrete by 1950 (LARWQCB 2004). On the eastern end of the San Fernando Valley, the Los Angeles River meanders around the Hollywood Hills and passes through Griffith and Elysian Parks (LARWQCB 2004). In this section, the river has a rocky, unlined bottom with concrete-lined or riprap sides due to the presence of a high water table (LARWQCB 2004). Below the Glendale Narrows, the river is in a concrete-lined channel until reaching Willow Street in Long Beach (LARWQCB 2004).

The proposed project is located approximately less than 1 mile south of the Los Angeles River, approximately 2 miles north of MacArthur Park Lake, and less than 0.5 mile east of the Ivanhoe and Silver Lake Reservoirs. MacArthur Park Lake is a small man-made lake that is supplied by natural springs. It is located in the middle of a densely populated part of Los Angeles and utilized solely for recreational purposes. Silver Lake and Ivanhoe Reservoirs are located adjacent to each other in the center of the Silver Lake community. The Silver Lake Reservoir has a water capacity of 2,500 acre-feet, and the Ivanhoe Reservoir can store 180 acre-feet of water. Both reservoirs contain drinking water treated from the Colorado River Aqueduct (Lehrer 2000).

Surface Water Quality

According to the LARWQCB's Basin Plan, described in the Regulatory Setting section below, the Los Angeles River is a beneficial source of aquatic life, recreation, groundwater recharge, and municipal water supply (LARWQCB 1994). Pollutants from dense clusters of residential, industrial, and other urban activities have impaired water quality in the Los Angeles River watershed. The majority of the Los Angeles River is classified as impaired due to a variety of point and nonpoint sources. The recently approved 2006 Section 303(d) list of water quality-limited segments includes the Los Angeles River as impaired for coliform bacteria, cyanide, diazinon, vinyl chlorides, oil, and trash (State Water Resources Control Board [SWRCB] 2006). Some of these impairments apply throughout the entire length of the river, while others are of concern only in certain reaches (the river has been divided into six different reaches). At Reach 3, near the proposed project site, the Los Angeles River is listed as impaired by trash (SWRCB 2006). A plan, or Total Maximum Daily Load (TMDL), to reverse this trash impairment is anticipated for approval in 2007 (SWRCB 2006).

Groundwater Occurrence

The project site is located in the central subbasin of the Coastal Plain of the Los Angeles Groundwater Basin (California Department of Water Resources [DWR] 2004a). Often referred to as the “Central Basin,” it covers a surface area of approximately 177,000 acres and has a total storage capacity of 13,800,000 acre-feet (DWR 2004a). On the north side, the Central Basin is bordered by a surface divide called the La Brea High and on the northeast and east by emergent, less-permeable Tertiary rocks of the Elysian, Repetto, Merced, and Puente Hills formations (DWR 2004a). The boundary to the southeast follows, roughly, Coyote Creek, a regional drainage province boundary (DWR 2004a). The basin’s southwest boundary is formed from the Newport-Inglewood fault system and the associated folded rocks of the Newport-Inglewood uplift (DWR 2004a).

Groundwater within the Central Basin occurs in Holocene and Pleistocene sediments and at relatively shallow depths (DWR 2004a). Throughout the Central Basin, most aquifers are confined, but there are areas with semipermeable aquicludes, which allow some interaction between aquifers (DWR 2004a). Groundwater enters the Central Basin through surface and subsurface flow and direct percolation of rainwater, streamflow, and applied water. Primary recharge areas are located in the southeastern region of the Central Basin (DWR 2004a).

Groundwater Quality

Groundwater in the Los Angeles Groundwater Basin is characterized as having a calcium sulfate and calcium bicarbonate quality (DWR 2004b). Total dissolved solids (TDS) concentrations range from 200 to 2,500 mg/l, with the average being 453 mg/l (DWR 2004a). Nitrates have also been found to be elevated in some areas of the basin (DWR 2004b).

Groundwater quality within the Los Angeles River watershed has been affected by hundreds of known leaking underground storage tanks, which have contaminated the soil and/or groundwater with petroleum hydrocarbons and volatile organic compounds (LARWCQB 2004). The main constituents in the contamination plumes are trichloroethylene (TCE) and tetrachloroethylene (PCE) (DWR 2004b). In addition, several wells have been closed due to high nitrate contamination; however, none of these sites are located near the project location (DWR 2004b).

Stormwater Drainage in the Study Area

The City of Los Angeles’ stormwater drainage system is an extensive network of open channels and underground pipes designed to prevent flooding (City of Los Angeles 2006). Stormwater runoff from streets flows through curb and gutter systems, which drain into several catch basins that eventually discharge to the Pacific Ocean. The city’s storm drain network is composed of more than 35,000 catch basins, 1,500 miles of underground pipes, and 100 miles of open channels (City of Los Angeles 2006). On an average dry day, nearly 100 million gallons of water flow through the system (City of Los Angeles 2006). During a storm event, the amount of water in the channels can increase to 10 billion gallons and reach speeds of 35 miles per hour and depths of 25 feet (City of Los Angeles 2006). The storm drain system is separate from Los Angeles' sewer system and receives no treatment or filtering prior to discharging to the ocean (City of Los Angeles 2006). Stormwater runoff from the project site is captured by the city's stormwater drainage system and discharges into the Los Angeles River.

Regulatory Setting

The construction and operation of the proposed project must comply with both federal and state water quality standards, local regulations, and applicable permit conditions. This section discusses the regulations that protect the Los Angeles River and receiving waters.

Federal Regulations

The Clean Water Act (CWA), adopted by Congress in 1972, is the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and wetlands. The CWA established national goals to eliminate pollutant discharges to navigable waters and ensure that all navigable waters would be fishable and swimmable. It operates on the following principles:

- all discharges to the nation's waters must be specifically authorized by a permit;
- no one has the right to pollute the navigable waters of the United States;
- permits shall set limits on the concentrations of the pollutants being discharged, and violation of the limits shall carry a penalty (fine or imprisonment); and
- best available technology shall be used to control the discharge of pollutants.

Permit review is the primary regulatory tool. Through the CWA, the U.S. Environmental Protection Agency (EPA) and corresponding state agencies regulate activities, such as public wastewater systems, that have the potential to threaten the quality of the nation's water resources. The following paragraphs provide additional information on specific sections of the CWA.

CWA Section 303(d): List of Impaired Water Bodies

Under CWA Section 303(d) and California's Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne), discussed below, the State of California is required to establish beneficial uses for state waters and adopt water quality standards to protect those beneficial uses. Beneficial uses are established by the Regional Water Quality Control Board's (RWQCB's) basin plans (see Basin

Plans and Water Quality Objectives below). Reach 3 of the Los Angeles River (Riverside Drive to Figueroa Street) is listed as impaired by trash in the SWRCB's 2006 303(d) list (SWRCB 2006). Section 303(d) establishes the Total Maximum Daily Load (TMDL) process to assist in guiding the application of state water quality standards, requiring states to identify water bodies in which quality is impaired, i.e., affected by the presence of pollutants or contaminants. The TMDL, which is the maximum quantity of a particular contaminant that a water body can assimilate without experiencing adverse effects, is established under this process. TMDLs have been developed to address water quality impairment by trash, nitrogen, and metals in the Los Angeles River. These TMDLs are in various states of approval and implementation.

CWA Section 402: Permits for Stormwater Discharge

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program, which is administered by EPA. In California, SWRCB is authorized by EPA to oversee the NPDES program through the RWQCBs (see related discussion under Porter-Cologne Water Quality Control Act below). The project area is under the jurisdiction of the LARWQCB.

SWRCB issues both general and individual permits for certain activities, including construction and municipal activities, as discussed below.

Construction Activities. Construction activities are regulated under the NPDES General Permit for Discharges of Stormwater Runoff Associated with Construction Activities (General Construction Permit) provided that the total amount of ground disturbance during construction exceeds 1 acre. The LARWQCB enforces the General Construction Permit. Coverage under a General Construction Permit requires preparation of a stormwater pollution prevention plan (SWPPP) and submittal of a notice of intent (NOI). The SWPPP includes pollution prevention measures (erosion and sediment control measures and measures to control nonstormwater discharges and hazardous spills), demonstration of compliance with all applicable local and regional erosion and sediment control standards, identification of responsible parties, a detailed construction timeline, and a best management practices (BMPs) monitoring and maintenance schedule. The NOI includes site-specific information and the certification of compliance with the terms of the General Construction Permit.

Dewatering Activities. Small amounts of construction-related dewatering discharges are covered under the General Construction Permit. Flow diversions are not considered dewatering discharges; however, pumping of groundwater seepage from an excavation and subsequent discharge would be considered a dewatering discharge. For dewatering discharges that do not meet the criteria in the General Construction Permit, the LARWQCB would need to be consulted. The RWQCB may require that an individual NPDES permit and Waste Discharge Requirement (WDR) permit be obtained for dewatering activities. Implementation of any of the action alternatives that involve excavating below subsurface groundwater elevations would be likely to require dewatering.

Municipal Activities. Municipal discharges of stormwater runoff are regulated under the NPDES permit for Municipal Small Storm Sewer Systems (MS4) (MS4 Permit). Coverage under this permit requires development and implementation of a stormwater management plan with the goal of reducing the discharge of pollutants to the maximum extent practicable. MS4 permits are issued and enforced by the RWQCBs.

In 2001, the LARWQCB issued a NPDES permit under Order Number 01-182, NPDES No. CAS004001, to the Los Angeles County Flood Control District, the County of Los Angeles, and 84 cities, covering an area of approximately 3,100 square miles (LARWCQB 2001).

The Los Angeles County NPDES municipal stormwater permit contains requirements for permittees to develop and implement programs for stormwater management within the County of Los Angeles (County of Los Angeles 2006).The permit requires new development and redevelopment projects incorporate stormwater mitigation measures that reduce the quantity and improve the quality of rainfall runoff that leaves the project site, as established in a Standard Urban Stormwater Mitigation Plan (SUSMP) or a Site-Specific Mitigation Plan. These plans are used to guide land developers, engineers, planners, and others in selecting postconstruction BMPs for stormwater runoff. If required, a project must obtain county approval for its mitigation plan before building and grading permits can be issued (County of Los Angeles 2006).

State Regulations

Porter-Cologne Water Quality Control Act

Porter-Cologne, passed in 1969, complements the CWA. It established the SWRCB and divided California into nine regions, each overseen by a RWQCB. The SWRCB is the primary state agency responsible for protecting the quality of the state's surface water and groundwater supplies, but much of its daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303(d) in addition to Porter-Cologne. In general, the SWRCB manages both water rights and statewide regulation of water quality, whereas the RWQCBs focus exclusively on water quality in their respective regions. The project area is under the jurisdiction of the LARWQCB.

Porter-Cologne provides for the development and periodic review of water quality control plans (basin plans) that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters (LARWQCB 1995). Basin plans are implemented primarily by using the NPDES permitting system to regulate waste discharges so that water quality objectives are met (see discussion of the NPDES system in the CWA sections above). Basin plans, updated every 3 years, provide the technical basis for determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals. The RWQCB has adopted the Water Quality Control Plan for the Los Angeles region

(LARWQCB 1995) to implement plans, policies, and provisions for water quality management. Beneficial uses for surface waters are identified (for major surface waters and their tributaries) and described in the basin plan. In addition, the basin plan identifies water quality objectives for the protection of the beneficial uses of the basin.

Basin Plans and Water Quality Objectives

The process of designating beneficial uses involves defining the resources, services, and qualities of the aquatic system. Beneficial uses are defined and designated by a RWQCB in its basin plan. Beneficial uses of the Los Angeles River include warm freshwater habitat (WARM), groundwater recharge (GWR), contact (REC1) and non-contact (REC2) water recreation, wetland habitat (WET), and wildlife habitat (WILD) (LARWQCB 1995). The LARWQCB has established water quality objectives for all surface waters with respect to bacteria, bioaccumulation, biostimulatory substances, color, dissolved oxygen, floating material, oil and grease, pH, pesticides, radioactivity, salinity, sediment, settleable material, suspended material, sulfide, tastes and odors, temperature, toxicity, turbidity and un-ionized ammonia. In addition, specific objectives for concentrations of chemical constituents are applied to bodies of water based on their designated beneficial uses.

Basin plans are implemented primarily by using WDRs to regulate discharges so that water quality objectives are met. Basin plans are updated regularly and provide the technical basis for establishing WDRs and enforcement actions. Under CWA Section 303(d) and Porter-Cologne, the State of California is required to establish beneficial uses for state waters and adopt water quality standards to protect those beneficial uses. WDRs apply to all discharges of waste that may affect waters of the state, while Section 303(d) TMDLs apply only where a water body has been identified as impaired.

Local Regulations

The Los Angeles County Stormwater Ordinance

The Los Angeles County Stormwater Ordinance addresses provisions that apply to the discharge, deposit, or disposal of any stormwater and/or runoff to the storm drain system and/or receiving waters within any unincorporated area covered by the NPDES municipal stormwater permit (Ordinance 98-0021, Section 1 1998).

The Los Angeles County Stormwater Ordinance requires projects to implement runoff management provisions such as good housekeeping provisions, BMPs for construction activity, and structural BMPs. Because the proposed project would be located within incorporated areas covered by the NPDES municipal stormwater permit, the project is not required to comply with this ordinance.

Project Effects on Water Quality

Significance thresholds are based on Appendix G of the State CEQA Guidelines (14 California Code of Regulations 15000 et seq.). Implementation of any of the alternatives could have considerable impacts on hydrology and water quality if it results in any of the following:

- substantial degradation of water quality or violation of any water quality standards or waste discharge requirements;
- substantial depletion of groundwater supplies or interference with groundwater recharge such that a deficit in aquifer volume or lowering of the water table would result;
- substantial alteration in the quantity or quality of surface runoff;
- substantial alterations to the existing drainage pattern of the site area such that flood risk and/or erosion and siltation potential would increase;
- runoff that would exceed the existing or planned capacity of stormwater drainage systems;
- placement of structures within a 100-year flood hazard area that would impede or redirect flood flows;
- exposure of people or structures to a considerable risk from flooding, including flooding as a result of the failure of a levee or dam; or
- exposure of people or structures to a considerable risk as a result of inundation by seiche, tsunami, or mudflow.

A preliminary review of the proposed project concluded that none of the project alternatives would involve groundwater extraction, and the project would not interfere with groundwater recharge areas. In addition, it is unlikely that the construction activities would affect groundwater resources because excavation during construction is not expected to reach the groundwater depth.

None of the project alternatives are located within or near a 100-year flood hazard area. The project alternatives would not redirect floodwater flows or expose people or structures to flood hazards. Additionally, site grading for the proposed project would be designed to ensure that all site runoff is captured and managed through the city's existing storm drain system. Thus, the capacity of the existing storm drainage system would not be exceeded such that flooding would result.

The project's location would not expose persons or property to increased risks involving seiche, tsunami, or mudflow because of the project's distant location from an ocean and the relative flat topography of the project area.

Silver Lake Reservoir, which is located less than 0.5 mile west of the project, is owned and operated by the Los Angeles Department of Water and Power for water storage and delivery purposes. Water flow-through rates are very high at the reservoir, and typical turnover time is 1 to 2 weeks (City of Los Angeles

2005). Water is imported to the reservoir from the State Water Project through outlets controlled by DWP (City of Los Angeles 2005). Silver Lake Reservoir is connected to the city's storm drainage system through storm drain and overflow outlets. If the dam at the reservoir were to fail, the water outlets would be shut down, and the excess water would flow south, away from the proposed project location, and be directed to the city's storm drainage system (City of Los Angeles 2005). As a result, there would not be a considerable risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a dam. Therefore, the possible causes of water quality effects based on the thresholds identified above would be associated with degradation of water quality (construction and operation), increases in runoff (operation), and changes in drainage patterns (operation). These issues are discussed below as they relate to each alternative during construction and operation.

Construction-Related Water Quality Impacts

Impacts to water quality may occur from construction of any of the alternatives. The severity of construction-related water quality impacts depends on soil erosion potential; construction practices; the frequency, magnitude, and duration of precipitation events; and the proximity of construction to stream channels or water bodies. Construction activities, such as grading, often expose disturbed and loosened soils to erosion from rainfall, runoff, and wind. Construction activities may remove the protective cover of vegetation and reduce natural soil resistance to rainfall impact erosion. These activities may lead to increased sedimentation of waters bodies downstream.

Sedimentation occurs when the exposed soils and particles are transported by surface water runoff from construction sites. Sediments are considered a pollutant by the LARWQCB due to their potential to transport absorbed pollutants such as nutrients, hydrocarbons, metals, and typical hydrophobic contaminants (e.g., organo-chlorine pesticides) to downstream areas. Although impacts from sedimentation are usually short term and greatly diminish after revegetation of exposed areas, under certain hydrologic conditions, sediment and sediment-borne pollutants may remobilize.

A typical construction site uses many chemicals or compounds that are hazardous to aquatic life. These chemicals and compounds may include gasoline, oils, grease, solvents, lubricants, and other petroleum products that are commonly used in construction activities. Many petroleum products contain a variety of toxic components and tend to form oily films on the water surface. Concrete, soap, trash, and sanitary wastes are other common sources of potentially harmful materials. Water used to wash and clean equipment and tools, as well as waste dumped or spilled on the construction site, can easily seep into water bodies.

Lastly, accidental spills of construction chemicals can enter bodies of water through storm drainage systems. Without control measures, these construction-related impacts could result in considerable impacts on water quality.

No-Build Alternative – Existing Conditions

Since no construction activities would occur, there would be no additional effects on water quality under the No-Build Alternative.

Alternative A – Widen Existing Ramps

This alternative would widen the existing southbound exit ramp and the existing northbound entrance ramp from two to three lanes. Construction activities related to lane widening would involve earth-disturbing activities, thereby creating the potential for construction-related impacts, as discussed above. According to current estimates, Alternative A would result in a disturbed Soil Area (DSA) of 16, 880 sf (0.39 acres). Discharges of sediments and construction-related contaminants to the city's storm drain system could eventually enter surface waters with little or no treatment. As a result, impacts from this alternative would be considerable. However, implementation of the mitigation measures listed below would abate those effects.

Alternative B – Realign Ramps East, Retain Partial Bridge and Flyover

This alternative would realign the existing southbound and northbound entrance ramps eastwards. The existing southbound exit ramp would be removed and landscaped, and the existing northbound entrance ramp would be restriped. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. The bridge would be partially retained for pedestrian use.

Alternative B would result in a disturbed Soil Area (DSA) of 38,400 sf (0.88 acres). Discharges of sediments and construction-related contaminants to the city's storm drain system could eventually enter surface waters with little or no treatment. Considerable construction-related impacts, as discussed above, could result from construction of this alternative. However, implementation of the mitigation measures listed below would abate those effects.

Alternative C – Realign Ramps East, Remove Bridge and Flyover

This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would also remove the southbound flyover ramp and bridge. This alternative will provide landscaped median and parkway treatment.

Alternative C would disturb 201,392 sf (4.62 acres) of soil area. Construction-related impacts from this alternative would be similar to Alternative B, except the bridge would be completely removed. Considerable construction-related impacts, as discussed above, could result from construction of this alternative. However, implementation of the mitigation measures listed below would abate those effects.

Alternative D – Realign Ramps East, Retain Bridge and Flyover

This alternative would shift the exit ramps to the east and decommission the bridge for community use. The alternative would reduce the number of freeway off-ramp lanes from four to three but maintain two on-ramp lanes. The existing retaining wall and landscaped buffer would remain and a landscaped median would be provided further north of the terminus area. Alternative D would disturb 72,200 sf (1.66 acres) of soil area. Construction related impacts from this alternative would be similar to those of Alternative C except the bridge and flyover would remain unchanged. Discharges of sediments and construction-related contaminants to the city's storm drain system could eventually enter surface waters with little or no treatment. As a result, impacts from this alternative would be considerable. However, implementation of the mitigation measures listed below would abate those effects.

Alternative E – Realign Ramps East, Retain Bridge and Flyover, Relocate Retaining Wall

This alternative would shift the exit ramps to the east and decommission the bridge for community use. The alternative would reduce the number of freeway off-ramp lanes from four to three but maintain the two on-ramp lanes. A new retaining wall along Allesandro Street would be relocated to the east to maintain Caltrans streets and highway standards. This alternative offers the potential for new open space.

Alternative E would disturb 76,200 sf (1.75 acres) of soil area. Construction related impacts from this alternative would be similar to those of Alternative D except that the existing retaining wall would remain unchanged. Implementation of the mitigation measures discussed below would ensure that potential impacts on water quality would be less than considerable.

Operational Water Quality Impacts

Impacts on water quality may result from operation of any of the alternatives. The severity of operational water quality impacts depends on the degree of alteration of drainage patterns; potential increases in surface water runoff due to increased impervious surfaces; and potential increases in pollutant concentrations in runoff associated with urban areas. Trash is a common pollutant to surface waters in urban areas. As stated above, the Los Angeles River has been identified as being impaired by trash. During storm events, articles of trash that have collected on roads or in gutters are transported by runoff into storm drains. Flow conveyance can be reduced, thus causing flood conditions. Additionally, motorized vehicles deposit oils and emit engine combustion byproducts that collect on paved surfaces. During storm events, these contaminants are diluted and transported in runoff, which can degrade surface waters, such as creeks and rivers, downstream.

Compared to natural, pervious (permeable) ground cover, impervious surfaces prevent natural absorption and filtration of pollutants from storm runoff. Increasing the area of impervious surfaces can thus result in greater volume, velocity, and pollutant loading of the storm runoff discharged to water bodies. In addition to degraded water quality, increased storm runoff can result in localized flooding. However, much of the project area is heavily urbanized, and the existing roadway is already a source of stormwater runoff. Proposed Alternative A would result in an increased amount of runoff from the project site, as discussed below. Proposed Alternatives B-E would not result in significant amounts of new impervious surfaces that would substantially increase the amount of storm runoff.

No-Build Alternative – Existing Conditions

Since no operational changes would be made, there would be no additional effects from project operation on water quality under the No Build alternative.

Alternative A – Widen Existing Ramps

This alternative would result in an increase in impervious surfaces of 15,202 square feet (0.35 acres) due to widening of the existing exit ramps from two to three lanes. Thus, compared to existing conditions, an increase in surface water runoff from the project would result from this alternative. Increased runoff could potentially contribute to increased contaminant loading, trash, in particular, for the storm drain system and, thus, the Los Angeles River.

According to the municipal stormwater discharge NPDES permit issued to the City of Los Angeles, redevelopment projects that would create more than 5,000 square feet of new impervious surfaces are considerable to a degree that mitigation of potential stormwater impacts is required. As a result, impacts from this alternative would be considerable. However, implementation of the mitigation measures below, which address stormwater management through the life of the project, would abate those effects.

Alternative B – Realign Ramps East, Retain Partial Bridge and Flyover

This alternative would result in little change to the existing area of impervious surfaces at the project site. While the realignment of the entrance and exit ramps, enhanced pedestrian crosswalks, and new paving would create new impervious areas, the addition of permeable landscaping as part of this alternative would offset those areas. Thus, there would be only a slight change in total impervious area at the project site compared to existing conditions. In terms of contaminant loading in surface waters, the existing levels of contaminant loading from vehicle emissions would continue, but no additional contributions to downstream surface waters are expected. As a result, operational impacts from this alternative would be less than considerable.

Alternative C – Realign Ramps East/No Bridge

Impacts from this alternative would be similar to Alternative B except there would be an increase in permeable surfaces, such as landscaped medians, compared to the No Build Alternative. A reduction in the quantity of surface runoff could potentially result from operation of this alternative. Likewise, a minor reduction in contaminant loading in downstream surface waters could occur. As a result, operational impacts from this alternative would be less than considerable.

Alternative D – Realign Ramps East, Retain Bridge and Flyover

This alternative would result in an overall decrease in impervious surfaces due to an increased amount of landscaping as part of the alternative design. Realignment of the entrance and exit ramps would allow for increased vegetated areas, and landscaped medians between the traffic lanes would be included as well. These vegetated and permeable areas would reduce the amount of surface runoff generated by the project compared to the existing conditions. A minor reduction in contaminant loading in downstream surface waters may also result from operation of this alternative. As a result, impacts from this alternative would be less than considerable.

Alternative E – Realign Ramps East, Retain Bridge and Flyover, Relocate Retaining Wall

Impacts from this alternative would be similar to Alternative D. Operational impacts from this alternative would be less than considerable.

Avoidance and Minimization Measures

Alternative A is the most favorable for treatment BMPs because it does not widen Glendale Boulevard and thus does not require additional grading or walls to construct a treatment BMP in the area available on the western side of Glendale Boulevard north of Duane Street. The other two treatment areas require the same amount of grading and preparation for all five alternatives and thus no advantage exists for any specific alternative**.** Alternative C has an advantage over the other four since the proposed SR 2 center median could be utilized as a fourth treatment BMP with minimal cost and ensure 100% of the WQV/WQF is treated. The proposed locations of the treatment BMPs include three specific areas. The first treatment BMP area is located in the available space located on the western side of Glendale Boulevard north of Duane Street to the SR 2 on-ramp. The second treatment BMP area is located on the western side of SR 2 just south of Oak Glen Place. The third treatment BMP area is located on the eastern side of SR 2 just south of Oak Glen Place. Preliminary research of the area's existing structures did not identify any existing treatment BMPs.

- As part of compliance with conditions of the NPDES General Construction Permit, the city and/or its contractors will implement a SWPPP to ensure no considerable impacts on water quality will occur during construction. The SWPPP will identify construction BMPs to maintain water quality. BMPs may consist of a wide variety of measures taken to reduce pollutants from stormwater runoff and other nonpoint-source runoff. BMPs to be implemented as part of compliance with conditions of the NPDES General Construction Permit may include but are not limited to the following measures:
  - temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas;
  - drainage facilities in downstream off-site areas will be protected from sediment using BMPs acceptable to the RWQCB; and
  - grass or other vegetative cover will be established on the construction site as soon as possible after disturbance.
- The implementation of a Hazardous Spill Prevention and Control Program is required as part of compliance with the NPDES General Construction Permit. The city and/or its contractors will develop and implement a spill prevention and control program to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction activities. The plan shall be completed before any construction activities begin and include provisions for preventing, containing, and reporting spills of hazardous materials.
- The implementation of measures to minimize water quality impacts on impaired water bodies, such as the Los Angeles River, are required as part of compliance with the Los Angeles County NPDES municipal stormwater permit. Because the project may be considered a redevelopment project,[1] the

[1] "Redevelopment" is defined by the NPDES municipal stormwater permit (LARWQCB 2001) as "...any land-disturbing activity that results in the creation, addition, or replacement of 5,000 square feet or more of impervious surface area on an already-developed site. Redevelopment includes but is not limited to the expansion of a building footprint, addition or replacement of a structure, replacement of impervious surface area when replacement is not part of a routine maintenance activity, and land-disturbing activities related to structural or impervious surfaces. It does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include

project proponent will develop a Site-Specific Mitigation Plan. This mitigation plan will follow Development Planning Program guidelines established in the *Manual for the Standard Urban Stormwater Mitigation Plan* (County of Los Angeles 2002). The Site-Specific Mitigation Plan will be submitted to the City of Los Angeles Watershed Protection Division for approval. Incorporation of stormwater source control measures, site design principals, and treatment control measures will be included in the design of the project. BMPs incorporated into the project design may include but are not limited to the following:

  - storm drain system stenciling and signage at storm drain inlets;
  - installation of devices to reduce the velocity or energy of water at storm drain outlets;
  - reducing the width of sidewalks and incorporating landscaped buffer areas between sidewalks and streets;
  - installation of a dry detention basin(s) to decrease runoff during storm events, prevent flooding, and allow for off-peak discharge;
  - installation of an infiltration trench to decrease runoff during storm events, prevent flooding, and allow for off-peak discharge; and
  - installation of vegetated strips, high infiltration substrates, and vegetated swales where feasible throughout the project site to reduce runoff and provide initial stormwater treatment.

- Because the proposed project would encroach into State Right of Way, the project proponent will conduct the following:
  - Construction-related water quality impacts would be minimized according to the *Storm Water Quality Handbook: Project Planning and Design Guide (PPDG)* (Caltrans 2007a). The Project Engineer would complete Appendix C (Selection of Construction Site BMPs) and Appendix F (Cost Estimate of the Construction Site BMPs). The Caltrans District 7 Storm Water Coordinator would approve completion of the PPDG requirements, while the Construction Storm Water Coordinator approves only construction site BMPs.
  - As described in the PPDG, the Project Engineer will develop the Project Study Report (PSR), Project Report (PR), Project Scope Summary Report (PSSR), and other scoping documents during project planning. The primary objectives of these documents are to:
    - Identify potential storm water quality requirements and pollutants of concern for specific water bodies;
    - Ensure that the planned project includes sufficient right-of-way and budget for required storm water controls according to Appendix F, Section F.6 of the PPDG;
    - Identify project-specific permanent and temporary BMPs that may be required to mitigate impacts. Permanent BMPs (including design

emergency construction activities required to immediately protect public health and safety. Existing ‘non-hillside’ single-family structures are exempt from the redevelopment requirements.”

pollution prevention and treatment BMPs) must be implemented to the maximum extent practicable and to the extent that implementation is consistent with existing Caltrans policies;

- The Project Engineer will comply with District 7 Directive No. DD31 And DD81 (Caltrans 2005a and 2005b, respectively); and
- The Project Engineer will prepare a Storm Water Data Report (Caltrans 2007b) and provide a copy to the Caltrans District 7 Storm Water NPDES Coordinator for review and comment.

The estimated cost of construction site BMPs, treatment BMPS, SWPPP measures and other water pollution controls is provided below in Table 1. Costs for proposed BMPs were calculated differently for each BMP type. Design pollution prevention (DPP) BMP costs were calculated by adding up all the project costs associated with proposed project improvements that (i) minimize impervious surfaces, (ii) prevent downstream erosion, (iii) stabilize disturbed soil areas, and (iv) maximize vegetated surfaces. For Construction Site BMPs, the total cost was determined by 1.5% of the total construction cost. The total Construction Site BMP costs was then distributed among the proposed Construction Site BMPs based on previous similar Caltrans projects. For the proposed treatment BMPs (bio filtration strip and/or infiltration trench), the estimated infiltration trenches and/or biofiltration strips were calculated at $416.67 per linear foot based on the required construction activities, a 25% contingency and an escalation cost of 4% per year.

Table 1. BMP and Water Pollution Control Costs

	Alt. A	Alt. B	Alt. C	Alt. D	Alt. E
Construction Site BMPs	$1,077,000	$1,776,250	$1,792,500	$1,720,500	$1,968,750
Treatment BMPs	$250,000	$400,000	$400,000	$400,000	$400,000
SWPPP	$8,000	$10,000	$10,000	$10,000	$10,000
Additional Water Pollution Controls	$125,000	$100,000	$100,000	$100,000	$100,000

Source: DMJM Harris, 2008.

Permits Required

The following permits will be required:

- The project would be required to comply with conditions of the NPDES General Construction Permit (CAS000002) and the Caltrans Statewide Permit (CAS000003), both issued by the SWRCB. Conditions include submittal of an NOI to comply with conditions of the permit, development and implementation of a SWPPP, monitoring, and reporting.
- In accordance with conditions of the Los Angeles County NPDES municipal stormwater permit, the project must develop a Site-Specific Mitigation Plan following the guidelines of the SUSMP (County of Los Angeles 2002). Caltrans' *Storm Water Quality Handbook: Project Planning and Design Guide(PPDG)* (Caltrans 2007a) may fulfill these requirements. Compliance with permit requirements will be determined by the County.

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VISUAL IMPACT ASSESSMENT TECHNICAL STUDY

for the

SR-2 Freeway Terminus Improvement Project

EA 205500

4th Draft

December 2008

Prepared for:

Los Angeles County Metropolitan Transportation Authority
California Department of Transportation
Federal Highway Administration

Prepared by**:**

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Visual Impact Assessment Memorandum

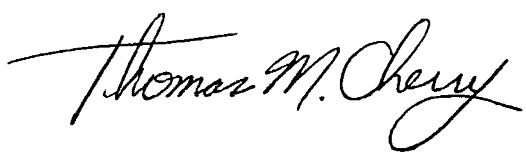
Los Angeles County, California

07-LA-02 (PM 13.5/15.0)

EA 20550K

This Visual Impact Assessment has been prepared under the direction of the following Licensed Landscape Architect. The Licensed Landscape Architect attests to the technical information contained therein and the data upon which recommendations, conclusions, and decisions are based.

Prepared by:



Project Landscape Architect

Contents

Summary of Findings and Conclusion

Construction of Alternative A, Widen Existing Ramps, would not have a significant adverse effect/significant impact on the visual environment. Alternative A would not result in the construction of new structures; it would retain the existing overpass and widen the on-ramp of SR-2 northbound from Glendale Boulevard. A majority of the existing vegetation would remain. However, improvements to the existing vegetation would include new street trees along the Tommy Lasorda Field of Dreams and new street trees along the northwest side of Glendale Boulevard, with a possible park expansion with grading in the northwest corner of the Tommy Lasorda Field of Dreams. The intersection of Glendale/Allesandro Street would be improved with a visual gateway with vertical accent trees and plaza, along with regrading and landscaping for the existing dirt area to the east of the SR-2 southbound exit ramp. Under Alternative A, there would be no change in the views from the residences other than the addition of the new trees along Glendale Boulevard. The views of the downtown skyline to the south and southeast and the mountains to the north and northwest would also remain unaltered. Construction of lighting and retaining walls would be similar to the original interchange.

Construction of Alternative B, Realign Ramps East, Retain Partial Overpass and Flyover, would not have a significant adverse effect/significant impact on the visual environment; although temporary, a less-than-significant adverse effect/less-than-significant impact would occur as a result of the removal of some of the existing right-of-way landscaping until the replacement median and embankment landscaping matures. Alternative B would result in the realignment of the southbound and northbound entrance and exit ramps of SR-2 to and from Glendale Boulevard. Alternative B has the potential to create new community open space or a new landscaped area on that portion of the overpass to be retained. Alternative B would also enhance the pedestrian connectivity by adding crosswalks and paving at the intersections of Glendale/Fargo Street and Glendale/Allesandro Street. The improvements to the overpass and flyover as greenspace are considered benefits to the visual environment. The views of the downtown skyline to the south and southeast and the mountains to the north and northwest would largely remain unchanged due to no structures being developed within the viewshed. Similar lighting would be installed along the new alignments of SR-2 and Glendale Boulevard; neither impacts to views of the mountains or downtown nor light and glare impacts are anticipated.

Construction of Alternative C, Realign Ramps East, Remove Overpass and Flyover, would not have a significant adverse effect/significant impact on the visual environment; although temporary, a less-than-significant adverse effect/less-than-significant impact would occur as a result of the removal of some of the existing right-of-way landscaping until the replacement median and embankment landscaping matures. Alternative C would result in the removal of the overpass and flyover and the realignment of the southbound exit lanes onto Glendale Boulevard. Alternative C has the potential to create new open space or a new landscaped area. A landscaped median/parkway treatment would be provided north and south of the terminus. An additional leg of crosswalk would be added at the Glendale/Waterloo/Fargo intersection and at the Glendale/Allesandro intersection to improve safe pedestrian access. The removal of the Glendale Boulevard overpass and flyover would positively contribute to the visual environment. The views of the downtown skyline to the south and southeast and the mountains to the north and northeast would largely remain unchanged or improve with the removal of the overpass. Also, similar lighting would be installed within the interchange; therefore, no new light and glare impacts would occur.

Construction of Alternative D, Realign Ramps East, Retain Overpass and Flyover, would not have a significant adverse effect/significant impact on the visual environment; although temporary, a less-than-significant adverse effect/less-than-significant impact would occur as a result of the removal of some of the existing right-of-way landscaping until the replacement median and embankment landscaping matures. Alternative D would result in the Glendale Boulevard overpass being retained. The flyover structure from southbound SR-2 would be modified and reused as an ADA accessible ramp adjacent to the existing flyover. The “greening” and conversion of the Glendale Boulevard overpass and flyover for community open space would occur northeast of the intersection. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged. An additional leg of crosswalk would be added at the Glendale/Waterloo/Fargo intersection and at the Glendale/Allesandro intersection to improve safe pedestrian access. The addition of greening and the community open space from the Glendale Boulevard overpass and flyover reuse would contribute positively to the visual environment. The views of the downtown skyline to the south and southeast and the mountains to the north and northeast would remain largely unchanged with the improvements. Also, similar lighting would be installed within the interchange; therefore, no light and glare impacts would occur.

Construction of Alternative E, Realign Ramps East, Retain Overpass and Flyover, Relocate Retaining Wall, would not have a significant adverse effect/significant impact on the visual environment and is very similar to Alternative D. Alternative E would result in the Glendale Boulevard overpass being retained. The flyover structure from southbound SR-2 would be modified and reused as an ADA accessible ramp adjacent to the existing flyover. The greening and conversion of the Glendale Boulevard overpass and flyover for community open space would occur northeast of the intersection. The only difference between the Alternative D and E is that the retaining wall along the northbound entrance ramp to SR-2 from Glendale would be relocated farther east, toward Allesandro Street, thereby removing some existing landscaping and creating limited landscaping opportunities along Allesandro Street. An additional leg of crosswalk would be added at the Glendale/Waterloo/Fargo intersection and at the Glendale/Allesandro intersection to improve safe pedestrian access. As in Alternative D, the addition of greening and the community open space from the Glendale Boulevard overpass and flyover reuse would contribute to the visual environment. The views of the downtown skyline to the south and southeast and the mountains to the north and northeast would remain largely unchanged with the improvements. Also, similar lighting would be installed within the interchange; therefore, no light and glare impacts would occur.

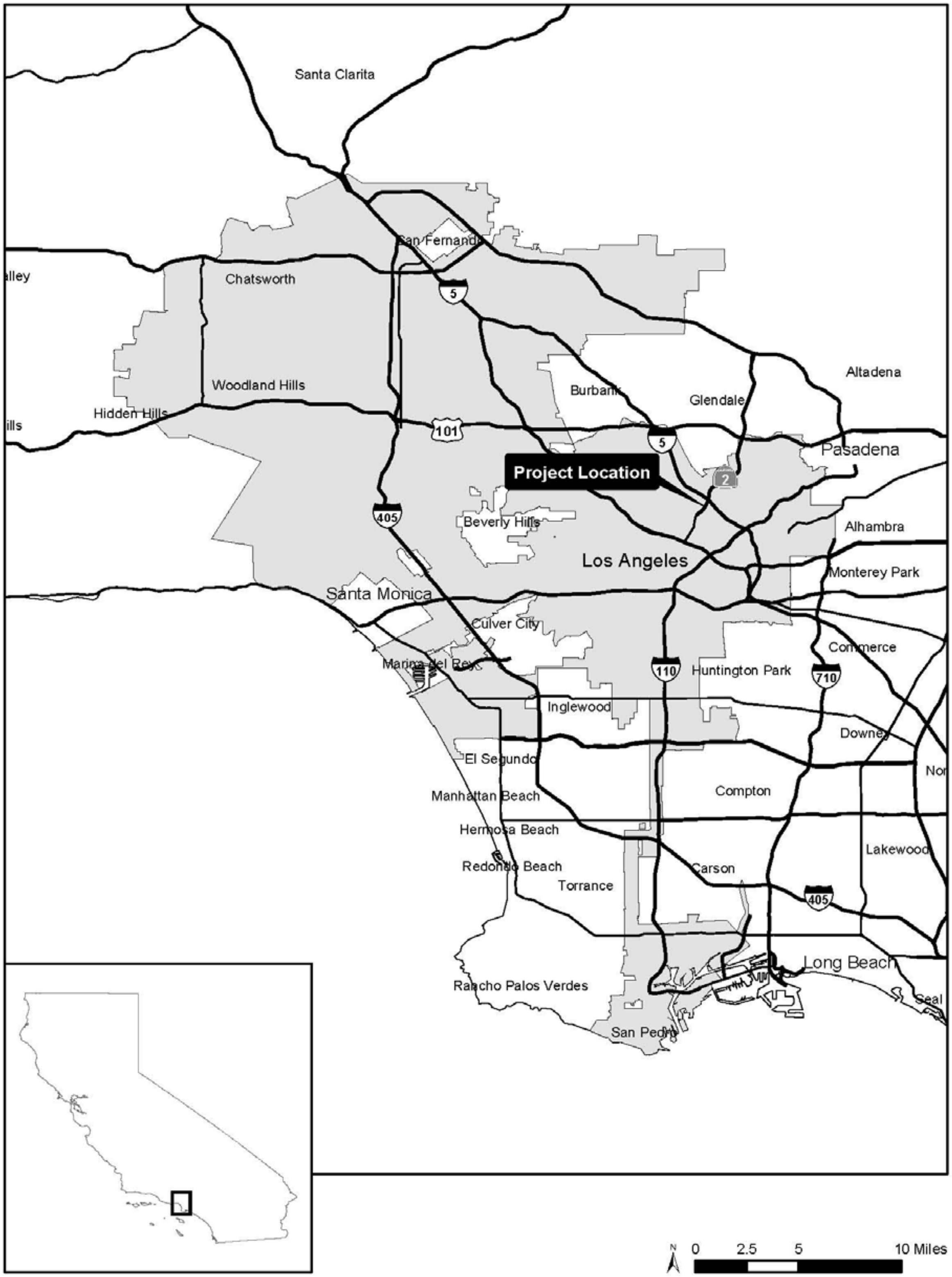
Noise studies were recently completed documenting the potential for significant traffic noise impacts adjoining the project area. On the basis of that analysis, the construction of soundwalls is anticipated as part of the project to reduce noise impacts. The proposed soundwalls would be of concrete masonry unit construction and range in height from 6 to 16 feet tall from adjoining road grade. It is anticipated that the soundwalls would be planted with vines and further screened with trees to reduce their potential visual impact. Because of this planting and the additional landscape enhancements being proposed under the five alternatives, the current landscaped appearance of the SR-2 right-of-way would be enhanced once replacement and new landscape features mature. Adverse changes to visual quality as a result of the removal of some of the existing landscaping would be temporary—experienced primarily by motorists—and hence would be expected to be less than significant. In addition, no significant impact on mid-range views would result from the soundwalls, and all far-off views of neighboring hills and ridgelines—views considered significant—would be preserved.

Project Description

The proposed project is located on State Route 2 (SR-2) in the City of Los Angeles between Branden Street (post mile [PM] 13.5) and Interstate 5 (I-5) (PM 15.0) (Figure 1). The project proposes to modify the southern terminus of SR-2 near the intersection of Duane and Allesandro Streets in the Echo Park District of the City of Los Angeles. This segment of the SR-2 extends approximately 1.5 miles and is bordered by residential developments and community parks. The area is urbanized and situated between Silver Lake Reservoir and Tommy Lasorda Field of Dreams to the west, Elysian Park and housing developments to the southeast, and the Los Angeles River and I-5 to the north. (see Figure 2).

The purpose of the project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses.

Figure 1. Regional Vicinity Map



Source: Jones & Stokes, 2007.

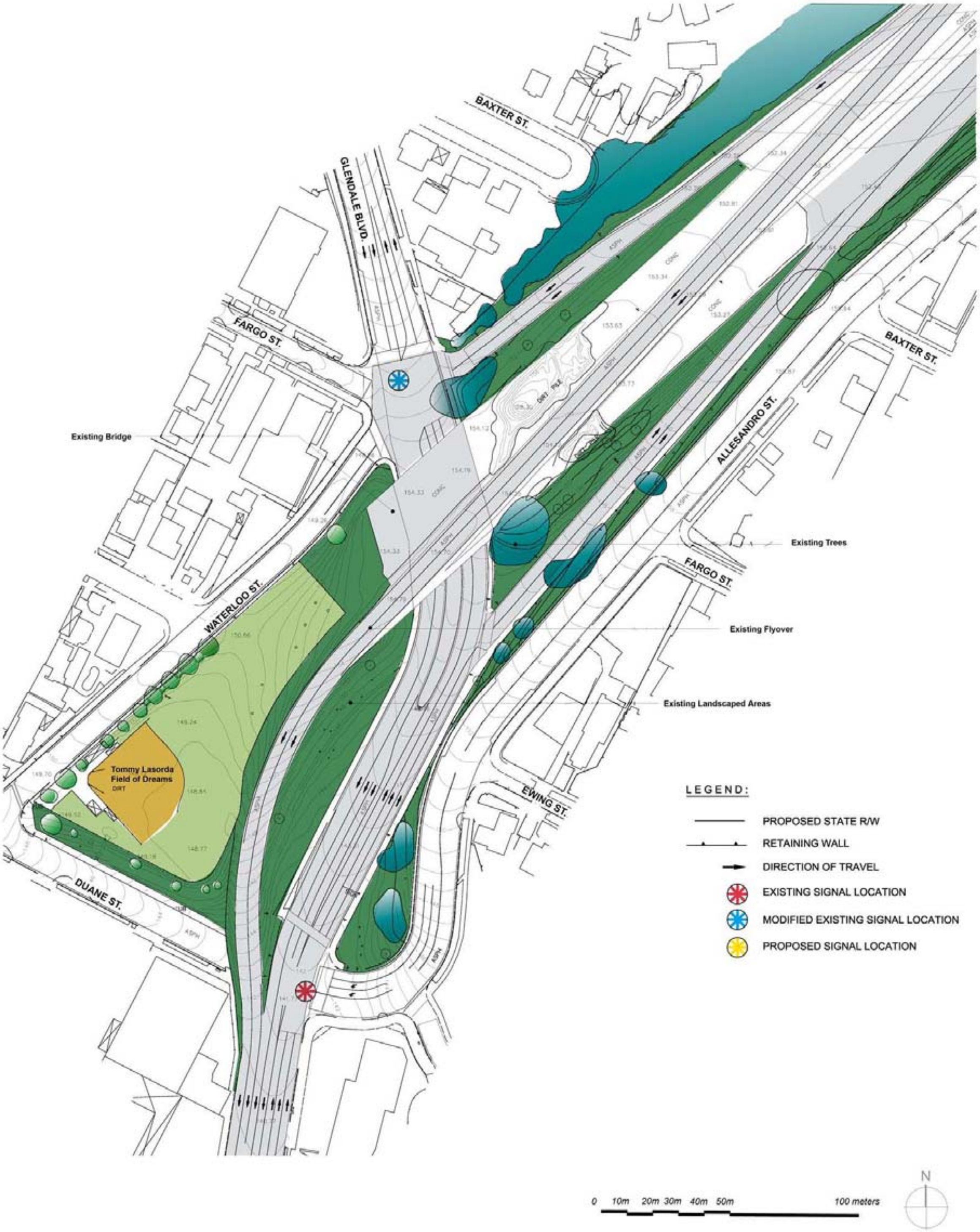
Figure 2. Project Location Map

Source: Jones & Stokes, 2007.

There are six proposed alternatives for the SR-2 Freeway Terminus Improvement Project, including the No-Build Alternative. The proposed project site is generally located between Clifford Street to the south and Oak Glen Place to the north. The six proposed alternatives are summarized as follows (see Figures 3 through 8):

- **No Build Alternative (Baseline Alternative)**
  This alternative requires no new construction or capital cost (Figure 3).
- **Alternative A (Widen Existing Ramps – Maintain Overpass)**
  This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp (two lanes). This alternative does not have any potential for new open space (Figure 4).
- **Alternative B (Realign Ramps East- Remove Flyover and Part of Overpass)**
  This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and part of the overpass. This alternative offers the potential for new open space (Figure 5).
- **Alternative C (Realign Ramps East – Remove Overpass)**
  This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and overpass. This alternative provides a landscaped median and parkway treatment. This alternative offers the potential for new open space. (Figure 6).
- **Alternative D (Realign Ramps East – Maintain Overpass)**
  This alternative would shift the exit ramps to the east and modify the existing flyover structure and overpass, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged (Figure 7).
- **Alternative E (Realign Ramps East, Retain Overpass and Flyover, Relocate Retaining Wall)**
  This alternative would shift the exit ramps to the east and modify the existing flyover structure and overpass, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall along Allesandro Street would be relocated to the east to maintain Caltrans' streets and highway standards (Figure 8).

Figure 3. No-Build Alternative (Baseline Alternative)



Source: Melendrez, 2006.

Figure 4. Alternative A (Widen Existing Ramps)

Source: Melendrez, 2006.

Figure 5. Alternative B (Realign Ramps East- Remove Flyover and Part of Overpass)

Source: Melendrez, 2006.

Figure 6. Alternative C (Realign Ramps East – Remove Flyover and Overpass)

Source: Melendrez. 2006.

Figure 7. Alternative D (Realign Ramps East – Retain Flyover and Overpass)

Source: Melendrez, 2006.

Figure 8. Alternative E (Realign Ramps East – Retain Flyover and Overpass – Relocate Retaining Wall)

Source: Melendrez, 2006.

Methodology and Approach

In accordance with FHWA and Caltrans environmental review guidelines, an assessment of visual impacts associated with highway projects is required to satisfy the provisions of NEPA and CEQA. This visual assessment technical study was prepared in conformance with those provisions and organized based upon the guidelines found in the publication titled *Visual Impact Assessment for Highway Projects*, March 1981. The publication was produced by FHWA, Office of Environmental Policy.

The following analysis identifies important, or “key,” views that could theoretically be noticeably altered by the proposed project. As recommended by FHWA, these views are described by the view character and quality, the visual resources present, viewer group and viewer group sensitivity, as well as the duration of the views. The terminology is described below.

- The **character** of a view is described by the topography, land uses, scale, form, and natural resources depicted in the view. The assessment of the visual character is descriptive and not evaluative because it is based on defined attributes.
- Visual **quality** refers to the aesthetics of the view. Determining the quality of a view can be subjective because it is based in part on the viewer’s values and notions about what constitutes a quality setting. In an effort to establish an objective framework, this assessment applies the evaluative criteria (i.e., vividness, intactness, and unity) and qualitative rankings (low, medium, and high) presented in the FHWA guidelines. **Vividness** is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns. **Intactness** is the visual integrity of the natural and man-made landscape and its freedom from encroaching elements. **Unity** is the visual coherence and compositional harmony of the landscape considered as a whole.
- In this assessment, visual quality is ranked as low, medium, or high. Views of high quality have topographic relief, a variety of vegetation, rich colors, impressive scenery, and unique natural and/or built features. Views of medium quality have interesting but minor landforms, some variety in vegetation and color, and/or moderate scenery. Views of low quality have uninteresting features, little variety in vegetation and color, uninteresting scenery, and/or common elements. The FHWA guidelines explain that all three criteria—vividness, intactness, and unity—must be high to indicate high quality.
- **Visual resources** within a view may include unique views, views identified as important in local plans, or views from scenic highways.

- **Viewer groups/sensitivity** refers to those who would see the highway project both during construction and after its completion and whether the viewers are likely to have a low, moderate, or high level of concern about the aesthetic changes resulting from the project. It is presumed that residents who can see the project from their place of residence would have a relatively high level of sensitivity, as would tourists and motorists driving for pleasure. By contrast, it is presumed that the typical motorist/commuter driving through the area to and from work or making deliveries is presumed to have a low level of sensitivity because attention is focused chiefly on driving or work-related activities.
- **Duration** of a view refers to the length of time the view is observed by a particular viewer group. The view duration may be either (1) short term or (2) long term. Short-term views include fleeting or intermittent views, such as those visible from a moving source over a short distance (viz., motorists views from a moving vehicle). Long-term views are composed chiefly of constant views as experienced over an extended period of time (viz., a view from a residential property or office building).

Visual Environment and Resources

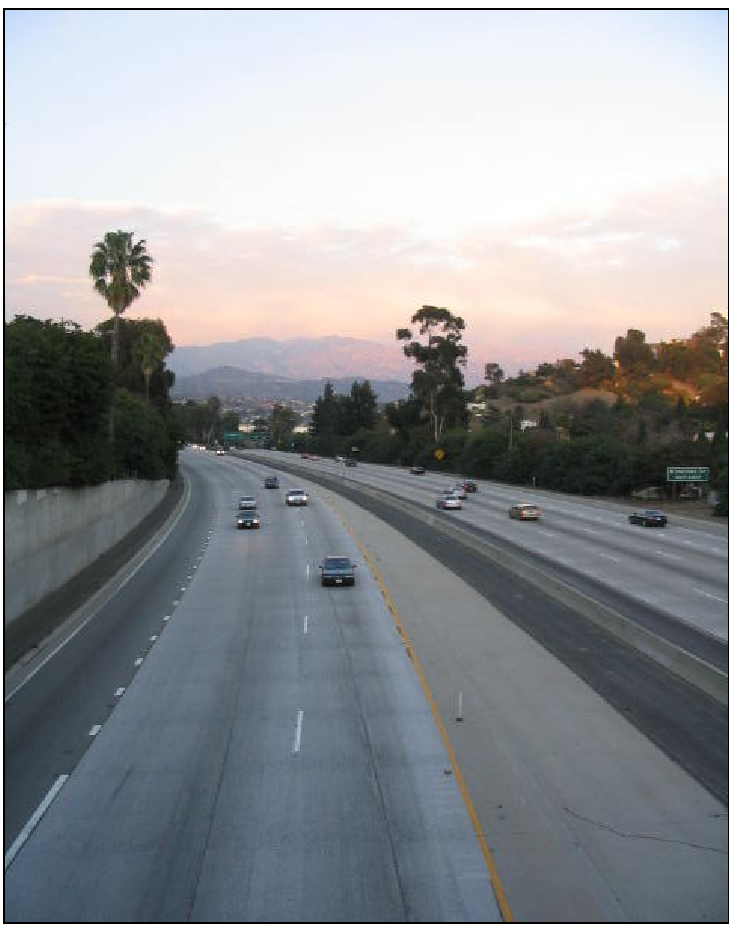
Setting

Located in the City of Los Angeles along SR-2 in the vicinity of Glendale Boulevard, the project site is bordered by Silver Lake to the west and Echo Park to the east, and because it occurs at Glendale Boulevard, is at the north/south demarcation between the two neighborhoods. The topography in the area is generally hilly, and the residential neighborhoods are set in the hills overlooking the project area. The neighborhoods are moderately densely developed and characterized by steep slopes and narrow, winding streets and many mature trees that occasionally serve to frame views but more typically obscure views of SR-2. Both neighborhoods, Silver Lake and Echo Park, were first developed at the beginning of the twentieth century, and contain an eclectic mix of building types constructed in phases in the early twentieth, mid-century, and during the recent past, including a number of historic buildings in scattered locations throughout the neighborhood. Although Glendale Boulevard contains an eclectic mix of commercial, commercial-with-residential-above, light manufacturing uses, and storage facilities, the predominant uses in the vicinity of the project site are residential and vacant land. To the west, there is a school and St. Teresa of Avila Church (at the southwest corner of Fargo Street and Glendale Boulevard). Constructed in 1929, the Mission Revival style church is potentially eligible for the California Register of Historical Resources. Based upon an intensive survey conducted by Jones & Stokes, the church is the only historic building abutting the project site.

Key Views, Visual Resources, and Visual Quality

Two key views are identified in the vicinity of the project site: 1) views of the mountains to the north and northwest and 2) views of the downtown skyline to the south and southeast. In the vicinity of the project site, the far-off views of the mountains are available to northbound travelers along SR-2. Motorists along east–west overpasses on SR-2 also have views of the mountains (see Figure 9). The views of the downtown skyline are available along the southern extent of the project site near the Tommy Lasorda Field of Dreams (see Figure 10). These views are available to residents west of the park and park users (see Figure 11). Motorists along local streets would have the same views, as would motorists exiting SR-2 onto Glendale Boulevard southbound (see Figures 12 and 13). Residents east of Glendale Boulevard generally would not have views of the project when looking southerly and northerly directions due to topography and vegetation (e.g., the dense eucalyptus and Brazilian pepper tree plantings along the perimeters of/and in the median of the SR-2 right-of-way between the interchange with I-5 and Glendale Boulevard) (see Figures 14 through 17). The setting is heavily trafficked at present due to the presence of large volumes of vehicles entering and exiting SR-2, as well as the important role Glendale Boulevard plays as a north/south arterial street linking the City of Glendale and downtown Los Angeles. Due to the hilly terrain and traffic at the juncture of SR-2, the area has little pedestrian activity. Pedestrians, therefore, are not considered a significant viewer group.

Figure 9. Key View of the Mountains to the North



Source: Jones & Stokes, 2007.

Figure 10. Key View of the Downtown Skyline

Source: Jones & Stokes, 2007.

Figure 11. View of the Valley and Mountains from Residential Areas to the West

Source: Jones & Stokes, 2007.

Figure 12. View to the North from Intersection of Glendale Boulevard

Source: Jones & Stokes, 2007.

Figure 13. View Southwest of the SR-2 Terminus from Residential Areas to the East

Source: Jones & Stokes, 2007.

Figure 14. View Southeast toward SR-2, Adjoining 2290 Lakeview Avenue

Source: Jones and Stokes, 2008.

Figure 15. View Northeast along SR-2, from Oak Glen Place Overpass

Source: Jones & Stokes, 2008.

Figure 16. View Northwest toward SR-2, from Oak Glen Place

Source: Jones and Stokes, 2008.

Figure 17. View Southwest toward SR-2 Terminus, after I-5 Interchange

Source: Jones and Stokes, 2008.

Project Viewshed

The viewsheds vary according to the location of the viewer and direction of view. For northbound motorists along SR-2, the viewshed includes views of the hills on the east and west, the road surface ahead, and far-off views off the mountains. Residents located along higher reaches of the hills and with north-facing windows may have some views of the far-off mountains. The viewshed for such residents would include mid-range views of the valley below and distant views of the far-off mountains. Topographic features found in this hilly neighborhood setting, street patterns, and mature trees often serve to obscure mid-range and distant resident views of the project site from the southwest and southeast (see Figure 11).

For southbound motorists along SR-2, users of the Tommy Lasorda Field of Dreams ballpark, and residents in the Silver Lake neighborhood with south- and southeast-facing windows, the viewshed would include views of the downtown skyline in the background and views of Glendale Boulevard and its retail establishments in the foreground. The same combination of topographic features, street patterns, and mature trees noted above permits close-in and mid-range views from a small number of vantage points from the north and northeast. Such residential viewers are typically in a range from 600 to 1,000 feet away from the project site. East of Glendale Boulevard, sightlines from residences into the SR-2 right-of-way again are generally precluded due to topography and dense landscape features (Figures 14 through 17).

Viewer Groups/Sensitivity/View Duration

Views of mountains to the north:

- **Viewer Group/Sensitivity**

  Motorists along SR-2: Low to Moderate

  Pedestrians: Moderate

  Residents: High

- **View Duration**

  Short term (motorists, pedestrians)

  Long term (residents)

Views of downtown skyline:

- **Viewer Group/Sensitivity**

  Motorists along SR-2 and local streets: Moderate

  Pedestrians: Moderate

  Residents: High

  Park Users: Moderate

- **View Duration**

  Short term (motorists, pedestrians, park users)

  Long term (residents)

Local Plans and Policies

City of Los Angeles Silver Lake-Echo Park-Elysian Valley Community Plan

The City of Los Angeles Silver Lake-Echo Park-Elysian Valley Community Plan contains relevant policies related to aesthetics. These are:

> **Policy 1-3. 2:** Preserve existing views in hillside areas.
>
> **Policy 1-6.4:** Ensure that any proposed development be designed to enhance and be compatible with adjacent development.

Scenic Corridors and Highways

A review of official county and state scenic highway maps indicates that neither this segment of SR-2 nor the streets adjoining the project site have been designated scenic highways or scenic corridors.

Visual Impact Assessment

Methodology

This visual impact assessment is based upon FHWA guidelines outlined in the *Visual Impact Assessment for Highway Projects* and intended to conform to the visual impact analysis provisions of NEPA and CEQA.

Criteria Used to Evaluate Effects on the Landscape and Existing Views

- Significance Criterion 1 (Character Consistency): A significant visual impact/adverse effect would result if the proposed project would introduce new visual elements that would strongly contrast or be incompatible with the character of the existing landscape or key view.
- Significance Criterion 2 (Obstruction of Views): A significant visual impact/adverse effect would result if the proposed project would obstruct key views. The importance of a view is based on its character and quality, its viewers, and the duration of the view. For purposes of this analysis, a view is considered key if at least one of the following circumstances applies:

  a. visual resources are present, regardless of the quality of the view; the sensitivity of the affected viewer group is medium or high, and the duration of the view is long term; or

b. the quality of the view is medium or high, regardless of whether visual resources are present; the sensitivity of the viewer group is medium or high, and the duration of the view is long term; or

c. the view is distinct, clear, and unobstructed from the highway and is viewed regularly by a large number of commuters. In this case, the viewer sensitivity is medium, and the view is long term.

Criteria Used to Evaluate Light/Glare, Shade/Shadow

Potential visual impacts would occur if the proposed project results in significant light, shade/shadow, or glare, including substantial light intrusion on sensitive receptors (residences), noticeable glare that is hazardous to motorists, or substantial shade/shadow on sensitive receptors (e.g., residences and parks).

Long-Term Impacts

The project is located in an area of low to moderate natural beauty; the project area is not part of a recreational or scenic area. The local plans stress the importance of preserving views from the hillsides, which are the predominant landform in this setting. The project, however, would not significantly affect such views to nearby and more distant hills and ridgelines.

Under each of the five build alternatives, the changes and improvements proposed are designed to improve traffic flow at the freeway terminus, make the freeway terminus compatible with existing residential and commercial uses, provide pedestrian enhancements at the SR-2 freeway terminus, and create the opportunity for potential additional open space in the vicinity of the SR-2 terminus. The changes proposed under the alternatives include one or more of the following improvements: widen on-ramps, widen off-ramps, remove flyover and overpass, shift entrance and exit ramps to the east, and decommission the overpass for the creation of additional community open space. Under none of the alternatives would significant vertical obstructions be installed, although Alternatives B, D, and E would require installation of safety railings over the overpass connection. The improvements proposed are to the roadway alignment and as such would have no effect on key views identified for the project area. Alternative C would remove the existing overpass structure and supporting columns and include new landscaped medians on Glendale Boulevard and SR-2 and/or visual art features on Glendale Boulevard, which would have a beneficial impact on the overall visual quality and viewer experience. While soundwalls are likely to be proposed as part of the project, existing landscaping blocks most close-in views residents have of the freeway at present. In addition, notwithstanding the inclusion of soundwalls as part of the project, significant views of far-off ridgelines would be preserved.

Adverse changes to the visual setting would be of a temporary nature rather than long-term impacts. These are associated with the removal of some of the existing right-of-way landscaping to construct soundwalls and the visibility of the new concrete masonry soundwalls before new replacement landscaping matures to screen the soundwalls from view. In addition, under Alternatives B, C, D and E, the realignment of the north and southbound lanes so that they are side-by-side would require the removal of the existing median, which separates southbound and northbound traffic visually with a dense stand of mature eucalyptus and other evergreen trees. In the short-term, the loss of the median planting would be a significant adverse change in visual character of the project corridor for motorists rather than residents with ongoing fixed views across the visual setting. However, motorists are considered only low to moderately sensitive to such changes because most are commuters with only limited interest in the visual setting. Due to the dense landscaping outside of /and along the perimeter of the right-of-way, only a small number of nearby residents will notice the loss of the median landscaping and are unlikely to experience that loss as a significant adverse change to visual quality.

The key view of the mountains to the north would remain unchanged due to changes proposed under the build alternatives. Given the moderate level of motorist sensitivity (most being commuters rather than sightseers), were soundwalls to be constructed, the motorist experience on SR-2 would not be significantly affected as a result of the project due both to the retention of a significant portion of the existing landscaping and the eventual maturation of the new infill screening landscaping that would be installed. The shifting of on- and off-ramps to the west or east and/or widening of ramps would not result in changes that would obstruct views of the far-off mountains. The views of the far-off mountains are available from both east and west of the project area. The shifting of on- and off-ramps would not exclude a group of motorists from these views. Only a small percentage of views of the project site could be seen by the residents due to topographic factors, varying street alignments, and mature trees. Given the less-than-pristine character of the current project setting, including the presence of the existing overpass, vacant unimproved land, asphalt road paving, and the high volume of traffic now seen at the juncture of SR-2 and Glendale Boulevard, such close-in and mid-range views would not be expected to change substantially.

Similarly, views of the downtown skyline from the Tommy Lasorda Field of Dreams would remain unchanged. The project would not encroach upon the park or build structures that would obstruct views to and from the park. The park lies outside the construction limits for the project. None of the improvements proposed under the build alternatives would change views of the downtown skyline for the motorists, park users, residents, or pedestrians. Moreover, because the park is used primarily for team sports activities on weekends and weeknights, park users would have only a moderate level of sensitivity to the presence of the project and would be minimally affected by construction activities because park use and construction hours would generally not coincide.

No adverse direct or indirect impacts to potential historic resources would occur as a result of the project. Only one potential historic resource was identified—St. Teresa of Avila Church. However, the building lies outside the construction limits of the project, and improvements proposed under the build alternatives would not result in significant visual changes to the less- than-pristine physical/historic setting of the church.

The build alternatives would not result in any new structural elements that would produce substantial new shadows. The shade and shadow pattern would be similar to that of the existing conditions. The vertical elements on the proposed roadway that would cast shadows would be the safety barriers and soundwalls. The soundwalls would be screened with landscaping. Standard lighting fixtures, similar to the existing 30-foot downward-directed light standards, would be used. The materials used in the design of the roadway and safety railings would be non-glare producing. Soundwalls would be non-glare producing both in terms of texture and color and would be partially screened with the new and existing landscaping after the noise barriers are constructed. Once the landscaping matures it is anticipated that the new soundwalls would be largely screened from view through a combination of trees, shrubbery, and vines that would grow directly over the soundwalls. The nighttime lighting conditions would not change as a result of the project.

Construction Impacts

Minor, temporary potential visual impacts may result from removal of vegetation in the construction zone and other construction activities (viz., staging/stockpiling road-building materials, operating construction equipment, erecting temporary traffic barricades, and construction of sound walls). Construction hours are not expected to extend into the night; therefore, use of lights would be minimal. If use of lights occurs, an adequate buffer would be provided to avoid spill. Visible activities would include routine construction activities and truck deliveries. These activities would be visible from residential areas along both sides of SR-2, the Tommy Lasorda Field of Dreams, and along SR-2, Glendale Boulevard, and local streets. Nonetheless, these visual impacts would be limited to the period of construction. The Tommy Lasorda Field of Dreams field has a baseball diamond and other amenities associated with little league baseball. The greatest use of the facility occurs from April to July; the field is used Monday through Friday from 5 p.m. to 7 p.m. and Saturdays from 9 a.m. to 2 p.m. for Silver Lake Recreation Center baseball practice and games. There is no nighttime lighting equipment installed at the field. In the future, restrooms would be located adjacent to the field. Since the field is used after 5:00 p.m. on weekdays and on weekends, there would be limited impacts due to construction activities. Also, since this user group is limited to little league baseball players and fans, the viewer group is only moderately sensitive, because as team sport participants, it is expected that their primary focus would be their activities on the play field.

The presence of construction personnel and equipment would be short term and, therefore, would not result in any substantial adverse impacts. Due to the temporary nature of the impacts, the loss of visual quality during construction is not considered to be significant under CEQA or adverse under NEPA.

Avoidance/Minimization/Mitigation Measures

The project would be designed in accordance with Caltrans' Highway Design Manual and the 2007 Project Development Manual. The proposed SR-2 improvements would be designed to be in keeping with the local design context in which the work is proposed, with input from local governmental agencies. Aesthetic treatments to retaining wall gore paving, overpass structures (i.e., vines, colored textured paving, etc.), and, if proposed, extensive landscape screening of soundwalls utilizing a combination of vines, replacement trees and shrubbery would be done. As a result, visual impacts under CEQA and adverse visual effects under NEPA would be less than significant as a result of the project.

APPENDICES

APPENDIX A: Bibliography

APPENDIX B: List of Preparers

APPENDIX A

Bibliography

Bibliography

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Personal Communication

Sellers, Keith. Landscape associate. Caltrans District 7. October 16, 2008—email.

APPENDIX B

List of Preparers

List of Preparers

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B.S., Landscape Architecture. California State Landscape Architecture License #3660; Member of Society of Ecological Restoration.

Mr. Cherry has 23 years experience in environmental and land use planning analyses, including visual impact assessments, environmental compliance monitoring, preparing habitat mitigation and monitoring plans, and preparing landscape construction documentation for project implementation.

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Mr. Dudley has two years of experience as an environmental planner with a broad background in hazardous materials, environmental compliance, and wetlands. Bert assists with the preparation of documents for compliance with CEQA and NEPA, coordinates project work, and conducts research for project managers.

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M.A., Architectural History and Historic Preservation Studies, University of Virginia; B.A., Architecture, University of California, Berkeley.

Mr. Anderson has some 23 years of experience in the environmental planning field, focusing on urban design review and analysis, architectural/historic resource survey work, and Section 106 and historic resource-related CEQA analysis.

DRAFT

TRAFFIC STUDY
FOR THE
STATE ROUTE 2 GLENDALE FREEWAY
TERMINUS IMPROVEMENT PROJECT

EA 205500

June 2008

Prepared for:

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
CALIFORNIA DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

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TABLE OF CONTENTS

LIST OF FIGURES

NO.

LIST OF TABLES

NO.

I. INTRODUCTION

This report documents the results of a study evaluating the future traffic conditions resulting from six (one no-build and five design build) alternatives for the State Route 2 (SR-2) Freeway Terminus Improvement Project. Fehr & Peers/Kaku Associates conducted the study in support of the project's Initial Study/Environmental Assessment (IS/EA).

PROJECT DESCRIPTION

Location and Setting

The freeway terminus for the southern portion of SR-2 lies in the heart of the Silver Lake neighborhood of the City of Los Angeles. Glendale Boulevard provides the primary arterial access to the freeway. A map of the study area is shown in Figure 1.

State Route 2 between the I-5 freeway and Glendale Boulevard provides ingress and egress to the communities of Echo Park and Silver Lake and is a major thoroughfare for the surrounding area. This segment of SR-2 also provides a vital link for commuters traveling from communities in the northern and eastern parts of the Los Angeles Basin to the local Los Angeles area.

Project Context and Purpose

SR-2 was originally planned and constructed in 1959 to connect with the Hollywood Freeway (US 101) through the neighborhoods of Silver Lake and Echo Park. In 1962, as a result of local community opposition, the full buildout plan was rescinded and construction was terminated at the present SR-2 terminus near Glendale Boulevard and Duane Street. Since then, commuter

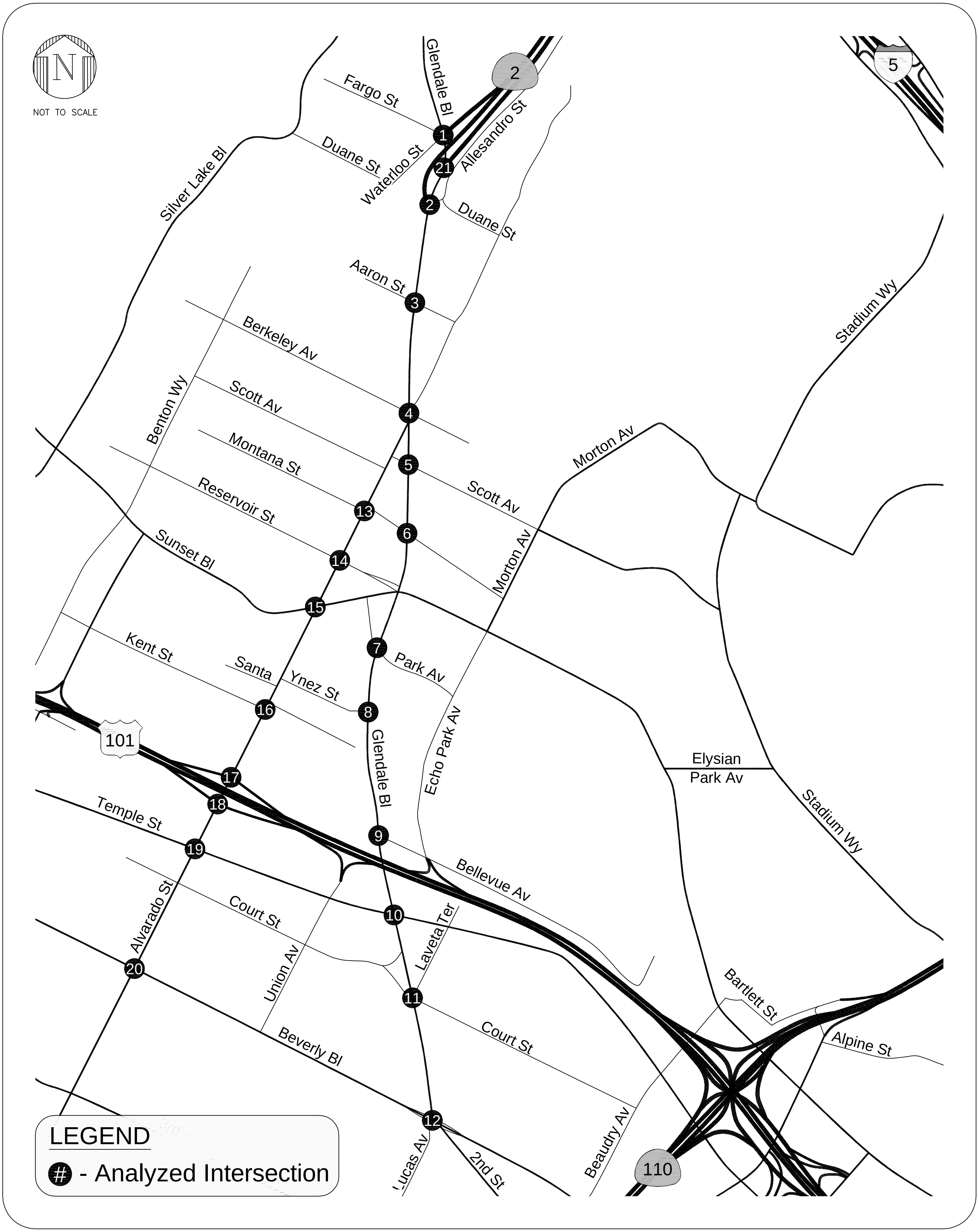


FIGURE 1
STUDY AREA AND ANALYZED INTERSECTIONS

traffic onto and off of SR-2 has passed through the community, primarily along Glendale Boulevard and Alvarado Street, and has contributed to congestion[1].

In 1994, *Glendale Boulevard Corridor Preliminary Planning Study – Phase II* (Gruen Associates, et al, 1994) developed a set of recommendations to renovate Glendale Boulevard into a multi-use street with an active pedestrian component. Among the recommendations that have been implemented as a result of the study are streetscape and traffic flow improvements. The reconfiguration of the SR-2 freeway terminus was recommended, but has not yet been implemented.

The purpose of the current SR-2 Freeway Terminus Improvement Project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include:

- creating the opportunity for additional open space in the vicinity of the SR-2 terminus, and
- developing a freeway terminus design that is compatible with existing residential and commercial uses.

The SR-2 Freeway Terminus Improvement Project involves the development of a conceptual alternative that is technically feasible and sensitive to the community. To this end, the project sponsors – the Los Angeles County Metropolitan Transportation Authority (Metro) and California Department of Transportation (Caltrans) – are using the context sensitive design (CSD) approach encouraged by the Federal Highway Administration (FHWA). The project is funded by FHWA through a $12-million Transportation Equity Act for the 21st Century (TEA-21) grant.

[1] Source: Metro (http://www.mta.net/projects programs/freeway terminus.htm)

Silver Lake North Sub-Area Neighborhood Traffic Management Plan

Just prior to the collection of traffic counts for this study, a traffic mitigation and calming program was implemented in the Silver Lake neighborhood sub-area bounded by Glendale Boulevard, Silver Lake Boulevard and Duane Street. Cut-through traffic between Glendale Boulevard and Silver Lake Boulevard was effectively eliminated in this sub-area as a result of the program. The mitigation measures are illustrated in Figure 2 and include:

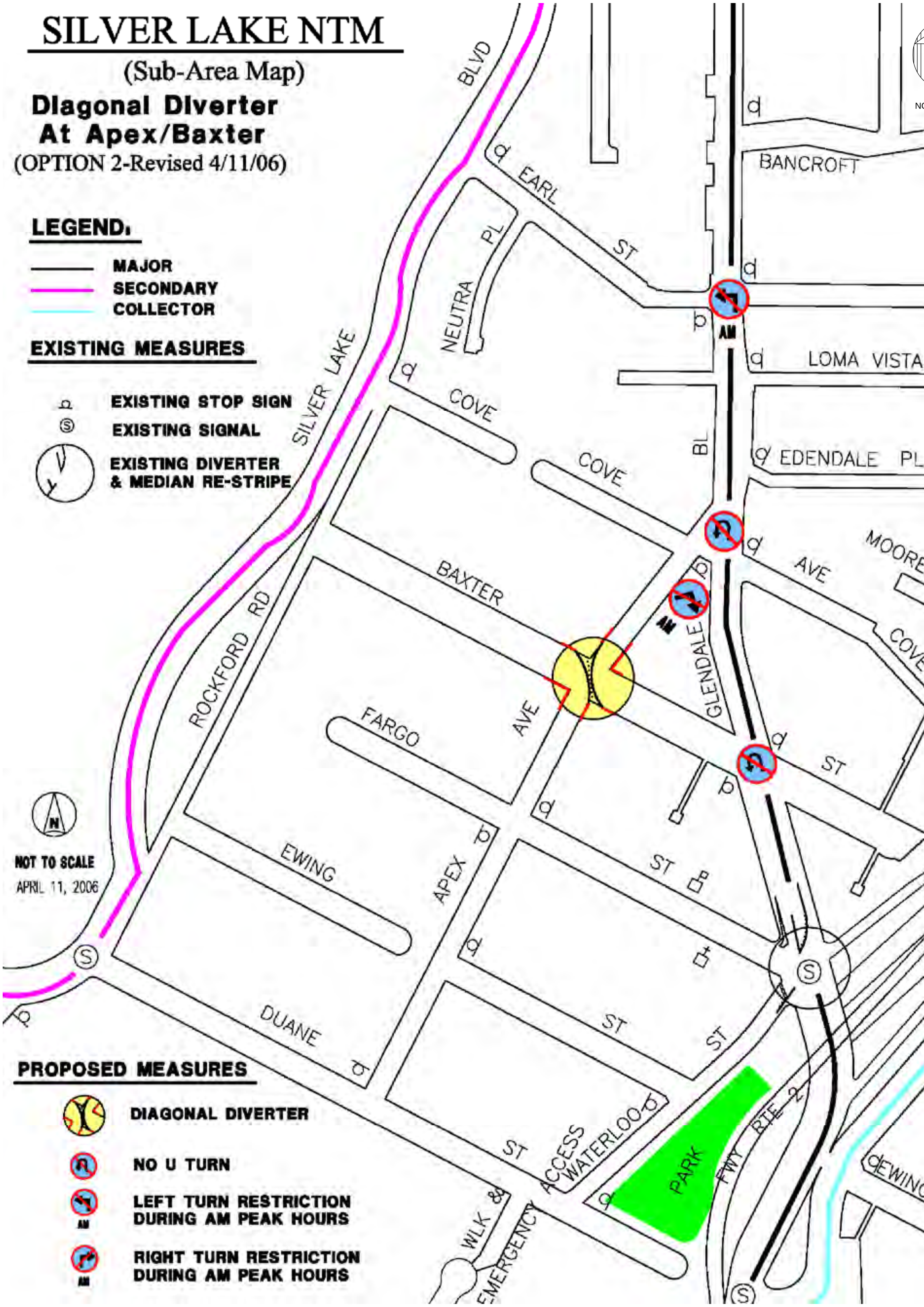
- A diagonal diverter at the intersection of Baxter Street and Apex Avenue
- Half-closure on Waterloo Street at Glendale Boulevard
- A median extension on Glendale Boulevard at Fargo Street
- Specified turn restriction signs on Glendale Boulevard at Baxter Street, Apex Avenue and Earl Street

In February 2007, a survey was administered asking residents whether they supported those traffic restrictions. Needing a supermajority to keep the restrictions in place, the "yes" responses tallied just 58.97% of the total vote and the measures were removed. Traffic counts were collected at the effected study intersections in September 2007 to determine changes in travel patterns resulting from the removal of the traffic calming devices.

PROPOSED ALTERNATIVES

The improvement project currently includes six alternatives for the SR-2 freeway southern terminus. Figure 3 illustrates the alternatives. Each alternative is described in detail below:

1. No-Build Alternative: This alternative requires no new construction or capital cost.
2. Alternative A (Widen Existing Ramps): This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp (two lanes). This alternative does not have the potential for new open space.



Source: LADOT

FIGURE 2
SILVER LAKE NORTH SUB-AREA
NEIGHBORHOOD TRAFFIC MANAGEMENT PLAN

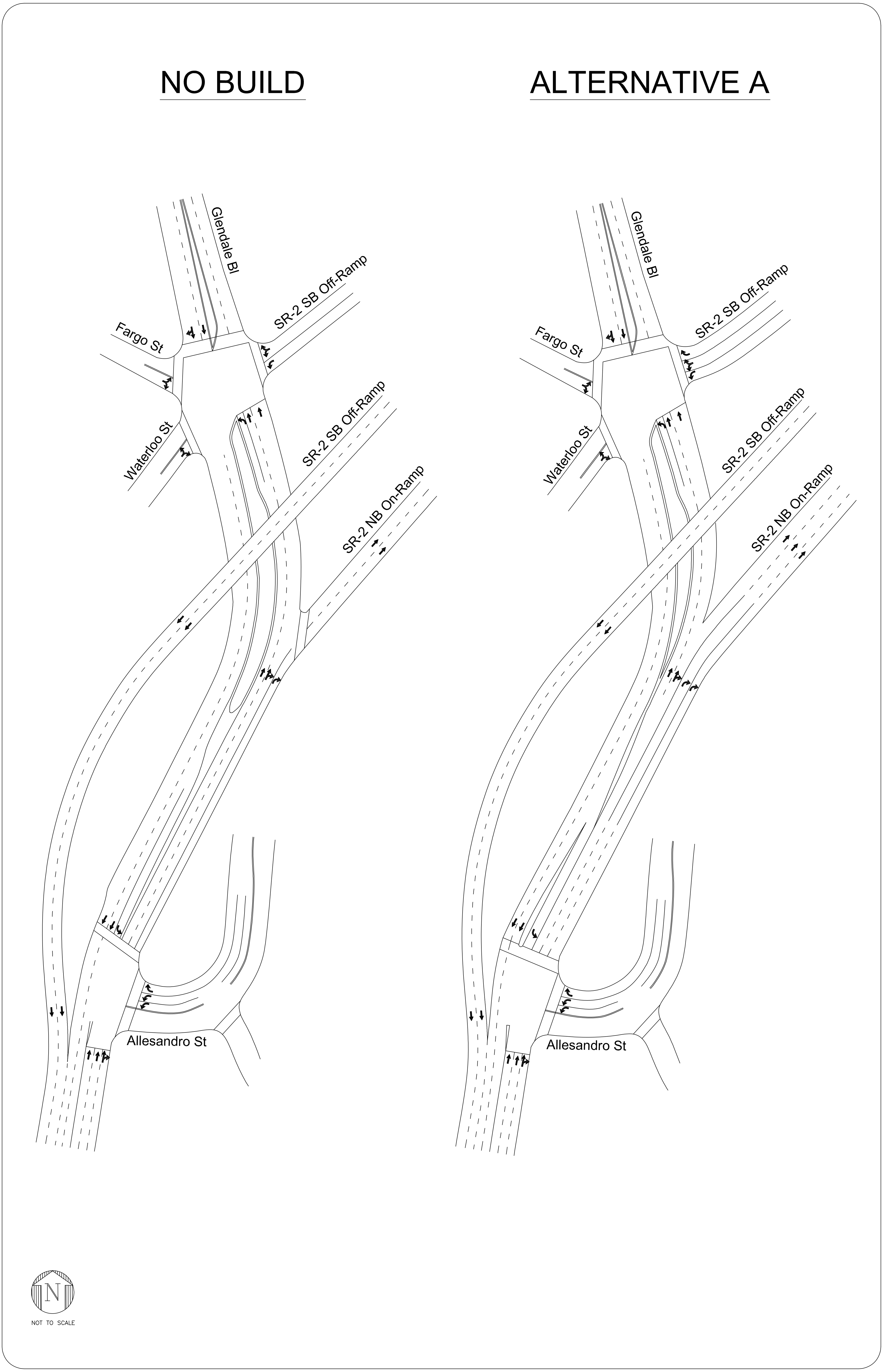
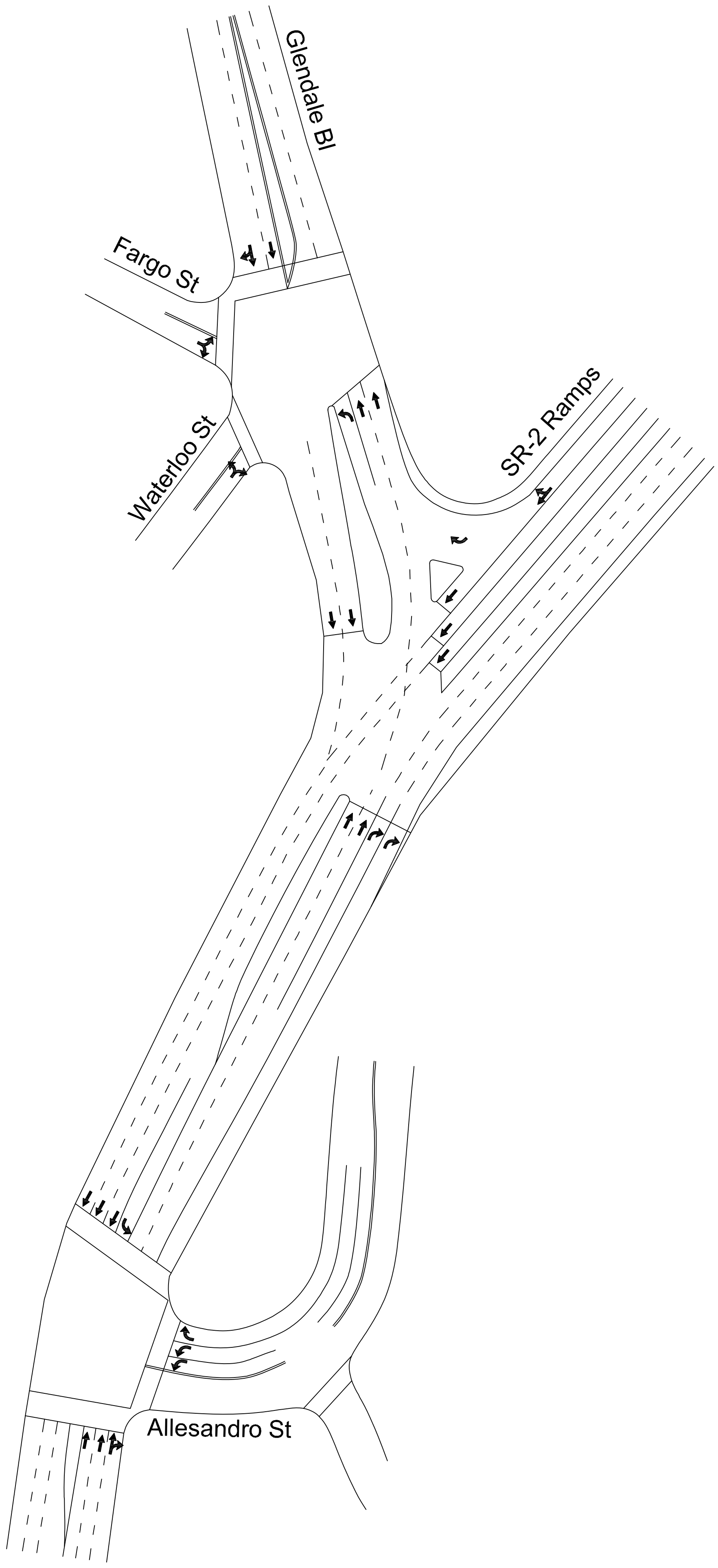
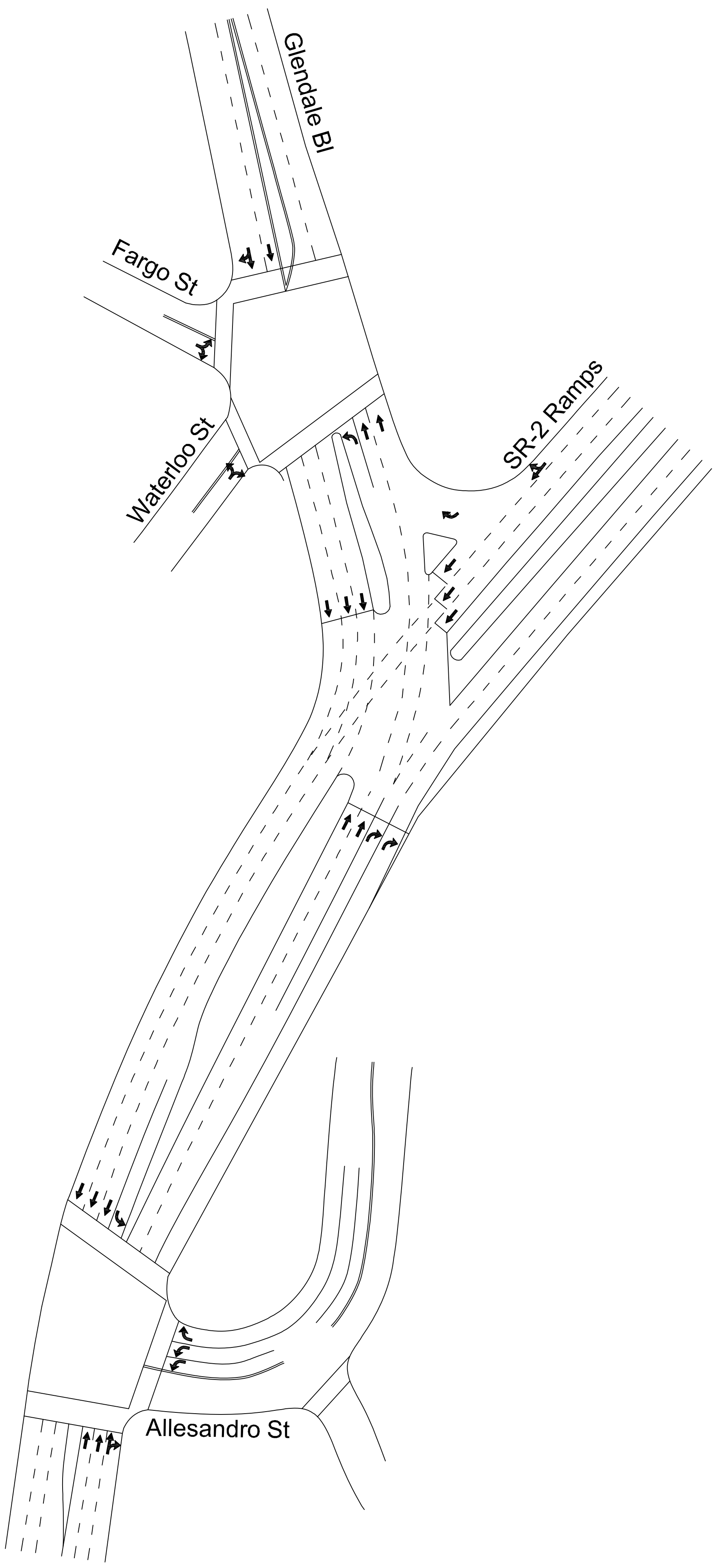


FIGURE 3
SR-2 FREEWAY TERMINUS IMPROVEMENT PROJECT LANE CONFIGURATIONS

ALTERNATIVE B



ALTERNATIVES C, D, & E



NOT TO SCALE

FIGURE 3 (CONT.)
SR-2 FREEWAY TERMINUS IMPROVEMENT PROJECT LANE CONFIGURATIONS

3. Alternative B (Realign Ramps East, Remove Flyover and Part of Bridge): This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the on-ramp lanes. It would remove the southbound flyover ramp and part of the bridge. This alternative offers the potential for new open space.

Alternatives C through E are identical from a lane configuration standpoint. They are considered together as a single alternative in the traffic impact analysis.

4. Alternative C (Realign Ramps East, Remove Flyover and Bridge): This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the on-ramp lanes. It would remove the southbound flyover ramp and bridge. This alternative provides a landscaped median and parkway treatment. This alternative offers the potential for new open space.

5. Alternative D (Realign Ramps East, Retain Bridge and Flyover for Community Purposes): This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged.

6. Alternative E (Realign Ramps East, Retain Bridge and Flyover for Community Purposes, Relocate Retaining Wall): This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall along Allesandro Street would be relocated to the east to maintain Caltrans streets and highway standards.

The project does not propose street widening or signalization improvements to Glendale Boulevard. Those improvements are part of the recently completed Glendale Boulevard Project. The SR-2 Freeway Terminus Improvement Project will, however, be integrated with the Glendale Boulevard Project.

STUDY SCOPE

The scope of work for this study was developed in conjunction with Caltrans and the Los Angeles Department of Transportation (LADOT). The base assumptions and technical methodologies were discussed as part of the study approach. The study, which provides a comparative analysis of the traffic conditions resulting from the project alternatives on the street system serving the SR-2 freeway terminus, expects that the project will be completed by 2010. The analysis of future year traffic forecasts is based on projected conditions in 2030 for the no-build and five build alternatives. The following traffic scenarios have been developed and analyzed as part of this study:

- Existing (Year 2006) Conditions – The analysis of existing traffic conditions provides a basis for the remainder of the study. The existing conditions analysis includes an assessment of streets, traffic volumes, operating conditions, and transit service.

- Future No-Build Alternative Conditions: Years 2030 and 2033 – The objective of this scenario is to project future traffic growth and operating conditions that could be expected to result from regional growth and related projects in the vicinity of the project site, without implementation of one of the proposed project alternatives.

- Future Build Alternative Conditions: Years 2030 and 2033 – The objective of this scenario is evaluate the future traffic conditions with the proposed project alternatives (A, B, and C).

The projected traffic conditions at 21 signalized intersections near the freeway terminus improvement project were evaluated during the weekday AM peak period (7:00 – 10:00 AM) and PM peak period (3:00 – 6:00 PM). The intersection lane configurations are shown in Appendix A. The 21 intersections selected in consultation with Caltrans and LADOT are shown in Figure 1 and listed below:

1. Glendale Boulevard & SR-2 southbound off-ramp/Fargo Street/Waterloo Street
2. Glendale Boulevard & Allesandro Street
3. Glendale Boulevard & Aaron Street
4. Glendale Boulevard/Alvarado Street & Berkeley Avenue
5. Glendale Boulevard & Scott Avenue
6. Glendale Boulevard & Montana Street
7. Glendale Boulevard & Park Avenue
8. Glendale Boulevard & Santa Ynez Street
9. Glendale Boulevard & Bellevue Avenue
10. Glendale Boulevard & Temple Street
11. Glendale Boulevard & Court Street/Laveta Terrace
12. Glendale Boulevard/Lucas Avenue/2nd Avenue & 1st Street/Beverly Boulevard
13. Alvarado Street & Montana Street
14. Alvarado Street & Reservoir Street

15. Alvarado Street & Sunset Boulevard
16. Alvarado Street & Kent Street
17. Alvarado Street & US 101 northbound ramps
18. Alvarado Street & US 101 southbound ramps
19. Alvarado Street & Temple Street
20. Alvarado Street & Beverly Boulevard
21. Glendale Boulevard & SR-2 ramps (signalized intersection exists only under build alternatives B through E)

ORGANIZATION OF REPORT

This report is divided into seven chapters, including this introductory chapter. Chapter II describes the existing circulation system, traffic volumes, and traffic conditions in the study area. Chapter III presents the traffic conditions of the proposed alternatives with existing traffic volumes. The methodologies used to forecast future traffic volumes are described and applied in Chapter IV. Chapter V presents a comparative assessment of levels of service for the future no-build and build alternatives. Chapter VI presents an evaluation of alternatives suggested by the community for the freeway terminus. A summary of the analyses and study conclusions is presented in Chapter VII. Details of the technical analysis are included in the appendices.

II. EXISTING CONDITIONS

Fehr & Peers/Kaku Associates undertook a comprehensive data collection effort to develop a detailed description of existing traffic conditions adjacent to the SR-2 freeway terminus and along the Glendale Boulevard and Alvarado Street corridors, which provide access to the SR-2 and US 101 freeways. The assessment of existing conditions relevant to this study included the street system, traffic volumes and operating conditions, and public transit service.

EXISTING STREET SYSTEM

The study area for this analysis contains the Glendale Boulevard corridor between the SR-2 freeway terminus to the north and Beverly Boulevard to the south and the Alvarado Street corridor between Glendale Boulevard/Berkeley Avenue to the north and Beverly Boulevard to the south. Primary regional access to the study corridors are provided by I-5 to the north and US 101 to the south. The SR-2 freeway intersects I-5 approximately one mile north of the freeway terminus. The following is a brief description of the streets that compose the study corridors and their cross streets:

- Glendale Boulevard – Glendale Boulevard is a north-south arterial and serves as SR-2 between the SR-2 freeway terminus and Alvarado Street. The street provides three travel lanes in each direction between the SR-2 terminus and Montana Street. South of Montana Street, two travel lanes in each direction are provided.

- Alvarado Street – Alvarado Street is a secondary arterial south of its intersection with Glendale Boulevard. The north-south road provides access to US 101 and to the SR-2 freeway via Glendale Boulevard. Between US 101 and Glendale Boulevard Alvarado Street is also SR-2. In the study area, two travel lanes in each direction are provided.

- Fargo Street – Fargo Street is a local street that intersects with the southbound off-ramps of the SR-2 freeway terminus, Glendale Boulevard, and Waterloo Street. It provides one travel lane in each direction.

- Waterloo Street – Waterloo Street is a local street that intersects with the southbound off-ramps of the SR-2 freeway terminus, Glendale Boulevard, and Fargo Street. It provides one travel lane in each direction.

- Allesandro Street – Allesandro Street is a north-south collector street that begins at its intersection with Glendale Boulevard. It provides one travel lane in each direction except at the intersection with Glendale Boulevard where two left-turn lanes and one right-turn lane are provided.

- Duane Street – Duane Street is a local east-west street that terminates at Allesandro Street east of Glendale Boulevard. It provides one travel lane in each direction.

- Aaron Street – Aaron Street is a local east-west street that intersects Glendale Boulevard. It provides one travel lane in each direction.

- Berkeley Avenue – Berkeley Avenue is a local east-west street that intersects Glendale Boulevard. It provides one travel lane in each direction.

- Scott Avenue – Scott Avenue is a local east-west street that intersects Glendale Boulevard and Alvarado Street. It provides one travel lane in each direction.

- Montana Street – Montana Street is a local east-west street that intersects Glendale Boulevard and Alvarado Street. It provides two travel lanes in each direction east of Alvarado Street and one travel lane in each direction west of Alvarado Street.

- Reservoir Street – Reservoir Street is a local east-west street that intersects Alvarado Street and ends at Glendale Boulevard. It provides one travel lane in each direction.

- Sunset Boulevard – Sunset Boulevard is an east-west four-lane arterial classified as a major highway. It connects to the San Diego Freeway (I-405) to the west and to the Hollywood Freeway to the east. Sunset Boulevard intersects Alvarado Street and is grade-separated from Glendale Boulevard.

- Park Avenue – Park Avenue begins at Sunset Boulevard and intersects Glendale Boulevard a block to the southeast before ending three blocks later at Echo Park Avenue. This collector street has one lane in each direction.

- Santa Ynez Street – Santa Ynez Street is a local east-west street that intersects Alvarado Street and terminates at Glendale Boulevard. It provides one travel lane in each direction.

- Kent Street – Kent Street is a local east-west street that intersects Alvarado Street. It provides one travel lane in each direction.

- Bellevue Avenue – Bellevue Avenue is a collector street that travels eastward from Glendale Boulevard. It provides one travel lane in each direction and a dedicated center median for beginning and finishing left turns. At the intersection with Glendale Boulevard two left-turn lanes and one right-turn lane are provided. The street also provides access to and from northbound US 101.

- US 101 – US 101 (the Hollywood Freeway) runs in the southeast-northwest direction as it crosses the study corridors and extends from downtown Los Angeles through Hollywood and the San Fernando Valley. In the vicinity of the study area, US 101 provides four lanes in each direction plus auxiliary lanes. Ramps are provided at Alvarado Street but no direct access is provided from Glendale Boulevard.

- Temple Street – Temple Street is a secondary arterial that runs east-west. The street provides two lanes in each direction and intersects with Glendale Boulevard and Alvarado Street.

- Court Street – Court Street is a local east-west street that intersects Glendale Boulevard and Alvarado Street. It provides one travel lane in each direction.

- Beverly Boulevard – Beverly Boulevard is an east-west four-lane arterial classified as a major highway. This arterial lies at the southern end of the study corridor and intersects both Glendale Boulevard and Alvarado Street.

A summary of the characteristics of each of the roadways is included in Table 1. Diagrams of the existing lane configurations at the analyzed intersections are contained in Appendix A.

LEVEL OF SERVICE METHODOLOGY

Level of service (LOS) is a qualitative measure used to describe the traffic flow conditions, ranging from excellent (LOS A) to overloaded (LOS F) conditions. A variety of methodologies is available to analyze LOS, including distinct methodologies employed by Caltrans and LADOT. Because the signal controls at the study intersections are split between Caltrans and LADOT, two LOS methodologies are required for this study. The following describes the methodology employed by each agency and the intersections subject to the specific analysis.

Caltrans Methodology

In accordance with Caltrans guidelines, the LOS analyses at Caltrans controlled signalized intersections were conducted using *Highway Capacity Manual 2000* (2000 HCM) methodology to obtain the average delay per vehicle for the respective study intersections. The delay is then used to find the corresponding LOS based on the definitions in Table 2. Intersections analyzed according to 2000 HCM methodology include:

TABLE 1
EXISTING SURFACE STREET CHARACTERISTICS

SEGMENT	FROM	TO	LANE		MEDIAN	PARKING RESTRICTIONS		SPEED
			NB/EB	SB/WB	TYPE	NB/EB	SB/WB	LIMIT
Glendale Bl	Baxter St	Fargo St	2	2	2LT	NSAT	NSAT	35/25*
	Fargo St	Allesandro St	2	2	2LT	NSAT	NSAT	35/25*
	Allesandro St	Clifford St	3	3	DY	NS 3P-7P, 1Hr 8A-3P	NSAT	35
	Clifford St	Branden St	3	3	DY	NS 3P-7P, 1Hr 8A-3P	NSAT	35
	Branden St	Aaron St	3	3	DY	NS 3P-7P, 1Hr 8A-3P	NS 7A-9A	35
	Aaron St	Effie St	3	3	RM	NS 3P-7P, 1Hr 8A-3P	NS 7A-9A	35
	Effie St	Berkeley Av	3	3	RM	NS 3P-7P	NS 7A-9A	35
	Berkeley Av	Alvarado Bl	3	3	RM	Unrestricted	RZ	35
	Alvarado St	Scott Av	3	3	RM	Unrestricted	2Hr 8A-6P	35
	Scott Av	Montana St	3	3	RM	Unrestricted	2Hr 8A-6P	35
	Montana St	Lake Shore Ave	3	3	RM	Unrestricted	2Hr 8A-6P	35
	Lake Shore Ave	Sunset Bl	3	3	RM	RZ	2Hr 8A-6P	35
	Sunset Bl	Park Av	2	2	2LT	NS 4P-7P	NS 7A-9A	35
	Park Av	Btw Santa Ynez St/Bellevue Av	2	2	DY	NS 4P-7P	NS 7A-9A	35
	Btw Santa Ynez St/Bellevue Av	Palo Alto St	2	2	DY	NSAT	NSAT	35
	Palo Alto St	Temple St	2	2	DY	NS 3P-7P	NSAT	35
	Temple St	Cortez St	2	2	DY	RZ	NSAT	35
	Cortez St	Court St	2	2	DY	NS 4P-7P	NS 7A-9A, 1Hr 8A-6P	35
	Court St	Colton St	2	2	DY/2LT	RZ	RZ	35
	Colton St	Beverly Bl	2	2	DY/2LT	NS 4P-7P	NS 7A-9A	35
Alvarado St	Glendale Bl	Scott Av	3	3	DY/RM	NS 4P-7P, 2Hr 8A-4P	NS 7A-9A, 2Hr 9A-6P	35
	Scott Av	Montana St	3	3	DY	NS 4P-7P, 2Hr 8A-4P	NS 7A-9A, 2Hr 9A-6P	35
	Montana St	Reservoir St	3	3	DY	NS 4P-7P, 2Hr 8A-4P	NS 7A-9A, 2Hr 9A-6P	35
	Reservoir St	100 Yds N. of Sunset Bl	3	3	DY	NS 4P-7P, 1Hr MP 8A-4P	NS 7A-9A	35
	100 Yds N. of Sunset Bl	Sunset Bl	3	3	DY	NS 4P-7P, 1Hr MP 8A-4P	NS 7A-9A, 1Hr MP 9A-6P	35
	Sunset Bl	Montrose St	3	3	DY	NS 4P-7P, 1Hr 8A-4P	NS 7A-9A, 1Hr 9A-6P	35
	Montrose St	Kent St	3	3	DY	NS 4P-7P, 1Hr 8A-4P	NS 7A-9A, 1Hr 9A-6P	35
	Kent St	101 NB Ramps	3	3	DY	NS 4P-7P, 1Hr 8A-4P	NS 7A-9A, 1Hr 9A-6P	35
	101 NB Ramps	101 SB Ramps	3	3	DY	NSAT	NSAT	35
	101 SB Ramps	Temple St	3	3	DY	NS 4P-7P	NS 7A-9A	35
	Temple St	Beverly Bl	3	3	DY	NS 4P-7P	NS 7A-9A	35
	Beverly Bl	3rd St	3	3	DY/2LT	PA	PA	35
Fargo St	Apex Av	Glendale Bl	1	1	UD	PA	PA	25
Allesandro St	Glendale Bl	Duane St	1	1	DY	NSAT	NSAT	35
	Duane St	Ewing St	1	1	DY	NSAT	NSAT	35
Aaron St	Dead end	Glendale Bl	1	1	UD	PA	PA	25
	Glendale Bl	Alvarado St	1	1	UD	PA	PA	25
Berkeley Av	Allesandro St	Alvarado St	1	1	SDY	PA	PA	25
	Alvarado St	Liberty St	1	1	DY	PA	PA	25
Scott Av	Alvarado St	Glendale Bl	1	1	DY	RZ	PA	25
	Glendale Bl	Liberty St	1	1	DY	PA	PA	25
Montana St	Allesandro St	Alvarado St	1	1	SDY	NSAT	NSAT	25
	Alvarado St	Glendale Bl	2	2	DY	PA	PA	25
	Glendale Bl	Lake Shore Av	2	2	DY	PA	PA	25
Reservoir St	Allesandro St	Alvarado St	1	1	2LT	PA	PA	25
	Alvarado St	Glendale Bl	1	1	DY	PA	PA	25
Sunset Bl	Mohawk St	Alvarado St	2	2	DY	PA	PA	30
	Alvarado St	Glendale Bl	2	2	DY	PA	PA	35
	Glendale Bl	Lemoyne St	2	2	2LT	PA	PA	25
Kent St	Rosemont Av	Alvarado St	1	1	UD	PA	PA	25
	Alvarado St	Bonnie Brea St	1	1	UD	PA	PA	25
Bellevue Av	Glendale Bl	Echo Park Av	1	1	DY	PA	PA	25
Temple St	Lake St	Alvarado St	2	2	DY	PA	PA	35
	Alvarado St	Glendale Bl	2	2	DY	PA	PA	35
	Glendale Bl	Laveta Ter	2	2	DY	PA	PA	35
Court	Lake St	Alvarado St	1	1	UD	PA	PA	25
	Alvarado St	Glendale Bl	1	1	UD	PA	PA	25
	Glendale Bl	Patton St	1	1	UD	PA	PA	25
Beverly Bl	Lake St	Alvarado St	3	3	DY	PA	PA	35
	Alvarado St	Glendale Bl	3	3	DY	PA	PA	35
	Glendale Bl	Toluca St	2	2	DY	NSAT	NSAT	35
Park Av	Sunset Bl	Glendale Bl	1	1	2LT	PA	PA	25
	Glendale Bl	Lake Shore Av	1	1	DY	PA	PA	25

Notes:

MEDIAN TYPE:
- DY = Double Yellow Centerline
- SDY = Single Dashed Yellow Centerline
- 2LT = Dual Left Turn Centerline
- RM = Raised Median
- UD = Undivided Lane

* When children are present, speed limit is 25 MPH

PARKING:
- PA = Parking Allowed
- NSAT = No Stopping Anytime
- GZ = Green zone - Passenger loading and unloading
- RZ = Red zone - No parking allowed

LANES: # = Number of lanes

TABLE 2
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS
2000 HCM OPERATIONAL METHODOLOGY

Level of Service	Average Stopped Delay per Vehicle (seconds)	Definition
A	≤10	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	>10 and ≤20	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	>20 and ≤35	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>35 and ≤55	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>55 and ≤80	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>80	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths

Source: *Highway Capacity Manual,* Transportation Research Board, 2000.

- Glendale Boulevard & SR-2 southbound off-ramp/Fargo Street/Waterloo Street (#1)
- Glendale Boulevard & Allesandro Street (#2)
- Glendale Boulevard & SR-2 ramps (signalized intersection exists only under Build Alternatives B through E) (#21)

The LOS analysis for signalized intersections maintained by Caltrans was conducted using the Synchro and VISSIM software programs, which are explained below. Intersections controlled by LADOT were also analyzed based on the 2000 HCM methodology to account for upstream and downstream vehicle queuing and bottlenecks in the existing roadway network under existing conditions with and without the proposed project alternatives. Signal timings and splits[2] were collected from LADOT to reflect existing operations at the study intersections. Signal timings were optimized with signal coordination along Glendale Boulevard under each proposed project alternative.

Synchro/Simtraffic

The Synchro/Simtraffic software program employs the methodologies published in the 2000 HCM to analyze traffic operations at signalized and unsignalized intersections. The program simulates projected traffic flows and considers the effects of upstream and downstream intersection queuing when calculating traffic operations. The use of a simulation software program when analyzing traffic operations at closely spaced intersections that experience congestion during peak hours is desirable to ensure that interaction between the intersections is considered. The Synchro/Simtraffic software program was used to estimate vehicle delay and LOS at study intersections under existing conditions. Traffic operations were based on existing peak hour traffic volumes and traffic signal timings. The Synchro/Simtraffic model was calibrated to existing traffic conditions in the study area with respect to traffic volumes, vehicle queues, and travel times.

[2] The portion of the traffic signal's cycle time allocated to each phase.

VISSIM

The VISSIM microsimulation software program was used to analyze the Glendale Boulevard/SR-2 interchange including the adjacent signalized intersections under existing conditions and with the implementation of the proposed project alternatives under future conditions. The delay and LOS for the study intersections, vehicle queues, and travel times through the interchange were estimated using VISSIM. VISSIM models the interactions between individual vehicles as they travel through the roadway network and replicates actual signal timings and signal coordination. The VISSIM model contains the following study roadways:

- SR-2 between I-5 and Glendale Boulevard
- Signalized intersections of Glendale Boulevard between the SR-2 off-ramp and Aaron Street

The VISSIM model was constructed using a scaled aerial photograph as a background to code the roadway network accurately. Based on the aerial and field observations, intersection lane configurations, turn pocket lengths, and free-flow travel speeds were added to the model. Existing AM and PM peak hour traffic volumes were input and signal phasing and timing data were added from signal timing plans obtained from the City. Pedestrians were also included in the model based on count data provided; however, pedestrian volumes are generally low in the study area.

A critical step in developing a VISSIM model is to ensure that the model accurately reflects existing traffic conditions. Model parameters must be calibrated and validated to observed field conditions. Calibration refers to adjustments to model parameters and validation describes the matching of model outputs to observed values. The suggested validation thresholds from *Guidelines for Applying Traffic Microsimulation Modeling Software* (Caltrans in association with Dowling Associates, September 2002) are listed below:

1. Link volumes for more than 85% of cases meet the following criteria:

   a. For volumes less than 700 vehicles per hour (vph), within 100 vph
   b. For volumes between 700 and 2,700 vph, within 15%
   c. For volumes greater than 2,700 vph, within 400 vph

2. Link volumes for more than 85% of cases have a GEH[3] statistic less than 5

3. Queue lengths consistent with observed queues

Following the initial data input, the VISSIM model flows were compared to the traffic counts. The driver behavior parameters were then adjusted to reflect more aggressive driving attributes, which is typical in areas such as the project study area where traffic congestion is common. Once the model flows matched actual traffic counts, vehicle queues and travel times were reviewed to ensure the model reflected conditions observed in the field.

LADOT Methodology

According to *Traffic Study Policies and Procedures* (LADOT, March 2002), the study is required to use the "Critical Movement Analysis – Planning" (Transportation Research Board, 1980) method of intersection capacity calculation to analyze LADOT maintained signalized intersections. The Critical Movement Analysis (CMA) methodology determines the intersection volume-to-capacity (V/C) ratio. The ratio is then used to find the corresponding LOS based on the definitions in Table 3. Intersections analyzed according to CMA methodology include:

- Glendale Boulevard & Aaron Street (#3)
- Glendale Boulevard/Alvarado Street & Berkeley Avenue (#4)
- Glendale Boulevard & Scott Avenue (#5)
- Glendale Boulevard & Montana Street (#6)
- Glendale Boulevard & Park Avenue (#7)
- Glendale Boulevard & Santa Ynez Street (#8)
- Glendale Boulevard & Bellevue Avenue (#9)
- Glendale Boulevard & Temple Street (#10)
- Glendale Boulevard & Court Street/Laveta Terrace (#11)
- Glendale Boulevard/Lucas Avenue/2nd Avenue & 1st Street/Beverly Boulevard (#12)
- Alvarado Street & Montana Street (#13)
- Alvarado Street & Reservoir Street (#14)

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3 GEH statistic is a "goodness of fit" measurement that compares the modeled flows to observed flows.

TABLE 3
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

Level of Service	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	>0.600 - 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat what restricted within groups of vehicles.
C	>0.700 - 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.800 - 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.900 - 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths

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

- Alvarado Street & Sunset Boulevard (#15)
- Alvarado Street & Kent Street (#16)
- Alvarado Street & US 101 northbound ramps (#17)
- Alvarado Street & US 101 southbound ramps (#18)
- Alvarado Street & Temple Street (#19)
- Alvarado Street & Beverly Boulevard (#20)

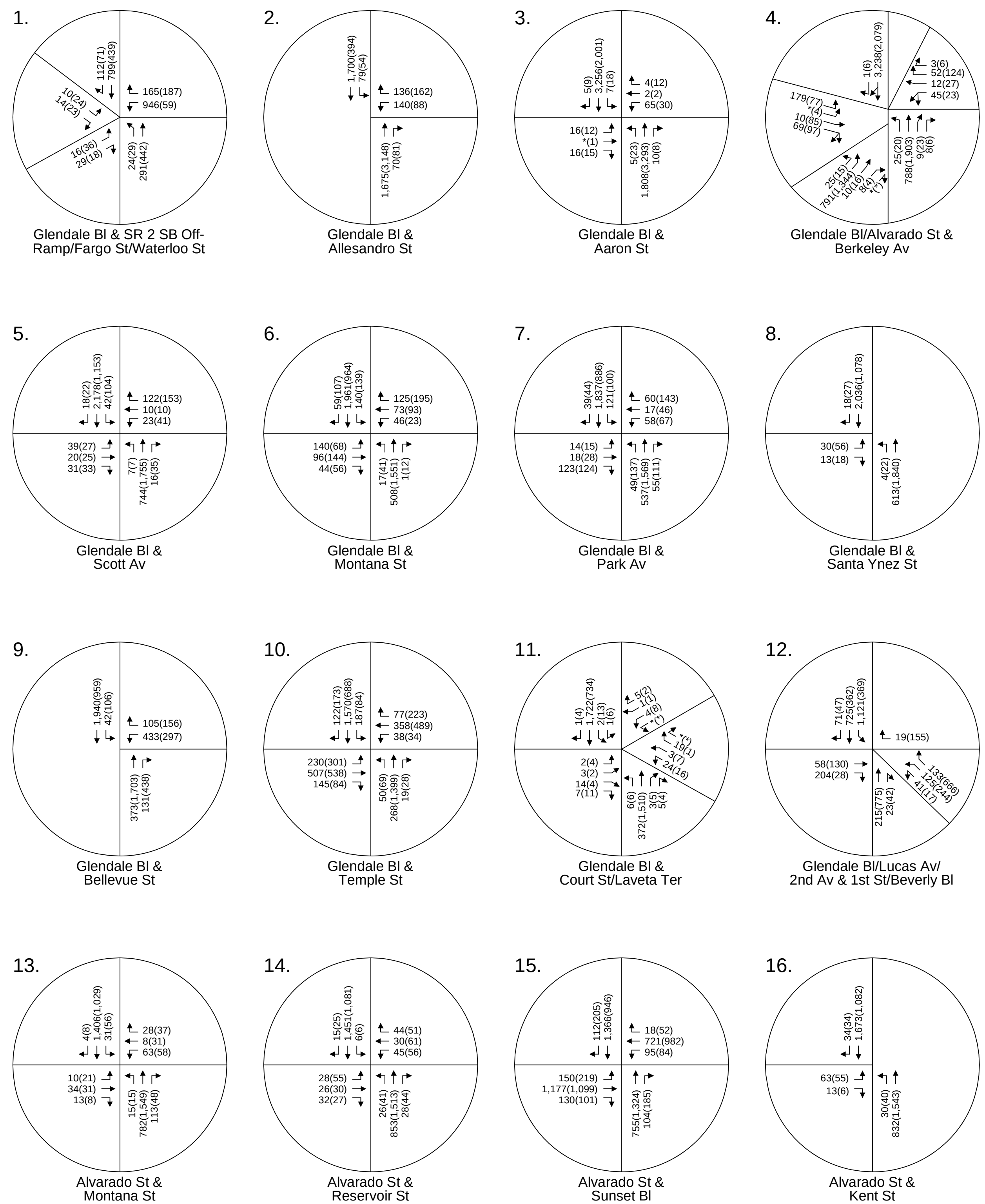
All existing study intersections controlled by LADOT employ the City of Los Angeles' Automatic Traffic Surveillance and Control (ATSAC) system. In accordance with standard LADOT procedures, a capacity of 7% (0.07 V/C credit) was applied to reflect the benefits of ATSAC control at these intersections. Additionally, all but two (Glendale Boulevard & Aaron Street and Glendale Boulevard & Court Street/Laveta Terrace) existing signalized study intersections are operating under the Automated Traffic Control Systems (ATCS). In accordance with standard LADOT procedures, an additional capacity of 3% (0.03 V/C credit) was applied to reflect the benefits of ATCS at these intersections.

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

The following sections discuss the methodology used to analyze the intersection traffic conditions, present the intersection peak hour traffic volumes, and calculate the resulting LOS at each of the study intersections under existing conditions.

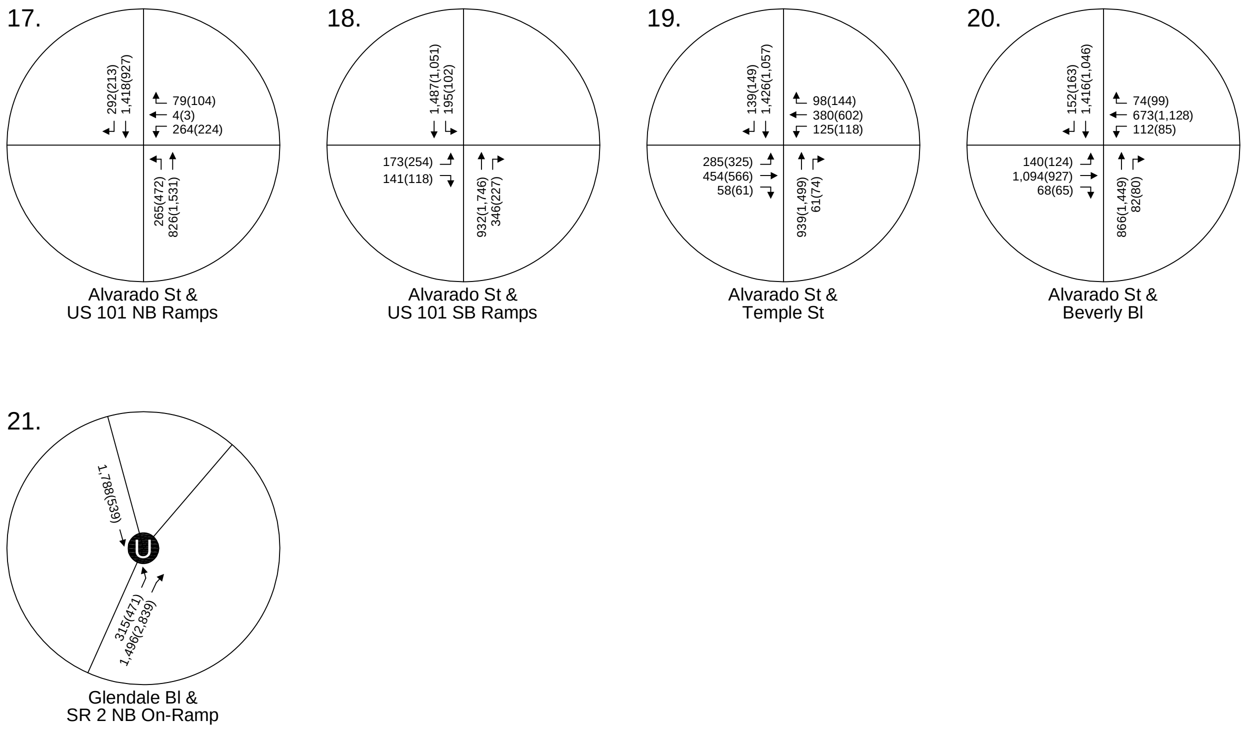
Existing Traffic Volumes

New weekday AM peak period (7:00 – 10:00 AM) and PM peak period (3:00 – 6:00 PM) traffic counts were conducted for the 20 existing study intersections in May and June 2006. Intersection 21 (Glendale Boulevard & SR-2 ramps) only exists as a signalized intersection for Build Alternatives C through E and was not evaluated for the existing condition analysis. These existing traffic volumes are shown in Figure 4. Appendix B contains the detailed traffic count data.



#(#) - A.M.(P.M.) Peak Hour Traffic Volumes
* - Negligible Volume

FIGURE 4
EXISTING (YEAR 2006) PEAK HOUR TRAFFIC VOLUMES



U - Uncontrolled Intersection

#(#) - A.M.(P.M.) Peak Hour Traffic Volumes

FIGURE 4 (CONT.)

EXISTING (YEAR 2006) PEAK HOUR TRAFFIC VOLUMES

Existing Levels of Service

The traffic volumes presented in Figure 4 were analyzed using the intersection capacity analysis methodology described above to determine current operating conditions at the study intersections. Table 4 summarizes the existing weekday morning and evening peak hour V/C ratio and delay and the corresponding LOS for each of the study intersections based on the CMA and HCM methodologies, respectively. Using the CMA methodology required by LADOT, the results indicate that all but one of the analyzed intersections are currently operating at LOS D or better during both the morning and afternoon peak periods. The following study intersection operates worse than LOS D:

- Glendale Boulevard & Temple Street (#10) - LOS E in PM peak hour

According to the HCM methodology, the following study intersections operate worse than LOS D:

- Glendale Boulevard & SR-2 southbound off-ramp/Fargo Street/Waterloo Street (#1) - LOS E in AM peak hour
- Glendale Boulevard/Alvarado Street & Berkeley Avenue (#4) – LOS F in AM peak hour
- Glendale Boulevard & Scott Avenue (#5) – LOS E in PM peak hour
- Glendale Boulevard & Temple Street (#10) – LOS F in AM peak hour
- Glendale Boulevard/2nd Street & 1st Street/Berkeley Avenue (#12) – LOS E during PM peak hour
- Alvarado Street & Temple Street (#19) – LOS E during PM peak hour

EXISTING TRANSIT SERVICE

Metro provides public transit service near the SR-2 freeway terminus and Glendale Boulevard/Alvarado Street Corridor. The following transit lines serve the study area:

TABLE 4
INTERSECTION LEVEL OF SERVICE ANALYSIS
EXISTING CONDITIONS (YEAR 2006)

No.		Intersection	Peak Hour	V/C [d]	LOS	Delay [e]	LOS
1.	[a]	Glendale Boulevard &	A.M.	--	--	56.5	E
		SR 2 SB Off-Ramp/Fargo Street/Waterloo Street	P.M.	--	--	16.3	B
2.	[a]	Glendale Boulevard &	A.M.	--	--	17.3	B
		Allesandro Street	P.M.	--	--	16.6	B
3.	[b]	Glendale Boulevard &	A.M.	0.723	C	18.1	B
		Aaron Street	P.M.	0.714	C	11.4	B
4.	[a]	Glendale Boulevard/Alvarado Street &	A.M.	0.888	D	>80.0	F
		Berkeley Avenue	P.M.	0.876	D	34.3	C
5.	[a]	Glendale Boulevard &	A.M.	0.555	A	10.8	B
		Scott Avenue	P.M.	0.554	A	61.6	E
6.	[a]	Glendale Boulevard &	A.M.	0.742	C	16.9	B
		Montana Street	P.M.	0.515	A	45.1	D
7.	[a]	Glendale Boulevard &	A.M.	0.666	B	13.0	B
		Park Avenue	P.M.	0.654	B	14.2	B
8.	[a]	Glendale Boulevard &	A.M.	0.616	B	3.3	A
		Santa Ynez Street	P.M.	0.607	B	10.1	B
9.	[a]	Glendale Boulevard &	A.M.	0.748	C	21.8	C
		Bellevue Avenue	P.M.	0.687	B	20.1	C
10.	[a]	Glendale Boulevard &	A.M.	0.877	D	>80.0	F
		Temple Street	P.M.	0.958	E	43.2	D
11.	[b]	Glendale Boulevard &	A.M.	0.601	B	8.4	A
		Court Street/Laveta Terrace	P.M.	0.527	A	7.3	A
12.	[a]	Glendale Boulevard/Lucas Avenue/2nd Avenue &	A.M.	0.643	B	42.5	D
		1st Street/Beverly Boulevard	P.M.	0.610	B	63.2	E
13.	[a]	Alvarado Street &	A.M.	0.331	A	5.5	A
		Montana Street	P.M.	0.391	A	46.2	D
14.	[a]	Alvarado Street &	A.M.	0.317	A	7.4	A
		Reservoir Street	P.M.	0.416	A	10.2	B
15.	[a]	Alvarado Street &	A.M.	0.619	B	27.8	C
		Sunset Boulevard	P.M.	0.649	B	26.7	C
16.	[a]	Alvarado Street &	A.M.	0.350	A	3.0	A
		Kent Street	P.M.	0.337	A	3.9	A
17.	[a]	Alvarado Street &	A.M.	0.671	B	19.8	B
		US 101 Northbound Ramps	P.M.	0.655	B	18.4	B
18.	[a]	Alvarado Street &	A.M.	0.511	A	14.1	B
		US 101 Southbound Ramps	P.M.	0.576	A	20.1	C
19.	[a]	Alvarado Street &	A.M.	0.661	B	22.9	C
		Temple Street	P.M.	0.789	C	74.7	E
20.	[a]	Alvarado Street &	A.M.	0.547	A	20.0	B
		Beverly Boulevard	P.M.	0.649	B	23.2	C
21.	[c]	Glendale Boulevard &	A.M.	-	-	-	-
		SR 2 Ramps	P.M.	-	-	-	-

Notes:

[a] Intersection is currently operating under the LADOT Adaptive Traffic Control System (ATCS). A credit of 0.10 in V/C ratio was included in the above analysis.
[b] Intersection is currently operating under the LADOT Automated Traffic Surveillance and Control (ATSAC) system. A credit of 0.07 in V/C ratio was included in the above analysis.
[c] Intersection is uncontrolled under existing conditions.
[d] V/C ratio calculated based on LADOT CMA Methodology.
[e] Delay calculated based on HCM Methodology using Synchro/Simtraffic.

- Metro Line 92 – Line 92 is a north-south route that travels from downtown Burbank to downtown Los Angeles. Limited service (approximately every other bus trip) originates and terminates at the Sylmar/San Fernando Metrolink Station. This line has stops in Burbank, Glendale, Atwater Village, Silver Lake, Echo Park, and downtown Los Angeles. The limited service has stops in San Fernando, Pacoima, and Sun Valley. In the study area, the route travels along Glendale Boulevard. This line has average headways of 10-12 minutes during the weekday peak periods.

- Metro Line 200 – Line 200 provides service between the study area and MacArthur Park, USC, and Exposition Park to the south. In the study area, Line 200 runs along Montana Street. This line has average headways of six minutes during the weekday peak periods.

- Metro Line 2/302 – Lines 2/302 are east-west lines that travel from Castellammare to downtown Los Angeles, with limited stops for Line 302 on Sunset Boulevard, from Beverly Drive to Cesar E. Chavez Avenue/Figueroa Street. These lines have stops in Brentwood, Bel Air, West Hollywood, Silver Lake, and Echo Park. In the study area these lines travel along Sunset Boulevard. These lines have average headways of six minutes during weekday peak periods.

- Metro Line 4/304 – Lines 4/304 are east-west lines that travel from Santa Monica to downtown Los Angeles, with limited stops for Line 304 along Santa Monica Boulevard and Sunset Boulevard. These lines have stops in West Los Angeles, West Hollywood, Silver Lake, and Echo Park. In the study area these lines travel along Sunset Boulevard. This line has average headways of 12 minutes during the weekday AM peak period and eight minutes during the weekday PM peak period.

- Metro Line 603 – Line 603 is a north-south route that travels between the Glendale Galleria and downtown Los Angeles. In the study area, Line 603 runs along Glendale Boulevard and Allesandro Street. This line has average headways of 10 minutes during the weekday peak periods.

III. EXISTING PLUS PROJECT CONDITIONS

Traffic operations at the study intersections with the proposed project alternatives were analyzed under existing plus project conditions that assumed no increase in traffic volumes in the study corridor. The purpose of this analysis was to compare operations of the existing roadway network to each proposed alternative with current traffic volumes.

EXISTING PLUS PROJECT TRAFFIC VOLUMES

The existing AM and PM peak hour traffic volumes collected in 2006 were applied to the existing plus project conditions analysis. Turning movements at the Glendale Boulevard & SR-2 ramps were modified as needed to reflect the proposed project alternatives.

EXISTING PLUS PROJECT LEVELS OF SERVICE

The existing plus project analysis was completed using the Synchro/Simtraffic software program to calculate the delay and resulting LOS for the study intersections under each project alternative. Since the traffic volumes and lane configurations for the majority of the study intersections do not change with the implementation of the proposed project, applying the CMA methodology would produce LOS results identical to existing conditions. The Synchro/Simtraffic results capture changes in traffic operations due to upstream/downstream queuing and traffic signal timings. Traffic signal timings were reoptimized in the northern portion of the study area (primarily north of Berkeley Avenue), including signal coordination along Glendale Boulevard, to accommodate the proposed project alternatives.

Table 5 summarizes the existing plus project weekday morning and evening peak hour delay and the corresponding LOS for each of the study intersections based on the HCM methodology. As shown, no additional study intersections would operate worse than LOS D beyond those already

TABLE 5
INTERSECTION LEVEL OF SERVICE ANALYSIS
EXISTING PLUS PROJECT CONDITIONS - PROJECT ALTERNATIVES

			EXISTING		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVES C, D, E	
No.	Intersection	Peak Hour	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. [a]	Glendale Boulevard & SR 2 SB Off-Ramp/Fargo Street/Waterloo Street	A.M. P.M.	56.5 16.3	E B	54.9 12.3	D B	58.3 7.7	E A	51.9 7.9	D A
2. [b]	Glendale Boulevard & Allesandro Street	A.M. P.M.	17.3 16.6	B B	22.7 11.2	C B	18.5 8.2	B A	20.6 8.2	C A
3. [b]	Glendale Boulevard & Aaron Street	A.M. P.M.	18.1 11.4	B B	20.9 11.7	C B	21.9 11.6	C B	22.3 11.1	C B
4.	Glendale Boulevard/Alvarado Street & Berkeley Avenue	A.M. P.M.	>80.0 34.3	F C	>80.0 34.9	F C	>80.0 32.2	F C	>80.0 30.7	F C
5.	Glendale Boulevard & Scott Avenue	A.M. P.M.	10.8 61.6	B E	9.4 50.5	A D	9.5 64.2	A E	9.6 60.8	A E
6.	Glendale Boulevard & Montana Street	A.M. P.M.	16.9 45.1	B D	13.8 37.2	B D	13.7 57.8	B E	13.8 46.2	B D
7.	Glendale Boulevard & Park Avenue	A.M. P.M.	13.0 14.2	B B	13.6 14.5	B B	12.2 14.5	B B	12.5 14.5	B B
8.	Glendale Boulevard & Santa Ynez Street	A.M. P.M.	3.3 10.1	A B	3.0 9.7	A A	2.9 10.2	A B	2.9 9.8	A A
9.	Glendale Boulevard & Bellevue Avenue	A.M. P.M.	21.8 20.1	C C	18.3 21.8	B C	17.8 24.8	B C	17.5 20.3	B C
10.	Glendale Boulevard & Temple Street	A.M. P.M.	>80.0 43.2	F D	>80.0 49.2	F D	>80.0 46.2	F D	>80.0 40.1	F D
11.	Glendale Boulevard & Court Street	A.M. P.M.	8.4 7.3	A A	7.1 11.8	A B	7.0 7.3	A A	7.2 8.9	A A
12.	Glendale Boulevard/Lucas Avenue/2nd Avenue & 1st Street/Berkeley Avenue	A.M. P.M.	42.5 63.2	D E	43.6 59.5	D E	47.5 67.2	D E	38.8 64.3	D E
13.	Alvarado Street & Montana Street	A.M. P.M.	5.5 46.2	A D	5.2 42.0	A D	5.7 40.0	A D	5.6 30.6	A C
14.	Alvarado Street & Reservoir Street	A.M. P.M.	7.4 10.2	A B	8.1 11.1	A B	7.8 10.6	A B	8.2 9.4	A A
15.	Alvarado Street & Sunset Boulevard	A.M. P.M.	27.8 26.7	C C	27.3 27.4	C C	28.0 26.2	C C	27.8 26.5	C C
16.	Alvarado Street & Kent Street	A.M. P.M.	3.0 3.9	A A	2.9 3.7	A A	2.9 3.9	A A	2.9 3.6	A A
17.	Alvarado Street & US 101 Northbound Ramps	A.M. P.M.	19.8 18.4	B B	19.3 18.5	B B	19.4 18.4	B B	20.0 18.2	B B
18.	Alvarado Street & US 101 Southbound Ramps	A.M. P.M.	14.1 20.1	B C	14.1 20.1	B C	14.2 19.7	B B	15.2 19.7	B B
19.	Alvarado Street & Temple Street	A.M. P.M.	22.9 74.7	C E	20.9 64.6	C E	20.7 72.7	C E	20.9 74.6	C E
20.	Alvarado Street & Beverly Boulevard	A.M. P.M.	20.0 23.2	B C	18.9 24.1	B C	18.2 27.3	B C	19.1 23.0	B C
21. [c]	Glendale Boulevard & SR 2 Ramps	A.M. P.M.	- -	N/A N/A	- -	N/A N/A	43.4 13.2	D B	46.9 12.4	D B

Notes:
Existing and build alternatives were simulated 20 times in SimTraffic. LOS reported as an average of 10 typical simulations.
[a] Intersection does not include the SR 2 SB Off-Ramp for Alternatives B & C.
[b] Due to signal coordination on Glendale Boulevard, the majority of vehicles travel through the intersection at reduced speed in the AM peak hour without stopping. Reported intersection delay is less than driver's actual experience
[c] Intersection is uncontrolled for No-Build Alternative & Alternative A.

identified under existing conditions. Under Alternatives B and C, the proposed new intersection (#21) providing access between SR-2 and Glendale Boulevard would operate at LOS D during the AM peak hour and LOS B during the PM peak hour with existing traffic volumes.

IV. FUTURE (YEARS 2030 AND 2033) TRAFFIC PROJECTIONS

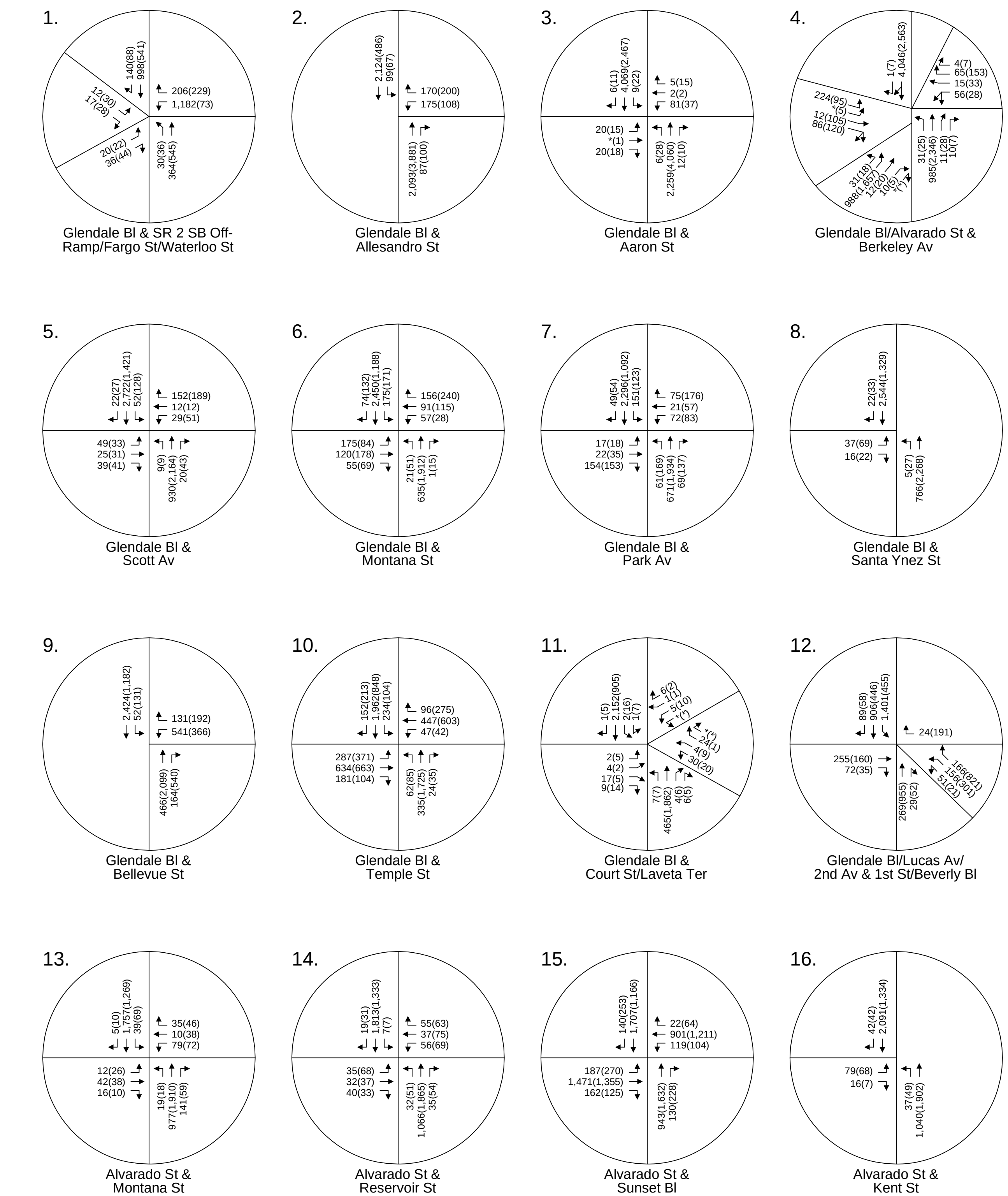
Fehr & Peers/Kaku Associates estimated future traffic volumes under the no-build and the five build alternatives to evaluate the service levels of the local street system resulting from the proposed improvement project. The future no-build traffic scenario represents future traffic conditions with the existing freeway on- and off-ramp configuration. In contrast, the future Build Alternatives A, B, and C traffic scenarios represent future traffic conditions with modified freeway on- and off-ramp configurations. Figure 3 illustrates the proposed alternatives. The analysis of future year traffic forecasts is based on projected conditions in 2030 and 2033.

YEARS 2030 AND 2033 NO-BUILD TRAFFIC PROJECTIONS

The Years 2030 and 2033 traffic projections for all scenarios reflect an average annual growth of 1.04% for the AM peak and 0.97% for the PM peak weekday periods. These rates were obtained from the Metro travel demand model. They reflect the ambient or background growth in traffic on an annual basis and the traffic resulting from the completion of specific projects in or in the vicinity of the study area. These growth rates were applied to the existing traffic volumes to obtain future traffic volumes at the analyzed intersections. Figure 5 illustrates the future traffic volumes at the analyzed intersections for the no-build alternative under 2030 conditions. Year 2033 traffic forecasts were also developed for the study intersections; however, because of oversaturated conditions with the projected increase in traffic volumes, the 2030 forecasts were used to analyze future traffic operations, as explained in more detail in the following chapter.

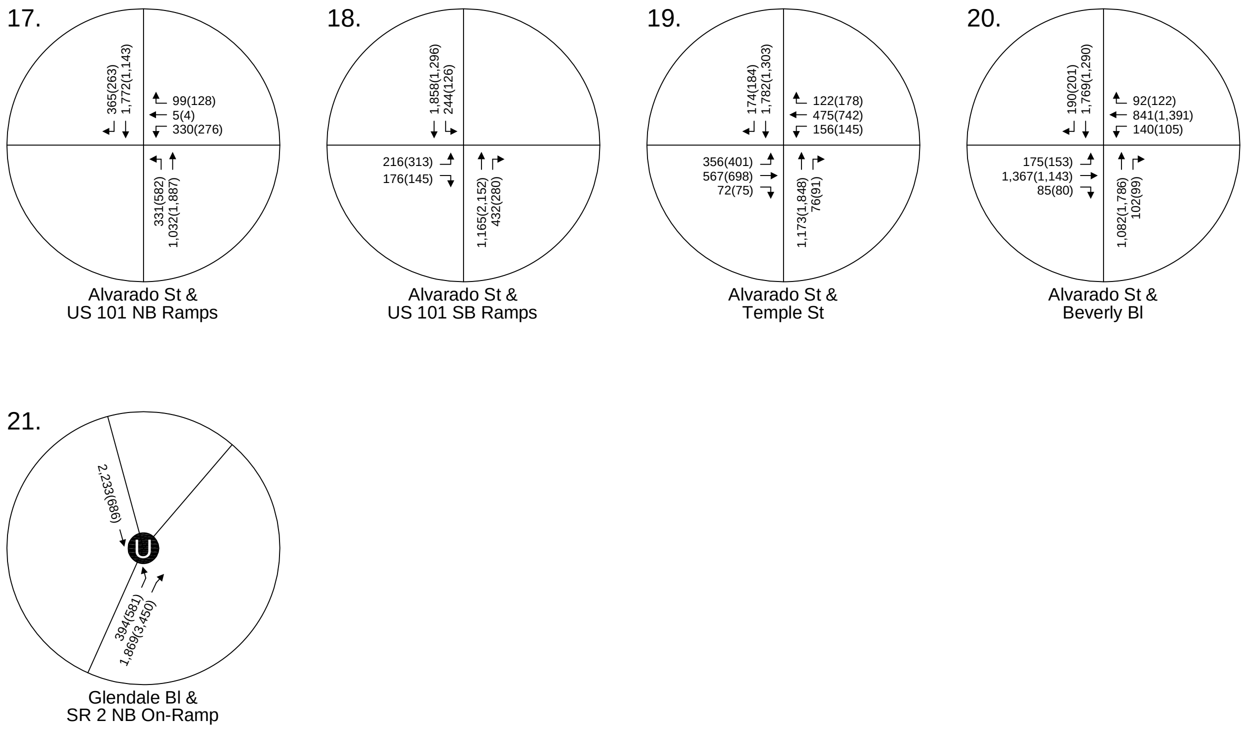
YEAR 2030 BUILD ALTERNATIVES TRAFFIC PROJECTIONS

Per discussions with Caltrans and LADOT, the freeway improvement project alternatives are not expected to result in an increase in traffic above the average annual growth rate. The project itself is not considered a trip generator. The discussions also determined that traffic volumes on Alvarado Street and Glendale Boulevard south of their intersection with Aaron Street would not



#(#) - A.M.(P.M.) Peak Hour Traffic Volumes
* - Negligible Volume

FIGURE 5
FUTURE (YEAR 2030) PEAK HOUR TRAFFIC VOLUMES
NO-BUILD CONDITIONS



U - Uncontrolled Intersection

#(#) - A.M.(P.M.) Peak Hour Traffic Volumes

FIGURE 5 (CONT.)
FUTURE (YEAR 2030) PEAK HOUR TRAFFIC VOLUMES
NO-BUILD CONDITIONS

be affected by the terminus improvement project. The proposed project does not provide additional capacity on SR-2 or Glendale Boulevard that would attract drivers to adjust their travel patterns to use these roadways instead of their current route. We concluded that total upstream and downstream volumes would be the same for the no-build and five build alternatives. Thus, future traffic projections for the five build alternatives were only developed at the intersections that would be affected by the terminus reconfiguration. For each build alternative, future year (2030) no-build traffic projections are duplicated for all intersections that do not change with the terminus reconfiguration. The affected intersections include:

- Glendale Boulevard & SR-2 southbound off-ramp/Fargo Street/Waterloo Street (#1)
- Glendale Boulevard & Allesandro Street (#2)
- Glendale Boulevard & Aaron Street (#3)
- Glendale Boulevard & SR-2 ramps (#21)

Figure 6 illustrates the alternatives and the projected traffic volumes at the above-mentioned intersections. Because Alternative A does not change the ramp configuration, traffic volumes are projected to be the same as the no-build alternative, which are shown in Figure 7. Figure 8 illustrates the future traffic volumes at the analyzed intersections for Alternatives B and C. Because of similar ramp layouts, traffic volumes are identical for each of these four build alternatives.

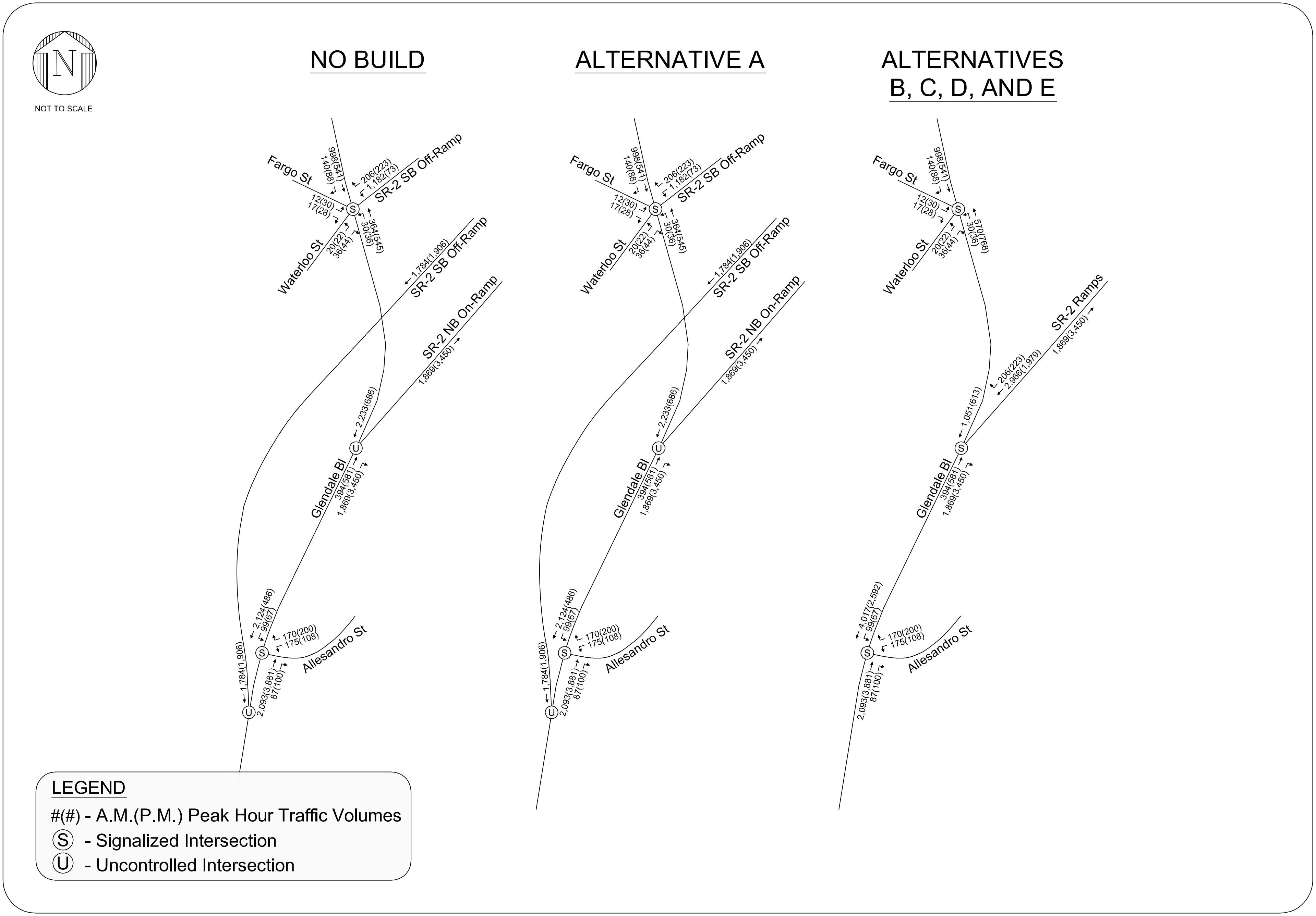
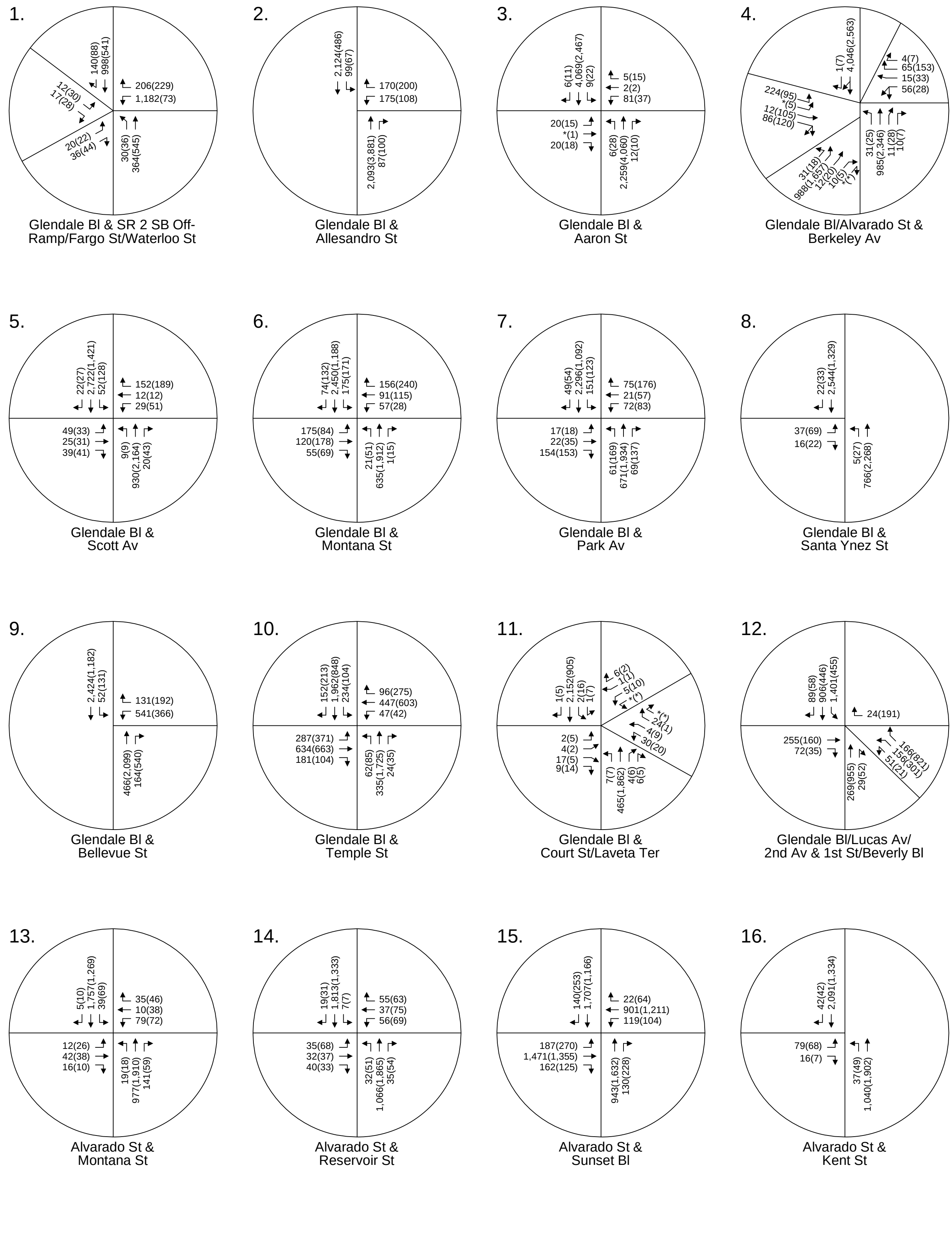
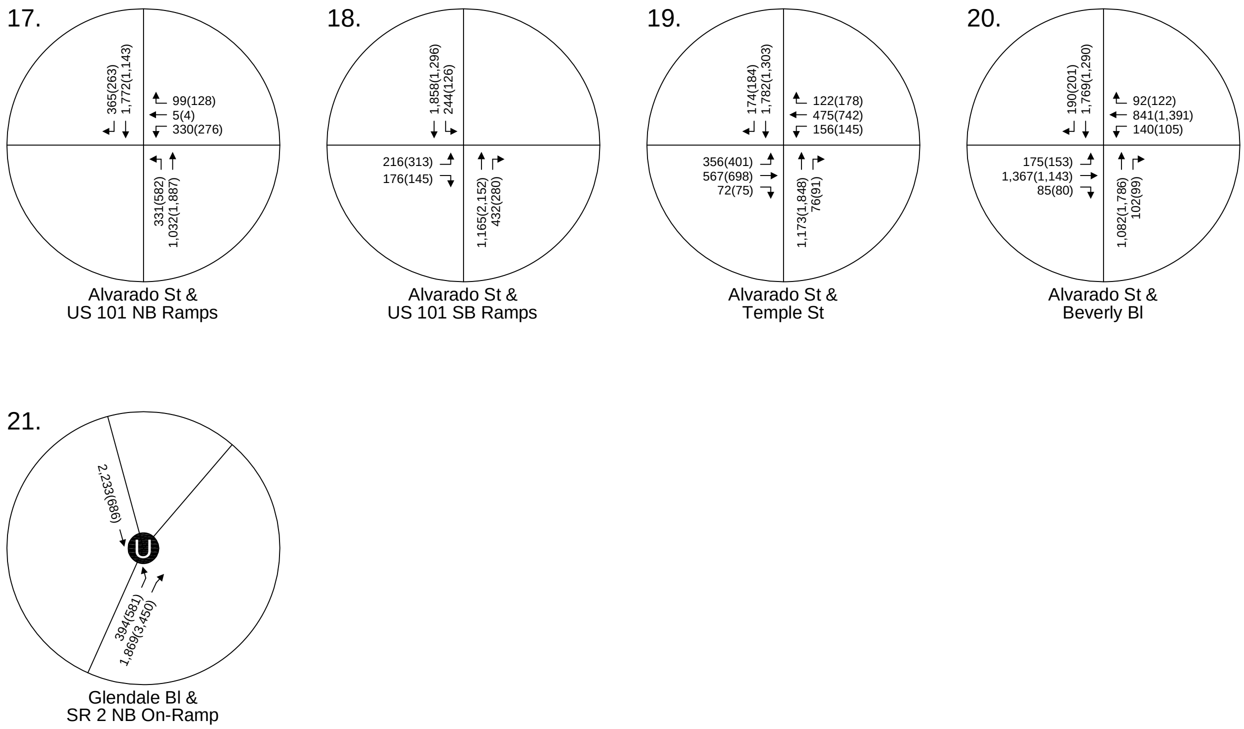


FIGURE 6
SR-2 TERMINUS ALTERNATIVES (YEAR 2030)



#(#) - A.M.(P.M.) Peak Hour Traffic Volumes
* - Negligible Volume

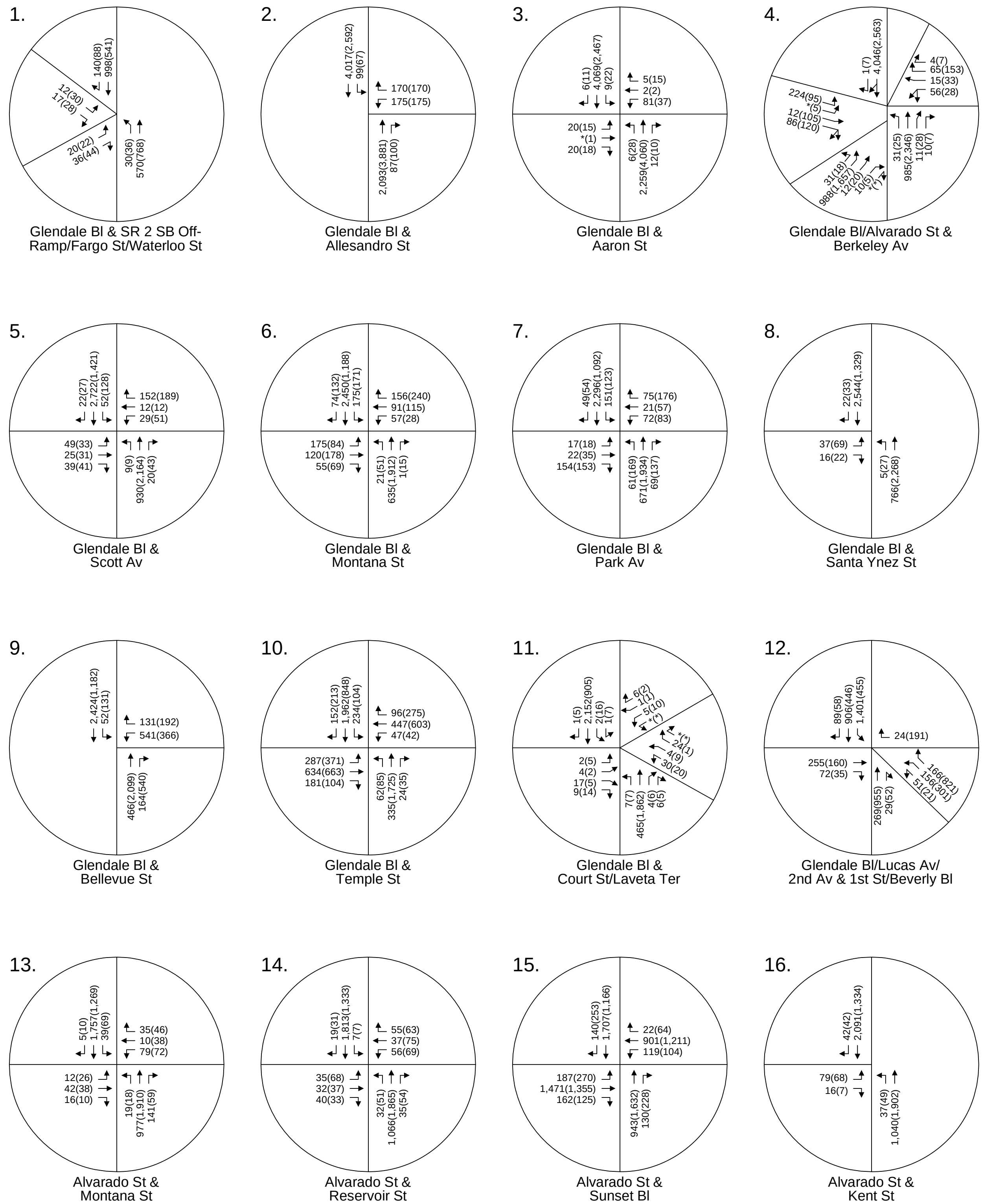
FIGURE 7
FUTURE (YEAR 2030) PEAK HOUR TRAFFIC VOLUMES
ALTERNATIVE A



U - Uncontrolled Intersection

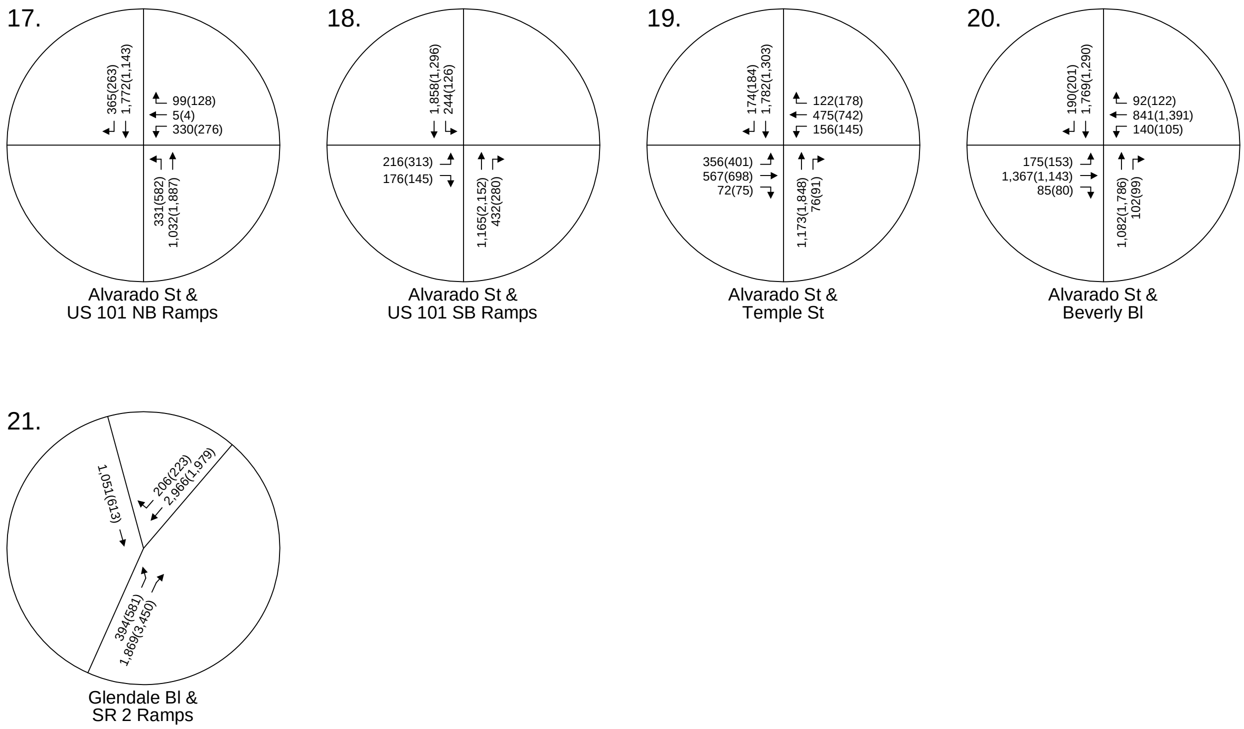
#(#) - A.M.(P.M.) Peak Hour Traffic Volumes

FIGURE 7 (CONT.)
FUTURE (YEAR 2030) PEAK HOUR TRAFFIC VOLUMES
ALTERNATIVE A



#(#) - A.M.(P.M.) Peak Hour Traffic Volumes
* - Negligible Volume

FIGURE 8
FUTURE (YEAR 2030) PEAK HOUR TRAFFIC VOLUMES
ALTERNATIVES B, C, D, AND E



#(#) - A.M.(P.M.) Peak Hour Traffic Volumes

FIGURE 8 (CONT.)
FUTURE (YEAR 2030) PEAK HOUR TRAFFIC VOLUMES
ALTERNATIVES B, C, D, AND E

V. FUTURE (YEARS 2030 AND 2033) TRAFFIC ANALYSIS

This chapter presents a comparative LOS analysis of the no-build and five build project alternatives for the SR-2 Freeway Terminus Improvement Project in Years 2030 and 2033.

FUTURE (YEARS 2030 AND 2033) NO-BUILD ANALYSIS METHODOLOGY

The Synchro/Simtraffic program was used to assess traffic operations under 2030 conditions during the peak hours. The simulation results indicated that the future traffic projections could not be accommodated by the roadway network in the study area. Under existing conditions, the vehicle demand exceeds the roadway capacity in the AM and PM peak hours. During the AM peak hour, southbound vehicles are constrained by the SR-2 off-ramp merge onto Glendale Boulevard and the Glendale Boulevard and Berkeley Avenue intersection. During the PM peak hour, northbound vehicles are metered by the Glendale Boulevard and Berkeley Avenue intersection. Since traffic flows were being metered by the bottlenecks in the roadway system using Synchro/Simtraffic, the LOS results for certain study intersections were better than expected because vehicles could not access the downstream intersection during the peak hour. Since the CMA methodology is an isolated intersection analysis, the forecasted vehicle demand for each intersection was used to determine the LOS for the study intersections.

The VISSIM software program was used to estimate vehicle delay, queuing, and travel times through the northern portion of the study area under no-build and project alternative conditions. The Glendale Boulevard/Alvarado Street & Berkeley Avenue intersection was not included in the VISSIM model. Therefore, traffic operations resulting from the design changes of the SR-2 & Glendale Boulevard interchange could be compared for each of the proposed project alternatives.

Since the 2030 traffic projections would exceed the capacity of the roadway network, the traffic forecasts originally developed for 2030 conditions were not modified to account for additional growth between 2030 and 2033. Traffic forecasts under 2030 conditions are already higher than could reasonably occur in the study area because of limited roadway capacity. Therefore, the forecasts applied to the future traffic analysis reflect traffic volumes beyond Year 2030 or 2033 conditions.

FUTURE (YEARS 2030 AND 2033) NO-BUILD TRAFFIC CONDITIONS

The no-build alternative peak hour traffic volumes illustrated in Figure 5 were analyzed to determine the delay or V/C ratio and corresponding LOS for each of the analyzed intersections under Year 2030 and 2033 conditions, taking into account average annual traffic growth. Table 6 summarizes these results. Under Year 2030 no-build alternative conditions, Table 6 shows that 14 of the 20 analyzed intersections are projected to operate at LOS D or better during the AM peak period, and 16 of the 20 analyzed intersections are projected to operate at LOS D or better during the PM peak period. Because of bottlenecks in the transportation system, such as the Glendale Boulevard/Alvarado Street & Berkeley Avenue intersection, additional intersections would operate worse than reported, as noted in the table. The intersections projected to operate at LOS E or F during at least one of the analyzed peak hours are:

- Glendale Boulevard & SR-2 southbound off-ramp/Fargo Street/Waterloo Street (AM)
- Glendale Boulevard & Allesandro Street (PM)
- Glendale Boulevard & Aaron Street (AM)
- Glendale Boulevard/Alvarado Street & Berkeley Avenue (AM and PM)
- Glendale Boulevard & Montana Street (AM)
- Glendale Boulevard & Bellevue Avenue (AM)
- Glendale Boulevard & Temple Street (AM and PM)
- Alvarado Street & Temple Street (PM)

FUTURE (YEAR 2030) BUILD ALTERNATIVE TRAFFIC CONDITIONS

The projected future Year 2030 peak hour traffic volumes for Alternative A (illustrated in Figure 7) and Alternatives B, C, D and E (illustrated in Figure 8) were analyzed to determine the future operating conditions with the completion of each of the freeway terminus improvement

TABLE 6
INTERSECTION LEVEL OF SERVICE ANALYSIS
FUTURE CONDITIONS (YEAR 2030) - NO-BUILD ALTERNATIVE

No.		Intersection	Peak Hour	V/C	LOS
1.	[a]	Glendale Boulevard & SR 2 SB Off-Ramp/Fargo Street/Waterloo Street	A.M. P.M.	92.5 24.6	F C
2.	[a]	Glendale Boulevard & Allesandro Street	A.M. P.M.	13.7 100.9	B [d] F
3.	[b]	Glendale Boulevard & Aaron Street	A.M. P.M.	0.920 0.897	E [d] D
4.	[a]	Glendale Boulevard/Alvarado Street & Berkeley Avenue	A.M. P.M.	1.135 1.103	F F
5.	[a]	Glendale Boulevard & Scott Avenue	A.M. P.M.	0.718 0.706	C C [d]
6.	[a]	Glendale Boulevard & Montana Street	A.M. P.M.	0.951 0.658	E B [d]
7.	[a]	Glendale Boulevard & Park Avenue	A.M. P.M.	0.857 0.830	D D
8.	[a]	Glendale Boulevard & Santa Ynez Street	A.M. P.M.	0.794 0.771	C C
9.	[a]	Glendale Boulevard & Bellevue Avenue	A.M. P.M.	0.960 0.870	E D
10.	[a]	Glendale Boulevard & Temple Street	A.M. P.M.	1.120 1.205	F F
11.	[b]	Glendale Boulevard & Court Street/Laveta Terrace	A.M. P.M.	0.768 0.666	C B
12.	[a]	Glendale Boulevard/Lucas Avenue/2nd Avenue & 1st Street/Beverly Boulevard	A.M. P.M.	0.829 0.776	D C
13.	[a]	Alvarado Street & Montana Street	A.M. P.M.	0.455 0.505	A A
14.	[a]	Alvarado Street & Reservoir Street	A.M. P.M.	0.423 0.537	A A
15.	[a]	Alvarado Street & Sunset Boulevard	A.M. P.M.	0.798 0.823	C D
16.	[a]	Alvarado Street & Kent Street	A.M. P.M.	0.462 0.438	A A
17.	[a]	Alvarado Street & US 101 Northbound Ramps	A.M. P.M.	0.864 0.831	D D
18.	[a]	Alvarado Street & US 101 Southbound Ramps	A.M. P.M.	0.663 0.733	B C
19.	[a]	Alvarado Street & Temple Street	A.M. P.M.	0.851 0.996	D E
20.	[a]	Alvarado Street & Beverly Boulevard	A.M. P.M.	0.709 0.871	C D
21.	[c]	Glendale Boulevard & SR 2 Ramps	A.M. P.M.	- -	- -

Notes:
Growth rates of 1.04% and 0.97% per year applied to existing (year 2006) A.M. and P.M. volumes respectively to forecast year 2030 No-Build Alternative volumes based on average growth predicted by the MTA Model in the study area.

[a] Intersection is currently operating under the LADOT Adaptive Traffic Control System (ATCS). A credit of 0.10 in V/C ratio was included in the above analysis.
[b] Intersection is currently operating under the LADOT Automated Traffic Surveillance and Control (ATSAC) system. A credit of 0.07 in V/C ratio was included in the above analysis.
[c] Intersection is uncontrolled under existing conditions.
[d] Reported intersection delay is better than would actually occur due to bottlenecks and resulting vehicle queuing along Glendale Boulevard.

alternatives. These results are presented in Table 7. LOS worksheets are provided in Appendix C.

As explained in Chapter 3, because the project is not expected to add trips, traffic volumes at intersections not affected by the reconfiguration will be the same across the no-build and five build alternatives. Thus, the LOS at all study intersections south of Berkeley Avenue for the five build alternatives is expected to be the same as in the no-build alternative. The intersections south of Berkeley Avenue projected to operate at LOS E or F during at least one of the analyzed peak hours for build alternatives A, B, C, D and E include:

- Glendale Boulevard & Aaron Street (AM)
- Glendale Boulevard/Alvarado Street & Berkeley Avenue (AM and PM)
- Glendale Boulevard & Montana Street (PM)
- Glendale Boulevard & Bellevue Avenue (AM)
- Glendale Boulevard & Temple Street (AM and PM)
- Alvarado Street & Temple Street (PM)

VISSIM Results

The VISSIM software program was used to estimate vehicle delay and travel times through the northern portion of the study area under future no-build and project alternative conditions. The VISSIM model contained SR-2 between I-5 and Glendale Boulevard and Glendale Boulevard between the SR-2 off-ramp/Fargo Street and Aaron Street. Traffic forecasts reflecting Year 2033 conditions were reflected in the VISSIM model. The traffic growth rates (approximately 1 percent per year) were applied to the 2030 traffic volumes to develop Year 2033 traffic forecasts.

Tables 8A and 8B summarize the AM and PM peak hour delay and LOS results for the intersections serving the SR-2 and Glendale Boulevard interchange and nearby intersections. The number of vehicles traveling through each intersection (i.e., volume served) is also reported.

TABLE 7
INTERSECTION LEVEL OF SERVICE ANALYSIS
FUTURE CONDITIONS (YEAR 2030) - PROJECT ALTERNATIVES

No.		Intersection	Peak Hour	No-Build Alternative		Alternative A		Alternative B		Alternatives C, D, E	
				Delay or V/C	LOS	Delay or V/C	LOS	Delay or V/C	LOS	Delay or V/C	LOS
1.	[a], [b]	Glendale Boulevard & SR 2 SB Off-Ramp/Fargo Street/Waterloo Street	A.M. P.M.	92.5 24.6	F C	63.7 24.4	E C	5.9 7.9	A A	5.9 7.9	A A
2.	[a]	Glendale Boulevard & Allesandro Street	A.M. P.M.	13.7 100.9	B [f] F	14.7 100.9	B [f] F	49.2 91.4	D [f] F	52.3 91.4	D [f] F
21.	[a], [d], [e]	Glendale Boulevard & SR 2 Ramps	A.M. P.M.	- -	- -	- -	- -	51.0 101.8	D [f] F	34.3 101.5	C [f] F
3.	[c]	Glendale Boulevard & Aaron Street	A.M. P.M.	0.920 0.897	E [f] D	0.920 0.897	E [f] D	0.920 0.897	E [f] D	0.920 0.897	E [f] D
4.	[a]	Glendale Boulevard/Alvarado Street & Berkeley Avenue	A.M. P.M.	1.135 1.103	F F	1.135 1.103	F F	1.135 1.103	F F	1.135 1.103	F F
5.	[a]	Glendale Boulevard & Scott Avenue	A.M. P.M.	0.718 0.706	C C [f]	0.718 0.706	C C [f]	0.718 0.706	C C [f]	0.718 0.706	C C [f]
6.	[a]	Glendale Boulevard & Montana Street	A.M. P.M.	0.951 0.658	E B [f]	0.951 0.658	E B [f]	0.951 0.658	E B [f]	0.951 0.658	E B [f]
7.	[a]	Glendale Boulevard & Park Avenue	A.M. P.M.	0.857 0.830	D D	0.857 0.830	D D	0.857 0.830	D D	0.857 0.830	D D
8.	[a]	Glendale Boulevard & Santa Ynez Street	A.M. P.M.	0.794 0.771	C C	0.794 0.771	C C	0.794 0.771	C C	0.794 0.771	C C
9.	[a]	Glendale Boulevard & Bellevue Avenue	A.M. P.M.	0.960 0.870	E D	0.960 0.870	E D	0.960 0.870	E D	0.960 0.870	E D
10.	[a]	Glendale Boulevard & Temple Street	A.M. P.M.	1.120 1.205	F F	1.120 1.205	F F	1.120 1.205	F F	1.120 1.205	F F
11.	[c]	Glendale Boulevard & Court Street	A.M. P.M.	0.768 0.666	C B	0.768 0.666	C B	0.768 0.666	C B	0.768 0.666	C B
12.	[a]	Glendale Boulevard/Lucas Avenue/2nd Avenue & 1st Street/Berkeley Avenue	A.M. P.M.	0.829 0.776	D C	0.829 0.776	D C	0.829 0.776	D C	0.829 0.776	D C
13.	[a]	Alvarado Street & Montana Street	A.M. P.M.	0.455 0.505	A A	0.455 0.505	A A	0.455 0.505	A A	0.455 0.505	A A
14.	[a]	Alvarado Street & Reservoir Street	A.M. P.M.	0.423 0.537	A A	0.423 0.537	A A	0.423 0.537	A A	0.423 0.537	A A
15.	[a]	Alvarado Street & Sunset Boulevard	A.M. P.M.	0.798 0.823	C D	0.798 0.823	C D	0.798 0.823	C D	0.798 0.823	C D
16.	[a]	Alvarado Street & Kent Street	A.M. P.M.	0.462 0.438	A A	0.462 0.438	A A	0.462 0.438	A A	0.462 0.438	A A
17.	[a]	Alvarado Street & US 101 Northbound Ramps	A.M. P.M.	0.864 0.831	D D	0.864 0.831	D D	0.864 0.831	D D	0.864 0.831	D D
18.	[a]	Alvarado Street & US 101 Southbound Ramps	A.M. P.M.	0.663 0.733	B C	0.663 0.733	B C	0.663 0.733	B C	0.663 0.733	B C
19.	[a]	Alvarado Street & Temple Street	A.M. P.M.	0.851 0.996	D E	0.851 0.996	D E	0.851 0.996	D E	0.851 0.996	D E
20.	[a]	Alvarado Street & Beverly Boulevard	A.M. P.M.	0.709 0.871	C D	0.709 0.871	C D	0.709 0.871	C D	0.709 0.871	C D

Notes:
Growth rates of 1.04% and 0.97% per year applied to existing (year 2006) A.M. and P.M. volumes respectively to forecast year 2030 volumes based on average growth predicted by the MTA Model in the study area.
[a] Intersection is currently operating under the LADOT Adaptive Traffic Control System (ATCS). A credit of 0.10 in V/C ratio was included in the above analysis.
[b] Intersection does not include the SR 2 SB Off-Ramp for Alternatives B & C.
[c] Intersection is currently operating under the LADOT Automated Traffic Surveillance and Control (ATSAC) system. A credit of 0.07 in V/C ratio was included in the above analysis.
[d] Intersection is uncontrolled for No-Build Alternative & Alternative A.
[e] It is assumed that the intersection would operate under the LADOT Adaptive Traffic Control System (ATCS). A credit of 0.10 in V/C ratio was included in the above analysis.

TABLE 8A
COMPARISON OF INTERSECTION OPERATING CONDITIONS (LOS AND AVERAGE VEHICLE DELAY) - AM PEAK HOUR
AVERAGE RESULTS FROM 10 VISSIM SIMULATION RUNS

NODE	Approach	Direction	Movement	2007 Existing			2033 No-Build			2033 Alternative A			2033 Alternative B			2033 Alternatives C, D, E		
				Volume Served (veh/hr)	Average Delay (sec/veh)	LOS	Volume Served (veh/hr)	Average Delay (sec/veh)	LOS	Volume Served (veh/hr)	Average Delay (sec/veh)	LOS	Volume Served (veh/hr)	Average Delay (sec/veh)	LOS	Volume Served (veh/hr)	Average Delay (sec/veh)	LOS
1. Glendale Bl/SR-2 Off-ramp-Fargo St-Waterloo St	Glendale Bl	**NB**	LT (Waterloo)	30	54	D	39	91	F	39	65	E	38	12	B	38	9	A
			LT (Fargo)	18	41	D	22	76	E	22	49	D	32	15	B	33	12	B
			TH	283	22	C	355	23	C	355	22	C	402	2	A	402	2	A
	Glendale Bl	**SB**	TH	840	27	C	843	34	C	842	29	C	1,058	24	C	1,060	15	B
			RT (Waterloo)	13	25	C	20	34	C	20	30	C	26	15	B	26	10	B
			RT (Fargo)	20	28	C	12	31	C	12	25	C	15	17	B	15	13	B
	Fargo St	**SE**	LT	10	59	E	11	63	E	11	63	E	11	53	D	11	51	D
			RT	10	58	E	10	61	E	10	59	E	10	71	E	10	45	D
	Waterloo St	**NE**	LT	32	65	E	27	64	E	27	63	E	27	51	D	27	51	D
			RT	29	45	D	27	46	D	26	43	D	26	45	D	27	29	C
	SR-2 off-ramp	**WB**	LT	1,186	96	F	1,168	241	F	1,263	213	F	To Be Removed			To Be Removed		
			TH	18	99	F	16	242	F	18	219	F						
			RT	77	91	F	76	234	F	82	174	F						
			Total	***2528***	***62***	***E***	***2,626***	***133***	***F***	***2,727***	***120***	***F***	***1,645***	***19***	***B***	***1,649***	***13***	***B***
21. Glendale Bl/ SR-2 On-ramp and/or Off-ramps	Glendale Bl	**NB**	TH	330	2	A	416	4	A	355	1	A	354	26	D	353	24	C
			RT	1,355	1	A	1,699	2	A	1,697	0	A	1,696	4	A	1,691	3	C
	Glendale Bl	**SB**	TH	2,067	1	A	2,052	6	A	2,089	8	A	1,095	17	C	1,095	20	C
	SR-2 ramps	**WB**	LT	Does Not Exist			Does Not Exist			Does Not Exist			2,255	435	F	2,261	444	F
			RT										47	516	F	48	535	F
			Total	***3,752***	***1***	***A***	***4,167***	***4***	***A***	***4,141***	***4***	***A***	***5,447***	***191***	***F***	***5,448***	***195***	***F***
2. Glendale Bl/ Allesandro St/	Glendale Bl	**NB**	TH	1,547	7	A	1,939	9	A	1,936	8	A	1,931	9	A	1,928	10	B
			RT	58	6	A	74	8	A	73	8	A	74	9	A	74	10	B
	Glendale Bl	**SB**	LT	61	22	C	66	36	D	69	26	C	59	28	C	59	31	C
			TH	861	23	C	854	34	C	2,086	21	C	3,290	15	B	3,293	16	B
	SR-2 flyover	**SB**	TH	2,563	212	F	2,521	302	F	1,295	119	F	To Be Removed			To Be Removed		
	Allesandro St	**WB**	LT	193	78	E	236	122	F	235	128	F	243	53	D	243	52	D
			RT	133	14	B	170	58	E	175	58	E	174	14	B	174	14	B
			Total	***5,416***	***109***	***F***	***5,860***	***145***	***F***	***5,869***	***44***	***D***	***5,772***	***15***	***B***	***5,771***	***16***	***B***
3. Glendale Bl/ Aaron St	Glendale Bl	**NB**	LT	5	45	D	6	42	D	6	41	D	6	43	D	6	44	D
			TH	1,942	10	B	2,439	13	B	2,437	13	B	2,440	13	B	2,439	13	B
			RT	10	12	B	14	17	B	14	17	B	14	10	B	14	12	B
	Glendale Bl	**SB**	LT	5	65	E	5	56	E	6	57	E	5	53	D	4	48	D
			TH	3,423	32	C	3,414	32	C	3,243	32	C	3,333	25	C	3,337	25	C
			RT	4	38	D	5	35	C	5	36	D	6	26	C	7	31	C
	Aaron St	**EB**	LT	18	21	C	23	22	C	23	22	C	22	21	C	22	20	C
			TH	1	4	A	2	7	A	2	7	A	2	6	A	2	6	A
			RT	19	7	A	23	9	A	23	8	A	22	9	A	22	9	A
	Aaron St	**WB**	LT	36	21	C	40	21	C	40	21	C	41	21	C	41	21	C
			TH	1	11	B	2	27	C	2	27	C	2	27	C	2	27	C
			RT	10	18	B	14	20	C	14	20	C	14	20	C	14	20	C
			Total	***5,473***	***24***	***C***	***5,987***	***24***	***C***	***5,995***	***24***	***C***	***5,907***	***20***	***B***	***5,910***	***20***	***B***

LT: Left Turn. TH: Through. RT: Right Turn.

TABLE 8B
COMPARISON OF INTERSECTION OPERATING CONDITIONS (LOS AND AVERAGE VEHICLE DELAY) - PM PEAK HOUR
AVERAGE RESULTS FROM 10 VISSIM SIMULATION RUNS

NODE	Approach	Direction	Movement	2007 Existing			2033 No-Build			2033 Alternative A			2033 Alternative B			2033 Alternatives C, D, E		
				Volume Served (veh/hr)	Average Delay (sec/veh)	LOS	Volume Served (veh/hr)	Average Delay (sec/veh)	LOS	Volume Served (veh/hr)	Average Delay (sec/veh)	LOS	Volume Served (veh/hr)	Average Delay (sec/veh)	LOS	Volume Served (veh/hr)	Average Delay (sec/veh)	LOS
1. Glendale Bl/SR-2 Off-ramp-Fargo St-Waterloo St	Glendale Bl	**NB**	LT (Waterloo)	51	20	C	58	31	C	59	43	D	53	82	F	57	34	C
			LT (Fargo)	19	15	B	19	37	D	22	45	D	35	88	F	40	39	D
			TH	429	9	A	446	11	B	509	12	B	482	2	A	498	2	A
	Glendale Bl	**SB**	TH	621	9	A	772	40	D	770	66	E	708	176	F	747	80	F
			RT (Waterloo)	10	8	A	14	33	C	14	6138	E	13	149	F	14	60	E
			RT (Fargo)	13	10	B	15	30	C	15	58	E	14	150	F	14	62	E
	Fargo St	**SE**	LT	33	32	C	33	29	C	33	29	C	33	30	C	33	29	C
			RT	5	37	D	5	36	D	5	39	D	5	70	E	5	51	D
	Waterloo St	**NE**	LT	5	29	C	5	36	D	5	36	D	5	19	B	5	19	B
			RT	3	6	A	3	21	C	3	21	C	3	23	C	3	8	A
	SR-2 off-ramp	**WB**	LT	74	28	C	458	363	F	461	347	F	To Be Removed			To Be Removed		
			TH	32	33	C	35	347	F	35	341	F						
			RT	118	15	B	132	324	F	137	192	F						
			Total	***1413***	***12***	***B***	***1,995***	***130***	***F***	***2,068***	***126***	***F***	***1,351***	***101***	***F***	***1,416***	***48***	***D***
21. Glendale Bl/ SR-2 On-ramp and/or Off-ramps	Glendale Bl	**NB**	TH	497	7	A	446	4	A	591	1	A	465	50	F	404	29	D
			RT	2,911	2	A	3,051	2	A	3,459	0	A	2,743	6	A	2,823	437	A
	Glendale Bl	**SB**	TH	703	2	A	1,226	40	E	1,224	58	F	708	57	F	741	66	F
	New SR-2 off-ramps	**WB**	LT	Does Not Exist			Does Not Exist			Does Not Exist			1,133	544	F	1,092	568	F
			RT										107	642	F	91	705	F
			Total	***4,111***	***3***	***A***	***4,723***	***12***	***B***	***5,274***	***14***	***B***	***5,156***	***148***	***F***	***5,151***	***147***	***F***
2. Glendale Bl/ Allesandro St/SR-2 flyover	Glendale Bl	**NB**	TH	3,526	15	B	3,386	34	C	3,852	15	B	3,029	41	D	3,116	37	D
			RT	84	15	B	88	31	C	101	17	B	78	39	D	82	36	D
	Glendale Bl	**SB**	LT	43	262	F	55	100	F	56	92	F	45	390	F	46	507	F
			TH	583	16	B	704	105	F	1,149	87	F	1,767	93	F	1,765	97	F
	SR-2 flyover	**SB**	TH	1,301	72	E	1,061	594	F	611	721	F	To Be Removed			To Be Removed		
	Allesandro St	**WB**	LT	122	56	E	155	102	F	155	103	F	151	176	F	153	190	F
			RT	121	17	B	189	28	C	190	18	B	187	92	F	189	103	F
			Total	***5,510***	***31***	***C***	***5,638***	***150***	***F***	***6,114***	***102***	***F***	***5,257***	***67***	***E***	***5,351***	***68***	***E***
3. Glendale Bl/ Aaron St	Glendale Bl	**NB**	LT	15	32	C	16	77	E	18	59	E	14	87	F	14	84	F
			TH	3,633	8	A	3,783	63	E	4,321	41	D	3,390	81	F	3,483	77	E
			RT	21	7	A	22	50	D	25	38	D	20	64	E	20	62	E
	Glendale Bl	**SB**	LT	4	97	F	4	192	F	4	196	F	4	199	F	4	195	F
			TH	1,739	125	F	1,733	172	F	1,730	172	F	1,734	169	F	1,734	170	F
			RT	38	79	E	35	120	F	35	120	F	36	117	F	37	117	F
	Aaron St	**EB**	LT	14	73	E	17	84	F	18	76	E	17	90	F	18	85	F
			TH	1	35	D	1	51	D	1	32	C	1	37	D	1	37	D
			RT	19	67	E	24	74	E	24	72	E	24	74	E	24	76	E
	Aaron St	**WB**	LT	38	245	F	35	853	F	38	712	F	34	893	F	37	817	F
			TH	1	54	D	1	525	F	1	315	F	1	522	F	1	405	F
			RT	9	141	F	9	807	F	9	594	F	8	839	F	9	708	F
			Total	***5,532***	***48***	***D***	***5,680***	***103***	***F***	***6,224***	***83***	***F***	***5,283***	***116***	***F***	***5,382***	***114***	***F***

LT: Left Turn. TH: Through. RT: Right Turn.

Although each alternative has the same demand volume, the number of vehicles being served varies based on the capacity of the intersection and roadway network.

As shown in Table 8A, the intersections serving the SR-2 and Glendale Boulevard interchange would operate as follows during the AM peak hour:

- Glendale Boulevard & SR-2 Off-Ramp/Fargo Street – This intersection is projected to operate at LOS F under future no-build conditions and under Alternative A. Due to the relocation of the SR-2 off-ramp under Alternatives B and C, the intersection would improve to LOS B during the AM peak hour under future conditions.

- Glendale Boulevard & SR-2 On-/Off-Ramp – This intersection would be constructed under Alternatives B and C and is projected to operate at LOS F during the AM peak hour under future conditions.

- Glendale Boulevard & Allesandro Street – This intersection is projected to operate at LOS F under future no-build conditions and improve to LOS D under Alternative A and LOS B under Alternatives B and C. The delay experienced by vehicles traveling on the SR-2 flyover off-ramp is included in the average delay at this intersection although the merge area actually occurs just south of Allesandro Street. Therefore, removing the flyover off-ramp under Alternatives B and C reduces the average delay and improves the LOS during the AM peak hour.

- Glendale Boulevard & Aaron Street – This intersection would operate at LOS C under no-build and Alternative A conditions (without the bottleneck at the Glendale Boulevard/Alvarado Street & Berkeley Avenue intersection). The delay is reduced by approximately 5 seconds resulting in LOS B conditions under Alternatives B and C. This is due to the decrease in vehicles served (approximately 100 vehicles) on southbound Glendale Boulevard due to delays at the SR-2 off-ramp intersection during the AM peak hour.

As shown in Table 8B, the intersections serving the SR-2 and Glendale Boulevard interchange would operate as follows during the PM peak hour:

- Glendale Boulevard & SR-2 Off-Ramp/Fargo Street – This intersection is projected to operate at LOS F under future no-build conditions and under Alternatives A and B. Under Alternative C, the intersection would operate at LOS D during the PM peak hour.

- Glendale Boulevard & SR-2 On-/Off-Ramp – This intersection would be constructed under Alternatives B and C and is projected to operate at LOS F during the PM peak hour under future conditions.

- Glendale Boulevard & Allesandro Street – This intersection is projected to operate at LOS F under future no-build and Alternative A conditions. Traffic operations would improve to LOS E under Alternatives B and C. The delay experienced by vehicles traveling on the SR-2 flyover off-ramp is included in the average delay at this intersection although the merge area actually occurs just south of Allesandro Street. Therefore, removing the flyover off-ramp under Alternatives B and C reduces the overall average delay and improves the LOS for the intersection as a whole during the PM peak hour. The northbound approach to this intersection would experience additional delay because of the proposed traffic signal at the SR-2 on/off-ramp under Alternatives B and C.

- Glendale Boulevard & Aaron Street – This intersection would operate at LOS F under no-build and Alternative A, B and C conditions. With the proposed design changes under Alternatives B and C, the number of vehicles served on northbound Glendale Boulevard decreases (by approximately 300 to 400 vehicles) because of capacity constraints at the proposed SR-2 on-ramp intersection during the PM peak hour.

The travel time through the SR-2 and Glendale Boulevard interchange was also estimated using the VISSIM model. Table 9 shows the northbound and southbound travel times during the AM and PM peak hours for vehicles traveling on Glendale Boulevard to and from SR-2.

During the AM peak hour, the southbound travel times from SR-2 onto Glendale Boulevard (through the Aaron Street intersection) are as follows:

- The travel time under existing conditions ranges from 4.5 to 7.5 minutes depending on whether vehicles are traveling through the SR-2 off-ramp signalized intersection or using the flyover ramp.
- Under future no-build conditions, the travel time would increase to between 9 and 12 minutes depending on whether vehicles are traveling through the SR-2 off-ramp signalized intersection or using the flyover ramp and would remain relatively constant under Alternative A (compared to no-build conditions).
- Under Alternatives B and C, the travel time would increase to 13 minutes due to capacity constraints at the proposed SR-2 off-ramp signalized intersection.

During the PM peak hour, the northbound travel times from Glendale Boulevard (just south of the Aaron Street intersection) to SR-2 are as follows:

- The travel time under existing conditions is approximately 1.5 minutes.
- Under future no-build conditions, the travel time would increase to approximately 2.5 minutes.
- Under Alternative A, the travel time would decrease by approximately 40 seconds compared to no-build conditions (1 minute, 50 seconds).

TABLE 9

COMPARISON OF CORRIDOR TRAVEL TIME PERFORMANCE

AVERAGE RESULTS FROM 10 VISSIM SIMULATION RUNS

AM PEAK HOUR:

Direction	Beginning	End	Approximate Distance (mile)	Travel Time (min:sec)				
				2007 Existing	2033 No-Build	2033 Alt. A	2033 Alt. B	2033 Alt. C,D,E
NB	Glendale Bl s/o Aaron St	SR-2 on-ramp	0.61	01:27	01:32	01:28	01:33	01:33
NB	Glendale Bl s/o Aaron St	Glendale Bl at n/o Fargo St	0.72	02:01	02:09	02:05	02:09	02:07
SB	Glendale Bl n/o Fargo St	Glendale Bl at s/o Aaron St	0.72	02:44	03:07	02:51	02:40	02:37
SB	Existing SR-2 off-ramp	Glendale Bl s/o Aaron St	1.13	04:33	09:13	08:08		
SB	Existing SR-2 flyover	Glendale Bl /o Aaron St	1.13	07:47	12:17	13:16		
SB	Proposed SR-2 off-ramp	Glendale Bl s/o Aaron St	1.11				13:01	13:12

PM PEAK HOUR:

Direction	Beginning	End	Approximate Distance (mile)	Travel Time (min:sec)				
				2007 Existing	2033 No-Build	2033 Alt. A	2033 Alt. B	2033 Alt. C,D,E
NB	Glendale Bl s/o Aaron St	SR-2 on-ramp	0.66	01:35	02:32	01:51	02:52	02:44
NB	Glendale Bl s/o Aaron St	Glendale Bl at n/o Fargo St	0.68	01:59	03:02	02:18	03:53	03:29
SB	Glendale Bl n/o Fargo St	Glendale Bl at s/o Aaron St	0.88	05:28	08:36	09:01	09:59	08:48
SB	Existing SR-2 off-ramp	Glendale Bl s/o Aaron St	1.13	06:28	15:47	15:34		
SB	Existing SR-2 flyover	Glendale Bl /o Aaron St	1.13	06:24	13:48	13:20		
SB	Proposed SR-2 off-ramp	Glendale Bl s/o Aaron St	0.72				16:20	16:43

- Under Alternatives B and C, the travel time would increase by approximately 15 to 20 seconds compared to no-build conditions because of capacity constraints at the proposed SR-2 on-ramp signalized intersection (2 minutes, 45 seconds).

VI. COMMUNITY SUGGESTED ALTERNATIVES EVALUATION

Through the project's outreach efforts, members of the local community have expressed a desire to explore other access and traffic control options at the SR-2 terminus. These suggestions include adding a left turn onto the SR-2 freeway from southbound Glendale Boulevard, a right-turn prohibition onto northbound Glendale Boulevard, and providing fewer through lanes at the freeway terminus. This chapter analyzes the feasibility of these potential roadway changes using the Synchro software program.

LEFT-TURN FEASIBILITY ONTO SR-2 RAMPS

The traffic models for Alternatives B through E were modified to allow a protected left-turn movement from southbound Glendale Boulevard onto northbound SR-2. The intersection of Glendale Boulevard & the SR-2 ramps was assumed to be signalized for these four alternatives, with a cycle length of 105 seconds[4]. The intersection would be uncontrolled under the no-build alternative and Alternative A. The model was tested with 100 and 200 southbound left-turning vehicles[5] onto the freeway in the AM and PM peak hours. This movement was given a 20-second phasing because of the wide left turn required. The critical volumes in the PM peak hour are the southbound Glendale Boulevard volumes from the freeway (SR-2 southbound off-ramp) and the northbound right-turn volumes (from northbound Glendale onto SR-2 northbound). The SR-2 northbound right-turn movement from northbound Glendale Boulevard would receive a green phase for the entire cycle except during the left-turn protected phase from southbound Glendale Boulevard to northbound SR-2. Because of the lane configurations at the intersection (two northbound right-turn lanes feeding onto two lanes on SR-2), the SR-2 northbound right-turn movement would experience free-flow conditions for 85 seconds every cycle.

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[4] 105 seconds was the Synchro optimized cycle time

[5] These volumes represent a conservative estimate of local traffic likely to travel northbound on SR-2 following the addition of the left-turn lane

Table 10 shows the average delay that would be experienced by vehicles making only the northbound right turn from Glendale Boulevard onto northbound SR-2 for the proposed project alternatives under two scenarios: (1) two lanes on the SR-2 southbound off-ramp, and (2) three lanes on the SR-2 southbound off-ramp. Both scenarios were analyzed with and without the left turn from southbound Glendale Boulevard onto northbound SR-2. Table 11, in contrast, shows the average delay experienced for *all* the vehicles at the intersection for the proposed alternatives for the above-mentioned lane configurations. The scenarios tested for the left-turn feasibility analysis include:

- Three southbound SR-2 off-ramp lanes without the left turn from Glendale Boulevard to northbound SR-2
- Three southbound SR-2 off-ramp lanes with the left turn from Glendale Boulevard to northbound SR-2
- Two southbound SR-2 off-ramp lanes without the left turn from Glendale Boulevard to northbound SR-2
- Two southbound SR-2 off-ramp lanes with the left turn from Glendale Boulevard to northbound SR-2

Left-Turn Feasibility Assessment

Without a left turn, the average delay experienced by vehicles at the intersection during peak hours is close to five minutes for Alternative B and three minutes for Alternatives C, D and E. According to the feasibility analysis, the left turn from southbound Glendale Boulevard to northbound SR-2 would increase the average vehicular delay for the northbound Glendale Boulevard right-turn and southbound Glendale Boulevard movements. The average delay experienced by vehicles making a right turn from northbound Glendale Boulevard to northbound SR-2 without the left turn is five minutes, which increases to almost six minutes with the left turn. Assuming a cycle length of 105 seconds, a vehicle would have to wait for over three cycle lengths to clear the intersection and enter northbound SR-2. The added southbound SR-2 off-ramp lane does not make a difference in the amount of delay experienced by northbound vehicles.

TABLE 10
INTERSECTION LEVEL OF SERVICE ANALYSIS
ALTERNATIVES - FUTURE CONDITIONS (YEAR 2030)
AVERAGE DELAY FOR NORTHBOUND GLENDALE BOULEVARD[1] RIGHT TURN ONTO NORTHBOUND SR-2

No.	Intersection	Scenario		Peak Hour	Alternative B		Alternatives C, D & E	
		SR-2 SB Off-Ramps	SB Glendale Boulevard Left Turn onto NB SR-2		Total Delay (sec)	LOS	Total Delay (sec)	LOS
21.	Glendale Boulevard & SR-2 Ramps	3 Lanes	Without	A.M. P.M.	37 302	D F	37 302	D F
21.	Glendale Boulevard & SR-2 Ramps	3 Lanes	With	A.M. P.M.	109 348	F F	109 325	F F
21.	Glendale Boulevard & SR-2 Ramps	2 Lanes	Without	A.M. P.M.	37 302	D F	37 302	D F
21.	Glendale Boulevard & SR-2 Ramps	2 Lanes	With	A.M. P.M.	109 348	F F	109 325	F F

Notes:
Growth rates of 1.04% and 0.97% per year applied to existing (year 2006) A.M. and P.M. volumes respectively to forecast year 2030 volumes based on average growth predicted by the in the study area.
[1] Intersection is uncontrolled for No-Build alternative & Alternative A.

TABLE 11
INTERSECTION LEVEL OF SERVICE ANALYSIS
ALTERNATIVES - FUTURE CONDITIONS (YEAR 2030)
AVERAGE DELAY FOR INTERSECTION[1]

No.	Intersection	Scenario		Peak Hour	Alternative B		Alternatives C, D & E	
		SR-2 SB Off-Ramps	SB Glendale Boulevard Left Turn onto NB SR-2		Total Delay (seconds)	LOS	Total Delay (seconds)	LOS
21.	Glendale Boulevard & SR-2 Ramps	3 Lanes	Without	A.M. P.M.	281 179	F F	188 178	F F
21.	Glendale Boulevard & SR-2 Ramps	3 Lanes	With	A.M. P.M.	301 215	F F	293 188	F F
21.	Glendale Boulevard & SR-2 Ramps	2 Lanes	Without	A.M. P.M.	413 224	F F	387 223	F F
21.	Glendale Boulevard & SR-2 Ramps	2 Lanes	With	A.M. P.M.	430 260	F F	420 232	F F

Notes:
Growth rates of 1.04% and 0.97% per year applied to existing (year 2006) A.M. and P.M. volumes respectively to forecast year 2030 volumes based on average growth predicted by the MTA Model in the study area.
[1] Intersection is uncontrolled for No-Build alternative & Alternative A.

With the addition of the southbound Glendale Boulevard left turn onto northbound SR-2, the average delay for the northbound Glendale Boulevard right-turning vehicles for Alternative B increases by 72 seconds in the morning peak hour and 46 seconds in the evening peak hour. This increases the delay experienced by these vehicles by approximately 195% in the morning peak hour and 15% in the evening peak hour.

RIGHT-TURN PROHIBITION AT SR-2 RAMPS

Prohibiting automobiles and trucks from making the right turn onto northbound Glendale Boulevard from southbound SR-2 was assessed for vehicular delay. Tables 12 and 13 illustrate the average delay (seconds) expected to occur at the SR-2 southbound off-ramp for the proposed alternatives with and without the left turn for two additional scenarios: (1) prohibiting the right-turn movement from the SR-2 southbound off-ramp (Table 12), and (2) permitting the right-turn movement from the SR-2 southbound off-ramp onto northbound Glendale Boulevard (Table 13). To mirror the steps taken in the analysis of left-turn feasibility, delay was calculated for two separate lane configurations on the SR-2 off-ramp: two and three lanes. The scenarios tested for the right-turn prohibition analysis include:

- Prohibition of the right turn from southbound SR-2 to northbound Glendale Boulevard and three southbound SR-2 off-ramp lanes without the left turn from Glendale Boulevard to northbound SR-2
- Prohibition of the right turn from southbound SR-2 to northbound Glendale Boulevard and three southbound SR-2 off-ramp lanes with the left turn from Glendale Boulevard to northbound SR-2
- Prohibition of the right turn from southbound SR-2 to northbound Glendale Boulevard and two southbound SR-2 off-ramp lanes without the left turn from Glendale Boulevard to northbound SR-2
- Prohibition of the right turn from southbound SR-2 to northbound Glendale Boulevard and two southbound SR-2 off-ramp lanes with the left turn from Glendale Boulevard to northbound SR-2
- Permission of the right turn from southbound SR-2 to northbound Glendale Boulevard and three southbound SR-2 off-ramp lanes without the left turn from Glendale Boulevard to northbound SR-2

TABLE 12
INTERSECTION LEVEL OF SERVICE ANALYSIS
ALTERNATIVES - FUTURE CONDITIONS (YEAR 2030)
AVERAGE VEHICLE DELAY FOR SOUTHBOUND SR-2 OFF-RAMP[1] WITH NORTHBOUND RIGHT TURN PROHIBITED

No.	Intersection	Scenario		Peak Hour	Alternative B		Alternatives C, D & E	
		SR-2 SB Off-Ramps	SB Glendale Boulevard Left Turn onto NB SR-2		Total Delay (seconds)	LOS	Total Delay (seconds)	LOS
21.	Glendale Boulevard & SR-2 Ramps	3 Lanes	Without	A.M. P.M.	108 42	F D	94 42	E D
21.	Glendale Boulevard & SR-2 Ramps	3 Lanes	With	A.M. P.M.	111 42	F D	146 42	F D
21.	Glendale Boulevard & SR-2 Ramps	2 Lanes	Without	A.M. P.M.	348 227	F F	328 227	F F
21.	Glendale Boulevard & SR-2 Ramps	2 Lanes	With	A.M. P.M.	352 227	F F	402 227	F F

Notes:
Growth rates of 1.04% and 0.97% per year applied to existing (year 2006) A.M. and P.M. volumes respectively to forecast year 2030 volumes based on average growth predicted by the MTA Model in the study area.
[1] Intersection is uncontrolled for No-Build alternative & Alternative A.

TABLE 13
INTERSECTION LEVEL OF SERVICE ANALYSIS
ALTERNATIVES - FUTURE CONDITIONS (YEAR 2030)
AVERAGE VEHICLE DELAY FOR SOUTHBOUND SR-2 OFF-RAMP[1] WITH NORTHBOUND RIGHT TURN PERMITTED

No.	Intersection	Scenario		Peak Hour	Alternative B		Alternatives C, D & E	
		SR-2 SB Off-Ramps	SB Glendale Boulevard Left Turn onto NB SR-2		Total Delay (seconds)	LOS	Total Delay (seconds)	LOS
21.	Glendale Boulevard & SR-2 Ramps	3 Lanes	Without	A.M. P.M.	112 43	F D	95 43	E D
21.	Glendale Boulevard & SR-2 Ramps	3 Lanes	With	A.M. P.M.	112 43	F D	148 43	F D
21.	Glendale Boulevard & SR-2 Ramps	2 Lanes	Without	A.M. P.M.	354 229	F F	330 229	F F
21.	Glendale Boulevard & SR-2 Ramps	2 Lanes	With	A.M. P.M.	354 229	F F	405 229	F F

Notes:
Growth rates of 1.04% and 0.97% per year applied to existing (year 2006) A.M. and P.M. volumes respectively to forecast year 2030 volumes based on average growth predicted by the MTA Model in the study area.
[1] Intersection is uncontrolled for No-Build alternative & Alternative A.

- Permission of the right turn from southbound SR-2 to northbound Glendale Boulevard and three southbound SR-2 off-ramp lanes with the left turn from Glendale Boulevard to northbound SR-2

- Permission of the right turn from southbound SR-2 to northbound Glendale Boulevard and two southbound SR-2 off-ramp lanes without the left turn from Glendale Boulevard to northbound SR-2

- Permission of the right turn from southbound SR-2 to northbound Glendale Boulevard and two southbound SR-2 off-ramp lanes with the left turn from Glendale Boulevard to northbound SR-2

According to the Synchro analysis, the right turn prohibition scenario would slightly decrease the delay experienced by motorists exiting SR-2 at Glendale Boulevard over the scenario in which the right turn is permitted. While a slight decrease was recorded, the total delay under each scenario is nearly identical and reveals highly congested conditions in 2030 under the B through E build alternatives. With two lanes on the southbound SR-2 off-ramp, vehicles exiting the freeway will experience LOS F conditions during the AM and PM peak periods. Under the three-lane scenario, LOS ranges from LOS E and F in the AM peak hour to LOS D in the PM peak hour. The addition of a third lane on the SR-2 southbound off-ramp provides extra storage capacity and allows a higher volume of traffic to pass through the Glendale Boulevard & SR-2 ramps intersection during each cycle.

Right-Turn Prohibition Assessment

A right-turn prohibition has been suggested by some community members. However, it is not recommended by Metro, Caltrans, or LADOT, as the prohibition of the right turn (1) conflicts with Caltrans' truck route designation, (2) conflicts with FHWA policy not to restrict user access on a federally-funded facility, (3) conflicts with LADOT's traffic operations policy, (4) poses traffic enforcement issues for the Los Angeles Police Department, (5) restricts the demonstrated need for neighborhood access by residents, and (6) could redirect traffic to exit at the southbound SR-2 Fletcher Drive off-ramp.

Prohibiting the SR-2 right-turn lane would merely shift the vehicles wanting to make that movement to other street segments accessing Glendale Boulevard. The traffic demand would remain and could result in unforeseen traffic impacts.

RECOMMENDATIONS

Although these community suggested alternatives could alleviate traffic on the surface streets, the delay and congestion on the SR-2 would increase substantially and would be worsened further by the provision of the left turn onto the freeway. Further, fewer lanes would result in even greater levels of congestion at the terminus than predicted for the No-Build Alternative, with no improvement in traffic flow management, which is inconsistent with the project's goals and objectives. The community suggested alternatives are not recommended due to the increases in delay and congestion on the SR-2 that would occur if they were implemented.

VII. SUMMARY AND CONCLUSIONS

This report documents the results of a study evaluating the future traffic conditions resulting from six (one no-build and five design build) alternatives for the SR-2 Freeway Terminus Improvement Project. Fehr & Peers/Kaku Associates conducted the study in support of the IS/EA for the project. Following is a summary of the report's conclusions:

- The proposed SR-2 design alternatives were reanalyzed under "existing plus project" conditions assuming no growth in traffic volumes during peak hours.

- Existing plus project conditions was analyzed due to oversaturated conditions with Year 2030 and 2033 traffic forecasts; SR-2 at Glendale Boulevard is currently at or near capacity; therefore, the roadway system cannot accommodate the 1% per year growth rate applied to the 2030 and 2033 analysis.

- The intersections at Allesandro and Aaron are reported to operate at LOS C or better during the peak hours. Because of signal coordination on Glendale Boulevard, most vehicles traveling northbound and southbound on Glendale Boulevard do not stop at these intersections. Vehicles travel slowly through these intersections; however, slower travel speeds are not reflected in intersection delay calculations. In this situation, travel times are a better indicator of driver comfort and experience.

- Travel time results were estimated with the VISSIM simulation model under Year 2033 conditions. For southbound SR-2 to Glendale (@ Aaron) during the AM peak hour, removing the flyover and providing one southbound off-ramp intersection as proposed under Alternatives B and C would add approximately two minutes of travel time.

- For northbound Glendale (@ Aaron) to SR-2 during the PM peak hour, travel times would be similar under no-build and build conditions; the proposed redesign would increase travel times by approximately 20 seconds under Alternatives B and C.

LIST OF PREPARERS

The following people took part in the preparation of this document:

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REFERENCES

Glendale Boulevard Corridor Preliminary Planning Study – Phase II (Gruen Associates, et al, 1994)

Guidelines for Applying Traffic Microsimulation Modeling Software, California Department of Transportation in association with Dowling Associates, September 2002.

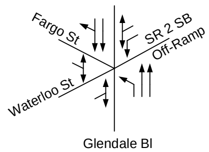
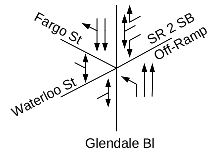
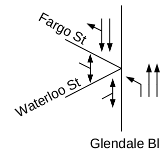
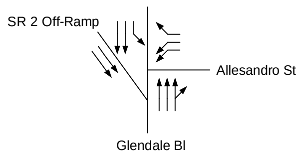
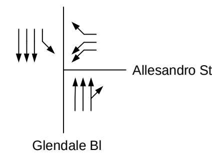
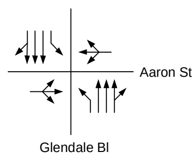
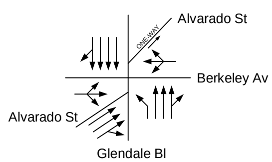
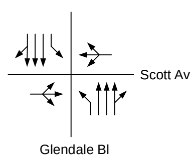
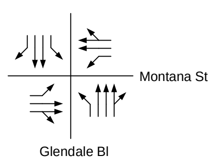
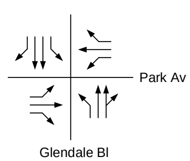
Highway Capacity Manual, Transportation Research Board, 2000.

Traffic Study Policies and Procedures, Los Angeles Department of Transportation, March 2002.

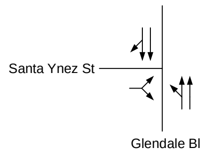
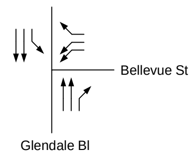
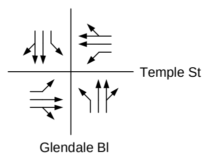
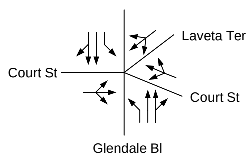
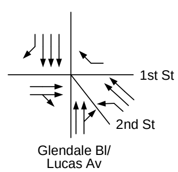
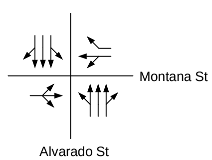
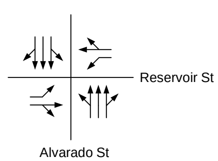
APPENDIX A

INTERSECTION LANE CONFIGURATIONS

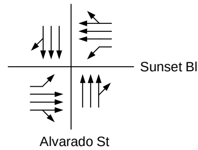
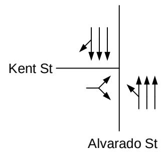
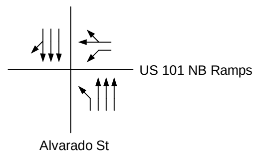
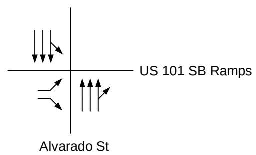
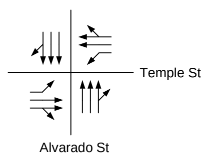
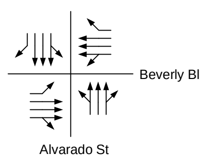
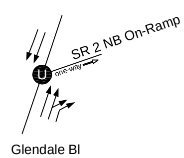
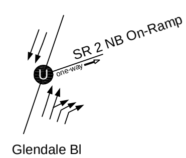
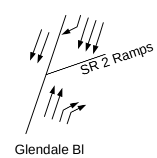
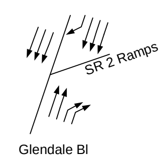
INTERSECTION LANE CONFIGURATIONS

	EXISTING	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVES C, D AND E
1. Glendale Bl & SR 2 SB Off-Ramp/ Fargo St/Waterloo St				Same as Alternative B
2. Glendale Bl /SR 2 SB Off-Ramp & Allesandro St		Same as Existing		Same as Alternative B
3. Glendale Bl & Aaron St		Same as Existing	Same as Existing	Same as Existing
4. Glendale Bl/Alvarado St & Berkeley Av		Same as Existing	Same as Existing	Same as Existing
5. Glendale Bl & Scott Av		Same as Existing	Same as Existing	Same as Existing
6. Glendale Bl & Montana St		Same as Existing	Same as Existing	Same as Existing
7. Glendale Bl & Park Av		Same as Existing	Same as Existing	Same as Existing

INTERSECTION LANE CONFIGURATIONS

	EXISTING	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVES C, D AND E
8. Glendale Bl & Santa Ynez St		Same as Existing	Same as Existing	Same as Existing
9. Glendale Bl & Bellevue St		Same as Existing	Same as Existing	Same as Existing
10. Glendale Bl & Temple St		Same as Existing	Same as Existing	Same as Existing
11. Glendale Bl & Court St/Laveta Ter		Same as Existing	Same as Existing	Same as Existing
12. Glendale Bl/Lucas Av/2nd Av & 1st St		Same as Existing	Same as Existing	Same as Existing
13. Alvarado St & Montana St		Same as Existing	Same as Existing	Same as Existing
14. Alvarado St & Reservoir St		Same as Existing	Same as Existing	Same as Existing

INTERSECTION LANE CONFIGURATIONS

	EXISTING	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVES C, D AND E
15. Alvarado St & Sunset Bl		Same as Existing	Same as Existing	Same as Existing
16. Alvarado St & Kent St		Same as Existing	Same as Existing	Same as Existing
17. Alvarado St & US 101 NB Ramps		Same as Existing	Same as Existing	Same as Existing
18. Alvarado St & US 101 SB Ramps		Same as Existing	Same as Existing	Same as Existing
19. Alvarado St & Temple St		Same as Existing	Same as Existing	Same as Existing
20. Alvarado St & Beverly Bl		Same as Existing	Same as Existing	Same as Existing
21. Glendale Bl & SR 2 NB On-Ramp				

Ⓤ - Uncontrolled Intersection

APPENDIX B

TRAFFIC COUNTS

WILTEC

PHONE: (626) 564-1944 FAX: (626) 564-0969

5-LEG INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: TUESDAY, MAY 30, 2006
PERIOD: 7:00 A.M. TO 10:00 A.M.
INTERSECTION: N/S GLENDALE BOULEVARD
E/W SR-2 SB OFF RAMP/ FARGO STREET/ WATERLOO STREET

15 MIN COUNTS																				
	SB GLENDALE BLVD.				SB SR2 FREEWAY				NB GLENDALE BLVD.				NWB WATERLOO STREET				SEB FARGO STREET				
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
700-715	17	0	162	0	44	5	0	211	0	82	7	0	9	0	4	0	0	3	0	2	546
715-730	22	0	174	0	47	2	0	231	0	69	3	0	8	0	3	0	0	0	0	0	559
730-745	23	0	190	0	37	2	0	238	0	80	12	0	10	0	7	0	0	6	0	3	608
745-800	22	0	219	0	34	0	0	240	0	61	4	0	3	0	2	0	0	3	0	3	591
800-815	45	0	216	0	41	2	0	237	0	81	5	0	8	0	4	0	0	5	0	4	648
815-830	26	0	200	0	26	3	0	221	0	54	4	0	11	0	0	0	0	2	0	2	549
830-845	18	0	214	0	27	1	0	225	0	68	4	0	7	0	7	0	0	4	0	0	575
845-900	16	0	152	0	34	3	0	226	0	63	5	0	8	0	10	0	0	0	0	1	518
900-915	16	0	158	0	44	2	0	274	0	62	4	0	2	0	6	0	0	1	0	4	573
915-930	17	0	120	0	62	0	0	222	0	76	3	0	5	0	1	0	0	4	0	1	511
930-945	16	0	112	0	68	2	0	225	0	58	6	0	5	0	3	0	0	6	0	1	502
945-1000	15	0	89	0	35	0	0	184	0	61	0	0	3	0	5	0	0	1	0	0	393
HOUR TOTALS																					
	SB GLENDALE BLVD.				SB SR2 FREEWAY				NB GLENDALE BLVD.				NWB WATERLOO STREET				SEB FARGO STREET				
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
700-800	84	0	745	0	162	9	0	920	0	292	26	0	30	0	16	0	0	12	0	8	2304
715-815	112	0	799	0	159	6	0	946	0	291	24	0	29	0	16	0	0	14	0	10	2406
730-830	116	0	825	0	138	7	0	936	0	276	25	0	32	0	13	0	0	16	0	12	2396
745-845	111	0	849	0	128	6	0	923	0	264	17	0	29	0	13	0	0	14	0	9	2363
800-900	105	0	782	0	128	9	0	909	0	266	18	0	34	0	21	0	0	11	0	7	2290
815-915	76	0	724	0	131	9	0	946	0	247	17	0	28	0	23	0	0	7	0	7	2215
830-930	67	0	644	0	167	6	0	947	0	269	16	0	22	0	24	0	0	9	0	6	2177
845-945	65	0	542	0	208	7	0	947	0	259	18	0	20	0	20	0	0	11	0	7	2104
900-1000	64	0	479	0	209	4	0	905	0	257	13	0	15	0	15	0	0	12	0	6	1979

WILTEC

PHONE: (626) 564-1944 FAX: (626) 564-0969

5-LEG INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: TUESDAY, MAY 30, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S GLENDALE BOULEVARD
E/W SR-2 SB OFF RAMP/ FARGO STREET/ WATERLOO STREET

15 MIN COUNTS																				
	SB GLENDALE BLVD.				SB SR2 FREEWAY				NB GLENDALE BLVD.				NWB WATERLOO STREET				SEB FARGO STREET				
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
300-315	16	0	128	0	44	2	0	10	0	107	7	0	6	0	6	0	0	3	0	4	333
315-330	19	0	107	0	40	1	0	14	0	101	4	0	10	0	2	0	0	3	0	5	306
330-345	17	0	126	0	55	5	0	18	0	97	5	0	8	0	5	0	0	3	0	3	342
345-400	10	0	90	0	30	0	0	15	0	97	6	0	5	0	1	0	0	4	0	3	261
400-415	18	0	128	0	35	0	0	11	0	97	6	0	15	0	6	0	0	7	0	7	330
415-430	13	0	111	0	58	4	0	22	0	104	10	0	8	0	7	0	0	9	0	5	351
430-445	22	0	110	0	50	1	0	14	0	112	7	0	6	0	3	0	0	2	0	2	329
445-500	18	0	90	0	38	1	0	12	0	129	6	0	7	0	2	0	0	5	0	10	318
500-515	20	0	104	0	44	3	0	21	0	113	12	0	8	0	8	0	0	0	0	6	339
515-530	16	0	80	0	58	0	0	10	0	113	11	0	5	0	4	0	0	3	0	5	305
530-545	17	0	68	0	48	0	1	27	0	134	14	0	8	0	3	0	0	2	0	7	329
545-600	24	0	72	0	41	4	0	22	0	95	13	0	10	0	2	0	0	2	0	9	294
HOUR TOTALS																					
	SB GLENDALE BLVD.				SB SR2 FREEWAY				NB GLENDALE BLVD.				NWB WATERLOO STREET				SEB FARGO STREET				
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
300-400	62	0	451	0	169	8	0	57	0	402	22	0	29	0	14	0	0	13	0	15	1242
315-415	64	0	451	0	160	6	0	58	0	392	21	0	38	0	14	0	0	17	0	18	1239
330-430	58	0	455	0	178	9	0	66	0	395	27	0	36	0	19	0	0	23	0	18	1284
345-445	63	0	439	0	173	5	0	62	0	410	29	0	34	0	17	0	0	22	0	17	1271
400-500	71	0	439	0	181	6	0	59	0	442	29	0	36	0	18	0	0	23	0	24	1328
415-515	73	0	415	0	190	9	0	69	0	458	35	0	29	0	20	0	0	16	0	23	1337
430-530	76	0	384	0	190	5	0	57	0	467	36	0	26	0	17	0	0	10	0	23	1291
445-545	71	0	342	0	188	4	1	70	0	489	43	0	28	0	17	0	0	10	0	28	1291
500-600	77	0	324	0	191	7	1	80	0	455	50	0	31	0	17	0	0	7	0	27	1267

WILTEC

PHONE: (626) 564-1944 FAX: (626) 564-0969

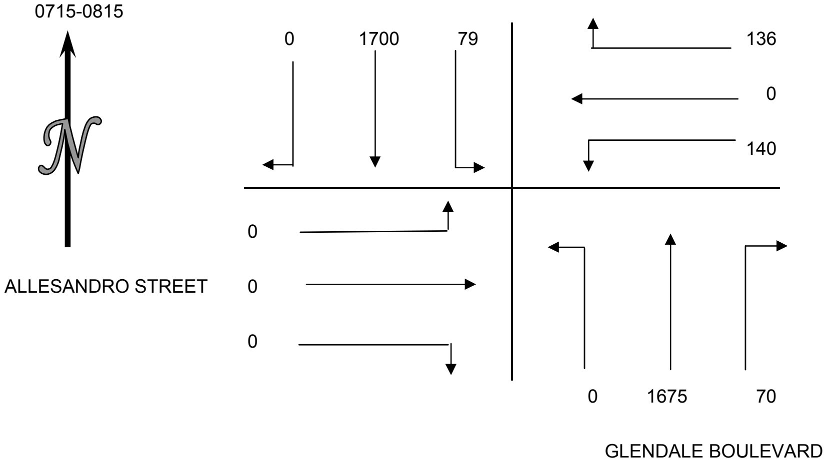
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

PROJECT: SR-2 GLENDALE INTERCHANGE
INTERSECTION: N/S GLENDALE BOULEVARD
E/W ALLESANDRO STREET
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 7:00 A.M. TO 10:00 A.M.

VEHICLE COUNTS

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-715	0	389	16	23	0	29	15	411	0	0	0	0	883
715-730	0	398	13	27	0	30	17	428	0	0	0	0	913
730-745	0	419	25	27	0	23	18	431	0	0	0	0	943
745-800	0	440	22	48	0	43	23	421	0	0	0	0	997
800-815	0	443	19	34	0	44	12	395	0	0	0	0	947
815-830	0	417	12	20	0	55	16	385	0	0	0	0	905
830-845	0	418	16	37	0	53	10	324	0	0	0	0	858
845-900	0	402	14	28	0	46	12	358	0	0	0	0	860
900-915	0	418	15	32	0	39	15	350	0	0	0	0	869
915-930	0	337	21	55	0	35	21	354	0	0	0	0	823
930-945	0	274	18	31	0	24	21	334	0	0	0	0	702
945-1000	0	286	19	22	0	34	10	336	0	0	0	0	707
HOUR TOTALS													
0700-0800	0	1646	76	125	0	125	73	1691	0	0	0	0	3736
0715-0815	0	1700	79	136	0	140	70	1675	0	0	0	0	3800
0730-0830	0	1719	78	129	0	165	69	1632	0	0	0	0	3792
0745-0845	0	1718	69	139	0	195	61	1525	0	0	0	0	3707
0800-0900	0	1680	61	119	0	198	50	1462	0	0	0	0	3570
0815-0915	0	1655	57	117	0	193	53	1417	0	0	0	0	3492
0830-0930	0	1575	66	152	0	173	58	1386	0	0	0	0	3410
0845-0945	0	1431	68	146	0	144	69	1396	0	0	0	0	3254
0900-1000	0	1315	73	140	0	132	67	1374	0	0	0	0	3101

AM PEAK HOUR
0715-0815



PEDESTRIAN COUNTS

PERIOD 15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
700-715	0	1	0	0
715-730	2	0	0	0
730-745	0	0	0	0
745-800	0	0	0	0
800-815	0	0	0	0
815-830	2	0	0	0
830-845	1	2	0	0
845-900	0	0	0	0
900-915	0	0	0	0
915-930	0	0	0	0
930-945	0	0	0	0
945-1000	0	0	0	0
HOUR TOTALS				
0700-0800	2	1	0	0
0715-0815	2	0	0	0
0730-0830	2	0	0	0
0745-0845	3	2	0	0
0800-0900	2	1	0	0
0815-0915	2	0	0	0
0830-0930	2	0	0	0
0845-0945	3	2	0	0
0900-1000	3	2	0	0
800-900	0	0	0	0

WILTEC

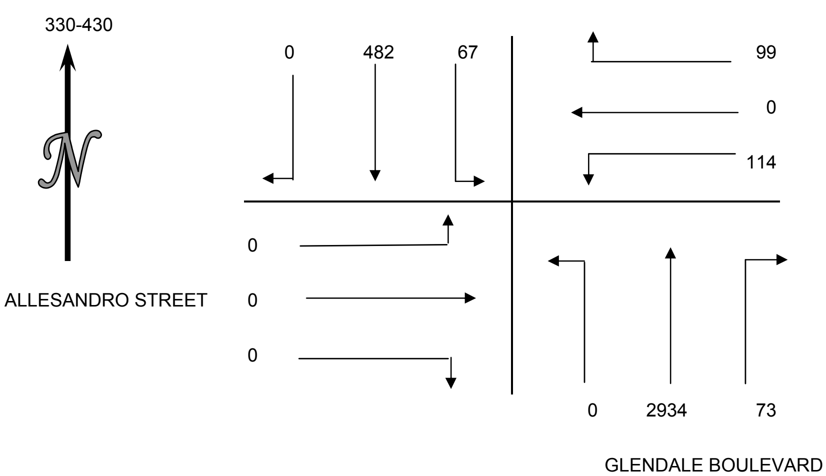
PHONE: (626) 564-1944 FAX: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

PROJECT: SR-2 GLENDALE INTERCHANGE
INTERSECTION: N/S GLENDALE BOULEVARD
E/W ALLESANDRO STREET
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 3:00 PM TO 6:00 PM

VEHICLE COUNTS

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
300-315	0	105	16	11	0	11	17	606	0	0	0	0	766
315-330	0	118	19	27	0	33	25	624	0	0	0	0	846
330-345	0	134	19	17	0	32	22	651	0	0	0	0	875
345-400	0	122	15	23	0	21	15	706	0	0	0	0	902
400-415	0	121	14	25	0	20	24	723	0	0	0	0	927
415-430	0	132	23	20	0	39	10	691	0	0	0	0	915
430-445	0	116	11	26	0	24	24	751	0	0	0	0	952
445-500	0	113	19	28	0	31	15	769	0	0	0	0	975
500-515	0	98	10	44	0	15	23	794	0	0	0	0	984
515-530	0	96	12	37	0	22	21	794	0	0	0	0	982
530-545	0	87	13	53	0	20	22	791	0	0	0	0	986
545-600	0	108	15	16	0	22	29	760	0	0	0	0	950
HOUR TOTALS													
300-400	0	479	69	78	0	97	79	2587	0	0	0	0	3389
315-415	0	495	67	92	0	106	86	2704	0	0	0	0	3550
330-430	0	509	71	85	0	112	71	2771	0	0	0	0	3619
345-445	0	491	63	94	0	104	73	2871	0	0	0	0	3696
400-500	0	482	67	99	0	114	73	2934	0	0	0	0	3769
415-515	0	459	63	118	0	109	72	3005	0	0	0	0	3826
430-530	0	423	52	135	0	92	83	3108	0	0	0	0	3893
445-545	0	394	54	162	0	88	81	3148	0	0	0	0	3927
500-600	0	389	50	150	0	79	95	3139	0	0	0	0	3902



PEDESTRIAN COUNTS

PERIOD 15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
300-315	0	1	0	0
315-330	2	0	0	0
330-345	1	0	0	0
345-400	1	0	0	0
400-415	2	0	0	0
415-430	0	1	0	0
430-445	1	0	0	0
445-500	0	1	0	0
500-515	0	1	0	0
515-530	0	0	0	0
530-545	2	2	0	0
545-600	0	0	0	0
HOUR TOTALS				
300-400	4	1	0	0
315-415	6	0	0	0
330-430	4	1	0	0
345-445	4	1	0	0
400-500	4	1	0	0
415-515	6	0	0	0
430-530	4	1	0	0
445-545	4	1	0	0
500-600	3	2	0	0
800-900	0	0	0	0

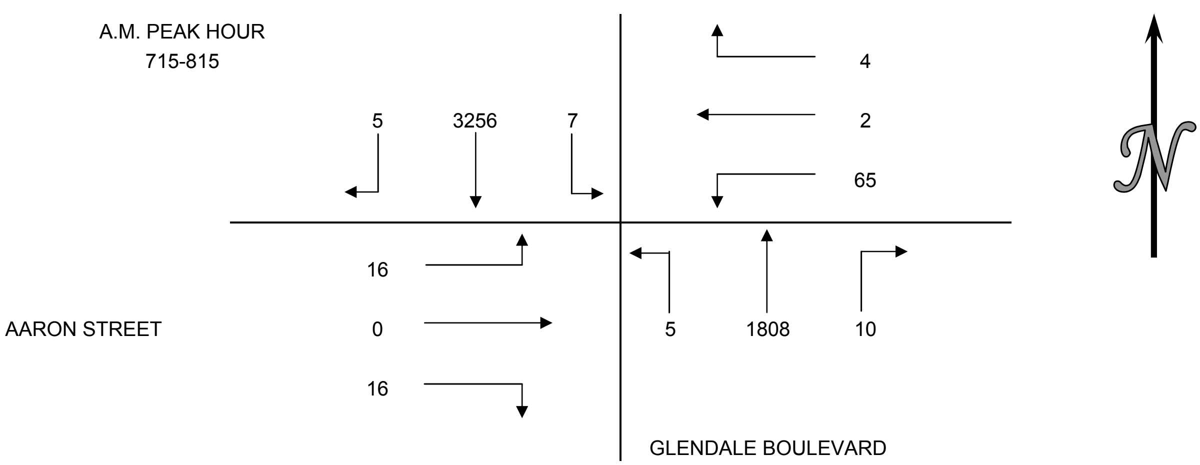
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: THURSDAY, JUNE 1, 2006
PERIOD: 7:00 AM TO 10:00 AM
INTERSECTION: N/S GLENDALE BOULEVARD
E/W AARON STREET

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	3	735	1	0	0	10	1	345	0	2	0	3	1100
715-730	0	773	2	1	1	16	1	384	1	5	0	4	1188
730-745	3	883	2	1	0	20	5	474	2	3	0	1	1394
745-800	1	792	1	0	1	10	2	495	2	4	0	6	1314
800-815	1	808	2	2	0	19	2	455	0	4	0	5	1298
815-830	0	758	1	3	0	19	3	391	2	3	0	1	1181
830-845	0	774	1	0	0	10	2	366	3	3	0	2	1161
845-900	1	827	0	2	0	7	2	360	1	0	0	4	1204
900-915	0	785	0	0	0	13	2	323	3	3	0	1	1130
915-930	1	655	1	1	1	10	3	357	3	5	1	1	1039
930-945	4	690	0	0	0	13	5	330	4	3	0	3	1052
945-1000	0	700	15	0	0	10	3	337	5	3	0	2	1075
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	7	3183	6	2	2	56	9	1698	5	14	0	14	4996
715-815	5	3256	7	4	2	65	10	1808	5	16	0	16	5194
730-830	5	3241	6	6	1	68	12	1815	6	14	0	13	5187
745-845	2	3132	5	5	1	58	9	1707	7	14	0	14	4954
800-900	2	3167	4	7	0	55	9	1572	6	10	0	12	4844
815-915	1	3144	2	5	0	49	9	1440	9	9	0	8	4676
830-930	2	3041	2	3	1	40	9	1406	10	11	1	8	4534
845-945	6	2957	1	3	1	43	12	1370	11	11	1	9	4425
900-1000	5	2830	16	1	1	46	13	1347	15	14	1	7	4296



WILTEC

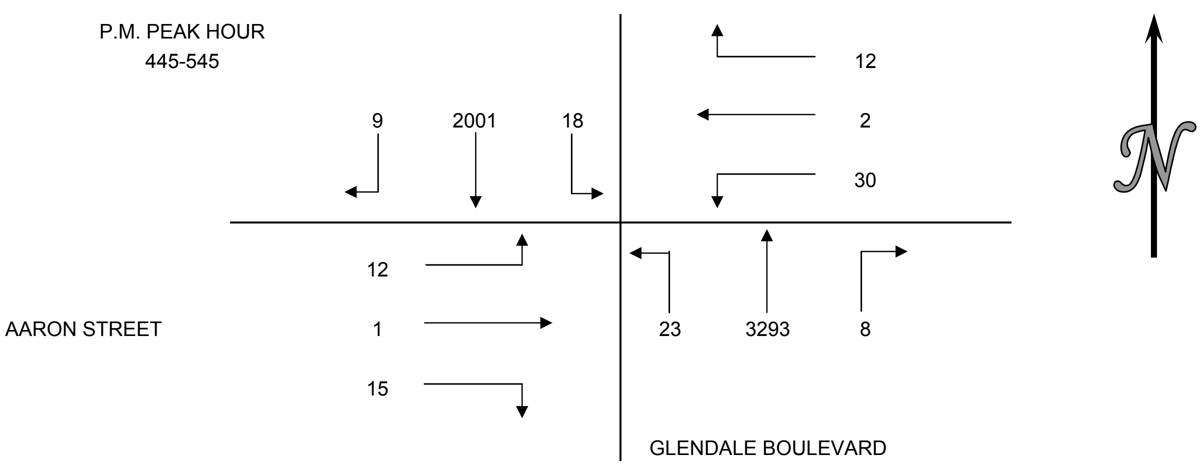
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: THURSDAY, JUNE 1, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S GLENDALE BOULEVARD
E/W AARON STREET

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-315	4	467	2	4	0	9	3	630	2	3	0	4	1128
315-330	3	488	5	5	0	11	6	653	2	2	0	2	1177
330-345	2	496	1	0	0	9	4	642	0	3	0	1	1158
345-400	3	529	7	6	1	8	2	729	4	2	0	1	1292
400-415	5	535	2	2	0	8	11	766	8	9	1	4	1351
415-430	3	515	4	0	0	4	2	702	4	1	0	0	1235
430-445	1	511	4	4	0	4	1	743	5	5	0	3	1281
445-500	1	514	7	1	1	12	1	822	1	6	0	1	1367
500-515	1	515	0	6	1	8	1	852	2	4	1	4	1395
515-530	4	484	2	0	0	3	5	820	11	3	0	5	1337
530-545	3	488	9	5	0	7	1	799	9	2	0	2	1325
545-600	1	474	2	7	0	6	3	793	10	5	1	2	1304

HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-400	12	1980	15	15	1	37	15	2654	8	10	0	8	4755
315-415	13	2048	15	13	1	36	23	2790	14	16	1	8	4978
330-430	13	2075	14	8	1	29	19	2839	16	15	1	6	5036
345-445	12	2090	17	12	1	24	16	2940	21	17	1	8	5159
400-500	10	2075	17	7	1	28	15	3033	18	21	1	8	5234
415-515	6	2055	15	11	2	28	5	3119	12	16	1	8	5278
430-530	7	2024	13	11	2	27	8	3237	19	18	1	13	5380
445-545	9	2001	18	12	2	30	8	3293	23	15	1	12	5424
500-600	9	1961	13	18	1	24	10	3264	32	14	2	13	5361



WILTEC

Phone: (925) 706-9911 Fax: (925) 706-9914

5-LEG INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: THURSDAY, JUNE 1, 2006
PERIOD: 7:00 A.M. TO 10:00 A.M.
INTERSECTION: N/S GLENDALE BOULEVARD
E/W BERKELEY AVENUE

15 MIN COUNTS																				
	SB GLENDALE BLVD.				WB BERKELEY AVENUE				NB GLENDALE BLVD.				EB BERKELEY AVENUE							
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
700-715	0	701	0	0	0	9	2	7	2	2	256	6	0	3	2	35	0	0	0	0	1025
715-730	1	827	0	0	0	15	5	19	4	3	363	11	2	2	0	35	0	0	0	0	1287
730-745	0	838	0	0	1	14	3	5	3	5	418	9	12	6	0	46	0	0	0	0	1360
745-800	0	788	0	0	0	6	4	7	5	2	419	10	4	3	0	55	0	0	0	0	1303
800-815	1	834	0	0	1	11	4	9	6	8	377	15	20	8	1	50	0	0	0	0	1345
815-830	0	824	1	0	0	4	2	5	8	4	360	7	28	8	0	45	0	0	0	0	1296
830-845	1	784	0	0	0	14	8	19	2	2	342	12	23	4	1	41	0	0	0	0	1253
845-900	0	760	0	0	0	10	7	15	1	3	288	12	21	2	0	36	0	0	0	0	1155
900-915	1	769	0	0	0	9	5	12	6	5	279	10	32	6	1	39	0	0	0	0	1174
915-930	1	745	0	0	0	7	4	14	6	3	342	11	32	5	0	43	0	0	0	0	1213
930-945	0	732	0	0	2	10	4	15	4	1	275	10	22	0	0	21	0	0	0	0	1096
945-1000	0	722	0	0	0	8	4	9	10	4	329	12	26	2	1	20	0	0	0	0	1147
HOUR TOTALS																				
	SB GLENDALE BLVD.				WB BERKELEY AVENUE				NB GLENDALE BLVD.				EB BERKELEY AVENUE							
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
700-800	1	3154	0	0	1	44	14	38	14	12	1456	36	18	14	2	171	0	0	0	0	4975
715-815	2	3287	0	0	2	46	16	40	18	18	1577	45	38	19	1	186	0	0	0	0	5295
730-830	1	3284	1	0	2	35	13	26	22	19	1574	41	64	25	1	196	0	0	0	0	5304
745-845	2	3230	1	0	1	35	18	40	21	16	1498	44	75	23	2	191	0	0	0	0	5197
800-900	2	3202	1	0	1	39	21	48	17	17	1367	46	92	22	2	172	0	0	0	0	5049
815-915	2	3137	1	0	0	37	22	51	17	14	1269	41	104	20	2	161	0	0	0	0	4878
830-930	3	3058	0	0	0	40	24	60	15	13	1251	45	108	17	2	159	0	0	0	0	4795
845-945	2	3006	0	0	2	36	20	56	17	12	1184	43	107	13	1	139	0	0	0	0	4638
900-1000	2	2968	0	0	2	34	17	50	26	13	1225	43	112	13	2	123	0	0	0	0	4630

WILTEC

Phone: (925) 706-9911 Fax: (925) 706-9914

5-LEG INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: TUESDAY, MAY 30, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S GLENDALE BOULEVARD
E/W BERKELEY AVENUE

15 MIN COUNTS																					
	SB GLENDALE BLVD.				NB GLENDALE BLVD.																
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
300-315	2	486	0	0	0	15	5	16	5	5	513	9	8	6	0	53	0	0	0	0	1123
315-330	3	496	0	0	0	6	8	10	8	11	660	11	13	8	2	47	0	0	0	0	1283
330-345	2	503	0	0	0	12	3	15	4	7	669	12	19	3	1	52	0	0	0	0	1302
345-400	2	530	0	0	1	14	2	12	5	3	662	14	17	10	1	39	0	0	0	0	1312
400-415	0	520	0	0	0	15	1	10	5	4	685	9	25	12	0	29	0	0	0	0	1315
415-430	0	538	0	0	1	13	4	7	4	9	725	11	22	22	1	37	0	0	0	0	1394
430-445	0	535	0	0	0	19	5	14	4	9	736	6	20	20	1	25	0	0	0	0	1394
445-500	1	503	0	0	0	23	5	7	4	9	815	14	19	4	0	30	0	0	0	0	1434
500-515	1	502	0	0	0	31	9	7	3	13	753	8	30	14	0	17	0	0	0	0	1388
515-530	0	527	0	0	0	35	7	12	4	1	728	10	21	19	1	13	0	0	0	0	1378
530-545	2	500	0	0	1	47	3	10	2	5	800	10	14	17	1	26	0	0	0	0	1438
545-600	0	427	0	0	0	42	3	6	1	6	736	8	29	23	1	20	0	0	0	0	1302
HOUR TOTALS																					
	SB GLENDALE BLVD.				NB GLENDALE BLVD.																
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
300-400	9	2015	0	0	1	47	18	53	22	26	2504	46	57	27	4	191	0	0	0	0	5020
315-415	7	2049	0	0	1	47	14	47	22	25	2676	46	74	33	4	167	0	0	0	0	5212
330-430	4	2091	0	0	2	54	10	44	18	23	2741	46	83	47	3	157	0	0	0	0	5323
345-445	2	2123	0	0	2	61	12	43	18	25	2808	40	84	64	3	130	0	0	0	0	5415
400-500	1	2096	0	0	1	70	15	38	17	31	2961	40	86	58	2	121	0	0	0	0	5537
415-515	2	2078	0	0	1	86	23	35	15	40	3029	39	91	60	2	109	0	0	0	0	5610
430-530	2	2067	0	0	0	108	26	40	15	32	3032	38	90	57	2	85	0	0	0	0	5594
445-545	4	2032	0	0	1	136	24	36	13	28	3096	42	84	54	2	86	0	0	0	0	5638
500-600	3	1956	0	0	1	155	22	35	10	25	3017	36	94	73	3	76	0	0	0	0	5506

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

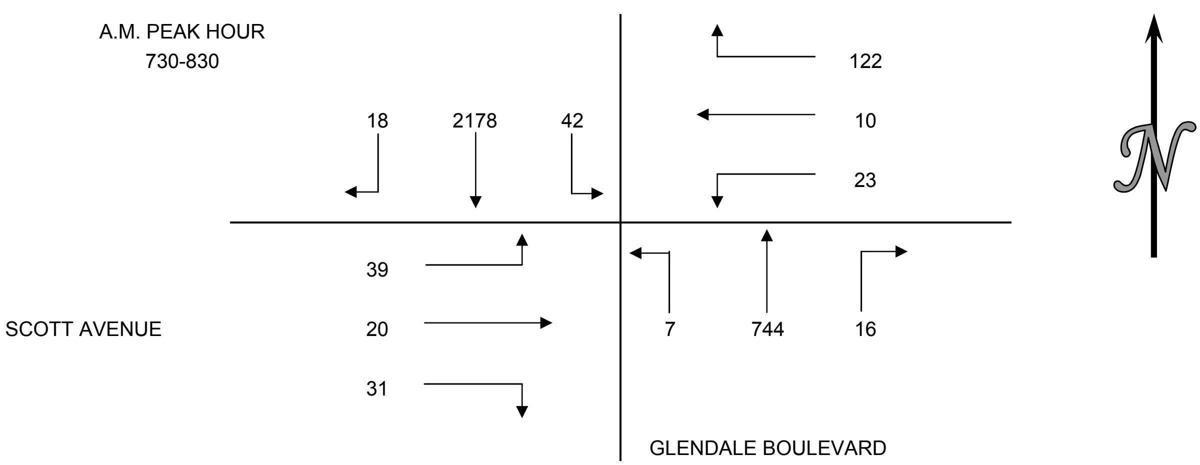
CLIENT:		KAKU ASSOCIATES
PROJECT:		SR-2 GLENDALE INTERCHANGE
DATE:		THURSDAY, JUNE 1, 2006
PERIOD:		7:00 AM TO 10:00 AM
INTERSECTION:	N/S	GLENDALE BOULEVARD
	E/W	SCOTT AVENUE

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	5	572	8	24	3	7	2	123	6	7	2	1	760
715-730	6	520	8	30	2	2	1	170	5	7	3	7	761
730-745	3	516	14	30	4	7	2	221	2	5	5	7	816
745-800	5	522	13	29	1	4	5	196	2	14	5	16	812
800-815	5	568	8	43	2	8	4	168	1	5	3	9	824
815-830	5	572	7	20	3	4	5	159	2	7	7	7	798
830-845	4	426	8	22	4	4	2	139	3	9	4	4	629
845-900	2	499	8	25	2	2	4	107	0	5	5	5	664
900-915	5	393	10	16	3	9	1	114	1	10	2	7	571
915-930	8	455	13	24	4	10	2	136	2	2	2	4	662
930-945	7	443	9	29	3	7	5	133	1	5	7	9	658
945-1000	8	431	8	20	2	4	4	106	1	6	4	8	602

HOUR TOTALS

TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	19	2130	43	113	10	20	10	710	15	33	15	31	3149
715-815	19	2126	43	132	9	21	12	755	10	31	16	39	3213
730-830	18	2178	42	122	10	23	16	744	7	31	20	39	3250
745-845	19	2088	36	114	10	20	16	662	8	35	19	36	3063
800-900	16	2065	31	110	11	18	15	573	6	26	19	25	2915
815-915	16	1890	33	83	12	19	12	519	6	31	18	23	2662
830-930	19	1773	39	87	13	25	9	496	6	26	13	20	2526
845-945	22	1790	40	94	12	28	12	490	4	22	16	25	2555
900-1000	28	1722	40	89	12	30	12	489	5	23	15	28	2493



WILTEC

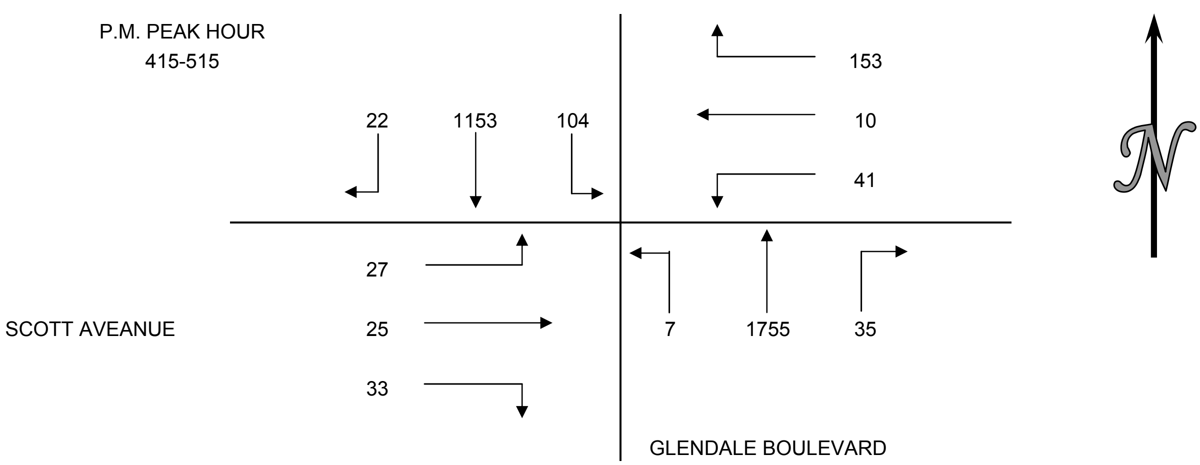
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: THURSDAY, JUNE 1, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S GLENDALE BOULEVARD
E/W SCOTT AVEANUE

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-315	3	298	35	35	3	3	5	306	3	8	5	1	705
315-330	0	213	23	22	2	7	6	349	3	11	6	9	651
330-345	2	257	33	28	3	10	5	325	0	12	8	10	693
345-400	6	299	26	36	6	10	8	383	6	11	6	7	804
400-415	3	290	24	25	5	4	7	393	6	8	12	11	788
415-430	9	292	27	23	3	7	10	422	5	11	5	10	824
430-445	4	293	20	34	3	11	5	445	1	5	8	4	833
445-500	3	270	21	39	3	10	7	449	0	10	5	8	825
500-515	6	298	36	57	1	13	13	439	1	7	7	5	883
515-530	8	252	20	61	0	0	8	423	2	13	8	1	796
530-545	4	254	25	92	2	9	7	381	1	11	5	5	796
545-600	7	264	38	81	2	9	3	374	3	2	1	10	794

HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-400	11	1067	117	121	14	30	24	1363	12	42	25	27	2853
315-415	11	1059	106	111	16	31	26	1450	15	42	32	37	2936
330-430	20	1138	110	112	17	31	30	1523	17	42	31	38	3109
345-445	22	1174	97	118	17	32	30	1643	18	35	31	32	3249
400-500	19	1145	92	121	14	32	29	1709	12	34	30	33	3270
415-515	22	1153	104	153	10	41	35	1755	7	33	25	27	3365
430-530	21	1113	97	191	7	34	33	1756	4	35	28	18	3337
445-545	21	1074	102	249	6	32	35	1692	4	41	25	19	3300
500-600	25	1068	119	291	5	31	31	1617	7	33	21	21	3269



WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

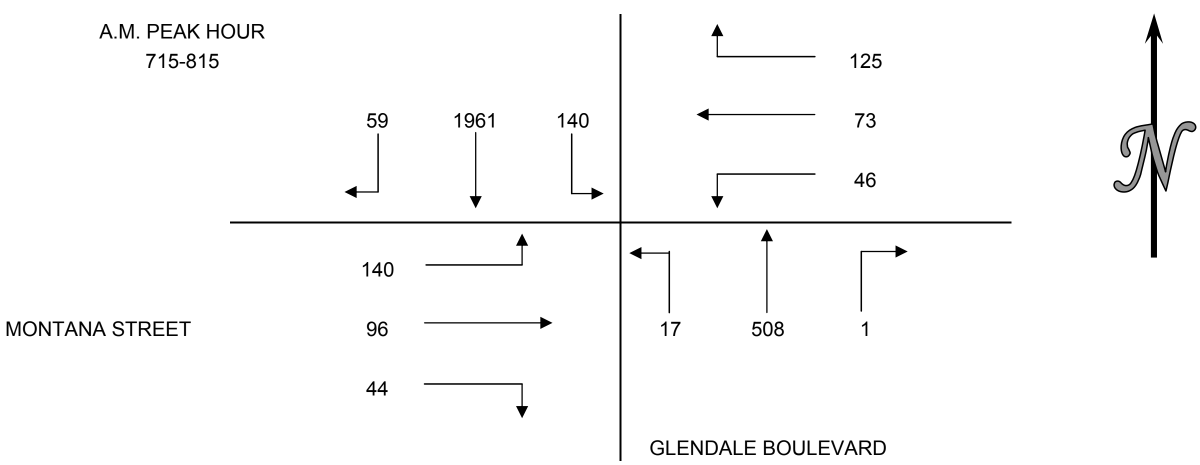
CLIENT:		KAKU ASSOCIATES
PROJECT:		SR-2 GLENDALE INTERCHANGE
DATE:		THURSDAY, JUNE 1, 2006
PERIOD:		7:00 AM TO 10:00 AM
INTERSECTION:	N/S	GLENDALE BOULEVARD
	E/W	MONTANA STREET

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	15	496	28	19	17	9	0	104	4	14	18	17	741
715-730	15	489	43	36	16	13	1	97	2	10	20	15	757
730-745	20	488	43	39	20	10	0	153	5	9	27	37	851
745-800	8	480	22	28	15	14	0	133	4	11	25	53	793
800-815	16	504	32	22	22	9	0	125	6	14	24	35	809
815-830	15	503	27	31	10	15	1	96	5	13	12	16	744
830-845	17	457	19	26	9	10	2	103	5	13	19	22	702
845-900	9	457	20	22	14	5	0	87	4	9	12	13	652
900-915	19	405	26	24	10	5	0	84	5	7	21	12	618
915-930	15	435	31	21	12	8	1	92	10	10	13	8	656
930-945	12	402	29	31	19	6	1	103	4	11	14	12	644
945-1000	16	374	31	22	11	8	2	91	7	11	16	12	601

HOUR TOTALS

TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	58	1953	136	122	68	46	1	487	15	44	90	122	3142
715-815	59	1961	140	125	73	46	1	508	17	44	96	140	3210
730-830	59	1975	124	120	67	48	1	507	20	47	88	141	3197
745-845	56	1944	100	107	56	48	3	457	20	51	80	126	3048
800-900	57	1921	98	101	55	39	3	411	20	49	67	86	2907
815-915	60	1822	92	103	43	35	3	370	19	42	64	63	2716
830-930	60	1754	96	93	45	28	3	366	24	39	65	55	2628
845-945	55	1699	106	98	55	24	2	366	23	37	60	45	2570
900-1000	62	1616	117	98	52	27	4	370	26	39	64	44	2519



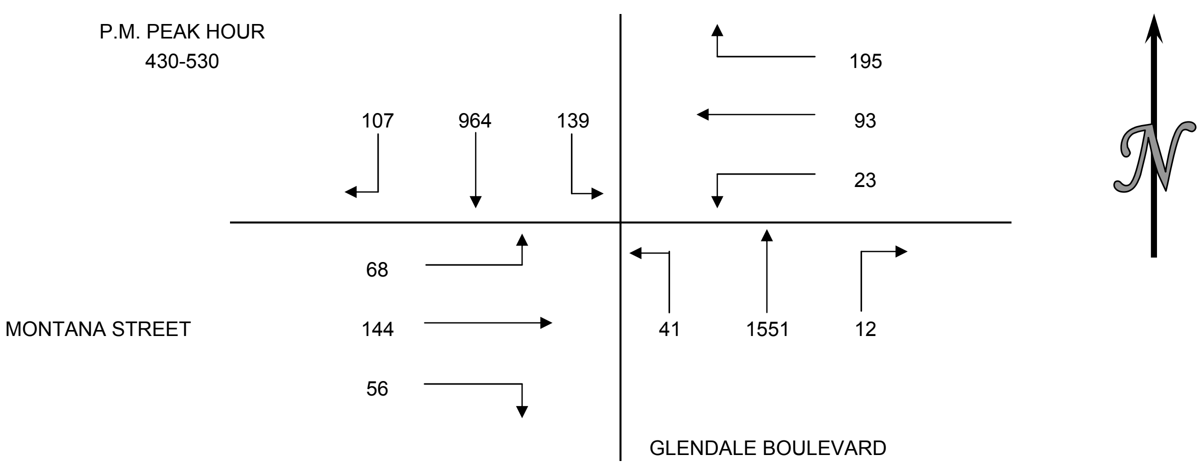
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: THURSDAY, JUNE 1, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S GLENDALE BOULEVARD
E/W MONTANA STREET

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-315	16	215	31	19	19	9	3	243	3	10	24	16	608
315-330	26	216	30	34	16	8	3	304	7	14	36	14	708
330-345	19	215	32	32	21	9	0	313	12	15	37	11	716
345-400	22	256	31	46	22	11	3	351	8	18	34	14	816
400-415	20	228	42	38	17	8	1	337	5	18	30	16	760
415-430	22	248	40	52	22	13	2	343	9	13	21	11	796
430-445	23	234	33	47	21	10	3	417	9	14	36	13	860
445-500	25	237	31	38	21	2	0	418	11	10	32	13	838
500-515	28	240	37	53	22	4	5	362	14	16	37	22	840
515-530	31	253	38	57	29	7	4	354	7	16	39	20	855
530-545	28	204	31	41	19	7	7	338	7	19	43	21	765
545-600	17	223	34	39	22	6	6	359	9	17	37	12	781
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-400	83	902	124	131	78	37	9	1211	30	57	131	55	2848
315-415	87	915	135	150	76	36	7	1305	32	65	137	55	3000
330-430	83	947	145	168	82	41	6	1344	34	64	122	52	3088
345-445	87	966	146	183	82	42	9	1448	31	63	121	54	3232
400-500	90	947	146	175	81	33	6	1515	34	55	119	53	3254
415-515	98	959	141	190	86	29	10	1540	43	53	126	59	3334
430-530	107	964	139	195	93	23	12	1551	41	56	144	68	3393
445-545	112	934	137	189	91	20	16	1472	39	61	151	76	3298
500-600	104	920	140	190	92	24	22	1413	37	68	156	75	3241



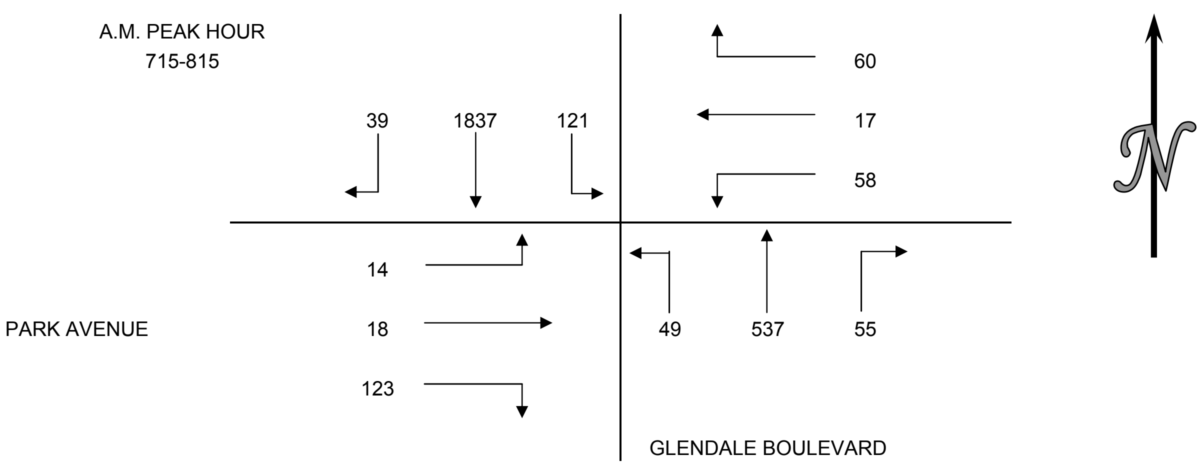
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 7:00 AM TO 10:00 AM
INTERSECTION: N/S GLENDALE BOULEVARD
E/W PARK AVENUE

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	10	493	25	10	5	13	12	96	34	23	2	2	725
715-730	9	457	29	15	4	7	12	118	8	33	3	2	697
730-745	16	474	22	15	2	17	19	170	9	30	5	4	783
745-800	7	462	34	22	6	24	9	116	12	24	3	3	722
800-815	7	444	36	8	5	10	15	133	20	36	7	5	726
815-830	16	447	20	10	3	15	12	103	11	40	7	4	688
830-845	9	468	34	16	8	20	13	94	14	40	2	2	720
845-900	6	439	23	7	11	13	13	99	11	51	3	1	677
900-915	14	430	22	16	4	13	14	54	7	27	3	3	607
915-930	9	427	15	11	6	13	13	86	13	39	4	1	637
930-945	11	375	29	19	1	13	11	97	19	40	5	3	623
945-1000	8	319	19	9	4	14	14	82	11	58	2	2	542
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	42	1886	110	62	17	61	52	500	63	110	13	11	2927
715-815	39	1837	121	60	17	58	55	537	49	123	18	14	2928
730-830	46	1827	112	55	16	66	55	522	52	130	22	16	2919
745-845	39	1821	124	56	22	69	49	446	57	140	19	14	2856
800-900	38	1798	113	41	27	58	53	429	56	167	19	12	2811
815-915	45	1784	99	49	26	61	52	350	43	158	15	10	2692
830-930	38	1764	94	50	29	59	53	333	45	157	12	7	2641
845-945	40	1671	89	53	22	52	51	336	50	157	15	8	2544
900-1000	42	1551	85	55	15	53	52	319	50	164	14	9	2409



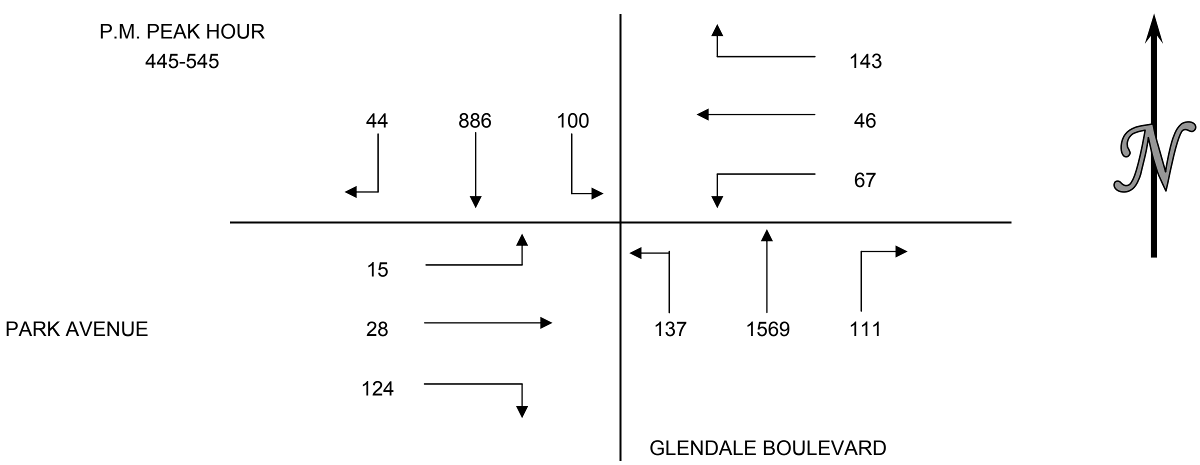
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S GLENDALE BOULEVARD
E/W PARK AVENUE

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-315	11	223	23	22	7	14	20	254	19	22	8	4	627
315-330	8	184	11	31	10	12	24	275	29	20	6	4	614
330-345	10	199	28	30	10	12	28	321	31	40	6	3	718
345-400	13	238	26	28	10	38	14	334	20	34	3	7	765
400-415	10	227	41	35	5	25	20	361	36	32	5	6	803
415-430	6	204	35	40	16	22	19	376	30	16	4	4	772
430-445	15	201	16	39	14	14	28	398	31	31	1	4	792
445-500	3	225	27	43	14	12	19	415	25	29	2	4	818
500-515	18	194	16	30	10	25	25	381	38	34	5	4	780
515-530	14	229	28	36	10	16	34	385	37	31	8	3	831
530-545	9	238	29	34	12	14	33	388	37	30	13	4	841
545-600	14	216	14	39	14	23	24	390	49	24	6	3	816
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-400	42	844	88	111	37	76	86	1184	99	116	23	18	2724
315-415	41	848	106	124	35	87	86	1291	116	126	20	20	2900
330-430	39	868	130	133	41	97	81	1392	117	122	18	20	3058
345-445	44	870	118	142	45	99	81	1469	117	113	13	21	3132
400-500	34	857	119	157	49	73	86	1550	122	108	12	18	3185
415-515	42	824	94	152	54	73	91	1570	124	110	12	16	3162
430-530	50	849	87	148	48	67	106	1579	131	125	16	15	3221
445-545	44	886	100	143	46	67	111	1569	137	124	28	15	3270
500-600	55	877	87	139	46	78	116	1544	161	119	32	14	3268



WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

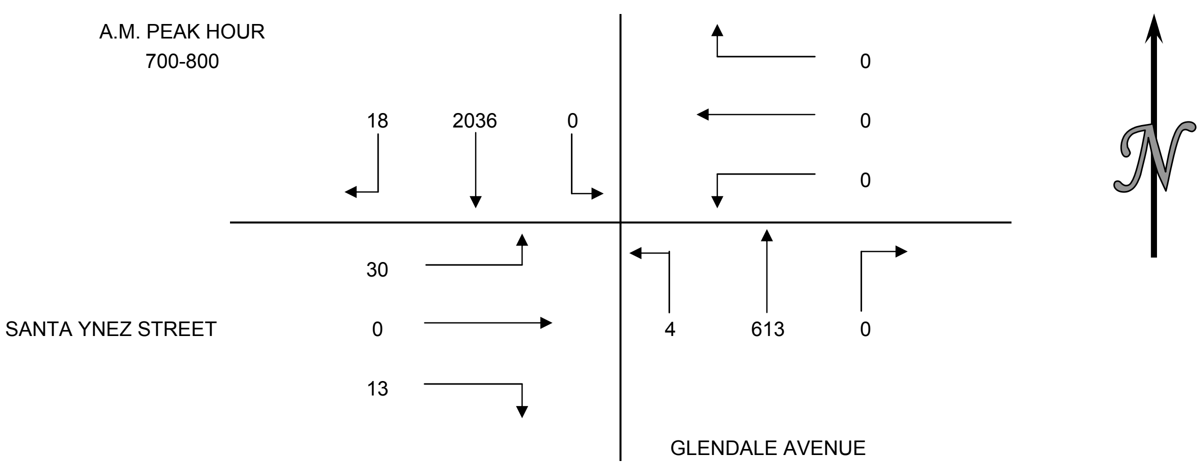
CLIENT:		KAKU ASSOCIATES
PROJECT:		SR-2 GLENDALE INTERCHANGE
DATE:		THURSDAY, MAY 25, 2006
PERIOD:		7:00 AM TO 10:00 AM
INTERSECTION:	N/S	GLENDALE AVENUE
	E/W	SANTA YNEZ STREET

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	4	549	0	0	0	0	0	153	0	8	0	4	718
715-730	4	518	0	0	0	0	0	166	2	0	0	6	696
730-745	6	449	0	0	0	0	0	143	0	3	0	8	609
745-800	4	520	0	0	0	0	0	151	2	2	0	12	691
800-815	2	512	0	0	0	0	0	154	6	2	0	10	686
815-830	2	475	0	0	0	0	0	135	2	3	0	5	622
830-845	5	445	0	0	0	0	0	108	2	6	0	3	569
845-900	2	556	0	0	0	0	0	111	4	9	0	6	688
900-915	6	413	0	0	0	0	0	90	1	5	0	2	517
915-930	1	464	0	0	0	0	0	105	1	2	0	3	576
930-945	4	418	0	0	0	0	0	106	1	3	0	4	536
945-1000	6	385	0	0	0	0	0	112	2	3	0	5	513

HOUR TOTALS

TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	18	2036	0	0	0	0	0	613	4	13	0	30	2714
715-815	16	1999	0	0	0	0	0	614	10	7	0	36	2682
730-830	14	1956	0	0	0	0	0	583	10	10	0	35	2608
745-845	13	1952	0	0	0	0	0	548	12	13	0	30	2568
800-900	11	1988	0	0	0	0	0	508	14	20	0	24	2565
815-915	15	1889	0	0	0	0	0	444	9	23	0	16	2396
830-930	14	1878	0	0	0	0	0	414	8	22	0	14	2350
845-945	13	1851	0	0	0	0	0	412	7	19	0	15	2317
900-1000	17	1680	0	0	0	0	0	413	5	13	0	14	2142



WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

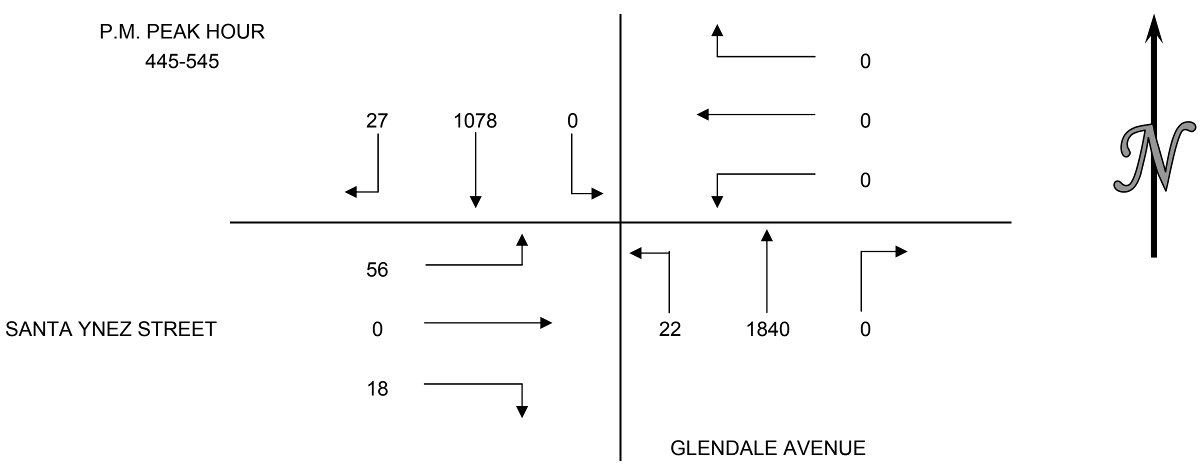
CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 24, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S GLENDALE AVENUE
E/W SANTA YNEZ STREET

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	2	246	0	0	0	0	0	331	5	4	0	4	592
315-330	7	227	0	0	0	0	0	340	4	6	0	6	590
330-345	9	246	0	0	0	0	0	315	3	5	0	6	584
345-400	6	273	0	0	0	0	0	428	3	3	0	10	723
400-415	8	307	0	0	0	0	0	459	5	4	0	10	793
415-430	6	247	0	0	0	0	0	423	4	3	0	4	687
430-445	2	219	0	0	0	0	0	413	4	5	0	11	654
445-500	9	305	0	0	0	0	0	474	6	2	0	13	809
500-515	8	243	0	0	0	0	0	468	8	7	0	18	752
515-530	4	284	0	0	0	0	0	483	5	4	0	15	795
530-545	6	246	0	0	0	0	0	415	3	5	0	10	685
545-600	8	213	0	0	0	0	0	461	9	9	0	7	707

HOUR TOTALS

TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	24	992	0	0	0	0	0	1414	15	18	0	26	2489
315-415	30	1053	0	0	0	0	0	1542	15	18	0	32	2690
330-430	29	1073	0	0	0	0	0	1625	15	15	0	30	2787
345-445	22	1046	0	0	0	0	0	1723	16	15	0	35	2857
400-500	25	1078	0	0	0	0	0	1769	19	14	0	38	2943
415-515	25	1014	0	0	0	0	0	1778	22	17	0	46	2902
430-530	23	1051	0	0	0	0	0	1838	23	18	0	57	3010
445-545	27	1078	0	0	0	0	0	1840	22	18	0	56	3041
500-600	26	986	0	0	0	0	0	1827	25	25	0	50	2939



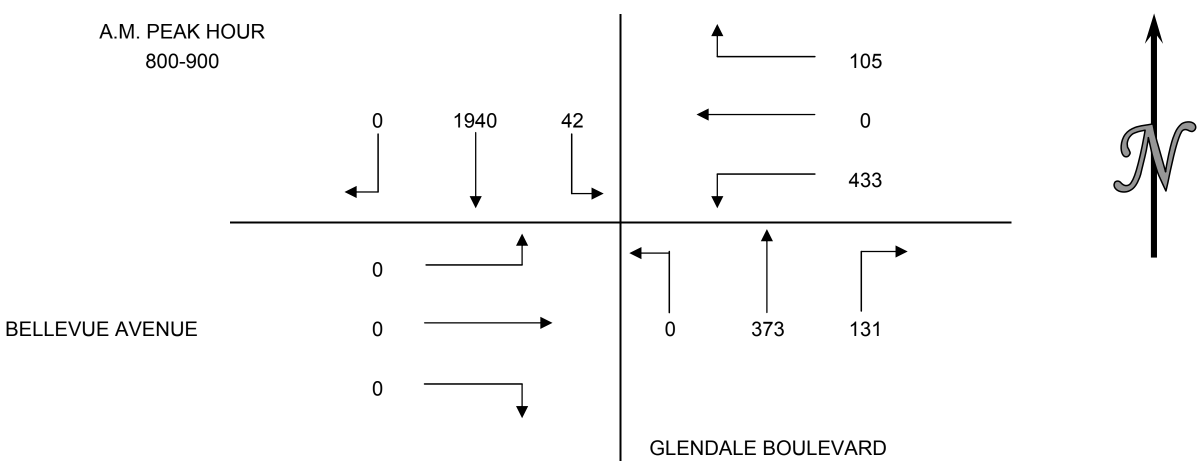
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT:		KAKU ASSOCIATES
PROJECT:		SR-2 GLENDALE INTERCHANGE
DATE:		TUESDAY, MAY 30, 2006
PERIOD:		7:00 AM TO 10:00 AM
INTERSECTION:	N/S	GLENDALE BOULEVARD
	E/W	BELLEVUE AVENUE

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	0	526	18	39	0	91	23	109	0	0	0	0	806
715-730	0	492	6	23	0	53	21	109	0	0	0	0	704
730-745	0	471	4	26	0	60	25	91	0	0	0	0	677
745-800	0	487	9	24	0	123	29	95	0	0	0	0	767
800-815	0	510	12	18	0	100	26	97	0	0	0	0	763
815-830	0	457	6	24	0	110	44	91	0	0	0	0	732
830-845	0	453	11	27	0	105	27	96	0	0	0	0	719
845-900	0	520	13	36	0	118	34	89	0	0	0	0	810
900-915	0	423	10	28	0	86	35	83	0	0	0	0	665
915-930	0	415	31	14	0	111	33	76	0	0	0	0	680
930-945	0	418	17	37	0	105	33	87	0	0	0	0	697
945-1000	0	392	9	14	0	54	11	78	0	0	0	0	558
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	0	1976	37	112	0	327	98	404	0	0	0	0	2954
715-815	0	1960	31	91	0	336	101	392	0	0	0	0	2911
730-830	0	1925	31	92	0	393	124	374	0	0	0	0	2939
745-845	0	1907	38	93	0	438	126	379	0	0	0	0	2981
800-900	0	1940	42	105	0	433	131	373	0	0	0	0	3024
815-915	0	1853	40	115	0	419	140	359	0	0	0	0	2926
830-930	0	1811	65	105	0	420	129	344	0	0	0	0	2874
845-945	0	1776	71	115	0	420	135	335	0	0	0	0	2852
900-1000	0	1648	67	93	0	356	112	324	0	0	0	0	2600



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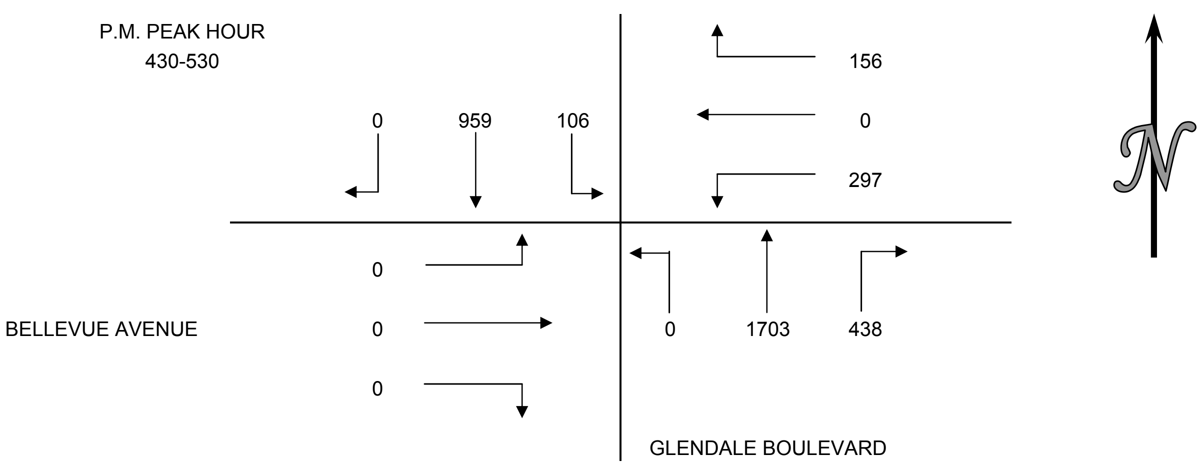
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 24, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S GLENDALE BOULEVARD
E/W BELLEVUE AVENUE

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-315	0	188	21	40	0	76	82	256	0	0	0	0	663
315-330	0	221	14	42	0	64	84	301	0	0	0	0	726
330-345	0	223	23	30	0	83	88	294	0	0	0	0	741
345-400	0	249	23	46	0	70	106	362	0	0	0	0	856
400-415	0	224	21	39	0	74	102	376	0	0	0	0	836
415-430	0	218	22	30	0	83	109	406	0	0	0	0	868
430-445	0	215	35	42	0	73	108	401	0	0	0	0	874
445-500	0	240	26	40	0	68	98	417	0	0	0	0	889
500-515	0	261	22	37	0	85	120	454	0	0	0	0	979
515-530	0	243	23	37	0	71	112	431	0	0	0	0	917
530-545	0	223	25	31	0	58	97	398	0	0	0	0	832
545-600	0	231	19	52	0	68	96	430	0	0	0	0	896
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-400	0	881	81	158	0	293	360	1213	0	0	0	0	2986
315-415	0	917	81	157	0	291	380	1333	0	0	0	0	3159
330-430	0	914	89	145	0	310	405	1438	0	0	0	0	3301
345-445	0	906	101	157	0	300	425	1545	0	0	0	0	3434
400-500	0	897	104	151	0	298	417	1600	0	0	0	0	3467
415-515	0	934	105	149	0	309	435	1678	0	0	0	0	3610
430-530	0	959	106	156	0	297	438	1703	0	0	0	0	3659
445-545	0	967	96	145	0	282	427	1700	0	0	0	0	3617
500-600	0	958	89	157	0	282	425	1713	0	0	0	0	3624



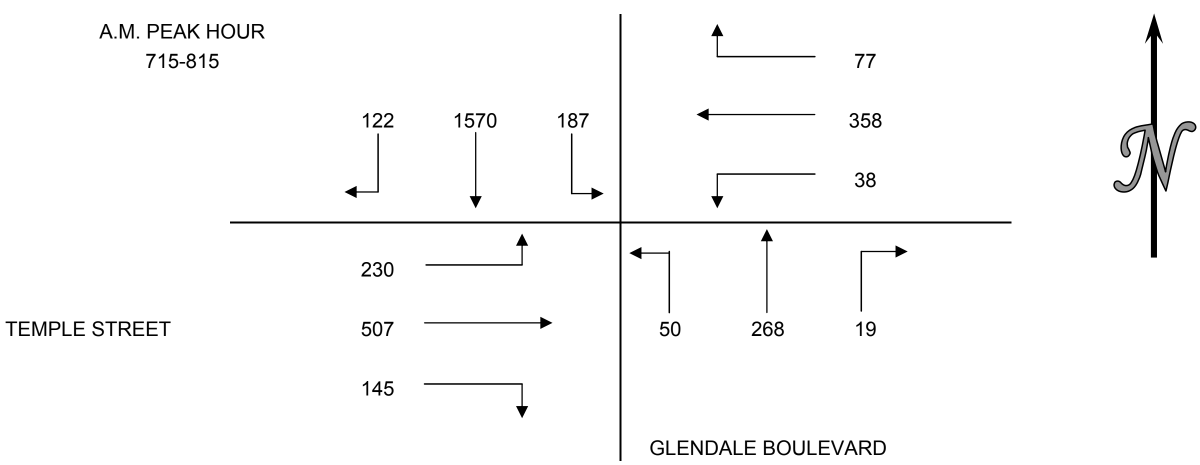
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT:		KAKU ASSOCIATES
PROJECT:		SR-2 GLENDALE INTERCHANGE
DATE:		TUESDAY, MAY 30, 2006
PERIOD:		7:00 AM TO 10:00 AM
INTERSECTION:	N/S	GLENDALE BOULEVARD
	E/W	TEMPLE STREET

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	28	393	63	28	80	4	2	61	10	25	90	48	832
715-730	23	389	45	15	71	7	2	79	12	40	107	48	838
730-745	29	395	38	11	108	13	4	84	11	32	146	76	947
745-800	34	393	58	27	103	6	9	78	12	33	117	55	925
800-815	36	393	46	24	76	12	4	27	15	40	137	51	861
815-830	46	391	39	12	84	9	5	41	8	36	115	38	824
830-845	49	386	49	10	93	3	2	49	8	30	103	55	837
845-900	35	407	47	18	73	9	7	41	15	32	105	37	826
900-915	42	357	34	10	83	11	5	79	10	33	82	42	788
915-930	49	307	56	13	77	10	5	78	6	17	78	42	738
930-945	40	276	33	18	74	6	5	78	12	21	81	34	678
945-1000	32	226	39	7	59	7	6	56	7	25	92	38	594
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	114	1570	204	81	362	30	17	302	45	130	460	227	3542
715-815	122	1570	187	77	358	38	19	268	50	145	507	230	3571
730-830	145	1572	181	74	371	40	22	230	46	141	515	220	3557
745-845	165	1563	192	73	356	30	20	195	43	139	472	199	3447
800-900	166	1577	181	64	326	33	18	158	46	138	460	181	3348
815-915	172	1541	169	50	333	32	19	210	41	131	405	172	3275
830-930	175	1457	186	51	326	33	19	247	39	112	368	176	3189
845-945	166	1347	170	59	307	36	22	276	43	103	346	155	3030
900-1000	163	1166	162	48	293	34	21	291	35	96	333	156	2798



WILTEC

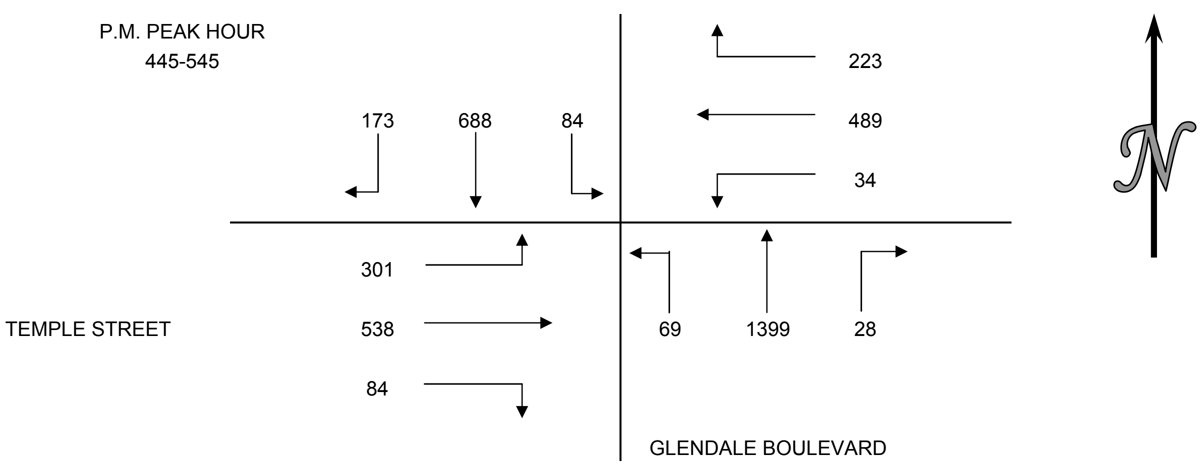
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: TUESDAY, MAY 30, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S GLENDALE BOULEVARD
E/W TEMPLE STREET

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-315	41	150	31	57	110	10	1	193	21	15	104	94	827
315-330	38	143	30	53	111	3	3	248	29	28	102	52	840
330-345	42	161	23	68	123	8	10	233	24	13	108	74	887
345-400	34	165	22	42	127	14	5	295	12	17	114	61	908
400-415	59	139	27	64	100	6	5	306	17	16	94	76	909
415-430	39	192	15	48	125	4	5	335	17	16	117	66	979
430-445	45	174	22	47	116	10	6	322	13	19	133	94	1001
445-500	41	176	22	61	118	8	8	346	17	24	115	85	1021
500-515	48	160	22	57	112	8	9	357	12	27	145	83	1040
515-530	46	181	18	49	134	11	4	336	21	14	129	63	1006
530-545	38	171	22	56	125	7	7	360	19	19	149	70	1043
545-600	48	155	23	46	118	11	8	343	18	22	122	76	990
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-400	155	619	106	220	471	35	19	969	86	73	428	281	3462
315-415	173	608	102	227	461	31	23	1082	82	74	418	263	3544
330-430	174	657	87	222	475	32	25	1169	70	62	433	277	3683
345-445	177	670	86	201	468	34	21	1258	59	68	458	297	3797
400-500	184	681	86	220	459	28	24	1309	64	75	459	321	3910
415-515	173	702	81	213	471	30	28	1360	59	86	510	328	4041
430-530	180	691	84	214	480	37	27	1361	63	84	522	325	4068
445-545	173	688	84	223	489	34	28	1399	69	84	538	301	4110
500-600	180	667	85	208	489	37	28	1396	70	82	545	292	4079

P.M. PEAK HOUR
445-545



WILTEC

PHONE: (626) 564-1944 FAX: (626) 564-0969

5-LEG INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: TUESDAY, MAY 30, 2006
PERIOD: 7:00 A.M. TO 10:00 A.M.
INTERSECTION: N/S GLENDALE BOULEVARD
E/W COURT STREET

15 MIN COUNTS																				
	SB GLENDALE BLVD.				SB LAVETA ST.				WB COURT ST.				NB GLENDALE BLVD.				EB COURT ST.			
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
700-715	2	403	1	1	1	2	2	0	0	7	2	3	1	3	96	0	3	1	0	2	530
715-730	0	450	0	0	0	1	2	0	0	3	0	6	0	1	106	2	2	5	0	2	580
730-745	0	399	1	0	2	0	0	0	0	5	1	8	3	0	67	1	1	3	1	0	492
745-800	1	446	1	1	3	0	1	0	0	8	2	2	1	0	105	0	4	2	1	0	578
800-815	0	427	0	0	0	0	1	0	0	3	0	8	1	2	94	3	0	4	1	0	544
815-830	1	427	1	2	0	0	0	0	0	0	3	6	0	0	72	0	0	1	0	1	514
830-845	1	429	1	0	0	0	0	0	0	0	1	3	1	0	75	0	1	0	0	1	513
845-900	1	470	1	1	0	0	0	0	0	1	1	1	0	0	64	0	0	0	0	0	540
900-915	0	344	2	0	1	0	0	0	0	1	0	5	0	6	74	0	2	0	0	1	436
915-930	0	330	0	1	0	0	0	0	0	0	0	2	1	1	47	2	0	0	0	0	384
930-945	0	299	2	0	2	0	1	0	0	0	0	1	1	0	91	2	0	0	0	0	399
945-1000	0	219	0	0	3	0	0	0	0	0	0	0	2	0	79	0	0	0	0	0	303
HOUR TOTALS																					
	SB GLENDALE BLVD.				SB LAVETA ST.				WB COURT ST.				NB GLENDALE BLVD.				EB COURT ST.				
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
700-800	3	1698	3	2	6	3	5	0	0	23	5	19	5	4	374	3	10	11	2	4	2180
715-815	1	1722	2	1	5	1	4	0	0	19	3	24	5	3	372	6	7	14	3	2	2194
730-830	2	1699	3	3	5	0	2	0	0	16	6	24	5	2	338	4	5	10	3	1	2128
745-845	3	1729	3	3	3	0	2	0	0	11	6	19	3	2	346	3	5	7	2	2	2149
800-900	3	1753	3	3	0	0	1	0	0	4	5	18	2	2	305	3	1	5	1	2	2111
815-915	3	1670	5	3	1	0	0	0	0	2	5	15	1	6	285	0	3	1	0	3	2003
830-930	2	1573	4	2	1	0	0	0	0	2	2	11	2	7	260	2	3	0	0	2	1873
845-945	1	1443	5	2	3	0	1	0	0	2	1	9	2	7	276	4	2	0	0	1	1759
900-1000	0	1192	4	1	6	0	1	0	0	1	0	8	4	7	291	4	2	0	0	1	1522

WILTEC

PHONE: (626) 564-1944 FAX: (626) 564-0969

5-LEG INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: TUESDAY, MAY 30, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S GLENDALE BOULEVARD
E/W COURT STREET

15 MIN COUNTS																				
	SB GLENDALE BLVD.				SB LAVETA ST.				WB COURT ST.				NB GLENDALE BLVD.				EB COURT ST.			
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
300-315	0	172	4	5	4	0	2	0	0	6	0	5	3	5	261	3	2	1	0	0	473
315-330	2	157	2	2	3	0	4	0	0	3	1	1	0	1	323	5	1	1	0	1	507
330-345	4	175	1	0	0	0	4	0	0	5	3	5	2	2	296	3	1	0	0	1	502
345-400	0	182	5	2	0	0	1	0	0	5	1	5	1	3	318	1	1	0	0	1	526
400-415	1	142	0	0	0	0	4	0	0	1	1	5	1	2	293	2	0	0	0	0	452
415-430	1	201	2	0	2	0	1	0	0	1	1	3	1	2	355	2	1	0	0	0	573
430-445	1	199	3	0	0	0	0	0	0	1	0	4	1	2	345	2	0	1	0	1	560
445-500	2	177	3	2	0	0	3	0	0	0	2	4	0	2	378	2	3	0	0	1	579
500-515	0	157	3	3	0	1	4	0	0	0	1	3	1	1	369	1	2	1	1	0	548
515-530	1	201	4	1	2	0	1	0	0	0	4	5	2	0	418	1	6	2	1	2	651
530-545	0	186	4	4	1	0	1	0	1	2	1	3	2	2	330	3	2	1	0	1	544
545-600	0	173	1	2	0	0	5	0	0	1	1	4	3	0	375	1	0	0	1	0	567
HOUR TOTALS																					
	SB GLENDALE BLVD.				SB LAVETA ST.				WB COURT ST.				NB GLENDALE BLVD.				EB COURT ST.				
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
300-400	6	686	12	9	7	0	11	0	0	19	5	16	6	11	1198	12	5	2	0	3	2008
315-415	7	656	8	4	3	0	13	0	0	14	6	16	4	8	1230	11	3	1	0	3	1987
330-430	6	700	8	2	2	0	10	0	0	12	6	18	5	9	1262	8	3	0	0	2	2053
345-445	3	724	10	2	2	0	6	0	0	8	3	17	4	9	1311	7	2	1	0	2	2111
400-500	5	719	8	2	2	0	8	0	0	3	4	16	3	8	1371	8	4	1	0	2	2164
415-515	4	734	11	5	2	1	8	0	0	2	4	14	3	7	1447	7	6	2	1	2	2260
430-530	4	734	13	6	2	1	8	0	0	1	7	16	4	5	1510	6	11	4	2	4	2338
445-545	3	721	14	10	3	1	9	0	1	2	8	15	5	5	1495	7	13	4	2	4	2322
500-600	1	717	12	10	3	1	11	0	1	3	7	15	8	3	1492	6	10	4	3	3	2310

WILTEC

PHONE: (626) 564-1944 FAX: (626) 564-0969

5-LEG INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: TUESDAY, MAY 30, 2006
PERIOD: 7:00 A.M. TO 10:00 A.M.
INTERSECTION: N/S GLENDALE BOULEVARD / LUCAS STREET
E/W 1ST STREET

15 MIN COUNTS																				
	SB GLENDALE BLVD.				WB 1ST STREET				NWB 2ND STREET				NB LUCAS ST.				EB BEVERLY BLVD.			
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
700-715	25	127	205	0	13	0	0	0	0	22	14	10	8	0	39	0	6	29	0	0	498
715-730	32	180	289	0	7	0	0	0	0	35	33	15	7	0	61	0	15	48	0	0	722
730-745	12	191	284	0	3	0	0	0	0	24	33	6	6	0	56	0	13	53	0	0	681
745-800	13	154	255	0	3	0	0	0	0	40	31	12	3	0	49	0	19	64	0	0	643
800-815	14	200	293	0	6	0	0	0	0	34	28	8	7	0	49	0	11	39	0	0	689
815-830	21	159	246	0	6	0	0	0	0	28	45	9	6	0	41	0	6	54	0	0	621
830-845	10	192	257	0	9	0	0	0	0	32	30	3	9	0	50	0	12	33	0	0	637
845-900	15	161	263	0	8	0	0	0	0	23	27	7	4	0	32	0	17	32	0	0	589
900-915	26	130	224	0	16	0	0	0	0	34	31	6	12	0	33	0	13	28	0	0	553
915-930	18	124	224	0	8	0	0	0	0	20	34	3	8	0	37	0	6	23	0	0	505
930-945	20	77	214	0	8	0	0	0	0	42	20	8	13	0	50	0	8	20	0	0	480
945-1000	13	85	169	0	13	0	0	0	0	30	30	3	7	0	39	1	4	17	0	0	411
HOUR TOTALS																					
	SB GLENDALE BLVD.				WB 1ST STREET				NWB 2ND STREET				NB LUCAS ST.				EB BEVERLY BLVD.				
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
700-800	82	652	1033	0	26	0	0	0	0	121	111	43	24	0	205	0	53	194	0	0	2544
715-815	71	725	1121	0	19	0	0	0	0	133	125	41	23	0	215	0	58	204	0	0	2735
730-830	60	704	1078	0	18	0	0	0	0	126	137	35	22	0	195	0	49	210	0	0	2634
745-845	58	705	1051	0	24	0	0	0	0	134	134	32	25	0	189	0	48	190	0	0	2590
800-900	60	712	1059	0	29	0	0	0	0	117	130	27	26	0	172	0	46	158	0	0	2536
815-915	72	642	990	0	39	0	0	0	0	117	133	25	31	0	156	0	48	147	0	0	2400
830-930	69	607	968	0	41	0	0	0	0	109	122	19	33	0	152	0	48	116	0	0	2284
845-945	79	492	925	0	40	0	0	0	0	119	112	24	37	0	152	0	44	103	0	0	2127
900-1000	77	416	831	0	45	0	0	0	0	126	115	20	40	0	159	1	31	88	0	0	1949

WILTEC

PHONE: (626) 564-1944 FAX: (626) 564-0969

5-LEG INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: TUESDAY, MAY 30, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S GLENDALE BOULEVARD/2NDSTREET/LUCAS STREET
E/W BEVERLY/1ST STREET

15 MIN COUNTS																					
	SB GLENDALE BLVD.				WB 1ST STREET				NWB 2ND STREET				NB LUCAS ST.				EB BEVERLY BLVD.				
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
300-315	15	61	84	0	34	0	0	0	0	126	20	3	17	0	128	0	7	30	0	0	525
315-330	24	90	94	0	47	0	0	0	0	137	28	5	9	0	167	0	3	25	0	0	629
330-345	15	63	76	0	47	0	0	0	0	125	32	4	10	0	126	0	6	36	0	0	540
345-400	18	86	79	0	33	0	0	0	0	123	26	2	11	0	146	0	10	23	0	0	557
400-415	20	78	57	0	33	0	0	0	0	151	39	3	11	0	179	0	4	34	0	0	609
415-430	10	89	66	0	67	0	0	0	0	147	39	1	10	0	132	0	5	30	0	0	596
430-445	12	99	103	0	45	0	0	0	0	143	52	6	10	0	175	0	6	30	0	3	684
445-500	10	63	76	0	34	0	0	0	0	173	44	3	2	0	197	0	6	37	0	0	645
500-515	11	112	100	0	33	0	0	0	0	173	61	5	15	0	230	0	10	30	0	1	781
515-530	14	88	90	0	43	0	0	0	0	177	87	3	15	0	173	0	6	29	0	0	725
530-545	11	101	101	0	44	0	0	0	0	162	65	7	6	0	174	0	5	33	0	0	709
545-600	15	80	89	0	33	0	0	0	0	143	76	16	3	0	188	0	4	40	0	0	687
HOUR TOTALS																					
	SB GLENDALE BLVD.				WB 1ST STREET				NWB 2ND STREET				NB LUCAS ST.				EB BEVERLY BLVD.				
PERIOD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	TOTALS
300-400	72	300	333	0	161	0	0	0	0	511	106	14	47	0	567	0	26	114	0	0	2251
315-415	77	317	306	0	160	0	0	0	0	536	125	14	41	0	618	0	23	118	0	0	2335
330-430	63	316	278	0	180	0	0	0	0	546	136	10	42	0	583	0	25	123	0	0	2302
345-445	60	352	305	0	178	0	0	0	0	564	156	12	42	0	632	0	25	117	0	3	2446
400-500	52	329	302	0	179	0	0	0	0	614	174	13	33	0	683	0	21	131	0	3	2534
415-515	43	363	345	0	179	0	0	0	0	636	196	15	37	0	734	0	27	127	0	4	2706
430-530	47	362	369	0	155	0	0	0	0	666	244	17	42	0	775	0	28	126	0	4	2835
445-545	46	364	367	0	154	0	0	0	0	685	257	18	38	0	774	0	27	129	0	1	2860
500-600	51	381	380	0	153	0	0	0	0	655	289	31	39	0	765	0	25	132	0	1	2902

WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT:		KAKU ASSOCIATES
PROJECT:		SR-2 GLENDALE INTERCHANGE
DATE:		WEDNESDAY, MAY 31, 2006
PERIOD:		7:00 AM TO 10:00 AM
INTERSECTION:	N/S	ALVARADO STREET
	E/W	MONTANA STREET

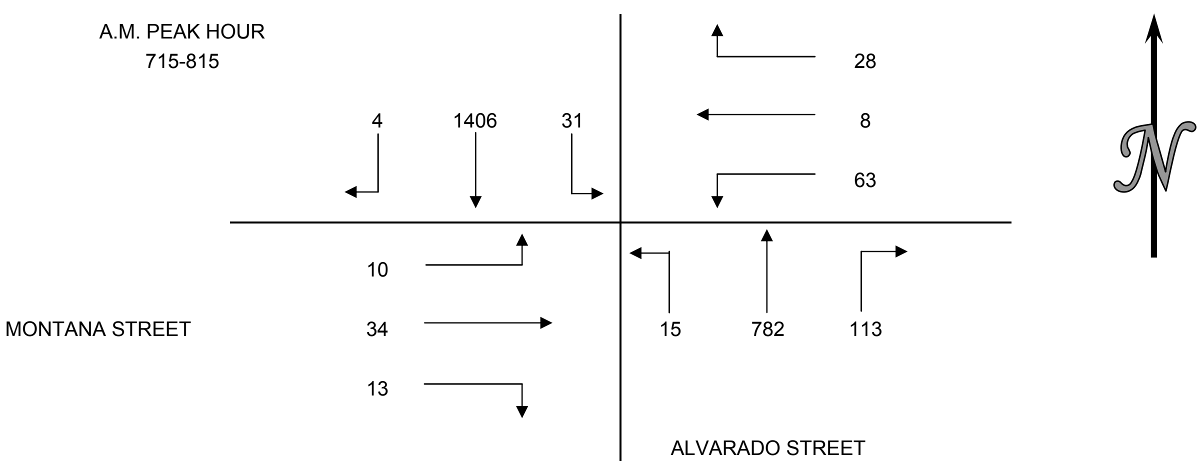
15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	1	333	5	5	1	18	20	167	2	3	11	3	569
715-730	2	397	10	5	1	18	18	189	1	2	4	1	648
730-745	0	323	7	6	1	12	43	216	3	6	15	3	635
745-800	1	321	4	9	2	22	31	196	6	1	7	3	603
800-815	1	365	10	8	4	11	21	181	5	4	8	3	621
815-830	2	349	10	6	3	13	20	188	4	6	6	1	608
830-845	1	386	11	5	1	16	15	194	1	3	4	3	640
845-900	2	306	6	6	3	9	13	229	0	1	5	3	583
900-915	2	360	12	5	4	14	27	167	2	1	2	4	600
915-930	3	321	15	4	1	15	7	161	2	2	7	4	542
930-945	4	301	7	4	1	18	8	154	1	3	4	2	507
945-1000	2	312	12	6	3	12	9	162	0	4	0	1	523

HOUR TOTALS

TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	4	1374	26	25	5	70	112	768	12	12	37	10	2455
715-815	4	1406	31	28	8	63	113	782	15	13	34	10	2507
730-830	4	1358	31	29	10	58	115	781	18	17	36	10	2467
745-845	5	1421	35	28	10	62	87	759	16	14	25	10	2472
800-900	6	1406	37	25	11	49	69	792	10	14	23	10	2452
815-915	7	1401	39	22	11	52	75	778	7	11	17	11	2431
830-930	8	1373	44	20	9	54	62	751	5	7	18	14	2365
845-945	11	1288	40	19	9	56	55	711	5	7	18	13	2232
900-1000	11	1294	46	19	9	59	51	644	5	10	13	11	2172

A.M. PEAK HOUR
715-815



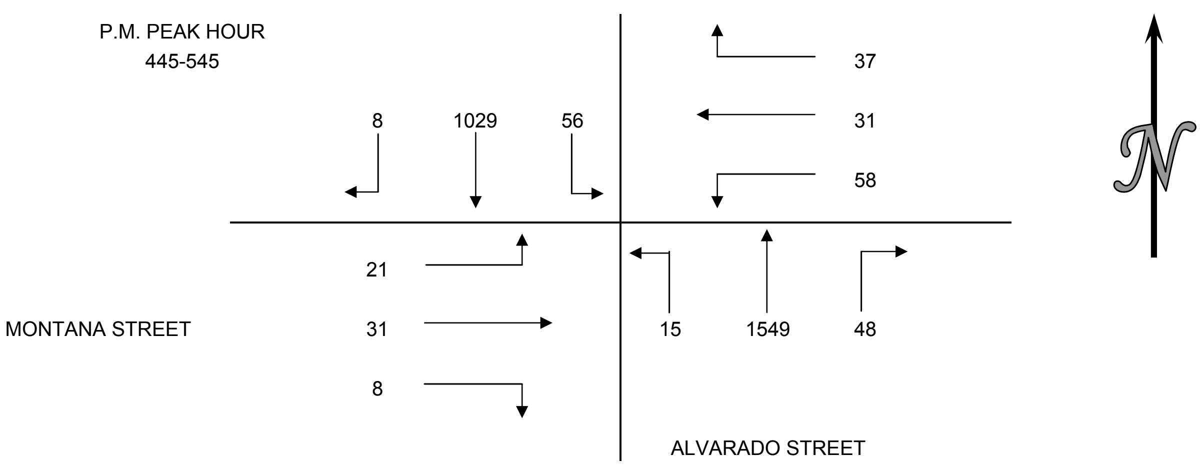
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S ALVARADO STREET
E/W MONTANA STREET

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-315	2	216	11	12	2	13	8	293	1	3	6	3	570
315-330	5	267	10	10	3	19	11	302	0	0	8	0	635
330-345	0	237	14	11	3	13	14	265	2	1	5	8	573
345-400	1	239	15	10	8	25	15	373	3	3	10	5	707
400-415	1	240	12	8	9	15	13	346	6	1	13	6	670
415-430	2	249	7	11	9	18	15	352	1	0	8	6	678
430-445	4	247	10	12	1	20	15	343	4	1	4	4	665
445-500	2	254	18	10	9	16	9	373	3	2	9	10	715
500-515	2	265	14	9	7	15	8	389	5	3	8	4	729
515-530	2	247	11	8	3	15	8	393	5	2	3	3	700
530-545	2	263	13	10	12	12	23	394	2	1	11	4	747
545-600	1	245	8	9	6	13	18	333	7	4	30	3	677
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-400	8	959	50	43	16	70	48	1233	6	7	29	16	2485
315-415	7	983	51	39	23	72	53	1286	11	5	36	19	2585
330-430	4	965	48	40	29	71	57	1336	12	5	36	25	2628
345-445	8	975	44	41	27	78	58	1414	14	5	35	21	2720
400-500	9	990	47	41	28	69	52	1414	14	4	34	26	2728
415-515	10	1015	49	42	26	69	47	1457	13	6	29	24	2787
430-530	10	1013	53	39	20	66	40	1498	17	8	24	21	2809
445-545	8	1029	56	37	31	58	48	1549	15	8	31	21	2891
500-600	7	1020	46	36	28	55	57	1509	19	10	52	14	2853



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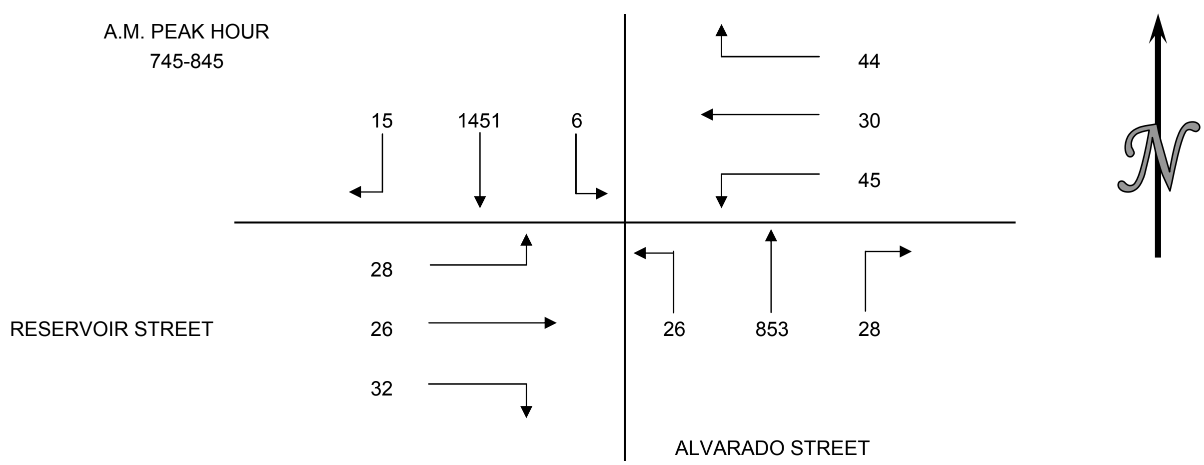
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 7:00 AM TO 10:00 AM
INTERSECTION: N/S ALVARADO STREET
E/W RESERVOIR STREET

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	2	355	3	4	3	6	6	180	2	16	3	14	594
715-730	3	379	0	7	9	8	6	220	2	4	5	5	648
730-745	0	369	2	6	8	9	2	237	3	11	8	5	660
745-800	3	346	2	10	6	9	7	218	3	13	9	10	636
800-815	8	342	2	9	5	8	7	218	8	5	8	5	625
815-830	1	350	0	7	7	11	8	197	4	8	3	3	599
830-845	3	413	2	18	12	17	6	220	11	6	6	10	724
845-900	3	366	2	0	0	3	11	205	6	9	10	8	623
900-915	2	340	0	11	1	3	10	190	6	6	3	5	577
915-930	3	336	4	9	4	5	9	159	7	5	3	4	548
930-945	2	330	1	6	3	4	8	174	4	11	5	8	556
945-1000	3	326	2	7	2	5	10	167	4	6	4	2	538
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	8	1449	7	27	26	32	21	855	10	44	25	34	2538
715-815	14	1436	6	32	28	34	22	893	16	33	30	25	2569
730-830	12	1407	6	32	26	37	24	870	18	37	28	23	2520
745-845	15	1451	6	44	30	45	28	853	26	32	26	28	2584
800-900	15	1471	6	34	24	39	32	840	29	28	27	26	2571
815-915	9	1469	4	36	20	34	35	812	27	29	22	26	2523
830-930	11	1455	8	38	17	28	36	774	30	26	22	27	2472
845-945	10	1372	7	26	8	15	38	728	23	31	21	25	2304
900-1000	10	1332	7	33	10	17	37	690	21	28	15	19	2219



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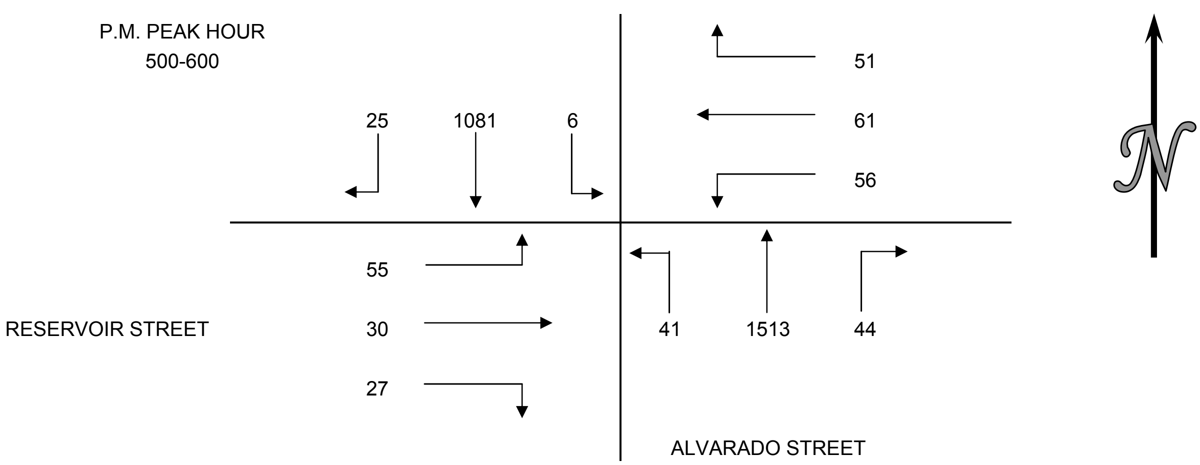
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S ALVARADO STREET
E/W RESERVOIR STREET

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-315	1	244	7	11	9	18	9	310	7	10	8	11	645
315-330	0	263	3	8	10	11	4	245	5	3	2	5	559
330-345	4	252	1	14	2	5	11	285	9	9	4	10	606
345-400	3	278	1	10	12	17	11	345	12	7	4	7	707
400-415	5	246	3	12	10	7	11	329	11	6	5	6	651
415-430	6	249	1	23	14	10	9	326	7	3	5	16	669
430-445	1	281	1	14	17	12	14	380	14	2	7	13	756
445-500	6	252	6	15	9	8	12	355	5	2	5	12	687
500-515	6	272	3	20	19	16	12	394	9	7	6	14	778
515-530	6	260	1	10	10	14	13	369	16	5	6	19	729
530-545	8	274	2	12	15	15	7	372	7	4	11	11	738
545-600	5	275	0	9	17	11	12	378	9	11	7	11	745
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-400	8	1037	12	43	33	51	35	1185	33	29	18	33	2517
315-415	12	1039	8	44	34	40	37	1204	37	25	15	28	2523
330-430	18	1025	6	59	38	39	42	1285	39	25	18	39	2633
345-445	15	1054	6	59	53	46	45	1380	44	18	21	42	2783
400-500	18	1028	11	64	50	37	46	1390	37	13	22	47	2763
415-515	19	1054	11	72	59	46	47	1455	35	14	23	55	2890
430-530	19	1065	11	59	55	50	51	1498	44	16	24	58	2950
445-545	26	1058	12	57	53	53	44	1490	37	18	28	56	2932
500-600	25	1081	6	51	61	56	44	1513	41	27	30	55	2990



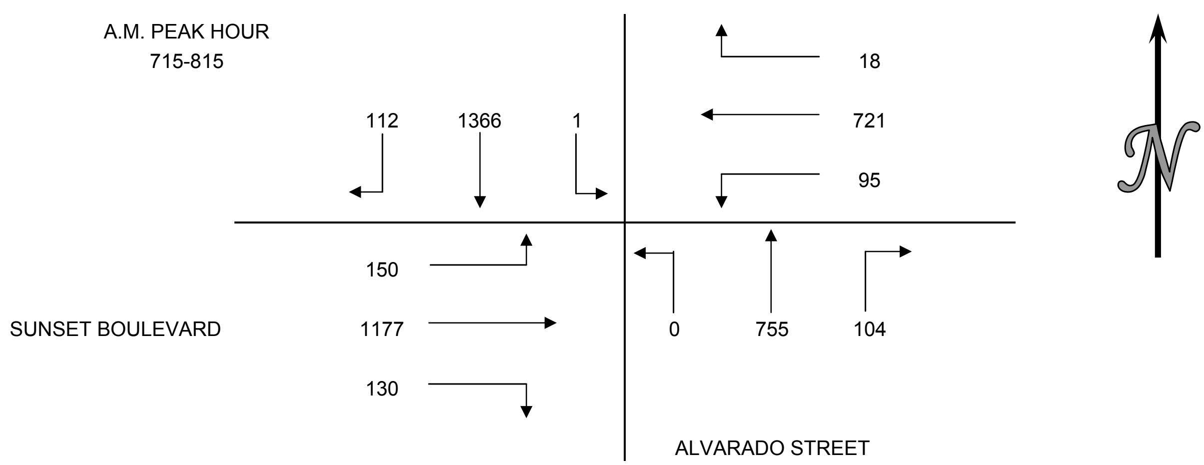
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT:		KAKU ASSOCIATES
PROJECT:		SR-2 GLENDALE INTERCHANGE
DATE:		WEDNESDAY, MAY 31, 2006
PERIOD:		7:00 AM TO 10:00 AM
INTERSECTION:	N/S	ALVARADO STREET
	E/W	SUNSET BOULEVARD

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	27	345	1	1	213	20	28	147	0	17	244	33	1076
715-730	32	348	0	4	174	21	36	197	0	31	295	36	1174
730-745	28	359	0	7	169	24	18	195	0	43	292	39	1174
745-800	36	334	0	2	182	29	24	200	0	24	293	30	1154
800-815	16	325	1	5	196	21	26	163	0	32	297	45	1127
815-830	25	352	0	7	164	30	31	184	0	36	277	42	1148
830-845	26	386	0	4	189	23	32	178	0	31	232	48	1149
845-900	38	354	0	4	196	28	29	165	0	24	243	51	1132
900-915	37	333	0	3	154	23	33	154	0	35	210	36	1018
915-930	44	306	0	7	186	24	32	145	1	33	226	29	1033
930-945	25	309	0	8	114	30	27	134	0	24	209	52	932
945-1000	46	290	3	5	191	31	39	142	0	18	220	30	1015
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	123	1386	1	14	738	94	106	739	0	115	1124	138	4578
715-815	112	1366	1	18	721	95	104	755	0	130	1177	150	4629
730-830	105	1370	1	21	711	104	99	742	0	135	1159	156	4603
745-845	103	1397	1	18	731	103	113	725	0	123	1099	165	4578
800-900	105	1417	1	20	745	102	118	690	0	123	1049	186	4556
815-915	126	1425	0	18	703	104	125	681	0	126	962	177	4447
830-930	145	1379	0	18	725	98	126	642	1	123	911	164	4332
845-945	144	1302	0	22	650	105	121	598	1	116	888	168	4115
900-1000	152	1238	3	23	645	108	131	575	1	110	865	147	3998



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Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

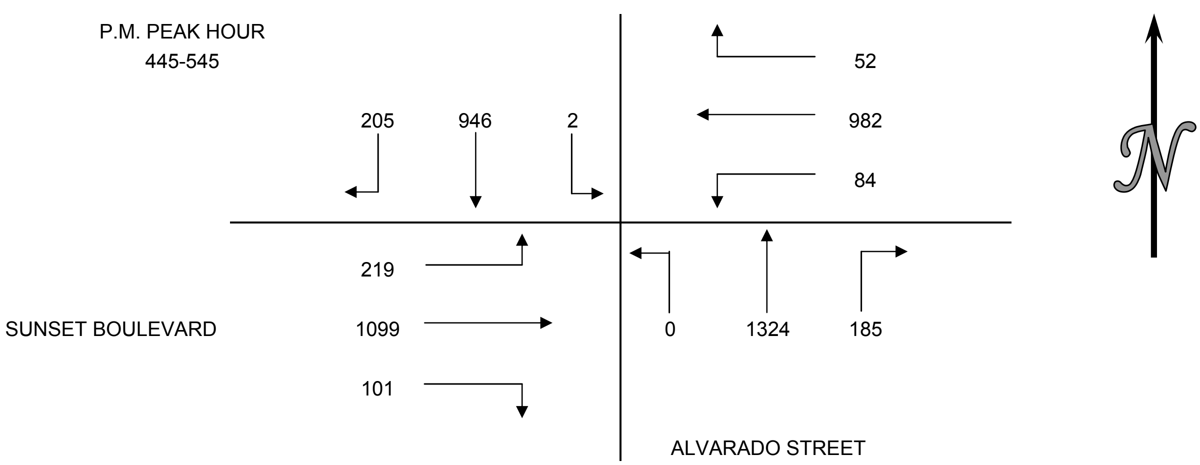
CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S ALVARADO STREET
E/W SUNSET BOULEVARD

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	53	177	0	4	183	31	35	218	1	21	216	53	992
315-330	59	231	1	13	225	23	36	235	1	35	238	49	1146
330-345	59	220	0	11	213	33	33	235	1	19	217	46	1087
345-400	60	236	1	16	195	24	52	297	3	23	263	54	1224
400-415	40	208	0	13	208	23	55	314	2	29	222	51	1165
415-430	45	228	0	10	204	22	47	275	0	18	223	39	1111
430-445	48	245	0	17	233	29	36	335	0	20	252	53	1268
445-500	45	207	1	10	259	19	48	333	0	37	272	69	1300
500-515	48	261	0	15	222	24	39	351	0	18	234	57	1269
515-530	55	233	0	15	271	18	50	333	0	28	301	50	1354
530-545	57	245	1	12	230	23	48	307	0	18	292	43	1276
545-600	42	247	0	16	231	19	40	310	0	17	279	39	1240

HOUR TOTALS

TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	231	864	2	44	816	111	156	985	6	98	934	202	4449
315-415	218	895	2	53	841	103	176	1081	7	106	940	200	4622
330-430	204	892	1	50	820	102	187	1121	6	89	925	190	4587
345-445	193	917	1	56	840	98	190	1221	5	90	960	197	4768
400-500	178	888	1	50	904	93	186	1257	2	104	969	212	4844
415-515	186	941	1	52	918	94	170	1294	0	93	981	218	4948
430-530	196	946	1	57	985	90	173	1352	0	103	1059	229	5191
445-545	205	946	2	52	982	84	185	1324	0	101	1099	219	5199
500-600	202	986	1	58	954	84	177	1301	0	81	1106	189	5139



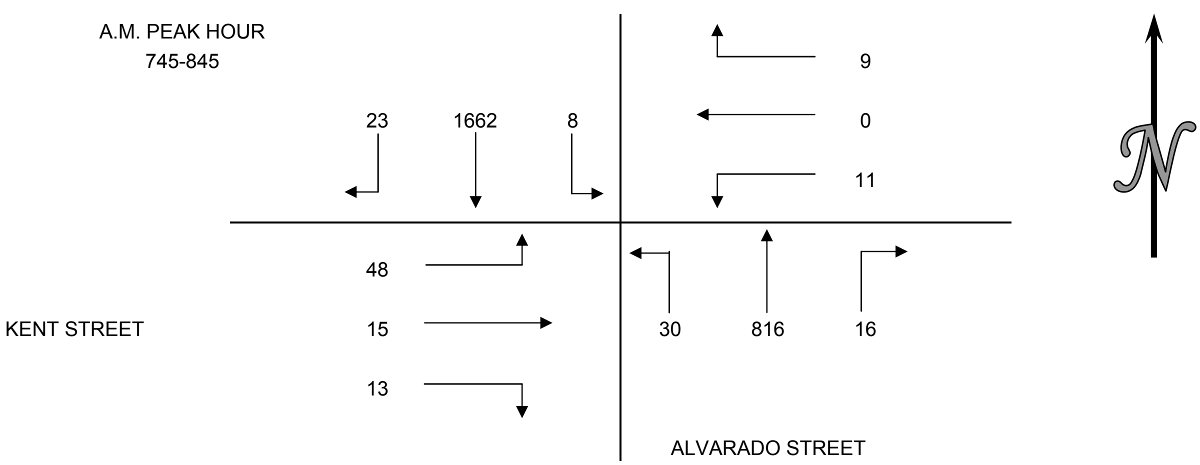
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 7:00 AM TO 10:00 AM
INTERSECTION: N/S ALVARADO STREET
E/W KENT STREET

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	8	372	1	4	0	0	1	197	4	1	1	7	596
715-730	6	397	2	6	0	1	0	217	6	5	2	10	652
730-745	8	409	7	4	0	1	2	215	5	9	11	19	690
745-800	6	427	0	0	0	1	4	210	8	6	7	17	686
800-815	5	353	1	7	0	4	5	215	12	3	3	13	621
815-830	5	423	4	0	0	1	2	200	3	1	3	10	652
830-845	7	459	3	2	0	5	5	191	7	3	2	8	692
845-900	3	438	3	2	1	2	6	210	6	3	2	3	679
900-915	6	369	3	6	0	0	1	167	4	5	5	9	575
915-930	4	352	1	3	0	3	6	182	9	3	0	2	565
930-945	3	361	0	0	0	0	1	154	6	6	0	5	536
945-1000	10	338	0	4	0	0	6	167	7	3	1	8	544
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	28	1605	10	14	0	3	7	839	23	21	21	53	2624
715-815	25	1586	10	17	0	7	11	857	31	23	23	59	2649
730-830	24	1612	12	11	0	7	13	840	28	19	24	59	2649
745-845	23	1662	8	9	0	11	16	816	30	13	15	48	2651
800-900	20	1673	11	11	1	12	18	816	28	10	10	34	2644
815-915	21	1689	13	10	1	8	14	768	20	12	12	30	2598
830-930	20	1618	10	13	1	10	18	750	26	14	9	22	2511
845-945	16	1520	7	11	1	5	14	713	25	17	7	19	2355
900-1000	23	1420	4	13	0	3	14	670	26	17	6	24	2220



WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S ALVARADO STREET
E/W KENT STREET

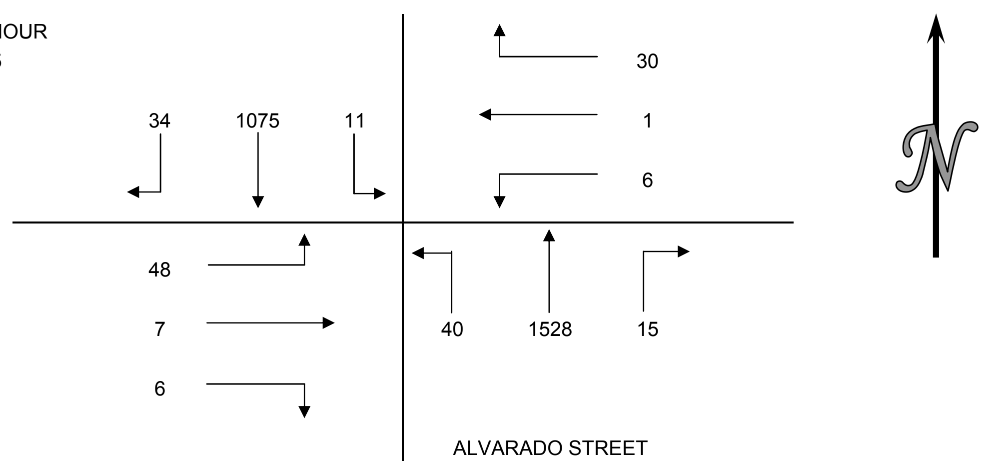
15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	7	253	1	3	0	2	5	243	6	4	1	10	535
315-330	5	274	3	4	0	1	2	304	9	3	2	5	612
330-345	5	258	4	2	0	1	0	302	14	3	3	11	603
345-400	9	284	0	2	0	1	3	314	8	1	5	10	637
400-415	5	251	6	4	0	3	5	381	11	7	2	9	684
415-430	4	251	2	1	0	0	8	331	6	1	1	7	612
430-445	3	280	2	6	0	1	2	345	7	7	3	10	666
445-500	12	247	3	9	0	2	3	375	6	2	2	12	673
500-515	10	303	5	11	0	2	4	401	8	2	1	16	763
515-530	8	246	2	4	1	0	4	382	17	1	1	12	678
530-545	4	279	1	6	0	2	4	370	9	1	3	8	687
545-600	8	285	4	6	0	1	5	323	6	0	0	8	646

HOUR TOTALS

TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	26	1069	8	11	0	5	10	1163	37	11	11	36	2387
315-415	24	1067	13	12	0	6	10	1301	42	14	12	35	2536
330-430	23	1044	12	9	0	5	16	1328	39	12	11	37	2536
345-445	21	1066	10	13	0	5	18	1371	32	16	11	36	2599
400-500	24	1029	13	20	0	6	18	1432	30	17	8	38	2635
415-515	29	1081	12	27	0	5	17	1452	27	12	7	45	2714
430-530	33	1076	12	30	1	5	13	1503	38	12	7	50	2780
445-545	34	1075	11	30	1	6	15	1528	40	6	7	48	2801
500-600	30	1113	12	27	1	5	17	1476	40	4	5	44	2774

P.M. PEAK HOUR
445-545



KENT STREET

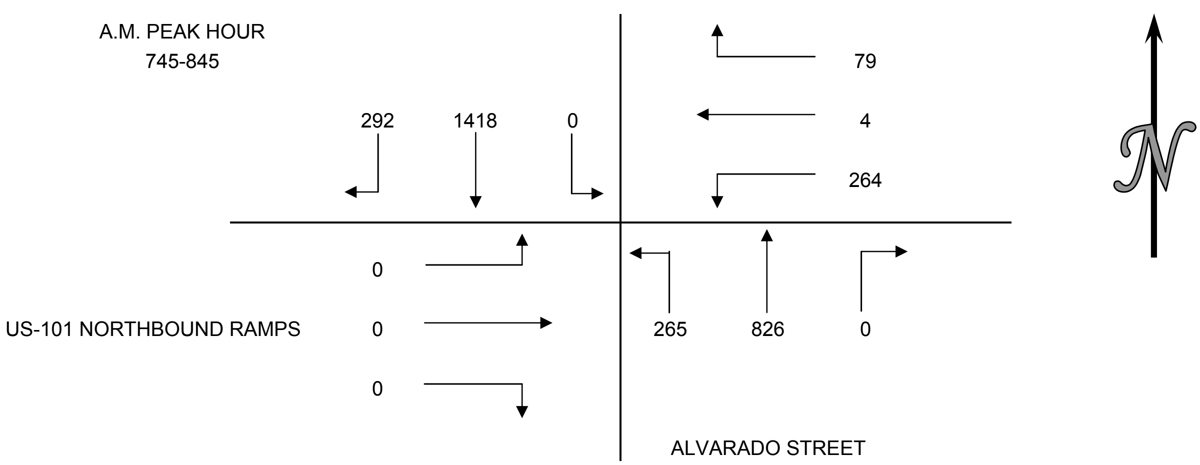
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY MAY 31, 2006
PERIOD: 7:00 AM TO 10:00 AM
INTERSECTION: N/S ALVARADO STREET
E/W US-101 NORTHBOUND RAMPS

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	75	319	0	17	1	48	0	181	80	0	0	0	721
715-730	77	348	0	20	1	66	0	194	79	0	0	0	785
730-745	63	358	0	16	2	44	0	219	80	0	0	0	782
745-800	71	342	0	17	2	71	0	225	86	0	0	0	814
800-815	72	329	0	21	1	70	0	192	57	0	0	0	742
815-830	78	392	0	18	0	49	0	200	66	0	0	0	803
830-845	71	355	0	23	1	74	0	209	56	0	0	0	789
845-900	83	356	0	15	0	65	0	206	77	0	0	0	802
900-915	86	283	0	19	0	68	0	193	59	0	0	0	708
915-930	90	310	0	23	0	68	0	165	75	0	0	0	731
930-945	103	264	0	14	2	67	0	174	65	0	0	0	689
945-1000	80	280	0	12	1	59	0	184	64	0	0	0	680
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	286	1367	0	70	6	229	0	819	325	0	0	0	3102
715-815	283	1377	0	74	6	251	0	830	302	0	0	0	3123
730-830	284	1421	0	72	5	234	0	836	289	0	0	0	3141
745-845	292	1418	0	79	4	264	0	826	265	0	0	0	3148
800-900	304	1432	0	77	2	258	0	807	256	0	0	0	3136
815-915	318	1386	0	75	1	256	0	808	258	0	0	0	3102
830-930	330	1304	0	80	1	275	0	773	267	0	0	0	3030
845-945	362	1213	0	71	2	268	0	738	276	0	0	0	2930
900-1000	359	1137	0	68	3	262	0	716	263	0	0	0	2808



WILTEC

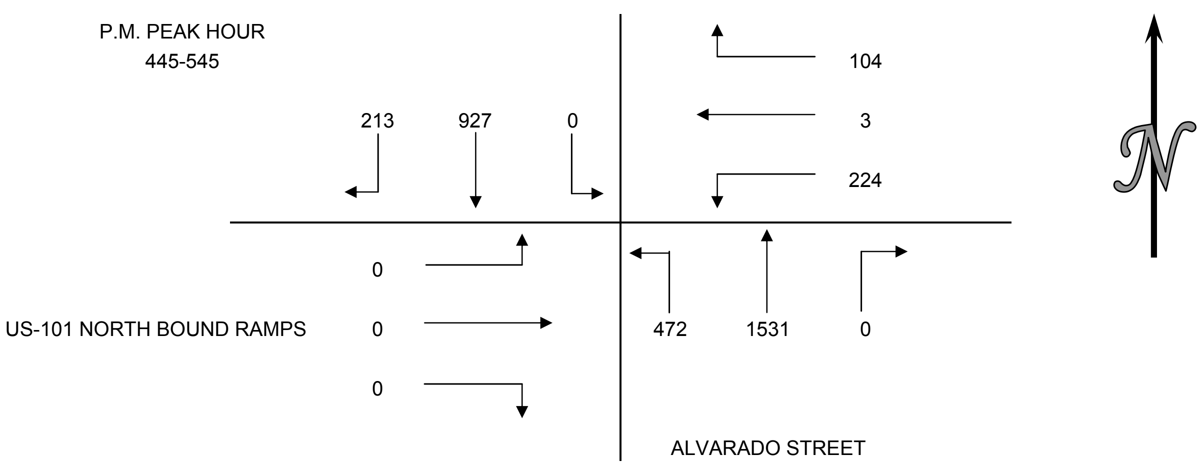
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S ALVARADO STREET
E/W US-101 NORTH BOUND RAMPS

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-315	81	229	0	19	0	61	0	266	112	0	0	0	768
315-330	41	209	0	17	0	57	0	289	90	0	0	0	703
330-345	61	234	0	19	0	55	0	298	124	0	0	0	791
345-400	45	230	0	20	0	48	0	322	128	0	0	0	793
400-415	62	234	0	32	0	57	0	365	116	0	0	0	866
415-430	47	226	0	26	0	49	0	319	90	0	0	0	757
430-445	52	235	0	21	0	50	0	364	108	0	0	0	830
445-500	51	238	0	17	1	50	0	409	127	0	0	0	893
500-515	65	239	0	24	2	58	0	395	118	0	0	0	901
515-530	40	217	0	35	0	61	0	373	114	0	0	0	840
530-545	57	233	0	28	0	55	0	354	113	0	0	0	840
545-600	72	227	0	15	1	44	0	365	120	0	0	0	844
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-400	228	902	0	75	0	221	0	1175	454	0	0	0	3055
315-415	209	907	0	88	0	217	0	1274	458	0	0	0	3153
330-430	215	924	0	97	0	209	0	1304	458	0	0	0	3207
345-445	206	925	0	99	0	204	0	1370	442	0	0	0	3246
400-500	212	933	0	96	1	206	0	1457	441	0	0	0	3346
415-515	215	938	0	88	3	207	0	1487	443	0	0	0	3381
430-530	208	929	0	97	3	219	0	1541	467	0	0	0	3464
445-545	213	927	0	104	3	224	0	1531	472	0	0	0	3474
500-600	234	916	0	102	3	218	0	1487	465	0	0	0	3425

P.M. PEAK HOUR
445-545



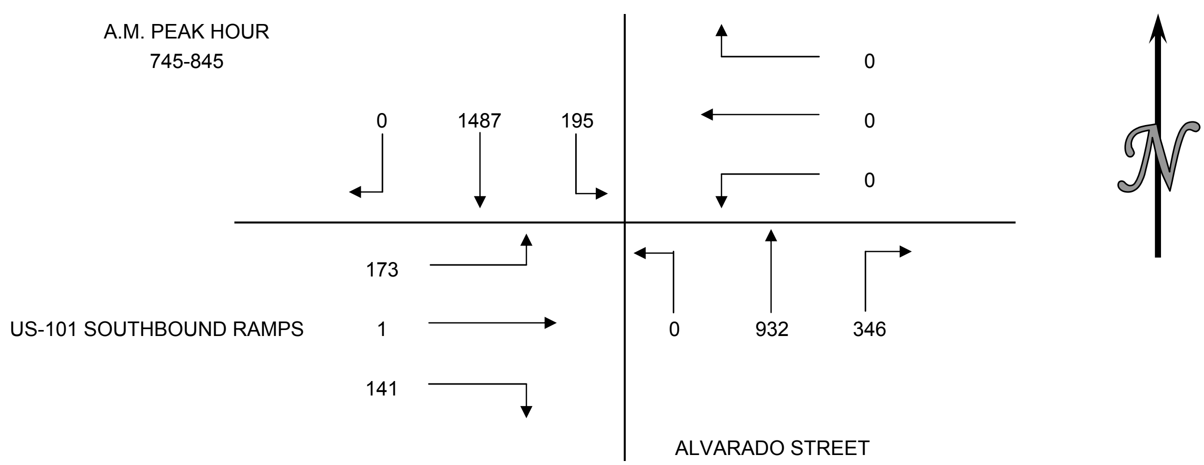
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 31, 2006
PERIOD: 7:00 AM TO 10:00 AM
INTERSECTION: N/S ALVARADO STREET
E/W US-101 SOUTHBOUND RAMPS

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	0	328	42	0	0	0	71	221	0	35	1	37	735
715-730	0	366	42	0	0	0	75	256	0	21	0	38	798
730-745	0	352	53	0	0	0	85	268	0	23	0	26	807
745-800	0	350	65	0	0	0	99	239	0	39	0	45	837
800-815	0	366	34	0	0	0	82	224	0	32	0	29	767
815-830	0	387	51	0	0	0	79	249	0	24	1	49	840
830-845	0	384	45	0	0	0	86	220	0	46	0	50	831
845-900	0	385	31	0	0	0	43	212	0	38	0	34	743
900-915	0	329	36	0	0	0	77	218	0	43	0	32	735
915-930	0	341	24	0	0	0	55	216	0	34	0	39	709
930-945	0	310	35	0	0	0	68	218	0	56	0	40	727
945-1000	0	315	14	0	0	0	63	191	0	35	0	48	666
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	0	1396	202	0	0	0	330	984	0	118	1	146	3177
715-815	0	1434	194	0	0	0	341	987	0	115	0	138	3209
730-830	0	1455	203	0	0	0	345	980	0	118	1	149	3251
745-845	0	1487	195	0	0	0	346	932	0	141	1	173	3275
800-900	0	1522	161	0	0	0	290	905	0	140	1	162	3181
815-915	0	1485	163	0	0	0	285	899	0	151	1	165	3149
830-930	0	1439	136	0	0	0	261	866	0	161	0	155	3018
845-945	0	1365	126	0	0	0	243	864	0	171	0	145	2914
900-1000	0	1295	109	0	0	0	263	843	0	168	0	159	2837



WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

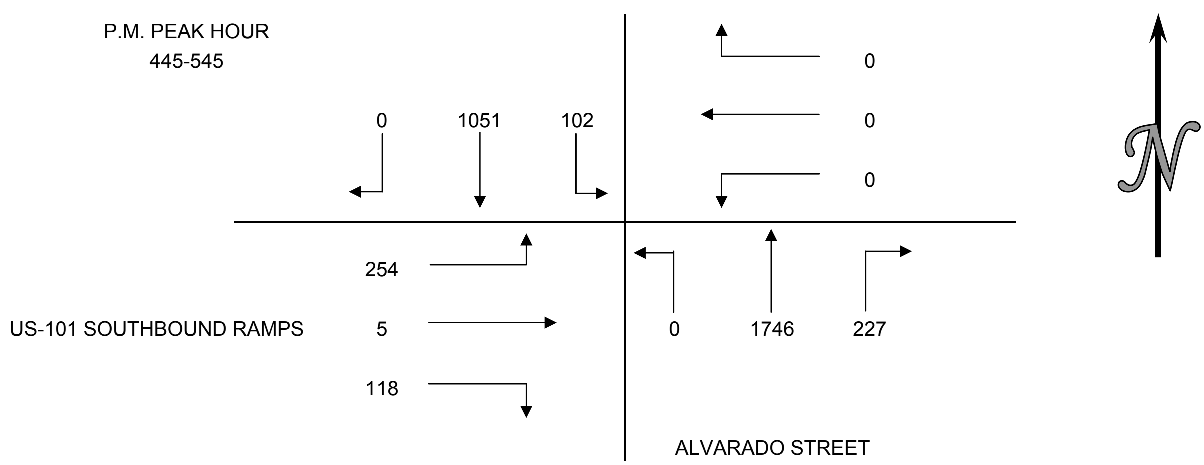
CLIENT:		KAKU ASSOCIATES
PROJECT:		SR-2 GLENDALE INTERCHANGE
DATE:		WEDNESDAY, MAY 31, 2006
PERIOD:		3:00 PM TO 6:00 PM
INTERSECTION:	N/S	ALVARADO STREET
	E/W	US-101 SOUTHBOUND RAMPS

15 MIN COUNTS

	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-315	0	258	37	0	0	0	67	330	0	17	2	55	766
315-330	0	236	28	0	0	0	50	337	0	20	0	40	711
330-345	0	262	24	0	0	0	54	369	0	24	0	46	779
345-400	0	267	11	0	0	0	60	384	0	35	0	62	819
400-415	0	236	51	0	0	0	62	389	0	31	1	105	875
415-430	0	264	20	0	0	0	52	385	0	26	3	50	800
430-445	0	252	28	0	0	0	48	407	0	30	2	42	809
445-500	0	262	26	0	0	0	51	446	0	27	0	69	881
500-515	0	260	31	0	0	0	68	438	0	41	3	88	929
515-530	0	269	17	0	0	0	58	445	0	22	0	43	854
530-545	0	260	28	0	0	0	50	417	0	28	2	54	839
545-600	0	249	20	0	0	0	51	424	0	29	3	74	850

HOUR TOTALS

	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-400	0	1023	100	0	0	0	231	1420	0	96	2	203	3075
315-415	0	1001	114	0	0	0	226	1479	0	110	1	253	3184
330-430	0	1029	106	0	0	0	228	1527	0	116	4	263	3273
345-445	0	1019	110	0	0	0	222	1565	0	122	6	259	3303
400-500	0	1014	125	0	0	0	213	1627	0	114	6	266	3365
415-515	0	1038	105	0	0	0	219	1676	0	124	8	249	3419
430-530	0	1043	102	0	0	0	225	1736	0	120	5	242	3473
445-545	0	1051	102	0	0	0	227	1746	0	118	5	254	3503
500-600	0	1038	96	0	0	0	227	1724	0	120	8	259	3472



WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT:		KAKU ASSOCIATES
PROJECT:		SR-2 GLENDALE INTERCHANGE
DATE:		TUESDAY, MAY 30, 2006
PERIOD:		7:00 AM TO 10:00 AM
INTERSECTION:	N/S	ALVARADO STREET
	E/W	TEMPLE STREET

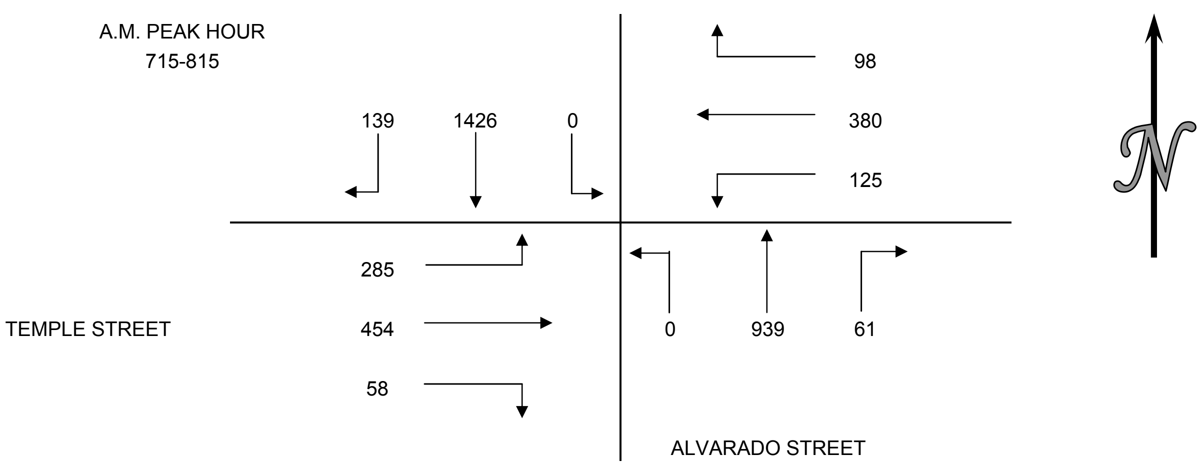
15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	22	307	2	9	65	27	12	210	0	13	83	71	821
715-730	43	373	0	22	89	30	10	234	0	6	130	68	1005
730-745	29	337	0	20	85	35	16	239	0	17	132	71	981
745-800	30	363	0	30	117	36	10	263	0	17	86	78	1030
800-815	37	353	0	26	89	24	25	203	0	18	106	68	949
815-830	32	369	0	15	88	26	15	232	0	15	119	68	979
830-845	46	382	0	30	85	31	17	198	0	22	91	57	959
845-900	45	369	0	21	98	20	13	203	0	15	106	49	939
900-915	53	361	1	22	91	38	15	201	0	17	79	50	928
915-930	41	328	0	19	95	33	14	218	0	19	55	43	865
930-945	39	260	1	23	79	20	15	196	0	16	45	49	743
945-1000	45	284	2	22	76	16	13	162	0	5	50	38	713

HOUR TOTALS

TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	124	1380	2	81	356	128	48	946	0	53	431	288	3837
715-815	139	1426	0	98	380	125	61	939	0	58	454	285	3965
730-830	128	1422	0	91	379	121	66	937	0	67	443	285	3939
745-845	145	1467	0	101	379	117	67	896	0	72	402	271	3917
800-900	160	1473	0	92	360	101	70	836	0	70	422	242	3826
815-915	176	1481	1	88	362	115	60	834	0	69	395	224	3805
830-930	185	1440	1	92	369	122	59	820	0	73	331	199	3691
845-945	178	1318	2	85	363	111	57	818	0	67	285	191	3475
900-1000	178	1233	4	86	341	107	57	777	0	57	229	180	3249

A.M. PEAK HOUR
715-815



WILTEC

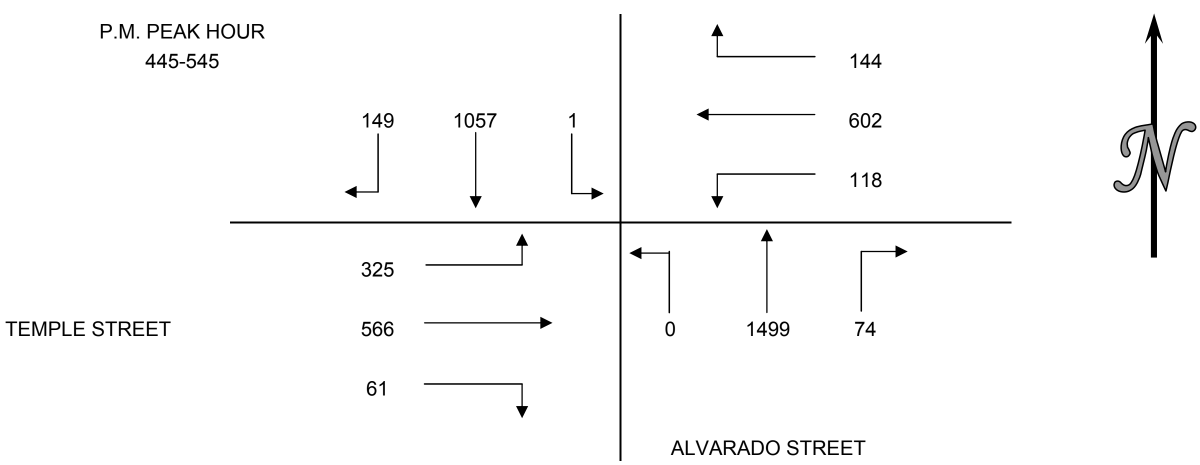
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: TUESDAY, MAY 30, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S ALVARADO STREET
E/W TEMPLE STREET

15 MIN COUNTS													
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-315	35	234	0	31	105	33	21	281	1	12	64	61	878
315-330	43	244	0	34	126	36	14	317	0	14	95	55	978
330-345	40	212	0	31	119	22	19	286	2	15	98	68	912
345-400	43	241	0	25	150	33	14	353	0	14	105	52	1030
400-415	24	249	0	43	141	27	10	339	0	23	102	83	1041
415-430	34	276	0	36	126	29	11	290	0	12	104	101	1019
430-445	30	220	0	28	117	19	15	327	0	11	118	88	973
445-500	29	249	0	36	143	33	17	357	0	13	107	87	1071
500-515	33	249	0	26	122	28	23	371	0	17	134	82	1085
515-530	53	325	1	26	188	30	13	396	0	15	140	82	1269
530-545	34	234	0	56	149	27	21	375	0	16	185	74	1171
545-600	42	212	0	31	140	20	17	364	0	14	128	72	1040

HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
300-400	161	931	0	121	500	124	68	1237	3	55	362	236	3798
315-415	150	946	0	133	536	118	57	1295	2	66	400	258	3961
330-430	141	978	0	135	536	111	54	1268	2	64	409	304	4002
345-445	131	986	0	132	534	108	50	1309	0	60	429	324	4063
400-500	117	994	0	143	527	108	53	1313	0	59	431	359	4104
415-515	126	994	0	126	508	109	66	1345	0	53	463	358	4148
430-530	145	1043	1	116	570	110	68	1451	0	56	499	339	4398
445-545	149	1057	1	144	602	118	74	1499	0	61	566	325	4596
500-600	162	1020	1	139	599	105	74	1506	0	62	587	310	4565



WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

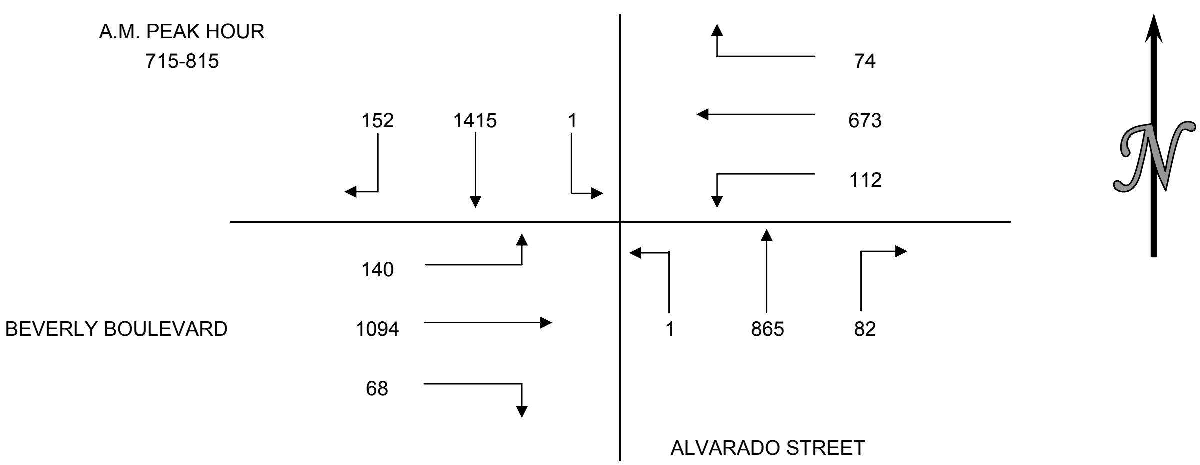
CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 24, 2006
PERIOD: 7:00 AM TO 10:00 AM
INTERSECTION: N/S ALVARADO STREET
E/W BEVERLY BOULEVARD

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	38	338	1	15	171	24	21	211	0	22	215	32	1088
715-730	34	335	0	14	208	31	18	210	1	10	291	25	1177
730-745	39	357	0	22	170	30	21	231	0	20	284	37	1211
745-800	46	373	1	16	149	28	26	207	0	20	279	40	1185
800-815	33	350	0	22	146	23	17	217	0	18	240	38	1104
815-830	28	367	1	11	110	22	20	192	0	24	268	19	1062
830-845	30	388	0	11	124	28	14	171	0	24	223	30	1043
845-900	39	399	1	11	136	25	20	174	0	25	229	26	1085
900-915	32	333	2	18	118	29	17	166	0	22	211	24	972
915-930	40	353	0	19	97	24	16	173	0	11	149	20	902
930-945	38	325	0	11	92	20	20	180	1	18	154	30	889
945-1000	32	346	0	15	112	21	17	183	0	15	125	24	890

HOUR TOTALS

TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	157	1403	2	67	698	113	86	859	1	72	1069	134	4661
715-815	152	1415	1	74	673	112	82	865	1	68	1094	140	4677
730-830	146	1447	2	71	575	103	84	847	0	82	1071	134	4562
745-845	137	1478	2	60	529	101	77	787	0	86	1010	127	4394
800-900	130	1504	2	55	516	98	71	754	0	91	960	113	4294
815-915	129	1487	4	51	488	104	71	703	0	95	931	99	4162
830-930	141	1473	3	59	475	106	67	684	0	82	812	100	4002
845-945	149	1410	3	59	443	98	73	693	1	76	743	100	3848
900-1000	142	1357	2	63	419	94	70	702	1	66	639	98	3653



WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

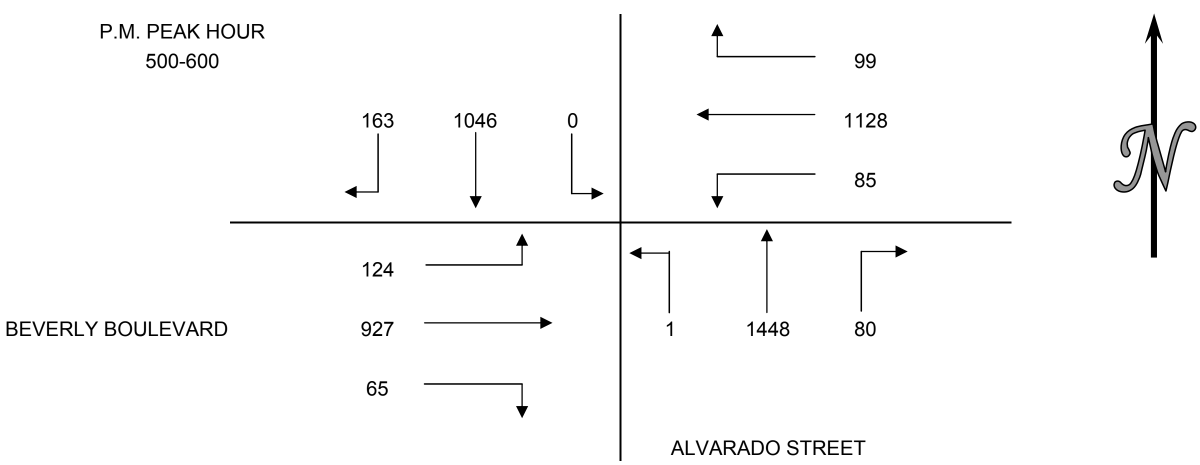
CLIENT: KAKU ASSOCIATES
PROJECT: SR-2 GLENDALE INTERCHANGE
DATE: WEDNESDAY, MAY 24, 2006
PERIOD: 3:00 PM TO 6:00 PM
INTERSECTION: N/S ALVARADO STREET
E/W BEVERLY BOULEVARD

15 MIN COUNTS

PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	36	233	0	12	141	26	19	255	0	18	142	42	924
315-330	32	216	0	21	164	24	19	297	1	22	136	43	975
330-345	33	254	0	23	170	18	14	269	1	19	197	35	1033
345-400	25	249	0	27	167	29	10	299	1	21	177	33	1038
400-415	31	252	0	24	165	17	23	315	2	13	204	42	1088
415-430	35	237	0	13	183	23	14	302	0	18	183	28	1036
430-445	34	276	1	15	200	26	23	323	0	22	186	42	1148
445-500	43	270	1	28	246	25	13	326	0	16	218	35	1221
500-515	40	258	0	25	253	21	18	343	0	15	221	28	1222
515-530	40	267	0	28	311	19	16	393	1	17	223	31	1346
530-545	38	255	0	28	273	20	19	358	0	11	229	37	1268
545-600	45	266	0	18	291	25	27	354	0	22	254	28	1330

HOUR TOTALS

TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	126	952	0	83	642	97	62	1120	3	80	652	153	3970
315-415	121	971	0	95	666	88	66	1180	5	75	714	153	4134
330-430	124	992	0	87	685	87	61	1185	4	71	761	138	4195
345-445	125	1014	1	79	715	95	70	1239	3	74	750	145	4310
400-500	143	1035	2	80	794	91	73	1266	2	69	791	147	4493
415-515	152	1041	2	81	882	95	68	1294	0	71	808	133	4627
430-530	157	1071	2	96	1010	91	70	1385	1	70	848	136	4937
445-545	161	1050	1	109	1083	85	66	1420	1	59	891	131	5057
500-600	163	1046	0	99	1128	85	80	1448	1	65	927	124	5166



City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South GLENDALE BL

East/West GLENDALE FW S/B WATERLOO ST OFF RAMP

Day: TUESDAY Date: SEPTEMBER 11, 2007 Weather: SUNNY

Hours: 7-10AM 3-6PM

School Day: YES District: HW I/S CODE 0

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	0	7	0
BIKES	0	0	0	0
BUSES	0	0	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	7.00	0	7.00	20	8.15	0	7.00
PM PK 15 MIN	0	3.00	0	3.00	9	3.00	0	3.00
AM PK HOUR	0	7.00	0	7.00	68	7.30	0	7.00
PM PK HOUR	0	3.00	0	3.00	20	3.00	0	3.00

NORTHBOUND Approach / **SOUTHBOUND Approach** / **TOTAL** / **XING S/L** / **XING N/L**

Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
7-8	0	0	0	0	*7-8*	0	0	0	0	0	0	0	0	0
8-9	0	0	0	0	*8-9*	0	0	0	0	0	0	0	0	0
9-10	0	0	0	0	*9-10*	0	0	0	0	0	0	0	0	0
3-4	0	0	0	0	*3-4*	0	0	0	0	0	0	0	0	0
4-5	0	0	0	0	*4-5*	0	0	0	0	0	0	0	0	0
5-6	0	0	0	0	*5-6*	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	TOTAL	0	0	0	0	0	0	0	0	0

EASTBOUND Approach / **WESTBOUND Approach** / **TOTAL** / **XING W/L** / **XING E/L**

Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
7-8	25	0	30	55	*7-8*	0	0	0	0	55	7	4	0	0
8-9	25	0	36	61	*8-9*	0	0	0	0	61	5	0	0	0
9-10	16	0	32	48	*9-10*	0	0	0	0	48	2	0	0	0
3-4	8	0	12	20	*3-4*	0	0	0	0	20	2	0	0	0
4-5	3	0	4	7	*4-5*	0	0	0	0	7	0	0	0	0
5-6	4	0	5	9	*5-6*	0	0	0	0	9	3	0	0	0
TOTAL	81	0	119	200	TOTAL	0	0	0	0	200	19	4	0	0

(Rev Oct 06)

City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South GLENDALE BL

East/West GLENDALE FW S/B FARGO ST OFF RAMP

Day: TUESDAY Date: SEPTEMBER 11, 2007 Weather: SUNNY

Hours: 7-10AM 3-6PM

School Day: YES District: HW I/S CODE 19092

	N/B	S/B	E/B	W/B
DUAL-WHEELED	41	74	2	98
BIKES	5	4	0	0
BUSES	25	26	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	87	8.00	280	8.15	17	8.15	315	7.00
PM PK 15 MIN	128	3.00	178	5.15	27	3.00	63	5.30
AM PK HOUR	314	7.45	1016	7.45	40	8.00	1100	7.00
PM PK HOUR	473	5.00	644	5.00	77	3.00	212	5.00

NORTHBOUND Approach					**SOUTHBOUND Approach**					**TOTAL**	**XING S/L**		**XING N/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
7-8	22	283	0	305	*7-8*	0	849	24	873	1178	0	0	2	0
8-9	22	281	0	303	*8-9*	0	978	32	1010	1313	0	0	3	0
9-10	16	246	0	262	*9-10*	0	740	18	758	1020	0	0	0	0
3-4	33	429	0	462	*3-4*	0	494	23	517	979	0	0	4	1
4-5	25	434	0	459	*4-5*	0	539	20	559	1018	0	0	3	0
5-6	28	445	0	473	*5-6*	0	630	14	644	1117	0	0	3	1
TOTAL	146	2118	0	2264	TOTAL	0	4230	131	4361	6625	0	0	15	2

EASTBOUND Approach					**WESTBOUND Approach**					**TOTAL**	**XING W/L**		**XING E/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
7-8	14	0	7	21	*7-8*	1012	21	67	1100	1121	12	3	4	0
8-9	22	0	18	40	*8-9*	753	17	49	819	859	13	0	3	0
9-10	13	0	6	19	*9-10*	910	24	79	1013	1032	5	0	2	0
3-4	30	0	47	77	*3-4*	35	58	57	150	227	10	2	1	0
4-5	26	0	19	45	*4-5*	49	32	89	170	215	11	0	0	0
5-6	20	0	18	38	*5-6*	64	41	107	212	250	10	1	2	0
TOTAL	125	0	115	240	TOTAL	2823	193	448	3464	3704	61	6	12	0

(Rev Oct 06)

City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South SILVER LAKE BL

East/West DUANE ST

Day: TUESDAY Date: SEPMTEMBER 11, 2007 Weather: SUNNY

Hours: 7-10AM 3-6PM

School Day: YES District: HW I/S CODE 0

	N/B	S/B	E/B	W/B
DUAL-WHEELED	35	60	0	2
BIKES	11	0	0	10
BUSES	1	0	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	175	8.30	314	7.15	0	7.00	23	9.15
PM PK 15 MIN	369	5.15	197	4.30	0	3.00	25	3.30
AM PK HOUR	601	7.45	1078	7.00	0	7.00	77	8.30
PM PK HOUR	1364	5.00	750	4.30	0	3.00	68	3.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	502	10	512
8-9	0	578	13	591
9-10	0	511	11	522
3-4	0	868	32	900
4-5	0	994	23	1017
5-6	0	1331	33	1364
TOTAL	0	4784	122	4906

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	1	1077	0	1078
8-9	3	921	0	924
9-10	4	976	0	980
3-4	9	534	0	543
4-5	7	666	0	673
5-6	8	719	0	727
TOTAL	32	4893	0	4925

Hours	**TOTAL** N-S	**XING S/L** Ped	Sch	**XING N/L** Ped	Sch
7-8	1590	8	0	9	0
8-9	1515	13	0	23	0
9-10	1502	10	0	22	0
3-4	1443	2	0	1	0
4-5	1690	3	0	4	0
5-6	2091	9	0	18	0
TOTAL	9831	45	0	77	0

EASTBOUND Approach **NONE**

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	19	0	23	42
8-9	37	0	20	57
9-10	50	0	19	69
3-4	54	0	14	68
4-5	27	0	12	39
5-6	26	0	14	40
TOTAL	213	0	102	315

Hours	**TOTAL** E-W	**XING W/L** Ped	Sch	**XING E/L** Ped	Sch
7-8	42	0	0	26	0
8-9	57	0	0	27	0
9-10	69	0	0	23	0
3-4	68	0	0	14	0
4-5	39	0	0	17	0
5-6	40	0	0	18	0
TOTAL	315	0	0	125	0

(Rev Oct 06)

City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South GLENDALE BL

East/West AARON ST

Day: WEDNESDAY Date: SEPTEMBER 12, 2007 Weather: SUNNY

Hours: 7-10AM 2-5PM

School Day: YES District: HW I/S CODE 19180

	N/B	S/B	E/B	W/B
DUAL-WHEELED	358	519	1	2
BIKES	5	2	1	2
BUSES	49	51	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	605	7.45	927	7.45	17	7.15	23	8.00
PM PK 15 MIN	930	4.30	553	3.45	12	3.45	15	4.30
AM PK HOUR	2155	7.30	3634	7.00	40	7.15	72	8.00
PM PK HOUR	3644	4.00	2011	3.30	37	3.45	50	4.00

NORTHBOUND Approach					**SOUTHBOUND Approach**					**TOTAL**	**XING S/L**		**XING N/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	N-S	Ped	Sch	Ped	Sch
7-8	5	1916	11	1932	*7-8*	5	3625	4	3634	5566	1	0	1	1
8-9	4	1875	12	1891	*8-9*	6	3144	8	3158	5049	0	0	1	0
9-10	7	1573	21	1601	*9-10*	7	2763	9	2779	4380	0	0	0	0
2-3	15	2460	7	2482	*2-3*	4	1559	14	1577	4059	0	0	4	0
3-4	17	3281	19	3317	*3-4*	11	1936	13	1960	5277	10	3	1	0
4-5	14	3610	20	3644	*4-5*	3	1920	44	1967	5611	10	0	2	2
TOTAL	62	14715	90	14867	TOTAL	36	14947	92	15075	29942	21	3	9	3

EASTBOUND Approach					**WESTBOUND Approach**					**TOTAL**	**XING W/L**		**XING E/L**	
Hours	Lt	Th	Rt	Total	Hours	Lt	Th	Rt	Total	E-W	Ped	Sch	Ped	Sch
7-8	16	1	22	39	*7-8*	36	1	6	43	82	9	1	7	0
8-9	17	1	11	29	*8-9*	63	2	7	72	101	19	0	10	0
9-10	10	0	7	17	*9-10*	40	1	5	46	63	12	0	9	0
2-3	8	0	10	18	*2-3*	16	1	6	23	41	7	0	4	0
3-4	16	0	12	28	*3-4*	23	2	10	35	63	8	1	8	0
4-5	12	1	22	35	*4-5*	40	1	9	50	85	12	9	7	0
TOTAL	79	3	84	166	TOTAL	218	8	43	269	435	67	11	45	0

(Rev Oct 06)

City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South GLENDALE BL

East/West ALLESANDRO ST

Day: THURSDAY Date: SEPTEMBER 13, 2007 Weather: SUNNY

Hours: 7-10AM 2-5PM

School Day: YES District: HW I/S CODE 19873

	N/B	S/B	E/B	W/B
DUAL-WHEELED	322	225	0	43
BIKES	4	0	0	1
BUSES	42	22	0	34

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	537	8.00	481	7.15	0	7.00	122	8.00
PM PK 15 MIN	886	4.45	266	3.00	0	2.00	83	4.30
AM PK HOUR	2015	7.45	1807	7.00	0	7.00	433	7.45
PM PK HOUR	3312	4.00	1037	3.00	0	2.00	287	3.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	1513	57	1570
8-9	0	1899	50	1949
9-10	0	1399	44	1443
2-3	0	1980	62	2042
3-4	0	2705	89	2794
4-5	0	3230	82	3312
TOTAL	0	12726	384	13110

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	62	1745	0	1807
8-9	41	1610	0	1651
9-10	60	1114	0	1174
2-3	69	483	0	552
3-4	86	951	0	1037
4-5	47	541	0	588
TOTAL	365	6444	0	6809

Hours	**TOTAL** N-S	**XING S/L** Ped	**XING S/L** Sch	**XING N/L** Ped	**XING N/L** Sch
7-8	3377	0	0	2	0
8-9	3600	0	0	3	0
9-10	2617	0	0	1	0
2-3	2594	0	0	3	0
3-4	3831	0	0	5	0
4-5	3900	0	0	4	0
TOTAL	19919	0	0	18	0

EASTBOUND Approach **NONE**

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
2-3	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	201	0	131	332
8-9	280	0	152	432
9-10	170	0	121	291
2-3	144	0	86	230
3-4	125	0	122	247
4-5	123	0	146	269
TOTAL	1043	0	758	1801

Hours	**TOTAL** E-W	**XING W/L** Ped	**XING W/L** Sch	**XING E/L** Ped	**XING E/L** Sch
7-8	332	0	0	10	1
8-9	432	0	0	12	0
9-10	291	0	0	12	0
2-3	230	0	0	9	0
3-4	247	0	0	8	1
4-5	269	0	0	5	1
TOTAL	1801	0	0	56	3

(Rev Oct 06)

APPENDIX C

INTERSECTION LEVEL OF SERVICE WORKSHEETS

EXISTING CONDITIONS

EXAM

CalcaDB

March 12, 2007 ,Monday 06:00:20 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Aaron St I/S No: 3

AM/PM: AM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	5	1808	10	7	3256	5	65	2	4	16	0	16
AMBIENT												
RELATED												
PROJECT												
TOTAL	5	1808	10	7	3256	5	65	2	4	16	0	16

LANE							
NORTHBOUND	1		2		1		
SOUTHBOUND	1		2		1		
WESTBOUND				1			
EASTBOUND				1			

SIGNAL	NB Phasing	NB RTOR	SB Phasing	SB RTOR	WB Phasing	WB RTOR	EB Phasing	EB RTOR
	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	1087	7
EastBound	32	16
WestBound	71	65
NorthBound	606	5

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

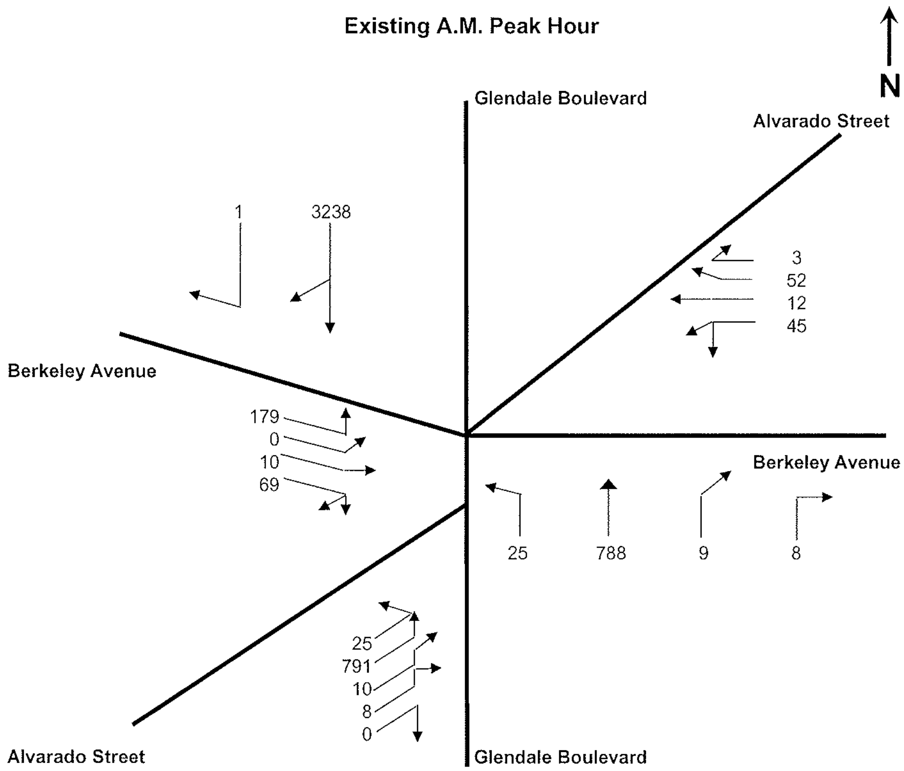
$$V/C = \frac{5 + 1087 + 65 + 32}{*1500} = 0.723$$

LOS = C

Developed by Chun Wong, 12/94

Intersection 4

Existing A.M. Peak Hour



Phase 1) $\frac{1 + 3238}{4}$

&

$\frac{788 + 9 + 8}{3}$

= **810**

Phase 2) $\left\{ \frac{788 + 9 + 8}{3} \right\} - 810$

or

$\frac{25}{1}$

= **25**

Phase 3) $\frac{25 + 791 + 10 + 8 + 0}{3}$

= **278**

Phase 4) $\frac{3 + 52 + 12}{1} + \frac{0 + 179}{1}$

or

$\frac{10 + 69}{1} + \frac{45}{1}$

= **246**

Critical Volumes = 810 + 25 + 278 + 246

= 1359

V/C = $\frac{1359}{1375}$ - 0.10 = 0.888 LOS D

EXAM

March 12, 2007 ,Monday 06:00:20 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Scott Av I/S No: 5

AM/PM: AM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	7	744	16	42	2178	18	23	10	122	39	20	31
AMBIENT												
RELATED												
PROJECT												
TOTAL	7	744	16	42	2178	18	23	10	122	39	20	31

	NB							SB							WB							EB						
LANE	1		2		1			1		2		1						1							1			

	NB Phasing	NB RTOR	SB Phasing	SB RTOR	WB Phasing	WB RTOR	EB Phasing	EB RTOR
SIGNAL	Perm	Auto	Prot-Fix	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

SouthBound
A: 732
B: 42

EastBound
A: 90
B: 39

WestBound
A: 155
B: 23

NorthBound
A: 253
B: 7

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{7 + 732 + 155 + 39}{*1425} = 0.585$$

LOS = A

Developed by Chun Wong, 12/94

EXAM

March 12, 2007 ,Monday 06:00:20 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd | W/E: Montana St | I/S No: 6

AM/PM: AM | Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	17	508	1	140	1961	59	46	73	125	140	96	44
AMBIENT												
RELATED												
PROJECT												
TOTAL	17	508	1	140	1961	59	46	73	125	140	96	44

LANE							
NORTHBOUND	1		2		1		
SOUTHBOUND	1		2			1	
WESTBOUND	1		1		1		
EASTBOUND	1		1		1		

SIGNAL	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Perm	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	981	140
EastBound	70	140
WestBound	125	46
NorthBound	170	17

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{17 + 981 + 125 + 140}{*1500} = 0.772$$

LOS = C

Developed by Chun Wong, 12/94

EXAM

March 12, 2007 ,Monday 06:00:20 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd   W/E: Park Av   I/S No: 7

AM/PM: AM   Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	49	537	55	121	1837	39	58	17	60	14	18	123
AMBIENT												
RELATED												
PROJECT												
TOTAL	49	537	55	121	1837	39	58	17	60	14	18	123

LANE	LT	LT/TH	TH	LT/TH/RT	TH/RT	RT	LT/RT
NORTHBOUND	1		1		1		
SOUTHBOUND	1		2			1	
WESTBOUND	1		1			1	
EASTBOUND	1		1			1	

SIGNAL	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Free
WESTBOUND	Perm	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	919	121
EastBound	123	14
WestBound	60	58
NorthBound	296	49

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{49 + 919 + 58 + 123}{*1500} = 0.696$$

LOS = B

Developed by Chun Wong, 12/94

EXAM

March 12, 2007 ,Monday 06:00:20 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S:	Glendale Blvd	W/E:	Santa Ynez St	I/S No:	8
AM/PM:	AM	Comments:	EXISTING CONDITIONS (YEAR 2006)		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	4	613	0	0	2036	18	0	0	0	30	0	13
AMBIENT												
RELATED												
PROJECT												
TOTAL	4	613	0	0	2036	18	0	0	0	30	0	13

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE		1	1							1		1																1

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	<none>	Perm	Auto			Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	1027	0
EastBound	43	30
WestBound	0	0
NorthBound	319	4

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{4 + 1027 + 0 + 43}{*1500} = 0.646$$

LOS = B

EXAM

CalcaDB

March 12, 2007 ,Monday 06:00:20 PM

INTERSECTION DATA SUMMARY SHEET

N/S:	Glendale Blvd	W/E:	Bellevue Av	I/S No:	9
AM/PM:	AM	Comments:	EXISTING CONDITIONS (YEAR 2006)		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	373	131	42	1940	0	433	0	105	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	373	131	42	1940	0	433	0	105	0	0	0

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE			2			1		1		2					2					1								

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Prot-Fix	<none>	Perm	Auto		

Critical Movements Diagram

SouthBound
A: 970
B: 42

EastBound
A: 0
B: 0

WestBound
A: 84
B: 238

NorthBound
A: 187
B: 0

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{0 + 970 + 238 + 0}{*1425} = 0.778$$

LOS = C

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EXAM

CalcaDB

March 12, 2007 ,Monday 06:00:20 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Temple St I/S No: 10

AM/PM: AM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	50	268	19	187	1570	122	38	358	77	230	507	145
AMBIENT												
RELATED												
PROJECT												
TOTAL	50	268	19	187	1570	122	38	358	77	230	507	145

LANE							
NORTHBOUND	1		1		1		
SOUTHBOUND	1		1		1		
WESTBOUND	1		1		1		
EASTBOUND	1		1		1		

SIGNAL	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Prot-Var	Auto
EASTBOUND	Prot-Var	Auto

Critical Movements Diagram

SouthBound
A: 846
B: 187

EastBound
A: 326
B: 230

WestBound
A: 218
B: 38

NorthBound
A: 144
B: 50

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

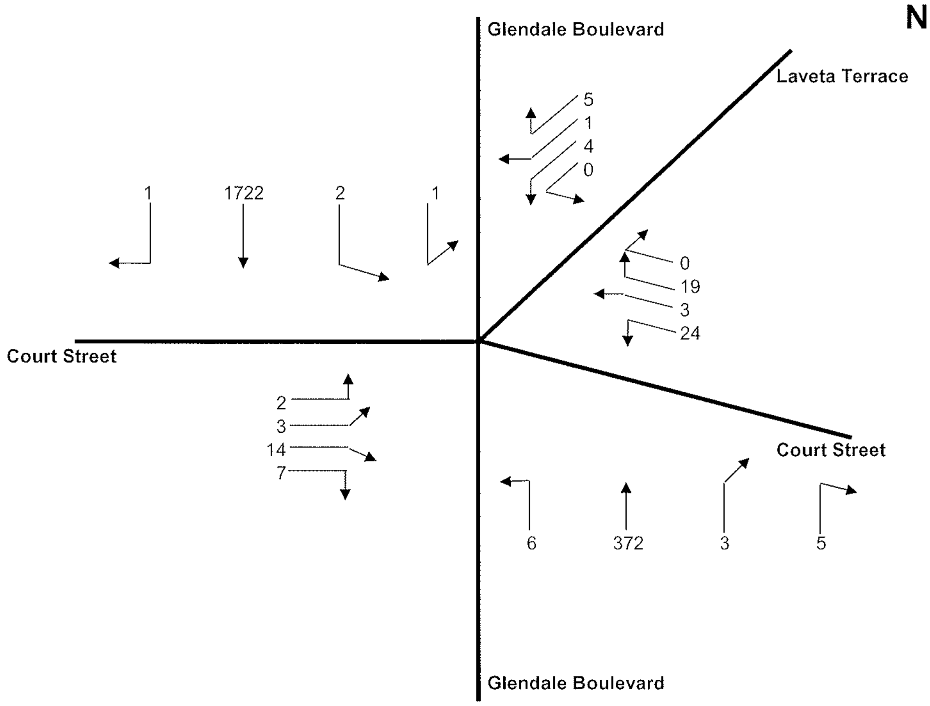
$$V/C = \frac{50 + 846 + 218 + 230}{*1375} = 0.907$$

LOS = E

Developed by Chun Wong, 12/94

Intersection 11

Existing A.M. Peak Hour



Phase 1) $\frac{2 + 1}{1}$

& $\frac{1 + 1722}{2}$

= **3**

Phase 2) $\frac{1 + 1722}{2} - 3 + \frac{6}{1}$

or $\frac{372 + 3 + 5}{2}$

= **865**

Phase 3) $\frac{0 + 19 + 3}{1} + \frac{2 + 3}{1}$

or $\frac{14 + 7}{1} + \frac{24}{1}$

= **45**

Phase 4) $\frac{5 + 1 + 4 + 0}{1}$

= **10**

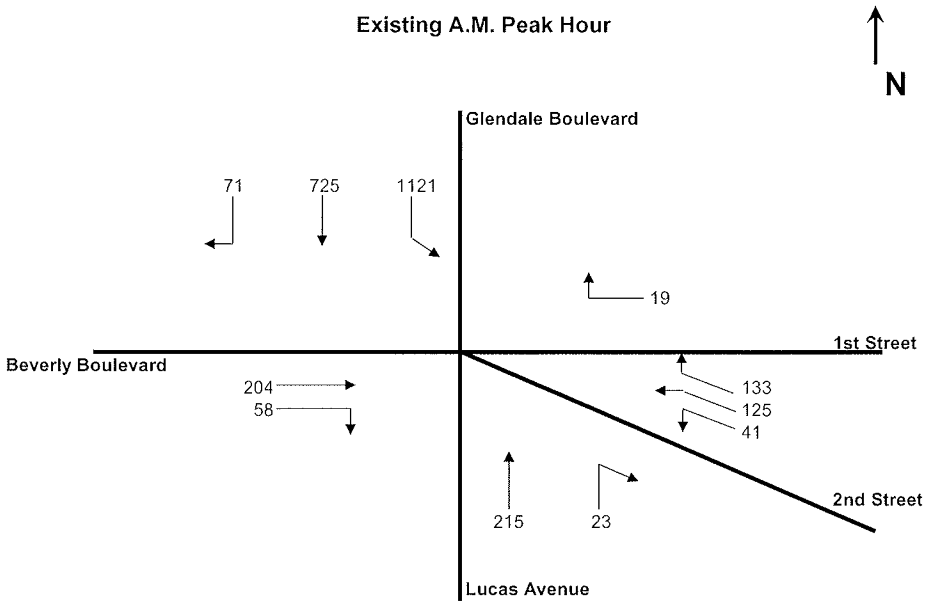
Critical Volumes = 3 + 865 + 45 + 10

= **923**

V/C = $\frac{923}{1375}$ **- 0.07 = 0.601 LOS B**

Intersection 12

Existing A.M. Peak Hour



Phase 1) $\frac{204 + 58}{2}$

$= \mathbf{131}$

Phase 2) $\frac{215 + 23}{2}$

&

$\frac{71}{1}$ & $\frac{725}{1}$

$= \mathbf{119}$

Phase 3) $\frac{19}{1}$

& $\left\{ \frac{725}{1} - 119 \right\}$ & $\left\{ \frac{1121}{2} \right\}$

$= \mathbf{19}$

Phase 4) $\left\{ \frac{1121}{2} - 19 \right\}$

or $\left\{ \frac{725}{1} - 119 - 19 \right\}$

$= \mathbf{587}$

& $\frac{133}{2}$

Phase 5) $\frac{133}{2} - 587$

or $\left\{ \frac{125 + 41}{1} \right\}$

$= \mathbf{166}$

Critical Volumes = 131 + 119 + 19 + 587 + 166

= 1022

V/C = $\mathbf{\frac{1022}{1375} - 0.10 = 0.643}$ **LOS B**

EXAM

CalcaDB

March 12, 2007 ,Monday 06:00:20 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Montana St I/S No: 13

AM/PM: AM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	15	782	113	31	1406	4	63	8	28	10	34	13
AMBIENT												
RELATED												
PROJECT												
TOTAL	15	782	113	31	1406	4	63	8	28	10	34	13

LANE

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE		1	1		1				1	1		1				1				1					1			

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

SouthBound
A: 511
B: 31

EastBound
A: 57
B: 10

WestBound
A: 71
B: 63

NorthBound
A: 328
B: 15

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{15 + 511 + 63 + 57}{*1500} = 0.361$$

LOS = A

Developed by Chun Wong, 12/94

EXAM

March 12, 2007 ,Monday 06:00:20 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Reservoir St I/S No: 14

AM/PM: AM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND LT	NORTHBOUND TH	NORTHBOUND RT	SOUTHBOUND LT	SOUTHBOUND TH	SOUTHBOUND RT	WESTBOUND LT	WESTBOUND TH	WESTBOUND RT	EASTBOUND LT	EASTBOUND TH	EASTBOUND RT
EXISTING	26	853	28	6	1451	15	45	30	44	28	26	32
AMBIENT												
RELATED												
PROJECT												
TOTAL	26	853	28	6	1451	15	45	30	44	28	26	32

LANE

	LT	LT-TH	TH	LT-TH-RT	TH-RT	RT	LT-RT
NORTHBOUND		1	1		1		
SOUTHBOUND		1	1		1		
WESTBOUND	1				1		
EASTBOUND	1		1			1	

SIGNAL

	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Perm	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	497	6
EastBound	32	28
WestBound	74	45
NorthBound	346	26

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{26 + 497 + 74 + 28}{*1500} = 0.347$$

LOS = A

Developed by Chun Wong, 12/94

EXAM

March 12, 2007 ,Monday 06:00:20 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S:	Alvarado St	W/E:	Sunset Blvd	I/S No:	15
AM/PM:	AM	Comments:	EXISTING CONDITIONS (YEAR 2006)		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	755	104	0	1366	112	95	721	18	150	1177	130
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	755	104	0	1366	112	95	721	18	150	1177	130

	NB							SB							WB							EB						
LANE			2		1					2		1			1		2		1			1		2		1		

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Prot-Fix	Auto	Perm	Auto

Critical Movements Diagram

SouthBound
A: 493
B: 0

EastBound
A: 436
B: 150

WestBound
A: 246
B: 95

NorthBound
A: 286
B: 0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{0 + 493 + 95 + 436}{*1425} = 0.649$$

LOS = B

Developed by Chun Wong, 12/94

EXAM

March 12, 2007 ,Monday 06:00:20 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St | W/E: Kent St | I/S No: 16

AM/PM: AM | Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	30	832	0	0	1673	34	0	0	0	63	0	13
AMBIENT												
RELATED												
PROJECT												
TOTAL	30	832	0	0	1673	34	0	0	0	63	0	13

LANE

NORTHBOUND		1	2				
SOUTHBOUND			2		1		
WESTBOUND							
EASTBOUND							1

SIGNAL

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	<none>	<none>	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	569	0
EastBound	76	63
WestBound	0	0
NorthBound	337	30

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{30 + 569 + 0 + 76}{*1500} = 0.380$$

LOS = A

Developed by Chun Wong, 12/94

EXAM

CalcaDB

March 12, 2007 ,Monday 06:00:20 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St | W/E: US 101 NB Ramps | I/S No: 17

AM/PM: AM | Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	265	826	0	0	1418	292	264	4	79	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	265	826	0	0	1418	292	264	4	79	0	0	0

	NB LT	NB LT+TH	NB TH	NB LT+TH+RT	NB TH+RT	NB RT	NB LT+RT	SB LT	SB LT+TH	SB TH	SB LT+TH+RT	SB TH+RT	SB RT	SB LT+RT	WB LT	WB LT+TH	WB TH	WB LT+TH+RT	WB TH+RT	WB RT	WB LT+RT	EB LT	EB LT+TH	EB TH	EB LT+TH+RT	EB TH+RT	EB RT	EB LT+RT
LANE	1		3							2		1			1				1									

	NB Phasing	NB RTOR	SB Phasing	SB RTOR	WB Phasing	WB RTOR	EB Phasing	EB RTOR
SIGNAL	Prot-Fix	Auto	Perm	Auto	Perm	Auto	<none>	<none>

Critical Movements Diagram

SouthBound
A: 570
B: 0

EastBound
A: 0
B: 0

WestBound
A: 83
B: 264

NorthBound
A: 275
B: 265

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{265 + 570 + 264 + 0}{{}^{*}1425} = 0.701$$

LOS = C

Developed by Chun Wong, 12/94

EXAM

CalcaDB

March 12, 2007 ,Monday 06:00:20 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: US-101 SB Ramps I/S No: 18

AM/PM: AM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	932	346	195	1487	0	0	0	0	173	0	141
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	932	346	195	1487	0	0	0	0	173	0	141

LANE

NORTHBOUND			2		1		
SOUTHBOUND		1	2				
WESTBOUND							
EASTBOUND	1					1	

SIGNAL

	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	<none>	<none>
EASTBOUND	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	744	195
EastBound	141	173
WestBound	0	0
NorthBound	426	0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{0 + 744 + 0 + 173}{*1500} = 0.541$$

LOS = A

EXAM

CalcaDB

March 12, 2007 ,Monday 06:00:20 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Temple St I/S No: 19

AM/PM: AM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	939	61	0	1426	139	125	380	98	285	454	58
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	939	61	0	1426	139	125	380	98	285	454	58

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE		1	1		1				1	1		1			1		1		1			1		1		1		

	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Prot-Var	Auto	Prot-Var	Auto

Critical Movements Diagram

SouthBound
A: 522
B: 0

EastBound
A: 256
B: 285

WestBound
A: 239
B: 125

NorthBound
A: 333
B: 0

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{0 + 522 + 239 + 285}{*1375} = 0.691$$

LOS = B

Developed by Chun Wong, 12/94

EXAM

CalcaDB

March 12, 2007 ,Monday 06:00:20 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St | W/E: Beverly Blvd | I/S No: 20

AM/PM: AM | Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	866	82	0	1416	152	112	673	74	140	1094	68
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	866	82	0	1416	152	112	673	74	140	1094	68

LANE

NORTHBOUND		1	1		1		
SOUTHBOUND		1	2			1	
WESTBOUND		1	2			1	
EASTBOUND	1		2		1		

SIGNAL

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	472	0
EastBound	387	140
WestBound	337	112
NorthBound	316	0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{0 + 472 + 112 + 387}{*1500} = 0.577$$

LOS = A

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EXPM

March 12, 2007 ,Monday 06:01:46 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd | W/E: Aaron St | I/S No: 3

AM/PM: PM | Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	23	3293	8	18	2001	9	30	2	12	12	1	15
AMBIENT												
RELATED												
PROJECT												
TOTAL	23	3293	8	18	2001	9	30	2	12	12	1	15

LANE

	LT	LT/TH	TH	LT/TH/RT	TH/RT	RT	LT/RT
NORTHBOUND	1		2		1		
SOUTHBOUND	1		2		1		
WESTBOUND				1			
EASTBOUND				1			

SIGNAL

	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Perm	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	670	18
EastBound	28	12
WestBound	44	30
NorthBound	1100	23

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

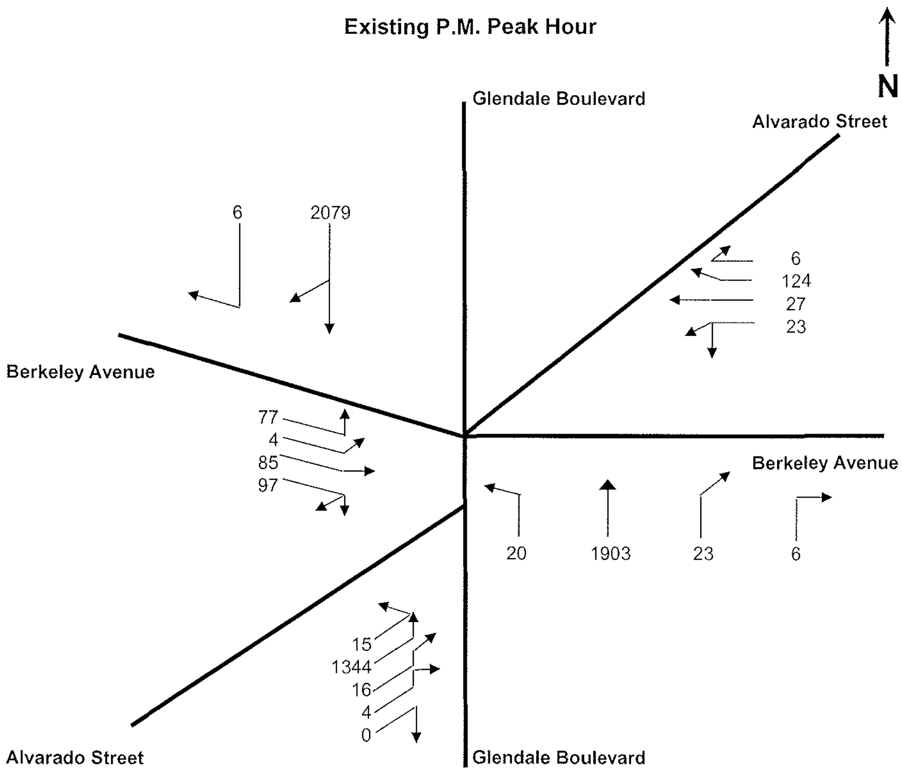
$$V/C = \frac{1100 + 18 + 30 + 28}{*1500} = 0.714$$

LOS = C

Developed by Chun Wong, 12/94

Intersection 4

Existing P.M. Peak Hour



Phase 1) $\frac{6 + 2079}{4}$

&

$\frac{1903 + 23 + 6}{3}$

= **521**

Phase 2) $\left\{\frac{1903 + 23 + 6}{3}\right\} - 521$

or

$\frac{20}{1}$

= **123**

Phase 3) $\frac{15 + 1344 + 16 + 4 + 0}{3}$

= **460**

Phase 4) $\frac{6 + 124 + 27}{1} + \frac{4 + 77}{1}$

or

$\frac{85 + 97}{1} + \frac{23}{1}$

= **238**

Critical Volumes = 521 + 123 + 460 + 238

= 1342

V/C = $\frac{1342}{1375}$ - 0.10 = 0.876 LOS D

EXPM

March 12, 2007 ,Monday 06:01:46 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Scott Av I/S No: 5

AM/PM: PM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	7	1755	35	104	1153	22	41	10	153	27	25	33
AMBIENT												
RELATED												
PROJECT												
TOTAL	7	1755	35	104	1153	22	41	10	153	27	25	33

LANE (NORTHBOUND)	1		2		1		
LANE (SOUTHBOUND)	1		2		1		
LANE (WESTBOUND)				1			
LANE (EASTBOUND)				1			

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Prot-Fix	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

SouthBound
A: 392
B: 104

EastBound
A: 85
B: 27

WestBound
A: 204
B: 41

NorthBound
A: 597
B: 7

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{597 + 104 + 204 + 27}{*1425} = 0.584$$

LOS = A

Developed by Chun Wong, 12/94

EXPM

CalcaDB

March 12, 2007 ,Monday 06:01:46 PM

INTERSECTION DATA SUMMARY SHEET

N/S:	Glendale Blvd	W/E:	Montana St	I/S No:	6
AM/PM:	PM	Comments:	EXISTING CONDITIONS (YEAR 2006)		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND LT	NORTHBOUND TH	NORTHBOUND RT	SOUTHBOUND LT	SOUTHBOUND TH	SOUTHBOUND RT	WESTBOUND LT	WESTBOUND TH	WESTBOUND RT	EASTBOUND LT	EASTBOUND TH	EASTBOUND RT
EXISTING	41	1551	12	139	964	107	23	93	195	68	144	56
AMBIENT												
RELATED												
PROJECT												
TOTAL	41	1551	12	139	964	107	23	93	195	68	144	56

LANE	1	2	3	4	5	6	7
NORTHBOUND	1		2		1		
SOUTHBOUND	1		2			1	
WESTBOUND	1		1		1		
EASTBOUND	1		1		1		

SIGNAL	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	482	139
EastBound	100	68
WestBound	195	23
NorthBound	521	41

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{521 + 139 + 195 + 68}{*1500} = 0.545$$

LOS = A

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EXPM

CalcaDB

March 12, 2007 ,Monday 06:01:46 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Park Av I/S No: 7

AM/PM: PM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	137	1569	111	100	886	44	67	46	143	15	28	124
AMBIENT												
RELATED												
PROJECT												
TOTAL	137	1569	111	100	886	44	67	46	143	15	28	124

	NB							SB							WB							EB						
LANE	1		1		1			1		2			1		1		1			1		1		1			1	

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Free	Perm	Auto	Perm	Auto

Critical Movements Diagram

SouthBound
A: 443
B: 100

EastBound
A: 124
B: 15

WestBound
A: 143
B: 67

NorthBound
A: 840
B: 137

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{840 + 100 + 67 + 124}{*1500} = 0.684$$

LOS = B

EXPM

March 12, 2007 ,Monday 06:01:46 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Santa Ynez St I/S No: 8

AM/PM: PM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	22	1840	0	0	1078	27	0	0	0	56	0	18
AMBIENT												
RELATED												
PROJECT												
TOTAL	22	1840	0	0	1078	27	0	0	0	56	0	18

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE		1	1							1		1																1

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	<none>	Perm	Auto			Perm	Auto

Critical Movements Diagram

SouthBound
A: 553
B: 0

EastBound
A: 74
B: 56

WestBound
A: 0
B: 0

NorthBound
A: 986
B: 22

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{986 + 0 + 0 + 74}{*1500} = 0.637$$

LOS = B

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CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Bellevue Av I/S No: 9

AM/PM: PM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	1703	438	106	959	0	297	0	156	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	1703	438	106	959	0	297	0	156	0	0	0

LANE

NORTHBOUND			2			1	
SOUTHBOUND	1		2				
WESTBOUND	2					1	
EASTBOUND							

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Prot-Fix	<none>	Perm	Auto		

Critical Movements Diagram

	A	B
SouthBound	480	106
EastBound	0	0
WestBound	103	163
NorthBound	852	0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{852 + 106 + 163 + 0}{{}^{*}1425} = 0.717$$

LOS = C

EXPM

March 12, 2007 ,Monday 06:01:46 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Temple St I/S No: 10

AM/PM: PM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	69	1399	28	84	688	173	34	489	223	301	538	84
AMBIENT												
RELATED												
PROJECT												
TOTAL	69	1399	28	84	688	173	34	489	223	301	538	84

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE	1		1		1			1		1		1			1		1		1			1		1		1		

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Prot-Var	Auto	Prot-Var	Auto

Critical Movements Diagram

	A	B
SouthBound	431	84
EastBound	311	301
WestBound	356	34
NorthBound	714	69

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{714 + 84 + 356 + 301}{*1375} = 0.988$$

LOS = E

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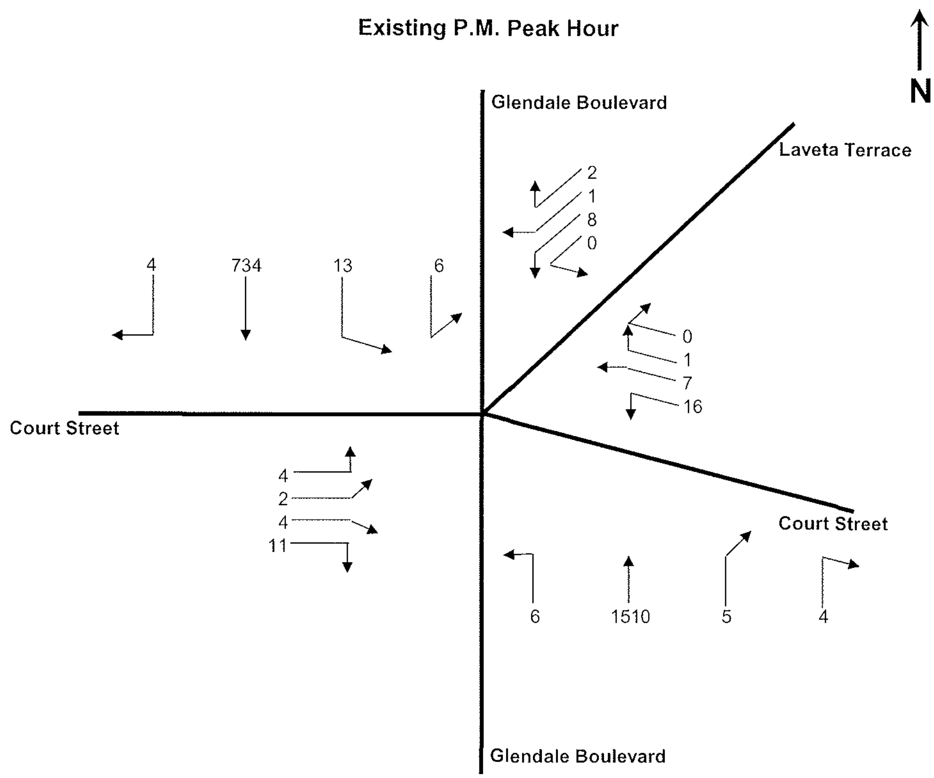
Intersection 11

Existing P.M. Peak Hour



Phase 1) $\frac{13 + 6}{1}$

&

$\frac{4 + 734}{2}$

= **19**

Phase 2) $\frac{4 + 734}{2} \quad - \quad 19 \quad + \quad \frac{6}{1}$

or

$\frac{1510 + 5 + 4}{2}$

= **760**

Phase 3) $\frac{0 + 1 + 7}{1} \quad + \quad \frac{4 + 2}{1}$

or

$\frac{4 + 11}{1} \quad + \quad \frac{16}{1}$

= **31**

Phase 4) $\frac{2 + 1 + 8 + 0}{1}$

= **11**

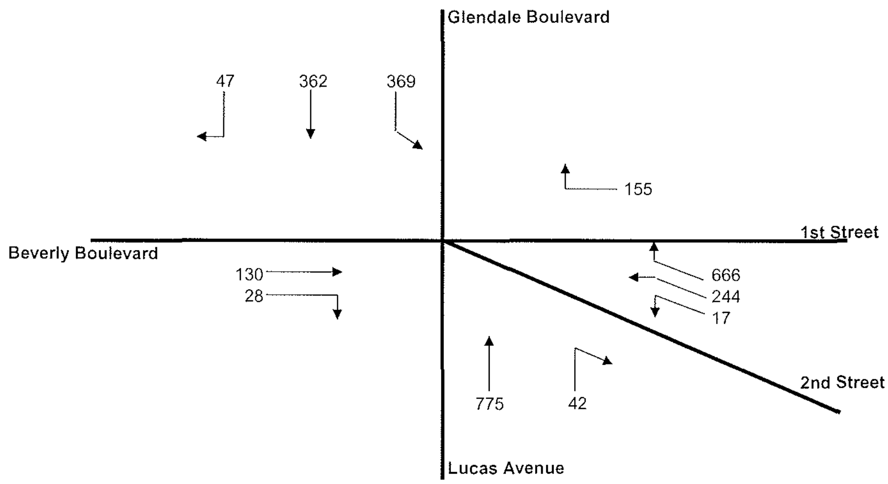
Critical Volumes = 19 + 760 + 31 + 11

= 821

V/C = $\frac{821}{1375}$ - 0.07 = 0.527 LOS A

Intersection 12

Existing P.M. Peak Hour



Phase 1) $\dfrac{130 + 28}{2}$

$= \mathbf{79}$

Phase 2) $\dfrac{775 + 42}{2}$

&

$\dfrac{47}{1}$ & $\dfrac{362}{1}$

$= \mathbf{409}$

Phase 3) $\dfrac{155}{1}$

& $\left\{ \dfrac{362}{1} - 409 \right\}$ & $\left\{ \dfrac{369}{2} \right\}$

$= \mathbf{155}$

Phase 4) $\left\{ \dfrac{369}{2} - 155 \right\}$

or $\left\{ \dfrac{362}{1} - 409 - 155 \right\}$

$= \mathbf{30}$

& $\dfrac{666}{2}$

Phase 5) $\dfrac{666}{2} - 30$

or $\left\{ \dfrac{244 + 17}{1} \right\}$

$= \mathbf{303}$

Critical Volumes = **79 + 409 + 155 + 30 + 303**

= 976

V/C = $\dfrac{976}{1375} - 0.10 = 0.610$ LOS B

EXPM

March 12, 2007 ,Monday 06:01:46 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Montana St I/S No: 13

AM/PM: PM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	15	1549	48	56	1029	8	58	31	37	21	31	8
AMBIENT												
RELATED												
PROJECT												
TOTAL	15	1549	48	56	1029	8	58	31	37	21	31	8

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE		1	1		1				1	1		1				1				1					1			

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	458	56
EastBound	60	21
WestBound	89	58
NorthBound	562	15

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{562 + 56 + 58 + 60}{*1500} = 0.421$$

LOS = A

Developed by Chun Wong, 12/94

EXPM

March 12, 2007 ,Monday 06:01:46 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Reservoir St I/S No: 14

AM/PM: PM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	41	1513	44	6	1081	25	56	61	51	55	30	27
AMBIENT												
RELATED												
PROJECT												
TOTAL	41	1513	44	6	1081	25	56	61	51	55	30	27

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE		1	1		1				1	1		1			1				1			1		1			1	

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

SouthBound
A: 381
B: 6

EastBound
A: 30
B: 55

WestBound
A: 112
B: 56

NorthBound
A: 601
B: 41

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{601 + 6 + 112 + 55}{*1500} = 0.446$$

LOS = A

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EXPM

March 12, 2007 ,Monday 06:01:46 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St | W/E: Sunset Blvd | I/S No: 15

AM/PM: PM | Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	1324	185	0	946	205	84	982	52	219	1099	101
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	1324	185	0	946	205	84	982	52	219	1099	101

LANE

	LT	LT/TH	TH	LT/TH/RT	TH/RT	RT	LT/RT
NORTHBOUND			2		1		
SOUTHBOUND			2		1		
WESTBOUND	1		2		1		
EASTBOUND	1		2		1		

SIGNAL

	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Prot-Fix	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	384	0
EastBound	400	219
WestBound	345	84
NorthBound	503	0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{503 + 0 + 345 + 219}{*1425} = 0.679$$

LOS = B

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EXPM

CalcaDB

March 12, 2007 ,Monday 06:01:46 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Kent St I/S No: 16

AM/PM: PM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	40	1543	0	0	1082	34	0	0	0	55	0	6
AMBIENT												
RELATED												
PROJECT												
TOTAL	40	1543	0	0	1082	34	0	0	0	55	0	6

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE		1	2							2		1																1

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	<none>	<none>	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	372	0
EastBound	61	55
WestBound	0	0
NorthBound	594	40

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{594 + 0 + 0 + 61}{*1500} = 0.367$$

LOS = A

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EXPM

CalcaDB

March 12, 2007 ,Monday 06:01:46 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St

W/E: US 101 NB Ramps

I/S No: 17

AM/PM: PM

Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE:

STUDY DATE:

GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	472	1531	0	0	927	213	224	3	104	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	472	1531	0	0	927	213	224	3	104	0	0	0

LANE

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE	1		3							2		1			1				1									

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Prot-Fix	Auto	Perm	Auto	Perm	Auto	<none>	<none>

Critical Movements Diagram

SouthBound
A: 380
B: 0

EastBound
A: 0
B: 0

WestBound
A: 107
B: 224

NorthBound
A: 510
B: 472

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{472 + 380 + 224 + 0}{*1425} = 0.685$$

LOS = B

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EXPM

CalcaDB

March 12, 2007 ,Monday 06:01:46 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: US-101 SB Ramps I/S No: 18

AM/PM: PM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	1746	227	102	1051	0	0	0	0	254	0	118
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	1746	227	102	1051	0	0	0	0	254	0	118

LANE

NORTHBOUND			2		1		
SOUTHBOUND		1	2				
WESTBOUND							
EASTBOUND	1					1	

SIGNAL

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	<none>	<none>	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	526	102
EastBound	118	254
WestBound	0	0
NorthBound	658	0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{658 + 102 + 0 + 254}{*1500} = 0.606$$

LOS = B

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EXPM

CalcaDB

March 12, 2007 ,Monday 06:01:46 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Temple St I/S No: 19

AM/PM: PM Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	1499	74	0	1057	149	118	602	144	325	566	61
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	1499	74	0	1057	149	118	602	144	325	566	61

	NB							SB							WB							EB						
LANE		1	1		1				1	1		1			1		1		1			1		1		1		

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Prot-Var	Auto	Prot-Var	Auto

Critical Movements Diagram

SouthBound
A: 402
B: 0

EastBound
A: 314
B: 325

WestBound
A: 373
B: 118

NorthBound
A: 524
B: 0

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{524 + 0 + 373 + 325}{*1375} = 0.819$$

LOS = D

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EXPM

CalcaDB

March 12, 2007 ,Monday 06:01:46 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St | W/E: Beverly Blvd | I/S No: 20

AM/PM: PM | Comments: EXISTING CONDITIONS (YEAR 2006)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	1	1448	80	0	1046	163	85	1128	99	124	927	65
AMBIENT												
RELATED												
PROJECT												
TOTAL	1	1448	80	0	1046	163	85	1128	99	124	927	65

LANE

NORTHBOUND		1	1		1		
SOUTHBOUND		1	2			1	
WESTBOUND		1	2			1	
EASTBOUND	1		2		1		

SIGNAL

	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Perm	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

SouthBound
A: 349
B: 0

EastBound
A: 331
B: 124

WestBound
A: 489
B: 85

NorthBound
A: 511
B: 1

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{511 + 0 + 489 + 124}{*1500} = 0.679$$

LOS = B

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FUTURE YEAR 2030 NO PROJECT CONDITIONS

Movement	EBL2	EBR	NBL	NBT	SBT	SBR2	NEL	NET	NER	SWL	SWT	SWR2
Lane Configurations	↰	↱	↰	↑↑	↓↓	↱		✥		↰	✥	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	11	14	10	12	12	12	12	9	12	11
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00		1.00		0.95	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	
Frt	1.00	0.85	1.00	1.00	1.00	0.85		0.91		1.00	0.96	
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00		0.98		0.95	0.97	
Satd. Flow (prot)	1534	1372	1711	3775	3303	1583		1672		1513	1634	
Flt Permitted	0.95	1.00	0.09	1.00	1.00	1.00		0.45		0.95	0.75	
Satd. Flow (perm)	1534	1372	154	3775	3303	1583		772		1513	1272	
Volume (vph)	12	17	30	364	998	140	20	0	36	1182	0	206
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	18	33	396	1085	152	22	0	39	1285	0	224
RTOR Reduction (vph)	0	0	0	0	0	70	0	37	0	0	11	0
Lane Group Flow (vph)	13	18	33	396	1085	82	0	24	0	751	747	0
Confl. Peds. (#/hr)						5						
Turn Type	custom	custom	Perm			custom	Perm			Prot		
Protected Phases				2	2	2		1		3		
Permitted Phases	4	4	2			2	1				3	
Actuated Green, G (s)	5.1	5.1	44.9	44.9	44.9	44.9		5.0		64.0	64.0	
Effective Green, g (s)	6.1	6.1	46.9	46.9	46.9	46.9		6.0		65.0	65.0	
Actuated g/C Ratio	0.04	0.04	0.34	0.34	0.34	0.34		0.04		0.46	0.46	
Clearance Time (s)	5.0	5.0	6.0	6.0	6.0	6.0		5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	67	60	52	1265	1107	530		33		702	591	
v/s Ratio Prot				0.10	c0.33	0.05				0.50		
v/s Ratio Perm	0.01	c0.01	0.21					c0.03			c0.59	
v/c Ratio	0.19	0.30	0.63	0.31	0.98	0.15		0.72		1.07	1.26	
Uniform Delay, d1	64.6	64.9	39.3	34.6	46.1	32.6		66.2		37.5	37.5	
Progression Factor	1.00	1.00	0.96	0.94	1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	1.4	2.8	38.2	0.5	22.7	0.6		53.9		54.2	132.1	
Delay (s)	66.0	67.7	75.8	33.0	68.8	33.3		120.0		91.7	169.6	
Level of Service	E	E	E	C	E	C		F		F	F	
Approach Delay (s)				36.3	64.4			120.0			130.8	
Approach LOS				D	E			F			F	

Intersection Summary

HCM Average Control Delay	92.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	11	12	12	12
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	0.97	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4713		1711	3539	3433	1555
Flt Permitted	1.00		0.05	1.00	0.95	1.00
Satd. Flow (perm)	4713		94	3539	3433	1555
Volume (vph)	2093	87	99	2124	175	170
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2275	95	108	2309	190	185
RTOR Reduction (vph)	2	0	0	0	0	24
Lane Group Flow (vph)	2368	0	108	2309	190	161
Confl. Peds. (#/hr)		2				3
Turn Type			Perm			Perm
Protected Phases	6			2	4	
Permitted Phases			2			4
Actuated Green, G (s)	112.6		112.6	112.6	17.6	17.6
Effective Green, g (s)	114.0		114.0	114.0	18.0	18.0
Actuated g/C Ratio	0.81		0.81	0.81	0.13	0.13
Clearance Time (s)	5.4		5.4	5.4	4.4	4.4
Vehicle Extension (s)	5.5		5.5	5.5	2.0	2.0
Lane Grp Cap (vph)	3838		77	2882	441	200
v/s Ratio Prot	0.50			0.65	0.06	
v/s Ratio Perm			c1.15			c0.10
v/c Ratio	0.62		1.40	0.80	0.43	0.80
Uniform Delay, d1	4.9		13.0	6.9	56.3	59.3
Progression Factor	0.15		1.24	1.15	1.00	1.00
Incremental Delay, d2	0.6		188.2	0.2	0.2	19.3
Delay (s)	1.3		204.4	8.2	56.5	78.6
Level of Service	A		F	A	E	E
Approach Delay (s)	1.3			17.0	67.4	
Approach LOS	A			B	E	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

2030AM

March 12, 2007 ,Monday 07:18:17 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S:	Glendale Blvd	W/E:	Aaron St	I/S No:	3
AM/PM:	AM	Comments:	FUTURE CONDITIONS (YEAR 2030)		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	6	2259	12	9	4069	6	81	2	5	20	0	20
AMBIENT												
RELATED												
PROJECT												
TOTAL	6	2259	12	9	4069	6	81	2	5	20	0	20

LANE	LT	LT-TH	TH	LT-TH-RT	TH-RT	RT	LT-RT
NORTHBOUND	1		2		1		
SOUTHBOUND	1		2		1		
WESTBOUND				1			
EASTBOUND				1			

SIGNAL	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Perm	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	1358	9
EastBound	40	20
WestBound	88	81
NorthBound	757	6

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{6 + 1358 + 81 + 40}{*1500} = 0.920$$

LOS = E

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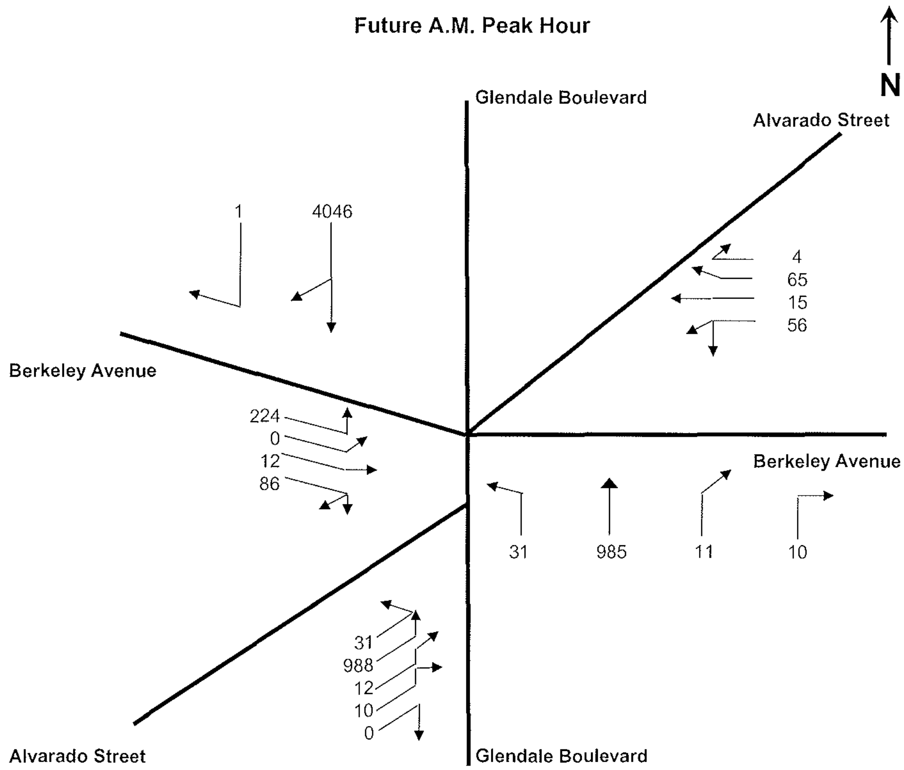
Intersection 4

Future A.M. Peak Hour



Phase 1) $\frac{1 + 4046}{4}$

&

$\frac{985 + 11 + 10}{3}$

= **1012**

Phase 2) $\left\{ \frac{985 + 11 + 10}{3} \right\} - 1012$

or

$\frac{31}{1}$

= **31**

Phase 3) $\frac{31 + 988 + 12 + 10 + 0}{3}$

= **347**

Phase 4) $\frac{4 + 65 + 15}{1} + \frac{0 + 224}{1}$

or

$\frac{12 + 86}{1} + \frac{56}{1}$

= **308**

Critical Volumes = 1012 + 31 + 347 + 308

= 1698

V/C = $\frac{1698}{1375}$ - 0.10 = 1.135 LOS F

2030AM

March 12, 2007 ,Monday 07:18:17 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd | W/E: Scott Av | I/S No: 5

AM/PM: AM | Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	9	930	20	52	2722	22	29	12	152	49	25	39
AMBIENT												
RELATED												
PROJECT												
TOTAL	9	930	20	52	2722	22	29	12	152	49	25	39

LANE

	NB							SB							WB							EB						
LANE	1		2		1			1		2		1						1							1			

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Prot-Fix	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	915	52
EastBound	113	49
WestBound	193	29
NorthBound	317	9

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{9 + 915 + 193 + 49}{*1425} = 0.748$$

LOS = C

Developed by Chun Wong, 12/94

CalcaDB

March 12, 2007 ,Monday 07:18:17 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Montana St I/S No: 6

AM/PM: AM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	21	635	1	175	2450	74	57	91	156	175	120	55
AMBIENT												
RELATED												
PROJECT												
TOTAL	21	635	1	175	2450	74	57	91	156	175	120	55

LANE

NORTHBOUND	1		2		1		
SOUTHBOUND	1		2			1	
WESTBOUND	1		1		1		
EASTBOUND	1		1		1		

	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

SouthBound
A: 1225
B: 175

EastBound
A: 88
B: 175

WestBound
A: 156
B: 57

NorthBound
A: 212
B: 21

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{21 + 1225 + 156 + 175}{*1500} = 0.981$$

LOS = E

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March 12, 2007 ,Monday 07:18:17 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Park Av I/S No: 7

AM/PM: AM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	61	671	69	151	2296	49	72	21	75	17	22	154
AMBIENT												
RELATED												
PROJECT												
TOTAL	61	671	69	151	2296	49	72	21	75	17	22	154

LANE							
NORTHBOUND	1		1		1		
SOUTHBOUND	1		2			1	
WESTBOUND	1		1			1	
EASTBOUND	1		1			1	

SIGNAL	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Free
WESTBOUND	Perm	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

SouthBound
A: 1148
B: 151

EastBound
A: 154
B: 17

WestBound
A: 75
B: 72

NorthBound
A: 370
B: 61

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{61 + 1148 + 72 + 154}{*1500} = 0.887$$

LOS = D

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March 12, 2007 ,Monday 07:18:17 PM

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INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd   W/E: Santa Ynez St   I/S No: 8

AM/PM: AM   Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	5	766	0	0	2544	22	0	0	0	37	0	16
AMBIENT												
RELATED												
PROJECT												
TOTAL	5	766	0	0	2544	22	0	0	0	37	0	16

LANE

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE		1	1							1		1																1

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	<none>	Perm	Auto			Perm	Auto

Critical Movements Diagram

SouthBound A: 1283 B: 0

EastBound A: 53 B: 37

WestBound A: 0 B: 0

NorthBound A: 398 B: 5

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{5 + 1283 + 0 + 53}{{}^{*}1500} = 0.824$$

LOS = D

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March 12, 2007 ,Monday 07:18:17 PM

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INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Bellevue Av I/S No: 9

AM/PM: AM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	466	164	52	2424	0	541	0	131	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	466	164	52	2424	0	541	0	131	0	0	0

LANE

NORTHBOUND			2			1	
SOUTHBOUND	1		2				
WESTBOUND	2					1	
EASTBOUND							

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Prot-Fix	<none>	Perm	Auto		

Critical Movements Diagram

	SouthBound	EastBound	WestBound	NorthBound
A:	1212	0	105	233
B:	52	0	298	0

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{0 + 1212 + 298 + 0}{*1425} = 0.990$$

LOS = E

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March 12, 2007 ,Monday 07:18:17 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Temple St I/S No: 10

AM/PM: AM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	62	335	24	234	1962	152	47	447	96	287	634	181
AMBIENT												
RELATED												
PROJECT												
TOTAL	62	335	24	234	1962	152	47	447	96	287	634	181

LANE							
NORTHBOUND	1		1		1		
SOUTHBOUND	1		1		1		
WESTBOUND	1		1		1		
EASTBOUND	1		1		1		

SIGNAL	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Prot-Var	Auto
EASTBOUND	Prot-Var	Auto

Critical Movements Diagram

	A	B
SouthBound	1057	234
EastBound	408	287
WestBound	272	47
NorthBound	180	62

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

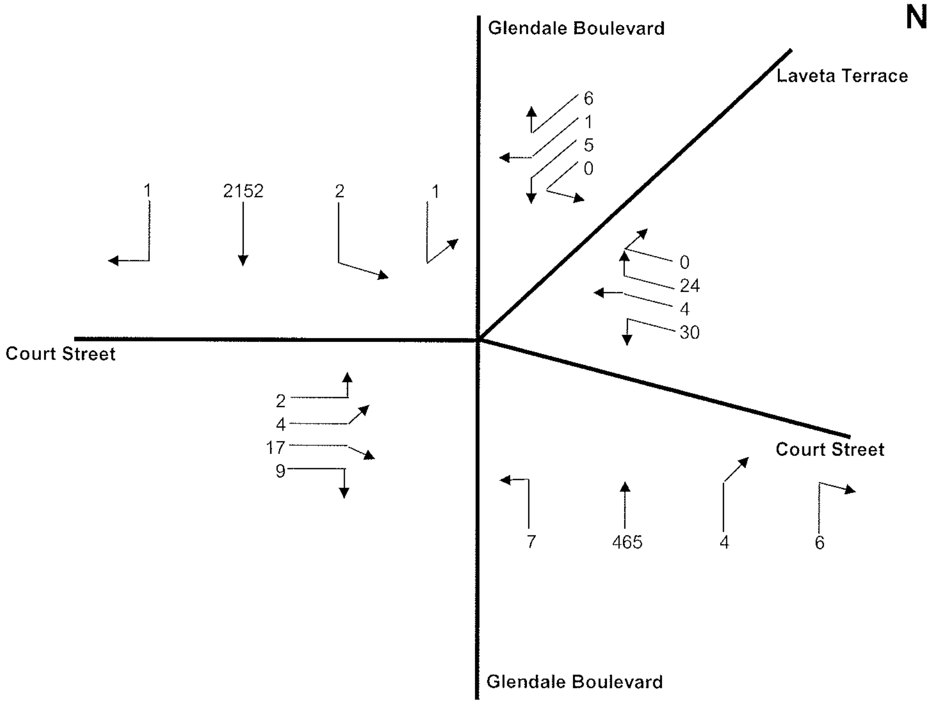
West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{62 + 1057 + 272 + 287}{*1375} = 1.150$$

LOS = F

Intersection 11

Future A.M. Peak Hour



Phase 1) $\dfrac{2 + 1}{1}$

&

$\dfrac{1 + 2152}{2}$

= **3**

Phase 2) $\dfrac{1 + 2152}{2}$ — 3 + $\dfrac{7}{1}$

or

$\dfrac{465 + 4 + 6}{2}$

= **1081**

Phase 3) $\dfrac{0 + 24 + 4}{1}$ + $\dfrac{2 + 4}{1}$

or

$\dfrac{17 + 9}{1}$ + $\dfrac{30}{1}$

= **56**

Phase 4) $\dfrac{6 + 1 + 5 + 0}{1}$

= **12**

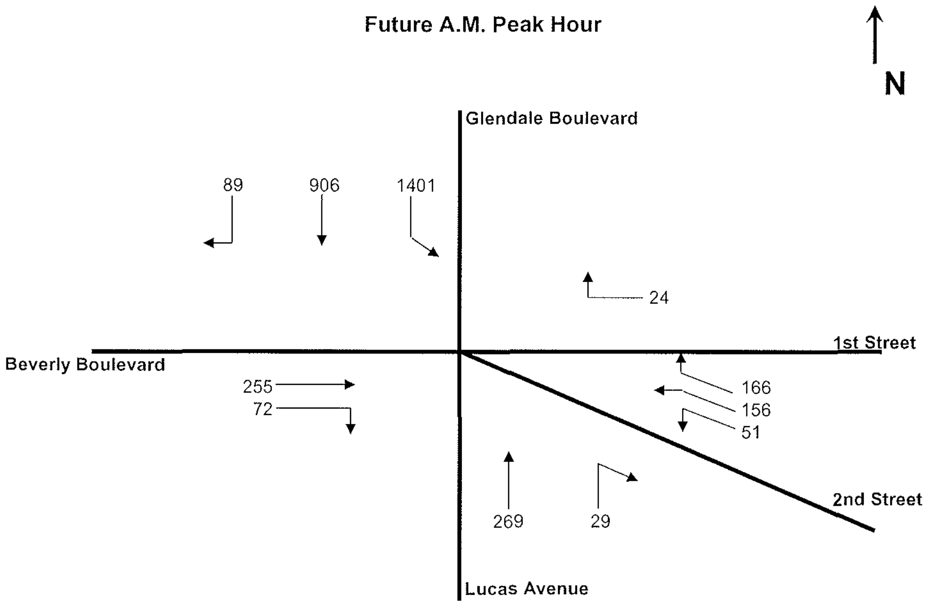
Critical Volumes = 3 + 1081 + 56 + 12

= 1152

V/C = $\dfrac{1152}{1375}$ - 0.07 = 0.768 LOS C

Intersection 12

Future A.M. Peak Hour



Phase 1) $\dfrac{255 + 72}{2}$

$= \mathbf{164}$

Phase 2) $\dfrac{269 + 29}{2}$

&

$\dfrac{89}{1}$ & $\dfrac{906}{1}$

$= \mathbf{149}$

Phase 3) $\dfrac{24}{1}$

& $\left\{ \dfrac{906}{1} - 149 \right\}$ & $\left\{ \dfrac{1401}{2} \right\}$

$= \mathbf{24}$

Phase 4) $\left\{ \dfrac{1401}{2} - 24 \right\}$

or $\left\{ \dfrac{906}{1} - 149 - 24 \right\}$

$= \mathbf{733}$

& $\dfrac{166}{2}$

Phase 5) $\dfrac{166}{2} - 733$

or $\left\{ \dfrac{156 + 51}{1} \right\}$

$= \mathbf{207}$

Critical Volumes = 164 + 149 + 24 + 733 + 207

= 1277

V/C = $\dfrac{1277}{1375}$ - 0.10 = 0.829 LOS D

2030AM

CalcaDB

March 12, 2007 ,Monday 07:18:17 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St | W/E: Montana St | I/S No: 13

AM/PM: AM | Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND LT	NORTHBOUND TH	NORTHBOUND RT	SOUTHBOUND LT	SOUTHBOUND TH	SOUTHBOUND RT	WESTBOUND LT	WESTBOUND TH	WESTBOUND RT	EASTBOUND LT	EASTBOUND TH	EASTBOUND RT
EXISTING	19	977	141	39	1757	5	79	10	35	12	42	16
AMBIENT												
RELATED												
PROJECT												
TOTAL	19	977	141	39	1757	5	79	10	35	12	42	16

LANE

	LT	LT/TH	TH	LT/TH/RT	TH/RT	RT	LT/RT
NORTHBOUND		1	1		1		
SOUTHBOUND		1	1		1		
WESTBOUND		1			1		
EASTBOUND				1			

SIGNAL

	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Perm	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	665	39
EastBound	70	12
WestBound	89	79
NorthBound	411	19

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{19 + 665 + 79 + 70}{*1500} = 0.485$$

LOS = A

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March 12, 2007 ,Monday 07:18:17 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St

W/E: Reservoir St

I/S No: 14

AM/PM: AM

Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE:

STUDY DATE:

GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND LT	NORTHBOUND TH	NORTHBOUND RT	SOUTHBOUND LT	SOUTHBOUND TH	SOUTHBOUND RT	WESTBOUND LT	WESTBOUND TH	WESTBOUND RT	EASTBOUND LT	EASTBOUND TH	EASTBOUND RT
EXISTING	32	1066	35	7	1813	19	56	37	55	35	32	40
AMBIENT												
RELATED												
PROJECT												
TOTAL	32	1066	35	7	1813	19	56	37	55	35	32	40

LANE		1	1		1				1	1		1			1				1			1		1			1	

	NORTHBOUND Phasing	NORTHBOUND RTOR	SOUTHBOUND Phasing	SOUTHBOUND RTOR	WESTBOUND Phasing	WESTBOUND RTOR	EASTBOUND Phasing	EASTBOUND RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

SouthBound
A: 625
B: 7

EastBound
A: 40
B: 35

WestBound
A: 92
B: 56

NorthBound
A: 431
B: 32

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{32 + 625 + 92 + 35}{*1500} = 0.453$$

LOS = A

2030AM

March 12, 2007 ,Monday 07:18:17 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St	W/E: Sunset Blvd	I/S No: 15	
AM/PM: AM	Comments: FUTURE CONDITIONS (YEAR 2030)		
COUNT DATE:	STUDY DATE:	GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND LT	NORTHBOUND TH	NORTHBOUND RT	SOUTHBOUND LT	SOUTHBOUND TH	SOUTHBOUND RT	WESTBOUND LT	WESTBOUND TH	WESTBOUND RT	EASTBOUND LT	EASTBOUND TH	EASTBOUND RT
EXISTING	0	943	130	0	1707	140	119	901	22	187	1471	162
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	943	130	0	1707	140	119	901	22	187	1471	162

LANE

	LT	LT-TH	TH	LT-TH-RT	TH-RT	RT	LT-RT
NORTHBOUND			2		1		
SOUTHBOUND			2		1		
WESTBOUND	1		2		1		
EASTBOUND	1		2		1		

SIGNAL

	NORTHBOUND	SOUTHBOUND	WESTBOUND	EASTBOUND
Phasing	Perm	Perm	Prot-Fix	Perm
RTOR	Auto	Auto	Auto	Auto

Critical Movements Diagram

SouthBound
A: 616
B: 0

EastBound
A: 544
B: 187

WestBound
A: 308
B: 119

NorthBound
A: 358
B: 0

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{0 + 616 + 119 + 544}{*1425} = 0.828$$

LOS = D

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Kent St I/S No: 16

AM/PM: AM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	37	1040	0	0	2091	42	0	0	0	79	0	16
AMBIENT												
RELATED												
PROJECT												
TOTAL	37	1040	0	0	2091	42	0	0	0	79	0	16

LANE

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE		1	2							2		1																1

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	<none>	<none>	Perm	Auto

Critical Movements Diagram

SouthBound
A: 711
B: 0

EastBound
A: 95
B: 79

WestBound
A: 0
B: 0

NorthBound
A: 421
B: 37

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{37 + 711 + 0 + 95}{*1500} = 0.492$$

LOS = A

2030AM

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March 12, 2007 ,Monday 07:18:17 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: US 101 NB Ramps I/S No: 17

AM/PM: AM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	331	1032	0	0	1772	365	330	5	99	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	331	1032	0	0	1772	365	330	5	99	0	0	0

	NB							SB							WB							EB						
LANE	1		3							2		1			1				1									

	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Prot-Fix	Auto	Perm	Auto	Perm	Auto	<none>	<none>

Critical Movements Diagram

SouthBound
A: 712
B: 0

EastBound
A: 0
B: 0

WestBound
A: 104
B: 330

NorthBound
A: 344
B: 331

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{331 + 712 + 330 + 0}{*1425} = 0.894$$

LOS = D

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March 12, 2007 ,Monday 07:18:17 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St | W/E: US-101 SB Ramps | I/S No: 18

AM/PM: AM | Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND LT	NORTHBOUND TH	NORTHBOUND RT	SOUTHBOUND LT	SOUTHBOUND TH	SOUTHBOUND RT	WESTBOUND LT	WESTBOUND TH	WESTBOUND RT	EASTBOUND LT	EASTBOUND TH	EASTBOUND RT
EXISTING	0	1165	432	244	1858	0	0	0	0	216	0	176
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	1165	432	244	1858	0	0	0	0	216	0	176

LANE

	LT	LT/TH	TH	LT/TH/RT	TH/RT	RT	LT/RT
NORTHBOUND			2		1		
SOUTHBOUND		1	2				
WESTBOUND							
EASTBOUND	1					1	

SIGNAL

	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	<none>	<none>
EASTBOUND	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	929	244
EastBound	176	216
WestBound	0	0
NorthBound	532	0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{0 + 929 + 0 + 216}{*1500} = 0.693$$

LOS = B

2030AM

March 12, 2007 ,Monday 07:18:17 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St | W/E: Temple St | I/S No: 19

AM/PM: AM | Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	1173	76	0	1782	174	156	475	122	356	567	72
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	1173	76	0	1782	174	156	475	122	356	567	72

LANE

	LT	LT/TH	TH	LT/TH/RT	TH/RT	RT	LT/RT
NORTHBOUND		1	1		1		
SOUTHBOUND		1	1		1		
WESTBOUND	1		1		1		
EASTBOUND	1		1		1		

SIGNAL

	NORTHBOUND	SOUTHBOUND	WESTBOUND	EASTBOUND
Phasing	Perm	Perm	Prot-Var	Prot-Var
RTOR	Auto	Auto	Auto	Auto

Critical Movements Diagram

	A	B
SouthBound	652	0
EastBound	320	356
WestBound	299	156
NorthBound	416	0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{0 + 652 + 299 + 356}{*1375} = 0.881$$

LOS = D

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INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Beverly Blvd I/S No: 20

AM/PM: AM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	1082	102	0	1769	190	140	841	92	175	1367	85
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	1082	102	0	1769	190	140	841	92	175	1367	85

LANE

NORTHBOUND		1	1		1		
SOUTHBOUND		1	2			1	
WESTBOUND		1	2			1	
EASTBOUND	1		2		1		

SIGNAL

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	590	0
EastBound	484	175
WestBound	421	140
NorthBound	395	0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{0 + 590 + 140 + 484}{*1500} = 0.739$$

LOS = C

Movement	EBL2	EBR	NBL	NBT	SBT	SBR2	NEL	NET	NER	SWL	SWT	SWR2
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	11	14	10	12	12	12	12	9	12	11
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00		1.00		0.95	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	
Frt	1.00	0.85	1.00	1.00	1.00	0.85		0.91		1.00	0.85	
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00		0.98		0.95	1.00	
Satd. Flow (prot)	1534	1372	1711	3775	3303	1583		1667		1513	1504	
Flt Permitted	0.95	1.00	0.39	1.00	1.00	1.00		0.21		0.95	1.00	
Satd. Flow (perm)	1534	1372	711	3775	3303	1583		362		1513	1504	
Volume (vph)	30	28	36	545	541	88	22	0	44	73	0	229
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	30	39	592	588	96	24	0	48	79	0	249
RTOR Reduction (vph)	0	0	0	0	0	37	0	43	0	0	222	0
Lane Group Flow (vph)	33	30	39	592	588	59	0	29	0	79	27	0
Confl. Peds. (#/hr)						5						
Turn Type	custom	custom	Perm			custom	Perm			Prot		
Protected Phases				2	2	2		1		3		
Permitted Phases	4	4	2			2	1				3	
Actuated Green, G (s)	7.2	7.2	77.4	77.4	77.4	77.4		11.5		12.9	12.9	
Effective Green, g (s)	8.2	8.2	79.4	79.4	79.4	79.4		12.5		13.9	13.9	
Actuated g/C Ratio	0.06	0.06	0.61	0.61	0.61	0.61		0.10		0.11	0.11	
Clearance Time (s)	5.0	5.0	6.0	6.0	6.0	6.0		5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)	97	87	434	2306	2017	967		35		162	161	
v/s Ratio Prot				0.16	c0.18	0.04				c0.05		
v/s Ratio Perm	0.02	c0.02	0.05					c0.08			0.02	
v/c Ratio	0.34	0.34	0.09	0.26	0.29	0.06		0.82		0.49	0.17	
Uniform Delay, d1	58.3	58.3	10.4	11.7	12.0	10.2		57.6		54.7	52.8	
Progression Factor	1.00	1.00	0.53	0.54	1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	2.1	2.4	0.0	0.0	0.4	0.1		80.8		2.3	0.5	
Delay (s)	60.4	60.7	5.6	6.3	12.3	10.3		138.5		57.0	53.3	
Level of Service	E	E	A	A	B	B		F		E	D	
Approach Delay (s)				6.2	12.1			138.5			54.2	
Approach LOS				A	B			F			D	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	60.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	11	12	12	12
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	0.97	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4725		1711	3539	3433	1556
Flt Permitted	1.00		0.04	1.00	0.95	1.00
Satd. Flow (perm)	4725		71	3539	3433	1556
Volume (vph)	3881	100	67	486	108	200
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4218	109	73	528	117	217
RTOR Reduction (vph)	2	0	0	0	0	10
Lane Group Flow (vph)	4325	0	73	528	117	207
Confl. Peds. (#/hr)		2				3
Turn Type			Perm			Perm
Protected Phases	6			2	4	
Permitted Phases			2			4
Actuated Green, G (s)	100.5		100.5	100.5	19.7	19.7
Effective Green, g (s)	101.9		101.9	101.9	20.1	20.1
Actuated g/C Ratio	0.78		0.78	0.78	0.15	0.15
Clearance Time (s)	5.4		5.4	5.4	4.4	4.4
Vehicle Extension (s)	5.5		5.5	5.5	2.0	2.0
Lane Grp Cap (vph)	3704		56	2774	531	241
v/s Ratio Prot	0.92			0.15	0.03	
v/s Ratio Perm			c1.03			c0.13
v/c Ratio	1.17		1.30	0.19	0.22	0.86
Uniform Delay, d1	14.0		14.0	3.6	48.1	53.6
Progression Factor	0.42		2.26	1.29	1.00	1.00
Incremental Delay, d2	75.8		219.9	0.1	0.1	24.0
Delay (s)	81.7		251.7	4.7	48.2	77.6
Level of Service	F		F	A	D	E
Approach Delay (s)	81.7			34.7	67.3	
Approach LOS	F			C	E	

Intersection Summary			
HCM Average Control Delay	75.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

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March 12, 2007 ,Monday 07:19:26 PM

INTERSECTION DATA SUMMARY SHEET

N/S:	Glendale Blvd	W/E:	Aaron St	I/S No:	3
AM/PM:	PM	Comments:	FUTURE CONDITIONS (YEAR 2030)		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	28	4060	10	22	2467	11	37	2	15	15	1	18
AMBIENT												
RELATED												
PROJECT												
TOTAL	28	4060	10	22	2467	11	37	2	15	15	1	18

	NB							SB							WB							EB						
LANE	1		2		1			1		2		1						1							1			

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	826	22
EastBound	34	15
WestBound	54	37
NorthBound	1357	28

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

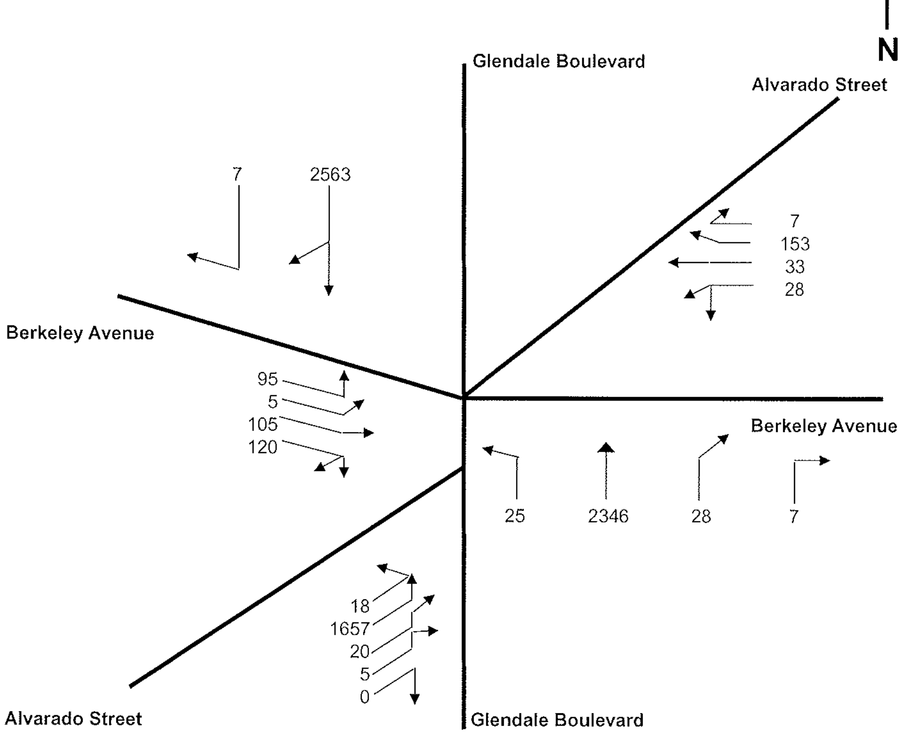
West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{1357 + 22 + 37 + 34}{*1500} = 0.897$$

LOS = D

Intersection 4

Future P.M. Peak Hour



Phase 1) $\dfrac{7 + 2563}{4}$

&

$\dfrac{2346 + 28 + 7}{3}$

= **643**

Phase 2) $\left\{\dfrac{2346 + 28 + 7}{3}\right\} - 643$

or

$\dfrac{25}{1}$

= **151**

Phase 3) $\dfrac{18 + 1657 + 20 + 5 + 0}{3}$

= **567**

Phase 4) $\dfrac{7 + 153 + 33}{1} + \dfrac{5 + 95}{1}$

or

$\dfrac{105 + 120}{1} + \dfrac{28}{1}$

= **293**

Critical Volumes = 643 + 151 + 567 + 293

= 1654

V/C = $\dfrac{1654}{1375}$ - 0.10 = 1.103 LOS F

2030PM

March 12, 2007 ,Monday 07:19:26 PM

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INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd | W/E: Scott Av | I/S No: 5

AM/PM: PM | Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND LT	NORTHBOUND TH	NORTHBOUND RT	SOUTHBOUND LT	SOUTHBOUND TH	SOUTHBOUND RT	WESTBOUND LT	WESTBOUND TH	WESTBOUND RT	EASTBOUND LT	EASTBOUND TH	EASTBOUND RT
EXISTING	9	2164	43	128	1421	27	51	12	189	33	31	41
AMBIENT												
RELATED												
PROJECT												
TOTAL	9	2164	43	128	1421	27	51	12	189	33	31	41

LANE	NB	SB	WB	EB
Left	1	1		
Left-Through				
Through	2	2		
Left-Through-Right			1	1
Through-Right	1	1		
Right				
Left-Right				

SIGNAL	NB	SB	WB	EB
Phasing	Perm	Prot-Fix	Perm	Perm
RTOR	Auto	Auto	Auto	Auto

Critical Movements Diagram

	A	B
SouthBound	483	128
EastBound	105	33
WestBound	252	51
NorthBound	736	9

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{736 + 128 + 252 + 33}{*1425} = 0.736$$

LOS = C

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Montana St I/S No: 6

AM/PM: PM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	51	1912	15	171	1188	132	28	115	240	84	178	69
AMBIENT												
RELATED												
PROJECT												
TOTAL	51	1912	15	171	1188	132	28	115	240	84	178	69

	NB							SB							WB							EB						
LANE	1		2		1			1		2			1		1		1		1			1		1		1		

	NB Phasing	NB RTOR	SB Phasing	SB RTOR	WB Phasing	WB RTOR	EB Phasing	EB RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

SouthBound
A: 594
B: 171

EastBound
A: 124
B: 84

WestBound
A: 240
B: 28

NorthBound
A: 642
B: 51

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{642 + 171 + 240 + 84}{*1500} = 0.688$$

LOS = B

2030PM

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March 12, 2007 ,Monday 07:19:26 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Park Av I/S No: 7

AM/PM: PM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	169	1934	137	123	1092	54	83	57	176	18	35	153
AMBIENT												
RELATED												
PROJECT												
TOTAL	169	1934	137	123	1092	54	83	57	176	18	35	153

LANE (NORTHBOUND)	1		1		1		
LANE (SOUTHBOUND)	1		2			1	
LANE (WESTBOUND)	1		1			1	
LANE (EASTBOUND)	1		1			1	

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Free	Perm	Auto	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	546	123
EastBound	153	18
WestBound	176	83
NorthBound	1036	169

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{1036 + 123 + 83 + 153}{*1500} = 0.860$$

LOS = D

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March 12, 2007 ,Monday 07:19:26 PM

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INTERSECTION DATA SUMMARY SHEET

N/S:	Glendale Blvd	W/E:	Santa Ynez St	I/S No:	8
AM/PM:	PM	Comments:	FUTURE CONDITIONS (YEAR 2030)		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	27	2268	0	0	1329	33	0	0	0	69	0	22
AMBIENT												
RELATED												
PROJECT												
TOTAL	27	2268	0	0	1329	33	0	0	0	69	0	22

LANE

NORTHBOUND		1	1				
SOUTHBOUND			1		1		
WESTBOUND							
EASTBOUND							1

	NORTHBOUND		SOUTHBOUND		WESTBOUND		EASTBOUND	
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	<none>	Perm	Auto			Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	681	0
EastBound	91	69
WestBound	0	0
NorthBound	1215	27

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{1215 + 0 + 0 + 91}{*1500} = 0.801$$

LOS = D

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March 12, 2007 ,Monday 07:19:26 PM

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INTERSECTION DATA SUMMARY SHEET

N/S:	Glendale Blvd	W/E:	Bellevue Av	I/S No:	9
AM/PM:	PM	Comments:	FUTURE CONDITIONS (YEAR 2030)		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND LT	NORTHBOUND TH	NORTHBOUND RT	SOUTHBOUND LT	SOUTHBOUND TH	SOUTHBOUND RT	WESTBOUND LT	WESTBOUND TH	WESTBOUND RT	EASTBOUND LT	EASTBOUND TH	EASTBOUND RT
EXISTING	0	2099	540	131	1182	0	366	0	192	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	2099	540	131	1182	0	366	0	192	0	0	0

LANE	↰	↰↑	↑	↰↑↱	↑↱	↱	↰↱
NORTHBOUND			2			1	
SOUTHBOUND	1		2				
WESTBOUND	2					1	
EASTBOUND							

SIGNAL	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Prot-Fix	<none>
WESTBOUND	Perm	Auto
EASTBOUND		

Critical Movements Diagram

	A	B
SouthBound	591	131
EastBound	0	0
WestBound	126	201
NorthBound	1050	0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{1050 + 131 + 201 + 0}{*1425} = 0.900$$

LOS = D

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March 12, 2007 ,Monday 07:19:26 PM

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INTERSECTION DATA SUMMARY SHEET

N/S: Glendale Blvd W/E: Temple St I/S No: 10

AM/PM: PM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	85	1725	35	104	848	213	42	603	275	371	663	104
AMBIENT												
RELATED												
PROJECT												
TOTAL	85	1725	35	104	848	213	42	603	275	371	663	104

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
LANE	1		1		1			1		1		1			1		1		1			1		1		1		

	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Prot-Var	Auto	Prot-Var	Auto

Critical Movements Diagram

	A	B
SouthBound	531	104
EastBound	384	371
WestBound	439	42
NorthBound	880	85

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

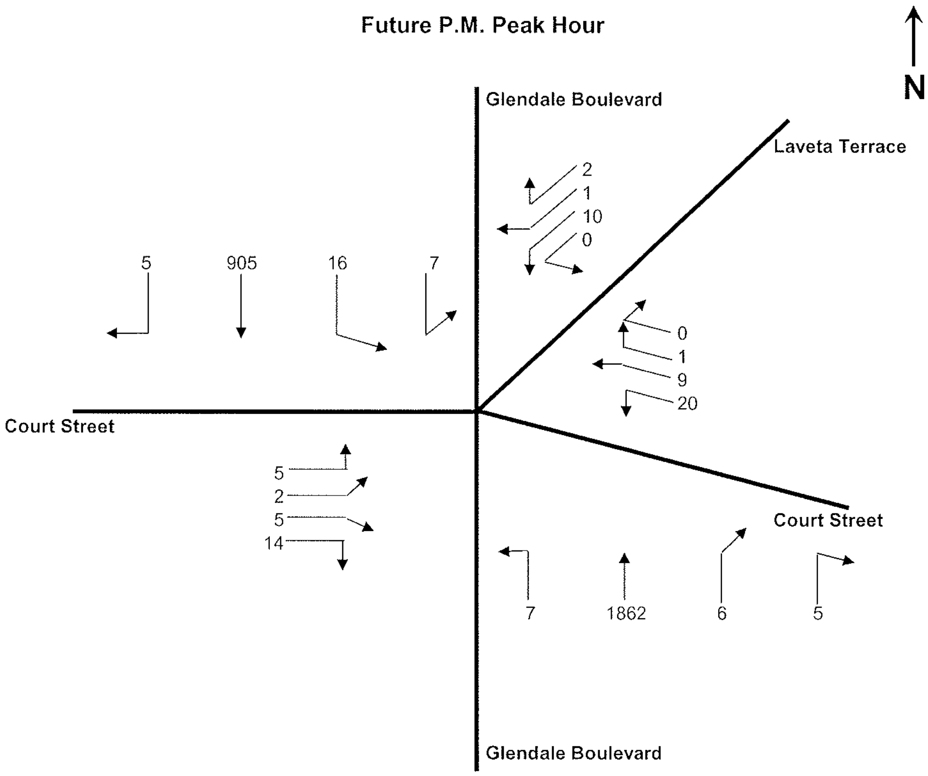
West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{880 + 104 + 439 + 371}{*1375} = 1.235$$

LOS = F

Intersection 11

Future P.M. Peak Hour



Phase 1) $\dfrac{16 \quad + \quad 7}{1}$

&

$\dfrac{5 \quad + \quad 905}{2}$

= **23**

Phase 2) $\dfrac{5 \quad + \quad 905}{2} \quad — \quad 23 \quad + \quad \dfrac{7}{1}$

or

$\dfrac{1862 \quad + \quad 6 \quad + \quad 5}{2}$

= **937**

Phase 3) $\dfrac{0 \quad + \quad 1 \quad + \quad 9}{1} \quad + \quad \dfrac{5 \quad + \quad 2}{1}$

or

$\dfrac{5 \quad + \quad 14}{1} \quad + \quad \dfrac{20}{1}$

= **39**

Phase 4) $\dfrac{2 \quad + \quad 1 \quad + \quad 10 \quad + \quad 0}{1}$

= **13**

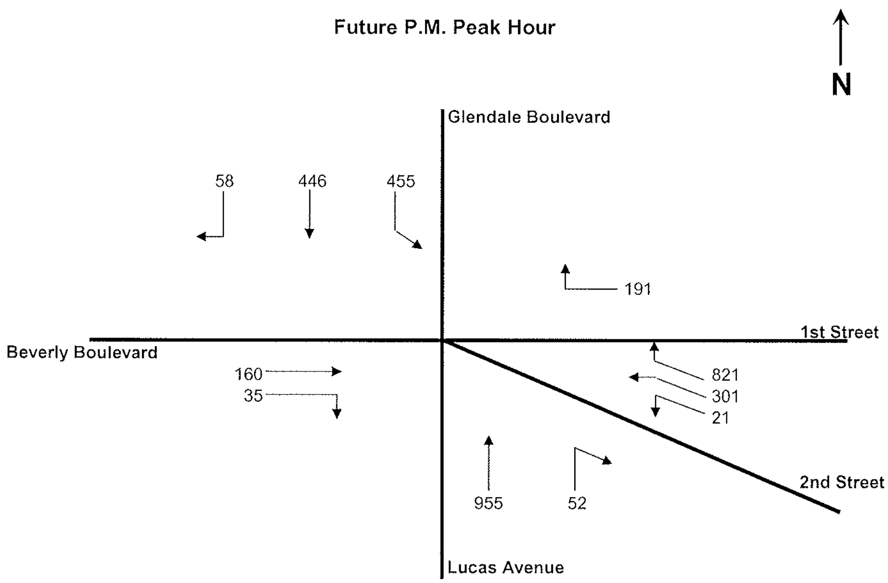
Critical Volumes = 23 + 937 + 39 + 13

= 1012

V/C = $\dfrac{\mathbf{1012}}{\mathbf{1375}}$ **- 0.07 = 0.666** **LOS B**

Intersection 12

Future P.M. Peak Hour



Phase 1) $\frac{160 + 35}{2}$

$= \mathbf{98}$

Phase 2) $\frac{955 + 52}{2}$

&

$\frac{58}{1}$ & $\frac{446}{1}$

$= \mathbf{504}$

Phase 3) $\frac{191}{1}$

& $\left\{ \frac{446}{1} - 504 \right\}$ & $\left\{ \frac{455}{2} \right\}$

$= \mathbf{191}$

Phase 4) $\left\{ \frac{455}{2} - 191 \right\}$

or $\left\{ \frac{446}{1} - 504 - 191 \right\}$

$= \mathbf{37}$

& $\frac{821}{2}$

Phase 5) $\frac{821}{2} - 37$

or $\left\{ \frac{301 + 21}{1} \right\}$

$= \mathbf{374}$

Critical Volumes = 98 + 504 + 191 + 37 + 374

= 1204

V/C = $\frac{1204}{1375} - 0.10 = 0.776$ LOS C

2030PM

March 12, 2007 ,Monday 07:19:26 PM

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INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St   W/E: Montana St   I/S No: 13

AM/PM: PM   Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	18	1910	59	69	1269	10	72	38	46	26	38	10
AMBIENT												
RELATED												
PROJECT												
TOTAL	18	1910	59	69	1269	10	72	38	46	26	38	10

LANE

NORTHBOUND		1	1		1		
SOUTHBOUND		1	1		1		
WESTBOUND		1				1	
EASTBOUND				1			

SIGNAL	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Perm	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	564	69
EastBound	74	26
WestBound	110	72
NorthBound	692	18

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{692 + 69 + 72 + 74}{*1500} = 0.535$$

LOS = A

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2030PM

March 12, 2007 ,Monday 07:19:26 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S:	Alvarado St	W/E:	Reservoir St	I/S No:	14
AM/PM:	PM	Comments:	FUTURE CONDITIONS (YEAR 2030)		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	51	1865	54	7	1333	31	69	75	63	68	37	33
AMBIENT												
RELATED												
PROJECT												
TOTAL	51	1865	54	7	1333	31	69	75	63	68	37	33

LANE							
NORTHBOUND		1	1		1		
SOUTHBOUND		1	1		1		
WESTBOUND	1				1		
EASTBOUND	1		1			1	

SIGNAL	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram

	A	B
SouthBound	469	7
EastBound	37	68
WestBound	138	69
NorthBound	742	51

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{742 + 7 + 138 + 68}{*1500} = 0.567$$

LOS = A

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CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Sunset Blvd I/S No: 15

AM/PM: PM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND LT	NORTHBOUND TH	NORTHBOUND RT	SOUTHBOUND LT	SOUTHBOUND TH	SOUTHBOUND RT	WESTBOUND LT	WESTBOUND TH	WESTBOUND RT	EASTBOUND LT	EASTBOUND TH	EASTBOUND RT
EXISTING	0	1632	228	0	1166	253	104	1211	64	270	1355	125
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	1632	228	0	1166	253	104	1211	64	270	1355	125

LANE

	NB	SB	WB	EB
LT			1	1
LT-TH				
TH	2	2	2	2
LT-TH-RT				
TH-RT	1	1	1	1
RT				
LT-RT				

SIGNAL

	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Prot-Fix	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

SouthBound A: 473 B: 0

EastBound A: 493 B: 270

WestBound A: 425 B: 104

NorthBound A: 620 B: 0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{620 + 0 + 425 + 270}{*1425} = 0.853$$

LOS = D

CalcaDB

March 12, 2007 ,Monday 07:19:26 PM

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Kent St I/S No: 16

AM/PM: PM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	49	1902	0	0	1334	42	0	0	0	68	0	7
AMBIENT												
RELATED												
PROJECT												
TOTAL	49	1902	0	0	1334	42	0	0	0	68	0	7

LANE							
NORTHBOUND		1	2				
SOUTHBOUND			2		1		
WESTBOUND							
EASTBOUND							1

SIGNAL	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	<none>	<none>
EASTBOUND	Perm	Auto

Critical Movements Diagram

	A:	B:
SouthBound	459	0
EastBound	75	68
WestBound	0	0
NorthBound	732	49

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{732 + 0 + 0 + 75}{*1500} = 0.468$$

LOS = A

March 12, 2007 ,Monday 07:19:26 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: US 101 NB Ramps I/S No: 17

AM/PM: PM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND LT	NORTHBOUND TH	NORTHBOUND RT	SOUTHBOUND LT	SOUTHBOUND TH	SOUTHBOUND RT	WESTBOUND LT	WESTBOUND TH	WESTBOUND RT	EASTBOUND LT	EASTBOUND TH	EASTBOUND RT
EXISTING	582	1887	0	0	1143	263	276	4	128	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	582	1887	0	0	1143	263	276	4	128	0	0	0

LANE

	NB							SB							WB							EB						
LANE	1		3							2		1			1				1									

	NB Phasing	NB RTOR	SB Phasing	SB RTOR	WB Phasing	WB RTOR	EB Phasing	EB RTOR
SIGNAL	Prot-Fix	Auto	Perm	Auto	Perm	Auto	<none>	<none>

Critical Movements Diagram

SouthBound A: 469 B: 0

EastBound A: 0 B: 0

WestBound A: 132 B: 276

NorthBound A: 629 B: 582

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{582 + 469 + 276 + 0}{*1425} = 0.861$$

LOS = D

2030PM

March 12, 2007 ,Monday 07:19:26 PM

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St

W/E: US-101 SB Ramps

I/S No: 18

AM/PM: PM

Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE:

STUDY DATE:

GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	2152	280	126	1296	0	0	0	0	313	0	145
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	2152	280	126	1296	0	0	0	0	313	0	145

LANE							
NORTHBOUND			2		1		
SOUTHBOUND		1	2				
WESTBOUND							
EASTBOUND	1					1	

SIGNAL	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	<none>	<none>
EASTBOUND	Perm	Auto

Critical Movements Diagram

SouthBound
A: 648
B: 126

EastBound
A: 145
B: 313

WestBound
A: 0
B: 0

NorthBound
A: 811
B: 0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{811 + 126 + 0 + 313}{*1500} = 0.763$$

LOS = C

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INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St | W/E: Temple St | I/S No: 19

AM/PM: PM | Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: | STUDY DATE: | GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	1848	91	0	1303	184	145	742	178	401	698	75
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	1848	91	0	1303	184	145	742	178	401	698	75

LANE

	LT	LT/TH	TH	LT/TH/RT	TH/RT	RT	LT/RT
NORTHBOUND		1	1		1		
SOUTHBOUND		1	1		1		
WESTBOUND	1		1		1		
EASTBOUND	1		1		1		

SIGNAL	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Prot-Var	Auto
EASTBOUND	Prot-Var	Auto

Critical Movements Diagram

	A	B
SouthBound	496	0
EastBound	387	401
WestBound	460	145
NorthBound	646	0

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{646 + 0 + 460 + 401}{*1375} = 1.026$$

LOS = F

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March 12, 2007 ,Monday 07:19:26 PM

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INTERSECTION DATA SUMMARY SHEET

N/S: Alvarado St W/E: Beverly Blvd I/S No: 20

AM/PM: PM Comments: FUTURE CONDITIONS (YEAR 2030)

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	1	1785	99	0	1290	201	105	1391	122	153	1143	80
AMBIENT												
RELATED												
PROJECT												
TOTAL	1	1785	99	0	1290	201	105	1391	122	153	1143	80

LANE

NORTHBOUND		1	1		1		
SOUTHBOUND		1	2			1	
WESTBOUND		1	2			1	
EASTBOUND	1		2		1		

SIGNAL

	Phasing	RTOR
NORTHBOUND	Perm	Auto
SOUTHBOUND	Perm	Auto
WESTBOUND	Perm	Auto
EASTBOUND	Perm	Auto

Critical Movements Diagram

SouthBound
A: 430
B: 0

EastBound
A: 408
B: 153

WestBound
A: 674
B: 105

NorthBound
A: 630
B: 1

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{630 + 0 + 674 + 153}{*1500} = 0.901$$

LOS = E

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FUTURE YEAR 2030 ALTERNATIVE A CONDITIONS

Movement	EBL2	EBR	NBL	NBT	SBT	SBR2	NEL	NET	NER	SWL	SWT	SWR2
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	11	14	10	12	12	12	12	9	12	11
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00		1.00		0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85		0.91		1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00		0.98		0.95	0.95	1.00
Satd. Flow (prot)	1534	1372	1711	3775	3303	1583		1672		1513	1681	1531
Flt Permitted	0.95	1.00	0.09	1.00	1.00	1.00		0.45		0.95	0.72	1.00
Satd. Flow (perm)	1534	1372	154	3775	3303	1583		772		1513	1269	1531
Volume (vph)	12	17	30	364	998	140	20	0	36	1182	0	206
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	18	33	396	1085	152	22	0	39	1285	0	224
RTOR Reduction (vph)	0	0	0	0	0	70	0	37	0	0	0	99
Lane Group Flow (vph)	13	18	33	396	1085	82	0	24	0	643	642	125
Confl. Peds. (#/hr)						5						
Turn Type	custom	custom	Perm			custom	Perm			Prot		custom
Protected Phases				2	2	2		1		3		
Permitted Phases	4	4	2			2	1				3	3
Actuated Green, G (s)	5.1	5.1	44.9	44.9	44.9	44.9		5.0		64.0	64.0	64.0
Effective Green, g (s)	6.1	6.1	46.9	46.9	46.9	46.9		6.0		65.0	65.0	65.0
Actuated g/C Ratio	0.04	0.04	0.34	0.34	0.34	0.34		0.04		0.46	0.46	0.46
Clearance Time (s)	5.0	5.0	6.0	6.0	6.0	6.0		5.0		5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	67	60	52	1265	1107	530		33		702	589	711
v/s Ratio Prot				0.10	c0.33	0.05				0.42		
v/s Ratio Perm	0.01	c0.01	0.21					c0.03			c0.51	0.08
v/c Ratio	0.19	0.30	0.63	0.31	0.98	0.15		0.72		0.92	1.09	0.18
Uniform Delay, d1	64.6	64.9	39.3	34.6	46.1	32.6		66.2		35.0	37.5	21.9
Progression Factor	1.00	1.00	0.98	0.95	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.4	2.8	38.2	0.5	22.7	0.6		53.9		16.6	63.9	0.1
Delay (s)	66.0	67.7	76.6	33.4	68.8	33.3		120.0		51.6	101.4	22.0
Level of Service	E	E	E	C	E	C		F		D	F	C
Approach Delay (s)				36.8	64.4			120.0			68.4	
Approach LOS				D	E			F			E	

Intersection Summary			
HCM Average Control Delay	63.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	11	12	12	12
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	0.97	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4713		1711	3539	3433	1555
Flt Permitted	1.00		0.05	1.00	0.95	1.00
Satd. Flow (perm)	4713		94	3539	3433	1555
Volume (vph)	2093	87	99	2124	175	170
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2275	95	108	2309	190	185
RTOR Reduction (vph)	2	0	0	0	0	24
Lane Group Flow (vph)	2368	0	108	2309	190	161
Confl. Peds. (#/hr)		2				3
Turn Type			Perm			Perm
Protected Phases	6			2	4	
Permitted Phases			2			4
Actuated Green, G (s)	112.6		112.6	112.6	17.6	17.6
Effective Green, g (s)	114.0		114.0	114.0	18.0	18.0
Actuated g/C Ratio	0.81		0.81	0.81	0.13	0.13
Clearance Time (s)	5.4		5.4	5.4	4.4	4.4
Vehicle Extension (s)	5.5		5.5	5.5	2.0	2.0
Lane Grp Cap (vph)	3838		77	2882	441	200
v/s Ratio Prot	0.50			0.65	0.06	
v/s Ratio Perm			c1.15			c0.10
v/c Ratio	0.62		1.40	0.80	0.43	0.80
Uniform Delay, d1	4.9		13.0	6.9	56.3	59.3
Progression Factor	0.14		1.33	1.24	1.00	1.00
Incremental Delay, d2	0.6		202.4	0.6	0.2	19.3
Delay (s)	1.3		219.7	9.2	56.5	78.6
Level of Service	A		F	A	E	E
Approach Delay (s)	1.3			18.6	67.4	
Approach LOS	A			B	E	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL2	EBR	NBL	NBT	SBT	SBR2	NEL	NET	NER	SWL	SWT	SWR2
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	11	14	10	12	12	12	12	9	12	11
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00		1.00		0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85		0.91		1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00		0.98		0.95	0.95	1.00
Satd. Flow (prot)	1534	1372	1711	3775	3303	1583		1667		1513	1681	1531
Flt Permitted	0.95	1.00	0.40	1.00	1.00	1.00		0.21		0.95	0.71	1.00
Satd. Flow (perm)	1534	1372	714	3775	3303	1583		362		1513	1257	1531
Volume (vph)	30	28	36	545	541	88	22	0	44	73	0	229
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	30	39	592	588	96	24	0	48	79	0	249
RTOR Reduction (vph)	0	0	0	0	0	37	0	43	0	0	0	224
Lane Group Flow (vph)	33	30	39	592	588	59	0	29	0	40	39	25
Confl. Peds. (#/hr)						5						
Turn Type	custom	custom	Perm			custom	Perm			Prot		custom
Protected Phases				2	2	2		1		3		
Permitted Phases	4	4	2			2	1				3	3
Actuated Green, G (s)	7.2	7.2	78.3	78.3	78.3	78.3		11.5		12.0	12.0	12.0
Effective Green, g (s)	8.2	8.2	80.3	80.3	80.3	80.3		12.5		13.0	13.0	13.0
Actuated g/C Ratio	0.06	0.06	0.62	0.62	0.62	0.62		0.10		0.10	0.10	0.10
Clearance Time (s)	5.0	5.0	6.0	6.0	6.0	6.0		5.0		5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	97	87	441	2332	2040	978		35		151	126	153
v/s Ratio Prot				0.16	c0.18	0.04				0.03		
v/s Ratio Perm	0.02	c0.02	0.05					c0.08			c0.03	0.02
v/c Ratio	0.34	0.34	0.09	0.25	0.29	0.06		0.82		0.26	0.31	0.16
Uniform Delay, d1	58.3	58.3	10.0	11.3	11.6	9.9		57.6		54.1	54.3	53.5
Progression Factor	1.00	1.00	0.52	0.53	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	2.1	2.4	0.0	0.0	0.4	0.1		80.8		0.9	1.4	0.5
Delay (s)	60.4	60.7	5.3	6.0	11.9	10.0		138.5		55.0	55.7	54.0
Level of Service	E	E	A	A	B	A		F		E	E	D
Approach Delay (s)				5.9	11.6			138.5			54.3	
Approach LOS				A	B			F			D	

Intersection Summary			
HCM Average Control Delay	24.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	60.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	11	12	12	12
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	0.97	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4725		1711	3539	3433	1556
Flt Permitted	1.00		0.04	1.00	0.95	1.00
Satd. Flow (perm)	4725		71	3539	3433	1556
Volume (vph)	3881	100	67	486	108	200
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4218	109	73	528	117	217
RTOR Reduction (vph)	2	0	0	0	0	10
Lane Group Flow (vph)	4325	0	73	528	117	207
Confl. Peds. (#/hr)		2				3
Turn Type			Perm			Perm
Protected Phases	6			2	4	
Permitted Phases			2			4
Actuated Green, G (s)	100.5		100.5	100.5	19.7	19.7
Effective Green, g (s)	101.9		101.9	101.9	20.1	20.1
Actuated g/C Ratio	0.78		0.78	0.78	0.15	0.15
Clearance Time (s)	5.4		5.4	5.4	4.4	4.4
Vehicle Extension (s)	5.5		5.5	5.5	2.0	2.0
Lane Grp Cap (vph)	3704		56	2774	531	241
v/s Ratio Prot	0.92			0.15	0.03	
v/s Ratio Perm			c1.03			c0.13
v/c Ratio	1.17		1.30	0.19	0.22	0.86
Uniform Delay, d1	14.0		14.0	3.6	48.1	53.6
Progression Factor	0.42		2.21	1.25	1.00	1.00
Incremental Delay, d2	75.8		220.2	0.1	0.1	24.0
Delay (s)	81.7		251.3	4.5	48.2	77.6
Level of Service	F		F	A	D	E
Approach Delay (s)	81.7			34.5	67.3	
Approach LOS	F			C	E	

Intersection Summary

HCM Average Control Delay	75.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

FUTURE YEAR 2030 ALTERNATIVE B CONDITIONS

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	NEL	NER
Lane Configurations									
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	11	14	10	12	12	12	12
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.85	1.00	1.00	1.00		0.85	0.91	
Flt Protected	0.95	1.00	0.95	1.00	1.00		1.00	0.98	
Satd. Flow (prot)	1534	1372	1711	3775	3303		1583	1672	
Flt Permitted	0.95	1.00	0.25	1.00	1.00		1.00	0.98	
Satd. Flow (perm)	1534	1372	441	3775	3303		1583	1672	
Volume (vph)	12	17	30	570	998	0	140	20	36
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	18	33	620	1085	0	152	22	39
RTOR Reduction (vph)	0	0	0	0	0	0	28	37	0
Lane Group Flow (vph)	13	18	33	620	1085	0	124	24	0
Confl. Peds. (#/hr)						2	5		
Turn Type		custom	Perm				custom		
Protected Phases				2	2		2		
Permitted Phases	4	4	2				2	1	
Actuated Green, G (s)	5.0	5.0	112.4	112.4	112.4		112.4	6.6	
Effective Green, g (s)	6.0	6.0	114.4	114.4	114.4		114.4	7.6	
Actuated g/C Ratio	0.04	0.04	0.82	0.82	0.82		0.82	0.05	
Clearance Time (s)	5.0	5.0	6.0	6.0	6.0		6.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	66	59	360	3085	2699		1294	91	
v/s Ratio Prot				0.16	c0.33		0.08		
v/s Ratio Perm	0.01	c0.01	0.07					c0.01	
v/c Ratio	0.20	0.31	0.09	0.20	0.40		0.10	0.27	
Uniform Delay, d1	64.7	65.0	2.5	2.8	3.5		2.5	63.5	
Progression Factor	1.00	1.00	0.48	0.48	1.00		1.00	1.00	
Incremental Delay, d2	1.5	2.9	0.4	0.1	0.4		0.1	1.6	
Delay (s)	66.1	67.9	1.6	1.5	3.9		2.7	65.1	
Level of Service	E	E	A	A	A		A	E	
Approach Delay (s)	67.2			1.5	3.8			65.1	
Approach LOS	E			A	A			E	

Intersection Summary			
HCM Average Control Delay	5.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	11	12	12	12
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.91	0.97	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4713		1711	5085	3433	1555
Flt Permitted	1.00		0.05	1.00	0.95	1.00
Satd. Flow (perm)	4713		94	5085	3433	1555
Volume (vph)	2093	87	99	4017	175	170
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2275	95	108	4366	190	185
RTOR Reduction (vph)	2	0	0	0	0	24
Lane Group Flow (vph)	2368	0	108	4366	190	161
Confl. Peds. (#/hr)		2				3
Turn Type			Perm			Perm
Protected Phases	6			2	4	
Permitted Phases			2			4
Actuated Green, G (s)	112.6		112.6	112.6	17.6	17.6
Effective Green, g (s)	114.0		114.0	114.0	18.0	18.0
Actuated g/C Ratio	0.81		0.81	0.81	0.13	0.13
Clearance Time (s)	5.4		5.4	5.4	4.4	4.4
Vehicle Extension (s)	5.5		5.5	5.5	2.0	2.0
Lane Grp Cap (vph)	3838		77	4141	441	200
v/s Ratio Prot	0.50			0.86	0.06	
v/s Ratio Perm			c1.15			c0.10
v/c Ratio	0.62		1.40	1.05	0.43	0.80
Uniform Delay, d1	4.9		13.0	13.0	56.3	59.3
Progression Factor	0.24		0.54	0.53	1.00	1.00
Incremental Delay, d2	0.6		188.2	25.2	0.2	19.3
Delay (s)	1.8		195.2	32.1	56.5	78.6
Level of Service	A		F	C	E	E
Approach Delay (s)	1.8			36.0	67.4	
Approach LOS	A			D	E	

Intersection Summary

HCM Average Control Delay	26.4	HCM Level of Service	C
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	
Lane Util. Factor	0.95	0.88		0.95	0.94	
Frt	1.00	0.85		1.00	0.99	
Flt Protected	1.00	1.00		1.00	0.96	
Satd. Flow (prot)	3539	2787		3539	4969	
Flt Permitted	1.00	1.00		1.00	0.96	
Satd. Flow (perm)	3539	2787		3539	4969	
Volume (vph)	394	1869	0	1051	2966	206
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	428	2032	0	1142	3224	224
RTOR Reduction (vph)	0	0	0	0	6	0
Lane Group Flow (vph)	428	2032	0	1142	3442	0
Turn Type		Free				
Protected Phases	2			6	8	
Permitted Phases		Free				
Actuated Green, G (s)	42.0	140.0		42.0	90.0	
Effective Green, g (s)	42.0	140.0		42.0	90.0	
Actuated g/C Ratio	0.30	1.00		0.30	0.64	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1062	2787		1062	3194	
v/s Ratio Prot	0.12			c0.32	c0.69	
v/s Ratio Perm		0.73				
v/c Ratio	0.40	0.73		1.08	1.08	
Uniform Delay, d1	39.0	0.0		49.0	25.0	
Progression Factor	1.11	1.00		0.93	1.00	
Incremental Delay, d2	0.9	1.3		49.5	41.6	
Delay (s)	44.2	1.3		94.9	66.6	
Level of Service	D	A		F	E	
Approach Delay (s)	8.8			94.9	66.6	
Approach LOS	A			F	E	

Intersection Summary			
HCM Average Control Delay	51.0	HCM Level of Service	D
HCM Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	NEL	NER
Lane Configurations	↰	↱	↰	↑↑	↑↑		↱	↰	↱
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	11	14	10	12	12	12	12
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00		0.85	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00		1.00	0.95	1.00
Satd. Flow (prot)	1534	1372	1711	3775	3303		1583	1770	1583
Flt Permitted	0.95	1.00	0.42	1.00	1.00		1.00	0.95	1.00
Satd. Flow (perm)	1534	1372	763	3775	3303		1583	1770	1583
Volume (vph)	30	28	36	545	541	0	88	22	44
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	30	39	592	588	0	96	24	48
RTOR Reduction (vph)	0	0	0	0	0	0	23	0	45
Lane Group Flow (vph)	33	30	39	592	588	0	73	24	3
Confl. Peds. (#/hr)						2	5		
Turn Type		custom	Perm				custom		custom
Protected Phases				2	2		2		
Permitted Phases	4	4	2				2	1	1
Actuated Green, G (s)	5.4	5.4	77.9	77.9	77.9		77.9	5.7	5.7
Effective Green, g (s)	6.4	6.4	79.9	79.9	79.9		79.9	6.7	6.7
Actuated g/C Ratio	0.06	0.06	0.76	0.76	0.76		0.76	0.06	0.06
Clearance Time (s)	5.0	5.0	6.0	6.0	6.0		6.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	94	84	581	2873	2513		1205	113	101
v/s Ratio Prot				0.16	c0.18		0.05		
v/s Ratio Perm	0.02	c0.02	0.05					c0.01	0.00
v/c Ratio	0.35	0.36	0.07	0.21	0.23		0.06	0.21	0.03
Uniform Delay, d1	47.3	47.3	3.2	3.6	3.6		3.1	46.6	46.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.3	2.6	0.2	0.2	0.2		0.1	0.9	0.1
Delay (s)	49.6	49.9	3.4	3.7	3.9		3.2	47.6	46.2
Level of Service	D	D	A	A	A		A	D	D
Approach Delay (s)	49.7			3.7	3.8			46.7	
Approach LOS	D			A	A			D	

Intersection Summary			
HCM Average Control Delay	7.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	11	12	12	12
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	0.97	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4725		1711	3539	3433	1556
Flt Permitted	1.00		0.04	1.00	0.95	1.00
Satd. Flow (perm)	4725		71	3539	3433	1556
Volume (vph)	3881	100	67	2592	108	200
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4218	109	73	2817	117	217
RTOR Reduction (vph)	2	0	0	0	0	10
Lane Group Flow (vph)	4325	0	73	2817	117	207
Confl. Peds. (#/hr)		2				3
Turn Type			Perm			Perm
Protected Phases	6			2	4	
Permitted Phases			2			4
Actuated Green, G (s)	100.5		100.5	100.5	19.7	19.7
Effective Green, g (s)	101.9		101.9	101.9	20.1	20.1
Actuated g/C Ratio	0.78		0.78	0.78	0.15	0.15
Clearance Time (s)	5.4		5.4	5.4	4.4	4.4
Vehicle Extension (s)	5.5		5.5	5.5	2.0	2.0
Lane Grp Cap (vph)	3704		56	2774	531	241
v/s Ratio Prot	0.92			0.80	0.03	
v/s Ratio Perm			c1.03			c0.13
v/c Ratio	1.17		1.30	1.02	0.22	0.86
Uniform Delay, d1	14.0		14.0	14.0	48.1	53.6
Progression Factor	0.42		1.00	1.00	1.00	1.00
Incremental Delay, d2	75.8		221.7	21.1	0.1	24.0
Delay (s)	81.7		235.7	35.1	48.2	77.6
Level of Service	F		F	D	D	E
Approach Delay (s)	81.7			40.2	67.3	
Approach LOS	F			D	E	

Intersection Summary			
HCM Average Control Delay	65.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	
Lane Util. Factor	0.95	0.88		0.95	0.94	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	1.00	1.00		1.00	0.95	
Satd. Flow (prot)	3539	2787		3539	4990	
Flt Permitted	1.00	1.00		1.00	0.95	
Satd. Flow (perm)	3539	2787		3539	4990	
Volume (vph)	581	3450	0	613	1979	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	632	3750	0	666	2151	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	632	3750	0	666	2151	0
Turn Type		Free				
Protected Phases	2			6	8	
Permitted Phases		Free				
Actuated Green, G (s)	14.7	50.0		14.7	27.3	
Effective Green, g (s)	14.7	50.0		14.7	27.3	
Actuated g/C Ratio	0.29	1.00		0.29	0.55	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1040	2787		1040	2725	
v/s Ratio Prot	0.18			0.19	0.43	
v/s Ratio Perm		c1.35				
v/c Ratio	0.61	1.35		0.64	0.79	
Uniform Delay, d1	15.2	25.0		15.4	9.1	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.6	158.0		3.0	1.6	
Delay (s)	17.8	183.0		18.4	10.6	
Level of Service	B	F		B	B	
Approach Delay (s)	159.1			18.4	10.6	
Approach LOS	F			B	B	

Intersection Summary			
HCM Average Control Delay	101.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	50.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

FUTURE YEAR 2030 ALTERNATIVES C, D, & E CONDITIONS

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	NEL	NER
Lane Configurations									
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	11	14	10	12	12	12	12
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.85	1.00	1.00	1.00		0.85	0.91	
Flt Protected	0.95	1.00	0.95	1.00	1.00		1.00	0.98	
Satd. Flow (prot)	1534	1372	1711	3775	3303		1583	1672	
Flt Permitted	0.95	1.00	0.25	1.00	1.00		1.00	0.98	
Satd. Flow (perm)	1534	1372	441	3775	3303		1583	1672	
Volume (vph)	12	17	30	570	998	0	140	20	36
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	18	33	620	1085	0	152	22	39
RTOR Reduction (vph)	0	0	0	0	0	0	28	37	0
Lane Group Flow (vph)	13	18	33	620	1085	0	124	24	0
Confl. Peds. (#/hr)						2	5		
Turn Type		custom	Perm				custom		
Protected Phases				2	2		2		
Permitted Phases	4	4	2				2	1	
Actuated Green, G (s)	5.0	5.0	112.4	112.4	112.4		112.4	6.6	
Effective Green, g (s)	6.0	6.0	114.4	114.4	114.4		114.4	7.6	
Actuated g/C Ratio	0.04	0.04	0.82	0.82	0.82		0.82	0.05	
Clearance Time (s)	5.0	5.0	6.0	6.0	6.0		6.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	66	59	360	3085	2699		1294	91	
v/s Ratio Prot				0.16	c0.33		0.08		
v/s Ratio Perm	0.01	c0.01	0.07					c0.01	
v/c Ratio	0.20	0.31	0.09	0.20	0.40		0.10	0.27	
Uniform Delay, d1	64.7	65.0	2.5	2.8	3.5		2.5	63.5	
Progression Factor	1.00	1.00	0.48	0.48	1.00		1.00	1.00	
Incremental Delay, d2	1.5	2.9	0.4	0.1	0.4		0.1	1.6	
Delay (s)	66.1	67.9	1.6	1.5	3.9		2.7	65.1	
Level of Service	E	E	A	A	A		A	E	
Approach Delay (s)	67.2			1.5	3.8			65.1	
Approach LOS	E			A	A			E	

Intersection Summary			
HCM Average Control Delay	5.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	11	12	12	12
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.91	0.97	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4713		1711	5085	3433	1555
Flt Permitted	1.00		0.05	1.00	0.95	1.00
Satd. Flow (perm)	4713		94	5085	3433	1555
Volume (vph)	2093	87	99	4017	175	170
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2275	95	108	4366	190	185
RTOR Reduction (vph)	2	0	0	0	0	24
Lane Group Flow (vph)	2368	0	108	4366	190	161
Confl. Peds. (#/hr)		2				3
Turn Type			Perm			Perm
Protected Phases	6			2	4	
Permitted Phases			2			4
Actuated Green, G (s)	112.6		112.6	112.6	17.6	17.6
Effective Green, g (s)	114.0		114.0	114.0	18.0	18.0
Actuated g/C Ratio	0.81		0.81	0.81	0.13	0.13
Clearance Time (s)	5.4		5.4	5.4	4.4	4.4
Vehicle Extension (s)	5.5		5.5	5.5	2.0	2.0
Lane Grp Cap (vph)	3838		77	4141	441	200
v/s Ratio Prot	0.50			0.86	0.06	
v/s Ratio Perm			c1.15			c0.10
v/c Ratio	0.62		1.40	1.05	0.43	0.80
Uniform Delay, d1	4.9		13.0	13.0	56.3	59.3
Progression Factor	0.24		0.71	0.76	1.00	1.00
Incremental Delay, d2	0.6		206.4	27.1	0.2	19.3
Delay (s)	1.8		215.6	37.0	56.5	78.6
Level of Service	A		F	D	E	E
Approach Delay (s)	1.8			41.3	67.4	
Approach LOS	A			D	E	

Intersection Summary

HCM Average Control Delay	29.7	HCM Level of Service	C
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	
Lane Util. Factor	0.95	0.88		0.91	0.94	
Frt	1.00	0.85		1.00	0.99	
Flt Protected	1.00	1.00		1.00	0.96	
Satd. Flow (prot)	3539	2787		5085	4969	
Flt Permitted	1.00	1.00		1.00	0.96	
Satd. Flow (perm)	3539	2787		5085	4969	
Volume (vph)	394	1869	0	1051	2966	206
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	428	2032	0	1142	3224	224
RTOR Reduction (vph)	0	0	0	0	5	0
Lane Group Flow (vph)	428	2032	0	1142	3443	0
Turn Type		Free				
Protected Phases	2			6	8	
Permitted Phases		Free				
Actuated Green, G (s)	37.9	140.0		37.9	94.1	
Effective Green, g (s)	37.9	140.0		37.9	94.1	
Actuated g/C Ratio	0.27	1.00		0.27	0.67	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	958	2787		1377	3340	
v/s Ratio Prot	0.12			c0.22	c0.69	
v/s Ratio Perm		0.73				
v/c Ratio	0.45	0.73		0.83	1.03	
Uniform Delay, d1	42.4	0.0		48.0	23.0	
Progression Factor	1.06	1.00		0.92	1.00	
Incremental Delay, d2	1.2	1.3		5.6	24.2	
Delay (s)	46.3	1.3		49.7	47.1	
Level of Service	D	A		D	D	
Approach Delay (s)	9.2			49.7	47.1	
Approach LOS	A			D	D	

Intersection Summary			
HCM Average Control Delay	34.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	NEL	NER
Lane Configurations									
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	11	14	10	12	12	12	12
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00		0.85	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00		1.00	0.95	1.00
Satd. Flow (prot)	1534	1372	1711	3775	3303		1583	1770	1583
Flt Permitted	0.95	1.00	0.42	1.00	1.00		1.00	0.95	1.00
Satd. Flow (perm)	1534	1372	763	3775	3303		1583	1770	1583
Volume (vph)	30	28	36	545	541	0	88	22	44
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	30	39	592	588	0	96	24	48
RTOR Reduction (vph)	0	0	0	0	0	0	23	0	45
Lane Group Flow (vph)	33	30	39	592	588	0	73	24	3
Confl. Peds. (#/hr)						2	5		
Turn Type		custom	Perm				custom		custom
Protected Phases				2	2		2		
Permitted Phases	4	4	2				2	1	1
Actuated Green, G (s)	5.4	5.4	77.9	77.9	77.9		77.9	5.7	5.7
Effective Green, g (s)	6.4	6.4	79.9	79.9	79.9		79.9	6.7	6.7
Actuated g/C Ratio	0.06	0.06	0.76	0.76	0.76		0.76	0.06	0.06
Clearance Time (s)	5.0	5.0	6.0	6.0	6.0		6.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	94	84	581	2873	2513		1205	113	101
v/s Ratio Prot				0.16	c0.18		0.05		
v/s Ratio Perm	0.02	c0.02	0.05					c0.01	0.00
v/c Ratio	0.35	0.36	0.07	0.21	0.23		0.06	0.21	0.03
Uniform Delay, d1	47.3	47.3	3.2	3.6	3.6		3.1	46.6	46.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.3	2.6	0.2	0.2	0.2		0.1	0.9	0.1
Delay (s)	49.6	49.9	3.4	3.7	3.9		3.2	47.6	46.2
Level of Service	D	D	A	A	A		A	D	D
Approach Delay (s)	49.7			3.7	3.8			46.7	
Approach LOS	D			A	A			D	

Intersection Summary			
HCM Average Control Delay	7.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	11	12	12	12
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	0.97	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4725		1711	3539	3433	1556
Flt Permitted	1.00		0.04	1.00	0.95	1.00
Satd. Flow (perm)	4725		71	3539	3433	1556
Volume (vph)	3881	100	67	2592	108	200
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4218	109	73	2817	117	217
RTOR Reduction (vph)	2	0	0	0	0	10
Lane Group Flow (vph)	4325	0	73	2817	117	207
Confl. Peds. (#/hr)		2				3
Turn Type			Perm			Perm
Protected Phases	6			2	4	
Permitted Phases			2			4
Actuated Green, G (s)	100.5		100.5	100.5	19.7	19.7
Effective Green, g (s)	101.9		101.9	101.9	20.1	20.1
Actuated g/C Ratio	0.78		0.78	0.78	0.15	0.15
Clearance Time (s)	5.4		5.4	5.4	4.4	4.4
Vehicle Extension (s)	5.5		5.5	5.5	2.0	2.0
Lane Grp Cap (vph)	3704		56	2774	531	241
v/s Ratio Prot	0.92			0.80	0.03	
v/s Ratio Perm			c1.03			c0.13
v/c Ratio	1.17		1.30	1.02	0.22	0.86
Uniform Delay, d1	14.0		14.0	14.0	48.1	53.6
Progression Factor	0.42		1.00	1.00	1.00	1.00
Incremental Delay, d2	75.8		221.7	21.1	0.1	24.0
Delay (s)	81.7		235.7	35.1	48.2	77.6
Level of Service	F		F	D	D	E
Approach Delay (s)	81.7			40.2	67.3	
Approach LOS	F			D	E	

Intersection Summary			
HCM Average Control Delay	65.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	
Lane Util. Factor	0.95	0.88		0.91	0.94	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	1.00	1.00		1.00	0.95	
Satd. Flow (prot)	3539	2787		5085	4990	
Flt Permitted	1.00	1.00		1.00	0.95	
Satd. Flow (perm)	3539	2787		5085	4990	
Volume (vph)	581	3450	0	613	1979	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	632	3750	0	666	2151	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	632	3750	0	666	2151	0
Turn Type		Free				
Protected Phases	2			6	8	
Permitted Phases		Free				
Actuated Green, G (s)	14.6	50.0		14.6	27.4	
Effective Green, g (s)	14.6	50.0		14.6	27.4	
Actuated g/C Ratio	0.29	1.00		0.29	0.55	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1033	2787		1485	2735	
v/s Ratio Prot	0.18			0.13	0.43	
v/s Ratio Perm		c1.35				
v/c Ratio	0.61	1.35		0.45	0.79	
Uniform Delay, d1	15.3	25.0		14.4	9.0	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.7	158.0		1.0	1.6	
Delay (s)	18.0	183.0		15.4	10.5	
Level of Service	B	F		B	B	
Approach Delay (s)	159.2			15.4	10.5	
Approach LOS	F			B	B	

Intersection Summary			
HCM Average Control Delay	101.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	50.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Resources Evaluated Relative to the Requirements of Section 4(f)

for the

SR-2 Freeway Terminus Improvement Project

EA 205500

2nd Draft

June 2008

Prepared for:

Los Angeles County Metropolitan Transportation Authority
California Department of Transportation
Federal Highway Administration

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Contents

Acronyms

APE	area of potential effects
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
EIR/EIS	environmental impact report/environmental impact statement
FHWA	Federal Highway Administration
FONSI	findings of no significant impact
LWCF Act	Land and Water Conservation Fund Act
LPA	Locally Preferred Alternative
LADOT	Los Angeles Department of Transportation
Metro	Metropolitan Transportation Authority
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
SHPO	State Historic Preservation Officer
SR-2	State Route 2
field	Tommy Lasorda Field of Dreams
USC	United States Code

Executive Summary

This section of the document discusses parks, recreational facilities, wildlife refuges, and historic properties found within or adjacent to the project area that do not trigger Section 4(f) protection because 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, 4) the project does not permanently use the property and does not hinder the preservation of the property, or 5) the proximity impacts do not result in constructive use. This Section 4(f) evaluation has been prepared in accordance with 49 United States Code (USC) Section 303 and the Federal Highway Administration (FHWA) regulations for Section 4(f) compliance codified at 23 Code of Federal Regulations (CFR) Section 771.135. This study evaluates the effects of the proposed project on one public park, the Tommy Lasorda Field of Dreams. There are no historic sites in the vicinity of the project.

Under the alternatives proposed, there would be no use of or impacts on the Tommy Lasorda Field of Dreams or proximity impacts that would be considered adverse in terms of the preservationist purposes of the Section 4(f) statute and therefore, the provisions of Section 4(f) are not triggered.

Application of Section 4(f)

Introduction

Section 4(f) of the Department of Transportation Act of 1966, codified at 49 USC Section 303, declares that "[i]t is the policy of the United States government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that

> [t]he Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge or site) only if
>
> (1) there is no prudent and feasible alternative to using that land; and
>
> (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Section 4(f) further requires consultation with the Department of Interior and, as appropriate, the involved offices of the Department of Agriculture, the Department of Housing and Urban Development, and relevant state and local officials in developing transportation projects and programs that use lands protected by Section 4(f).

The proposed project (and alternatives) is a transportation project that may receive federal funding and/or discretionary approvals through the U.S. Department of Transportation (i.e., FHWA); therefore, documentation of compliance with Section 4(f) is required.

This Section 4(f) evaluation has been prepared in accordance with the FHWA regulations for Section 4(f) compliance codified at 23 CFR Section 771.135. Additional guidance has been obtained from FHWA Technical Advisory T 6640.8A (1987) and the revised FHWA Section 4(f) Policy Paper (2005).

Section 4(f) Use

As defined in 23 CFR Section 771.135(p), the "use" of a protected Section 4(f) resource occurs when any of the following conditions are met.

- Land is permanently incorporated into a transportation facility through partial or full acquisition (i.e., direct use).
- There is a temporary occupancy of land that is adverse in terms of the preservationist purposes of Section 4(f) (i.e., temporary use).
- There is no permanent incorporation of land, but the proximity of a transportation facility results in impacts so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired (i.e., constructive use).

Direct Use

A direct use of a Section 4(f) resource takes place when property is permanently incorporated into a proposed transportation project (23 CFR Section 771.135[p][1]). This may occur as a result of partial or full acquisition of a fee simple interest, permanent easements, or temporary easements that exceed the regulatory limits noted below (23 CFR Section 771.135[p][7]).

Temporary Occupancy

A use of a Section 4(f) resource occurs when there is a temporary occupancy of property that is considered adverse in terms of the preservationist purposes of the Section 4(f) statute. Under FHWA regulations (23 CFR Section 771.135[p][7]), a temporary occupancy of a property does not constitute a use of a Section 4(f) resource when the following conditions are satisfied.

- The occupancy must be of temporary duration (i.e., shorter than the period of construction) and not involve a change in ownership of the property.
- The scope of work must be minor, with only minimal changes to the protected resource.

- There are no permanent adverse physical effects on the protected resource, and there would be no temporary or permanent interference with activities or purpose of the resource.
- The property being used must be fully restored to a condition that is at least as good as that which existed prior to the proposed project.
- There must be documented agreement of the appropriate officials having jurisdiction over the resource regarding the foregoing requirements.

Constructive Use

A constructive use of a Section 4(f) resource happens when a transportation project does not permanently incorporate land from the resource, but the proximity of the project results in impacts (i.e., noise, vibration, visual, access, and/or ecological impacts) so severe that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) are substantially impaired (23 CFR Section 771.135[p][2]). Substantial impairment occurs only if the protected activities, features, or attributes of the resource are substantially diminished. This determination is made through the following practices.

- Identification of the current activities, features, or attributes of the resource that may be sensitive to proximity impacts.
- Analysis of the potential proximity impacts on the resource.
- Consultation with the appropriate officials having jurisdiction over the resource (23 CFR Section 771.135[p][6]).

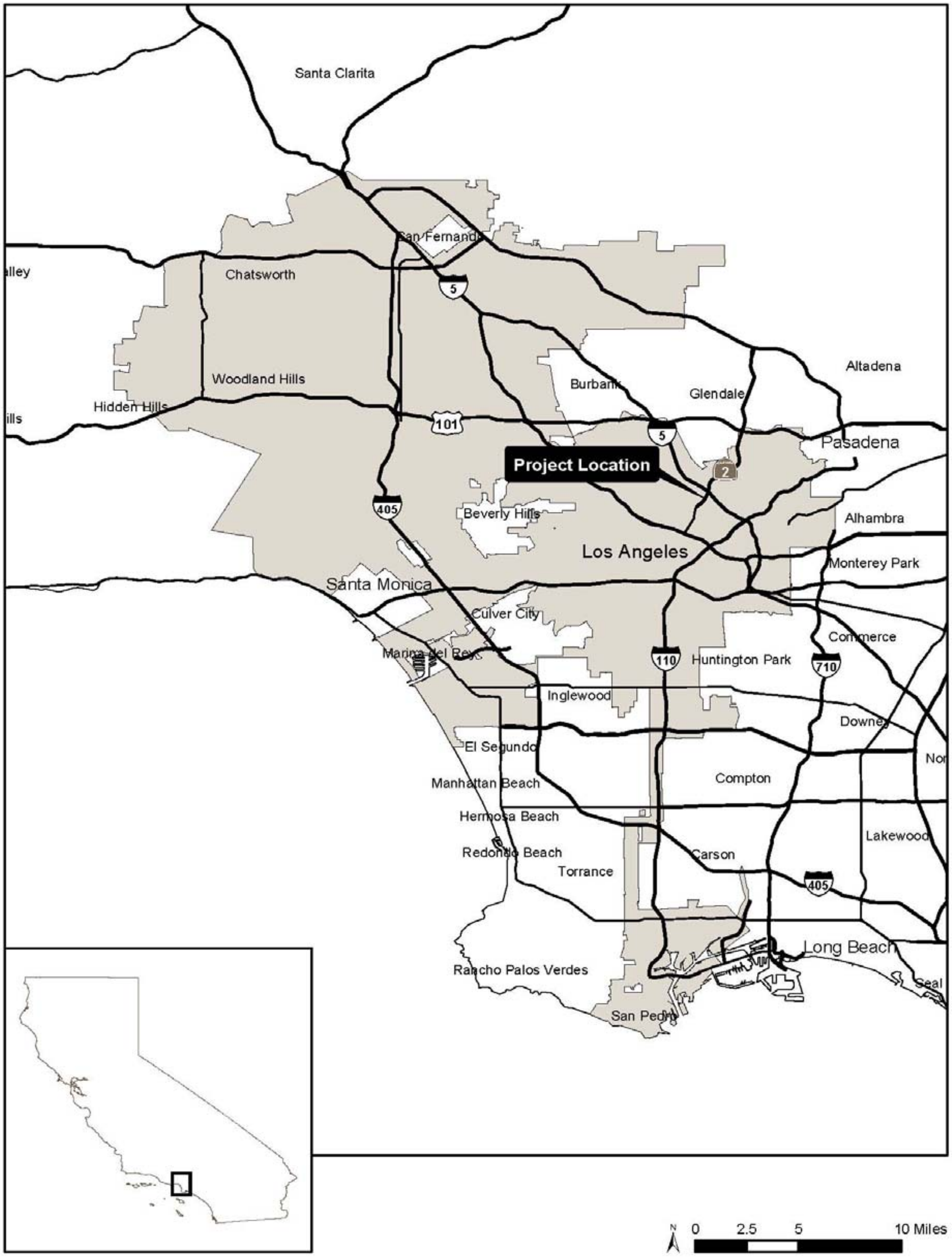
Proposed Action

The Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the California Department of Transportation (Caltrans) and the Los Angeles Department of Transportation (LADOT), is proposing to modify the southern terminus of State Route 2 (SR-2), also known as the Glendale Freeway, located in the City of Los Angeles, Los Angeles County, California (Figure 1). The proposed project construction limits are located approximately between Clifford Street to the south and Oak Glen Place to the north; however, the overall study area for the project includes the right-of-way between Aaron Street to the south and Interstate 5 (I-5) to the north (Figure 2).

Purpose and Need

Metro, in cooperation with the Caltrans and LADOT, is proposing to modify the southern terminus of SR-2 at Glendale Boulevard to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the

Figure 1. Regional Location Map



Source: Jones & Stokes, 2007.

Figure 2. Project Vicinity Map

Source: Jones & Stokes, 2007.

vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses.

Project Description

There are six proposed alternatives for the SR-2 Freeway Terminus Improvement Project, including the No-Build Alternative. The proposed project site is located between approximately Clifford Street to the south and Oak Glen Place to the north. The six proposed alternatives are summarized as follows:

- **No Build Alternative (Baseline Alternative)**
  This alternative requires no new construction or capital cost (Figure 3).
- **Alternative A (Widen Existing Ramps – Maintain Bridge)**
  This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp (two lanes). This alternative does not have any potential for new open space (Figure 4).
- **Alternative B (Realign Ramps East- Remove Flyover and Part of Bridge)**
  This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would also remove the southbound flyover ramp and bridge. It would remove the southbound flyover ramp and part of the bridge (Figure 5).
- **Alternative C (Realign Ramps East – Remove Bridge)**
  This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and bridge. This alternative provides a landscaped median and parkway treatment. This alternative offers the potential for new open space (Figure 6).
- **Alternative D (Realign Ramps East – Maintain Bridge)**
  This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged (Figure 7).

  Alternative E (Realign Ramps East, Retain Bridge and Flyover, Relocate Retaining Wall)
  This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining

Figure 3. No-Build Alternative (Baseline Alternative)

Source: Melendrez, 2006.

Figure 4. Alternative A (Widen Existing Ramps)

Source: Melendrez, 2006.

Figure 5. Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge)

Source: Melendrez, 2006.

Figure 6. Alternative C (Realign Ramps East – Remove Flyover and Bridge)

Source: Melendrez, 2006.

Figure 7. Alternative D (Realign Ramps East – Retain Flyover and Bridge)

Source: Melendrez, 2006.

Figure 8. Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining Wall)

Source: Melendrez, 2006.

wall along Allesandro Street would be relocated to the east to maintain Caltrans' streets and highway standards (Figure 8).

Description of Section 4(f) Resources

As noted above, resources subject to Section 4(f) consideration include publicly owned lands consisting of public park/recreational areas; public wildlife and waterfowl refuges of national, state, or local significance; or historic sites of national, state, or local significance, whether publicly or privately owned. As described more fully below, the Section 4(f) resources in the vicinity of the proposed project area include publicly owned parks/recreational areas and significant historic sites. There are no wildlife and waterfowl refuges in the proposed project area.

For purposes of this Section 4(f) evaluation, only those public park/recreational resources within approximately 0.25 mile of the proposed project area and only those historic sites within the area of potential effects (APE) have been identified for additional analysis.

Public Parks and Recreational Areas

One public park has been identified in the proposed project area. Table 1 provides a summary listing of that resource. A detailed description of the resource is provided below in the discussion of effects on Section 4(f) properties.

Table 1. Section 4(f) Properties—Public Parks and Recreational Areas

Map #	Name	Size	Location
1	Tommy Lasorda Field of Dreams	1.8 acres	City of Los Angeles. Address unassigned; located within leased freeway right-of-way bounded by Duane Street, Waterloo Street, and SR-2.

Source: Jones & Stokes, 2007.

Historic Sites

No historic sites eligible for the National Register of Historic Places (NRHP) have been identified in the APE for the proposed project. In accordance with FHWA regulations, Section 4(f) requirements are applicable only to *significant* historic sites (i.e., those sites on or eligible for the NRHP) or sites otherwise determined significant by the FHWA administrator (23 CFR Section 771.135[e]).

Effects on Section 4(f) Resources

The following sections describe how the proposed build alternatives would affect Section 4(f) resources. A summary of potential effects is provided below in Table 2. Additional analysis then follows for each resource. In every instance, an assessment has been made as to whether any permanent or temporary occupation of a property would occur and whether the proximity of the proposed project would cause any access disruption, noise, vibration, or aesthetic effects that would substantially impair the features or attributes that qualify the resource for protection under Section 4(f).

Table 2: Potential Effects on Section 4(f) Resource

Resource	Proposed Build Alternatives				
	Use under Section 4(f)				
	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Tommy Lasorda Field of Dreams	**Direct -**None **Temporary Occupancy -** None **Constructive -** None	**Direct -**None **Temporary Occupancy -** None **Constructive -** None	**Direct -**None **Temporary Occupancy -** None **Constructive -** None	**Direct -**None **Temporary Occupancy -** None **Constructive -** None	**Direct -** None **Temporary Occupancy -** None **Constructive -** None

Source: Jones & Stokes, 2007.

The analysis of potential effects on the Section 4(f) resources below includes:

- A description of each Section 4(f) resource;
- A discussion of how the proposed build alternatives would affect each Section 4(f) resource and whether the effects would result in a use of the resource;
- An evaluation of any feasible and prudent alternatives to avoid use of the Section 4(f) resource. An alternative is not feasible if it cannot be built as a matter of sound engineering practice. A feasible alternative is not prudent if there are truly unusual factors present in a particular case, if there are uniquely difficult problems, or if the cost or community disruption resulting from the alternative reaches extraordinary magnitude. A feasible alternative that fails to satisfy the purpose of and need for the project is usually also not prudent; and
- A discussion of measures to minimize harm to Section 4(f) resources where a potential use has been identified. When a Section 4(f) resource must be used, all planning to minimize harm, including development of mitigation measures, must be undertaken in cooperation with the agency owning and/or administering the resource.

Public Parks/Recreational Areas with Potential Section 4(f) Use

Tommy Lasorda Field of Dreams—Description and Significance of Property

Type/Location/Size

Tommy Lasorda Field of Dreams (field) is located within the State Route 2 (SR-2) right-of-way, south of Glendale Boulevard (Figure 9). The total size of the field is approximately 1.8 acres.

Access/Facilities/Usage

Access to the field is restricted by a locked gate. Entry to the field is by permit only; the City of Los Angeles Department of Recreation and Parks issues permits at a rate of $16 per hour. The field has a baseball diamond (two dugouts, backstop), one set of concrete bleachers with shade canopy, one set of wooden bleachers with shade canopy, a cargo storage bin, three picnic tables, a wooden scoreboard, two Porta-Potties, a drinking fountain, and a water system box. The greatest use of the facility occurs from April to July; the field is used Monday through Friday from 5 to 7 p.m. and Saturdays from 9 a.m. to 2 p.m. for Silver Lake Recreation Center baseball practice and games. There is no nighttime lighting equipment installed at the field. In the future, restrooms will be located adjacent to the field.

Relationship to Similar Facilities in the Area

The field is unique in the area since it is within a transportation right-of-way but used for recreational purposes. The field is part of the City of Los Angeles Silver Lake Recreation Center, which uses the field for its baseball programs.

Ownership/Jurisdiction

Tommy Lasorda Field of Dreams is a Caltrans-owned property within the SR-2 right-of-way. The property is currently leased to the City of Los Angeles for a 10-year term, from 2006 to 2016.

Significance

Although there are some restrictions to entry at the Tommy Lasorda Field of Dreams, such as fees and permits, and it is leased to the city for recreational purposes for a period of 10 years and not in perpetuity, the field is considered a Section 4(f) resource because it is part of the City of Los Angeles Silver Lake Recreation Center. The city believes it is an important community recreational resource.

Figure 9. Location of Section 4(f) Resource

Source: Jones & Stokes, 2006.

Tommy Lasorda Field of Dreams – Application of Section 4(f) Criteria for Use

Direct Use

The proposed build alternatives would not require any permanent use (acquisition) of the Tommy Lasorda Field of Dreams. The Tommy Lasorda Field of Dreams would continue to function as a recreational area under all of the build alternatives.

Temporary Occupancy

No construction activities would occur on the field, construction staging and the construction zone for the build alternatives would be located outside the field. The field is currently fenced, therefore, there would not be encroachment of the field by any construction activities. The proposed build alternatives would not result in any permanent or temporary disruptions of recreational activities at the field. The pedestrian and vehicular access to the field would be maintained during construction and operation of the proposed build alternatives.

Constructive Use

The proposed build alternatives would not result in any constructive use of the Tommy Lasorda Field of Dreams.

Noise

The types of athletic activities (baseball, softball games, etc.) that take place at the field do not require quiet surroundings. According to the noise study prepared for the project, noise levels are expected to exceed acceptable levels and may require sound walls. However, a sound wall is not proposed in the vicinity of the field. No noise impacts to park users were identified as a result of the build alternatives.

Aesthetics

The analysis of aesthetic effects in the Draft Visual Impact Assessment prepared for the project finds that build alternatives would not result in a substantial adverse aesthetic effect at this location. Build alternatives would not have aesthetic effects that would substantially impair the protected activities, features, and attributes that qualify this resource for protection under Section 4(f).

Access

The proposed build alternatives would not affect access to the Tommy Lasorda Field of Dreams. During construction, detours would be provided for any street closures in the vicinity of the field.

Tommy Lasorda Field of Dreams – Avoidance Alternatives

Because the proposed build alternatives would not result in a direct, temporary, or constructive use of the Tommy Lasorda Field of Dreams, no analysis of avoidance alternatives is required.

Tommy Lasorda Field of Dreams – Measures to Minimize Harm

Although no Section 4(f) use would result from the proposed build alternatives, the following measures have been identified to minimize harm to the Tommy Lasorda Field of Dreams during the construction period.

- The public shall be notified of street closures through on-site notices, direct mailings, and postings on the city's web site.

Tommy Lasorda Field of Dreams – Consultation and Coordination

Consultation with the City of Los Angeles Department of Recreation and Parks is ongoing. The city has indicated that the Tommy Lasorda Field of Dreams should be considered a significant resource for the purposes of this study (Barraza pers. comm.).

Tommy Lasorda Field of Dreams – Recommended Determination

It is recommended that a determination be made by the FHWA administrator that no direct use, temporary occupancy, or constructive use of the Tommy Lasorda Field of Dreams would occur.

Historic Sites with Potential Section 4(f) Use

Archaeological Sites

A cultural resources survey (see the Archaeological Survey Report dated April 2007) provided the basis for the determination that there is no archaeological site within the APE.

Architectural/Historic Sites

A Historic Preservation Survey Report and Historic Resources Evaluation Report (dated April 2007) provided the basis for the determination that there is no historic site within the APE.

Consultation and Coordination

Consultation with the State Historic Preservation Officer (SHPO) and other cultural resources stakeholders has been initiated and is described in the Section 106 documentation.

Section 4(f) Considerations

According to the U.S. Department of Transportation Federal Highway Administration's Section 4(f) Policy Paper dated March 1, 2005:

"When a project proposes to use resources protected by Section 4(f), a section 4(f) evaluation must be prepared…"

Due to the lack of Section 4(f) resources being affected by the above referenced project, it has been determined that no further review of this document is necessary.

Section 6(f)(3) Considerations

Section 6(f)(3) of the Land and Water Conservation Fund Act (LWCF Act) (16 USC Section 460l-4) contains provisions to protect federal investments in park and recreational resources and the quality of those assisted resources. The law recognizes the likelihood that changes in land use or development may make park use of some areas purchased with LWCF Act funds obsolete over time, particularly in rapidly changing urban areas, and provides for conversion to other uses pursuant to certain specific conditions:

> Section 6(f)(3) – No property acquired or developed with assistance under this section shall, without the approval of the Secretary, be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location.

This requirement applies to all parks and other sites that have been the subject of LWCF Act grants of any type and includes acquisition of parkland and development or rehabilitation of park facilities.

A review of the LWCF Act grants database found no record of LWCF Act assistance for property acquisition or development at the Tommy Lasorda Field of Dreams.[1]

[1] National Park Service. Land and Water Conservation Fund web site. Available: <http://waso-lwcf.ncrc.nps.gov/public/index.cfm>. Accessed: June 12, 2006.

APPENDIX A

LIST OF PREPARERS

List of Preparers

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Mr. Lisecki has 22 years of experience in preparing and managing California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) environmental documents, including initial studies/ environmental assessments, negative declarations/findings of no significant impact (FONSIs), and environmental impact reports/environmental impact statements (EIRs/EISs) for development projects, specific and master plans, highway projects, and transit projects for state and local agencies.

PRELIMINARY GEOLOGIC REPORT
PROPOSED STATE ROUTE 2 FREEWAY
TERMINUS IMPROVEMENT PROJECT
LOS ANGELES, CALIFORNIA

EA 205500

JUNE 2008

prepared for

CALIFORNIA DEPARTMENT OF TRANSPORTATION,
FEDERAL HIGHWAY ADMINISTRATION,
AND LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY

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TABLE OF CONTENTS

Page

INTRODUCTION

This is a preliminary assessment of the local geologic conditions and their potential to adversely impact the proposed State Route 2 Freeway Terminus Improvement Project. The findings are based on the general geologic setting and a limited surface reconnaissance of the project area. Baseline geologic and soil information was collected from geologic, seismic, geotechnical, and soil survey literature of the project region. This preliminary assessment focused on the identification of specific geologic hazards (unstable slopes and landslide deposits, faulting and seismicity, expansive soil, and collapsible/compressible or corrosive soil) that may impact construction planned for the site.

PROJECT DESCRIPTION

The Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the California Department of Transportation (Caltrans) and the Los Angeles Department of Transportation (LADOT), is proposing to modify the southern terminus of State Route 2 (SR-2), also known as the Glendale Freeway, located in the City of Los Angeles, Los Angeles County, California. The overall project extends along State Route 2 (SR-2) from Glendale Boulevard northward to the I-5. The physical improvements of the proposed project are located on SR-2 in Los Angeles between Branden Street and Oak Glen Place Overcrossing, and consist of modifications to the southern terminus of SR-2 (Glendale Freeway) near the intersection of Duane and Allesandro Streets in the Echo Park District of the City of Los Angeles. The purpose of the project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses.

- No Build Alternative (Baseline Alternative): This alternative requires no new construction or capital cost.
- Alternative A (Widen Existing Ramps – Maintain Bridge): This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp (two lanes). This alternative offers additional landscaping.
- Alternative B (Realign Ramp East, Retain Partial Bridge and Flyover): This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the on-ramp lanes. It would remove the southbound flyover ramp and a portion of the bridge. A portion of the existing bridge across Glendale Boulevard would remain for community reuse and greening. This alternative offers additional landscaping and a potential opportunity for excess land with public access.

- Alternative C (Realign Ramps East – Remove Bridge and Flyover): This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and bridge. This alternative provides a landscaped median and parkway treatment. This alternative also offers additional landscaping and a potential opportunity for excess land with public access.
- Alternative D (Realign Ramps East – Retain Bridge and Flyover): This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. This alternative also offers additional landscaping and a potential opportunity for excess land with public access. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged.

Alternative E (Realign Ramps East, Retain Bridge and Flyover, Relocate Retaining Wall): This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. This alternative also offers additional landscaping and a potential opportunity for excess land with public access. The last sentence should read as: The existing retaining wall along Allesandro Street would be relocated to the east to maintain Caltran's streets and highway standards.

The six above project alternatives are located in the same project area/footprint and only generally vary in orientation and design of project features such as ramps, bridges, and retaining walls. Therefore this report analyzes the potential area of construction covered by all of the above alternatives and is hence forth referred to as the project site. The location of the project site (the approximate limits of physical construction for the project) is shown in Figure 1 – Project Location Map.

PHYSIOGRAPHY AND TOPOGRAPHY

The project site is located in the Echo Park District of Los Angeles, along the edge of a valley within the Elysian Park Hills. The physiography of the project area is dominated by hilly and mountainous terrain along the southern slope of the eastern Santa Monica Mountains. The southern slopes of the eastern Santa Monica Mountains include peaks more than 1,600 feet in elevation. Numerous steep-sided, north-trending ridges extend from the crest to the coastal plain of the Los Angeles Basin. The Elysian Park Hills are located immediately southeast of the eastern end of the Santa Monica Mountains, and are a group of deeply dissected hills with moderate relief. The Los Angeles Narrows, an erosional feature cut by the Los Angeles River, separates the

Figure 1: Project Location Map

Elysian Park Hills from the Repetto Hills to the east. The Los Angeles River flows from northwest to southeast approximately 1 mile north of the project site, hugging the northeastern edge of the Elysian Hills, which rise about 400 feet above the surrounding plain (CGS, 2002).

The existing topography at the site consists of gentle to moderate slopes descending towards the SR-2 freeway. Elevation ranges from approximately 515 feet near the northern project boundary to approximately 460 feet near the southern end of the project site.

LOCAL GEOLOGY

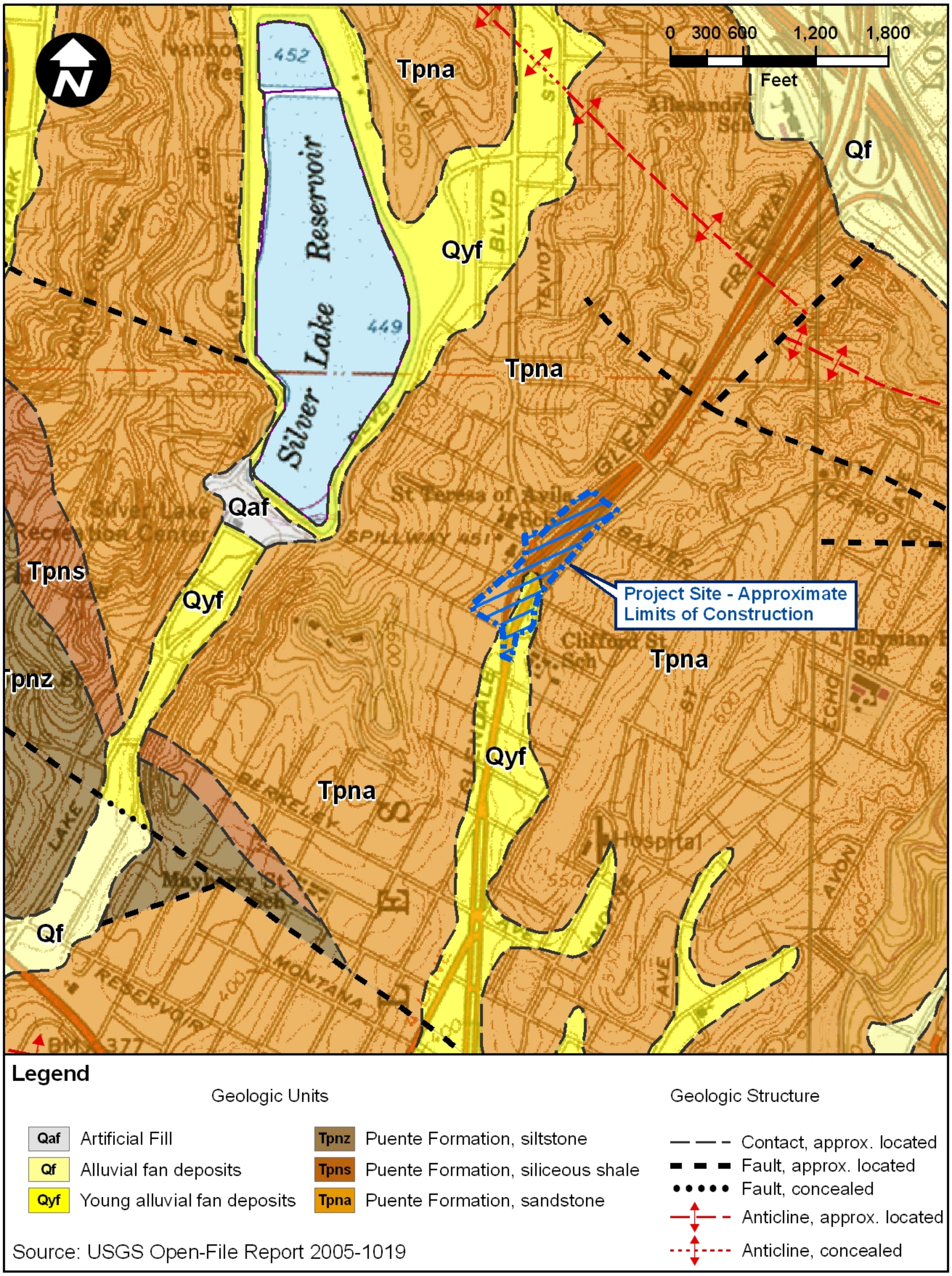
The project area is located along the southwestern edge of the Elysian Park Hills and is primarily underlain by deep-marine sedimentary rocks of the upper Miocene Puente Formation, which consists of units of interbedded and interfingering siltstone, sandstone, and siliceous shale. The Puente Formation is folded and faulted and contains anticlines and synclines and the beds are cut by numerous old bedrock faults. Overlying the Puente Formation are Quaternary alluvial fan deposits of varying ages and pockets of artificial fill. Geology of the project area is shown in Figure 2 – Project Area Geologic Map. Most of the project area is underlain by Puente Formation sandstone, with young alluvial fan deposits underlying the south-eastern portion of the project site. Units expected to be encountered during construction activities for the project are described below.

Puente Formation, sandstone (Tpna). Most of the project site is underlain by this unit, which consists of medium to light brown and light grey well-bedded sandstone. It ranges from very fine to very coarse grained and is mostly well cemented.

Young Alluvial Fan Deposits (Qyf). Young alluvial fan deposits will be encountered in the southeastern portions of the project site. The young alluvial fan deposits generally consist of unconsolidated gravel, sand, and silt that have been deposited primarily by flooding streams and debris flows. The surface may show sight soil development.

Artificial Fill (Qaf). Deposits of sand, silt, and gravel resulting from human construction activities; includes compacted engineered and noncompacted nonengineered fill. Although not mapped in the project area on Figure 2, local layers of artificial fill of varying thicknesses are expected to underlie roads and buildings in the project area. Due to the age of roads and structures in the area, generally greater than 50 years old, undocumented fill may be encountered during project construction.

Figure 2: Project Area Geologic Map



SLOPE STABILITY

A large portion of the project area along the SR-2 freeway is below the surrounding grade. The eastern side of the freeway is bracketed by vertical retaining walls and the western side consists of slopes that are a combination of retaining walls and natural vegetated sloping hills, all underlain by Puente Formation. No landslides or obvious slope stability issues were visually noted at the site. Project alternatives that require relocation of retaining walls and/or regrading of slopes will require a slope stability evaluation, which should include site specific recommendations for mitigating potential slope stability issues.

GROUNDWATER

Shallow perched groundwater may occur in the young alluvial fan deposits and in sandstone layers of the Puente Formation. Perched groundwater levels likely vary seasonally. A project specific geotechnical investigation should determine depth to groundwater and provide recommendations for mitigation as appropriate.

MINERAL RESOURCES

The project site is in a fully developed urban area and is underlain by artificial fill, young alluvial fan deposits, and Puente Formation. There would be no potential impacts to mineral resources, including oil, gas, or mining, from construction of the proposed project.

FAULTING AND SEISMICITY

The seismicity of southern California is dominated by the intersection of the north-northwest trending San Andreas Fault system and the east-west trending Transverse Ranges fault system. Both systems are responding to strain produced by the relative motions of the Pacific and North American Tectonic Plates. This strain is relieved by right-lateral strike-slip faulting on the San Andreas, and related faults, and by vertical, reverse-slip or left-lateral strike-slip displacement on faults in the Transverse Ranges. The effects of this deformation include mountain building; basin development; deformation of Quaternary marine terraces; widespread regional uplift; and generation of earthquakes. The project area will be subject to ground shaking associated with earthquakes on faults of both the San Andreas and Transverse Ranges fault systems. Active faults of the San Andreas system are predominantly strike-slip faults accommodating translational[1] movement. The Transverse Ranges fault system consists primarily of oblique dip-slip faults[2] and blind thrust faults accommodating tectonic compressional stresses in the region. Blind faults have no surface expression

[1] Fault block movements in which the blocks have no rotational component, parallel features remain so after movement.
[2] A fault with primarily vertical movement, but also has a significant amount of horizontal (lateral) movement.

and have been located using subsurface geologic and geophysical methods. This combination of translational and compressional stresses gives rise to diffuse seismicity across the region. Significant faults in the project area are shown in Figure 3 – Regional Fault Map.

Active reverse or thrust faults[3] in the Transverse Ranges include blind thrust faults[4] responsible for the 1987 Whittier Narrows Earthquake and 1994 Northridge Earthquake, and the range-front faults[5] responsible for uplift of the Santa Monica and San Gabriel Mountains. The range-front faults include the Malibu Coast, Santa Monica-Hollywood, Raymond, Verdugo, and San Fernando-Sierra Madre faults. Active right lateral strike slip faults in the northern Los Angeles area include the San Andreas, Palos Verdes, Newport-Inglewood, and San Gabriel faults, all associated with the San Andreas fault system.

Both the Transverse Ranges and northern Los Angeles area are characterized by numerous geologically young faults. These faults can be classified as historically active, active, potentially active, or inactive, based on the following criteria (CGS 1999):

- Faults that have generated earthquakes accompanied by surface rupture during historic time (approximately the last 200 years) and faults that exhibit aseismic fault creep[6] are defined as **Historically Active**.
- Faults that show geologic evidence of movement within Holocene time (approximately the last 11,000 years) are defined as **Active**.
- Faults that show geologic evidence of movement within the Quaternary (approximately the last 2,000,000 years) are defined as **Potentially Active**.
- Faults that show direct geologic evidence of inactivity during all of Holocene time or longer may be classified as **Inactive**.

Although it is difficult to quantify the probability that an earthquake will occur on a specific fault, this classification is based on the assumption that if a fault has moved during the Holocene epoch, it is likely to produce earthquakes in the future. Blind thrust faults do not intersect the ground surface, and thus they are not classified as active or potentially active in the same manner as faults that are present at the earth's surface. Blind thrust faults are seismogenic structures[7] and thus the activity classification of these faults is predominantly based on historic earthquakes and microseismic activity along the fault. Significant active faults in the project region are presented in Table 1.

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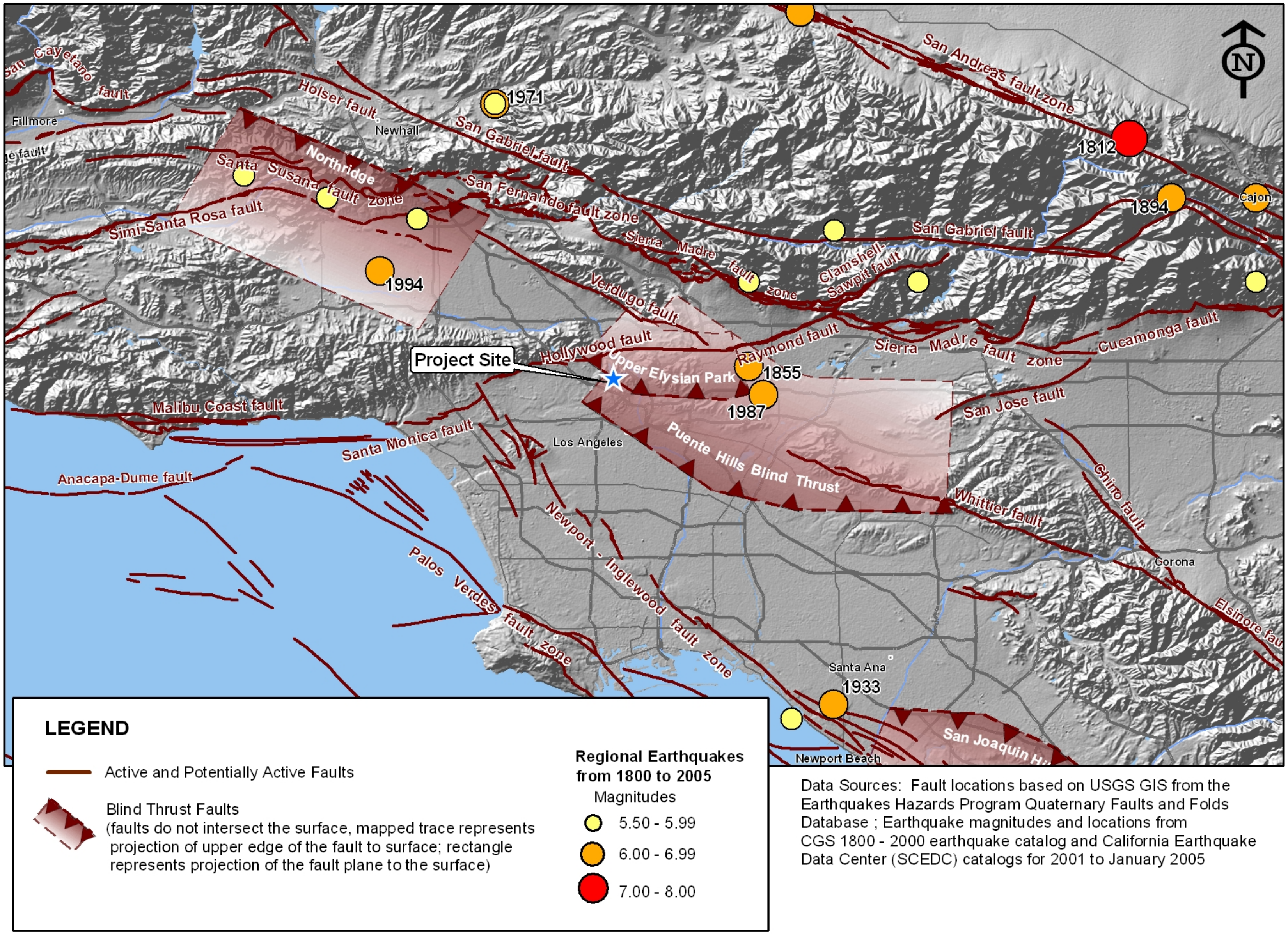
[3] A fault with predominantly vertical movement in which the upper block moves upward in relation to the lower block, a thrust fault is a low angle reverse fault.
[4] Blind thrust faults are low-angled subterranean faults that have no surface expression.
[5] Faults along the front of mountain ranges responsible for the uplift of the mountains.
[6] Movement along a fault that does not entail earthquake activity.
[7] A geologic structure that has or is capable of generating an earthquake.

Figure 3: Regional Fault Map



Data Sources: Fault locations based on USGS GIS from the Earthquakes Hazards Program Quaternary Faults and Folds Database ; Earthquake magnitudes and locations from CGS 1800 - 2000 earthquake catalog and California Earthquake Data Center (SCEDC) catalogs for 2001 to January 2005

Table 1: Significant Active Faults in the Project Region				
Name	**Closest Distance to Project (miles)[1]**	**Estimated Max. Earthquake Magnitude[2, 3]**	**Fault Type and Dip Direction[3]**	**Slip Rate (mm/yr)[3, 4]**
Upper Elysian Park	1.9	6.4	Blind Thrust, 50° NE	1.3
Hollywood	3.0	6.4	Left Lateral Reverse Oblique, 70° N	1.0
Raymond	3.8	6.5	Left Lateral Reverse Oblique, 75° N	1.5
Puente Hills Blind Thrust	4.2	7.1	Blind Thrust, 25° N	0.7
Verdugo	6.9	6.9	Reverse, 45° NE	0.5
Newport-Inglewood	8.4	7.1	Right Lateral Strike Slip, 90°	1.0
Santa Monica	9.8	6.6	Left Lateral Reverse Oblique, 75° N	1.0
Sierra Madre	11.2	6.7	Reverse, 45° S	2.0
San Fernando	15.0	6.7		
Northridge	15.4	7.0	Blind Thrust, 42° S	1.5
Whittier	15.7	6.8	Right Lateral Strike Slip, 90°	2.5
San Gabriel	15.8	7.2	Right Lateral Strike Slip, 90°	1.0
Clamshell-Sawpit	15.8	6.5	Reverse, 45° NW	0.5
Malibu Coast	16.2	6.7	Left Lateral Reverse Oblique, 75° N	0.3
Palos Verdes	19.1	7.3	Right Lateral Strike Slip, 90°	3.0
San Jose	21.7	6.4	Left Lateral Reverse Oblique, 75° NW	0.5
Santa Susana	22.0	6.7	Reverse, 55° N	5.0
Anacapa-Dume	26.3	7.5	Reverse Left Lateral Oblique, 45° N	3.0
Simi-Santa Rosa	29.2	7.0	Left Lateral Reverse Oblique, 60° N	1.0
Cucamonga	29.6	6.9	Reverse, 45° N	5.0
San Andreas	32.2	8.0	Right Lateral Strike Slip, 90°	34.0

Notes: 1) Fault distances obtained using the EQFault computer program (Blake, 2000), based on digitized data adapted and modified from the 2002 CGS fault database.
2) Maximum Earthquake Magnitude – the maximum earthquake that appears capable of occurring under the presently known tectonic framework, using the Richter scale.
3) Fault parameters from the CGS Revised 2002 California Probabilistic Seismic Hazard Maps report, Appendix A - 2002 California Fault Parameters.
4) References to fault slip rates are traditionally presented in millimeters per year.

Fault Rupture. The project site does not cross and known active or potentially active faults and is not likely to experience surface fault rupture.

Historic Earthquakes. A review of historic earthquake activity from 1800 to 1999 indicates that 10 earthquakes of magnitude (M) 6.0 or greater have occurred within a 50 miles of the proposed site. Significant historic earthquakes within 50 miles of the project site are presented in Table 2, which includes the date of earthquake, distance from the site, and magnitude for each of these earthquakes. The M 5.9 Whittier Narrows earthquake of 1987 is also included in the table because it was a significantly damaging earthquake within 50 miles of the project alignment. An additional 9 earthquakes of M 5.5 to M 6.0 occurred during this time period.

Table 2: Significant Historic Earthquakes				
Date	**Approximate Distance (miles)**	**Earthquake Magnitude[1]**	**Name, Location, or Region Affected**	**Comments[2]**
December 8, 1812	40	7.5	Wrightwood Earthquake	Caused collapse of Mission at San Juan Capistrano resulting in the death of 40 people.
July 11, 1855	9.1	6.0	Los Angles Region	The bells at San Gabriel Mission Church were thrown down and twenty-six buildings in Los Angeles were damaged.
July 29, 1894	40	6.2	Lytle Creek region	Felt from Bakersfield to San Diego. Minor damage in the Mojave and Los Angeles areas.
March 11, 1933	37	6.3	Long Beach Earthquake	Resulted in the death of 12 people and $60 million in property Damage.
February 9, 1971	23.5	6.6	San Fernando (Sylmar) Earthquake	This earthquake caused over $500 million in damage and resulted in 65 deaths. As A result of the damage from this earthquake, building codes were strengthened and the Alquist Priolo Special Studies Zone Act of 1972 was passed.
October 1, 1987	10.5	5.9	Whittier Narrows Earthquake	Resulted in eight deaths and $358 million in property damage. This earthquake occurred on a previously unknown blind thrust fault, the Puente Hills Fault.
January 17,1994	18	6.7	Northridge Earthquake	Resulted in 60 deaths and approximately $15 billion in property damage. Damage was significant and widespread, including collapsed freeway overpasses and more than 40,000 damaged buildings in Los Angeles, Ventura, Orange, and San Bernardino Counties.

Notes: 1) Earthquake magnitudes and locations before 1932 are estimated by Toppozada and others (1978, 1981, and 1982) based on reports of damage and felt effects.
2) Earthquake damage information compiled from the Southern California Data Center (SCEDC, 2005a and 2005b) and National Earthquake Information Center (NEIC, 2005) websites.

Three significant damaging historic earthquakes have occurred in the last century within 25 miles of the project site. The closest significant historic earthquake, the October 1, 1987 M 5.9 Whittier Narrows earthquake, caused significant damage in the Los Angeles region. This earthquake was located approximately 10.5 miles east of the project site and occurred on a previously unknown blind thrust fault, the Puente Hills fault, located just northwest of the northern terminus of the Whittier fault (Southern California Earthquake Center, 2007). This fault was previously thought to be part of the Elysian Park Thrust, however recent studies (Dolan et al., 2003) have shown that the Puente Hills Fault is a distinct blind thrust fault.

The most recent significant earthquake near the project site was the January 17, 1994, M 6.7 Northridge Earthquake. This earthquake was located approximately 18 miles northwest of the project site and also occurred on a blind thrust fault. This earthquake produced the strongest ground motions ever instrumentally recorded in an urban setting in North America. The maximum recorded acceleration exceeded 1.0g (g is the acceleration due to gravity) at several sites, with the largest recorded (1.8g) at Tarzana, about 4 miles south of the epicenter (National Earthquake Information Center, 2007).

The February 9, 1971 M 6.4 San Fernando Earthquake, also known as the Sylmar Earthquake occurred approximately 23.5 miles north of the project site. This earthquake caused 65 deaths, most of which occurred when the Veteran's Administration Hospital collapsed. In response to this earthquake, building codes were strengthened and the Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 (Southern California Earthquake Center, 2003).

Strong Ground Shaking. The site is located in a region that has a history of strong seismic activity with numerous active faults of the Transverse Ranges and San Andreas Fault systems. Therefore, the project site will be subject to strong ground shaking associated with earthquakes on faults in the vicinity and should be designed accordingly.

The intensity of earthquake induced ground motions can be described using peak site accelerations, represented as a fraction of the acceleration of gravity (g). California Geological Survey (CGS) Probabilistic Seismic Hazard Assessment (PSHA) Maps were used to estimate peak ground accelerations (PGAs) at the proposed project site resulting in an estimated PGA of 0.58 g. Taking into consideration the uncertainties regarding the size and location of earthquakes and the resulting ground motions that can affect a particular site, PSHA Maps depict peak ground accelerations with a 10 percent probability of being exceeded in 50 years, which equals an annual probability of 1 in 475 of being exceeded each year.

An earthquake is classified by the amount of energy released, which traditionally has been quantified using the Richter scale. Recently, seismologists have begun using a Moment Magnitude (M) scale, because it provides a more accurate measurement of the size of major and great earthquakes. For earthquakes of less than M 7.0, the Moment and Richter Magnitude scales are nearly identical. For earthquake magnitudes greater than 7.0, readings on the Moment Magnitude scale are slightly greater than a corresponding Richter Magnitude. Earthquakes of M 6.0 to M 6.9 are classified as moderate, between M 7.0 and M 7.9 as major, and of M 8.0 or greater as great. Any of the faults listed in Table 1 could potentially generate earthquakes with magnitudes greater than 6.0, resulting in strong ground shaking.

Another commonly used measure of earthquake intensity is the Modified Mercalli Scale, which is a subjective measure of the strength of an earthquake at a particular place as determined by its effects on persons, structures, and earth materials. The Modified Mercalli Scale for Earthquake Intensity is presented in Table 3, along with a range of approximate average peak accelerations associated with each intensity value.

Table 3: Modified Mercalli Scale For Earthquake Intensity

Intensity Value	Intensity Description	Average Peak Acceleration
I	Not felt except by a very few persons under especially favorable circumstances.	<0.0017 g
II	Felt only by a few persons at rest, especially on upper floors on buildings. Delicately suspended objects may swing.	0.0017-0.014 g
III	Felt noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly, vibration similar to a passing truck. Duration estimated.	
IV	During the day felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.	0.014-0.039 g
V	Felt by nearly everyone, many awakened. Some dishes and windows broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles may be noticed. Pendulum clocks may stop.	0.039–0.092 g
VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; and fallen plaster or damaged chimneys. Damage slight.	0.092–0.18 g
VII	Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.	0.18–0.34 g
VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.	0.34–0.65 g
IX	Damage considerable in specially designed structures; well designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.	0.65–1.24 g
X	Some well built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from riverbanks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.	>1.24 g
XI	Few, if any, masonry structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.	
XII	Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted. Objects are thrown upward into the air.	

Source: Bolt, 1988; Wald, 1999 (from USGS website: http://pasadena.wr.usgs.gov/shake/pubs/regress/node3.html).

Liquefaction. Liquefaction is the phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of earthquake induced, strong groundshaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of the granular sediments and the magnitude and frequency of earthquakes in the surrounding region. Saturated, unconsolidated silts, sands, and silty sands within 50 feet of the ground surface are most susceptible to liquefaction.

Liquefaction related phenomena include lateral spreading, ground oscillation, flow failures, loss of bearing strength, subsidence, and buoyancy effects (Tinsley et. al., 1986). In addition, densification of the soil resulting in vertical settlement of the ground can also occur.

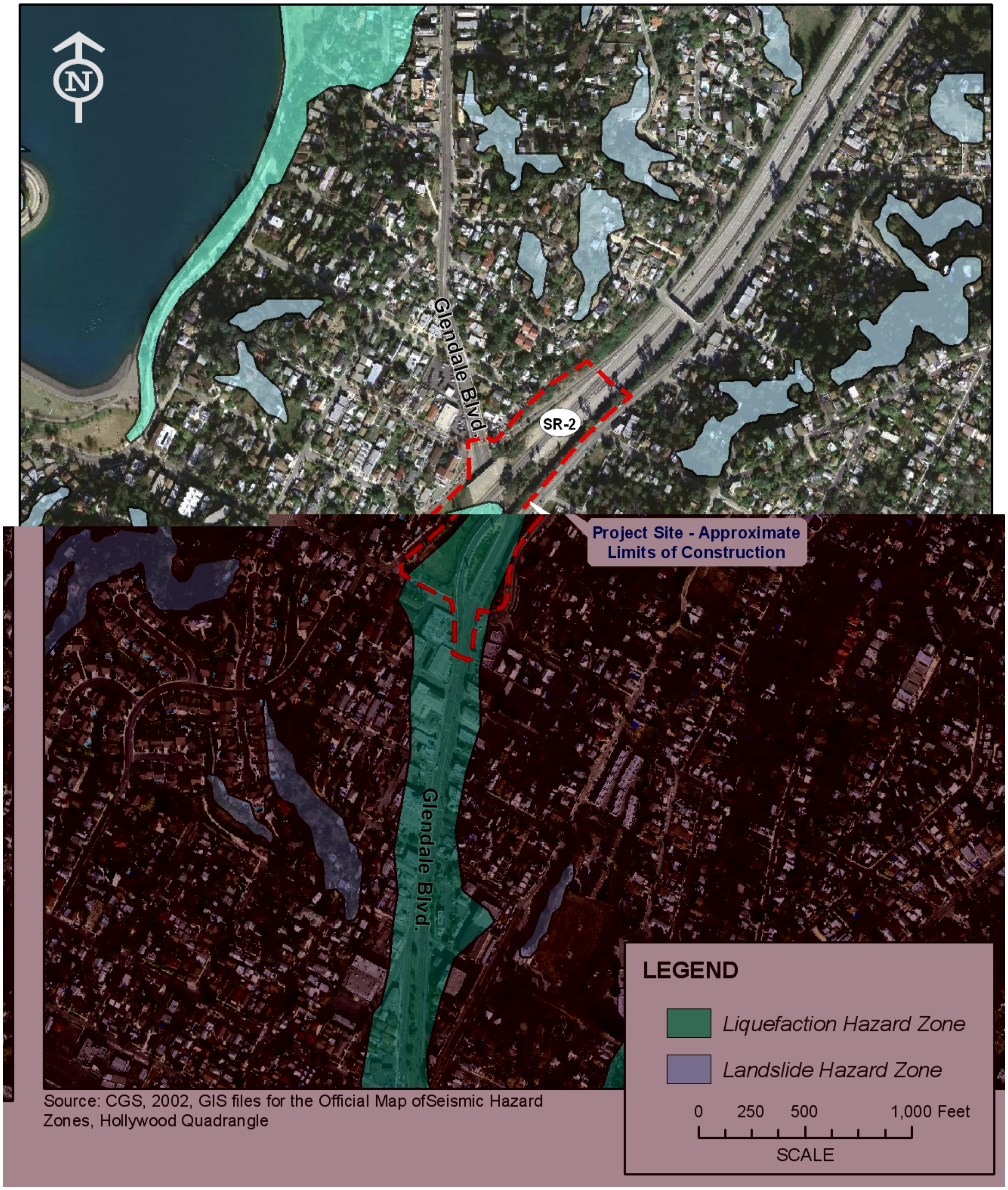
In order to determine liquefaction susceptibility of a region, three major factors must be analyzed. These include: (a) the density and textural characteristics of the alluvial sediments; (b) the intensity and duration of groundshaking; and (c) the depth to groundwater. The young alluvial fan deposits and artificial fill underlying portions of the project site may meet the criteria for liquefaction if unconsolidated sandy deposits are present in areas of perched groundwater. The older indurated Puente Formation bedrock and well-drained materials would have a low potential for liquefaction.

Seismic hazard mapping, delineating areas of potential liquefaction and seismically induced landslides, has been conducted by the State of California for the Hollywood 7.5-Minute Quadrangle (CGS 2002). A CGS mapped liquefaction hazard zone, generally correlating with the limits of the young alluvial fan deposits, is present within the southeastern portion of the project site, as shown in Figure 4 – Project Area Seismic Hazard Map.

Seismic Slope Instability. Other forms of seismically induced ground failures which may affect the project area include ground cracking and seismically induced landslides. Landslides triggered by earthquakes have been a significant cause of earthquake damage, in southern California large earthquakes such as the 1971 San Fernando and 1994 Northridge earthquakes triggered landslides that were responsible for destroying or damaging numerous structures, blocking major transportation corridors, and damaging life-line infrastructure. Areas that are most susceptible to earthquake-induced landslides are steep slopes in poorly cemented or highly fractured rocks, areas underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits.

The CGS Seismic hazard mapping delineates areas of potential seismically induced landslides (CGS 2002) near the project site, but not within the boundaries of the project work area.

Figure 4: Project Area Seismic Hazard Map



CLOSURE

This review of geologic conditions was performed to identify geologic hazards related to the proposed SR-2 Freeway Terminus Improvement Project. This assessment relied on published reports, surface reconnaissance, and the general geologic setting as indicators of potential geologic hazards. The geologic review completed for this technical report does not replace a project-specific design-level investigation.

A design-level engineering geology and geotechnical investigation, laboratory testing, and analysis should be performed for the project site. The site-specific design-level geotechnical investigation should be performed as required by the California Department of Transportation and local agencies. Where appropriate, a geotechnical investigation may include subsurface exploration by drilling, logging, sampling, and laboratory testing. Potential adverse geologic conditions should be evaluated and recommendations for mitigation developed on a site-specific basis. Geotechnical recommendations should include site preparation, slope stabilization, settlement, bearing capacity, and seismic design parameters.

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NOISE STUDY REPORT

for the

SR-2 Freeway Terminus Improvement Project

EA 205500

3rd Draft

June 2008

Prepared for:

Los Angeles County Metropolitan Transportation Authority
California Department of Transportation
Federal Highway Administration

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Table of Contents

Page

Appendices

List of Figures

List of Tables

Acronyms

ANSI	American National Standard Institute
Caltrans	California Department of Transportation
CFR	Code of Federal Regulations
CNA	community noise analyzer
dBA	A-weighted decibel
FHWA	Federal Highway Administration
HBRR	Highway Bridge Replacement and Rehabilitation
HVAC	Heating, Ventilation, and Air Conditioning
L_{eq}	equivalent sound level
L_{eqH}	hourly noise levels
L_{max}	maximum sound level
L_{min}	minimum sound level
LOS	level of service
LT	long-term
NAC	Noise Abatement Criteria
rpm	revolutions per minute
SLM	Sound Level Meter
ST	short-term
TNM®	Traffic Noise Model
TeNS	Technical Noise Supplement

Executive Summary

Purpose of Noise Report

This report evaluates the potential of the proposed SR-2 Freeway Terminus Improvement Project to adversely affect existing ambient noise characteristics within the proposed project's environs. This report has been prepared in accordance with *Traffic Noise Analysis Protocol and Technical Noise Supplement (TeNS)*[1] guidelines. The proposed project's regional location and project vicinity are shown in Figure 1 and Figure 2, respectively.

Project Description

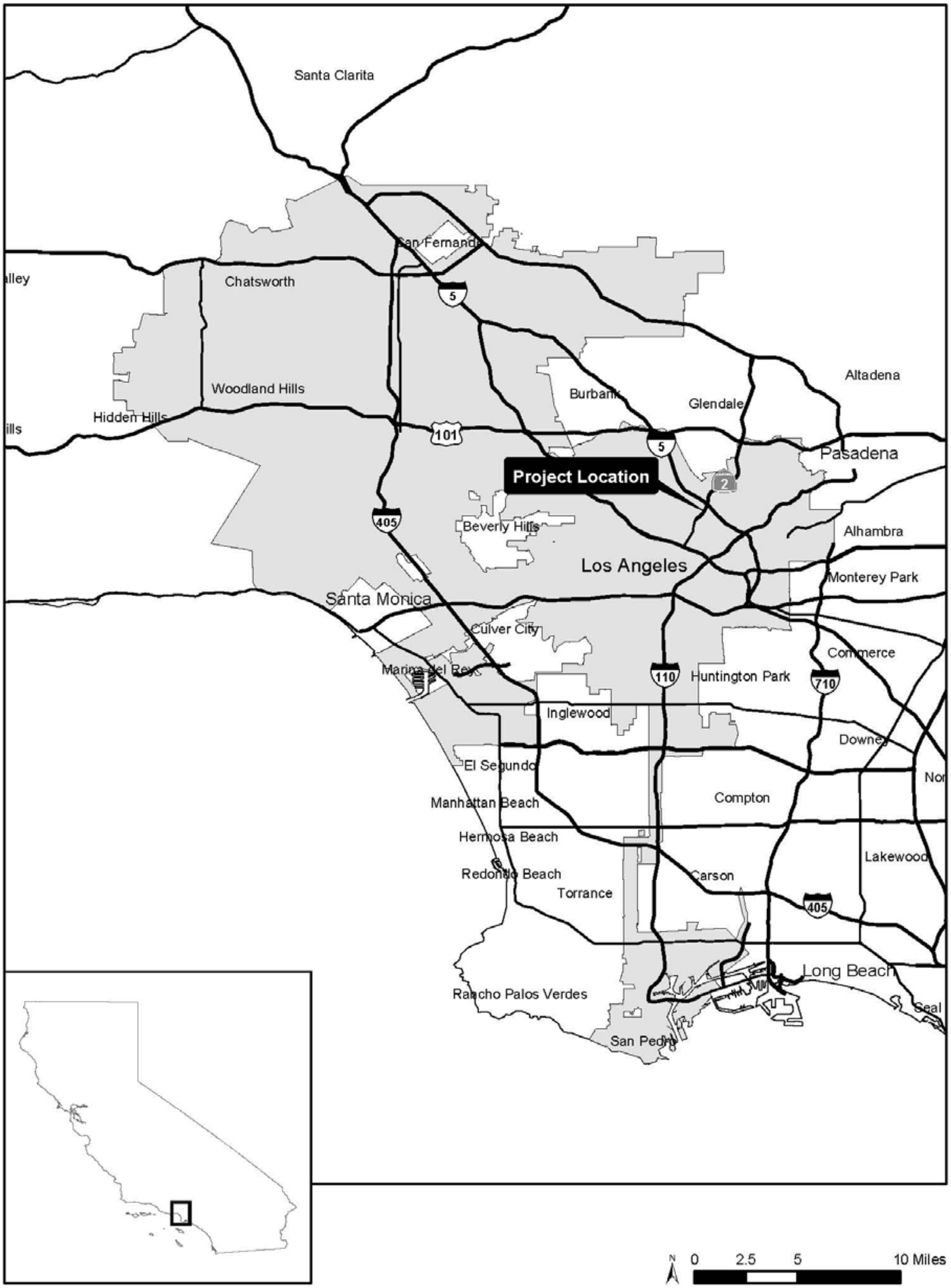
The proposed project is located on State Route 2 (SR-2) in Los Angeles between Branden Street (post mile [PM] 13.5) and Oak Glen Place Overcrossing (PM 15.0). It is proposed to modify the southern terminus of SR-2 (Glendale Freeway) near the intersection of Duane and Allesandro Streets in the Echo Park District of the City of Los Angeles. The purpose of the project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses.

Land Use and Terrain

The project area is urbanized and fully developed. The project would be situated between residences, the Silver Lake Reservoir, and Tommy Lasorda Field of Dreams to the northwest; residences and Elysian Park to the southeast; commercial land uses to the south; and the Los Angeles River and Interstate 5 to the north. Land uses in the area are shown in Figure 3. Terrain in the project vicinity is quite hilly, with steep residential side streets adjacent to both the northwest and southwest sides of the project.

[1] Available online at http://www.dot.ca.gov/hq/env/noise/pub/protocol.pdf

Figure 1. Regional Location Map



Source: Jones & Stokes, 2006.

Figure 2. Project Vicinity Map

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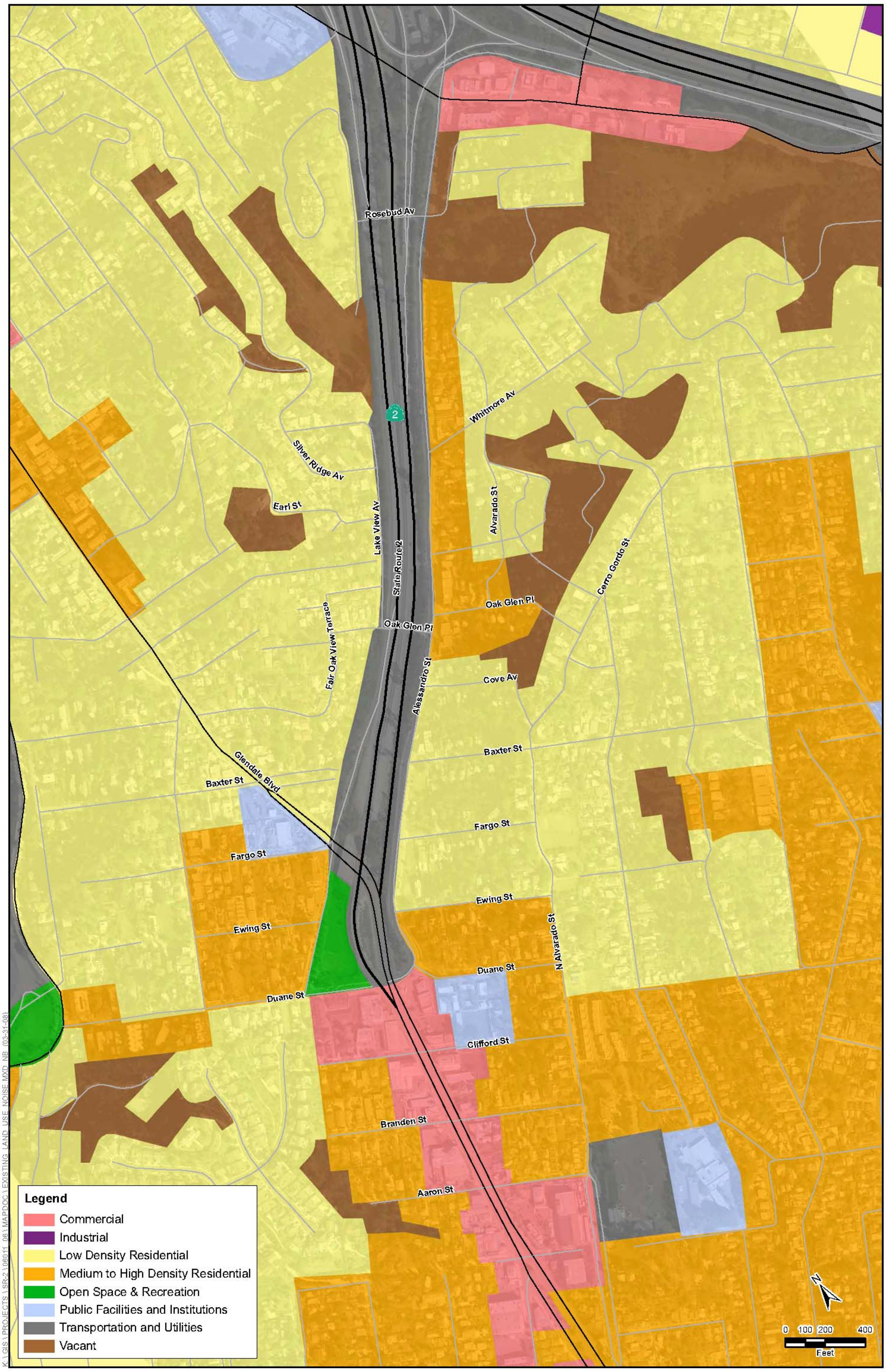
Figure 3. Existing Land Use



SOURCE: USGS UrbanArea (0.5 m), Southern California Association of Governments (2001)

Figure 3
Existing Land Use

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Existing Noise Levels (Ambient and Background)

Ambient noise levels were measured from May 24 through May 25, 2006 and September 26, 2007 at representative noise-sensitive land uses adjacent to the project alignment as shown in Figure 4. The noise measurement methodology was consistent with the guidelines in the TeNS, October 1998. Short-term (less than 1-hour in duration) noise measurements were conducted at ten sites. One of the measurement sites was for the purpose of collecting background noise data; therefore, the site was located at a sufficient distance from the project to assess the community noise level without the influence of SR-2/Glendale Boulevard. One long-term (24-hours or more in duration) noise measurement was also conducted and utilized to calculate the existing peak noise hour noise levels for the short-term measurement sites. The short-term noise measurement data is presented in Table 1, and Table 2 summarizes the long-term noise monitoring results.

Short-term measurements were adjusted to reflect peak-hour traffic noise levels by use of contemporaneous data from the long-term noise measurement data. As shown in Table 1, the adjusted exterior short-term (ST) peak noise hour noise levels in the vicinity of the project ranged from 63 to 70 dBA L_{eqH} (noise measurement terminology is explained in the Fundamentals of Traffic Noise section), while the measured long-term (LT) peak noise hour noise level was 67 dBA L_{eqH} at LT-1. The measured 24-hour noise level at LT-1 was 67 dBA CNEL. Peak noise levels occurred in the morning hours (0600-0900) and again in the afternoon/early evening hours (1400-1800). The background noise measurement data (ST-8) of 51 to 52 dBA L_{eqH} indicates that background noise levels are at least 10 dB below the noise levels with the project; therefore, background noise levels do not have an influence on ambient noise levels in the vicinity of the project.

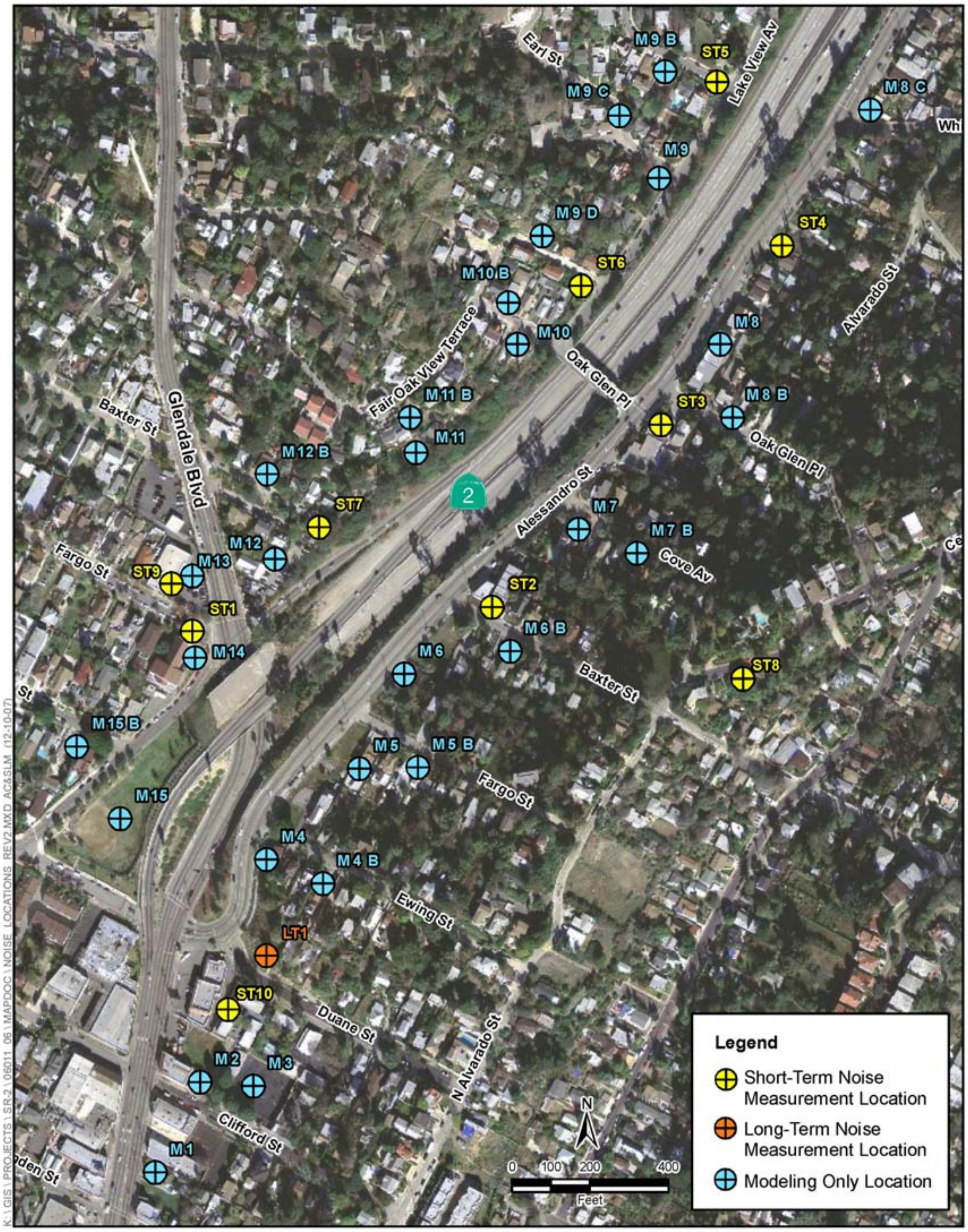
Future Predicted Noise Levels

Traffic noise level predictions were made with Federal Highway Administrations (FHWA) Traffic Noise Model (TNM®) Version 2.5 (FHWA 2004). The model uses national reference mean emission levels for several types of vehicles—automobiles, medium trucks, heavy trucks, buses, and motorcycles—to compute hourly noise levels (L_{eqH}). Using traffic volumes, speeds, roadway alignments, and cross-sections for the project, the resultant predicted project noise levels were compared to existing ambient noise levels to assess the project's potential noise effects. Future predicted noise levels were computed for the project area sites at which noise was measured, as well as at 28 additional "modeling-only" (M) receptor locations, in order to more completely characterize the existing and future noise environment. These "modeling-only" locations are shown on Figure 4.

Future predicted noise levels were computed for the future (Year 2030) No Build condition as well as the five build alternatives (Alternatives A, B, C, D, and E).

The projected traffic volumes and travel speeds used for this study were provided by the traffic study completed for the project (Fehr & Peers/Kaku Associates 2007).

Figure 4. Project Site and Noise Measurement / Modeling Locations



SOURCE: USGS UrbanArea (500mm)

Jones & Stokes

Figure 4
Project Site and Noise Measurement/Modeling Locations
SR-2 Glendale Freeway Transition

Table 1. Short Term Noise Measurement Data

Site ID	Measurement Location / Land Use Type (Activity Category)[2]	Measurement Period: Date	Measurement Period: Start Time	Measurement Period: Duration (mm:ss)	Noise Sources	Measurement Results (dBA): L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	Adjusted[1] Peak Noise Hour Level, L_{eqH} dBA
ST-1A & ST-1B	St. Teresa of Avila Church & Rectory / Institutional & Residential (Activity Category B)	05/24/06 05/24/06	12:25 12:50	15:00 15:00	Traffic, School, Dist. Children Playing, Dist. Barking Dogs, Birds	61.0 62.9	77.9 76.4	50.7 52.7	55.0 56.2	58.2 59.9	63.0 65.7	65
ST-2A & ST-2B	2147 Baxter / Residential (Activity Category B)	05/24/06 05/24/06	14:45 15:05	15:00 15:00	Traffic, Dist. Aircraft, Dist. Barking Dogs, Birds	63.1 63.6	80.0 75.4	52.0 54.6	57.0 58.4	60.5 61.7	64.8 66.9	67
ST-3A & ST-3B	Oak Glen Place / Residential (Activity Category B)	05/24/06 05/24/06	15:45 16:00	15:00 15:00	Traffic, Birds	66.6 66.0	83.1 75.9	58.6 58.3	62.0 62.4	64.5 65.0	68.2 67.9	67
ST-4A & ST-4B	2256 Alessandro / Residential (Activity Category B)	05/24/06 05/24/06	16:45 17:05	15:00 15:00	Traffic, Birds	66.7 66.4	77.9 74.6	58.7 58.5	63.5 63.4	66.2 66.0	68.2 68.3	70
ST-5A & ST-5B	Silver Place & Alessandro Way / Residential (Activity Category B)	05/25/06 05/25/06	14:50 15:06	15:00 15:00	Traffic, Dist. Aircraft, Birds	65.5 65.8	71.7 71.4	58.5 55.0	62.9 62.9	65.1 65.5	67.4 67.8	67
ST-6A & ST-6B	Alessandro Way & Loma Vista / Residential (Activity Category B)	05/25/06 05/25/06	15:40 16:00	15:00 15:00	Traffic, Dist. Aircraft, Rustling Leaves, Dist. Barking Dogs	65.4 65.1	76.1 75.9	56.4 55.8	61.7 61.0	64.9 64.8	67.5 67.0	66
ST-7A & ST-7B	2219 Baxter / Residential (Activity Category B)	05/25/06 05/25/06	16:30 16:47	15:00 15:00	Traffic, Dist. Construction Noise	66.6 67.0	74.9 74.0	58.2 59.0	63.2 63.9	66.4 66.7	68.4 68.7	68
ST-8A & ST-8B	2088 Cerro Gordo[3] (Background Noise Measurement) / Residential (Activity Category B)	09/26/07 09/26/07	11:10 11:29	15:00 15:00	Local traffic, Dist. Aircraft, Dist. Construction Noise	51.8 50.9	71.6 70.1	39.0 38.4	41.0 40.7	42.3 42.3	54.0 53.6	55
ST-9A & ST-9B	Saint Teresa of Avila School in front of classrooms facing SR-2 and Glendale Blvd. / School Recreational (Activity Category B)	09/26/07 09/26/07	14:19 14:36	15:00 15:00	Traffic, Dist. Aircraft, HVAC units	62.3 62.8	73.7 74.4	57.1 56.4	58.6 59.1	60.6 61.1	64.7 65.2	63
ST-9A Indoors & ST-9B Indoors	Saint Teresa of Avila School in classroom, windows closed. Saint Teresa of Avila School in classroom, windows open. / School (Activity Category E)	09/26/07 09/26/07	14:19 14:36	15:00 15:00	Traffic, Dist. children playing	46.9 53.6	60.2 65.2	41.5 48.2	42.6 49.5	44.5 52.0	49.9 56.6	47 (windows closed) 54 (windows open)
ST-10	Clifford Street Elementary School in front of classroom facing SR-2/Glendale Blvd / School (Activity Category B)	09/26/07	15:35	15:00	Traffic, Dist. Aircraft	61.3	71.1	56.7	55.3	61.0	62.8	64
ST-10 Indoors	Clifford Street Elementary School in classroom (#6), windows closed[4] / School (Activity Category E)	09/26/07	15:35	15:00	Traffic	44.2	66.3	39.5	41.0	42.3	44.5	47

Notes: 1. Measurements adjusted to peak noise hour noise levels by comparison with concurrent long-term noise measurement data.
2. Please see Table 27 for Activity Category definitions.
3. Background noise measurement location was approximately 800 feet east of project alignment, and shielded from SR-2 traffic by virtue of being on the opposite side of a steep slope.
4. According to the instructor, the windows and doors are kept shut during classes and the HVAC system is adequate; therefore noise measurements were conducted with windows and doors closed.
Source: Jones & Stokes, 2007.

Table 2. Long-Term Noise Measurement Data Summary

Site Number	Location / Land Use Type (Activity Category)	Date	Start Time	End Time	Peak noise hour L_{eq} (dBA) & Time	Quietest-Hour L_{eq} (dBA) & Time	24-Hour Avg. CNEL (dBA)
LT1	2147 Duane Street / Residential (Activity Category B)	5/24/06 – 5/25/06	11:45	17:15	67 14:00 on 5/24/06, 16:00 on 5/25/06	54 3:00	67

Source: Jones & Stokes, 2007.

Traffic Noise Impacts

Traffic noise impacts, evaluated against Caltrans/FHWA noise impact criteria, were estimated for 38 representative noise-sensitive receivers (nine short-term receivers, one long-term receiver and 28 modeled-only receivers, as shown in Figure 4). The detailed results of the noise impact assessment using Caltrans/FHWA criteria are presented in Tables 3 through 9.

Based upon FHWA criteria for substantial noise increases (i.e., an increase of 12 dBA or more above existing noise levels), impacts would not occur at any of the 38 representative noise-sensitive receivers. Depending upon the project alternative, Caltrans/FHWA Noise Abatement Criteria (NAC) for Activity Category B land uses would be approached or exceeded at 13 to 19 of the 38 modeled representative noise-sensitive receptors. Alternative A was found to have the highest number of receptors exceeding the NAC at a total of 19, followed by the Future No Build alternative with 18 receptors approaching or exceeding the NAC. Alternatives B, C, D, and E each were predicted to have 13 receptors approaching or exceeding the NAC. Unabated noise levels at the 13 to 19 modeled receptors exceeding the NAC are predicted to range from 66 dBA L_{eqH} to 72 dBA L_{eqH} during the peak noise hour.

Classroom noise

Based on the simultaneous exterior/interior noise measurements and the noise modeling and as shown in Tables 3 through 9, Caltrans/FHWA Category E NAC levels would be not exceeded at the Saint Teresa of Avila School (ST-9/M-13 Interior) under any of the scenarios (Future No Build, or Alternatives A through E) with the classroom windows closed. With windows open, Caltrans/FHWA Category E NAC levels would be exceeded at the Saint Teresa of Avila School under any of the future scenarios (Future No Build, or Alternatives A through E).

As shown in Tables 3 through 9, Caltrans/FHWA Category E NAC levels would be not exceeded at the Clifford Street Elementary School (ST-10) under any of the scenarios (Future No Build, or Alternatives A through E) with the classroom windows closed (the only scenario examined because the heating, ventilation and air conditioning (HVAC) system is adequate, according to the instructor).

Table 3. Predicted Exterior Noise Levels[1] without Noise Abatement: Existing

Receptor #	Receptor Location	Number of Units Represented[2]	Type of Development	Activity Category	Criterion Noise Level[3] (dBA L_{eq})	Existing Peak-Hour Noise Level (dBA L_{eq})
M1	N. of Branden St., e. of Glendale Blvd.	1	Residential	B	66	67
M2	N. of Clifford St., e. of Glendale Blvd.	1	Residential	B	66	61
M3	N. of Clifford St., e. of Glendale Blvd.	2	School	B	66	58
ST10	S. of Duane St., e. of Glendale Blvd.	1	School (Interior)	E	51	47
LT1	N. of Duane St., e. of SR2 and Allesandro St.	1	Residential	B	66	65
M4	S. of Ewing St., e. of SR2 and Allesandro St.	2	Residential	B	66	66
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	4	Residential	B	66	62
M5	S. of Fargo St., e. of SR2 and Allesandro St.	3	Residential	B	66	61
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	5	Residential	B	66	63
M6	N. of Fargo St., e. of SR2 and Allesandro St.	1	Residential	B	66	67
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	6	Residential	B	66	64
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	2	Residential	B	66	66
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	1	Residential	B	66	70
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	5	Residential	B	66	68
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	2	Residential	B	66	68
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	4	Residential	B	66	71
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	5	Residential	B	66	67
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	5	Residential	B	66	69
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	2	Residential	B	66	69
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	5	Residential	B	66	67
M9	S. of Earl St., w. of SR2 and Lake View Ave.	4	Residential	B	66	67
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	7	Residential	B	66	59
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	4	Residential	B	66	60
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	4	Residential	B	66	62
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	3	Residential	B	66	64
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	3	Residential	B	66	66
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	4	Residential	B	66	63

Table 3 Continued

Receptor #	Receptor Location	Number of Units Represented[2]	Type of Development	Activity Category	Criterion Noise Level[3] (dBA L_{eq})	Existing Peak-Hour Noise Level (dBA L_{eq})
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	3	Residential	B	66	67
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	2	Residential	B	66	65
ST7	N. of Baxter St., w. of SR2	1	Residential	B	66	66
M12	N. of Baxter St., w. of SR2	3	Residential	B	66	64
M12B	N. of Baxter St., w. of SR2	4	Residential	B	66	63
M13	S. of Fargo St., w. of Glendale Blvd.	2	School	B	66	63
ST9 / M13I	S. of Fargo St., w. of Glendale Blvd.	2	School	E	51	54
ST1	S. of Fargo St., w. of Waterloo St.	2	Church Rectory	B	66	64
M14	S. of Fargo St., w. of Waterloo St.	1	Church	B	66	62
M15	N. of Duane St., e. of Waterloo St.	4	Recreational	B	66	60
M15B	S. of Ewing St., w. of Waterloo St.	3	Residential	B	66	58

1 - Existing peak noise hour noise levels derived from the FHWA's TNM Version 2.5 noise model, using PM peak-hour traffic volumes (Fehr & Peers/Kaku Associates).

2 – Many of the modeled receptors are intended to be representative of more than one noise-sensitive land use.

3 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA L_{eqH}. Caltrans defines "approach" as within 1 decibel of the NAC

Source: Jones & Stokes, 2007.

Table 4. Predicted Exterior Traffic Noise Levels[1] Without Noise Abatement: Future No Build Alternative

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Future No Build Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M1	N. of Branden St., e. of Glendale Blvd.	1	67	68	1	B	66	Yes	No
M2	N. of Clifford St., e. of Glendale Blvd.	1	61	62	1	B	66	No	No
M3	N. of Clifford St., e. of Glendale Blvd.	2	58	59	1	B	66	No	No
LT1	N. of Duane St., e. of SR2 and Allesandro St.	1	65	66	1	B	66	Yes	No
ST10	S. of Duane St., e. of Glendale Blvd.	1	47	48	1	E	51	No	No
M4	S. of Ewing St., e. of SR2 and Allesandro St.	2	66	66	0	B	66	Yes	No
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	4	62	63	1	B	66	No	No
M5	S. of Fargo St., e. of SR2 and Allesandro St.	3	61	62	1	B	66	No	No
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	5	63	64	1	B	66	No	No
M6	N. of Fargo St., e. of SR2 and Allesandro St.	1	67	67	0	B	66	Yes	No
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	6	64	65	1	B	66	No	No
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	2	66	67	1	B	66	Yes	No
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	1	70	71	1	B	66	Yes	No
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	5	68	69	1	B	66	Yes	No
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	2	68	69	1	B	66	Yes	No

Table 4 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Future No Build Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	4	71	72	1	B	66	Yes	No
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	5	67	68	1	B	66	Yes	No
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	5	69	70	1	B	66	Yes	No
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	2	69	70	1	B	66	Yes	No
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	5	67	68	1	B	66	Yes	No
M9	S. of Earl St., w. of SR2 and Lake View Ave.	4	67	68	1	B	66	Yes	No
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	7	59	60	1	B	66	No	No
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	4	60	61	1	B	66	No	No
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	4	62	63	1	B	66	No	No
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	3	64	65	1	B	66	No	No
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	3	66	67	1	B	66	Yes	No
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	4	63	64	1	B	66	No	No
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	3	67	68	1	B	66	Yes	No
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	2	65	66	1	B	66	Yes	No
ST7	N. of Baxter St., w. of SR2	1	66	67	1	B	66	Yes	No
M12	N. of Baxter St., w. of SR2	3	64	65	1	B	66	No	No

Table 4 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Future No Build Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M12B	N. of Baxter St., w. of SR2	4	63	64	1	B	66	No	No
M13	S. of Fargo St., w. of Glendale Blvd.	1	63	64	1	B	66	No	No
ST9 / M13I	S. of Fargo St., w. of Glendale Blvd.	2	54	55	1	E	51	Yes	No
ST1	S. of Fargo St., w. of Waterloo St.	2	64	65	1	B	66	No	No
M14	S. of Fargo St., w. of Waterloo St.	1	62	63	1	B	66	No	No
M15	N. of Duane St., e. of Waterloo St.	4	60	61	1	B	66	No	No
M15B	S. of Ewing St., w. of Waterloo St.	3	58	59	1	B	66	No	No

1 - Existing and Future peak noise hour noise level from proposed project, derived from the FHWA's TNM Version 2.5 noise model, using PM peak-hour traffic

2 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA LeqH. Caltrans defines "approach" as within 1 decibel of the NAC.

Source: Jones & Stokes, 2007.

Table 5. Predicted Exterior Traffic Noise Levels[1] Without Noise Abatement: Alternative A

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative A Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M1	N. of Branden St., e. of Glendale Blvd.	1	67	68	1	B	66	Yes	No
M2	N. of Clifford St., e. of Glendale Blvd.	1	61	62	1	B	66	No	No
M3	N. of Clifford St., e. of Glendale Blvd.	2	58	59	1	B	66	No	No
ST10	S. of Duane St., e. of Glendale Blvd.	1	47	48	1	E	51	No	No
LT1	N. of Duane St., e. of SR2 and Allesandro St.	1	65	66	1	B	66	Yes	No
M4	S. of Ewing St., e. of SR2 and Allesandro St.	2	66	66	0	B	66	Yes	No
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	4	62	63	1	B	66	No	No
M5	S. of Fargo St., e. of SR2 and Allesandro St.	3	61	62	1	B	66	No	No
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	5	63	64	1	B	66	No	No
M6	N. of Fargo St., e. of SR2 and Allesandro St.	1	67	68	1	B	66	Yes	No
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	6	64	66	2	B	66	Yes	No
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	2	66	67	1	B	66	Yes	No
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	1	70	72	2	B	66	Yes	No
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	5	68	70	2	B	66	Yes	No
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	2	68	69	1	B	66	Yes	No

Table 5 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative A Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	4	71	72	1	B	66	Yes	No
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	5	67	68	1	B	66	Yes	No
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	5	69	70	1	B	66	Yes	No
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	2	69	70	1	B	66	Yes	No
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	5	67	68	1	B	66	Yes	No
M9	S. of Earl St., w. of SR2 and Lake View Ave.	4	67	68	1	B	66	Yes	No
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	7	59	60	1	B	66	No	No
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	4	60	61	1	B	66	No	No
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	4	62	63	1	B	66	No	No
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	3	64	65	1	B	66	No	No
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	3	66	68	2	B	66	Yes	No
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	4	63	64	1	B	66	No	No
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	3	67	69	2	B	66	Yes	No
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	2	65	66	1	B	66	Yes	No
ST7	N. of Baxter St., w. of SR2	1	66	68	2	B	66	Yes	No
M12	N. of Baxter St., w. of SR2	3	64	65	1	B	66	No	No

Table 5 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative A Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M12B	N. of Baxter St., w. of SR2	4	63	64	1	B	66	No	No
M13	S. of Fargo St., w. of Glendale Blvd.	1	63	64	1	B	66	No	No
ST9 / M13I	S. of Fargo St., w. of Glendale Blvd.	2	54	55	1	E	51	Yes	No
ST1	S. of Fargo St., w. of Waterloo St.	2	64	65	1	B	66	No	No
M14	S. of Fargo St., w. of Waterloo St.	1	62	63	1	B	66	No	No
M15	N. of Duane St., e. of Waterloo St.	4	60	61	1	B	66	No	No
M15B	S. of Ewing St., w. of Waterloo St.	3	58	59	1	B	66	No	No

1 - Existing and Future peak noise hour noise level from proposed project, derived from the FHWA's TNM Version 2.5 noise model, using PM peak-hour traffic volumes (Fehr & Peers/Kaku Associates).

2 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA L_{eqH}. Caltrans defines "approach" as within 1 decibel of the NAC.

Source: Jones & Stokes, 2007.

Table 6. Predicted Exterior Traffic Noise Levels[1] Without Noise Abatement: Alternative B

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative B Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level ?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M1	N. of Branden St., e. of Glendale Blvd.	1	67	68	1	B	66	Yes	No
M2	N. of Clifford St., e. of Glendale Blvd.	1	61	62	1	B	66	No	No
M3	N. of Clifford St., e. of Glendale Blvd.	2	58	58	0	B	66	No	No
ST10	S. of Duane St., e. of Glendale Blvd.	1	47	47	0	E	51	No	No
LT1	N. of Duane St., e. of SR2 and Allesandro St.	1	65	65	0	B	66	No	No
M4	S. of Ewing St., e. of SR2 and Allesandro St.	2	66	66	0	B	66	Yes	No
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	4	62	61	-1	B	66	No	No
M5	S. of Fargo St., e. of SR2 and Allesandro St.	3	61	59	-2	B	66	No	No
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	5	63	61	-2	B	66	No	No
M6	N. of Fargo St., e. of SR2 and Allesandro St.	1	67	65	-2	B	66	No	No
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	6	64	63	-1	B	66	No	No
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	2	66	64	-2	B	66	No	No
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	1	70	70	0	B	66	Yes	No
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	5	68	68	0	B	66	Yes	No
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	2	68	69	1	B	66	Yes	No

Table 6 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative B Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level^2 (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level ?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	4	71	72	1	B	66	Yes	No
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	5	67	67	0	B	66	Yes	No
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	5	69	70	1	B	66	Yes	No
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	2	69	70	1	B	66	Yes	No
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	5	67	67	0	B	66	Yes	No
M9	S. of Earl St., w. of SR2 and Lake View Ave.	4	67	67	0	B	66	Yes	No
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	7	59	59	0	B	66	No	No
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	4	60	60	0	B	66	No	No
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	4	62	62	0	B	66	No	No
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	3	64	64	0	B	66	No	No
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	3	66	67	1	B	66	Yes	No
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	4	63	63	0	B	66	No	No
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	3	67	66	-1	B	66	Yes	No
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	2	65	64	-1	B	66	No	No
ST7	N. of Baxter St., w. of SR2	1	66	63	-3	B	66	No	No
M12	N. of Baxter St., w. of SR2	3	64	61	-3	B	66	No	No

Table 6 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative B Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level ?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M12B	N. of Baxter St., w. of SR2	4	63	61	-2	B	66	No	No
M13	S. of Fargo St., w. of Glendale Blvd.	1	63	63	0	B	66	No	No
ST9 / M13I	S. of Fargo St., w. of Glendale Blvd.	2	54	54	0	E	51	Yes	No
ST1	S. of Fargo St., w. of Waterloo St.	2	64	64	0	B	66	No	No
M14	S. of Fargo St., w. of Waterloo St.	1	62	62	0	B	66	No	No
M15	N. of Duane St., e. of Waterloo St.	4	60	64	4	B	66	No	No
M15B	S. of Ewing St., w. of Waterloo St.	3	58	60	2	B	66	No	No

1 - Existing and Future peak noise hour noise level from proposed project, derived from the FHWA's TNM Version 2.5 noise model, using PM peak-hour traffic volumes (Fehr & Peers/Kaku Associates).

2 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA L_{eqH}. Caltrans defines "approach" as within 1 decibel of the NAC.

Source: Jones & Stokes, 2007.

Table 7. Predicted Exterior Traffic Noise Levels[1] Without Noise Abatement: Alternative C

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative C Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M1	N. of Branden St., e. of Glendale Blvd.	1	67	68	1	B	66	Yes	No
M2	N. of Clifford St., e. of Glendale Blvd.	1	61	62	1	B	66	No	No
M3	N. of Clifford St., e. of Glendale Blvd.	2	58	57	-1	B	66	No	No
ST10	S. of Duane St., e. of Glendale Blvd.	1	47	47	0	E	51	No	No
LT1	N. of Duane St., e. of SR2 and Allesandro St.	1	65	65	0	B	66	No	No
M4	S. of Ewing St., e. of SR2 and Allesandro St.	2	66	66	0	B	66	Yes	No
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	4	62	61	-1	B	66	No	No
M5	S. of Fargo St., e. of SR2 and Allesandro St.	3	61	59	-2	B	66	No	No
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	5	63	61	-2	B	66	No	No
M6	N. of Fargo St., e. of SR2 and Allesandro St.	1	67	65	-2	B	66	No	No
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	6	64	64	0	B	66	No	No
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	2	66	64	-2	B	66	No	No
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	1	70	71	1	B	66	Yes	No
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	5	68	69	1	B	66	Yes	No
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	2	68	69	1	B	66	Yes	No

Table 7 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative C Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	4	71	72	1	B	66	Yes	No
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	5	67	68	1	B	66	Yes	No
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	5	69	71	2	B	66	Yes	No
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	2	69	70	1	B	66	Yes	No
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	5	67	67	0	B	66	Yes	No
M9	S. of Earl St., w. of SR2 and Lake View Ave.	4	67	67	0	B	66	Yes	No
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	7	59	59	0	B	66	No	No
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	4	60	60	0	B	66	No	No
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	4	62	62	0	B	66	No	No
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	3	64	64	0	B	66	No	No
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	3	66	67	1	B	66	Yes	No
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	4	63	63	0	B	66	No	No
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	3	67	67	0	B	66	Yes	No
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	2	65	64	-1	B	66	No	No
ST7	N. of Baxter St., w. of SR2	1	66	63	-3	B	66	No	No
M12	N. of Baxter St., w. of SR2	3	64	62	-2	B	66	No	No

Table 7 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative C Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded?
M12B	N. of Baxter St., w. of SR2	4	63	61	-2	B	66	No	No
M13	S. of Fargo St., w. of Glendale Blvd.	1	63	63	0	B	66	No	No
ST1	S. of Fargo St., w. of Waterloo St.	2	64	65	1	B	66	No	No
ST9 / M13I	S. of Fargo St., w. of Glendale Blvd.	2	54	54	0	E	51	Yes	No
M14	S. of Fargo St., w. of Waterloo St.	1	62	63	1	B	66	No	No
M15	N. of Duane St., e. of Waterloo St.	4	60	64	4	B	66	No	No
M15B	S. of Ewing St., w. of Waterloo St.	3	58	58	0	B	66	No	No

1 - Existing and Future peak noise hour noise level from proposed project, derived from the FHWA's TNM Version 2.5 noise model, using PM peak-hour traffic volumes (Fehr & Peers/Kaku Associates).

2 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA L_{eqH}. Caltrans defines "approach" as within 1 decibel of the NAC.

Source: Jones & Stokes, 2007.

Table 8. Predicted Exterior Traffic Noise Levels[1] Without Noise Abatement: Alternative D

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative D Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level ?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded ?
M1	N. of Branden St., e. of Glendale Blvd.	1	67	68	1	B	66	Yes	No
M2	N. of Clifford St., e. of Glendale Blvd.	1	61	62	1	B	66	No	No
M3	N. of Clifford St., e. of Glendale Blvd.	2	58	58	0	B	66	No	No
ST10	S. of Duane St., e. of Glendale Blvd.	1	47	49	0	E	51	No	No
LT1	N. of Duane St., e. of SR2 and Allesandro St.	1	65	65	0	B	66	No	No
M4	S. of Ewing St., e. of SR2 and Allesandro St.	2	66	66	0	B	66	Yes	No
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	4	62	61	-1	B	66	No	No
M5	S. of Fargo St., e. of SR2 and Allesandro St.	3	61	59	-2	B	66	No	No
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	5	63	61	-2	B	66	No	No
M6	N. of Fargo St., e. of SR2 and Allesandro St.	1	67	64	-3	B	66	No	No
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	6	64	63	-1	B	66	No	No
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	2	66	64	-2	B	66	No	No
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	1	70	70	0	B	66	Yes	No
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	5	68	69	1	B	66	Yes	No
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	2	68	69	1	B	66	Yes	No

Table 8 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative D Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level ?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded ?
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	4	71	72	1	B	66	Yes	No
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	5	67	68	1	B	66	Yes	No
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	5	69	71	2	B	66	Yes	No
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	2	69	71	2	B	66	Yes	No
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	5	67	68	1	B	66	Yes	No
M9	S. of Earl St., w. of SR2 and Lake View Ave.	4	67	68	1	B	66	Yes	No
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	7	59	60	1	B	66	No	No
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	4	60	61	1	B	66	No	No
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	4	62	62	0	B	66	No	No
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	3	64	64	0	B	66	No	No
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	3	66	67	1	B	66	Yes	No
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	4	63	63	0	B	66	No	No
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	3	67	67	0	B	66	Yes	No
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	2	65	65	0	B	66	No	No
ST7	N. of Baxter St., w. of SR2	1	66	63	-3	B	66	No	No
M12	N. of Baxter St., w. of SR2	3	64	61	-3	B	66	No	No

Table 8 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative D Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level ?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded ?
M12B	N. of Baxter St., w. of SR2	4	63	61	-2	B	66	No	No
M13	S. of Fargo St., w. of Glendale Blvd.	1	63	63	0	B	66	No	No
ST1	S. of Fargo St., w. of Waterloo St.	2	64	65	1	B	66	No	No
ST9 / M13I	S. of Fargo St., w. of Glendale Blvd.	2	54	54	0	E	51	Yes	No
M14	S. of Fargo St., w. of Waterloo St.	1	62	63	1	B	66	No	No
M15	N. of Duane St., e. of Waterloo St.	4	60	64	4	B	66	No	No
M15B	S. of Ewing St., w. of Waterloo St.	3	58	60	2	B	66	No	No

1 - Existing and Future peak noise hour noise level from proposed project, derived from the FHWA's TNM Version 2.5 noise model, using PM peak-hour traffic volumes (Fehr & Peers/Kaku Associates).

2 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA L_{eqH}. Caltrans defines "approach" as within 1 decibel of the NAC.

Source: Jones & Stokes, 2007.

Table 9. Predicted Exterior Traffic Noise Levels[1] Without Noise Abatement: Alternative E

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative E Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level ?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded ?
M1	N. of Branden St., e. of Glendale Blvd.	1	67	68	1	B	66	Yes	No
M2	N. of Clifford St., e. of Glendale Blvd.	1	61	62	1	B	66	No	No
M3	N. of Clifford St., e. of Glendale Blvd.	2	58	58	0	B	66	No	No
ST10	S. of Duane St., e. of Glendale Blvd.	1	47	49	0	E	51	No	No
LT1	N. of Duane St., e. of SR2 and Allesandro St.	1	65	65	0	B	66	No	No
M4	S. of Ewing St., e. of SR2 and Allesandro St.	2	66	66	0	B	66	Yes	No
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	4	62	61	-1	B	66	No	No
M5	S. of Fargo St., e. of SR2 and Allesandro St.	3	61	59	-2	B	66	No	No
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	5	63	61	-2	B	66	No	No
M6	N. of Fargo St., e. of SR2 and Allesandro St.	1	67	64	-3	B	66	No	No
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	6	64	63	-1	B	66	No	No
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	2	66	64	-2	B	66	No	No
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	1	70	70	0	B	66	Yes	No
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	5	68	69	1	B	66	Yes	No
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	2	68	69	1	B	66	Yes	No

Table 9 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative E Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level ?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded ?
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	4	71	72	1	B	66	Yes	No
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	5	67	68	1	B	66	Yes	No
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	5	69	71	2	B	66	Yes	No
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	2	69	71	2	B	66	Yes	No
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	5	67	68	1	B	66	Yes	No
M9	S. of Earl St., w. of SR2 and Lake View Ave.	4	67	68	1	B	66	Yes	No
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	7	59	60	1	B	66	No	No
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	4	60	61	1	B	66	No	No
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	4	62	62	0	B	66	No	No
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	3	64	64	0	B	66	No	No
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	3	66	67	1	B	66	Yes	No
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	4	63	63	0	B	66	No	No
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	3	67	67	0	B	66	Yes	No
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	2	65	65	0	B	66	No	No
ST7	N. of Baxter St., w. of SR2	1	66	63	-3	B	66	No	No
M12	N. of Baxter St., w. of SR2	3	64	61	-3	B	66	No	No

Table 9 Continued

Receptor #	Receptor Location	Number of Units Represented	Existing Peak-Hour Noise Level (dBA L_{eq})	Alternative E Peak-Hour Noise Level (dBA L_{eq})	Estimated Increase Over Existing Noise Level (dBA)	Activity Category	Criterion Noise Level[2] (dBA L_{eq})	Future Noise Level Equals or Exceeds Criterion Noise Level ?	Substantial Increase Criterion (Greater than 12 dBA) Exceeded ?
M12B	N. of Baxter St., w. of SR2	4	63	61	-2	B	66	No	No
M13	S. of Fargo St., w. of Glendale Blvd.	1	63	63	0	B	66	No	No
ST1	S. of Fargo St., w. of Waterloo St.	2	64	65	1	B	66	No	No
ST9 / M13I	S. of Fargo St., w. of Glendale Blvd.	2	54	54	0	E	51	Yes	No
M14	S. of Fargo St., w. of Waterloo St.	1	62	63	1	B	66	No	No
M15	N. of Duane St., e. of Waterloo St.	4	60	64	4	B	66	No	No
M15B	S. of Ewing St., w. of Waterloo St.	3	58	60	2	B	66	No	No

1 - Existing and Future peak noise hour noise level from proposed project, derived from the FHWA's TNM Version 2.5 noise model, using PM peak-hour traffic volumes (Fehr & Peers/Kaku Associates).

2 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA L_{eqH}. Caltrans defines "approach" as within 1 decibel of the NAC.

Source: Jones & Stokes, 2007.

Noise Abatement/Mitigation Considered Including Range of Heights, Lengths, Insertion Losses and Number of Benefited Receivers

Traffic noise abatement measures in the form of soundwalls were considered for the noise-sensitive land use areas predicted to exceed the NAC. TNM® was used to predict soundwall performance (insertion loss or noise reduction) for barrier heights ranging from 6 feet to 16 feet for each of the build alternatives, as shown in Tables 10 through 14. Grey highlighted areas shown in Tables 10 through 14 indicated the minimum wall height at which 5 decibels or greater insertion loss is achieved. Abatement was found to be feasible for 14 of the representative modeled receptors exceeding the NAC adjacent to the northbound and southbound sides of the project alignment under Alternative A. Abatement was found to be feasible for eight of the representative modeled receptors exceeding the NAC adjacent to the northbound and southbound sides of the project alignment under Alternatives B, C, D, and E. Tables 15 through 19 contain additional details of the feasible barriers for the build alternatives, including range of heights, begin and end wall stations, insertion losses, break-line-of-sight heights, and number of benefited receivers.

Classroom Noise at Saint Teresa of Avila School

Additionally, noise modeling was conducted for the Saint Teresa of Avila School to predict the performance of a soundwall constructed in order to reduce noise levels within the classrooms facing the SR-2/Glendale Boulevard Interchange. TNM® was used to predict soundwall performance (insertion loss or noise reduction) for barrier heights ranging from 6 feet to 16 feet for each of the build alternatives, as shown in Table 20. Abatement in the form of a soundwall constructed at the Glendale Boulevard right-of-way was found to be feasible (i.e., reduce interior noise levels (with the windows-open condition) to 51 dBA L_{eqH} or less) for each of the future construction alternatives. Tables 21 through 25 contain additional details of the feasible barriers for the build alternatives, including range of wall heights, wall lengths, insertion losses, and number of benefited receivers.

Alternatively, effective noise abatement could be achieved by upgrading the HVAC systems in the classrooms facing the SR-2/Glendale Blvd. Interchange.

Areas Where Abatement/Mitigation Is Not Feasible

Abatement/mitigation was found to be infeasible at six of the representative modeled receptors exceeding the NAC under Alternative A. Abatement/mitigation was found to be infeasible at five of the representative modeled receptors exceeding the NAC under Alternatives B, C, D, and E.

Areas Where Abatement/Mitigation Is Not Reasonable

Reasonableness cost allowance calculations were carried out for the four barriers (NB1, NB2, SB1, and SB2) for each of the five build alternatives. The results of the reasonableness allowance calculations are summarized in Tables 15 through 19. Pursuant to current Caltrans protocol (Traffic Noise Analysis Protocol, August 2006), reasonableness recommendations and determination will be carried out by the project engineer in the Noise Abatement Decision Report (NADR).

Construction Noise

Noise from activities associated with construction of the project would occur over a period of approximately 18 months. Project construction would be accomplished in several phases, including demolition, grading, paving, and finishing. Many of these activities involve intermittent periods of high noise generation; however, these periods would generally be localized and transitory. Construction activities and associated noise would move along the right-of-way as construction activities proceed down the length of the corridor. With implementation of standard noise reduction practices, no adverse impacts from construction noise are anticipated. Recommended construction noise control measures are provided below.

Table 10. Predicted Exterior Traffic Noise Levels[1] and Insertion Loss With Noise Abatement: Alternative A

Receptor #	Receptor Location	Peak-Hour Noise Level without Wall (dBA L_{eq})	Peak-Hour Noise Level (Level) and Insertion Loss (IL) with Indicated Wall Height Constructed at Right-of-Way (same location as Top-of-Slope)											
			6'		8'		10'		12'		14'		16'	
			Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)
M1	N. of Branden St., e. of Glendale Blvd.	68	N/A[3]	N/A[3]	N/A[3]	N/A[3]	N/A[3]	N/A[3]	N/A[3]	N/A[3]	N/A[3]	N/A[3]	N/A[3]	N/A[3]
M2	N. of Clifford St., e. of Glendale Blvd.	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M3	N. of Clifford St., e. of Glendale Blvd.	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LT1	N. of Duane St., e. of SR2 and Allesandro St.	66	65	1	65	1	65	1	65	1	65	1	65	1
M4	S. of Ewing St., e. of SR2 and Allesandro St.	66	66	0	66	0	66	0	66	0	65	1	65	1
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	63	62	1	62	1	62	N/A	62	1	62	1	62	1
M5	S. of Fargo St., e. of SR2 and Allesandro St.	62	61	N/A	61	N/A	60	N/A	60	N/A	59	N/A	58	N/A
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	64	64	N/A	64	N/A	63	N/A	63	N/A	63	N/A	62	N/A
M6	N. of Fargo St., e. of SR2 and Allesandro St.	68	67	1	66	2	65	3	64	4	64*	4	63	5
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	66	65	1	65	1	65	1	64	2	63	3	62	4
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	67	64	3	63	4	62	5	61*	6	60	7	60	7
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	72	69	3	68	4	67	5	66*	6	65	7	64	8
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	70	69	1	69	1	69	1	68	2	67	3	67	3
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	69	67	2	66	3	66	3	65	4	65	4	65	4
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	72	71	1	70	2	69	3	68	4	67*	5	66	6
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	68	67	1	67	1	67	1	66	2	66	2	65	3
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	70	69	1	69	1	68	2	67	3	65*	5	63	7
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	70	70	0	70	0	68	2	67	3	66*	4	65	5
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	68	61*	7	60	8	60	8	59	9	58	10	58	10
M9	S. of Earl St., w. of SR2 and Lake View Ave.	68	63*	5	62	6	61	7	61	7	60	8	60	8
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	60	58	2	57	3	57	3	57	3	56	4	56	4
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	61	57*	4	56	5	55	6	55	6	55	6	54	7
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	63	61	2	61	2	61	2	61	2	60	3	60	3
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	65	64	1	63	2	63	2	63	2	63	2	63	2
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	68	63	5	62*	6	61	7	61	7	61	7	60	8
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	64	62	2	61	3	61	3	60	4	60	4	60	4
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	69	66	3	63*	6	62	7	60	9	59	10	58	11
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	66	65	1	64	2	62	4	61*	5	59	7	58	8
ST7	N. of Baxter St., w. of SR2	68	66	2	63	5	60*	8	59	9	58	10	57	11
M12	N. of Baxter St., w. of SR2	65	64	1	62	3	60*	5	59	6	59	6	58	7
M12B	N. of Baxter St., w. of SR2	64	63	1	63	1	63	1	62	2	62	2	61	3
M13	S. of Fargo St., w. of Glendale Blvd.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST1	S. of Fargo St., w. of Waterloo St.	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 10 Continued

Receptor #	Receptor Location	Peak-Hour Noise Level without Wall (dBA L_{eq})	Peak-Hour Noise Level (Level) and Insertion Loss (IL) with Indicated Wall Height Constructed at Right-of-Way (same location as Top-of-Slope) 6' Level (dBA L_{eq})	6' IL (dB)	8' Level (dBA L_{eq})	8' IL (dB)	10' Level (dBA L_{eq})	10' IL (dB)	12' Level (dBA L_{eq})	12' IL (dB)	14' Level (dBA L_{eq})	14' IL (dB)	16' Level (dBA L_{eq})	16' IL (dB)
M14	S. of Fargo St., w. of Waterloo St.	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M15	N. of Duane St., e. of Waterloo St.	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M15B	S. of Ewing St., w. of Waterloo St.	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1 - Future peak-noise-hour noise level from proposed project, derived from the FHWA's TNM version 2.5 noise model, using PM peak-hour traffic volumes (Kaku Associates).

2 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA L_{eqH}. Caltrans defines "approach" as within 1 decibel of the NAC.

3 - Barrier not considered at M1 because presence of adjacent side-streets and driveways would prohibit the construction of an effective soundwall at this location.

** - Break-line-of-sight height (the height at which an 11.5 foot high truck stack would break the line-of-sight to the receptor.*

N/A - Not Applicable (no barrier considered)

- Minimum 5 dB Insertion loss achieved at this barrier height.

Source: Jones & Stokes, 2007.

Table 11. Predicted Exterior Traffic Noise Levels[1] and Insertion Loss With Noise Abatement: Alternative B

			Peak-Hour Noise Level (Level) and Insertion Loss (IL) with Indicated Wall Height Constructed at Right-of-Way (same location as Top-of-Slope)											
		Peak-Hour Noise	6'		8'		10'		12'		14'		16'	
Receptor #	Receptor Location	Level without Wall (dBA L_{eq})	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)
M1	N. of Branden St., e. of Glendale Blvd.	68	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]
M2	N. of Clifford St., e. of Glendale Blvd.	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M3	N. of Clifford St., e. of Glendale Blvd.	58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LT1	N. of Duane St., e. of SR2 and Allesandro St.	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M4	S. of Ewing St., e. of SR2 and Allesandro St.	66	64	2	64	2	64	2	64	2	64	2	64	2
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	61	59	2	59	2	59	2	58	3	58	3	58	3
M5	S. of Fargo St., e. of SR2 and Allesandro St.	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M6	N. of Fargo St., e. of SR2 and Allesandro St.	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	71	68	3	67	4	66	5	65*	6	64	7	64	7
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	69	68	1	68	1	67	2	67	2	66	3	65	4
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	69	67	2	66	3	66	3	65*	4	65	4	64	5
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	72	71	1	70	2	69	3	68	4	67*	5	66	6
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	68	67	1	67	1	66	2	66	2	65	3	65	3
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	70	70	0	69	1	68	2	66	4	65*	5	63	7
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	70	70	0	70	0	69	1	67	3	66	4	66	4
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	67	61*	6	60	7	59	8	58	9	57	10	57	10
M9	S. of Earl St., w. of SR2 and Lake View Ave.	67	62*	5	61	6	60	7	60	7	59	8	59	8
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	59	57	2	56	3	56	3	56	3	55	4	55	4
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	60	56*	4	55	5	55	5	54	6	54	6	53	7
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	62	60	2	60	2	60	2	59	3	59	3	59	3
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	64	62	2	62	2	61	3	61	3	61	3	61	3
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	67	62	5	61*	6	60	7	60	7	59	8	59	8
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	63	60	3	60	3	59	4	59	4	58	5	58	5
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	67	65	2	62*	5	60	7	59	8	58	9	57	10
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	65	64	1	63	2	61	4	59*	6	58	7	57	8
ST7	N. of Baxter St., w. of SR2	63	62	1	59	4	57	6	55	8	55	8	54	9
M12	N. of Baxter St., w. of SR2	61	60	1	58	3	58	3	57	4	57	4	57	4
M12B	N. of Baxter St., w. of SR2	61	60	1	60	1	60	1	60	1	59	2	58	3
M13	S. of Fargo St., w. of Glendale Blvd.	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST1	S. of Fargo St., w. of Waterloo St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 11 Continued

Receptor #	Receptor Location	Peak-Hour Noise Level without Wall (dBA L_{eq})	6' Level (dBA L_{eq})	6' IL (dB)	8' Level (dBA L_{eq})	8' IL (dB)	10' Level (dBA L_{eq})	10' IL (dB)	12' Level (dBA L_{eq})	12' IL (dB)	14' Level (dBA L_{eq})	14' IL (dB)	16' Level (dBA L_{eq})	16' IL (dB)
			Peak-Hour Noise Level (Level) and Insertion Loss (IL) with Indicated Wall Height Constructed at Right-of-Way (same location as Top-of-Slope)											
M14	S. of Fargo St., w. of Waterloo St.	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M15	N. of Duane St., e. of Waterloo St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M15B	S. of Ewing St., w. of Waterloo St.	58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1 - Future peak-noise-hour noise level from proposed project, derived from the FHWA's TNM version 2.5 noise model, using PM peak-hour traffic volumes (Fehr & Peers/Kaku Associates).

2 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA L_{eqH}. Caltrans defines "approach" as within 1 decibel of the NAC.

3 - Barrier not considered at M1 because presence of adjacent side-streets and driveways would prohibit the construction of an effective soundwall at this location.

** - Break-line-of-sight height (the height at which an 11.5 foot high truck stack would break the line-of-sight to the receptor.*

N/A - Not Applicable (no barrier considered)

- Minimum 5 dB Insertion loss achieved at this barrier height.

Source: Jones & Stokes, 2007.

Table 12. Predicted Exterior Traffic Noise Levels[1] and Insertion Loss With Noise Abatement: Alternative C

			Peak-Hour Noise Level (Level) and Insertion Loss (IL) with Indicated Wall Height Constructed at Right-of-Way (same location as Top-of-Slope)											
		Peak-Hour Noise	6'		8'		10'		12'		14'		16'	
Receptor #	Receptor Location	Level without Wall (dBA L_{eq})	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)
M1	N. of Branden St., e. of Glendale Blvd.	68	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]
M2	N. of Clifford St., e. of Glendale Blvd.	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M3	N. of Clifford St., e. of Glendale Blvd.	57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LT1	N. of Duane St., e. of SR2 and Allesandro St.	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M4	S. of Ewing St., e. of SR2 and Allesandro St.	66	64	2	64	2	64	2	64	2	64	2	63	3
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	61	60	1	59	2	59	2	58	3	58	3	58	3
M5	S. of Fargo St., e. of SR2 and Allesandro St.	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M6	N. of Fargo St., e. of SR2 and Allesandro St.	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	71	68	3	67	4	66	5	65*	6	64	7	64	7
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	69	69	0	68	1	68	1	67	2	66	3	66	3
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	69	67	2	67	2	66	3	65	4	65	4	65	4
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	72	71	1	71	1	69	3	68	4	67*	5	66	6
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	68	68	0	67	1	67	1	67	1	66	2	66	2
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	71	70	1	69	2	68	3	67	4	65*	6	63	8
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	70	70	0	70	0	69	1	67	3	67	3	66	4
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	67	61*	5	60	7	60	7	59	8	58	9	57	10
M9	S. of Earl St., w. of SR2 and Lake View Ave.	68	62*	6	61	7	61	7	60	8	59	9	59	9
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	59	57	2	57	2	56	3	56	3	56	3	55	4
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	60	56	4	56*	4	55	5	55	5	54	6	54	6
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	62	61	1	60	2	60	2	60	2	60	2	60	2
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	64	62	2	62	2	62	2	61	3	61	3	61	3
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	67	62	5	61*	6	61	6	60	7	60	7	59	8
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	63	61	2	60	3	60	3	59	4	59	4	59	4
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	67	64	3	62*	5	60	7	59	8	58	9	57	10
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	65	64	1	63	2	61	4	60	5	58	7	57	8
ST7	N. of Baxter St., w. of SR2	63	62	1	59	4	57	6	56	7	55	8	54	9
M12	N. of Baxter St., w. of SR2	62	60	2	59	3	58	4	58	4	57	5	57	5
M12B	N. of Baxter St., w. of SR2	61	61	0	60	1	60	1	60	1	60	1	59	2
M13	S. of Fargo St., w. of Glendale Blvd.	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST1	S. of Fargo St., w. of Waterloo St.	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 12 Continued

Receptor #	Receptor Location	Peak-Hour Noise Level without Wall (dBA L_{eq})	Peak-Hour Noise Level (Level) and Insertion Loss (IL) with Indicated Wall Height Constructed at Right-of-Way (same location as Top-of-Slope)											
			6'		8'		10'		12'		14'		16'	
			Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)
M14	S. of Fargo St., w. of Waterloo St.	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M15	N. of Duane St., e. of Waterloo St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M15B	S. of Ewing St., w. of Waterloo St.	58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1 - Future peak-noise-hour noise level from proposed project, derived from the FHWA's TNM version 2.5 noise model, using PM peak-hour traffic volumes (Fehr & Peers/Kaku Associates).

2 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA L_{eqH}. Caltrans defines "approach" as within 1 decibel of the NAC.

3 - Barrier not considered at M1 because presence of adjacent side-streets and driveways would prohibit the construction of an effective soundwall at this location.

** - Break-line-of-sight height (the height at which an 11.5 foot high truck stack would break the line-of-sight to the receptor.*

N/A - Not Applicable (no barrier considered)

- Minimum 5 dB Insertion loss achieved at this barrier height.

Source: Jones & Stokes, 2007.

Table 13. Predicted Exterior Traffic Noise Levels[1] and Insertion Loss With Noise Abatement: Alternative D

			Peak-Hour Noise Level (Level) and Insertion Loss (IL) with Indicated Wall Height Constructed at Right-of-Way (same location as Top-of-Slope)											
			6'		8'		10'		12'		14'		16'	
Receptor #	Receptor Location	Peak-Hour Noise Level without Wall (dBA L_{eq})	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)
M1	N. of Branden St., e. of Glendale Blvd.	68	N/A [3]	N/A [4]	N/A [5]	N/A [6]	N/A [7]	N/A [8]	N/A [9]	N/A [10]	N/A [11]	N/A [12]	N/A [13]	N/A [14]
M2	N. of Clifford St., e. of Glendale Blvd.	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M3	N. of Clifford St., e. of Glendale Blvd.	58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LT1	N. of Duane St., e. of SR2 and Allesandro St.	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M4	S. of Ewing St., e. of SR2 and Allesandro St.	65	64	1	64	1	64	1	64	1	64	1	64	1
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	60	59	1	59	1	59	1	59	1	58	2	58	2
M5	S. of Fargo St., e. of SR2 and Allesandro St.	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M6	N. of Fargo St., e. of SR2 and Allesandro St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	70	68	2	67	3	66	4	65*	5	64	6	64	6
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	69	68	1	68	1	67	2	67	2	66	3	66	3
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	69	67	2	67	2	66	3	66	3	65	4	65	4
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	73	71	2	71	2	70	3	69	4	67*	6	67	6
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	68	68	0	68	0	67	1	67	1	66	2	66	2
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	71	70	1	70	1	68	3	67	4	66*	5	64	7
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	71	71*	0	70	1	69	2	68	3	67	4	66	5
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	68	62*	6	61	7	60	8	59	9	58	10	58	10
M9	S. of Earl St., w. of SR2 and Lake View Ave.	68	63*	5	62	6	61	7	60	8	60	8	59	9
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	60	57	3	57	3	57	3	56	4	56	4	56	4
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	61	57*	4	56	5	55	6	55	6	54	7	54	7
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	62	60	2	60	2	60	2	60	2	60	2	59	3
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	64	62	2	62	2	62	2	61	3	61	3	61	3
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	67	62	5	62*	5	61	6	61	6	60	7	60	7
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	63	61	2	61	2	60	3	60	3	59	4	59	4
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	67	65	2	62*	5	60	7	59	8	58	9	57	10
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	65	64	1	63	2	61	4	60	5	58	7	57	8
ST7	N. of Baxter St., w. of SR2	64	62	2	59	5	57	7	56	8	55	9	55	9
M12	N. of Baxter St., w. of SR2	61	59	2	58	3	58	3	58	3	57	4	57	4
M12B	N. of Baxter St., w. of SR2	61	61	0	61	0	60	1	60	1	59	2	59	2
M13	S. of Fargo St., w. of Glendale Blvd.	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST1	S. of Fargo St., w. of Waterloo St.	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 13 Continued

Receptor #	Receptor Location	Peak-Hour Noise Level without Wall (dBA L_{eq})	Peak-Hour Noise Level (Level) and Insertion Loss (IL) with Indicated Wall Height Constructed at Right-of-Way (same location as Top-of-Slope) 6' Level (dBA L_{eq})	6' IL (dB)	8' Level (dBA L_{eq})	8' IL (dB)	10' Level (dBA L_{eq})	10' IL (dB)	12' Level (dBA L_{eq})	12' IL (dB)	14' Level (dBA L_{eq})	14' IL (dB)	16' Level (dBA L_{eq})	16' IL (dB)
M14	S. of Fargo St., w. of Waterloo St.	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M15	N. of Duane St., e. of Waterloo St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M15B	S. of Ewing St., w. of Waterloo St.	60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1 - Future peak-noise-hour noise level from proposed project, derived from the FHWA's TNM version 2.5 noise model, using PM peak-hour traffic volumes (Fehr & Peers/Kaku Associates).

2 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA L_{eqH}. Caltrans defines "approach" as within 1 decibel of the NAC.

3 - Barrier not considered at M1 because presence of adjacent side-streets and driveways would prohibit the construction of an effective soundwall at this location.

** - Break-line-of-sight height (the height at which an 11.5 foot high truck stack would break the line-of-sight to the receptor.*

N/A - Not Applicable (no barrier considered)

- Minimum 5 dB Insertion loss achieved at this barrier height.

Source: Jones & Stokes, 2007.

Table 14. Predicted Exterior Traffic Noise Levels[1] and Insertion Loss With Noise Abatement: Alternative E

			Peak-Hour Noise Level (Level) and Insertion Loss (IL) with Indicated Wall Height Constructed at Right-of-Way (same location as Top-of-Slope)											
		Peak-Hour Noise	6'		8'		10'		12'		14'		16'	
Receptor #	Receptor Location	Level without Wall (dBA L_{eq})	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)
M1	N. of Branden St., e. of Glendale Blvd.	68	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]	N/A [3]
M2	N. of Clifford St., e. of Glendale Blvd.	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M3	N. of Clifford St., e. of Glendale Blvd.	58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LT1	N. of Duane St., e. of SR2 and Allesandro St.	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M4	S. of Ewing St., e. of SR2 and Allesandro St.	65	64	1	64	1	64	1	64	1	64	1	64	1
M4B	S. of Ewing St., e. of SR2 and Allesandro St.	60	59	1	59	1	59	1	58	2	58	2	58	2
M5	S. of Fargo St., e. of SR2 and Allesandro St.	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M5B	S. of Fargo St., e. of SR2 and Allesandro St.	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M6	N. of Fargo St., e. of SR2 and Allesandro St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M6B	S. of Baxter St., e. of SR2 and Allesandro St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST2	N. of Baxter St., e. of SR2 and Allesandro St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M7	S. of W. Cove Wy, e. of SR2 and Allesandro St.	70	68	2	67	3	66	4	65*	5	64	6	64	6
M7B	S. of W. Cove Wy, e. of SR2 and Allesandro St.	69	68	1	68	1	68	1	67	2	66	3	66	3
ST3	S. of Oak Glen Pl., e. of SR2 and Allesandro St.	69	67	2	67	2	66	3	66	3	65	4	65	4
M8	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	72	71	1	71	1	70	2	68	4	67*	5	66	6
M8B	N. of Oak Glen Pl., e. of SR2 and Allesandro St.	68	68	0	67	1	67	1	67	1	66	2	66	2
ST4	N. of Loma Vista Pl., e. of SR2 and Allesandro St.	71	70	1	69	2	68	3	67	4	66*	5	64	7
M8C	N. of Whitmore Ave, e. of SR2 and Allesandro St.	71	71*	0	70	1	69	2	68	3	67	4	66*	5
ST5	N. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	68	62*	6	61	7	60	8	59	9	58	10	58	10
M9	S. of Earl St., w. of SR2 and Lake View Ave.	68	63*	5	62	6	61	7	60	8	60	8	59	9
M9B	S. of Silver Ridge Ave., w. of SR2 and Lake View Ave.	60	58	2	57	3	57	3	57	3	56	4	56	4
M9C	N. of Earl St., w. of SR2 and Lake View Ave.	61	57*	4	56	5	56	5	55	6	54	7	54	7
M9D	N. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	63	61	2	60	3	60	3	60	3	60	3	60	3
ST6	S. of Fair Oak View Terrace, w. of SR2 and Lake View Ave.	64	63	1	62	2	62	2	62	2	62	2	61	3
M10	N. of Oak Glen Pl., w. of SR2 and Lake View Ave.	67	62	5	61*	6	61	6	60	7	60	7	60	7
M10B	S. of Oak Glen Pl., w. of SR2 and Lake View Ave.	64	61	3	60*	4	60	4	60	4	59	5	59	5
M11	S. of Cove Wy., w. of SR2 and Lake View Ave.	67	65	2	62*	5	60	7	59	8	58	9	57	10
M11B	S. of Cove Wy., w. of SR2 and e. of Cove Ave.	65	64	1	63	2	61	4	60	5	58	7	57	8
ST7	N. of Baxter St., w. of SR2	63	62	1	59	4	57	6	56	7	55	8	55	8
M12	N. of Baxter St., w. of SR2	60	59	1	58	2	58	2	58	2	57	3	57	3
M12B	N. of Baxter St., w. of SR2	61	61	0	60	1	60	1	60	1	59	2	59	2
M13	S. of Fargo St., w. of Glendale Blvd.	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST1	S. of Fargo St., w. of Waterloo St.	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 14 Continued

Receptor #	Receptor Location	Peak-Hour Noise Level without Wall (dBA L_{eq})	Peak-Hour Noise Level (Level) and Insertion Loss (IL) with Indicated Wall Height Constructed at Right-of-Way (same location as Top-of-Slope) 6' Level (dBA L_{eq})	6' IL (dB)	8' Level (dBA L_{eq})	8' IL (dB)	10' Level (dBA L_{eq})	10' IL (dB)	12' Level (dBA L_{eq})	12' IL (dB)	14' Level (dBA L_{eq})	14' IL (dB)	16' Level (dBA L_{eq})	16' IL (dB)
M14	S. of Fargo St., w. of Waterloo St.	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M15	N. of Duane St., e. of Waterloo St.	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M15B	S. of Ewing St., w. of Waterloo St.	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1 - Future peak-noise-hour noise level from proposed project, derived from the FHWA's TNM version 2.5 noise model, using PM peak-hour traffic volumes (Fehr & Peers/Kaku Associates).

2 - Criterion noise levels based upon Caltrans / FHWA exterior "approach or exceed" Noise Abatement Criteria for Activity Category B (which includes residential and recreational land uses) of 67 dBA L_{eqH}. Caltrans defines "approach" as within 1 decibel of the NAC.

3 - Barrier not considered at M1 because presence of adjacent side-streets and driveways would prohibit the construction of an effective soundwall at this location.

** - Break-line-of-sight height (the height at which an 11.5 foot high truck stack would break the line-of-sight to the receptor.*

N/A - Not Applicable (no barrier considered)

- Minimum 5 dB Insertion loss achieved at this barrier height.

Source: Jones & Stokes, 2007.

Table 15. Summary of Reasonableness Determination Data: Alternative A

Barrier I.D.: NB1Alt A, b/w Ewing St and Oak Glenn Place (Begin/End Sta. 10+15 / 14+55). Approx. 1440' long.						
Critical Design Receiver:	**M6**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	67					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	68					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	1	2	2	4	4	5
Number of Benefited Residences	0	0	3	3	3	4
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$0	$0
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$44,000	$44,000	$44,000	$44,000	$44,000
Total Reasonable Allowance	N/A	N/A	$132,000	$132,000	$132,000	$176,000

Barrier I.D.: NB2 Alt A, b/w Oak Glenn Place and n. of Walcott Way (Begin / End Sta. 14+70 / 19+20). Approx. 1475' long.						
Critical Design Receiver:	**M8**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	71					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	72					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	1	2	3	4	5	6
Number of Benefited Residences	0	0	0	0	9	11
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$0	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$46,000	$46,000	$46,000	$46,000	$46,000	$48,000
Total Reasonable Allowance	N/A	N/A	N/A	N/A	$414,000	$528,000

Table 15 Continued

Barrier I.D.: SB1 Alt A, b/w n. of Lake View Ave and Oak Glenn Place (Begin / End Sta. 19+20 / 14+70). Approx. 1475' long.						
Critical Design Receiver:	**M9**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	67					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	68					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	5	6	7	7	8	8
Number of Benefited Residences	9	13	13	13	13	13
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$2,000	$2,000	$2,000	$2,000	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$46,000	$46,000	$46,000	$46,000	$46,000
Total Reasonable Allowance	$396,000	$598,000	$598,000	$598,000	$598,000	$598,000

Barrier I.D.: SB2 Alt A, b/w Oak Glenn Place and Glendale Blvd (Begin / End Sta. 14+55 / 11+55). Approx. 985' long.						
Critical Design Receiver:	**M11**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	67					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	69					
Design Year Noise Level Minus Existing Noise Level	2					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	3	6	7	9	10	11
Number of Benefited Residences	3	7	10	12	12	12
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$2,000	$2,000	$4,000	$4,000	$4,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$46,000	$46,000	$48,000	$48,000	$48,000
Total Reasonable Allowance	$132,000	$322,000	$460,000	$576,000	$576,000	$576,000

Source: Jones & Stokes, 2007.

Table 16. Summary of Reasonableness Determination Data: Alternative B

Barrier I.D.: NB1Alt B, b/w Ewing St and Oak Glenn Place (Begin/End Sta. 12+10 / 14+55). Approx. 805' long.						
Critical Design Receiver:	**M7**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	70					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	71					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	3	4	5	6	7	7
Number of Benefited Residences	0	0	1	1	3	3
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$2,000	$2,000	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$46,000	$46,000	$46,000	$48,000	$48,000	$48,000
Total Reasonable Allowance	N/A	N/A	$46,000	$48,000	$144,000	$144,000

Barrier I.D.: NB2 Alt B, b/w Oak Glenn Place and n. of Walcott Way (Begin / End Sta. 14+70 / 19+20). Approx. 1475' long.						
Critical Design Receiver:	**M8**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	71					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	72					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	1	2	3	4	5	6
Number of Benefited Residences	0	0	0	0	9	11
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$0	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$46,000	$46,000	$46,000	$46,000	$46,000	$48,000
Total Reasonable Allowance	N/A	N/A	N/A	N/A	$414,000	$528,000

Table 16 Continued

Barrier I.D.: SB1 Alt B, b/w n. of Lake View Ave and Oak Glenn Place (Begin / End Sta. 19+20 / 14+70). Approx. 1475' long.						
Critical Design Receiver:	**M9**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	67					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	67					
Design Year Noise Level Minus Existing Noise Level	0					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	5	6	7	7	8	8
Number of Benefited Residences	9	13	13	13	13	13
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$2,000	$2,000	$2,000	$2,000	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$46,000	$46,000	$46,000	$46,000	$46,000
Total Reasonable Allowance	$396,000	$598,000	$598,000	$598,000	$598,000	$598,000

Barrier I.D.: SB2 Alt B, b/w Oak Glenn Place and Glendale Blvd (Begin / End Sta. 14+55 / 11+55). Approx. 985' long.						
Critical Design Receiver:	**M11**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	67					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	67					
Design Year Noise Level Minus Existing Noise Level	0					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	2	5	7	8	9	10
Number of Benefited Residences	3	6	7	9	13	13
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$2,000	$2,000	$4,000	$4,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$44,000	$46,000	$46,000	$48,000	$48,000
Total Reasonable Allowance	$132,000	$264,000	$322,000	$414,000	$624,000	$624,000

Source: Jones & Stokes, 2007.

Table 17. Summary of Reasonableness Determination Data: Alternative C

Barrier I.D.: NB1Alt C, b/w Ewing St and Oak Glenn Place (Begin/End Sta. 12+10 / 14+55). Approx. 805' long.						
Critical Design Receiver:	**M7**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	70					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	71					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	3	4	5	6	7	7
Number of Benefited Residences	0	0	1	1	1	1
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$2,000	$2,000	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$46,000	$46,000	$46,000	$48,000	$48,000	$48,000
Total Reasonable Allowance	N/A	N/A	$46,000	$48,000	$48,000	$48,000

Barrier I.D.: NB2 Alt C, b/w Oak Glenn Place and n. of Walcott Way (Begin / End Sta. 14+70 / 19+20). Approx. 1475' long.						
Critical Design Receiver:	**M8**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	71					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	72					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	1	1	3	4	5	6
Number of Benefited Residences	0	0	0	0	9	9
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$0	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$46,000	$46,000	$46,000	$46,000	$46,000	$48,000
Total Reasonable Allowance	N/A	N/A	N/A	N/A	$414,000	$432,000

Table 17 Continued

Barrier I.D.: SB1 Alt C, b/w n. of Lake View Ave and Oak Glenn Place (Begin / End Sta. 19+20 / 14+70). Approx. 1475' long.						
Critical Design Receiver:	**M9**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	67					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	68					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	6	7	7	8	9	9
Number of Benefited Residences	9	9	13	13	13	13
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$2,000	$2,000	$2,000	$2,000	$4,000	$4,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$46,000	$46,000	$46,000	$46,000	$48,000	$48,000
Total Reasonable Allowance	$414,000	$414,000	$598,000	$598,000	$624,000	$624,000

Barrier I.D.: SB2 Alt C, b/w Oak Glenn Place and Glendale Blvd (Begin / End Sta. 14+55 / 11+55). Approx. 985' long.						
Critical Design Receiver:	**M11**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	67					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	67					
Design Year Noise Level Minus Existing Noise Level	0					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	3	5	7	8	9	10
Number of Benefited Residences	3	6	7	9	9	12
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$2,000	$2,000	$4,000	$4,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$44,000	$46,000	$46,000	$48,000	$48,000
Total Reasonable Allowance	$132,000	$264,000	$322,000	$414,000	$432,000	$576,000

Source: Jones & Stokes, 2007.

Table 18. Summary of Reasonableness Determination Data: Alternative D

Barrier I.D.: NB1Alt D, b/w Ewing St and Oak Glenn Place (Begin/End Sta. 12+10 / 14+55). Approx. 805' long.						
Critical Design Receiver:	**M7**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	70					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	70					
Design Year Noise Level Minus Existing Noise Level	0					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	2	3	4	5	6	6
Number of Benefited Residences	0	0	0	1	1	1
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$2,000	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$46,000	$46,000	$46,000	$46,000	$48,000	$48,000
Total Reasonable Allowance	N/A	N/A	N/A	$46,000	$48,000	$48,000

Barrier I.D.: NB2 Alt D, b/w Oak Glenn Place and n. of Walcott Way (Begin / End Sta. 14+70 / 19+20). Approx. 1475' long.						
Critical Design Receiver:	**M8**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	71					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	73					
Design Year Noise Level Minus Existing Noise Level	2					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	2	2	3	4	6	6
Number of Benefited Residences	0	0	0	0	9	11
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$2,000	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$46,000	$46,000	$46,000	$46,000	$48,000	$48,000
Total Reasonable Allowance	N/A	N/A	N/A	N/A	$432,000	$528,000

Table 18 Continued

Barrier I.D.: SB1 Alt D, b/w n. of Lake View Ave and Oak Glenn Place (Begin / End Sta. 19+20 / 14+70). Approx. 1475' long.						
Critical Design Receiver:	**M9**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	67					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	68					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	5	6	7	8	8	9
Number of Benefited Residences	9	13	13	13	13	13
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$2,000	$2,000	$2,000	$2,000	$4,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$46,000	$46,000	$46,000	$46,000	$48,000
Total Reasonable Allowance	$396,000	$598,000	$598,000	$598,000	$598,000	$624,000

Barrier I.D.: SB2 Alt D, b/w Oak Glenn Place and Glendale Blvd (Begin / End Sta. 14+55 / 11+55). Approx. 985' long.						
Critical Design Receiver:	**M11**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	67					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	67					
Design Year Noise Level Minus Existing Noise Level	0					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	2	5	7	8	9	10
Number of Benefited Residences	3	6	7	9	9	9
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$2,000	$2,000	$4,000	$4,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$44,000	$46,000	$46,000	$48,000	$48,000
Total Reasonable Allowance	$132,000	$264,000	$322,000	$414,000	$432,000	$432,000

Source: Jones & Stokes, 2007.

Table 19. Summary of Reasonableness Determination Data: Alternative E

Barrier I.D.: NB1Alt E, b/w Ewing St and Oak Glenn Place (Begin/End Sta. 12+10 / 14+55). Approx. 805' long.						
Critical Design Receiver:	**M7**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	70					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	70					
Design Year Noise Level Minus Existing Noise Level	0					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	2	3	4	5	6	6
Number of Benefited Residences	0	0	0	1	1	1
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$2,000	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$46,000	$46,000	$46,000	$46,000	$48,000	$48,000
Total Reasonable Allowance	N/A	N/A	N/A	$46,000	$48,000	$48,000

Barrier I.D.: NB2 Alt E, b/w Oak Glenn Place and n. of Walcott Way (Begin / End Sta. 14+70 / 19+20). Approx. 1475' long.						
Critical Design Receiver:	**M8**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	71					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	72					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	1	1	2	4	5	6
Number of Benefited Residences	0	0	0	0	9	11
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$0	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$46,000	$46,000	$46,000	$46,000	$46,000	$48,000
Total Reasonable Allowance	N/A	N/A	N/A	N/A	$414,000	$528,000

Table 19 Continued

Barrier I.D.: SB1 Alt E, b/w n. of Lake View Ave and Oak Glenn Place (Begin / End Sta. 19+20 / 14+70). Approx. 1475' long.						
Critical Design Receiver:	**M9**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	67					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	68					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	5	6	7	8	8	9
Number of Benefited Residences	9	13	13	13	13	13
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$2,000	$2,000	$2,000	$2,000	$4,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$46,000	$46,000	$46,000	$46,000	$48,000
Total Reasonable Allowance	$396,000	$598,000	$598,000	$598,000	$598,000	$624,000

Barrier I.D.: SB2 Alt E, b/w Oak Glenn Place and Glendale Blvd (Begin / End Sta. 14+55 / 11+55). Approx. 985' long.						
Critical Design Receiver:	**M11**					
New Highway Construction?	No					
Pre-1978 Residences ?	Yes					
Existing Noise Level	67					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	67					
Design Year Noise Level Minus Existing Noise Level	0					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	2	5	7	8	9	10
Number of Benefited Residences	3	6	7	9	13	13
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$2,000	$2,000	$4,000	$4,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$44,000	$46,000	$46,000	$48,000	$48,000
Total Reasonable Allowance	$132,000	$264,000	$322,000	$414,000	$624,000	$624,000

Source: Jones & Stokes, 2007.

Table 20. Predicted Interior[1] Traffic Noise Levels and Insertion Loss With Noise Abatement – Saint Teresa of Avila Classrooms (Receptor ST-9 / M-13 I)

Alternative	Peak-Hour Noise Level without Wall (dBA L_{eq})	Peak-Hour Noise Level (Level) and Insertion Loss (IL) with Indicated Wall Height Constructed at Glendale Blvd. Right-of-Way											
		6'		8'		10'		12'		14'		16'	
		Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)	Level (dBA L_{eq})	IL (dB)
A	55	54	1	53	2	53	2	52	3	51	4	50	5
B	54	53	1	52	2	51	3	50	4	49	5	48	6
C	54	53	1	52	2	51	3	50	4	49	5	48	6
D	54	53	1	52	2	51	3	50	4	49	5	48	6
E	54	52	2	51	3	50	4	50	4	49	5	48	6

1- Interior levels are representative of structural outdoor/indoor noise reduction with windows open (9 decibels), as measured on September 26, 2007 at the Saint Teresa of Avila School.

- Interior noise level of less than 52 dBA L_{eqH} achieved.

Table 21. Summary of Reasonableness Determination Data for Noise Abatement at Saint Teresa of Avila School: Alternative A

Barrier I.D.: SB3Alt A, on SB Glendale Blvd b/w Baxter St. and Fargo St. Approx. 235'' long.						
Critical Design Receiver:	**M13 I (Interior)**					
New Highway Construction?	No					
Pre-1978 Land Use ?	Yes					
Existing Noise Level	54					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	55					
Design Year Noise Level Minus Existing Noise Level	1					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	1	2	2	3	4	5
Number of Benefited Residential Equivalents	0	0	0	0	2	2
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$0	$0
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$44,000	$44,000	$44,000	$44,000	$44,000
Total Reasonable Allowance	N/A	N/A	N/A	N/A	$88,000	$88,000

HVAC Option: Alt. A	
Critical Design Receiver:	**M13 I (Interior)**
New Highway Construction?	No
Pre-1978 Land Use ?	Yes
Existing Noise Level	54
Predicted Sound Level without Barrier	
Design Year Noise Level, dBA-L_{eq}[h]	55
Design Year Noise Level Minus Existing Noise Level	1
Design Year with Windows Closed (Possible with installation of new HVAC)	48
Windows Closed Noise Reduction, dB	7
Number of Benefited Residential Equivalents	2
Base Allowance	$32,000
Reasonableness Adjustments	
Absolute Noise Levels	$2,000
Design Year Increase Over Existing Noise Levels	$0
Achievable Noise Reduction	$2,000
New Hwy Const. or Pre-1978 Land Use.	$10,000
Reasonable Allowance per Benefitted Residence	$46,000
Total Reasonable Allowance	92,000

Table 22. Summary of Reasonableness Determination Data for Noise Abatement at Saint Teresa of Avila School: Alternative B

Barrier I.D.: SB3Alt B, on SB Glendale Blvd b/w Baxter St. and Fargo St. Approx. 235'' long.						
Critical Design Receiver:	**M13 I (Interior)**					
New Highway Construction?	No					
Pre-1978 Land Use ?	Yes					
Existing Noise Level	54					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	54					
Design Year Noise Level Minus Existing Noise Level	0					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	1	2	3	4	5	6
Number of Benefited Residential Equivalents	0	0	2	2	2	2
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$0	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$44,000	$44,000	$44,000	$44,000	$46,000
Total Reasonable Allowance	N/A	N/A	$88,000	$88,000	$88,000	$92,000

HVAC Option: Alt. B	
Critical Design Receiver:	**M13 I (Interior)**
New Highway Construction?	No
Pre-1978 Land Use ?	Yes
Existing Noise Level	54
Predicted Sound Level without Barrier	
Design Year Noise Level, dBA-L_{eq}[h]	54
Design Year Noise Level Minus Existing Noise Level	0
Design Year with Windows Closed (Possible with installation of new HVAC)	47
Windows Closed Noise Reduction, dB	7
Number of Benefited Residential Equivalents	2
Base Allowance	$32,000
Reasonableness Adjustments	
Absolute Noise Levels	$2,000
Design Year Increase Over Existing Noise Levels	$0
Achievable Noise Reduction	$2,000
New Hwy Const. or Pre-1978 Land Use.	$10,000
Reasonable Allowance per Benefitted Residence	$46,000
Total Reasonable Allowance	92,000

Table 23. Summary of Reasonableness Determination Data for Noise Abatement at Saint Teresa of Avila School: Alternative C

Barrier I.D.: SB3Alt C, on SB Glendale Blvd b/w Baxter St. and Fargo St. Approx. 235'' long.						
Critical Design Receiver:	**M13 I (Interior)**					
New Highway Construction?	No					
Pre-1978 Land Use ?	Yes					
Existing Noise Level	54					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	54					
Design Year Noise Level Minus Existing Noise Level	0					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	1	2	3	4	5	6
Number of Benefited Residential Equivalents	0	0	2	2	2	2
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$0	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$44,000	$44,000	$44,000	$44,000	$46,000
Total Reasonable Allowance	N/A	N/A	$88,000	$88,000	$88,000	$92,000

HVAC Option: Alt. C	
Critical Design Receiver:	**M13 I (Interior)**
New Highway Construction?	No
Pre-1978 Land Use ?	Yes
Existing Noise Level	54
Predicted Sound Level without Barrier	
Design Year Noise Level, dBA-L_{eq}[h]	54
Design Year Noise Level Minus Existing Noise Level	0
Design Year with Windows Closed (Possible with installation of new HVAC)	47
Windows Closed Noise Reduction, dB	7
Number of Benefited Residential Equivalents	2
Base Allowance	$32,000
Reasonableness Adjustments	
Absolute Noise Levels	$2,000
Design Year Increase Over Existing Noise Levels	$0
Achievable Noise Reduction	$2,000
New Hwy Const. or Pre-1978 Land Use.	$10,000
Reasonable Allowance per Benefitted Residence	$46,000
Total Reasonable Allowance	92,000

Table 24. Summary of Reasonableness Determination Data for Noise Abatement at Saint Teresa of Avila School: Alternative D

Barrier I.D.: SB3Alt D, on SB Glendale Blvd b/w Baxter St. and Fargo St. Approx. 235'' long.						
Critical Design Receiver:	**M13 I (Interior)**					
New Highway Construction?	No					
Pre-1978 Land Use ?	Yes					
Existing Noise Level	54					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	54					
Design Year Noise Level Minus Existing Noise Level	0					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	1	2	3	4	5	6
Number of Benefited Residential Equivalents	0	0	2	2	2	2
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$0	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$44,000	$44,000	$44,000	$44,000	$46,000
Total Reasonable Allowance	N/A	N/A	$88,000	$88,000	$88,000	$92,000

HVAC Option: Alt. D	
Critical Design Receiver:	**M13 I (Interior)**
New Highway Construction?	No
Pre-1978 Land Use ?	Yes
Existing Noise Level	54
Predicted Sound Level without Barrier	
Design Year Noise Level, dBA-L_{eq}[h]	54
Design Year Noise Level Minus Existing Noise Level	0
Design Year with Windows Closed (Possible with installation of new HVAC)	47
Windows Closed Noise Reduction, dB	7
Number of Benefited Residential Equivalents	2
Base Allowance	$32,000
Reasonableness Adjustments	
Absolute Noise Levels	$2,000
Design Year Increase Over Existing Noise Levels	$0
Achievable Noise Reduction	$2,000
New Hwy Const. or Pre-1978 Land Use.	$10,000
Reasonable Allowance per Benefitted Residence	$46,000
Total Reasonable Allowance	92,000

Table 25. Summary of Reasonableness Determination Data for Noise Abatement at Saint Teresa of Avila School: Alternative E

Barrier I.D.: SB3Alt E, on SB Glendale Blvd b/w Baxter St. and Fargo St. Approx. 235'' long.						
Critical Design Receiver:	**M13 I (Interior)**					
New Highway Construction?	No					
Pre-1978 Land Use ?	Yes					
Existing Noise Level	54					
Predicted Sound Level without Barrier						
Design Year Noise Level, dBA-L_{eq}[h]	54					
Design Year Noise Level Minus Existing Noise Level	0					
Design Year with Barrier	H = 6 ft	H = 8 ft	H = 10 ft	H = 12 ft	H = 14 ft	H = 16 ft
Barrier Noise Reduction, dB	2	3	4	4	5	6
Number of Benefited Residential Equivalents	0	0	2	2	2	2
Base Allowance	$32,000	$32,000	$32,000	$32,000	$32,000	$32,000
Reasonableness Adjustments						
Absolute Noise Levels	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Design Year Increase Over Existing Noise Levels	$0	$0	$0	$0	$0	$0
Achievable Noise Reduction	$0	$0	$0	$0	$0	$2,000
New Hwy Const. or Pre-1978 Resi.	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
Reasonable Allowance per Benefitted Residence	$44,000	$44,000	$44,000	$44,000	$44,000	$46,000
Total Reasonable Allowance	N/A	N/A	$88,000	$88,000	$88,000	$92,000

HVAC OPTION: Alt E	
Critical Design Receiver:	**M13 I (Interior)**
New Highway Construction?	No
Pre-1978 Land Use ?	Yes
Existing Noise Level	54
Predicted Sound Level without Barrier	
Design Year Noise Level, dBA-L_{eq}[h]	54
Design Year Noise Level Minus Existing Noise Level	0
Design Year with Windows Closed (Possible with installation of new HVAC)	47
Windows Closed Noise Reduction, dB	7
Number of Benefited Residential Equivalents	2
Base Allowance	$32,000
Reasonableness Adjustments	
Absolute Noise Levels	$2,000
Design Year Increase Over Existing Noise Levels	$0
Achievable Noise Reduction	$2,000
New Hwy Const. or Pre-1978 Land Use.	$10,000
Reasonable Allowance per Benefitted Residence	$46,000
Total Reasonable Allowance	92,000

Noise Impact Technical Report

Introduction

This report evaluates the extent of noise effects at noise-sensitive receivers from the proposed SR-2 Freeway Terminus Improvement Project (the project) and evaluates feasible and reasonable noise mitigation/abatement as necessary. The project has been analyzed for potential traffic noise impacts and mitigation measures in accordance with FHWA policy (June 1995) and Caltrans Traffic Noise Analysis Protocol (August 2006).

To assess the noise effects on receptors located in the area of this project, the following items are covered in this report:

- The measurement of existing noise levels at representative receptors in the project area.
- The prediction of future noise levels at receptor locations.
- The comparison of existing noise levels, predicted noise levels, and noise standards / noise abatement criteria.
- The evaluation of potential noise abatement.
- The effect of construction noise.
- Discussion of construction noise abatement.

Project Description

The purpose of the project is to develop a balanced transportation system that serves local and regional transportation needs while reducing congestion and improving transportation mobility at the SR-2 freeway terminus. The purpose of the project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses. The six project alternatives that will be analyzed in this report consist of the following:

- No Build Alternative (Baseline Alternative)

  This alternative requires no new construction or capital cost (Figure 5).

- Alternative A (Widen Existing Ramps – Maintain Bridge)

  This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp (two lanes). This alternative does not have any potential for new open space (Figure 6).

- Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge)

  This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and a portion of the bridge. A portion of the existing bridge across Glendale Boulevard would remain for community reuse and greening. This alternative offers the potential for new open space (Figure 7).

- Alternative C (Realign Ramps East – Remove Bridge)

  This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and bridge. This alternative provides a landscaped median and parkway treatment. This alternative offers the potential for new open space (Figure 8).

- Alternative D (Realign Ramps East – Maintain Bridge)

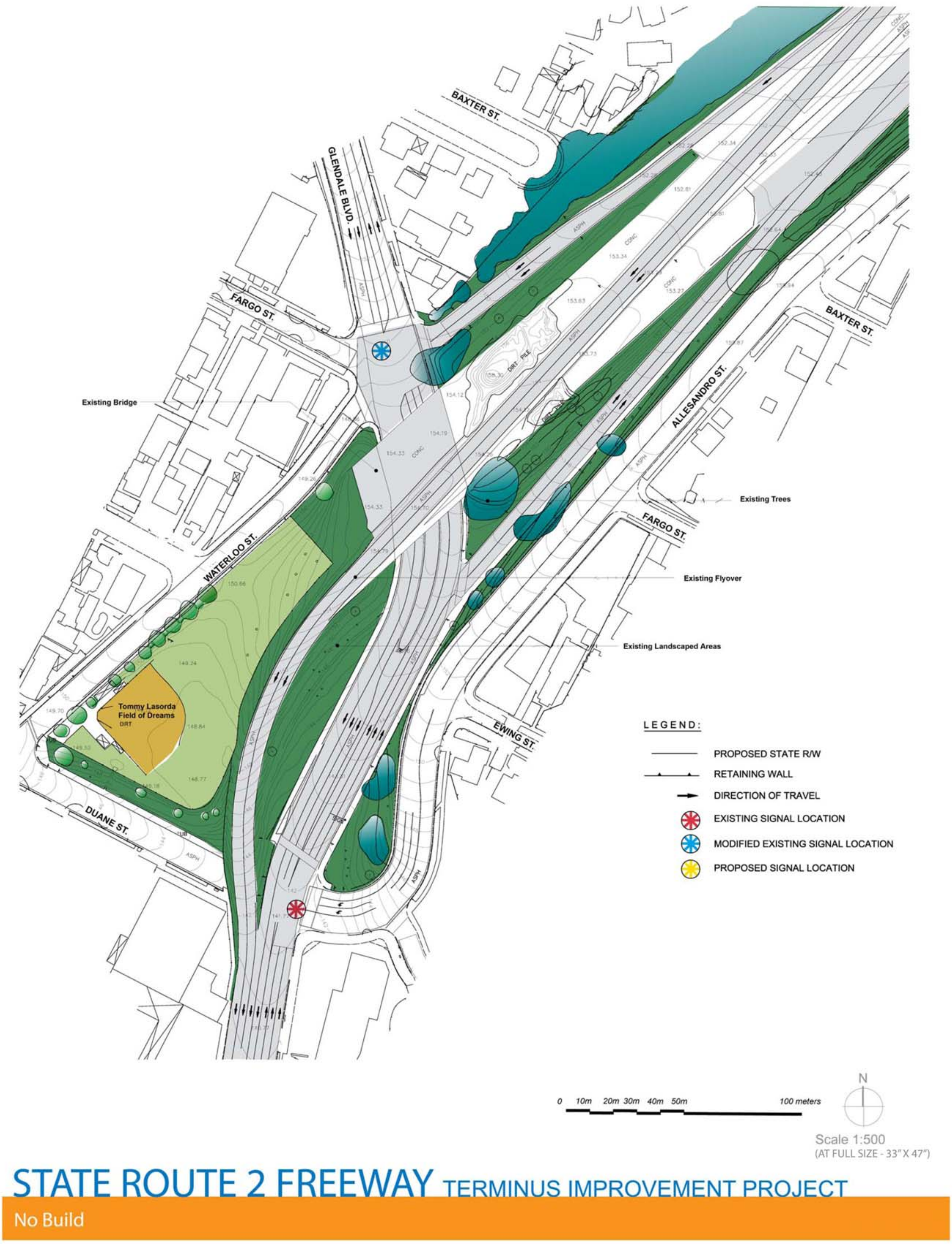
  This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged (Figure 9).

- Alternative E (Realign Ramps East, Retain Bridge and Flyover, Relocate Retaining Wall)

  This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall along Allesandro Street would be relocated to the east to maintain Caltrans' streets and highway standards (Figure 10).

  Large-scale figures showing the elevation contours and right-of-way are included in Appendix E.

Figure 5. Existing/No Build



Source: Melendrez, 2006.

Figure 6. Alternative A

Source: Melendrez, 2006.

Figure 7. Alternative B

Source: Melendrez, 2006.

Figure 8. Alternative C

Source: Melendrez, 2006.

Figure 9. Alternative D

Source: Melendrez, 2006.

Figure 10. Alternative E

Source: Melendrez, 2006.

Project History

SR-2 was originally planned and constructed in 1959 to connect I-5 with US-101 through the neighborhoods of Silver Lake and Echo Park. In 1962, as a result of local community opposition, the full build-out plan was rescinded and construction was terminated at the present SR-2 terminus near Glendale Boulevard and Duane Street, thus creating traffic congestion primarily along Glendale Boulevard and Alvarado Street.

There have been three relevant studies related to the terminus segment of SR-2, also known as the Glendale Freeway; it transitions from a freeway facility to a conventional highway (major arterial) at the terminus. Los Angeles County Metropolitan Transportation Authority (Metro) prepared a study in 1992 to develop a course of action for future traffic and transportation planning within the Glendale Freeway/Boulevard. This included a review of existing traffic conditions, proposed transportation improvements, evaluation of those improvements, and recommendations for implementation of the improvements.

In 1994, the Glendale Boulevard Corridor Preliminary Planning Study – Phase II was completed by Metro and the Los Angeles Department of Transportation (LADOT). That study analyzed existing constraints and opportunities within the corridor and developed urban design strategies and conceptual transportation measures to improve conditions along Glendale Boulevard. A list of short-term and long-term measures, including alternative reconfigurations of the SR-2 terminus, was recommended.

In January 2002, a project study report/project development report (PSR/PDR) was completed. The study addressed proposed reconstruction of the southern terminus of the Glendale Freeway. The build alternatives ranged from widening the ramps in the existing interchange configuration to realigning the ramps to tie into Glendale Boulevard in a new configuration. The total capital outlay cost for the build alternatives was estimated to be in the range of $10.2 million to $15.2 million.

The request for additional design alternatives stemmed from community review of the PSR/PDR. To accommodate the community's request, Metro is undertaking an initial study/environmental assessment (IS/EA) and project report.

Fundamentals of Traffic Noise

A number of factors affect the way the human ear perceives sound. These include the actual level of sound, the pitches or frequencies involved, the period of exposure to the noise, and fluctuations in the noise levels during exposure. Unwanted sound is called *noise*. The following sections discuss how noise is measured and described.

Decibels, Frequency, and A-Weighting

Levels of noise are measured in units of decibels, abbreviated as dB. Because humans do not perceive all frequencies equally well, measured sound levels at certain frequencies are weighted to correspond to the sensitivity of the human ear. This frequency weighting is known as *A weighting*, and sound levels that are adjusted in this way are given in units of A-weighted decibels. All references to noise in this report refer to A-weighted decibel levels, abbreviated as dBA. Table 26 describes typical A-weighted noise levels for various noise sources.

Table 26. Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet fly-over at 300 m (1,000 ft)		
	100	
Gas lawn mower at 1 m (3 ft)		
	90	
Diesel truck at 15 m (50 ft) at 80 kph (50 mph)		Food blender at 1 m (3 ft)
	80	Garbage disposal at 1 m (3 ft)
Noisy urban area, daytime		
Gas lawn mower, 30 m (100 ft)	**70**	Vacuum cleaner at 3 m (10 ft)
Commercial area		Normal speech at 1 m (3 ft)
Heavy traffic at 90 m (300 ft)	**60**	
		Large business office
Quiet urban daytime	**50**	Dishwasher next room
Quiet urban night-time	**40**	Theater, large conference room (background)
Quiet suburban night-time		
	30	Library
Quiet rural night-time		Bedroom at night, concert
	20	
		Broadcast/recording studio
	10	
Lowest threshold of human hearing	**0**	Lowest threshold of human hearing

Source: Caltrans 1998b.

Noise Descriptors

Very few sounds are constant. Most fluctuate in decibel level over both short and long periods of time. One way of describing time-varying sound is to describe the fluctuating sound energy detected over a specific time period as if it had been a steady, unchanging sound. For this purpose, a descriptor called the equivalent sound level, L_{eq}, is the constant sound level that, for a given situation and period (e.g., 1 hour or 24 hours) contains the same amount of sound energy as the actual time-varying sound. To assess potential noise impacts and to determine necessary abatement measures for roadway noise, Caltrans and FHWA use the 1-hour L_{eq} (L_{eqH}) during the peak-traffic-noise-hour period.

Perception of Noise

Potential responses of persons to changes in the noise environment are assessed by evaluating differences between the existing and total predicted future noise environments. The following relationships of perception and response to quantifiable increases are used as a basis for assessing potential effects of traffic noise:

- Except in a carefully controlled laboratory condition, a change of 1 dBA is difficult to perceive.
- In the outside environment, a 3 dBA change is considered perceptible.
- An increase of 5 dBA is considered readily perceptible and would generally result in a change in community response.
- A 10 dBA increase is perceived as a doubling in loudness and would likely result in a widespread community response.

Noise Source Characteristics (Vehicles and Roadways)

Roadway noise is dependent on many factors: vehicle type, speed, number of vehicles, roadway surface and gradient, distance from the roadway to the receiver, ground surface characteristics (“hard” or “soft”), meterological factors such as temperature gradients and wind, and shielding due to structures, noise barriers, hills, the edge of a roadway, and earth berms between the road and a receiver. Generally, as vehicle speeds and/or traffic volumes increase, so does the noise level. However, heavy trucks typically operate at a more constant noise output than automobiles regardless of speed because the number of engine revolutions per minute (rpm) is nearly constant over a large range of speeds.

The noisiest component from cars is typically the tires and the tire/road interface, while for most trucks much of the noise emanates from the exhaust stack. This affects the noise reduction provided by a barrier because both the height and proximity of the source and receiver with respect to the barrier’s location and height are important in determining the effectiveness of the barrier.

Roadway surface and gradient also affect the resultant noise. Surfaces vary from rough and potholed to smooth and seal-coated, and this can lead to an approximate difference of 3 to 4 dBA in generated noise levels among different types of surfaces (Bolt et al. 1973). The roadway gradient primarily influences noise levels from heavy truck traffic; the greatest effect is from an uphill grade, which increases noise levels.

Federal and State Policies and Procedures

The Caltrans Traffic Noise Analysis Protocol (August 2006) was used as guidance for this study and contains Caltrans' noise policies. These policies fulfill the highway noise analysis and abatement/mitigation requirements contained in the following state and federal environmental statutes.

National Environmental Policy Act (NEPA)

Under NEPA, noise impacts and measures to mitigate adverse impacts must be identified, including the identification of impacts for which no or only partial mitigation is possible. The FHWA regulations described below constitute the federal noise standard. Projects complying with this standard are also in compliance with the requirements stemming from NEPA.

California Environmental Quality Act (CEQA)

Under CEQA, a substantial noise increase may result in a significant adverse environmental effect and, if so, must be mitigated or identified as a noise impact for which it is likely that no or only partial abatement measures are available. Specific economic, social, environmental, legal, and technological conditions may make additional noise attenuation measures infeasible.

State and Federal Guidelines for Noise Impact Evaluation

The noise impact evaluation criteria for the proposed project are in agreement with the NAC established by the FHWA in Procedures for Abatement of Highway Traffic Noise and Construction Noise (23 CFR Part 772, 2003) and criteria adopted by Caltrans in the Traffic Noise Analysis Protocol (Protocol) (Caltrans 1998). For residential land uses, parks, schools, and hospitals, the FHWA outdoor noise criterion is 67 dBA and the interior noise criterion is 52 dBA. The FHWA/Caltrans NAC are shown in Table 27.

If these criteria sound levels are predicted to be approached or exceeded by traffic noise during the noisiest 1-hour period, noise abatement measures must be considered and, if found to be reasonable and feasible, they must be incorporated as part of the project. Consistent with FHWA guidelines, Caltrans defines *approach* as being within 1 decibel of the NAC (i.e., a peak noise hour sound level of 66 dBA L_{eq} for Activity Category B uses, 51 dBA for Activity Category E, etc.).

Table 27. Activity Categories and Associated Noise Abatement Criteria (NAC)

Activity Category	NAC, A-Weighted Noise Level, L_{eqH}	Description of Activities
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 sport 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: California Department of Transportation, Traffic Noise Analysis Protocol, *1998.*

TeNS establishes guidelines for construction of noise barriers along highways where sensitive receivers (e.g., residences) are located. It specifies parameters such as barrier dimensions, locations, type of barriers, and standard aesthetic treatments. Pursuant to FHWA and Caltrans policies, traffic noise abatement or mitigation must be considered for transportation improvement projects when the following criteria are met:

1. Predicted regular noisiest-hour-level is expected to approach or exceed FHWA NAC (e.g., 67 dBA L_{eq} for residences or other Category B land uses) or increase ambient noise levels substantially. Caltrans considers an increase of 12 dBA to be a substantial increase.
2. A feasible noise barrier must provide a minimum traffic noise reduction of 5 dBA to achieve a noticeable change in noise level. Greater levels of noise reduction are encouraged providing they can be achieved within the reasonableness guidelines discussed below. This is also discussed further in the Caltrans Noise Analysis Protocol Section 2.7.
3. A reasonable noise barrier must be cost-effective, and consideration should be taken of the number of residences that would benefit from the barrier. In addition to cost of abatement and noise-related factors such as absolute noise levels and change in noise levels, many other factors are considered as part of the comprehensive reasonable analysis. These factors include date of development along the highway; impacts of noise abatement on other resources; opinions of affected residents; and safety, social, economic, environmental, legal, and technological factors.
4. The noise barrier should interrupt the line-of-sight between the noise source (traffic on the roadway, including truck stacks, which are assumed to be 11.5 feet in height) and the receiver (assumed to be 5 feet high).

FHWA (23 CFR 772) and Caltrans (Traffic Noise Analysis Protocol) policies address the timing and applicability of noise abatement measures as part of the roadway project. Noise abatement at noise-sensitive land uses must be considered as part of the project (when NAC are approached or exceeded) if noise-sensitive development was planned, designed, and programmed prior to the roadway project's date of public knowledge. A development is considered planned, designed, and programmed on the date that final approval is granted from the local jurisdiction (for example, issuance of building permits from the City planning agency). The date of public knowledge of the roadway project is the date of approval of the final environmental decision document (for example, the Record of Decision).

Unusual and extraordinary noise abatement strategies, such as providing noise insulation of residential units, are rarely implemented. The Traffic Noise Analysis Protocol states the when considering extraordinary abatement measures, it must be demonstrated that the affected activities experience far greater traffic noise than other similar uses adjacent to highway facilities (i.e., residential units would have post-project exterior noise levels of 75 dBA L_{eq} or greater, or the project results in a noise level increase of 30 dBA or more).

City of Los Angeles Noise Criteria/Standards

City of Los Angeles noise criteria/standards are applicable to the construction of the proposed project as described below.

Construction Noise Regulations: The City of Los Angeles noise ordinance has noise limits for construction activities. Section 112.05 of the Los Angeles Building Code states that construction and industrial machinery shall not exceed a maximum of 75 dBA at a distance of 50 feet, except where compliance is technically infeasible. "The burden of proving that compliance is technically infeasible shall be upon the person or persons charged with a violation of this section. Technical infeasibility shall mean that said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers, and/or any other noise reduction device or technique during the operation of the equipment."

In addition, Section 41.40 of the Los Angeles Municipal Code restricts construction activities to specific hours of the day. According to Section 41.40, no person shall perform any construction or repair work that makes loud noises that disturb persons occupying sleeping quarters in any place of residence between the hours of 9:00 p.m. to 7:00 a.m. Furthermore, the code prohibits any person other than an individual homeowner engaged in the repair or construction of his single-family dwelling from performing any construction or repair work on land occupied by residential buildings, or within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on Saturdays or at any time on Sundays. In the event that project construction schedules necessitate construction activities to occur outside of the hours allowed by the City's noise ordinance, a variance must be obtained.

Study Methods and Procedures

Selection of Receivers and Measurement Sites

Representative noise measurement sites were selected from the noise-sensitive receivers having potential exposure to adverse effects from the proposed project.

Noise measurements were conducted at eleven sites, shown in Figure 4. Short-term measurements (each 15 minutes in duration) were conducted at ten sites, and a long-term measurement (24 hours or more) was conducted at one site. All of the sites were located at or adjacent to properties with existing noise-sensitive land uses. Background noise measurements were conducted at a site (ST-8) distant from the project area in order to assess the community noise level without the influence of SR-2/Glendale Boulevard.

There are numerous residential, one recreational (Tommy Lasorda Field of Dreams), and several institutional (church and school) land uses within the project area. LT-1 was located at a residence near the southern end of the project, adjacent to northbound Glendale Boulevard/SR-2 at Alessandro Street. These are all classified as Category B Activity categories.

Four short-term noise measurements were conducted on the south (northbound) side of the project alignment, and five were conducted on the north (southbound) side. ST-1 was conducted at the Saint Teresa of Avila Church and rectory, which is adjacent to the Saint Theresa School. ST-9 and ST-10 were conducted at the Saint Teresa of Avila School and the Clifford Street Elementary School, respectively. At sites ST-9 and ST-10, simultaneous interior (within a representative classroom) and exterior noise measurements were conducted in accordance with TeNS guidelines. The noise measurements at ST-9 were conducted during the peak noise hour (based upon the long-term noise measurement). The remaining noise measurements were conducted at or adjacent to residential land uses.

There are no hotels or motels within the project limits. There are several commercial land uses (Activity Category C) at the southern end of the project limits, but none of these were found to have areas of frequent exterior human use (such as employee break areas) with exposure to the project alignment.

Field Measurement Procedures

Existing noise levels were measured from May 24 through May 25, 2005 using Caltrans-approved methodology for sampling noise (TeNS 1998). A Larson Davis Model 812 Sound Level Meter (SLM) was used to conduct the short-term noise measurements. This is a Type 1 (Precision) instrument as defined in the American National Standard Institute (ANSI) specification S1.4-1984 and the International Electrotechnical Commission Publications 804 and 651. For the long-term measurement, a Larson Davis Model 720 SLM was used. This is a Type 2 (General Purpose) instrument as defined in the ANSI S1.4-1984 and the International Electrotechnical Commission Publications 804 and 651. The meters were set in Slow time response mode and used the A weighting filter network that most closely approximates the hearing characteristics of the human ear. To ensure accuracy, the laboratory calibration of each noise meter was field checked before and after each measurement period using an acoustical calibrator. The accuracy of each acoustical calibration is maintained through a program established by the manufacturer, and is traceable to the National Institute of Standards and Technology. For the measurements, the microphones were located approximately 5 feet above the ground, and were equipped with windscreens.

Appendix A provides a more detailed listing of the noise measurement instrumentation used for this study.

Meteorological conditions were conducive to reliable and accurate noise measurements, with clear and sunny skies (no precipitation), calm to moderate winds (0–5 miles per hour), temperatures between 77 and 84 degrees Fahrenheit, and relative humidity ranging from 32 to 43 percent during the short-term noise measurements.

The short-term noise measurements were each 15 minutes in duration. Two consecutive but independent measurements were conducted at each short-term measurement site[2]. In all cases, the two consecutive noise measurements agreed within 2 dBA. The short-term noise data is summarized in Table 1, and the field notes are shown in Appendix B. During the noise measurements, traffic count data were collected for purposes of subsequent model calibration.

The purpose of the long-term (24 hours or more in duration) noise measurement was to determine the changes in noise levels within the project area throughout a typical day. Using the difference, or offset, in the simultaneous noise levels between the short-term and long-term data, the long-term measurement data were used to estimate existing peak-noise hour levels at the representative receivers. The long-term noise data is summarized in Table 2, and the detailed data output is contained in Appendix C.

Noise Prediction Method Used

FHWA's Traffic Noise Model (TNM®) Version 2.5 (FHWA 2004) was used to calculate the future traffic noise levels. TNM® is a state-of-the-art computer program for predicting noise levels in the vicinity of highways. The model uses national reference mean emission levels for several types of vehicles—automobiles, medium trucks, heavy trucks, buses, and motorcycles—to compute hourly noise levels (L_{eqH}). The parameters used to estimate vehicular traffic noise included the Existing and Future-with-Project geometry; the AM and PM peak-hour traffic volumes and levels of service (LOS); the posted speed limits; the percentages of automobiles, medium trucks, and heavy trucks; and the site conditions (i.e., acoustically reflective or absorptive terrain).

In addition to the ten short-term measurement receptor locations and the one long-term measurement location, 28 "modeling-only" receptors were added to the model in order to more completely characterize the existing and future noise environment. These "modeling-only" locations are shown on Figure 4 and Tables 3 through 8.

The projected AM and PM traffic volumes and associated LOS used for this study were provided by the traffic study completed for the project by Fehr & Peers/Kaku Associates. The largest average traffic volumes are predicted to

[2] Except in the cases of classroom measurements ST-9 and ST-10. Because of logistical constraints, one measurement for each case (windows open/windows closed) was conducted.

occur during the PM peak hour; therefore, PM peak hour traffic volumes were used in the study area.

The Existing/Future No Build and Future-with-Project alternatives geometric input was modeled using digital topography and design drawings (alignments and profiles) supplied by the project proponent's design contractors (DMJM Harris/AECOM).

Using the measured existing noise level data and corresponding traffic counts, the noise model was calibrated as necessary in order to correctly predict noise levels at analysis locations. The TNM® model was found to agree within plus or minus 2 decibels, as shown in Table 28. Thus, pursuant to guidance contained in the Caltrans TeNS handbook, no K-factor adjustments were made to the subsequent Existing, Future-no-Build, and Future-with-project alternatives peak noise hour model runs.

Table 28. Calibration Modeling Results

Receptor #	Measured Noise Level (dBA L_{eq})	Modeled Noise Level (dBA L_{eq})	Difference (Measured – Modeled) (dBA)
ST2	63.6	66	2.4
ST3	66.6	67.9	1.3
ST4	66.7	68.1	1.4
ST5	65.5	65.7	0.2
ST6	65.4	63.1	-2.3
ST7	66.6	65.4	-1.2

Source: Jones & Stokes, 2007.

Existing Noise Environment

Noise Sensitive Land Uses and Site Geometry

Residential land uses are predominant in the project area, with single and multi-family residences (Activity Category B) adjacent to both the northbound and southbound sides of SR-2. Most of the residences in the area are above-grade relative to SR-2. Because of the steep terrain on the hillsides upon which the residences sit, many of the homes beyond the first row are elevated well above their downslope neighbors, and at least a portion of the SR-2. However, because much of SR-2 is below grade with respect to the local frontage roads (Lake View Avenue to the north and Alessandro Street to the south), many of the residences have an obstructed view of the near side of SR-2.

Recreational land uses (Activity Category B) are present in the study area at Tommy Lasorda Field of Dreams, located northwest of SR-2, north of Duane Street and south of Waterloo Street. The Tommy Lasorda Field of Dreams is owned and operated by the Los Angeles Department of Recreation and Parks.

Institutional and residential land uses in the project area consist of the Saint Teresa of Avila Church and rectory, which are just south of the Saint Teresa School. These Activity Category B land uses are located to the northwest of SR-2, at the intersection of Glendale Boulevard/Fargo Street/Waterloo Street. Saint Teresa of Avila Church includes grassy areas on the east and west sides of the main church structure that appear to be used as gathering areas or places to reflect. Saint Teresa School utilizes the paved lot on its east side as a playground area (as well as for staff parking). The classrooms of the Saint Teresa of Avila School and Clifford Street Elementary are classified as Activity Category E land uses, with NAC levels of 52 dBA L_{eqH} (interior). The noise measurements at ST-9 indicate that exterior NAC levels are not exceeded at the Saint Teresa of Avila School, but Category E interior noise levels are exceeded with the windows open.[3] Based on the noise measurements, the school building at ST-9 provides approximately 15 decibels of interior/exterior noise attenuation with windows closed, and approximately 9 decibels with windows open.

The noise measurements at ST-10 indicate that neither exterior nor interior NAC levels are currently exceeded at Clifford Street Elementary .[4] Based on the noise measurements, the building at ST-10 provides approximately 17 decibels of interior/exterior noise attenuation with the windows closed.

Background noise levels were measured at site ST-8, located approximately 800 feet southeast of the SR-2, on the other side of a ridgeline. Noise from SR-2 and Glendale Boulevard was not audible. The resultant measured (51 to 52 dBA L_{eqH}) and adjusted (55 dBA L_{eqH}) peak-noise-hour levels indicate that background noise levels are 10 dBA or more below project-area noise levels; thus, pursuant to TeNS guidelines, background noise levels do not have an influence on ambient noise levels in the vicinity of the project and were not factored into modeling calculations.

Future Traffic Data Assumptions

TNM® uses the hourly traffic condition expected to result in the highest hourly noise level (i.e., the peak noise hour). The peak noise hour generally occurs when traffic is heavy but remains flowing freely. This condition is known as level of service D/E (LOS D/E). Typically, traffic volumes in excess of LOS D/E are associated with congestion and lower travel speeds, resulting in lower noise levels.

The projected traffic volumes and associated LOS used for this study were provided by the traffic study completed for the project by Fehr & Peers/Kaku Associates. Because the traffic study indicates that peak-hour LOS does not exceed LOS D/E, the peak-traffic hour volumes were utilized for this analysis. The analysis years were Year 2005 (Existing) and Year 2030 (Future).

[3] According to the instructor, windows facing the project site are opened on warm days, because the air conditioning system is not always sufficient to provide adequate ventilation and comfortable temperatures.
[4] According to the instructor, windows facing the project site are not opened, because the air conditioning system is sufficient to provide adequate ventilation and comfortable temperatures.

The modeled vehicle speeds for SR-2 were as follows: from I-5 to the bridge at Oak Glen Place, 65 miles per hour [mph] for automobiles, 60 mph for medium trucks, and 55 mph for heavy trucks; from the bridge at Oak Glen Place to Glendale Boulevard, 35 mph for automobiles, 35 mph for medium trucks, and 30 mph for heavy trucks. On local streets, the posted speed limits were utilized for the automobiles and medium trucks (i.e., 35 mph for Glendale Boulevard and 25 mph elsewhere), with truck speeds being 5 mph lower. The mix of automobiles, medium trucks, and heavy trucks for the main lanes was determined based on the 2005 vehicle classification counts conducted by Caltrans (2005 Annual Average Daily Truck Traffic, Caltrans 2006). The traffic mix for the local streets was consistent with the percentages derived by traffic counts conducted concurrently with the ambient noise measurements.

Future Noise Levels

The results of the noise modeling for the 38 representative noise-sensitive receptor locations are shown in Tables 3 through 9 for the Existing, Future No Build Alternative, and the five build alternatives. Estimated existing and future peak noise hours were calculated for each of the measured and modeled receptors using the traffic data discussed in the Future Traffic Data Assumptions section below. The existing modeled noise level data are summarized in Table 3, which includes the estimated number of noise-sensitive units represented by each of the model receptors. The predicted future noise levels were then compared with the existing levels to determine the amount of noise increase resulting from the project, as shown in Tables 4 through 9.

Tables 3 through 9 present the data in terms of peak noise hour L_{eq} (i.e., Caltrans/FHWA NAC). Printouts of the TNM® input and output files are contained in Appendix D. As shown in the tables and discussed in further detail below by alternative, future noise levels are generally predicted to increase one to two decibels compared to existing levels as a result of the combination of increased traffic volumes and the proposed roadway modifications. In some cases, noise levels are predicted to decrease by several decibels as a result of the altered roadway geometry.

Future No Build

Table 4 summarizes the results of the TNM® analysis for the Future No Build Alternative. Under the Future No Build Alternative, peak noise hour traffic noise levels are predicted to range from approximately 59 dBA L_{eqH} (at receptors M3 and M15B) to 72 dBA L_{eqH} (at receptor M8). Traffic noise levels would increase 0 to 1 decibels (rounded to whole decibels) compared with existing conditions; thus, there would be no substantial (12 dBA or greater) noise increases. Under this alternative, traffic noise levels would exceed the Category B NAC at 18 of the 36 modeled representative receptors, corresponding to an estimated 49 affected residential units.

Alternative A

Table 5 summarizes the results of the TNM® analysis for Alternative A. Under Alternative A, peak noise hour traffic noise levels are predicted to range from approximately 59 dBA L_{eqH} (at receptors M3 and M15B) to 72 dBA L_{eqH} (at receptors M7 and M8). Traffic noise levels would increase 0 to 2 decibels (rounded to whole decibels) compared with existing conditions; thus, there would be no substantial noise increases. Under this alternative, traffic noise levels would exceed the Category B NAC at 19 of the 36 modeled representative receptors, corresponding to an estimated 55 affected residential units.

Alternative B

Table 6 summarizes the results of the TNM® analysis for Alternative B. Under Alternative B, peak-noise hour traffic noise levels are predicted to range from approximately 58 dBA L_{eqH} (at receptor M3) to 72 dBA L_{eqH} (at receptor M8). Traffic noise levels would decrease by as much as 3 decibels at several locations, but would increase 0 to 2 decibels (rounded to whole decibels) at most locations compared with existing conditions; there would be no substantial noise increases under Alternative B. Under this alternative, traffic noise levels would exceed the Category B NAC at 13 of the 36 modeled representative receptors, corresponding to an estimated 42 affected residential units.

Alternative C

Table 7 summarizes the results of the TNM® analysis for Alternative C. Under Alternative C, peak noise hour traffic noise levels are predicted to range from approximately 57 dBA L_{eqH} (at receptor M3) to 72 dBA L_{eqH} (at receptor M8). Traffic noise levels would decrease by as much as 3 decibels at one location (ST7), but would increase 0 to 2 decibels (rounded to whole decibels) at most locations compared with existing conditions; there would be no substantial noise increases under Alternative C. Under this alternative, traffic noise levels would exceed the Category B NAC at 13 of the 36 modeled representative receptors, corresponding to an estimated 42 affected residential units.

Alternative D

Table 8 summarizes the results of the TNM® analysis for Alternative D. Under Alternative D, peak noise hour traffic noise levels are predicted to range from approximately 58 dBA L_{eqH} (at receptor M3) to 72 dBA L_{eqH} (at receptor M8). Traffic noise levels would decrease by as much as 3 decibels at several locations, but would increase 0 to 2 decibels (rounded to whole decibels) at most locations compared with existing conditions; there would be no substantial noise increases under Alternative D. Under this alternative, traffic noise levels would exceed the Category B NAC at 13 of the 36 modeled representative receptors, corresponding to an estimated 42 affected residential units.

Alternative E

Table 9 summarizes the results of the TNM® analysis for Alternative E. Under Alternative E, peak noise hour traffic noise levels are predicted to range from approximately 58 dBA L_{eqH} (at receptor M3) to 72 dBA L_{eqH} (at receptor M8). Traffic noise levels would decrease by as much as 3 decibels at several locations, but would increase 0 to 2 decibels (rounded to whole decibels) at most locations compared with existing conditions; there would be no substantial noise increases under Alternative E. Under this alternative, traffic noise levels would exceed the Category B NAC at 13 of the 36 modeled representative receptors, corresponding to an estimated 42 affected residential units.

Classroom Noise

Based on the noise measurements and the modeling conducted for the project, traffic noise levels would exceed the NAC for classrooms (Activity Category E land uses) at the Saint Teresa of Avila School in the existing as well as the Future No Build, and Alternatives A, B, C, D and E. As shown in Table 20, predicted interior noise levels would exceed the "approach" level for the Activity Category E NAC of 51 dBA L_{eqH}. Future interior noise levels would be 54 to 55 dBA L_{eqH} unless abatement is provided.

Noise Abatement

In accordance with 23 CFR 772, noise abatement is considered where noise impacts are predicted in areas of frequent human use that would benefit from a lowered noise level. Potential noise abatement measures identified in the Protocol include the following:

- Avoiding the impact by using design alternatives, such as altering the horizontal and vertical alignment of the project.
- Constructing noise barriers.
- Acquiring property to serve as a buffer zone.
- Using traffic management measures to regulate types of vehicles and speeds.
- Acoustically insulating public-use or nonprofit institutional structures.

Because of the configuration and location of the project, noise barriers are the only form of noise abatement evaluated in this report. Due to the site geometry (affected receptors generally located well above the roadway grade), the only location at which an effective noise barrier could be constructed would be along the right-of-way line (ROW), which also generally coincides with the top-of-slope. For each of the five build alternatives, the TNM® noise model was used to determine the insertion loss (noise reduction) provided by soundwalls at the ROW ranging in height from 6 feet to 16 feet. TNM® was also used to determine the "break line-of-sight" height required of the considered barrier. The results of these analyses are summarized below, by alternative.

Alternative A

Table 10 summarizes the results of the feasibility analysis for Alternative A. Noise abatement would be feasible at 14 modeled representative receptors. Figure 11 presents the feasible soundwall locations and range of barrier heights. As shown, four soundwalls could be constructed under Alternative A:

- Barrier NB 1 Alt A would be constructed adjacent to the northbound side of SR-2 from Ewing Street to Oak Glen Place. The range of feasible barrier heights would be from 14 to 16 feet, benefiting an estimated 3 to 4 residential units.
- Barrier NB 2 Alt A would be constructed adjacent to the northbound side of SR-2 from Oak Glen Place to approximately 175 feet north of Walcott Way. The range of feasible barrier heights would be from 14 to 16 feet, benefiting an estimated 9 to 11 residential units.
- Barrier SB 1 Alt A would be constructed at the right-of-way/top-of-slope adjacent to the southbound side of SR-2 from approximately 300 north of Lake View Avenue to Oak Glen Place. The range of feasible barrier heights would be from 6 to 8 feet, benefiting an estimated 9 to 13 residential units.
- Barrier SB 2 Alt A would be constructed at the right-of-way/top-of-slope adjacent to the southbound side of SR-2 from Oak Glen Place to Glendale Boulevard. The range of feasible barrier heights would be from 8 to 12 feet, benefiting an estimated 3 to 12 residential units.

Alternative B

Table 11 summarizes the results of the feasibility analysis for Alternative B. Noise abatement would be feasible at 12 modeled representative receptors. Figure 12 presents the feasible soundwall locations and range of barrier heights. As shown, four soundwalls could be constructed under Alternative B:

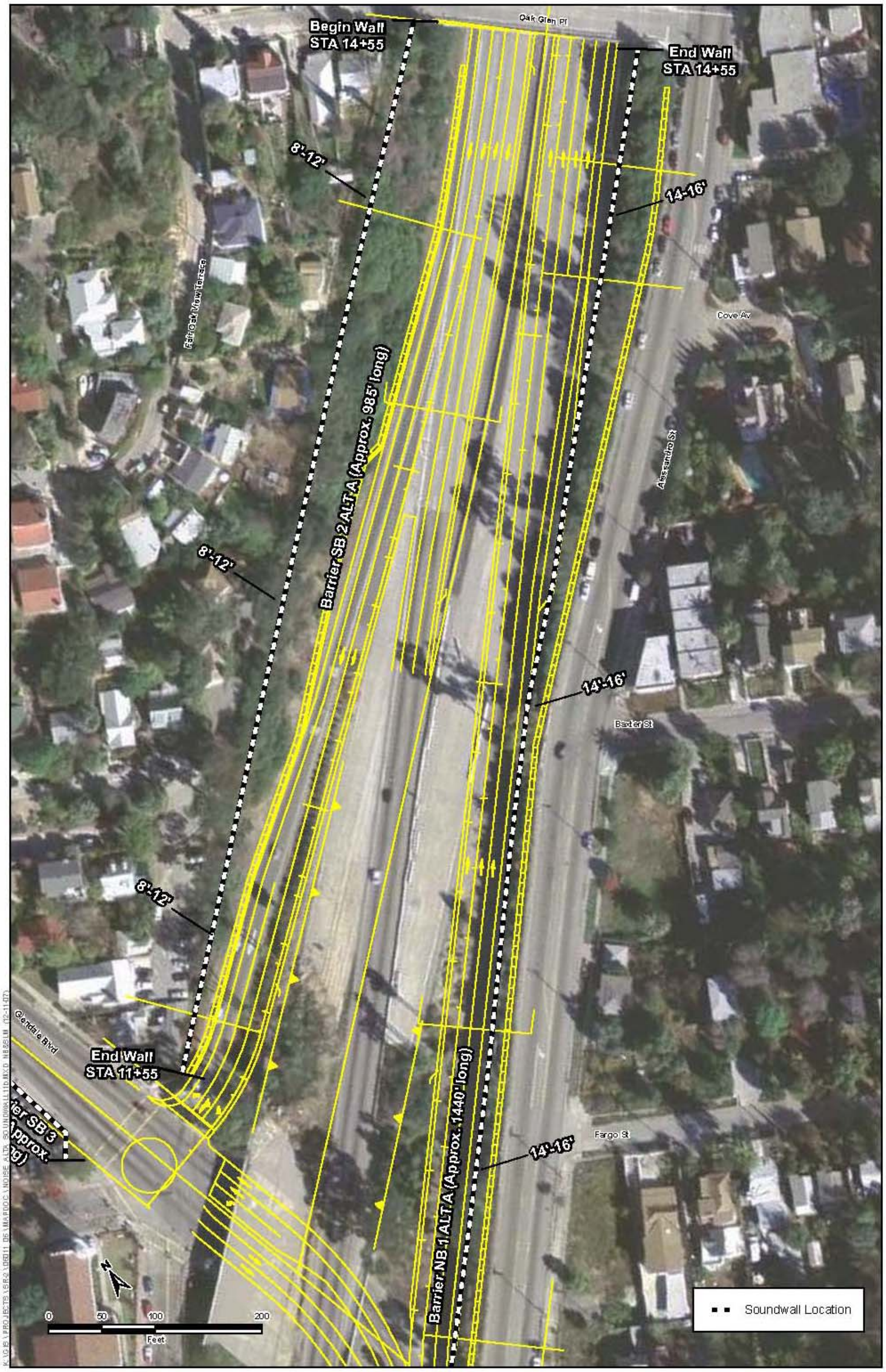
- Barrier NB 1 Alt B would be constructed at the right-of-way/top-of-slope adjacent to the northbound side of SR-2 from approximately 200 feet north of Fargo Street to Oak Glen Place. The range of feasible barrier heights would be from 12 to 16 feet, benefiting an estimated 1 to 3 residential units.
- Barrier NB 2 Alt B would be constructed at the right-of-way/top-of-slope adjacent to the northbound side of SR-2 from Oak Glen Place to approximately 175 feet north of Walcott Way. The range of feasible barrier heights would be from 14 to 16 feet, benefiting an estimated 9 to 11 residential units.
- Barrier SB 1 Alt B would be constructed at the right-of-way/top-of-slope adjacent to the southbound side of SR-2 from approximately 300 north of Lake View Avenue to Oak Glen Place. The range of feasible barrier heights would be from 6 to 10 feet, benefiting an estimated 9 to 13 residential units.
- Barrier SB 2 Alt B would be constructed at the right-of-way/top-of-slope adjacent to the southbound side of SR-2 from Oak Glen Place to Glendale Boulevard. The range of feasible barrier heights would be from 8 to 12 feet, benefiting an estimated 3 to 13 residential units.

Figure 11a. Soundwall Locations, Lengths, and Range of Feasible Heights Alternative A

SOURCE: USGS UrbanArea (0.5 m)

Figure 11a
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative A

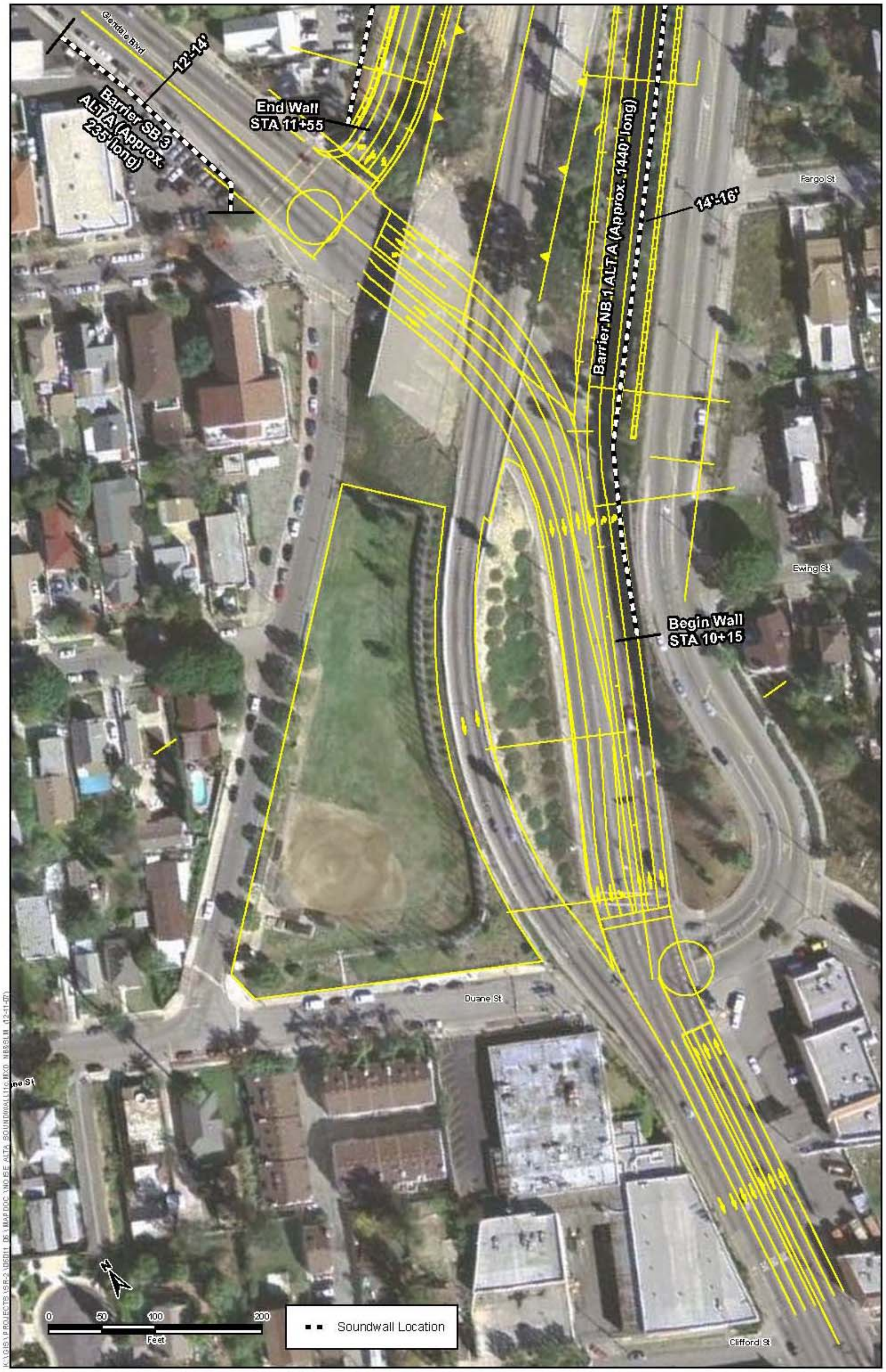
Figure 11b



SOURCE: USGS UrbanArea (0.5 m)

Figure 11b
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative A

Figure 11c



SOURCE: USGS UrbanArea (0.5 m)

Figure 11c
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative A

Figure 12a. Soundwall Locations, Lengths, and Range of Feasible Heights Alternative B

SOURCE: USGS UrbanArea (0.5 m)

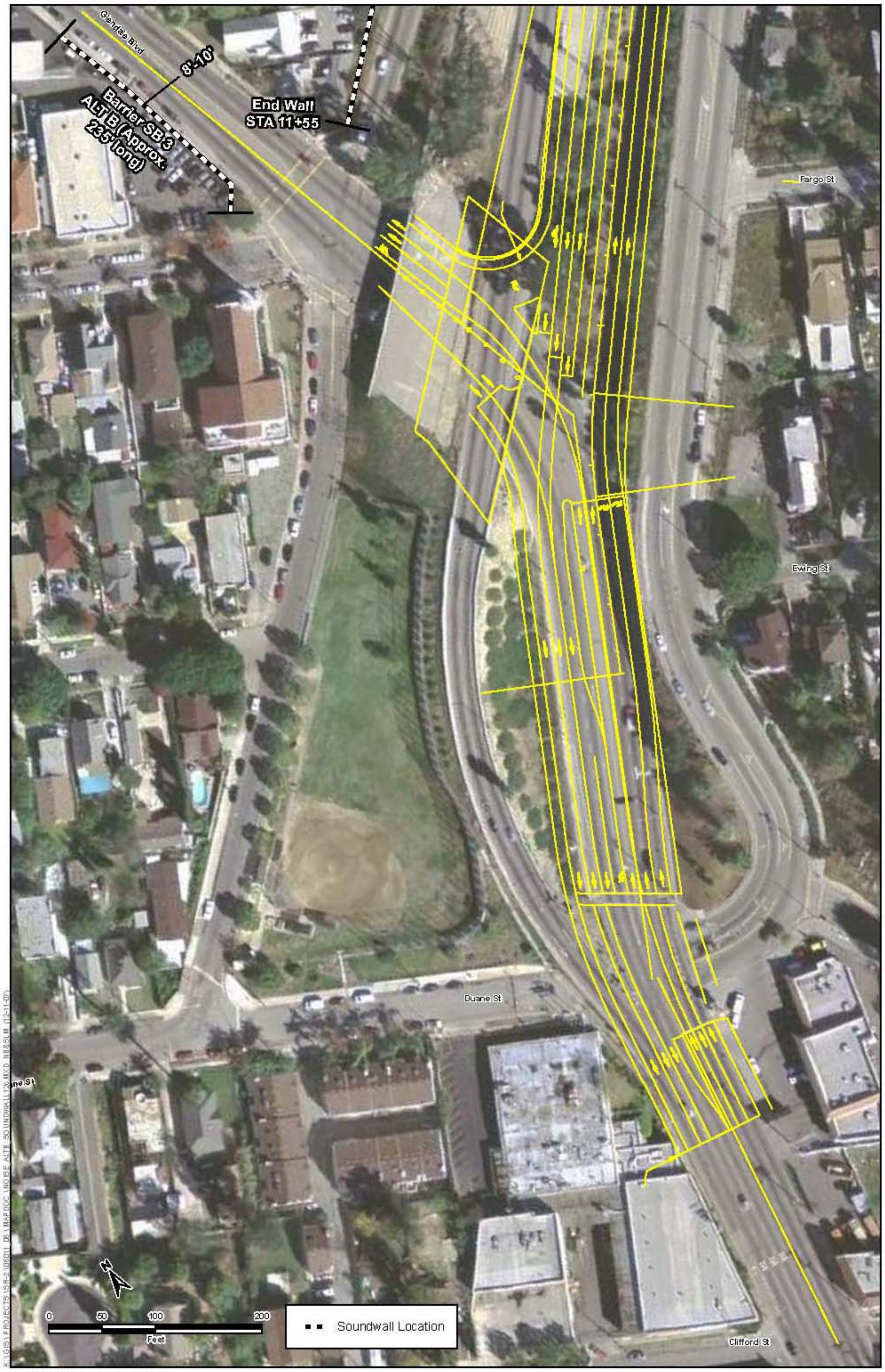
Figure 12a
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative B

Figure 12b

SOURCE: USGS UrbanArea (0.5 m)

Figure 12b
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative B

Figure 12c



SOURCE: USGS UrbanArea (0.5 m)

Figure 12c
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative B

Alternative C

Table 12 summarizes the results of the feasibility analysis for Alternative C. Noise abatement would be feasible at 11 modeled representative receptors. Figure 13 presents the feasible soundwall locations and range of barrier heights. As shown, four soundwalls could be constructed under Alternative C:

- Barrier NB 1 Alt C would be constructed at the right-of-way/top-of-slope adjacent to the northbound side of SR-2 from approximately 200 feet north of Fargo Street to Oak Glen Place. The range of feasible barrier heights would be from 12 to 14 feet, benefiting an estimated 1 residential unit.
- Barrier NB 2 Alt C would be constructed at the right-of-way/top-of-slope adjacent to the northbound side of SR-2 from Oak Glen Place to approximately 175 feet north of Walcott Way. The range of feasible barrier heights would be 14 to 16 feet, benefiting an estimated 9 residential units.
- Barrier SB 1 Alt C would be constructed at the right-of-way/top-of-slope adjacent to the southbound side of SR-2 from approximately 300 north of Lake View Avenue to Oak Glen Place. The range of feasible barrier heights would be from 6 to 10 feet, benefiting an estimated 9 to 13 residential units.
- Barrier SB 2 Alt C would be constructed at the right-of-way/top-of-slope adjacent to the southbound side of SR-2 from Oak Glen Place to Glendale Boulevard. The range of feasible barrier heights would be from 8 to 12 feet, benefiting an estimated 3 to 12 residential units.

Alternative D

Table 13 summarizes the results of the feasibility analysis for Alternative D. Noise abatement would be feasible at 11 modeled representative receptors. Figure 14 presents the feasible soundwall locations and range of barrier heights. As shown, four soundwalls could be constructed under Alternative D:

- Barrier NB 1 Alt D would be constructed at the right-of-way/top-of-slope adjacent to the northbound side of SR-2 from approximately 200 feet north of Fargo Street to Oak Glen Place. The range of feasible barrier heights would be from 12 to 14 feet, benefiting an estimated 1 residential unit.
- Barrier NB 2 Alt D would be constructed at the right-of-way/top-of-slope adjacent to the northbound side of SR-2 from Oak Glen Place to approximately 175 feet north of Walcott Way. The range of feasible barrier heights would be from 14 to 16 feet, benefiting an estimated 9 to 11 residential units.
- Barrier SB 1 Alt D would be constructed at the right-of-way/top-of-slope adjacent to the southbound side of SR-2 from approximately 300 north of Lake View Avenue to Oak Glen Place. The range of feasible barrier heights would be from 6 to 10 feet, benefiting an estimated 9 to 13 residential units.
- Barrier SB 2 Alt D would be constructed at the right-of-way/top-of-slope adjacent to the southbound side of SR-2 from Oak Glen Place to Glendale Boulevard. The range of feasible barrier heights would be from 8 to 12 feet, benefiting an estimated 3 to 9 residential units.

Figure 13a. Soundwall Locations, Lengths, and Range of Feasible Heights Alternative C

SOURCE: USGS UrbanArea (0.5 m)

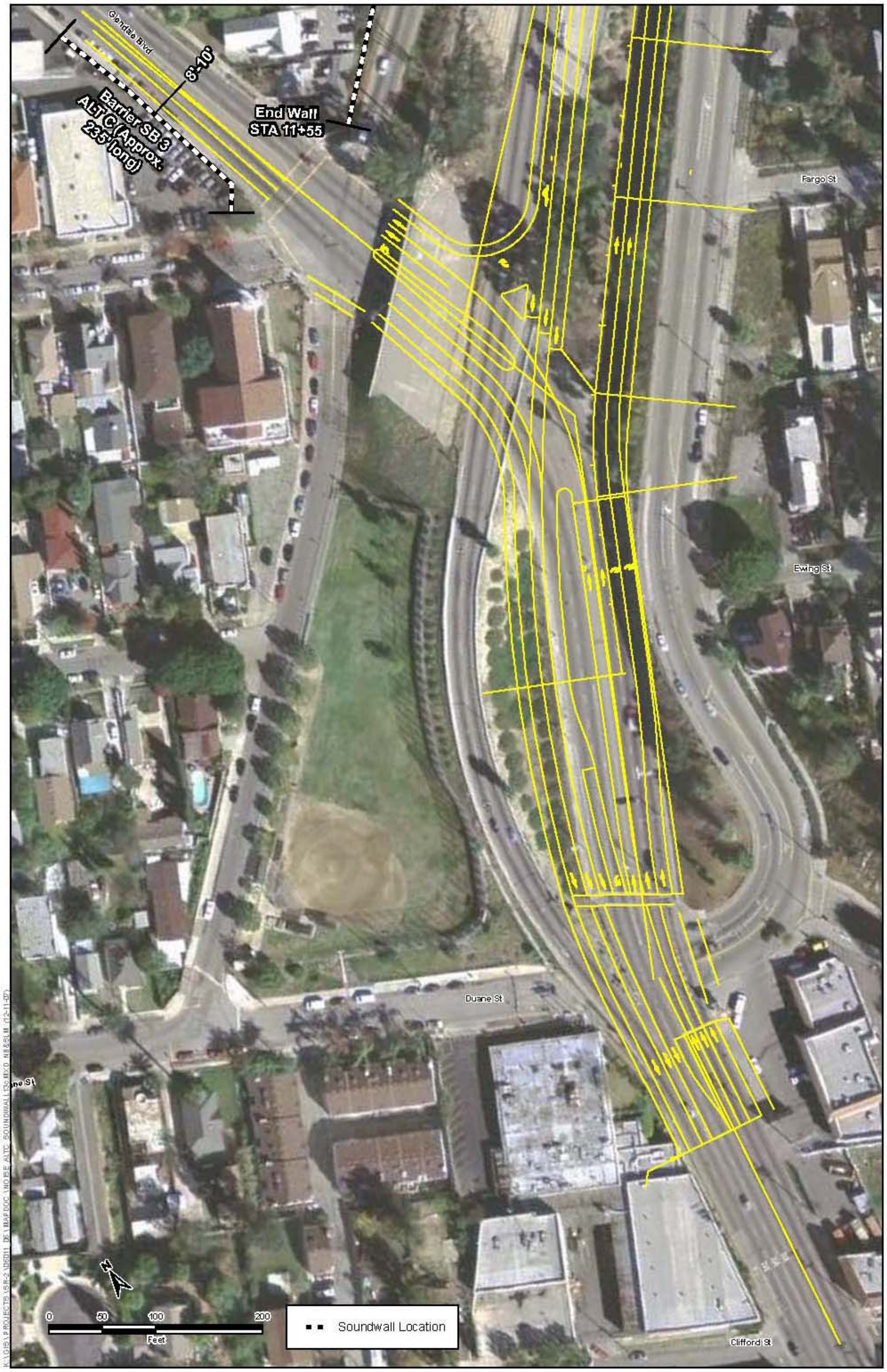
Figure 13a
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative C

Figure 13b

SOURCE: USGS UrbanArea (0.5 m)

Figure 13b
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative C

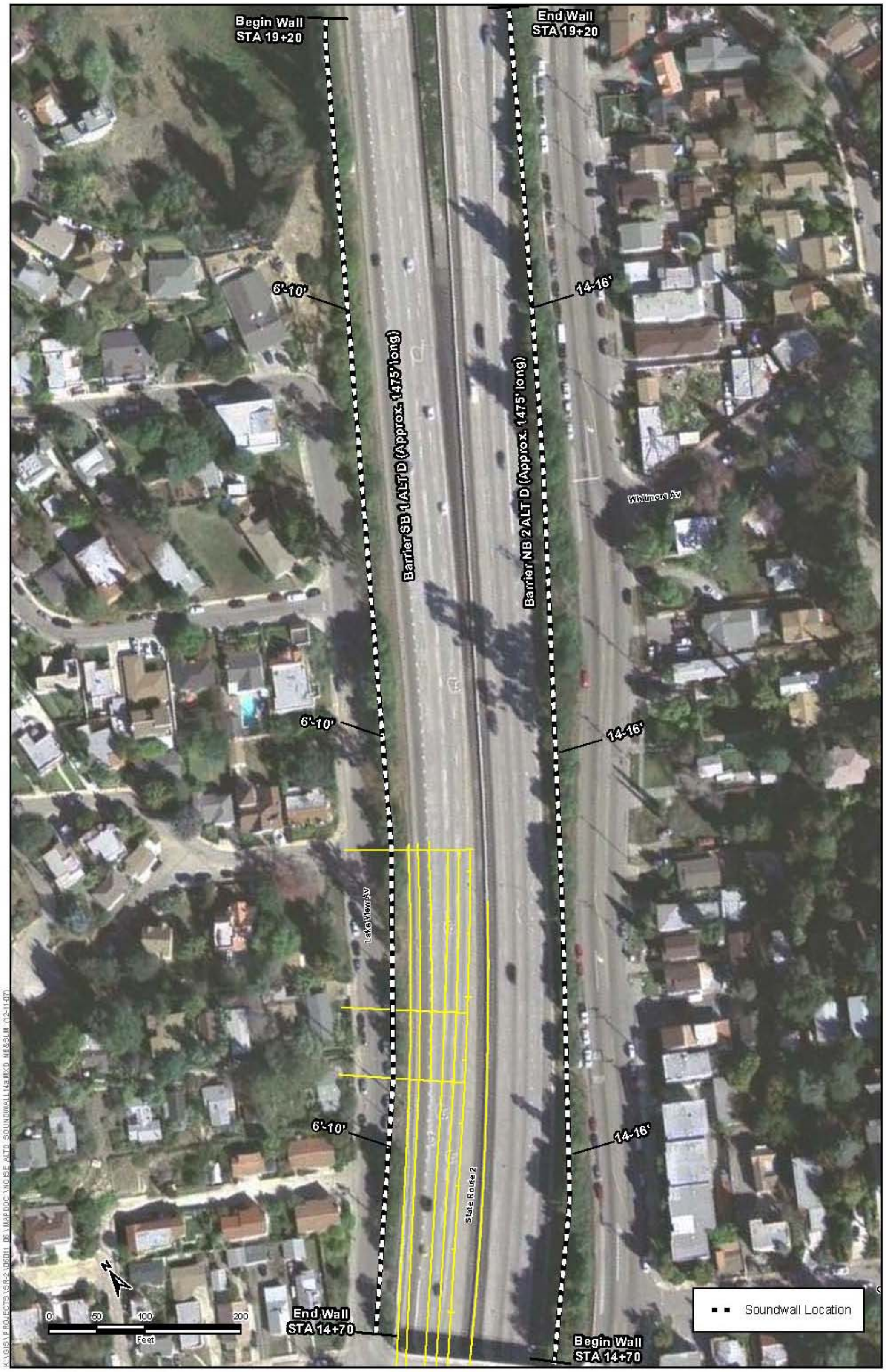
Figure 13c



SOURCE: USGS UrbanArea (0.5 m)

Figure 13c
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative C

Figure 14a. Soundwall Locations, Lengths, and Range of Feasible Heights Alternative D



SOURCE: USGS UrbanArea (0.5 m)

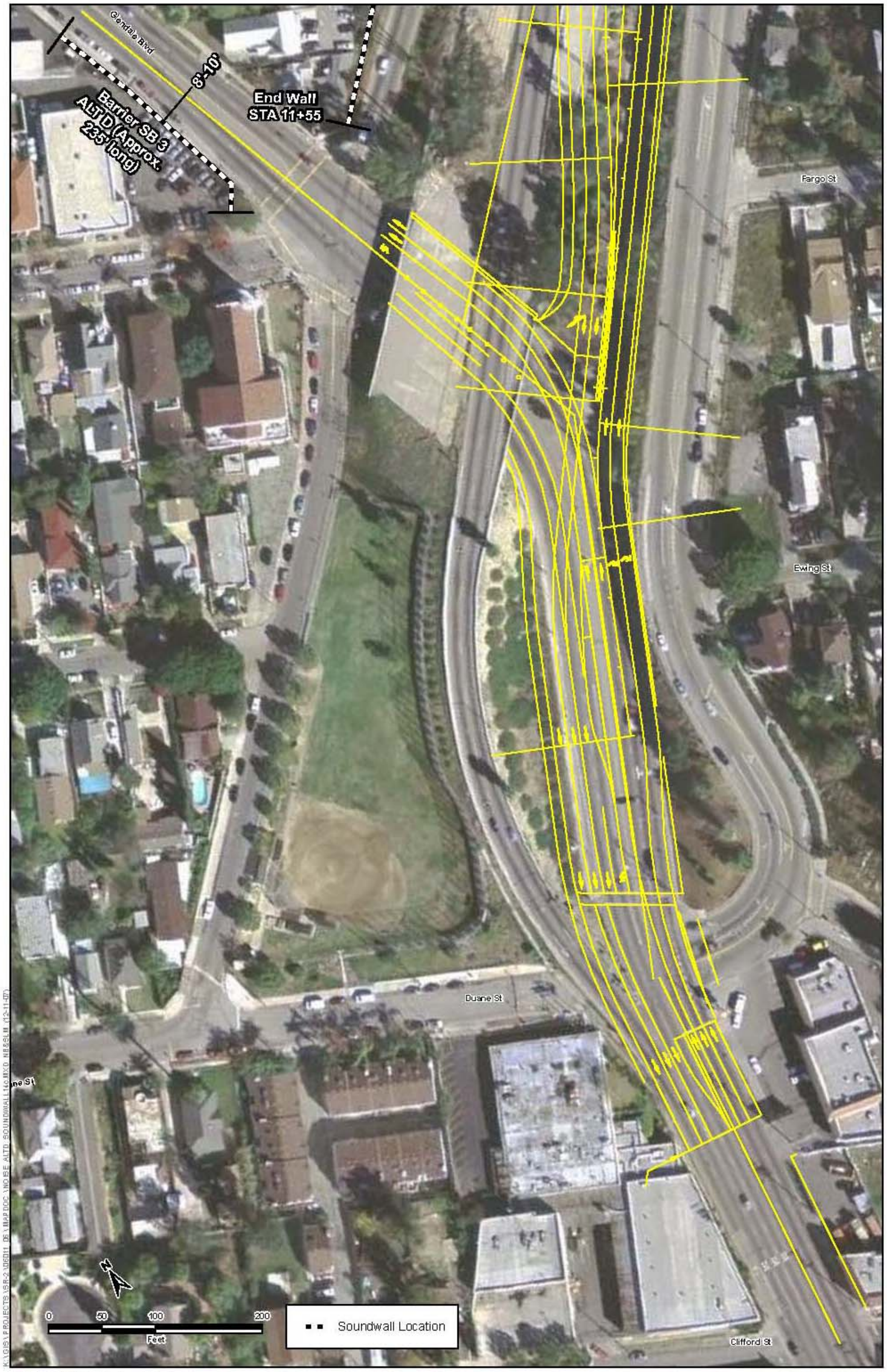
Figure 14a
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative D

Figure 14b

SOURCE: USGS UrbanArea (0.5 m)

Figure 14b
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative D

Figure 14c



SOURCE: USGS UrbanArea (0.5 m)

Figure 14c
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative D

Alternative E

Table 14 summarizes the results of the feasibility analysis for Alternative E. Noise abatement would be feasible at 12 modeled representative receptors. Figure 15 presents the feasible soundwall locations and range of barrier heights. As shown, four soundwalls could be constructed under Alternative E:

- Barrier NB 1 Alt E would be constructed at the right-of-way/top-of-slope adjacent to the northbound side of SR-2 from approximately 200 feet north of Fargo Street to Oak Glen Place. The range of feasible barrier heights would be from 12 to 14 feet, benefiting an estimated 1 residential unit.
- Barrier NB 2 Alt E would be constructed at the right-of-way/top-of-slope adjacent to the northbound side of SR-2 from Oak Glen Place to approximately 175 feet north of Walcott Way. The range of feasible barrier heights would be from 14 to 16 feet, benefiting an estimated 9 to 11 residential units.
- Barrier SB 1 Alt E would be constructed at the right-of-way/top-of-slope adjacent to the southbound side of SR-2 from approximately 300 north of Lake View Avenue to Oak Glen Place. The range of feasible barrier heights would be from 6 to 10 feet, benefiting an estimated 9 to 13 residential units.
- Barrier SB 2 Alt E would be constructed at the right-of-way/top-of-slope adjacent to the southbound side of SR-2 from Oak Glen Place to Glendale Boulevard. The range of feasible barrier heights would be from 8 to 12 feet, benefiting an estimated 3 to 13 residential units.

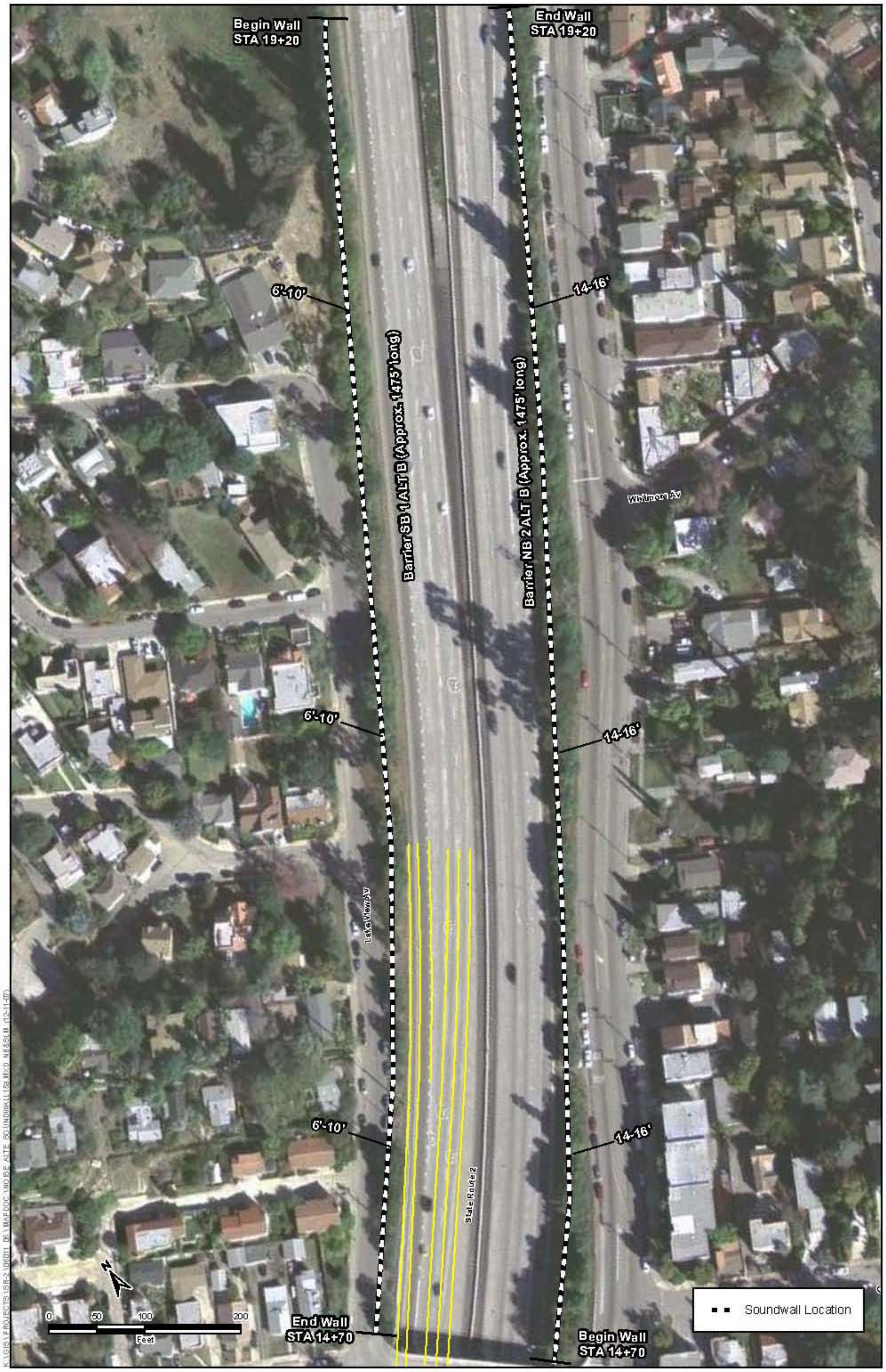
Classroom Noise at Saint Teresa of Avila School

Noise modeling was conducted for the Saint Teresa of Avila School to predict the performance of a soundwall constructed in order to reduce noise levels within the classrooms facing the SR-2/Glendale Boulevard Interchange. TNM® was used to predict soundwall performance (insertion loss or noise reduction) for barrier heights ranging from 6 feet to 16 feet for each of the build alternatives, as shown in Table 20. Using the results of the noise measurements conducted on September 26, 2007, the measured interior/exterior noise reduction value of 9 dBA was subtracted from modeled exterior noise levels (using a supplemental model receptor M-13I, located near M-13 but at an elevation of 10 feet above local ground to account for the classroom elevation) to estimate the corresponding interior noise levels.

Abatement in the form of a soundwall constructed at the Glendale Boulevard right-of-way was found to be feasible (i.e., reduce interior noise levels [with the windows-open condition] to 51 dBA L_{eqH} or less) for each of the future construction alternatives. The feasible noise barriers for each of the interchange design alternatives are shown in Figures 11 through 15.

Alternatively, effective noise abatement could be achieved by upgrading the HVAC systems in the classrooms facing the SR-2/Glendale Blvd. Interchange.

Figure 15a. Soundwall Locations, Lengths, and Range of Feasible Heights Alternative E



SOURCE: USGS UrbanArea (0.5 m)

Figure 15a
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative E

Figure 15b

SOURCE: USGS UrbanArea (0.5 m)

Figure 15b
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative E

Figure 15c

SOURCE: USGS UrbanArea (0.5 m)

Figure 15c
Soundwall Locations, Lengths, and Range of Feasible Heights
Alternative E

Areas Where Abatement/Mitigation Is Not Feasible

Abatement/mitigation was found to be infeasible at six of the representative modeled receptors exceeding the NAC under Alternative A. Abatement/mitigation was found to be infeasible at five of the representative modeled receptors exceeding the NAC under Alternatives B, C, D, and E. Because of the steep terrain, many of the receptor locations would not experience the minimum 5 dB insertion loss necessary to be considered a benefited residence. Additionally, an effective noise barrier was determined to be infeasible at receptor M1 (representative of a residence located near the southern side of the project terminus), because of the necessity for street and driveway access.

Areas Where Abatement/Mitigation Is Not Reasonable

Reasonableness cost allowance calculations were carried out for the four barriers (NB1, NB2, SB1, and SB2) for each of the five build alternatives. The results of the reasonableness allowance calculations are summarized in Tables 15 through 19. Pursuant to current Caltrans protocol (Traffic Noise Analysis Protocol, August 2006), reasonableness recommendations and determination will be carried out by the project engineer in the Noise Abatement Decision Report (NADR).

Reasonableness cost allowance calculations were also carried out for the abatement options for the Saint Teresa of Avila School. The results of the reasonableness allowance calculations are summarized in Tables 21 through 25.

Construction Noise

Noise from activities associated with construction of the project would occur, with varying intensities, over a period of approximately 18 months Because of the linear nature of the project and the different phases of construction, no single location (with the exception of laydown and staging areas) would experience a long-term period of construction noise. Table 29 presents typical construction noise levels for various pieces of construction equipment at a distance of 15 meters. Noise levels generated by construction equipment (or by any “point source”) decrease at a rate of approximately 6 dBA per doubling of distance away from the source (Diehl, 1973). Therefore, at a distance of approximately 100 feet, the noise levels will be about 6 dBA lower than at the 50-foot reference distance. Similarly, at a distance of 200 feet the noise levels would be approximately 12 dBA lower than at the 50-foot reference distance.

Based upon the construction noise levels listed in Table 29, noise from construction activities is anticipated to exceed City of Los Angeles noise regulations (i.e., 75 dBA at 50 feet) without mitigation. Recommended noise control measures are listed in the following section.

Table 29. Noise Level Ranges of Typical Construction Equipment

Equipment	Levels in dBA at 50 feet[a]
Front Loader	73-86
Trucks	82-95
Cranes (moveable)	75-88
Cranes (derrick)	86-89
Vibrator	68-82
Saws	72-82
Pneumatic Impact Equipment	83-88
Jackhammer	81-98
Pumps	68-72
Generators	71-83
Compressors	75-87
Concrete Mixers	75-88
Concrete Pumps	81-85
Back Hoe	73-95
Pile Driving (peaks)	95-107
Tractor	77-98
Scraper/Grader	80-93
Paver	85-88

Machinery equipped with noise control devices or other noise-reducing design features does not generate the same level of emissions as that shown in this table.

Source: EPA, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances, PB 206717, 1971.

Construction Noise Control

To reduce noise levels from construction to the extent that is technically feasible and avoid unnecessary annoyance from construction noise, the following construction noise control measures should be implemented:

1. Comply with all appropriate provisions of the City Municipal Code including restrictions on hours of operation (i.e., of 7:00 a.m. to 9:00 p.m. on weekdays, 8:00 a.m. to 6:00 p.m. on Saturdays and at no time on Sundays). In the event of the necessity for construction activities to occur outside of these hours, a variance shall be obtained.
2. Place maintenance yards, batch plants, haul roads, and other construction-oriented operations in locations that would be the least disruptive to the community.
3. Hold community meetings to explain to area residents about the construction work, time involved, and the control measures to be taken to reduce the impact of the construction work.
4. Schedule the timing and duration of construction activities to minimize noise impacts at noise-sensitive locations.

5. As practicable, use noise-attenuating “jackets” or portable noise screens to provide shielding for pavement breaking, jack hammering or other similar type activities when work is close to noise-sensitive areas.
6. Comply with the Caltrans Standard Specifications 7-1.011 (July 1999) “Sound Control Requirements. The contractor shall comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the contract. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.”

Subsequent Documents Related to Noise

This report presents information on potential noise impacts associated with construction and operation of the proposed project, contains information on preliminary noise abatement that has been assessed, and provides reasonable cost allowances for abatement that has been considered. A final decision on whether to include noise abatement in the final design will be made after the project engineer has estimated the cost of abatement and after input has been collected from the public and public agencies through the environmental review process. A Noise Abatement Decision Report will combine the engineer’s cost estimate and the reasonable cost allowances presented in this report. Information from this report and the Noise Abatement Decision Report will then be incorporated into the draft environmental document. Noise abatement considered reasonable and feasible at the end of the environmental review process will be identified in the final environmental document as abatement likely to be included in the final project design.

Based on the studies so far accomplished, LACMTA and Caltrans intend to incorporate noise abatement measures in the form of barriers at locations on the northbound and southbound sides of SR-2 between station 10+15 and station 19+20, and on the southbound side of Glendale Boulevard north of Fargo Street and South of Baxter Street, with lengths and height ranges as shown in Figures 11 through 15. Calculations based on preliminary design data indicate that the barriers will reduce noise levels by 5 to 9 dBA for up to 38 residences or residential equivalents, depending upon design alternative and wall height combinations. If during final design conditions have substantially changed, noise barriers might not be provided. The final decision of the noise barriers will be made upon completion of the project design and the public involvement process.

References

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List of Preparers

Michael Greene, INCE Bd. Cert. – Senior Acoustical Engineer,
Jones & Stokes Associates

B.S., Applied Mechanics, University of California, San Diego, 1985.

Mr. Greene has 17 years of experience in the environmental planning field, focusing on ambient noise monitoring, noise contour mapping, noise impact assessments, and noise simulation studies.

Appendix A
Noise Measurement Equipment Used

The following instruments were used to conduct the field noise measurements:

- **Sound Level Meter -** Brüel & Kjær Type 2231 Digital Precision Integrating, Serial Number 1413404.
- **Community Noise Analyzers -** Metrosonics Model dB308, serial numbers 2434, 2881.
- **Acoustical Calibrators -** Brüel & Kjær Type 4231 Acoustical Calibrator (94 dBA SPL @ 1000 Hz), Serial Number 1850301; Metrosonics Model CL-304 Acoustical Calibrator (102 dBA SPL @ 1000 Hz), Serial Number 2551.
- **Psychometric Instruments -** Mannix Model CMM 880 Digital Hygrometer/Thermometer, Serial Number 8821784; Sims Model DIC Digital Anemometer, Serial Number 95022.
- **Traffic Counts -** Sportline 4-digit hand counter

Appendix B

Field Notes

FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 PROJ. #

SITE IDENTIFICATION: ST-1 OBSERVER(S): MG SN
START DATE / TIME: 5/24/06 END DATE / TIME:
ADDRESS: St Teresa of Avila Church

METEROLOGICAL CONDITIONS:
TEMP: 84 °F HUMIDITY: 36 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 1-2 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:
INSTRUMENT: LD 812 TYPE: 1 2 SERIAL #: 0432
CALIBRATOR: CA 250 SERIAL #: 3143
CALIBRATION CHECK: PRE-TEST dBA SPL POST-TEST dBA SPL WINDSCREEN Y

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
	~~1245~~	~~1300~~									
	1225	1240	61.0	77.9	50.7	55.0	58.2	63.0			
	1250	1305	62.9	76.4	52.7	56.2	59.9	65.7			

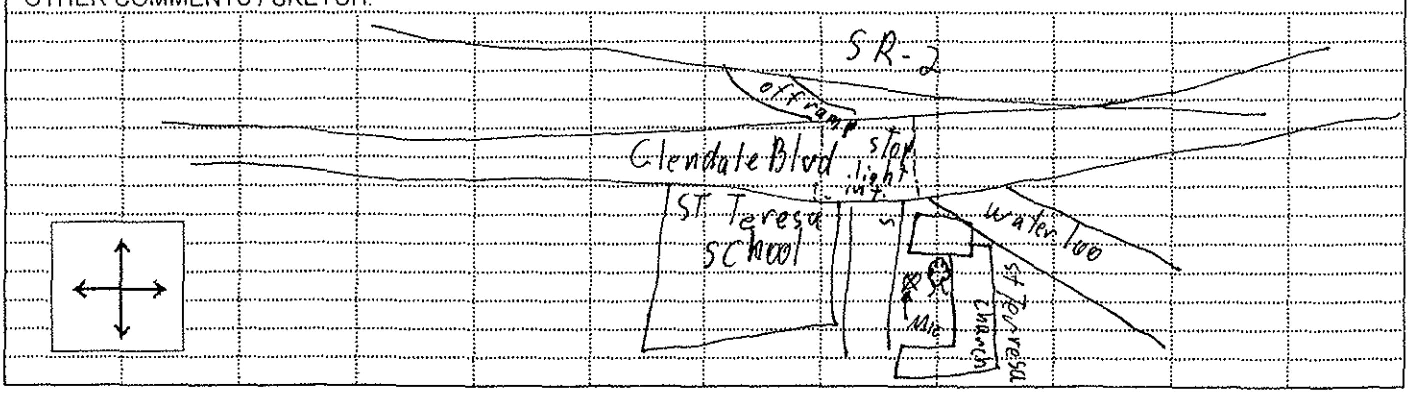
COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER: school
ROADWAY TYPE:
TRAFFIC COUNT DURATION: -MIN SPEED SR2 #2 COUNT SPEED

	NB / EB	SB / WB	NB / EB	SB / WB	NB / EB	SB / WB	NB / EB	SB / WB
			awA			glendale	aw	
AUTOS:	123	102	20	158	86	162	29	103
MED. TRUCKS:	2	2	1	8	3	5	1	3
HVY TRUCKS:				1	2	4		2
BUSES:	1	1		1	2	1		2
MOTORCYCLES:	1							
	↖ glendale ↗							SR 2

SPEED ESTIMATED BY: RADAR / ~~DRIVING / OBSERVER~~
OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / ~~DIST. BARKING DOGS~~ / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ~~ACTIVITIES~~ / OTHER:

DESCRIPTION / SKETCH:
TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS: 157-57 56, 55, 54
OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 PROJ. #

SITE IDENTIFICATION: ST-2
START DATE / TIME: 5·24·06 2:30
ADDRESS: 2147 Baxter
OBSERVER(S): MG SN
END DATE / TIME: 5/24/06 3:30

METEROLOGICAL CONDITIONS:
TEMP: 80 °F HUMIDITY: 38 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 4-5 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:
INSTRUMENT: LD 812 TYPE: 1 2 SERIAL #: 0432
CALIBRATOR: CA 250 SERIAL #: 3143
CALIBRATION CHECK: PRE-TEST 105.7 dBA SPL POST-TEST dBA SPL WINDSCREEN Y

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

~~REC #~~ START	~~START~~ END	~~END~~	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
2:45	3:00		63.1	80.0	52.0	57.0	~~60~~ 60.5	~~64.8~~ 64.8			
3:05	3:20		63.6	75.4	54.6	58.4	61.7	66.9			

COMMENTS:

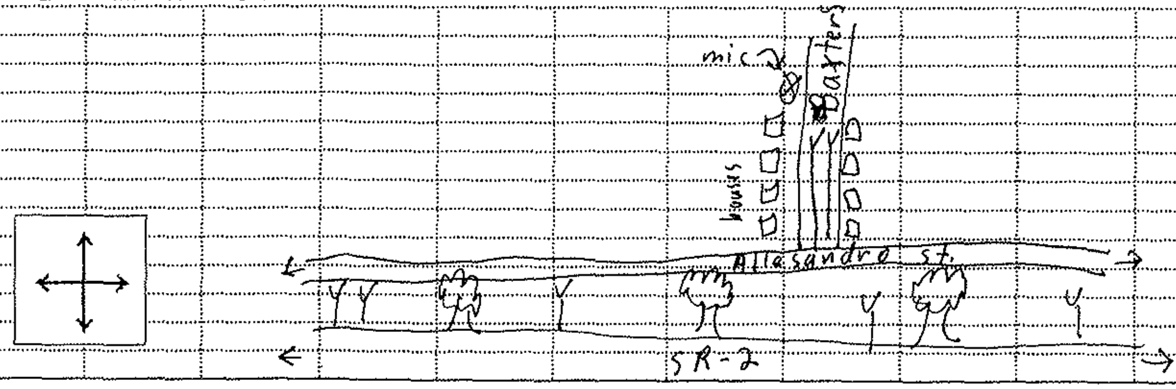
SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
ROADWAY TYPE:
TRAFFIC COUNT DURATION: 15 -MIN

	NB / EB	SB / WB	SPEED NB / EB	SPEED SB / WB	#2 COUNT NB / EB	#2 COUNT SB / WB	SPEED NB / EB	SPEED SB / WB
AUTOS:	275 SR-2	367	20 ALESSANDRO	22	502 SR-2	351	36 ALESSANDRO	55
MED. TRUCKS:	3	3	1	0	7	3	1	
HVY TRUCKS:	5	7	0	0	8	14	1	
BUSES:	1	5	2	3	8	7	1	3
MOTORCYCLES:					2	1		

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:
TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS: 157-5759, 58, 57
OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 PROJ. #: ____

SITE IDENTIFICATION:	ST 3	OBSERVER(S):	MGSN
START DATE / TIME:	5/24/06	END DATE / TIME:	5.24.06 4:30
ADDRESS:	Oak Glen Place		

METEROLOGICAL CONDITIONS:

TEMP: 83 °F HUMIDITY: 37 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 2-3 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:

INSTRUMENT: LD 812 TYPE: 1 2 SERIAL #: 0432
CALIBRATOR: CA 250 SERIAL #: 3143
CALIBRATION CHECK: PRE-TEST 105.6 dBA SPL POST-TEST 105.6 dBA SPL WINDSCREEN Y

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
	345	400	66.6	83.1	58.6	62.0	64.5	68.2			
	400	415	66.0	75.9	58.3	62.4	65.0	67.9			

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS:

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
ROADWAY TYPE:
TRAFFIC COUNT DURATION: ___-MIN

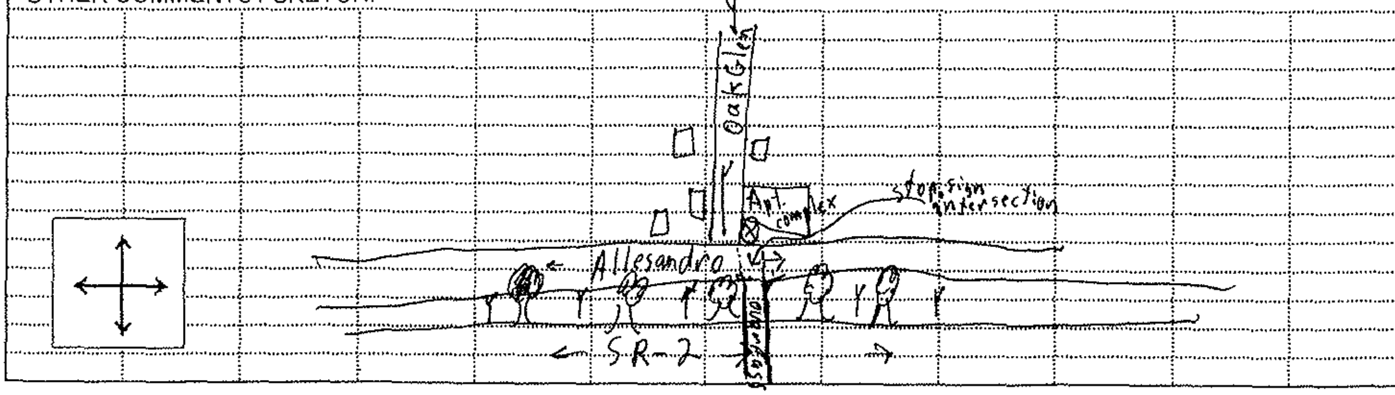
	NB / EB SR-2	SB / WB	SPEED NB / EB	Allesandro SB / WB	#2 COUNT NB / EB SR-2	SB / WB	SPEED NB / EB	Allesandro SB / WB
AUTOS:	751	360	35	40	759	463	38	57
MED. TRUCKS:	4	14		1	6	18		2
HVY TRUCKS:	1	11			1	4		
BUSES:		3	2	3	2	1		3
MOTORCYCLES:	3	1			2	1		1

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:

TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS: 157-59, 60, 61, 62
OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: ______ PROJ. # ______

SITE IDENTIFICATION: ST-4
START DATE / TIME: 5/24/06
ADDRESS: 2256 Alessandro
OBSERVER(S): MG, SN
END DATE / TIME:

METEROLOGICAL CONDITIONS:

TEMP: 82 °F HUMIDITY: 36 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 3-4 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:

INSTRUMENT: LD812 TYPE: 1 2 SERIAL #: 0832
CALIBRATOR: CA250 SERIAL #:
CALIBRATION CHECK: PRE-TEST 105.6 dBA SPL POST-TEST 105.7 dBA SPL WINDSCREEN Y

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
1	4:45	5:00	66.7	77.9	58.7	63.5	66.2	68.2			
2	5:05	5:20	66.4	74.6	58.5	63.4	66.0	68.3			

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS:

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
ROADWAY TYPE:
TRAFFIC COUNT DURATION: ___-MIN SPEED #2 COUNT SPEED

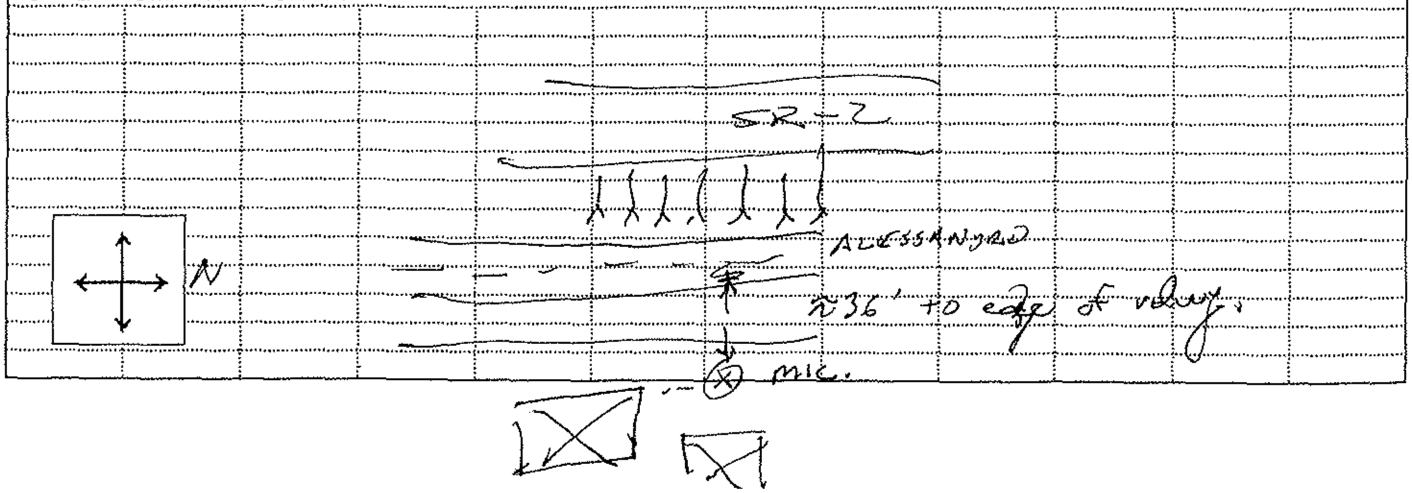
	NB / EB	SB / WB	NB / EB	SB / WB	NB / EB	SB / WB	NB / EB	SB / WB
AUTOS:	817 SR2	450	34 Alessandro	33	845 SR2	487	47 Alessandro	37
MED. TRUCKS:	3	6	/	1	4	7	/	1
HVY TRUCKS:	2	5	/	/	2	5	/	/
BUSES:	4	4	2	2	1	0	1	1
MOTORCYCLES:	1	/	/	/	3	0	/	/

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:

TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS: 157-5763, 64, 65
OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 PROJ. #

SITE IDENTIFICATION: ST-~~8~~ 3
START DATE / TIME: 5.25.06 2:50
ADDRESS: Silver Place & Allesandro Way
OBSERVER(S): SN MG
END DATE / TIME: 5.25.06 3:25

METEROLOGICAL CONDITIONS:
TEMP: 81 °F HUMIDITY: 39 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 1-3 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:
INSTRUMENT: LD 812 TYPE: 1 2 SERIAL #: 0432
CALIBRATOR: CA 250 SERIAL #: 03143
CALIBRATION CHECK: PRE-TEST 105.5 dBA SPL POST-TEST dBA SPL WINDSCREEN Y

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
	250	305	65.5	71.7	58.5	62.9	65.1	~~64.7~~ 67.4			
	306	321	65.8	71.4	55.0	62.9	65.5	67.8			

COMMENTS:

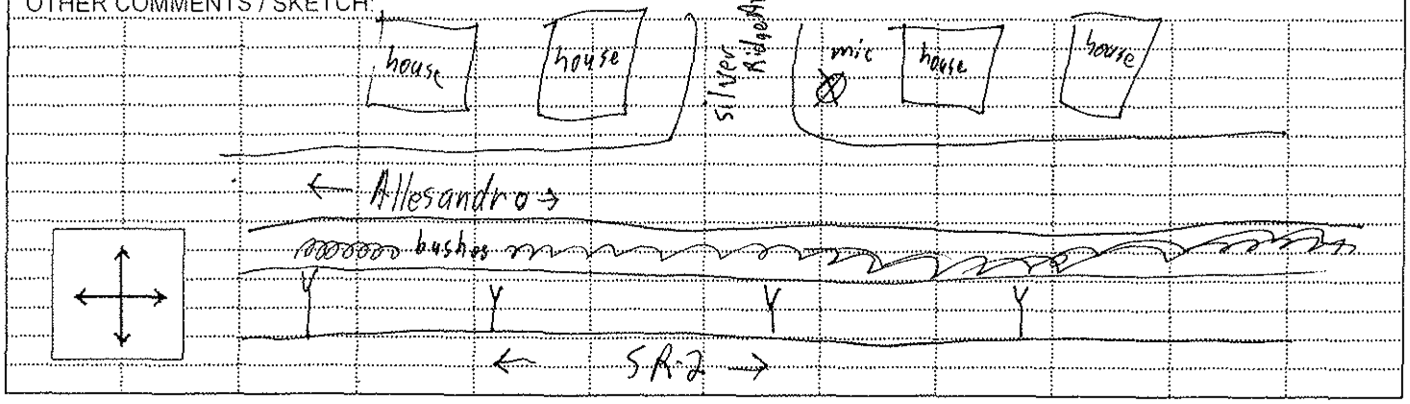
SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
ROADWAY TYPE:
TRAFFIC COUNT DURATION: -MIN

	NB / EB (SR-2)	SB / WB	~~NB / EB~~ Allesandro	SPEED SB / WB	#2 COUNT NB / EB (SR-2)	SB / WB	~~NB / EB~~ Allesandro	SPEED SB / WB
AUTOS:	572	373	9		571	449	8	
MED. TRUCKS:	12	10	—		12	9	1	
HVY TRUCKS:	0	9	—		4	10		
BUSES:	0	6	—		2	7		
MOTORCYCLES:	1	1	—		1	2		

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:
TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS: 157-5176, 77, 78
OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 PROJ. #

SITE IDENTIFICATION: ST-9 6
START DATE / TIME: 52606 335
ADDRESS: Allesandro Way & Loma Vista
OBSERVER(S): SN MG
END DATE / TIME: 5 26 06

METEROLOGICAL CONDITIONS:
TEMP: 84 °F HUMIDITY: 32 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 0-4 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:
INSTRUMENT: LD 812 TYPE: 1 2 SERIAL #: 0432
CALIBRATOR: CA 250 SERIAL #: 3143
CALIBRATION CHECK: PRE-TEST 105.5 dBA SPL POST-TEST dBA SPL WINDSCREEN Y

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
	340	355	65.4	76.1	56.4	61.7	64.9	67.5			
	~~356~~	~~411~~									
	400	413	65.1	75.9	55.8	61.0	64.8	67.0			

COMMENTS:

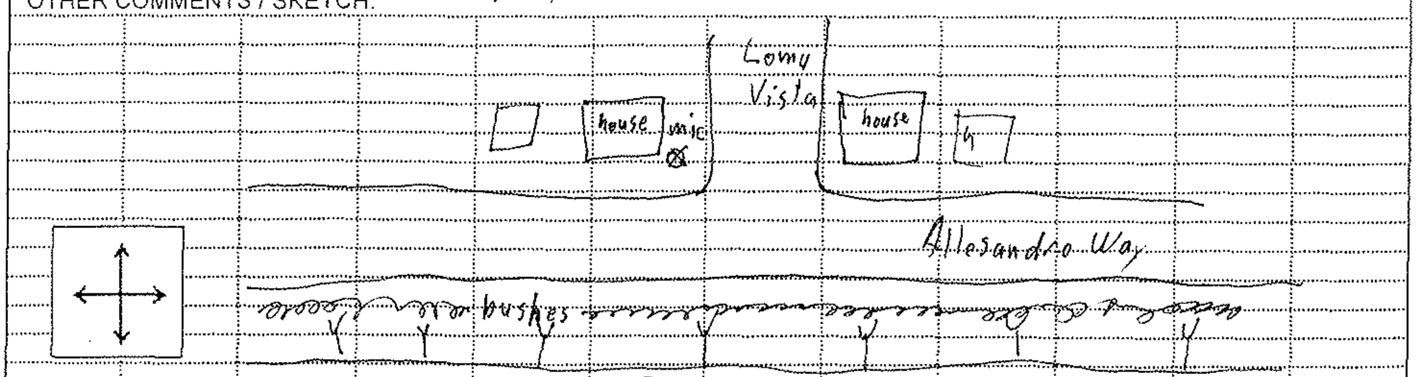
SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
ROADWAY TYPE:
TRAFFIC COUNT DURATION: ___-MIN

	NB / EB	SB / WB	~~NB / EB~~ Allesandro	SB / WB	#2 COUNT NB / EB	SB / WB	~~NB / EB~~ Allesandro	SB / WB
AUTOS:	546	491	13		697	493	8	
MED. TRUCKS:	~~54~~ 5	15	–		6	12	–	
HVY TRUCKS:	1	6	–		1	5	–	
BUSES:	2	3	–		1	4	–	
MOTORCYCLES:	0	1	–		0	0	–	

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:
TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS: 157-5779, 80, 81, 82, 83
OTHER COMMENTS / SKETCH:



SR-2

FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 PROJ. #

SITE IDENTIFICATION: ST-101
START DATE / TIME: 5-25-06
ADDRESS: 2219 Baxter
OBSERVER(S): MG SN
END DATE / TIME: 5-25-06

METEROLOGICAL CONDITIONS:
TEMP: 75 °F HUMIDITY: 34 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 82 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:
INSTRUMENT: LD 812 TYPE: 1 2 SERIAL #: 0432
CALIBRATOR: CA 250 SERIAL #: 3143
CALIBRATION CHECK: PRE-TEST 105.6 dBA SPL POST-TEST 105.5 dBA SPL WINDSCREEN Y

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)
1	4:30	4:45	66.6	74.7	58.2	63.2	66.4	68.4		
2	4:47	5:02	67.0	74.0	59.0	63.9	66.7	68.7		

COMMENTS:

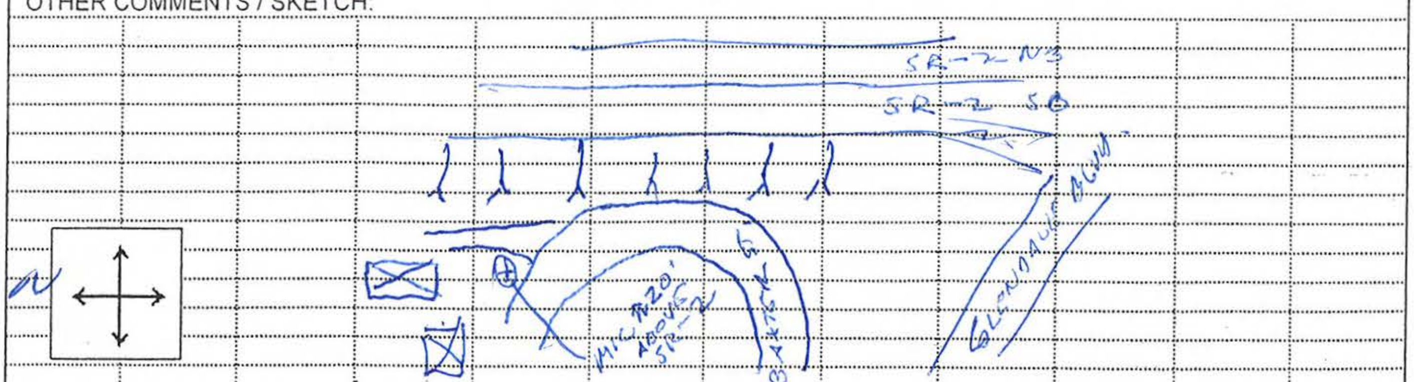
SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
ROADWAY TYPE: SR-2
TRAFFIC COUNT DURATION: 15 -MIN

	NB / EB	SB / WB	SPEED NB / EB	SPEED SB / WB	#2 COUNT NB / EB	#2 COUNT SB / WB	SPEED NB / EB	SPEED SB / WB
AUTOS:	698 SR-2	444			714 SR-	442		
MED. TRUCKS:	8	2			8	11		
HVY TRUCKS:	1	5			4	4		
BUSES:	1	3			6	4		
MOTORCYCLES:	1	0			4	5		

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:
DIST. CONST. Noise

DESCRIPTION / SKETCH:
TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS: 157-578, ~~79-8~~
OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 PROJ. #: ______

SITE IDENTIFICATION: LT-21
START DATE / TIME: 5/24/06 11:45
ADDRESS: 2147 Duane St.
OBSERVER(S): MG · SN
END DATE / TIME: 5/25/06 1715

METEROLOGICAL CONDITIONS:
TEMP: 80 °F HUMIDITY: 41 %R.H. WIND: CALM **LIGHT** MODERATE VARIABLE
WINDSPEED: 5 MPH DIR: N NE E SE **S** SW W NW STEADY **GUSTY**
SKY: **SUNNY** **CLEAR** OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:
INSTRUMENT: LD-720 TYPE: 1 **2** SERIAL #: 0507
CALIBRATOR: CA 250 SERIAL #: 3143
CALIBRATION CHECK: PRE-TEST 114.0 dBA SPL POST-TEST ______ dBA SPL WINDSCREEN Y

SETTINGS: **A-WEIGHTED** **SLOW** FAST FRONTAL **RANDOM** **ANSI** OTHER:

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)
	1145	515 pm	70.1							

COMMENTS:

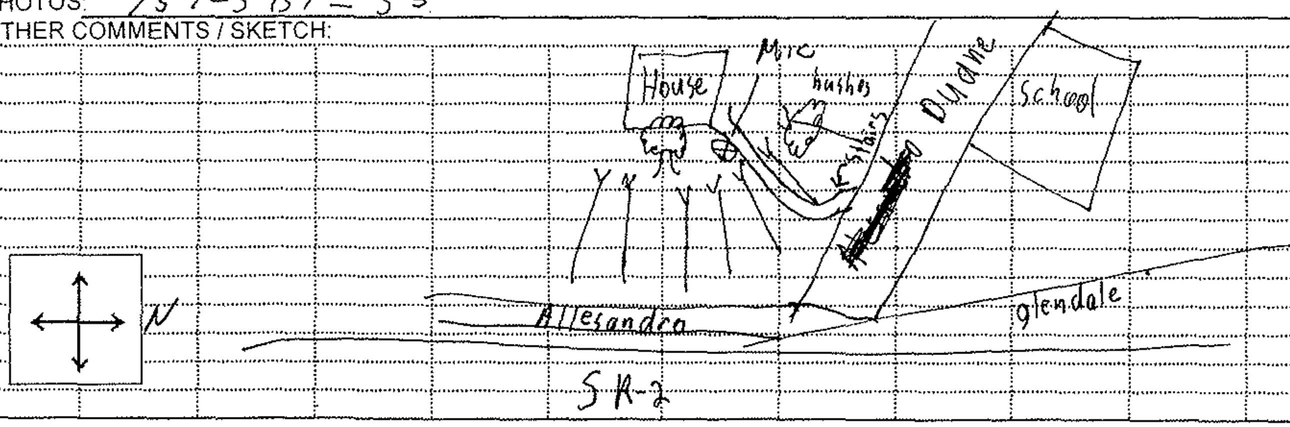
SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: **TRAFFIC** AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
ROADWAY TYPE:
TRAFFIC COUNT DURATION: ____-MIN

	NB / EB	SB / WB	SPEED NB / EB	SPEED SB / WB	#2 COUNT NB / EB	#2 COUNT SB / WB	SPEED NB / EB	SPEED SB / WB
AUTOS:								
MED. TRUCKS:								
HVY TRUCKS:								
BUSES:								
MOTORCYCLES:								

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:
dog on premises - on average doesn't bark

DESCRIPTION / SKETCH:
TERRAIN: HARD **SOFT** MIXED FLAT OTHER: leaf litter
PHOTOS: 157-5751-53
OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 INTG PROJ. #

SITE IDENTIFICATION: ST-8 (BACKGROUND) OBSERVER(S): PH, MG
START DATE / TIME: 9-26-07 END DATE / TIME: 9-26-07
ADDRESS: 2088 CERRO GORDO

METEROLOGICAL CONDITIONS:
TEMP: 80 °F HUMIDITY: 60 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 0-1 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:
INSTRUMENT: LD812 TYPE: 1 2 SERIAL #: 0432
CALIBRATOR: CA250 SERIAL #: 3143
CALIBRATION CHECK: PRE-TEST ~~103~~ 114.0 dBA SPL POST-TEST 114.0 dBA SPL WINDSCREEN ✓

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
ST-~~8~~A	11:10	11:25	51.8	71.6	39.0	41.0	42.3	54.0			
ST-~~8~~B	11:29	11:44	50.9	70.1	38.4	40.7	42.3	53.6			

COMMENTS:

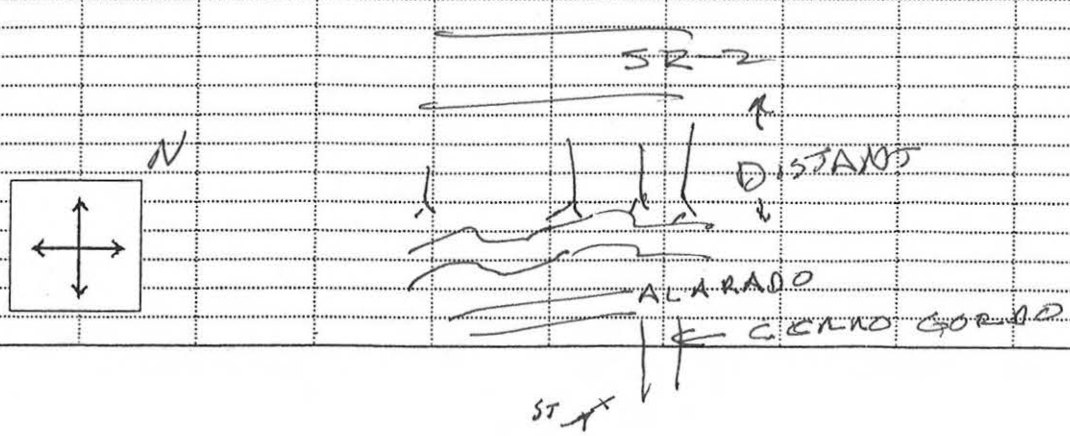
SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
ROADWAY TYPE: 2-lane undivided
TRAFFIC COUNT DURATION: ____-MIN

	NB / EB	SB / WB	SPEED NB / EB	SPEED SB / WB	#2 COUNT NB / EB	#2 COUNT SB / WB	SPEED NB / EB	SPEED SB / WB
AUTOS:								
MED. TRUCKS:								
HVY TRUCKS:								
BUSES:								
MOTORCYCLES:								

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:
DISTANT CONSTRUCTION

DESCRIPTION / SKETCH:
TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS: ✓ 123 W S E
OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 INT'G PROJ. #

SITE IDENTIFICATION: ST-9 OUTDOORS
OBSERVER(S): PN, MO.
START DATE / TIME: 9-26-07
END DATE / TIME: 9-26-07
ADDRESS: SAINT TERESA OF AVILIA SCHOOL OUTSIDE

METEROLOGICAL CONDITIONS:
TEMP: 88.3 °F HUMIDITY: 36.7 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: ____ MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:
INSTRUMENT: LD 812 TYPE: ~~1~~ 2 SERIAL #: 0432
CALIBRATOR: CA 250 SERIAL #: 3143
CALIBRATION CHECK: PRE-TEST 114.0 dBA SPL POST-TEST 114.0 dBA SPL WINDSCREEN ___

SETTINGS: ~~A-WEIGHTED~~ ~~SLOW~~ FAST FRONTAL ~~RANDOM~~ ANSI OTHER:

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
ST-9A	2:19	2:34	62.3	73.7	57.1	58.6	60.6	64.7			
ST-9B	2:38	2:57	62.8	74.4	56.4	59.1	61.1	65.2			

COMMENTS: NOISE

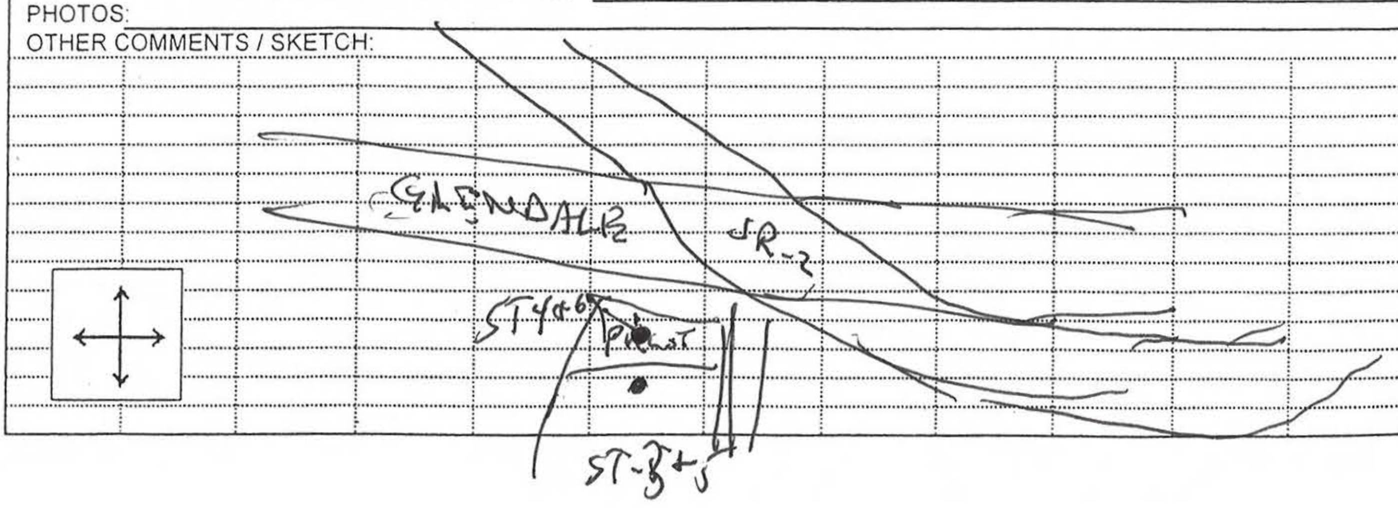
SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: ~~TRAFFIC~~ ~~AIRCRAFT~~ RAIL INDUSTRIAL ~~AMBIENT~~ OTHER: AC UNITS
ROADWAY TYPE:
TRAFFIC COUNT DURATION: ____-MIN

	NB / EB	SB / WB	SPEED NB / EB	SPEED SB / WB	#2 COUNT NB / EB	#2 COUNT SB / WB	SPEED NB / EB	SPEED SB / WB
AUTOS:	97	72			86	74		
MED. TRUCKS:	2	1			1	3		
HVY TRUCKS:					3	1		
BUSES:	1	1			2			
MOTORCYCLES:								

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:
TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 INT'G PROJ. #

SITE IDENTIFICATION: ST-9 INDOORS
START DATE / TIME: 9-26-07
ADDRESS: SAINT TERESA OF AVILIA SCHOOL (INDOOR)
OBSERVER(S): MG, PH
END DATE / TIME: 9-26-07

METEROLOGICAL CONDITIONS:
TEMP: 84 °F HUMIDITY: 36 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 0 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:
INSTRUMENT: LD 720 TYPE: 1 2 SERIAL #: 0507
CALIBRATOR: CA250 SERIAL #: 3143
CALIBRATION CHECK: PRE-TEST 114.0 dBA SPL POST-TEST dBA SPL WINDSCREEN

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

	REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
WINDOW CLOSED	ST-9A	2:16	2:34	46.9	60.2	41.5	42.6	44.5	49.9			
WINDOWS OPEN	ST-9B	2:36	2:51	53.6	65.2	48.2	49.5	52.0	56.6			

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER: CHILDREN
ROADWAY TYPE:
TRAFFIC COUNT DURATION: ___ MIN SPEED #2 COUNT SPEED

	NB / EB	SB / WB	NB / EB	SB / WB	NB / EB	SB / WB	NB / EB	SB / WB
AUTOS:	92	78						
MED. TRUCKS:	2	1						
HVY TRUCKS:	0	0						
BUSES:	1	1						
MOTORCYCLES:								

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:
TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:

FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 INT'G PROJ. #

SITE IDENTIFICATION: ST-10 OUT
START DATE / TIME: 9-26-07
ADDRESS: CLIFFORD ST SCHOOL

OBSERVER(S): MO, PH
END DATE / TIME: 9-26-07

METEROLOGICAL CONDITIONS:
TEMP: 84 °F HUMIDITY: 75 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: 1-2 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:
INSTRUMENT: LP 812 TYPE: 1 2 SERIAL #: 0432
CALIBRATOR: CA 250 SERIAL #: 3143
CALIBRATION CHECK: PRE-TEST 105.5 dBA SPL POST-TEST 105.5 dBA SPL WINDSCREEN

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)	
ST-10 OUT	3:35	3:49	61.3	71.1	56.7	59.3	61.0	62.8			

COMMENTS:

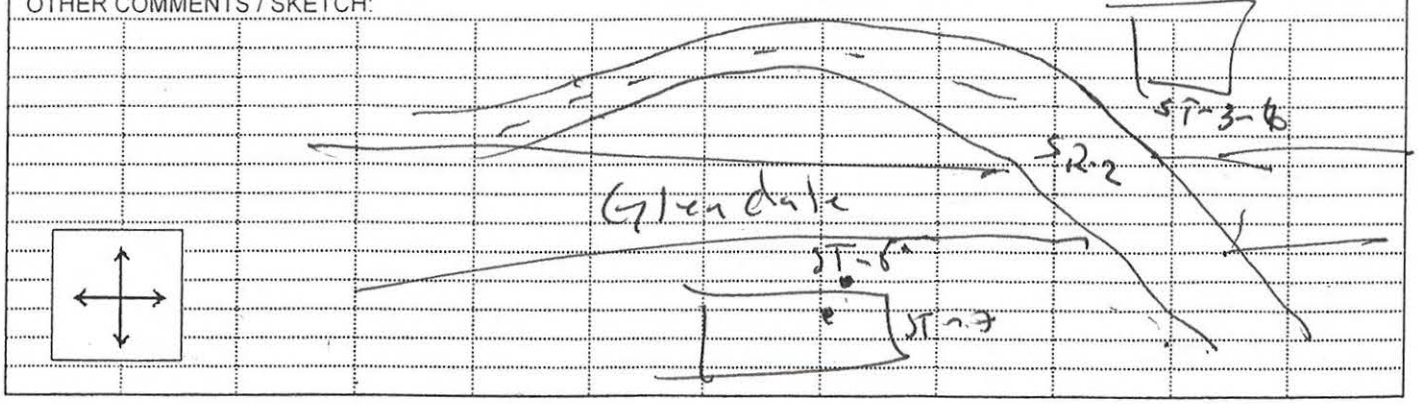
SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
ROADWAY TYPE:
TRAFFIC COUNT DURATION: ____-MIN

	#1 COUNT NB / EB	SB / WB	SPEED NB / EB	SB / WB	#2 COUNT SE NB / EB	NW SB / WB	SPEED NB / EB	SB / WB
AUTOS:					102	706		
MED. TRUCKS:	IIII	I			1	4		
HVY TRUCKS:	IIII					4		
BUSES:	II	II			2	2		
MOTORCYCLES:								

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:
TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



INSIDE

FIELD NOISE MEASUREMENT DATA

Jones & Stokes

PROJECT: SR-2 INT'G PROJ. #

SITE IDENTIFICATION: ST-10 INDOORS OBSERVER(S): MG, PM
START DATE / TIME: 9/26/07 END DATE / TIME: 9/26/07
ADDRESS: CLIFFORD ST SCHOOL RM 5

METEROLOGICAL CONDITIONS:
TEMP: 91 °F HUMIDITY: 40 %R.H. WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: ___ MPH DIR: N NE E SE S SW W NW STEADY GUSTY
SKY: SUNNY CLEAR OVRCST PRTLY CLOUDY FOG RAIN OTHER:

ACOUSTIC MEASUREMENTS:
INSTRUMENT: LD 720 TYPE 1 2 SERIAL #: 0507
CALIBRATOR: CA250 SERIAL #: 3143
CALIBRATION CHECK: PRE-TEST 114 dBA SPL POST-TEST 114.0 dBA SPL WINDSCREEN .

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

REC #	START	END	L_{eq}	L_{max}	L_{min}	L_{90}	L_{50}	L_{10}	OTHER:	(TYPE?)
ST-IN 10	15:35	15:50	44.2	66.3	39.5	41.0	42.3	44.5		

(WINDOWS CLOSED - PER THE INSTRUCTOR, WINDOWS ARE ALWAYS CLOSED SO NO WINDOWS-OPEN MEAS'TS CONDUCTED)

COMMENTS: CLASSROOM #6 FANS/A/C OFF

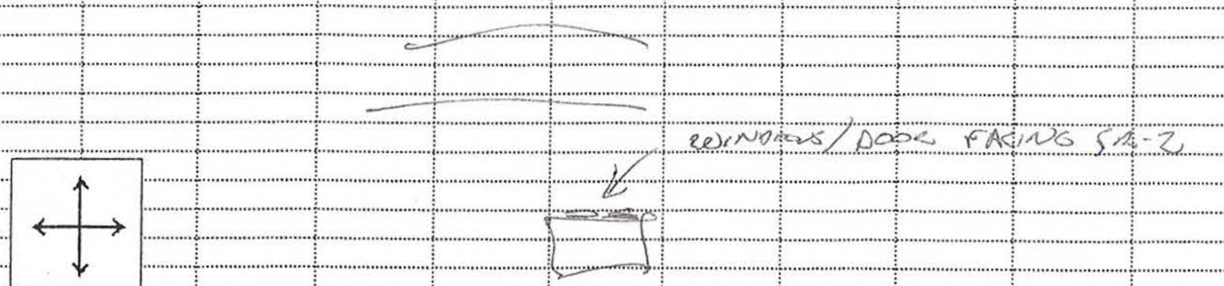
SOURCE INFO AND TRAFFIC COUNTS:
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
ROADWAY TYPE:
TRAFFIC COUNT DURATION: ___-MIN SPEED #2 COUNT SPEED

	NB / EB	SB / WB	NB / EB (SPEED)	SB / WB (SPEED)	#2 COUNT NB / EB	#2 COUNT SB / WB	SPEED NB / EB	SPEED SB / WB
AUTOS:		420						
MED. TRUCKS:		9						
HVY TRUCKS:		7						
BUSES:		3						
MOTORCYCLES:		1						

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

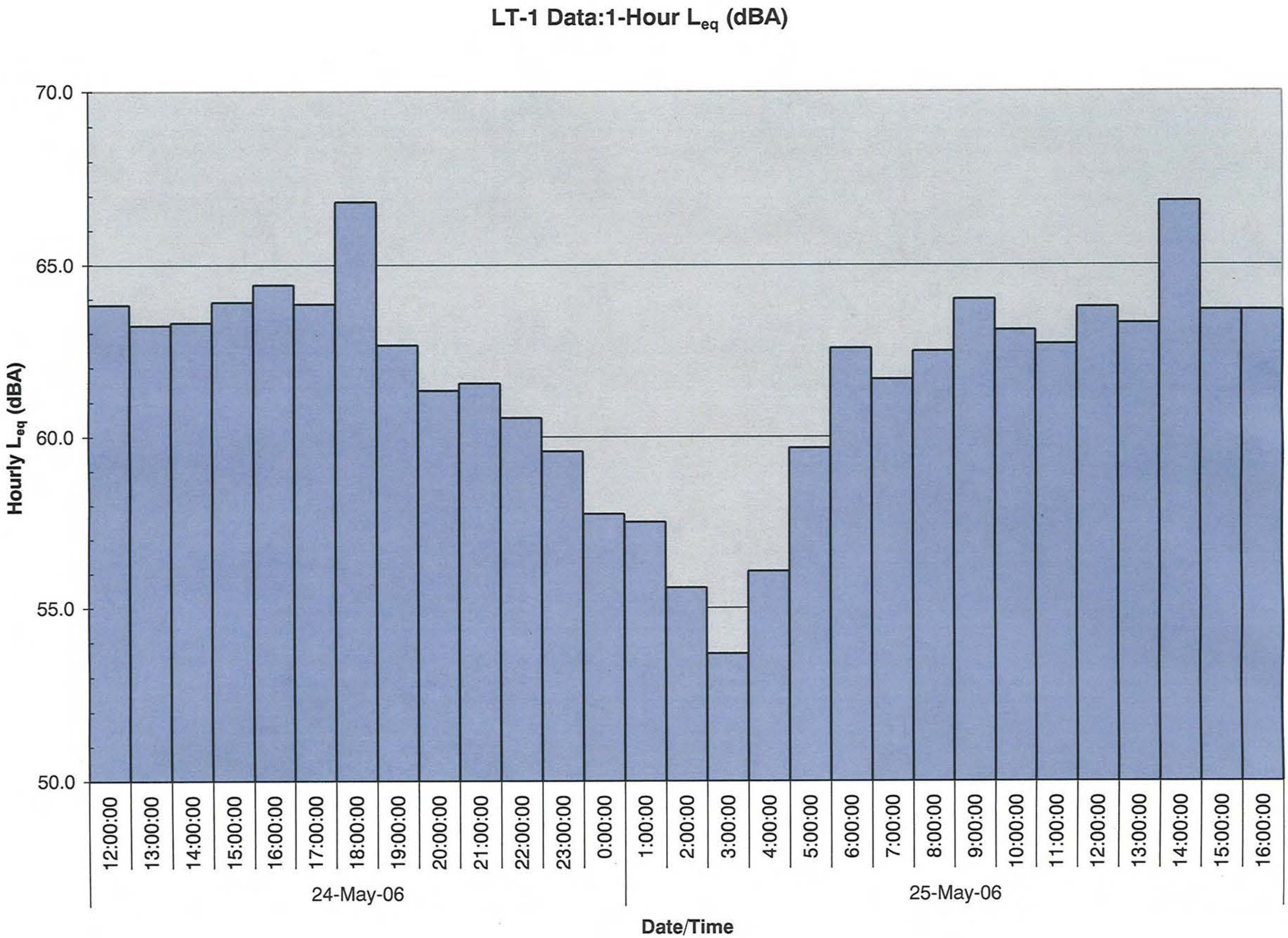
OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:

DESCRIPTION / SKETCH:
TERRAIN: HARD SOFT MIXED FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH:



Appendix C

Long-Term Noise Data Output


LT-1 Data:1-Hour L_{eq} (dBA)
70.0
65.0
60.0
55.0
50.0
Hourly L_{eq} (dBA)
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
18:00:00
19:00:00
20:00:00
21:00:00
22:00:00
23:00:00
0:00:00
1:00:00
2:00:00
3:00:00
4:00:00
5:00:00
6:00:00
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
24-May-06
25-May-06
Date/Time

C:\LARDA\ Interval Data

C:\LARDA\ Interval Data

Site	Meas Location	Number	Date	Time	Leq		
LT1	2147 Duan	Duane	24-May	11:43:38	61.8		
	0	LT1	2147	11:45:00	89		
	0	LT1	2147	12:00:00	64.5	2818383	63.8
	0	LT1	2147	12:15:00	64.6	2884032	
	0	LT1	2147	12:30:00	63.3	2137962	
	0	LT1	2147	12:45:00	62.6	1819701	
	0	LT1	2147	13:00:00	62.5	1778279	63.2
	0	LT1	2147	13:15:00	63.9	2454709	
	0	LT1	2147	13:30:00	63.2	2089296	
	0	LT1	2147	13:45:00	63.2	2089296	
	0	LT1	2147	14:00:00	63.2	2089296	63.3
	0	LT1	2147	14:15:00	63.4	2187762	
	0	LT1	2147	14:30:00	63.6	2290868	
	0	LT1	2147	14:45:00	63	1995262	
	0	LT1	2147	15:00:00	64	2511886	63.9
	0	LT1	2147	15:15:00	63.4	2187762	
	0	LT1	2147	15:30:00	64.1	2570396	
	0	LT1	2147	15:45:00	64.1	2570396	
	0	LT1	2147	16:00:00	64.3	2691535	64.4
	0	LT1	2147	16:15:00	65.8	3801894	
	0	LT1	2147	16:30:00	64	2511886	
	0	LT1	2147	16:45:00	63.1	2041738	
	0	LT1	2147	17:00:00	62.8	1905461	63.9
	0	LT1	2147	17:15:00	63	1995262	
	0	LT1	2147	17:30:00	63.4	2187762	
	0	LT1	2147	17:45:00	65.6	3630781	
	0	LT1	2147	18:00:00	71.4	13803843	66.8
	0	LT1	2147	18:15:00	62.3	1698244	
	0	LT1	2147	18:30:00	62.7	1862087	
	0	LT1	2147	18:45:00	62.8	1905461	
	0	LT1	2147	19:00:00	62.9	1949845	62.6
	0	LT1	2147	19:15:00	63.2	2089296	
	0	LT1	2147	19:30:00	62	1584893	
	0	LT1	2147	19:45:00	62.4	1737801	
	0	LT1	2147	20:00:00	61.3	1348963	61.3
	0	LT1	2147	20:15:00	61.7	1479108	
	0	LT1	2147	20:30:00	61.6	1445440	
	0	LT1	2147	20:45:00	60.7	1174898	
	0	LT1	2147	21:00:00	61.2	1318257	61.5
	0	LT1	2147	21:15:00	60.9	1230269	
	0	LT1	2147	21:30:00	62.8	1905461	
	0	LT1	2147	21:45:00	61	1258925	
	0	LT1	2147	22:00:00	60.7	1174898	60.6
	0	LT1	2147	22:15:00	60.8	1202264	
	0	LT1	2147	22:30:00	60.4	1096478	
	0	LT1	2147	22:45:00	60.3	1071519	
	0	LT1	2147	23:00:00	60.1	1023293	59.6
	0	LT1	2147	23:15:00	60.2	1047129	
	0	LT1	2147	23:30:00	59.4	870963.6	
	0	LT1	2147	23:45:00	58.4	691831	
	0	LT1	2147	0:00:00	58.5	707945.8	57.7
	0	LT1	2147	0:15:00	58.1	645654.2	
	0	LT1	2147	0:30:00	57.3	537031.8	
	0	LT1	2147	0:45:00	56.9	489778.8	
	0	LT1	2147	1:00:00	59.1	812830.5	57.5
	0	LT1	2147	1:15:00	56.3	426579.5	

0	LT1	2147	1:30:00	56.9	489778.8	
0	LT1	2147	1:45:00	57.2	524807.5	
0	LT1	2147	2:00:00	56.4	436515.8	55.6
0	LT1	2147	2:15:00	56.4	436515.8	
0	LT1	2147	2:30:00	53.7	234422.9	
0	LT1	2147	2:45:00	55.3	338844.2	
0	LT1	2147	3:00:00	52.2	165958.7	53.7
0	LT1	2147	3:15:00	54.1	257039.6	
0	LT1	2147	3:30:00	54.4	275422.9	
0	LT1	2147	3:45:00	53.7	234422.9	
0	LT1	2147	4:00:00	55.9	389045.1	56.1
0	LT1	2147	4:15:00	55.2	331131.1	
0	LT1	2147	4:30:00	56.2	416869.4	
0	LT1	2147	4:45:00	56.8	478630.1	
0	LT1	2147	5:00:00	58.2	660693.4	59.7
0	LT1	2147	5:15:00	58.6	724436	
0	LT1	2147	5:30:00	60.4	1096478	
0	LT1	2147	5:45:00	60.9	1230269	
0	LT1	2147	6:00:00	62.1	1621810	62.6
0	LT1	2147	6:15:00	63.2	2089296	
0	LT1	2147	6:30:00	63	1995262	
0	LT1	2147	6:45:00	61.8	1513561	
0	LT1	2147	7:00:00	61.7	1479108	61.7
0	LT1	2147	7:15:00	61.4	1380384	
0	LT1	2147	7:30:00	62.2	1659587	
0	LT1	2147	7:45:00	61.3	1348963	
0	LT1	2147	8:00:00	61.5	1412538	62.5
0	LT1	2147	8:15:00	61.6	1445440	
0	LT1	2147	8:30:00	64.7	2951209	
0	LT1	2147	8:45:00	61	1258925	
0	LT1	2147	9:00:00	63	1995262	64.0
0	LT1	2147	9:15:00	61.8	1513561	
0	LT1	2147	9:30:00	61.8	1513561	
0	LT1	2147	9:45:00	67	5011872	
0	LT1	2147	10:00:00	63.1	2041738	63.1
0	LT1	2147	10:15:00	63	1995262	
0	LT1	2147	10:30:00	63.6	2290868	
0	LT1	2147	10:45:00	62.6	1819701	
0	LT1	2147	11:00:00	61.9	1548817	62.7
0	LT1	2147	11:15:00	62.3	1698244	
0	LT1	2147	11:30:00	64	2511886	
0	LT1	2147	11:45:00	62.2	1659587	
0	LT1	2147	12:00:00	64.9	3090295	63.8
0	LT1	2147	12:15:00	64.1	2570396	
0	LT1	2147	12:30:00	62.9	1949845	
0	LT1	2147	12:45:00	62.8	1905461	
0	LT1	2147	13:00:00	63.6	2290868	63.3
0	LT1	2147	13:15:00	63.2	2089296	
0	LT1	2147	13:30:00	62.6	1819701	
0	LT1	2147	13:45:00	63.7	2344229	
0	LT1	2147	14:00:00	63	1995262	66.8
0	LT1	2147	14:15:00	65.3	3388442	
0	LT1	2147	14:30:00	70.6	11481536	
0	LT1	2147	14:45:00	63.9	2454709	
0	LT1	2147	15:00:00	63.5	2238721	63.7
0	LT1	2147	15:15:00	63.9	2454709	
0	LT1	2147	15:30:00	63.7	2344229	
0	LT1	2147	15:45:00	63.6	2290868	
0	LT1	2147	16:00:00	63.6	2290868	63.7
0	LT1	2147	16:15:00	63.9	2454709	
0	LT1	2147	16:30:00	63.5	2238721	
0	LT1	2147	16:45:00	63.7	2344229	
0	LT1	2147	17:00:00	83.9		

Date	Time	1-Hour L_{eq}						CNEL
			max	**67**				
			min	**58**	CNEL Weighting			
24-May-06	12:00:00	63.8				63.8	2415019	66.7
	13:00:00	63.2				63.2	2102895	66.7
	14:00:00	63.3				63.3	2140797	66.7
	15:00:00	63.9				63.9	2460110	66.8
	16:00:00	64.4				64.4	2761763	66.8
	17:00:00	63.9				63.9	2429816	66.8
	18:00:00	66.8				66.8	4817409	
	19:00:00	62.6				67.6	5820041	
	20:00:00	61.3				66.3	4307345	
	21:00:00	61.5				66.5	4516453	
	22:00:00	60.6				70.6	11362899	
	23:00:00	59.6				69.6	9083040	
	0:00:00	57.7				67.7	5951027	
25-May-06	1:00:00	57.5				67.5	5634991	
	2:00:00	55.6				65.6	3615747	
	3:00:00	53.7				63.7	2332110	
	4:00:00	56.1				66.1	4039189	
	5:00:00	59.7				69.7	9279691	
	6:00:00	62.6				72.6	18049824	
	7:00:00	61.7				61.7	1467011	
	8:00:00	62.5				62.5	1767028	
	9:00:00	64.0				64.0	2508564	
	10:00:00	63.1				63.1	2036892	
	11:00:00	62.7				62.7	1854633	
	12:00:00	63.8				63.8	2378999	
	13:00:00	63.3				63.3	2136023	
	14:00:00	66.8				66.8	4829987	
	15:00:00	63.7				63.7	2332132	
	16:00:00	63.7				63.7	2332132	

Appendix D

Computer Modeling Input and Output

Jones & Stokes					25 April 2007					
M Greene					TNM 2.5					
INPUT: ROADWAYS							Average pavement type shall be used unless			
PROJECT/CONTRACT:	<Project Name?>						a State highway agency substantiates the use			
RUN:	SR 2 Existing PM conditions						of a different type with the approval of FHWA			
Roadway		Points								
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt	On
							Device	Constraint	Vehicles	Type	Struct?
									Affected		
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	283	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.04				Average	
		point8	3	6,483,238.5	1,855,181.5	464.24				Average	
		point7	4	6,483,249.0	1,855,217.1	464.89					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	284	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.68				Average	
		point20	20	6,483,229.0	1,855,182.5	464.89				Average	
		point19	19	6,483,239.5	1,855,212.6	465.22					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	285	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.68				Average	
		point32	32	6,483,221.5	1,855,183.4	464.57				Average	
		point31	31	6,483,231.5	1,855,214.9	465.22					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,356.0	1,855,974.2	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,470.0	1,855,670.1	477.69				Average	

		point97	97	6,483,613.0	1,855,832.8	485.56				Average	
		point96	96	6,483,677.5	1,855,905.5	490.49				Average	
		point95	95	6,483,745.5	1,855,983.9	495.41				Average	
		point94	94	6,483,806.5	1,856,055.2	498.69				Average	
		point93	93	6,483,856.0	1,856,110.6	500.33				Average	
		point92	92	6,483,917.5	1,856,182.1	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,614.5	1,857,120.5	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,318.0	1,856,741.2	485.56				Average	
		point112	112	6,484,225.0	1,856,631.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,602.0	1,857,131.4	475.72				Average	
		point118	118	6,484,511.5	1,857,009.9	479.00				Average	
		point119	119	6,484,409.0	1,856,873.8	482.28				Average	
		point120	120	6,484,297.5	1,856,736.6	485.56				Average	
		point121	121	6,484,199.5	1,856,624.9	488.85					
SR 2 SB Off at Glendale Blvd	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,588.5	1,857,167.4	475.72				Average	
		point145	145	6,484,481.5	1,857,001.8	479.00				Average	
		point144	144	6,484,378.0	1,856,861.0	482.28				Average	
		point143	143	6,484,272.0	1,856,729.6	485.56				Average	
		point142	142	6,484,169.5	1,856,610.9	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	282	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,640.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	281	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point233	233	6,483,459.0	1,855,663.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,454.5	1,855,797.6	482.61					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point234	234	6,483,442.0	1,855,661.2	478.02				Average	
		point25	25	6,483,447.5	1,855,752.8	480.31				Average	
		point253	253	6,483,441.0	1,855,783.4	482.83					
Glendale Blvd SB - S of Alessandro	12.0	point235	235	6,483,409.5	1,855,669.1	478.67				Average	
		point53	53	6,483,359.5	1,855,543.0	474.08				Average	
		point52	52	6,483,332.0	1,855,477.0	472.44				Average	
		point51	51	6,483,273.0	1,855,365.4	469.16				Average	
		point50	50	6,483,245.0	1,855,302.5	467.52				Average	
		point49	49	6,483,208.5	1,855,187.2	464.89					
Glendale Blvd SB - S of Alessandro - 2	12.0	point236	236	6,483,395.5	1,855,673.0	478.35				Average	
		point62	62	6,483,351.5	1,855,560.6	473.75				Average	
		point61	61	6,483,328.5	1,855,512.2	472.44				Average	
		point60	60	6,483,267.0	1,855,388.6	469.16				Average	
		point59	59	6,483,238.5	1,855,324.8	467.52				Average	
		point58	58	6,483,197.5	1,855,188.0	464.57					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,231.5	1,855,214.9	465.22				Average	

		point30	30	6,483,263.0	1,855,298.0	469.16			Average
		point29	29	6,483,295.0	1,855,361.8	470.80			Average
		point28	28	6,483,351.5	1,855,470.0	472.44			Average
		point27	27	6,483,385.0	1,855,538.5	474.41			Average
		point26	26	6,483,442.0	1,855,661.2	478.02			
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,239.5	1,855,212.6	465.22			Average
		point18	18	6,483,272.0	1,855,294.5	467.52			Average
		point17	17	6,483,304.0	1,855,357.9	469.16			Average
		point16	16	6,483,359.5	1,855,467.4	472.44			Average
		point15	15	6,483,394.0	1,855,534.1	474.08			Average
		point14	14	6,483,459.0	1,855,663.8	477.69			
Glendale Blvd NB - S of Alessandro-2	12.0	point239	239	6,483,249.0	1,855,217.1	464.89			Average
		point6	5	6,483,279.0	1,855,286.0	466.54			Average
		point5	6	6,483,324.5	1,855,378.5	469.16			Average
		point4	7	6,483,356.0	1,855,437.4	471.46			Average
		point3	8	6,483,402.0	1,855,528.2	472.11			Average
		point2	9	6,483,431.0	1,855,584.6	475.72			Average
		point1	10	6,483,459.0	1,855,633.6	476.71			
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83			Average
		point87	87	6,484,435.5	1,856,781.5	485.56			Average
		point86	86	6,484,542.5	1,856,923.4	482.28			Average
		point278	278	6,484,624.0	1,857,047.6	479.00			Average
		point85	85	6,484,812.5	1,857,337.2	479.00			
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36			Average
		point83	83	6,483,529.0	1,855,715.2	479.00			Average
		point82	82	6,483,583.0	1,855,778.6	482.28			Average
		point81	81	6,483,644.0	1,855,848.9	487.20			Average
		point80	80	6,483,687.5	1,855,899.6	490.49			Average
		point79	79	6,483,729.5	1,855,948.1	493.77			Average
		point78	78	6,483,782.5	1,856,009.1	497.05			Average
		point77	77	6,483,842.5	1,856,076.1	500.33			Average
		point76	76	6,483,864.0	1,856,102.6	501.31			Average
		point75	75	6,483,886.0	1,856,126.8	500.33			Average
		point74	74	6,483,935.5	1,856,180.9	500.33			Average
		point73	73	6,484,051.0	1,856,300.9	498.69			Average
		point72	72	6,484,157.0	1,856,423.1	495.41			Average
		point71	71	6,484,255.0	1,856,531.4	492.78			Average
		point70	70	6,484,317.0	1,856,597.1	490.49			

SR2 NB-2	12.0	point247	247	6,484,317.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,504.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.89				Average	
		point48	48	6,483,150.5	1,854,833.5	457.68				Average	
		point286	286	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.57				Average	
		point57	57	6,483,146.0	1,854,849.0	457.68				Average	
		point287	287	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
SR 2 SB Trans into Glendale SB-2	12.0	point248	248	6,484,225.0	1,856,631.8	488.85				Average	
		point111	111	6,484,094.5	1,856,495.6	492.13				Average	
		point110	110	6,483,913.5	1,856,298.6	498.69				Average	
		point109	109	6,483,774.0	1,856,145.2	501.97				Average	
		point108	108	6,483,586.5	1,855,941.2	505.25				Average	
		point107	107	6,483,461.0	1,855,805.0	506.89				Average	
		point106	106	6,483,334.0	1,855,670.1	505.25				Average	
		point105	105	6,483,242.0	1,855,554.9	499.34				Average	
		point104	104	6,483,197.0	1,855,452.4	489.50				Average	
		point103	103	6,483,182.0	1,855,380.8	482.28				Average	
		point102	102	6,483,179.5	1,855,244.9	469.16				Average	
		point101	101	6,483,177.5	1,855,121.4	462.93				Average	
		point100	100	6,483,162.5	1,855,030.4	460.96				Average	
		point99	99	6,483,141.0	1,854,874.1	457.68					
SR 2 SB Trans into Glendale SB - 2-2	12.0	point249	249	6,484,199.5	1,856,624.9	488.85				Average	
		point122	122	6,484,075.0	1,856,492.1	492.13				Average	
		point123	123	6,483,898.5	1,856,300.9	498.69				Average	
		point124	124	6,483,766.0	1,856,156.8	501.97				Average	
		point125	125	6,483,564.5	1,855,937.8	505.25				Average	
		point126	126	6,483,456.0	1,855,817.4	506.89				Average	
		point127	127	6,483,297.0	1,855,647.1	505.25				Average	
		point128	128	6,483,229.0	1,855,556.1	500.33				Average	
		point129	129	6,483,186.5	1,855,455.9	490.49				Average	
		point130	130	6,483,165.5	1,855,374.0	482.28				Average	
		point131	131	6,483,166.0	1,855,239.1	469.16				Average	

		point132	132	6,483,167.0	1,855,136.4	462.60				Average	
		point133	133	6,483,156.5	1,855,051.0	460.96				Average	
		point134	134	6,483,133.5	1,854,905.6	457.68					
SR 2 SB Off at Glendale Blvd-2	12.0	point250	250	6,484,169.5	1,856,610.9	488.85				Average	
		point141	141	6,484,053.0	1,856,491.1	492.13				Average	
		point140	140	6,483,989.5	1,856,433.4	493.77				Average	
		point139	139	6,483,874.5	1,856,341.0	497.05				Average	
		point138	138	6,483,733.0	1,856,227.0	500.33				Average	
		point137	137	6,483,615.0	1,856,141.8	497.05				Average	
		point136	136	6,483,539.0	1,856,086.4	493.77				Average	
		point135	135	6,483,428.5	1,855,998.8	490.49					
Glendale Blvd NB - S of Alessandro - 3-2-2	12.0	point255	255	6,483,440.5	1,855,784.2	482.83				Average	
		point254	254	6,483,437.5	1,855,797.2	485.35					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,454.5	1,855,799.0	482.61				Average	
		point252	252	6,483,452.0	1,855,812.1	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,451.5	1,855,813.5	484.91				Average	
		point12	12	6,483,421.0	1,855,939.5	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd NB - S of Alessandro - 3-2-2-2	12.0	point258	258	6,483,437.0	1,855,798.6	485.35				Average	
		point24	24	6,483,406.5	1,855,934.2	487.86				Average	
		point23	23	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,357.5	1,855,972.1	490.81				Average	
		point271	271	6,483,395.0	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77				Average	
		point267	267	6,483,408.5	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,411.5	1,855,751.6	482.61				Average	
		point55	55	6,483,414.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,408.5	1,855,766.0	484.25				Average	
		point268	268	6,483,411.0	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,395.5	1,855,751.8	483.92				Average	
		point272	272	6,483,397.5	1,855,738.2	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,397.5	1,855,737.1	482.28				Average	
		point64	64	6,483,399.0	1,855,719.8	480.31				Average	
		point63	63	6,483,395.5	1,855,673.0	478.35					

Jones & Stokes			**25 April 2007**									
M Greene			**TNM 2.5**									
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	**<Project Name?>**											
RUN:	**SR 2 Existing PM conditions**											
Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1024	35	26	35	0	0	14	30	12	35
	point283	283	1024	35	26	35	0	0	14	30	12	35
	point9	2	1024	35	26	35	0	0	14	30	12	35
	point8	3	1024	35	26	35	0	0	14	30	12	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1024	35	26	35	0	0	14	30	12	35
	point284	284	1024	35	26	35	0	0	14	30	12	35
	point21	21	1024	35	26	35	0	0	14	30	12	35
	point20	20	1024	35	26	35	0	0	14	30	12	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1024	35	26	35	0	0	14	30	12	35
	point285	285	1024	35	26	35	0	0	14	30	12	35
	point33	33	1024	35	26	35	0	0	14	30	12	35
	point32	32	1024	35	26	35	0	0	14	30	12	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	328	35	8	35	0	0	5	30	4	35
	point40	40	328	35	8	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	328	35	8	35	0	0	5	30	4	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	243	35	6	35	0	0	3	30	3	35
	point45	45										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB N of SR2 Off -2	point46	46	243	35	6	35	0	0	3	30	3	35
	point47	47										
SR 2 NB - 2	point98	98	1375	65	15	65	25	60	5	60	0	0
	point97	97	1375	65	15	65	25	60	5	60	0	0
	point96	96	1375	65	15	65	25	60	5	60	0	0
	point95	95	1375	65	15	65	25	60	5	60	0	0
	point94	94	1375	65	15	65	25	60	5	60	0	0
	point93	93	1375	65	15	65	25	60	5	60	0	0
	point92	92	1375	65	15	65	25	60	5	60	0	0
	point91	91	1375	65	15	65	25	60	5	60	0	0
	point90	90	1375	65	15	65	25	60	5	60	0	0
	point89	89	1375	65	15	65	25	60	5	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	686	65	14	65	8	60	4	60	2	65
	point277	277	686	65	14	65	8	60	4	60	2	65
	point115	115	686	65	14	65	8	60	4	60	2	65
	point114	114	686	65	14	65	8	60	4	60	2	65
	point113	113	686	65	14	65	8	60	4	60	2	65
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	686	65	14	65	8	60	4	60	2	65
	point276	276	686	65	14	65	8	60	4	60	2	65
	point118	118	686	65	14	65	8	60	4	60	2	65
	point119	119	686	65	14	65	8	60	4	60	2	65
	point120	120	686	65	14	65	8	60	4	60	2	65
	point121	121										
SR 2 SB Off at Glendale Blvd	point146	146	238	65	3	65	4	60	1	60	0	0
	point275	275	238	65	3	65	4	60	1	60	0	0
	point145	145	238	65	3	65	4	60	1	60	0	0
	point144	144	238	65	3	65	4	60	1	60	0	0
	point143	143	238	65	3	65	4	60	1	60	0	0
	point142	142										
Fargo St NB	point147	147	96	25	4	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	45	25	2	25	0	0	0	0	0	0

	point150	150											
Waterloo St - 2	point151	151	26	25	1	25	0	0	0	0	0	0
	point152	152	26	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	26	25	1	25	0	0	0	0	0	0
	point155	155	26	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	230	35	7	35	0	0	13	30	0	0
	point181	282	230	35	7	35	0	0	13	30	0	0
	point180	180	230	35	7	35	0	0	13	30	0	0
	point179	179	230	35	7	35	0	0	13	30	0	0
	point178	178	230	35	7	35	0	0	13	30	0	0
	point177	177	230	35	7	35	0	0	13	30	0	0
	point176	176	230	35	7	35	0	0	13	30	0	0
	point175	175	230	35	7	35	0	0	13	30	0	0
	point174	174	230	35	7	35	0	0	13	30	0	0
	point173	173	230	35	7	35	0	0	13	30	0	0
	point172	172	230	35	7	35	0	0	13	30	0	0
	point171	171	230	35	7	35	0	0	13	30	0	0
	point170	170	230	35	7	35	0	0	13	30	0	0
	point169	169	230	35	7	35	0	0	13	30	0	0
	point168	168	230	35	7	35	0	0	13	30	0	0
	point167	167	230	35	7	35	0	0	13	30	0	0
	point166	166	230	35	7	35	0	0	13	30	0	0
	point165	165	230	35	7	35	0	0	13	30	0	0
	point164	164	230	35	7	35	0	0	13	30	0	0
	point163	163	230	35	7	35	0	0	13	30	0	0
	point162	162	230	35	7	35	0	0	13	30	0	0
	point161	161	230	35	7	35	0	0	13	30	0	0
	point160	160	230	35	7	35	0	0	13	30	0	0
	point159	159	230	35	7	35	0	0	13	30	0	0
	point158	158	230	35	7	35	0	0	13	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	916	65	10	65	17	60	3	60	0	0

	point203	203	916	65	10	65	17	60	3	60	0	0
	point202	202	916	65	10	65	17	60	3	60	0	0
	point201	201	916	65	10	65	17	60	3	60	0	0
	point279	279	916	65	10	65	17	60	3	60	0	0
	point200	200										
Alessandro NB	point228	228	124	35	4	35	0	0	7	30	0	0
	point227	227	124	35	4	35	0	0	7	30	0	0
	point226	226	124	35	4	35	0	0	7	30	0	0
	point225	225	124	35	4	35	0	0	7	30	0	0
	point224	224	124	35	4	35	0	0	7	30	0	0
	point223	223	124	35	4	35	0	0	7	30	0	0
	point222	222	124	35	4	35	0	0	7	30	0	0
	point221	221	124	35	4	35	0	0	7	30	0	0
	point220	220	124	35	4	35	0	0	7	30	0	0
	point219	219	124	35	4	35	0	0	7	30	0	0
	point218	218	124	35	4	35	0	0	7	30	0	0
	point217	217	124	35	4	35	0	0	7	30	0	0
	point216	216	124	35	4	35	0	0	7	30	0	0
	point215	215	124	35	4	35	0	0	7	30	0	0
	point214	214	124	35	4	35	0	0	7	30	0	0
	point213	213	124	35	4	35	0	0	7	30	0	0
	point212	212	124	35	4	35	0	0	7	30	0	0
	point211	211	124	35	4	35	0	0	7	30	0	0
	point210	210	124	35	4	35	0	0	7	30	0	0
	point209	209	124	35	4	35	0	0	7	30	0	0
	point208	208	124	35	4	35	0	0	7	30	0	0
	point207	207	124	35	4	35	0	0	7	30	0	0
	point206	206	124	35	4	35	0	0	7	30	0	0
	point205	281	124	35	4	35	0	0	7	30	0	0
	point286	205										
Glendale Blvd NB - S of Alessandro - 2-2	point233	233	224	35	6	35	0	0	3	30	3	35
	point13	13	224	35	6	35	0	0	3	30	3	35
	point251	251										
Glendale Blvd NB - S of Alessandro - 3-2	point234	234	224	35	6	35	0	0	3	30	3	35

	point25	25	224	35	6	35	0	0	3	30	3	35
	point253	253										
Glendale Blvd SB - S of Alessandro	point235	235	213	35	5	35	0	0	3	30	3	35
	point53	53	213	35	5	35	0	0	3	30	3	35
	point52	52	213	35	5	35	0	0	3	30	3	35
	point51	51	213	35	5	35	0	0	3	30	3	35
	point50	50	213	35	5	35	0	0	3	30	3	35
	point49	49										
Glendale Blvd SB - S of Alessandro - 2	point236	236	213	35	5	35	0	0	3	30	3	35
	point62	62	213	35	5	35	0	0	3	30	3	35
	point61	61	213	35	5	35	0	0	3	30	3	35
	point60	60	213	35	5	35	0	0	3	30	3	35
	point59	59	213	35	5	35	0	0	3	30	3	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1050	35	27	35	0	0	15	30	12	35
	point30	30	1050	35	27	35	0	0	15	30	12	35
	point29	29	1050	35	27	35	0	0	15	30	12	35
	point28	28	1050	35	27	35	0	0	15	30	12	35
	point27	27	1050	35	27	35	0	0	15	30	12	35
	point26	26										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1050	35	27	35	0	0	15	30	12	35
	point18	18	1050	35	27	35	0	0	15	30	12	35
	point17	17	1050	35	27	35	0	0	15	30	12	35
	point16	16	1050	35	27	35	0	0	15	30	12	35
	point15	15	1050	35	27	35	0	0	15	30	12	35
	point14	14										
Glendale Blvd NB - S of Alessandro-2	point239	239	1050	35	27	35	0	0	15	30	12	35
	point6	5	1050	35	27	35	0	0	15	30	12	35
	point5	6	1050	35	27	35	0	0	15	30	12	35
	point4	7	1050	35	27	35	0	0	15	30	12	35
	point3	8	1050	35	27	35	0	0	15	30	12	35
	point2	9	1050	35	27	35	0	0	15	30	12	35
	point1	10										
SR 2 NB - 2-2	point243	243	916	65	10	65	17	60	3	60	0	0

	point87	87	916	65	10	65	17	60	3	60	0	0
	point86	86	916	65	10	65	17	60	3	60	0	0
	point278	278	916	65	10	65	17	60	3	60	0	0
	point85	85										
SR2 NB	point84	84	1375	65	15	65	25	60	5	60	0	0
	point83	83	1375	65	15	65	25	60	5	60	0	0
	point82	82	1375	65	15	65	25	60	5	60	0	0
	point81	81	1375	65	15	65	25	60	5	60	0	0
	point80	80	1375	65	15	65	25	60	5	60	0	0
	point79	79	1375	65	15	65	25	60	5	60	0	0
	point78	78	1375	65	15	65	25	60	5	60	0	0
	point77	77	1375	65	15	65	25	60	5	60	0	0
	point76	76	1375	65	15	65	25	60	5	60	0	0
	point75	75	1375	65	15	65	25	60	5	60	0	0
	point74	74	1375	65	15	65	25	60	5	60	0	0
	point73	73	1375	65	15	65	25	60	5	60	0	0
	point72	72	1375	65	15	65	25	60	5	60	0	0
	point71	71	1375	65	15	65	25	60	5	60	0	0
	point70	70										
SR2 NB-2	point247	247	916	65	10	65	17	60	3	60	0	0
	point242	242	916	65	10	65	17	60	3	60	0	0
	point230	230	916	65	10	65	17	60	3	60	0	0
	point281	280	916	65	10	65	17	60	3	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	965	35	24	35	0	0	13	30	11	35
	point48	48	965	35	24	35	0	0	13	30	11	35
	point286	286	965	35	24	35	0	0	13	30	11	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	965	35	24	35	0	0	13	30	11	35
	point57	57	965	35	24	35	0	0	13	30	11	35
	point287	287	965	35	24	35	0	0	13	30	11	35
	point68	68										
SR 2 SB Trans into Glendale SB-2	point248	248	749	65	8	65	14	60	3	60	0	0
	point111	111	749	65	8	65	14	60	3	60	0	0

	point110	110	749	65	8	65	14	60	3	60	0	0
	point109	109	749	65	8	65	14	60	3	60	0	0
	point108	108	749	65	8	65	14	60	3	60	0	0
	point107	107	749	65	8	65	14	60	3	60	0	0
	point106	106	749	65	8	65	14	60	3	60	0	0
	point105	105	749	50	8	50	14	45	3	45	0	0
	point104	104	749	50	8	50	14	45	3	45	0	0
	point103	103	749	35	8	35	14	30	3	30	0	0
	point102	102	749	35	8	35	14	30	3	30	0	0
	point101	101	749	35	8	35	14	30	3	30	0	0
	point100	100	749	35	8	35	14	30	3	30	0	0
	point99	99										
SR 2 SB Trans into Glendale SB - 2-2	point249	249	749	65	8	65	14	60	3	60	0	0
	point122	122	749	65	8	65	14	60	3	60	0	0
	point123	123	749	65	8	65	14	60	3	60	0	0
	point124	124	749	65	8	65	14	60	3	60	0	0
	point125	125	749	65	8	65	14	60	3	60	0	0
	point126	126	749	65	8	65	14	60	3	60	0	0
	point127	127	749	65	8	65	14	60	3	60	0	0
	point128	128	749	50	8	50	14	45	3	45	0	0
	point129	129	749	50	8	50	14	45	3	45	0	0
	point130	130	749	35	8	35	14	30	3	30	0	0
	point131	131	749	35	8	35	14	30	3	30	0	0
	point132	132	749	35	8	35	14	30	3	30	0	0
	point133	133	749	35	8	35	14	30	3	30	0	0
	point134	134										
SR 2 SB Off at Glendale Blvd-2	point250	250	238	35	3	35	4	30	1	30	0	0
	point141	141	238	35	3	35	4	30	1	30	0	0
	point140	140	238	35	3	35	4	30	1	30	0	0
	point139	139	238	35	3	35	4	30	1	30	0	0
	point138	138	238	35	3	35	4	30	1	30	0	0
	point137	137	238	35	3	35	4	30	1	30	0	0
	point136	136	238	35	3	35	4	30	1	30	0	0
	point135	135										

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

Glendale Blvd NB - S of Alessandro - 3-2-2	point255	255	224	35	6	35	0	0	3	30	3	35
	point254	254										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	224	35	6	35	0	0	3	30	3	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	224	35	6	35	0	0	3	30	3	35
	point12	12	224	35	6	35	0	0	3	30	3	35
	point11	11										
Glendale Blvd NB - S of Alessandro - 3-2-2-	point258	258	224	35	6	35	0	0	3	30	3	35
	point24	24	224	35	6	35	0	0	3	30	3	35
	point23	23										
Glendale Blvd SB - N of Alessandro - 2	point65	65	256	35	6	35	0	0	4	30	3	35
	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	256	35	6	35	0	0	4	30	3	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	256	35	6	35	0	0	4	30	3	35
	point55	55	256	35	6	35	0	0	4	30	3	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	256	35	6	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	256	35	6	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	256	35	6	35	0	0	4	30	3	35
	point64	64	256	35	6	35	0	0	4	30	3	35
	point63	63										

Jones & Stokes 25 April 2007
M Greene TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	5	3	6,483,201.5	1,854,565.8	456.04	4.92	0.00	66	10.0	8.0	
M2	6	1	6,483,277.0	1,854,804.1	465.88	4.92	0.00	66	10.0	8.0	
M3	7	1	6,483,415.0	1,854,804.1	485.56	4.92	0.00	66	10.0	8.0	
LT1	8	3	6,483,420.5	1,855,201.2	490.00	4.92	0.00	66	10.0	8.0	Y
M4	9	2	6,483,477.0	1,855,442.9	513.45	4.92	0.00	66	10.0	8.0	
M4B	10	4	6,483,625.0	1,855,413.4	554.46	4.92	0.00	66	10.0	8.0	
M5	11	3	6,483,675.0	1,855,604.2	524.93	4.92	0.00	66	10.0	8.0	
M5B	12	5	6,483,842.5	1,855,604.2	600.39	4.92	0.00	66	10.0	8.0	
M6	13	1	6,483,798.0	1,855,847.1	540.00	4.92	0.00	66	10.0	8.0	
M6B	14	6	6,484,126.0	1,855,916.0	600.39	4.92	0.00	66	10.0	8.0	
ST2	15	11	6,484,036.5	1,856,041.5	545.00	4.92	0.00	66	10.0	8.0	
M7	16	5	6,484,234.5	1,856,282.2	535.00	4.92	0.00	66	10.0	8.0	
M7B	17	5	6,484,378.5	1,856,269.1	583.99	4.92	0.00	66	10.0	8.0	
ST3	18	9	6,484,498.0	1,856,566.2	514.00	4.92	0.00	66	10.0	8.0	
M8	19	6	6,484,612.5	1,856,728.8	505.00	4.92	0.00	66	10.0	8.0	
M8B	20	5	6,484,685.0	1,856,566.2	551.18	4.92	0.00	66	10.0	8.0	
ST4	21	11	6,484,708.0	1,856,841.0	487.00	4.92	0.00	66	10.0	8.0	
M8C	22	8	6,484,782.0	1,857,036.6	470.80	4.92	0.00	66	10.0	8.0	
ST5	23	5	6,484,494.5	1,857,197.4	492.13	4.92	0.00	66	10.0	8.0	
M9	24	4	6,484,366.0	1,856,999.4	500.00	4.92	0.00	66	10.0	8.0	
M9B	25	7	6,484,326.5	1,857,158.8	495.41	4.92	0.00	66	10.0	8.0	
M9C	27	4	6,484,384.5	1,857,338.4	497.05	4.92	0.00	66	10.0	8.0	

INPUT: RECEIVERS <Project Name?>

M9D	29	4	6,484,216.0	1,856,963.4	503.94	4.92	0.00	66	10.0	8.0		
ST6	31	3	6,484,280.5	1,856,893.5	500.00	4.92	0.00	66	10.0	8.0		
M10	32	4	6,484,088.5	1,856,734.5	505.00	4.92	0.00	66	10.0	8.0		
M10B	34	4	6,484,049.0	1,856,859.2	514.11	4.92	0.00	66	10.0	8.0		
M11	35	5	6,483,887.0	1,856,580.8	518.00	4.92	0.00	66	10.0	8.0		
M11B	37	6	6,483,887.0	1,856,712.0	528.00	4.92	0.00	66	10.0	8.0		
ST7	39	5	6,483,618.0	1,856,267.6	507.00	4.92	0.00	66	10.0	8.0		
M12	40	5	6,483,496.5	1,856,186.9	502.00	4.92	0.00	66	10.0	8.0		
M12B	41	4	6,483,470.5	1,856,357.5	521.65	4.92	0.00	66	10.0	8.0		
M13	43	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0		
ST1	44	7	6,483,303.0	1,855,961.8	492.13	4.92	0.00	66	10.0	8.0	Y	
M14	45	1	6,483,285.5	1,855,907.4	492.13	4.92	0.00	66	10.0	8.0	Y	
M15	47	1	6,483,110.0	1,855,511.8	488.85	4.92	0.00	66	10.0	8.0		
M15B	49	6	6,483,001.5	1,855,616.8	495.41	4.92	0.00	66	10.0	8.0		

Jones & Stokes 25 April 2007
M Greene TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions

Barrier Name	Type	Height Min	Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	Top Width	Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Perturbs Incre-ment	#Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier5	W	0.00	99.99	0.00				0.00	point28	28	6,484,006.5	1,856,432.1	490.49	0.00	0.00	0	0		
									point29	29	6,483,879.0	1,856,298.0	498.69	0.00	0.00	0	0		
									point30	30	6,483,673.0	1,856,071.0	503.61	0.00	0.00	0	0		
									point31	31	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point32	32	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0	Y	
									point33	33	6,483,344.5	1,855,732.9	505.25	0.00	0.00	0	0		
									point34	34	6,483,292.0	1,855,687.4	501.97	0.00	0.00	0	0		

									point35	35	6,483,204.5	1,855,575.1	497.05	0.00	0.00	0	0		
									point36	36	6,483,174.0	1,855,507.8	492.13	0.00	0.00	0	0		
									point37	37	6,483,161.5	1,855,451.5	488.85	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	121	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier14	W	0.00	100.00	0.00				0.00	point102	102	6,483,189.0	1,855,295.9	472.44	2.89	0.00	0	0		
									point103	103	6,483,194.5	1,855,393.2	482.28	2.89	0.00	0	0		
									point104	104	6,483,217.5	1,855,478.6	492.13	2.89	0.00	0	0		
									point105	105	6,483,274.0	1,855,583.6	501.97	2.89	0.00	0	0		
									point106	106	6,483,349.0	1,855,675.5	506.89	2.89	0.00	0	0	Y	

									point107	107	6,483,459.0	1,855,793.0	506.89	2.89	0.00	0	0	Y		
									point108	119	6,483,608.5	1,855,945.5	505.25	2.89	0.00	0	0			
									point109	120	6,483,777.5	1,856,132.9	501.97	2.89	0.00	0	0			
									point110	108	6,483,988.5	1,856,337.5	497.05	2.89						
Barrier15	W	0.00	100.00	0.00				0.00	point109	109	6,483,150.0	1,855,277.6	472.44	2.89	0.00	0	0			
									point110	110	6,483,153.5	1,855,373.0	482.28	2.89	0.00	0	0			
									point111	111	6,483,174.0	1,855,458.8	492.13	2.89	0.00	0	0			
									point112	112	6,483,216.0	1,855,560.0	501.97	2.89	0.00	0	0			
									point113	113	6,483,279.0	1,855,649.6	506.89	2.89	0.00	0	0	Y		
									point114	114	6,483,446.5	1,855,826.8	506.89	2.89	0.00	0	0	Y		
									point115	115	6,483,554.0	1,855,943.2	505.25	2.89						

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: RECEIVER ADJUSTMENT FACTORS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Existing PM conditions				
Receiver					
Name	No.	Individual Roadway Segment Adjustment Factors			
		Roadway	Segment		
		Name	Name	No.	Adj. Factor
					dB
<< This table is empty >>					

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: "STRUCTURE" BARRIERS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Existing PM conditions				
Barrier	**Segments**		**Shielded Roadways**	**Segments**	
Name	**Name**	**No.**	**Name**	**Name**	**No.**
Barrier4	point24	24	SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB-2	point108	108
			SR 2 SB Trans into Glendale SB-2	point107	107
Barrier5	point32	32	SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB-2	point108	108
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
Barrier6	point38	38	Fargo St NB	point147	147
Barrier7	point40	40	Fargo St SB	point149	149
Barrier14	point106	106	SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB-2	point108	108
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB - 2-2	point126	126
Barrier14	point107	107	SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB-2	point108	108
Barrier15	point113	113	SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB-2	point108	108
Barrier15	point114	114	SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB-2	point108	108

INPUT: "STRUCTURE" BARRIERS

<Project Name?>

				SR 2 SB Trans into Glendale SB-2	point107	107
				SR 2 SB Trans into Glendale SB - 2-2	point126	126

RESULTS: SOUND LEVELS <Project Name?>

Jones & Stokes 25 April 2007

M Greene TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: <Project Name?>

RUN: SR 2 Existing PM conditions

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	5	3	0.0	67.3	66	67.3	10	Snd Lvl	67.3	0.0	8	-8.0
M2	6	1	0.0	61.3	66	61.3	10	----	61.3	0.0	8	-8.0
M3	7	1	0.0	57.9	66	57.9	10	----	57.9	0.0	8	-8.0
LT1	8	3	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0
M4	9	2	0.0	65.5	66	65.5	10	----	65.5	0.0	8	-8.0
M4B	10	4	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
M5	11	3	0.0	61.1	66	61.1	10	----	61.1	0.0	8	-8.0
M5B	12	5	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
M6	13	1	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
M6B	14	6	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
ST2	15	11	0.0	65.8	66	65.8	10	----	65.8	0.0	8	-8.0
M7	16	5	0.0	70.0	66	70.0	10	Snd Lvl	70.0	0.0	8	-8.0
M7B	17	5	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0
ST3	18	9	0.0	68.0	66	68.0	10	Snd Lvl	68.0	0.0	8	-8.0
M8	19	6	0.0	70.9	66	70.9	10	Snd Lvl	70.9	0.0	8	-8.0
M8B	20	5	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
ST4	21	11	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
M8C	22	8	0.0	69.4	66	69.4	10	Snd Lvl	69.4	0.0	8	-8.0
ST5	23	5	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
M9	24	4	0.0	66.8	66	66.8	10	Snd Lvl	66.8	0.0	8	-8.0
M9B	25	7	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0
M9C	27	4	0.0	59.7	66	59.7	10	----	59.7	0.0	8	-8.0
M9D	29	4	0.0	61.7	66	61.7	10	----	61.7	0.0	8	-8.0

ST6	31	3	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
M10	32	4	0.0	66.2	66	66.2	10	Snd Lvl	66.2	0.0	8	-8.0
M10B	34	4	0.0	62.6	66	62.6	10	----	62.6	0.0	8	-8.0
M11	35	5	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0
M11B	37	6	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
ST7	39	5	0.0	66.3	66	66.3	10	Snd Lvl	66.3	0.0	8	-8.0
M12	40	5	0.0	64.0	66	64.0	10	----	64.0	0.0	8	-8.0
M12B	41	4	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
M13	43	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
ST1	44	7	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
M14	45	1	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
M15	47	1	0.0	60.4	66	60.4	10	----	60.4	0.0	8	-8.0
M15B	49	6	0.0	58.2	66	58.2	10	----	58.2	0.0	8	-8.0

Dwelling Units		**# DUs**	**Noise Reduction**		
			Min	**Avg**	**Max**
			dB	**dB**	**dB**
All Selected		165	0.0	0.0	0.0
All Impacted		76	0.0	0.0	0.0
All that meet NR Goal		0	0.0	0.0	0.0

Jones & Stokes				25 April 2007							
M Greene				TNM 2.5							
INPUT: ROADWAYS							Average pavement type shall be used unless				
PROJECT/CONTRACT:	<Project Name?>						a State highway agency substantiates the use				
RUN:	SR 2 Existing PM conditions						of a different type with the approval of FHWA				
Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control	Speed	Percent	Pvmt	On
							Device	Constraint	Vehicles	Type	Struct?
									Affected		
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	285	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,249.0	1,855,216.6	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	286	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.0	1,855,212.0	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	287	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.0	1,855,214.6	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,356.0	1,855,974.2	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,470.0	1,855,670.1	477.69				Average	

		point97	97	6,483,613.0	1,855,832.8	485.56				Average	
		point96	96	6,483,677.5	1,855,905.5	490.49				Average	
		point95	95	6,483,745.5	1,855,983.9	495.41				Average	
		point94	94	6,483,806.5	1,856,055.2	498.69				Average	
		point93	93	6,483,856.0	1,856,110.6	500.33				Average	
		point92	92	6,483,917.5	1,856,182.1	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,614.5	1,857,120.5	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,318.0	1,856,741.2	485.56				Average	
		point112	112	6,484,225.0	1,856,631.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,602.0	1,857,131.4	475.72				Average	
		point118	118	6,484,511.5	1,857,009.9	479.00				Average	
		point119	119	6,484,409.0	1,856,873.8	482.28				Average	
		point120	120	6,484,297.5	1,856,736.6	485.56				Average	
		point121	121	6,484,199.5	1,856,624.9	488.85					
SR 2 SB Off at Glendale Blvd	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,588.5	1,857,167.4	475.72				Average	
		point145	145	6,484,481.5	1,857,001.8	479.00				Average	
		point144	144	6,484,378.0	1,856,861.0	482.28				Average	
		point143	143	6,484,272.0	1,856,729.6	485.56				Average	
		point142	142	6,484,169.5	1,856,610.9	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	284	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,640.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	283	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2	12.0	point233	233	6,483,459.0	1,855,663.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,454.5	1,855,797.6	482.61					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point234	234	6,483,442.0	1,855,661.2	478.02				Average	
		point25	25	6,483,447.5	1,855,752.8	480.31				Average	
		point253	253	6,483,441.0	1,855,783.4	482.83					
Glendale Blvd SB - S of Alessandro	12.0	point235	235	6,483,409.5	1,855,669.1	478.67				Average	
		point53	53	6,483,359.5	1,855,543.0	474.08				Average	
		point52	52	6,483,332.0	1,855,477.0	472.44				Average	
		point51	51	6,483,273.0	1,855,365.4	469.16				Average	
		point50	50	6,483,245.0	1,855,302.5	467.52				Average	
		point49	49	6,483,208.5	1,855,187.8	464.89					
Glendale Blvd SB - S of Alessandro - 2	12.0	point236	236	6,483,395.5	1,855,673.0	478.35				Average	
		point62	62	6,483,351.5	1,855,560.6	473.75				Average	
		point61	61	6,483,328.5	1,855,512.2	472.44				Average	
		point60	60	6,483,267.0	1,855,388.6	469.16				Average	
		point59	59	6,483,238.5	1,855,325.1	467.52				Average	
		point58	58	6,483,197.5	1,855,188.4	464.57					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point237	237	6,483,231.5	1,855,214.9	465.22				Average	

		point30	30	6,483,263.0	1,855,298.0	469.16				Average	
		point29	29	6,483,295.0	1,855,361.8	470.80				Average	
		point28	28	6,483,351.5	1,855,470.0	472.44				Average	
		point27	27	6,483,385.0	1,855,538.5	474.41				Average	
		point26	26	6,483,442.0	1,855,661.2	478.02					
Glendale Blvd NB -N of Alessandro -2-	12.0	point238	238	6,483,239.5	1,855,212.6	465.22				Average	
		point18	18	6,483,272.0	1,855,294.5	467.52				Average	
		point17	17	6,483,304.0	1,855,357.9	469.16				Average	
		point16	16	6,483,359.5	1,855,467.4	472.44				Average	
		point15	15	6,483,394.0	1,855,534.1	474.08				Average	
		point14	14	6,483,459.0	1,855,663.8	477.69					
Glendale Blvd NB - N of Alessandro-2	12.0	point239	239	6,483,249.0	1,855,217.1	464.89				Average	
		point6	5	6,483,279.0	1,855,286.0	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,402.0	1,855,528.2	472.11				Average	
		point2	9	6,483,431.0	1,855,584.6	475.72				Average	
		point1	10	6,483,459.0	1,855,633.6	476.71					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36				Average	
		point83	83	6,483,529.0	1,855,715.2	479.00				Average	
		point82	82	6,483,583.0	1,855,778.6	482.28				Average	
		point81	81	6,483,644.0	1,855,848.9	487.20				Average	
		point80	80	6,483,687.5	1,855,899.6	490.49				Average	
		point79	79	6,483,729.5	1,855,948.1	493.77				Average	
		point78	78	6,483,782.5	1,856,009.1	497.05				Average	
		point77	77	6,483,842.5	1,856,076.1	500.33				Average	
		point76	76	6,483,864.0	1,856,102.6	501.31				Average	
		point75	75	6,483,886.0	1,856,126.8	500.33				Average	
		point74	74	6,483,935.5	1,856,180.9	500.33				Average	
		point73	73	6,484,051.0	1,856,300.9	498.69				Average	
		point72	72	6,484,157.0	1,856,423.1	495.41				Average	
		point71	71	6,484,255.0	1,856,531.4	492.78				Average	
		point70	70	6,484,317.0	1,856,597.1	490.49					

SR2 NB-2	12.0	point247	247	6,484,317.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,504.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	
		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	288	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	289	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
SR 2 SB Trans into Glendale SB-2	12.0	point248	248	6,484,225.0	1,856,631.8	488.85				Average	
		point111	111	6,484,094.5	1,856,495.6	492.13				Average	
		point110	110	6,483,913.5	1,856,298.6	498.69				Average	
		point109	109	6,483,774.0	1,856,145.2	501.97				Average	
		point108	108	6,483,586.5	1,855,941.2	505.25				Average	
		point107	107	6,483,461.0	1,855,805.0	506.89				Average	
		point106	106	6,483,334.0	1,855,670.1	505.25				Average	
		point105	105	6,483,242.0	1,855,554.9	499.34					
SR 2 SB Trans into Glendale SB - 2-2	12.0	point249	249	6,484,199.5	1,856,624.9	488.85				Average	
		point122	122	6,484,075.0	1,856,492.1	492.13				Average	
		point123	123	6,483,898.5	1,856,300.9	498.69				Average	
		point124	124	6,483,766.0	1,856,156.8	501.97				Average	
		point125	125	6,483,564.5	1,855,937.8	505.25				Average	
		point126	126	6,483,456.0	1,855,817.4	506.89				Average	
		point127	127	6,483,297.0	1,855,647.1	505.25				Average	
		point128	128	6,483,229.0	1,855,556.1	500.33					
SR 2 SB Off at Glendale Blvd-2	12.0	point250	250	6,484,169.5	1,856,610.9	488.85				Average	
		point141	141	6,484,053.0	1,856,491.1	492.13				Average	
		point140	140	6,483,989.5	1,856,433.4	493.77				Average	
		point139	139	6,483,874.5	1,856,341.0	497.05				Average	
		point138	138	6,483,733.0	1,856,227.0	500.33				Average	
		point137	137	6,483,615.0	1,856,141.8	497.05				Average	
		point136	136	6,483,539.0	1,856,086.4	493.77				Average	
		point135	135	6,483,428.5	1,855,998.8	490.49					
Glendale Blvd NB -N of Alessandro -3-2	12.0	point255	255	6,483,440.5	1,855,784.2	482.83				Average	

		point254	254	6,483,437.5	1,855,797.2	485.35					
Glendale Blvd NB - N of Alessandro -2	12.0	point256	256	6,483,454.5	1,855,799.0	482.61				Average	
		point252	252	6,483,452.0	1,855,812.1	484.91					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point257	257	6,483,451.5	1,855,813.5	484.91				Average	
		point12	12	6,483,421.0	1,855,939.5	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd NB - N of Alessandro - 3	12.0	point258	258	6,483,437.0	1,855,798.6	485.35				Average	
		point24	24	6,483,406.5	1,855,934.2	487.86				Average	
		point23	23	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,357.5	1,855,972.1	490.81				Average	
		point271	271	6,483,395.0	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77				Average	
		point267	267	6,483,408.5	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,411.5	1,855,751.6	482.61				Average	
		point55	55	6,483,414.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,408.5	1,855,766.0	484.25				Average	
		point268	268	6,483,411.0	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,395.5	1,855,751.8	483.92				Average	
		point272	272	6,483,397.5	1,855,738.2	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,397.5	1,855,737.1	482.28				Average	
		point64	64	6,483,399.0	1,855,719.8	480.31				Average	
		point63	63	6,483,395.5	1,855,673.0	478.35					
SR 2 SB Trans into Glendale SB - 2-2-2	12.0	point281	281	6,483,229.0	1,855,556.1	500.33				Average	
		point129	129	6,483,186.5	1,855,455.9	490.49				Average	
		point130	130	6,483,165.5	1,855,374.0	482.28				Average	
		point131	131	6,483,166.0	1,855,239.1	469.16				Average	
		point132	132	6,483,167.0	1,855,136.4	462.60				Average	
		point133	133	6,483,156.5	1,855,051.0	460.96				Average	
		point134	134	6,483,133.5	1,854,905.6	457.68					
SR 2 SB Trans into Glendale SB-2-2	12.0	point282	282	6,483,242.0	1,855,554.9	499.34				Average	
		point104	104	6,483,197.0	1,855,452.4	489.50				Average	
		point103	103	6,483,182.0	1,855,380.8	482.28				Average	
		point102	102	6,483,179.5	1,855,244.9	469.16				Average	
		point101	101	6,483,177.5	1,855,121.4	462.93				Average	
		point100	100	6,483,162.5	1,855,030.4	460.96				Average	
		point99	99	6,483,141.0	1,854,874.1	457.68					

Jones & Stokes 25 April 2007
M Greene TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	285	1263	35	32	35	0	0	17	30	15	35
	point9	2	1263	35	32	35	0	0	17	30	15	35
	point8	3	1263	35	32	35	0	0	17	30	15	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	286	1263	35	32	35	0	0	17	30	15	35
	point21	21	1263	35	32	35	0	0	17	30	15	35
	point20	20	1263	35	32	35	0	0	17	30	15	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point285	287	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	393	35	10	35	0	0	5	30	5	35
	point40	40	328	35	8	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	393	35	10	35	0	0	5	30	5	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	923	65	10	65	17	60	3	60	0	0
	point277	277	923	65	10	65	17	60	3	60	0	0
	point115	115	923	65	10	65	17	60	3	60	0	0
	point114	114	923	65	10	65	17	60	3	60	0	0
	point113	113	923	65	10	65	17	60	3	60	0	0
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	923	65	10	65	17	60	3	60	0	0
	point276	276	923	65	10	65	17	60	3	60	0	0
	point118	118	923	65	10	65	17	60	3	60	0	0
	point119	119	923	65	10	65	17	60	3	60	0	0
	point120	120	923	65	10	65	17	60	3	60	0	0
	point121	121										
SR 2 SB Off at Glendale Blvd	point146	146	292	65	3	65	5	60	1	60	0	0
	point275	275	292	65	3	65	5	60	1	60	0	0
	point145	145	292	65	3	65	5	60	1	60	0	0
	point144	144	292	65	3	65	5	60	1	60	0	0
	point143	143	292	65	3	65	5	60	1	60	0	0
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	284	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	12	65	20	60	4	60	0	0

	point203	203	1114	65	12	65	20	60	4	60	0	0
	point202	202	1114	65	12	65	20	60	4	60	0	0
	point201	201	1114	65	12	65	20	60	4	60	0	0
	point279	279	1114	65	12	65	20	60	4	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	283	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2	point233	233	276	35	7	35	0	0	4	30	3	35
	point13	13	276	35	7	35	0	0	4	30	3	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-	point234	234	276	35	7	35	0	0	4	30	3	35

	point25	25	276	35	7	35	0	0	4	30	3	35
	point253	253										
Glendale Blvd SB - S of Alessandro	point235	235	263	35	7	35	0	0	4	30	3	35
	point53	53	263	35	7	35	0	0	4	30	3	35
	point52	52	263	35	7	35	0	0	4	30	3	35
	point51	51	263	35	7	35	0	0	4	30	3	35
	point50	50	263	35	7	35	0	0	4	30	3	35
	point49	49										
Glendale Blvd SB - S of Alessandro - 2	point236	236	263	35	7	35	0	0	4	30	3	35
	point62	62	263	35	7	35	0	0	4	30	3	35
	point61	61	263	35	7	35	0	0	4	30	3	35
	point60	60	263	35	7	35	0	0	4	30	3	35
	point59	59	263	35	7	35	0	0	4	30	3	35
	point58	58										
Glendale Blvd NB -N of Alessandro - 3-	point237	237	1295	35	33	35	0	0	18	30	15	35
	point30	30	1295	35	33	35	0	0	18	30	15	35
	point29	29	1295	35	33	35	0	0	18	30	15	35
	point28	28	1295	35	33	35	0	0	18	30	15	35
	point27	27	1295	35	33	35	0	0	18	30	15	35
	point26	26										
Glendale Blvd NB -N of Alessandro -2-	point238	238	1295	35	33	35	0	0	18	30	15	35
	point18	18	1295	35	33	35	0	0	18	30	15	35
	point17	17	1295	35	33	35	0	0	18	30	15	35
	point16	16	1295	35	33	35	0	0	18	30	15	35
	point15	15	1295	35	33	35	0	0	18	30	15	35
	point14	14										
Glendale Blvd NB - N of Alessandro-2	point239	239	1295	35	33	35	0	0	18	30	15	35
	point6	5	1295	35	33	35	0	0	18	30	15	35
	point5	6	1295	35	33	35	0	0	18	30	15	35
	point4	7	1295	35	33	35	0	0	18	30	15	35
	point3	8	1295	35	33	35	0	0	18	30	15	35
	point2	9	1295	35	33	35	0	0	18	30	15	35
	point1	10										
SR 2 NB - 2-2	point243	243	1114	65	12	65	20	60	4	60	0	0

	point87	87	1114	65	12	65	20	60	4	60	0	0
	point86	86	1114	65	12	65	20	60	4	60	0	0
	point278	278	1114	65	12	65	20	60	4	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0
	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0
	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	1273	35	32	35	0	0	18	30	15	35
	point48	48	1273	35	32	35	0	0	18	30	15	35
	point286	288	1273	35	32	35	0	0	18	30	15	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	1273	35	32	35	0	0	18	30	15	35
	point57	57	1273	35	32	35	0	0	18	30	15	35
	point287	289	1273	35	32	35	0	0	18	30	15	35
	point68	68										
SR 2 SB Trans into Glendale SB-2	point248	248	923	65	10	65	17	60	3	60	0	0
	point111	111	923	65	10	65	17	60	3	60	0	0

	point110	110	923	65	10	65	17	60	3	60	0	0
	point109	109	923	65	10	65	17	60	3	60	0	0
	point108	108	923	65	10	65	17	60	3	60	0	0
	point107	107	923	65	10	65	17	60	3	60	0	0
	point106	106	923	65	10	65	17	60	3	60	0	0
	point105	105										
SR 2 SB Trans into Glendale SB - 2-2	point249	249	923	65	10	65	17	60	3	60	0	0
	point122	122	923	65	10	65	17	60	3	60	0	0
	point123	123	923	65	10	65	17	60	3	60	0	0
	point124	124	923	65	10	65	17	60	3	60	0	0
	point125	125	923	65	10	65	17	60	3	60	0	0
	point126	126	923	65	10	65	17	60	3	60	0	0
	point127	127	923	65	10	65	17	60	3	60	0	0
	point128	128										
SR 2 SB Off at Glendale Blvd-2	point250	250	292	35	3	35	5	30	1	30	0	0
	point141	141	292	35	3	35	5	30	1	30	0	0
	point140	140	292	35	3	35	5	30	1	30	0	0
	point139	139	292	35	3	35	5	30	1	30	0	0
	point138	138	292	35	3	35	5	30	1	30	0	0
	point137	137	292	35	3	35	5	30	1	30	0	0
	point136	136	292	35	3	35	5	30	1	30	0	0
	point135	135										
Glendale Blvd NB -N of Alessandro -3-2	point255	255	276	35	7	35	0	0	4	30	3	35
	point254	254										
Glendale Blvd NB - N of Alessandro -2	point256	256	276	35	7	35	0	0	4	30	3	35
	point252	252										
Glendale Blvd NB -N of Alessandro - 2-2	point257	257	276	35	7	35	0	0	4	30	3	35
	point12	12	276	35	7	35	0	0	4	30	3	35
	point11	11										
Glendale Blvd NB - N of Alessandro - 3	point258	258	276	35	7	35	0	0	4	30	3	35
	point24	24	276	35	7	35	0	0	4	30	3	35
	point23	23										
Glendale Blvd SB - N of Alessandro - 2	point65	65	326	35	8	35	0	0	5	30	4	35
	point271	271										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB - N of Alessandro	point56	56	326	35	8	35	0	0	5	30	4	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	326	35	8	35	0	0	5	30	4	35
	point55	55	326	35	8	35	0	0	5	30	4	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	326	35	8	35	0	0	5	30	4	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	326	35	8	35	0	0	5	30	4	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	326	35	8	35	0	0	5	30	4	35
	point64	64	326	35	8	35	0	0	5	30	4	35
	point63	63										
SR 2 SB Trans into Glendale SB - 2-2-2	point281	281	923	50	10	50	17	45	3	45	0	0
	point129	129	923	50	10	50	17	45	3	45	0	0
	point130	130	923	35	10	35	17	30	3	30	0	0
	point131	131	923	35	10	35	17	30	3	30	0	0
	point132	132	923	35	10	35	17	30	3	30	0	0
	point133	133	923	35	10	35	17	30	3	30	0	0
	point134	134										
SR 2 SB Trans into Glendale SB-2-2	point282	282	923	50	10	50	17	45	3	45	0	0
	point104	104	923	50	10	50	17	45	3	45	0	0
	point103	103	923	35	10	35	17	30	3	30	0	0
	point102	102	923	35	10	35	17	30	3	30	0	0
	point101	101	923	35	10	35	17	30	3	30	0	0
	point100	100	923	35	10	35	17	30	3	30	0	0
	point99	99										

Jones & Stokes | 25 April 2007
M Greene | TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	4	3	6,483,201.5	1,854,565.8	456.04	4.92	0.00	66	10.0	8.0	
M2	5	1	6,483,277.0	1,854,804.1	465.88	4.92	0.00	66	10.0	8.0	
M3	6	1	6,483,415.0	1,854,804.1	485.56	4.92	0.00	66	10.0	8.0	
LT1	7	3	6,483,420.5	1,855,201.2	490.00	4.92	0.00	66	10.0	8.0	Y
M4	8	2	6,483,477.0	1,855,442.9	513.45	4.92	0.00	66	10.0	8.0	
M4B	9	4	6,483,625.0	1,855,413.4	554.46	4.92	0.00	66	10.0	8.0	
M5	10	3	6,483,675.0	1,855,604.2	524.93	4.92	0.00	66	10.0	8.0	
M5B	11	5	6,483,842.5	1,855,604.2	600.39	4.92	0.00	66	10.0	8.0	
M6	12	1	6,483,798.0	1,855,847.1	540.00	4.92	0.00	66	10.0	8.0	
M6B	13	6	6,484,126.0	1,855,916.0	600.39	4.92	0.00	66	10.0	8.0	
ST2	14	11	6,484,036.5	1,856,041.5	545.00	4.92	0.00	66	10.0	8.0	
M7	15	5	6,484,234.5	1,856,282.2	535.00	4.92	0.00	66	10.0	8.0	
M7B	16	5	6,484,378.5	1,856,269.1	583.99	4.92	0.00	66	10.0	8.0	
ST3	17	9	6,484,498.0	1,856,566.2	514.00	4.92	0.00	66	10.0	8.0	
M8	18	6	6,484,612.5	1,856,728.8	505.00	4.92	0.00	66	10.0	8.0	
M8B	19	5	6,484,685.0	1,856,566.2	551.18	4.92	0.00	66	10.0	8.0	
ST4	20	11	6,484,708.0	1,856,841.0	487.00	4.92	0.00	66	10.0	8.0	
M8C	21	8	6,484,782.0	1,857,036.6	470.80	4.92	0.00	66	10.0	8.0	
ST5	22	5	6,484,494.5	1,857,197.4	492.13	4.92	0.00	66	10.0	8.0	
M9	23	4	6,484,366.0	1,856,999.4	500.00	4.92	0.00	66	10.0	8.0	
M9B	24	7	6,484,326.5	1,857,158.8	495.41	4.92	0.00	66	10.0	8.0	
M9C	25	4	6,484,384.5	1,857,338.4	497.05	4.92	0.00	66	10.0	8.0	

INPUT: RECEIVERS <Project Name?>

M9D	27	4	6,484,216.0	1,856,963.4	503.94	4.92	0.00	66	10.0	8.0	
ST6	29	3	6,484,280.5	1,856,893.5	500.00	4.92	0.00	66	10.0	8.0	
M10	31	4	6,484,088.5	1,856,734.5	505.00	4.92	0.00	66	10.0	8.0	
M10B	32	4	6,484,049.0	1,856,859.2	514.11	4.92	0.00	66	10.0	8.0	
M11	34	5	6,483,887.0	1,856,580.8	518.00	4.92	0.00	66	10.0	8.0	
M11B	35	6	6,483,887.0	1,856,712.0	528.00	4.92	0.00	66	10.0	8.0	
ST7	37	5	6,483,618.0	1,856,267.6	507.00	4.92	0.00	66	10.0	8.0	
M12	39	5	6,483,496.5	1,856,186.9	502.00	4.92	0.00	66	10.0	8.0	
M12B	40	4	6,483,470.5	1,856,357.5	521.65	4.92	0.00	66	10.0	8.0	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
ST1	43	7	6,483,303.0	1,855,961.8	492.13	4.92	0.00	66	10.0	8.0	Y
M14	44	1	6,483,285.5	1,855,907.4	492.13	4.92	0.00	66	10.0	8.0	Y
M15	45	1	6,483,110.0	1,855,511.8	488.85	4.92	0.00	66	10.0	8.0	
M15B	47	6	6,483,001.5	1,855,616.8	495.41	4.92	0.00	66	10.0	8.0	

Jones & Stokes — 25 April 2007
M Greene — TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions

Barrier Name	Type	Height Min	Height Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	If Berm Top Width	If Berm Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Coordinates (bottom) Y	Coordinates (bottom) Z	Height at Point	Segment Seg Ht Perturbs Incre-ment	Segment #Up	Segment #Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier5	W	0.00	99.99	0.00				0.00	point28	28	6,484,006.5	1,856,432.1	490.49	0.00	0.00	0	0		
									point29	29	6,483,879.0	1,856,298.0	498.69	0.00	0.00	0	0		
									point30	30	6,483,673.0	1,856,071.0	503.61	0.00	0.00	0	0		
									point31	31	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point32	32	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0	Y	
									point33	33	6,483,344.5	1,855,732.9	505.25	0.00	0.00	0	0		
									point34	34	6,483,292.0	1,855,687.4	501.97	0.00	0.00	0	0		

									point35	35	6,483,204.5	1,855,575.1	497.05	0.00	0.00	0	0		
									point36	36	6,483,174.0	1,855,507.8	492.13	0.00	0.00	0	0		
									point37	37	6,483,161.5	1,855,451.5	488.85	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	121	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier14	W	0.00	100.00	0.00				0.00	point102	102	6,483,189.0	1,855,295.9	472.44	2.89	0.00	0	0		
									point103	103	6,483,194.5	1,855,393.2	482.28	2.89	0.00	0	0		
									point104	104	6,483,217.5	1,855,478.6	492.13	2.89	0.00	0	0		
									point105	105	6,483,274.0	1,855,583.6	501.97	2.89	0.00	0	0		
									point106	106	6,483,349.0	1,855,675.5	506.89	2.89	0.00	0	0	Y	

									point107	107	6,483,459.0	1,855,793.0	506.89	2.89	0.00	0	0	Y	
									point108	119	6,483,608.5	1,855,945.5	505.25	2.89	0.00	0	0		
									point109	120	6,483,777.5	1,856,132.9	501.97	2.89	0.00	0	0		
									point110	108	6,483,988.5	1,856,337.5	497.05	2.89					
Barrier15	W	0.00	100.00	0.00				0.00	point109	109	6,483,150.0	1,855,277.6	472.44	2.89	0.00	0	0		
									point110	110	6,483,153.5	1,855,373.0	482.28	2.89	0.00	0	0		
									point111	111	6,483,174.0	1,855,458.8	492.13	2.89	0.00	0	0		
									point112	112	6,483,216.0	1,855,560.0	501.97	2.89	0.00	0	0		
									point113	113	6,483,279.0	1,855,649.6	506.89	2.89	0.00	0	0	Y	
									point114	114	6,483,446.5	1,855,826.8	506.89	2.89	0.00	0	0	Y	
									point115	115	6,483,554.0	1,855,943.2	505.25	2.89					

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: "STRUCTURE" BARRIERS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Existing PM conditions				
Barrier	Segments		Shielded Roadways	Segments	
Name	Name	No.	Name	Name	No.
Barrier4	point24	24	SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB-2	point108	108
			SR 2 SB Trans into Glendale SB-2	point107	107
Barrier5	point32	32	SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB-2	point108	108
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
Barrier6	point38	38	Fargo St NB	point147	147
Barrier7	point40	40	Fargo St SB	point149	149
Barrier14	point106	106	SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB-2	point108	108
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB - 2-2	point126	126
Barrier14	point107	107	SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB-2	point108	108
Barrier15	point113	113	SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB-2	point108	108
Barrier15	point114	114	SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB-2	point108	108

			SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB - 2-2	point126	126

Jones & Stokes					25 April 2007		
M Greene					TNM 2.5		
INPUT: BARRIER NOISE REDUCTION COEFFICIENTS							
PROJECT/CONTRACT:	<Project Name?>						
RUN:	SR 2 Existing PM conditions						
Barrier	Segments				Reflected Roadways	Segments	
Name	Name	No.	NRC		Name	Name	No.
			LSide	RSide			
Barrier1	point1	1	0.0	0.0	---	---	0
	point2	2	0.0	0.0	---	---	0
	point3	3	0.0	0.0	---	---	0
	point4	4	0.0	0.0	---	---	0
	point5	5	0.0	0.0	---	---	0
Barrier2	point7	7	0.0	0.0	---	---	0
	point8	8	0.0	0.0	---	---	0
	point9	9	0.0	0.0	---	---	0
	point10	10	0.0	0.0	---	---	0
	point11	11	0.0	0.0	---	---	0
	point12	12	0.0	0.0	---	---	0
Barrier3	point14	14	0.0	0.0	---	---	0
	point15	15	0.0	0.0	---	---	0
	point16	16	0.0	0.0	---	---	0
	point17	17	0.0	0.0	---	---	0
	point101	101	0.0	0.0	---	---	0
Barrier4	point19	19	0.0	0.0	---	---	0
	point20	20	0.0	0.0	---	---	0
	point21	21	0.0	0.0	---	---	0
	point22	22	0.0	0.0	---	---	0
	point23	23	0.0	0.0	---	---	0
	point24	24	0.0	0.0	---	---	0
	point25	25	0.0	0.0	---	---	0

	point26	26	0.0	0.0	---	---	0
Barrier5	point28	28	0.0	0.0	---	---	0
	point29	29	0.0	0.0	---	---	0
	point30	30	0.0	0.0	---	---	0
	point31	31	0.0	0.0	---	---	0
	point32	32	0.0	0.0	---	---	0
	point33	33	0.0	0.0	---	---	0
	point34	34	0.0	0.0	---	---	0
	point35	35	0.0	0.0	---	---	0
	point36	36	0.0	0.0	---	---	0
Barrier6	point38	38	0.0	0.0	---	---	0
Barrier7	point40	40	0.0	0.0	---	---	0
Barrier9	point66	66	0.0	0.0	---	---	0
	point67	67	0.0	0.0	---	---	0
	point68	68	0.0	0.0	---	---	0
Barrier10	point70	70	0.0	0.0	---	---	0
	point71	71	0.0	0.0	---	---	0
Barrier11	point73	73	0.0	0.0	---	---	0
Barrier12	point75	75	0.0	0.0	---	---	0
	point76	76	0.0	0.0	---	---	0
	point77	77	0.0	0.0	---	---	0
	point78	78	0.0	0.0	---	---	0
	point79	79	0.0	0.0	---	---	0
	point80	80	0.0	0.0	---	---	0
	point81	81	0.0	0.0	---	---	0
	point82	82	0.0	0.0	---	---	0
	point83	83	0.0	0.0	---	---	0
	point84	84	0.0	0.0	---	---	0
	point85	85	0.0	0.0	---	---	0
	point86	86	0.0	0.0	---	---	0
	point87	87	0.0	0.0	---	---	0
	point88	88	0.0	0.0	---	---	0
	point89	89	0.0	0.0	---	---	0
	point90	90	0.0	0.0	---	---	0

	point91	91	0.0	0.0	---	---	0
Barrier13	point121	93	0.0	0.0	---	---	0
	point93	121	0.0	0.0	---	---	0
	point94	94	0.0	0.0	---	---	0
	point95	95	0.0	0.0	---	---	0
	point96	96	0.0	0.0	---	---	0
	point97	97	0.0	0.0	---	---	0
	point98	98	0.0	0.0	---	---	0
	point99	99	0.0	0.0	---	---	0
Barrier14	point102	102	0.0	0.0	---	---	0
	point103	103	0.0	0.0	---	---	0
	point104	104	0.0	0.0	---	---	0
	point105	105	0.0	0.0	---	---	0
	point106	106	0.0	0.0	---	---	0
	point107	107	0.0	0.0	---	---	0
	point108	119	0.0	0.0	---	---	0
	point109	120	0.0	0.0	---	---	0
Barrier15	point109	109	0.0	0.0	---	---	0
	point110	110	0.0	0.0	---	---	0
	point111	111	0.0	0.0	---	---	0
	point112	112	0.0	0.0	---	---	0
	point113	113	0.0	0.0	---	---	0
	point114	114	0.0	0.0	---	---	0

Jones & Stokes 25 April 2007
M Greene TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT:	<Project Name?>
RUN:	SR 2 Existing PM conditions
BARRIER DESIGN:	INPUT HEIGHTS
ATMOSPHERICS:	68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	4	3	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
M2	5	1	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0
M3	6	1	0.0	58.9	66	58.9	10	----	58.9	0.0	8	-8.0
LT1	7	3	0.0	65.6	66	65.6	10	----	65.6	0.0	8	-8.0
M4	8	2	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
M4B	9	4	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
M5	10	3	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
M5B	11	5	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
M6	12	1	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0
M6B	13	6	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0
ST2	14	11	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
M7	15	5	0.0	70.9	66	70.9	10	Snd Lvl	70.9	0.0	8	-8.0
M7B	16	5	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0
ST3	17	9	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0
M8	18	6	0.0	71.8	66	71.8	10	Snd Lvl	71.8	0.0	8	-8.0
M8B	19	5	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
ST4	20	11	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0
M8C	21	8	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0
ST5	22	5	0.0	67.5	66	67.5	10	Snd Lvl	67.5	0.0	8	-8.0
M9	23	4	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
M9B	24	7	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
M9C	25	4	0.0	60.6	66	60.6	10	----	60.6	0.0	8	-8.0
M9D	27	4	0.0	62.6	66	62.6	10	----	62.6	0.0	8	-8.0

ST6	29	3	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
M10	31	4	0.0	67.1	66	67.1	10	Snd Lvl	67.1	0.0	8	-8.0
M10B	32	4	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
M11	34	5	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0
M11B	35	6	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
ST7	37	5	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
M12	39	5	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
M12B	40	4	0.0	63.6	66	63.6	10	----	63.6	0.0	8	-8.0
M13	41	1	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
ST1	43	7	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
M14	44	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
M15	45	1	0.0	61.3	66	61.3	10	----	61.3	0.0	8	-8.0
M15B	47	6	0.0	59.1	66	59.1	10	----	59.1	0.0	8	-8.0
Dwelling Units		**# DUs**	**Noise Reduction**									
			Min	**Avg**	**Max**							
			dB	**dB**	**dB**							
All Selected		165	0.0	0.0	0.0							
All Impacted		89	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Jones & Stokes					25 April 2007						
M Greene					TNM 2.5						
INPUT: ROADWAYS							Average pavement type shall be used unless				
PROJECT/CONTRACT:	<Project Name?>						a State highway agency substantiates the use				
RUN:	SR 2 Alt A PM conditions						of a different type with the approval of FHWA				

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	283	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,248.5	1,855,216.8	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	285	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.5	1,855,212.4	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	284	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.5	1,855,214.4	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,356.0	1,855,974.2	490.81					
SR 2 NB - 2	24.0	point98	98	6,483,469.0	1,855,685.4	477.69				Average	

		point97	97	6,483,602.0	1,855,840.1	485.56				Average	
		point96	96	6,483,668.0	1,855,913.0	490.49				Average	
		point95	95	6,483,736.5	1,855,992.0	495.41				Average	
		point94	94	6,483,798.0	1,856,063.1	498.69				Average	
		point93	93	6,483,847.5	1,856,117.6	500.33				Average	
		point92	92	6,483,909.0	1,856,188.4	500.33				Average	
		point91	91	6,484,055.0	1,856,356.4	495.41				Average	
		point90	90	6,484,155.5	1,856,468.0	493.77				Average	
		point89	89	6,484,224.5	1,856,545.2	492.13				Average	
		point88	88	6,484,292.5	1,856,616.5	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,614.5	1,857,120.5	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,331.5	1,856,740.1	485.56				Average	
		point112	112	6,484,244.0	1,856,632.5	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,602.0	1,857,131.4	475.72				Average	
		point118	118	6,484,511.5	1,857,009.9	479.00				Average	
		point119	119	6,484,409.0	1,856,873.8	482.28				Average	
		point120	120	6,484,313.5	1,856,740.6	485.56				Average	
		point121	121	6,484,228.0	1,856,635.2	488.85					
SR 2 SB Off at Glendale Blvd	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,588.5	1,857,167.4	475.72				Average	
		point145	145	6,484,481.5	1,857,001.8	479.00				Average	
		point144	144	6,484,378.0	1,856,861.0	482.28				Average	
		point143	143	6,484,293.0	1,856,736.9	485.56				Average	
		point142	142	6,484,187.5	1,856,618.6	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	289	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,640.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	288	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2	12.0	point233	233	6,483,443.0	1,855,672.5	477.69				Average	
		point13	13	6,483,460.0	1,855,770.1	480.31				Average	
		point251	251	6,483,454.0	1,855,797.0	482.61					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point234	234	6,483,429.0	1,855,662.9	478.02				Average	
		point25	25	6,483,447.5	1,855,752.8	480.31				Average	
		point253	253	6,483,441.0	1,855,783.4	482.83					
Glendale Blvd SB - S of Alessandro	12.0	point235	235	6,483,409.5	1,855,669.1	478.67				Average	
		point53	53	6,483,359.5	1,855,543.0	474.08				Average	
		point52	52	6,483,332.0	1,855,477.0	472.44				Average	
		point51	51	6,483,273.0	1,855,365.4	469.16				Average	
		point50	50	6,483,245.0	1,855,302.5	467.52				Average	
		point49	49	6,483,208.5	1,855,187.5	464.89					
Glendale Blvd SB - S of Alessandro - 2	12.0	point236	236	6,483,395.5	1,855,673.0	478.35				Average	
		point62	62	6,483,351.5	1,855,560.6	473.75				Average	
		point61	61	6,483,328.5	1,855,512.2	472.44				Average	
		point60	60	6,483,267.0	1,855,388.6	469.16				Average	
		point59	59	6,483,238.5	1,855,324.8	467.52				Average	
		point58	58	6,483,197.5	1,855,188.8	464.57					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point237	237	6,483,231.5	1,855,214.9	465.22				Average	

		point30	30	6,483,263.0	1,855,298.0	469.16				Average	
		point29	29	6,483,295.0	1,855,361.8	470.80				Average	
		point28	28	6,483,351.5	1,855,470.0	472.44				Average	
		point27	27	6,483,380.5	1,855,539.2	474.41				Average	
		point26	26	6,483,429.0	1,855,662.4	478.02					
Glendale Blvd NB -N of Alessandro -2-	12.0	point238	238	6,483,239.5	1,855,212.6	465.22				Average	
		point18	18	6,483,272.0	1,855,294.5	467.52				Average	
		point17	17	6,483,304.0	1,855,357.9	469.16				Average	
		point16	16	6,483,359.5	1,855,467.4	472.44				Average	
		point15	15	6,483,392.5	1,855,534.6	474.08				Average	
		point14	14	6,483,443.0	1,855,672.4	477.69					
Glendale Blvd NB - N of Alessandro-2	12.0	point239	239	6,483,249.0	1,855,217.1	464.89				Average	
		point6	5	6,483,279.0	1,855,286.0	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,402.0	1,855,528.2	472.11				Average	
		point2	9	6,483,431.0	1,855,584.6	475.72				Average	
		point1	10	6,483,459.0	1,855,633.6	476.71					
SR 2 NB - 2-2	12.0	point243	243	6,484,293.5	1,856,617.4	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,463.0	1,855,646.1	477.36				Average	
		point83	83	6,483,521.0	1,855,721.9	479.00				Average	
		point82	82	6,483,577.0	1,855,783.9	482.28				Average	
		point81	81	6,483,638.5	1,855,850.5	487.20				Average	
		point80	80	6,483,683.5	1,855,902.5	490.49				Average	
		point79	79	6,483,726.0	1,855,951.0	493.77				Average	
		point78	78	6,483,778.5	1,856,012.5	497.05				Average	
		point77	77	6,483,838.0	1,856,081.1	500.33				Average	
		point76	76	6,483,860.0	1,856,105.5	501.31				Average	
		point75	75	6,483,882.5	1,856,129.6	500.33				Average	
		point74	74	6,483,930.0	1,856,184.2	500.33				Average	
		point73	73	6,484,047.5	1,856,308.6	498.69				Average	
		point72	72	6,484,157.0	1,856,423.1	495.41				Average	
		point71	71	6,484,255.0	1,856,531.4	492.78				Average	
		point70	70	6,484,317.0	1,856,597.1	490.49					

SR2 NB-2	12.0	point247	247	6,484,317.0	1,856,598.6	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,504.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	
		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	286	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	287	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
SR 2 SB Trans into Glendale SB-2	12.0	point248	248	6,484,243.5	1,856,632.0	488.85				Average	
		point111	111	6,484,114.0	1,856,495.6	492.13				Average	
		point110	110	6,483,916.5	1,856,299.1	498.69				Average	
		point109	109	6,483,774.0	1,856,145.2	501.97				Average	
		point108	108	6,483,586.5	1,855,941.2	505.25				Average	
		point107	107	6,483,461.0	1,855,805.0	506.89				Average	
		point106	106	6,483,334.0	1,855,670.1	505.25				Average	
		point105	105	6,483,242.0	1,855,554.9	499.34					
SR 2 SB Trans into Glendale SB - 2-2	12.0	point249	249	6,484,227.5	1,856,634.6	488.85				Average	
		point122	122	6,484,095.5	1,856,495.1	492.13				Average	
		point123	123	6,483,900.0	1,856,300.9	498.69				Average	
		point124	124	6,483,766.0	1,856,156.8	501.97				Average	
		point125	125	6,483,564.5	1,855,937.8	505.25				Average	
		point126	126	6,483,456.0	1,855,817.4	506.89				Average	
		point127	127	6,483,297.0	1,855,647.1	505.25				Average	
		point128	128	6,483,229.0	1,855,556.1	500.33					
SR 2 SB Off at Glendale Blvd-2	24.0	point250	250	6,484,187.5	1,856,618.9	488.85				Average	
		point141	141	6,484,052.0	1,856,492.6	492.13				Average	
		point140	140	6,483,986.5	1,856,436.0	493.77				Average	
		point139	139	6,483,873.5	1,856,342.6	497.05				Average	
		point138	138	6,483,732.5	1,856,227.1	500.33				Average	
		point137	137	6,483,627.0	1,856,144.8	497.05				Average	
		point136	136	6,483,550.0	1,856,077.9	493.77				Average	
		point135	135	6,483,429.5	1,855,994.0	490.49					
Glendale Blvd NB -N of Alessandro -3-2	12.0	point255	255	6,483,440.5	1,855,784.2	482.83				Average	

		point254	254	6,483,437.5	1,855,797.2	485.35					
Glendale Blvd NB - N of Alessandro -2	12.0	point256	256	6,483,453.5	1,855,798.2	482.61				Average	
		point252	252	6,483,451.0	1,855,811.4	484.91					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point257	257	6,483,450.0	1,855,812.8	484.91				Average	
		point12	12	6,483,421.0	1,855,939.5	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd NB - N of Alessandro - 3	12.0	point258	258	6,483,437.0	1,855,798.6	485.35				Average	
		point24	24	6,483,406.5	1,855,934.2	487.86				Average	
		point23	23	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,357.5	1,855,971.0	490.81				Average	
		point271	271	6,483,398.5	1,855,757.0	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,971.6	493.77				Average	
		point267	267	6,483,411.0	1,855,769.8	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,413.5	1,855,754.0	482.61				Average	
		point55	55	6,483,414.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,411.5	1,855,767.2	484.25				Average	
		point268	268	6,483,413.5	1,855,754.8	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,398.5	1,855,754.9	483.92				Average	
		point272	272	6,483,401.0	1,855,742.1	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,401.0	1,855,741.1	482.28				Average	
		point64	64	6,483,403.0	1,855,730.4	480.31				Average	
		point63	63	6,483,395.5	1,855,673.0	478.35					
SR 2 SB Trans into Glendale SB - 2-2-2	12.0	point281	281	6,483,229.0	1,855,556.1	500.33				Average	
		point129	129	6,483,186.5	1,855,455.9	490.49				Average	
		point130	130	6,483,165.5	1,855,374.0	482.28				Average	
		point131	131	6,483,166.0	1,855,239.1	469.16				Average	
		point132	132	6,483,167.0	1,855,136.4	462.60				Average	
		point133	133	6,483,156.5	1,855,051.0	460.96				Average	
		point134	134	6,483,133.5	1,854,905.6	457.68					
SR 2 SB Trans into Glendale SB-2-2	12.0	point282	282	6,483,242.0	1,855,554.9	499.34				Average	
		point104	104	6,483,197.0	1,855,452.4	489.50				Average	
		point103	103	6,483,182.0	1,855,380.8	482.28				Average	
		point102	102	6,483,179.5	1,855,244.9	469.16				Average	
		point101	101	6,483,177.5	1,855,121.4	462.93				Average	
		point100	100	6,483,162.5	1,855,030.4	460.96				Average	
		point99	99	6,483,141.0	1,854,874.1	457.68					

Jones & Stokes 25 April 2007

M Greene TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes

PROJECT/CONTRACT: <Project Name?>

RUN: SR 2 Alt A PM conditions

Roadway Name	Points Name	No.	Segment Autos V	Autos S	MTrucks V	MTrucks S	HTrucks V	HTrucks S	Buses V	Buses S	Motorcycles V	Motorcycles S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	283	1263	35	32	35	0	0	17	30	15	35
	point9	2	1263	35	32	35	0	0	17	30	15	35
	point8	3	1263	35	32	35	0	0	17	30	15	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	285	1263	35	32	35	0	0	17	30	15	35
	point21	21	1263	35	32	35	0	0	17	30	15	35
	point20	20	1263	35	32	35	0	0	17	30	15	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point285	284	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	393	35	10	35	0	0	5	30	5	35
	point40	40	328	35	8	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	393	35	10	35	0	0	5	30	5	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	923	65	10	65	17	60	3	60	0	0
	point277	277	923	65	10	65	17	60	3	60	0	0
	point115	115	923	65	10	65	17	60	3	60	0	0
	point114	114	923	65	10	65	17	60	3	60	0	0
	point113	113	923	65	10	65	17	60	3	60	0	0
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	923	65	10	65	17	60	3	60	0	0
	point276	276	923	65	10	65	17	60	3	60	0	0
	point118	118	923	65	10	65	17	60	3	60	0	0
	point119	119	923	65	10	65	17	60	3	60	0	0
	point120	120	923	65	10	65	17	60	3	60	0	0
	point121	121										
SR 2 SB Off at Glendale Blvd	point146	146	292	65	3	65	5	60	1	60	0	0
	point275	275	292	65	3	65	5	60	1	60	0	0
	point145	145	292	65	3	65	5	60	1	60	0	0
	point144	144	292	65	3	65	5	60	1	60	0	0
	point143	143	292	65	3	65	5	60	1	60	0	0
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	289	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	12	65	20	60	4	60	0	0

	point203	203	1114	65	12	65	20	60	4	60	0	0
	point202	202	1114	65	12	65	20	60	4	60	0	0
	point201	201	1114	65	12	65	20	60	4	60	0	0
	point279	279	1114	65	12	65	20	60	4	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	288	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2	point233	233	276	35	7	35	0	0	4	30	3	35
	point13	13	276	35	7	35	0	0	4	30	3	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-	point234	234	276	35	7	35	0	0	4	30	3	35

	point25	25	276	35	7	35	0	0	4	30	3	35
	point253	253										
Glendale Blvd SB - S of Alessandro	point235	235	263	35	7	35	0	0	4	30	3	35
	point53	53	263	35	7	35	0	0	4	30	3	35
	point52	52	263	35	7	35	0	0	4	30	3	35
	point51	51	263	35	7	35	0	0	4	30	3	35
	point50	50	263	35	7	35	0	0	4	30	3	35
	point49	49										
Glendale Blvd SB - S of Alessandro - 2	point236	236	263	35	7	35	0	0	4	30	3	35
	point62	62	263	35	7	35	0	0	4	30	3	35
	point61	61	263	35	7	35	0	0	4	30	3	35
	point60	60	263	35	7	35	0	0	4	30	3	35
	point59	59	263	35	7	35	0	0	4	30	3	35
	point58	58										
Glendale Blvd NB -N of Alessandro - 3-	point237	237	1295	35	33	35	0	0	18	30	15	35
	point30	30	1295	35	33	35	0	0	18	30	15	35
	point29	29	1295	35	33	35	0	0	18	30	15	35
	point28	28	1295	35	33	35	0	0	18	30	15	35
	point27	27	1295	35	33	35	0	0	18	30	15	35
	point26	26										
Glendale Blvd NB -N of Alessandro -2-	point238	238	1295	35	33	35	0	0	18	30	15	35
	point18	18	1295	35	33	35	0	0	18	30	15	35
	point17	17	1295	35	33	35	0	0	18	30	15	35
	point16	16	1295	35	33	35	0	0	18	30	15	35
	point15	15	1295	35	33	35	0	0	18	30	15	35
	point14	14										
Glendale Blvd NB - N of Alessandro-2	point239	239	1295	35	33	35	0	0	18	30	15	35
	point6	5	1295	35	33	35	0	0	18	30	15	35
	point5	6	1295	35	33	35	0	0	18	30	15	35
	point4	7	1295	35	33	35	0	0	18	30	15	35
	point3	8	1295	35	33	35	0	0	18	30	15	35
	point2	9	1295	35	33	35	0	0	18	30	15	35
	point1	10										
SR 2 NB - 2-2	point243	243	1114	65	12	65	20	60	4	60	0	0

	point87	87	1114	65	12	65	20	60	4	60	0	0
	point86	86	1114	65	12	65	20	60	4	60	0	0
	point278	278	1114	65	12	65	20	60	4	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0
	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0
	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	1273	35	32	35	0	0	18	30	15	35
	point48	48	1273	35	32	35	0	0	18	30	15	35
	point286	286	1273	35	32	35	0	0	18	30	15	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	1273	35	32	35	0	0	18	30	15	35
	point57	57	1273	35	32	35	0	0	18	30	15	35
	point287	287	1273	35	32	35	0	0	18	30	15	35
	point68	68										
SR 2 SB Trans into Glendale SB-2	point248	248	923	65	10	65	17	60	3	60	0	0
	point111	111	923	65	10	65	17	60	3	60	0	0

	point110	110	923	65	10	65	17	60	3	60	0	0
	point109	109	923	65	10	65	17	60	3	60	0	0
	point108	108	923	65	10	65	17	60	3	60	0	0
	point107	107	923	65	10	65	17	60	3	60	0	0
	point106	106	923	65	10	65	17	60	3	60	0	0
	point105	105										
SR 2 SB Trans into Glendale SB - 2-2	point249	249	923	65	10	65	17	60	3	60	0	0
	point122	122	923	65	10	65	17	60	3	60	0	0
	point123	123	923	65	10	65	17	60	3	60	0	0
	point124	124	923	65	10	65	17	60	3	60	0	0
	point125	125	923	65	10	65	17	60	3	60	0	0
	point126	126	923	65	10	65	17	60	3	60	0	0
	point127	127	923	65	10	65	17	60	3	60	0	0
	point128	128										
SR 2 SB Off at Glendale Blvd-2	point250	250	292	35	3	35	5	30	1	30	0	0
	point141	141	292	35	3	35	5	30	1	30	0	0
	point140	140	292	35	3	35	5	30	1	30	0	0
	point139	139	292	35	3	35	5	30	1	30	0	0
	point138	138	292	35	3	35	5	30	1	30	0	0
	point137	137	292	35	3	35	5	30	1	30	0	0
	point136	136	292	35	3	35	5	30	1	30	0	0
	point135	135										
Glendale Blvd NB -N of Alessandro -3-2	point255	255	276	35	7	35	0	0	4	30	3	35
	point254	254										
Glendale Blvd NB - N of Alessandro -2	point256	256	276	35	7	35	0	0	4	30	3	35
	point252	252										
Glendale Blvd NB -N of Alessandro - 2-2	point257	257	276	35	7	35	0	0	4	30	3	35
	point12	12	276	35	7	35	0	0	4	30	3	35
	point11	11										
Glendale Blvd NB - N of Alessandro - 3	point258	258	276	35	7	35	0	0	4	30	3	35
	point24	24	276	35	7	35	0	0	4	30	3	35
	point23	23										
Glendale Blvd SB - N of Alessandro - 2	point65	65	326	35	8	35	0	0	5	30	4	35
	point271	271										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB - N of Alessandro	point56	56	326	35	8	35	0	0	5	30	4	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	326	35	8	35	0	0	5	30	4	35
	point55	55	326	35	8	35	0	0	5	30	4	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	326	35	8	35	0	0	5	30	4	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	326	35	8	35	0	0	5	30	4	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	326	35	8	35	0	0	5	30	4	35
	point64	64	326	35	8	35	0	0	5	30	4	35
	point63	63										
SR 2 SB Trans into Glendale SB - 2-2-2	point281	281	923	50	10	50	17	45	3	45	0	0
	point129	129	923	50	10	50	17	45	3	45	0	0
	point130	130	923	35	10	35	17	30	3	30	0	0
	point131	131	923	35	10	35	17	30	3	30	0	0
	point132	132	923	35	10	35	17	30	3	30	0	0
	point133	133	923	35	10	35	17	30	3	30	0	0
	point134	134										
SR 2 SB Trans into Glendale SB-2-2	point282	282	923	50	10	50	17	45	3	45	0	0
	point104	104	923	50	10	50	17	45	3	45	0	0
	point103	103	923	35	10	35	17	30	3	30	0	0
	point102	102	923	35	10	35	17	30	3	30	0	0
	point101	101	923	35	10	35	17	30	3	30	0	0
	point100	100	923	35	10	35	17	30	3	30	0	0
	point99	99										

Jones & Stokes | 25 April 2007

M Greene | TNM 2.5

INPUT: RECEIVERS

PROJECT/CONTRACT: <Project Name?>

RUN: SR 2 Alt A PM conditions

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	4	3	6,483,201.5	1,854,565.8	456.04	4.92	0.00	66	10.0	8.0	
M2	5	1	6,483,277.0	1,854,804.1	465.88	4.92	0.00	66	10.0	8.0	
M3	6	1	6,483,415.0	1,854,804.1	485.56	4.92	0.00	66	10.0	8.0	
LT1	7	3	6,483,420.5	1,855,201.2	490.00	4.92	0.00	66	10.0	8.0	Y
M4	8	2	6,483,477.0	1,855,442.9	513.45	4.92	0.00	66	10.0	8.0	
M4B	9	4	6,483,625.0	1,855,413.4	554.46	4.92	0.00	66	10.0	8.0	
M5	10	3	6,483,675.0	1,855,604.2	524.93	4.92	0.00	66	10.0	8.0	
M5B	11	5	6,483,842.5	1,855,604.2	600.39	4.92	0.00	66	10.0	8.0	
M6	12	1	6,483,798.0	1,855,847.1	540.00	4.92	0.00	66	10.0	8.0	
M6B	13	6	6,484,126.0	1,855,916.0	600.39	4.92	0.00	66	10.0	8.0	
ST2	14	11	6,484,036.5	1,856,041.5	545.00	4.92	0.00	66	10.0	8.0	
M7	15	5	6,484,234.5	1,856,282.2	535.00	4.92	0.00	66	10.0	8.0	
M7B	16	5	6,484,378.5	1,856,269.1	583.99	4.92	0.00	66	10.0	8.0	
ST3	17	9	6,484,498.0	1,856,566.2	514.00	4.92	0.00	66	10.0	8.0	
M8	18	6	6,484,612.5	1,856,728.8	505.00	4.92	0.00	66	10.0	8.0	
M8B	19	5	6,484,685.0	1,856,566.2	551.18	4.92	0.00	66	10.0	8.0	
ST4	20	11	6,484,708.0	1,856,841.0	487.00	4.92	0.00	66	10.0	8.0	
M8C	21	8	6,484,782.0	1,857,036.6	470.80	4.92	0.00	66	10.0	8.0	
ST5	22	5	6,484,494.5	1,857,197.4	492.13	4.92	0.00	66	10.0	8.0	
M9	23	4	6,484,366.0	1,856,999.4	500.00	4.92	0.00	66	10.0	8.0	
M9B	24	7	6,484,326.5	1,857,158.8	495.41	4.92	0.00	66	10.0	8.0	
M9C	25	4	6,484,384.5	1,857,338.4	497.05	4.92	0.00	66	10.0	8.0	

M9D	27	4	6,484,216.0	1,856,963.4	503.94	4.92	0.00	66	10.0	8.0	
ST6	29	3	6,484,280.5	1,856,893.5	500.00	4.92	0.00	66	10.0	8.0	
M10	31	4	6,484,088.5	1,856,734.5	505.00	4.92	0.00	66	10.0	8.0	
M10B	32	4	6,484,049.0	1,856,859.2	514.11	4.92	0.00	66	10.0	8.0	
M11	34	5	6,483,887.0	1,856,580.8	518.00	4.92	0.00	66	10.0	8.0	
M11B	35	6	6,483,887.0	1,856,712.0	528.00	4.92	0.00	66	10.0	8.0	
ST7	37	5	6,483,618.0	1,856,267.6	507.00	4.92	0.00	66	10.0	8.0	
M12	39	5	6,483,496.5	1,856,186.9	502.00	4.92	0.00	66	10.0	8.0	
M12B	40	4	6,483,470.5	1,856,357.5	521.65	4.92	0.00	66	10.0	8.0	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
ST1	43	7	6,483,303.0	1,855,961.8	492.13	4.92	0.00	66	10.0	8.0	Y
M14	44	1	6,483,285.5	1,855,907.4	492.13	4.92	0.00	66	10.0	8.0	Y
M15	45	1	6,483,110.0	1,855,511.8	488.85	4.92	0.00	66	10.0	8.0	
M15B	47	6	6,483,001.5	1,855,616.8	495.41	4.92	0.00	66	10.0	8.0	

Jones & Stokes — 25 April 2007
M Greene — TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt A PM conditions

Barrier Name	Type	Height Min	Height Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	If Berm Top Width	If Berm Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Coordinates (bottom) Y	Coordinates (bottom) Z	Height at Point	Segment Seg Ht Perturbs Incre-ment	Segment #Up	Segment #Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,860.0	1,856,367.2	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,432.0	493.77	0.00	0.00	0	0		
									point20	20	6,483,898.5	1,856,336.4	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.0	1,856,176.9	501.97	0.00	0.00	0	0		
									point23	23	6,483,587.0	1,856,061.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,446.5	1,855,939.6	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier5	W	0.00	99.99	0.00				0.00	point28	28	6,484,011.5	1,856,432.5	490.49	0.00	0.00	0	0		
									point29	29	6,483,879.0	1,856,298.0	498.69	0.00	0.00	0	0		
									point30	30	6,483,673.0	1,856,071.0	503.61	0.00	0.00	0	0		
									point31	31	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point32	32	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0	Y	
									point33	33	6,483,344.5	1,855,732.9	505.25	0.00	0.00	0	0		
									point34	34	6,483,292.0	1,855,687.4	501.97	0.00	0.00	0	0		

									point35	35	6,483,204.5	1,855,575.1	497.05	0.00	0.00	0	0	
									point36	36	6,483,174.0	1,855,507.8	492.13	0.00	0.00	0	0	
									point37	37	6,483,161.5	1,855,451.5	488.85	0.00				
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89				
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89				
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0	
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0	
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0	
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00				
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0	
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0	
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00				
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0	
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00				
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0	
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0	
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0	
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0	
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0	
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0	
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0	
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0	
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0	
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0	
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0	
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0	
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0	
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0	
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0	
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0	
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0	
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00				
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0	
									point93	121	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0	
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0	
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0	
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0	
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0	
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0	
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0	
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00				
Barrier14	W	0.00	100.00	0.00				0.00	point102	102	6,483,189.0	1,855,295.9	472.44	2.89	0.00	0	0	
									point103	103	6,483,194.5	1,855,393.2	482.28	2.89	0.00	0	0	
									point104	104	6,483,217.5	1,855,478.6	492.13	2.89	0.00	0	0	
									point105	105	6,483,274.0	1,855,583.6	501.97	2.89	0.00	0	0	
									point106	106	6,483,349.0	1,855,675.5	506.89	2.89	0.00	0	0	Y

									point107	107	6,483,459.0	1,855,793.0	506.89	2.89	0.00	0	0	Y	
									point108	119	6,483,608.5	1,855,945.5	505.25	2.89	0.00	0	0		
									point109	120	6,483,777.5	1,856,132.9	501.97	2.89	0.00	0	0		
									point110	108	6,483,988.5	1,856,337.5	497.05	2.89					
Barrier15	W	0.00	100.00	0.00				0.00	point109	109	6,483,150.0	1,855,277.6	472.44	2.89	0.00	0	0		
									point110	110	6,483,153.5	1,855,373.0	482.28	2.89	0.00	0	0		
									point111	111	6,483,174.0	1,855,458.8	492.13	2.89	0.00	0	0		
									point112	112	6,483,216.0	1,855,560.0	501.97	2.89	0.00	0	0		
									point113	113	6,483,279.0	1,855,649.6	506.89	2.89	0.00	0	0	Y	
									point114	114	6,483,446.5	1,855,826.8	506.89	2.89	0.00	0	0	Y	
									point115	115	6,483,554.0	1,855,943.2	505.25	2.89					

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: RECEIVER ADJUSTMENT FACTORS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Alt A PM conditions				
Receiver					
Name	No.	Individual Roadway Segment Adjustment Factors			
		Roadway	Segment		
		Name	Name	No.	Adj. Factor
					dB
<< This table is empty >>					

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: "STRUCTURE" BARRIERS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Alt A PM conditions				
Barrier	**Segments**		**Shielded Roadways**	**Segments**	
Name	**Name**	**No.**	**Name**	**Name**	**No.**
Barrier4	point24	24	SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB-2	point108	108
			SR 2 SB Trans into Glendale SB-2	point107	107
Barrier5	point32	32	SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB-2	point108	108
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
Barrier6	point38	38	Fargo St NB	point147	147
Barrier7	point40	40	Fargo St SB	point149	149
Barrier14	point106	106	SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB-2	point108	108
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB - 2-2	point126	126
Barrier14	point107	107	SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB-2	point108	108
Barrier15	point113	113	SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB - 2-2	point126	126
			SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB-2	point108	108
Barrier15	point114	114	SR 2 SB Trans into Glendale SB - 2-2	point125	125
			SR 2 SB Trans into Glendale SB-2	point108	108

INPUT: "STRUCTURE" BARRIERS

<Project Name?>

			SR 2 SB Trans into Glendale SB-2	point107	107
			SR 2 SB Trans into Glendale SB - 2-2	point126	126

Jones & Stokes 25 April 2007
M Greene TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt A PM conditions
BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	4	3	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
M2	5	1	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0
M3	6	1	0.0	58.9	66	58.9	10	----	58.9	0.0	8	-8.0
LT1	7	3	0.0	65.6	66	65.6	10	----	65.6	0.0	8	-8.0
M4	8	2	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
M4B	9	4	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
M5	10	3	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
M5B	11	5	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
M6	12	1	0.0	67.5	66	67.5	10	Snd Lvl	67.5	0.0	8	-8.0
M6B	13	6	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0
ST2	14	11	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	8	-8.0
M7	15	5	0.0	71.5	66	71.5	10	Snd Lvl	71.5	0.0	8	-8.0
M7B	16	5	0.0	69.5	66	69.5	10	Snd Lvl	69.5	0.0	8	-8.0
ST3	17	9	0.0	68.9	66	68.9	10	Snd Lvl	68.9	0.0	8	-8.0
M8	18	6	0.0	71.8	66	71.8	10	Snd Lvl	71.8	0.0	8	-8.0
M8B	19	5	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
ST4	20	11	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0
M8C	21	8	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
ST5	22	5	0.0	67.5	66	67.5	10	Snd Lvl	67.5	0.0	8	-8.0
M9	23	4	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
M9B	24	7	0.0	59.9	66	59.9	10	----	59.9	0.0	8	-8.0
M9C	25	4	0.0	60.7	66	60.7	10	----	60.7	0.0	8	-8.0
M9D	27	4	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0

ST6	29	3	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
M10	31	4	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
M10B	32	4	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
M11	34	5	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0
M11B	35	6	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
ST7	37	5	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
M12	39	5	0.0	65.1	66	65.1	10	----	65.1	0.0	8	-8.0
M12B	40	4	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
M13	41	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
ST1	43	7	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
M14	44	1	0.0	63.0	66	63.0	10	----	63.0	0.0	8	-8.0
M15	45	1	0.0	61.3	66	61.3	10	----	61.3	0.0	8	-8.0
M15B	47	6	0.0	59.1	66	59.1	10	----	59.1	0.0	8	-8.0
Dwelling Units		**# DUs**	**Noise Reduction**									
			Min	**Avg**	**Max**							
			dB	**dB**	**dB**							
All Selected		165	0.0	0.0	0.0							
All Impacted		95	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Jones & Stokes					25 April 2007							
M Greene					TNM 2.5							
INPUT: ROADWAYS							Average pavement type shall be used unless					
PROJECT/CONTRACT:	<Project Name?>						a State highway agency substantiates the use					
RUN:	SR 2 Alt B PM Conditions						of a different type with the approval of FHWA					
Roadway		Points										
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment		
				X	Y	Z	Control	Speed	Percent	Pvmt	On	
							Device	Constraint	Vehicles	Type	Struct?	
									Affected			
	ft			ft	ft	ft		mph	%			
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average		
		point283	355	6,483,141.0	1,854,568.8	451.80				Average		
		point9	2	6,483,183.0	1,854,824.1	456.00				Average		
		point8	3	6,483,238.5	1,855,181.5	464.20				Average		
		point7	4	6,483,249.0	1,855,217.1	464.90						
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average		
		point284	356	6,483,131.5	1,854,567.5	452.10				Average		
		point21	21	6,483,172.0	1,854,834.5	457.70				Average		
		point20	20	6,483,229.0	1,855,182.5	464.90				Average		
		point19	19	6,483,239.5	1,855,212.6	465.20						
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average		
		point285	357	6,483,121.0	1,854,567.6	452.10				Average		
		point33	33	6,483,163.0	1,854,835.1	457.70				Average		
		point32	32	6,483,221.5	1,855,183.4	464.60				Average		
		point31	31	6,483,231.5	1,855,214.9	465.20						
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average		
		point40	40	6,483,331.5	1,856,249.1	505.25				Average		
		point39	39	6,483,246.5	1,856,520.5	515.09						
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average		
		point43	43	6,483,240.0	1,856,513.5	515.09						
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average		
		point45	45	6,483,366.5	1,855,977.1	490.81						
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average		
		point47	47	6,483,356.0	1,855,974.2	490.81						
SR 2 NB - 2	12.0	point98	98	6,483,463.0	1,855,659.8	477.69				Average		

		point97	97	6,483,611.5	1,855,834.6	485.56				Average	
		point96	96	6,483,675.0	1,855,907.4	490.49				Average	
		point95	95	6,483,744.5	1,855,985.4	495.41				Average	
		point94	94	6,483,804.5	1,856,058.2	498.69				Average	
		point93	93	6,483,856.5	1,856,115.1	500.33				Average	
		point92	92	6,483,912.5	1,856,181.0	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,614.5	1,857,120.5	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,324.5	1,856,740.6	485.56				Average	
		point112	112	6,484,234.0	1,856,629.0	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,619.0	1,857,143.0	475.72				Average	
		point118	118	6,484,517.5	1,857,008.8	479.00				Average	
		point119	119	6,484,414.0	1,856,873.2	482.28				Average	
		point120	120	6,484,304.5	1,856,736.1	485.56				Average	
		point121	121	6,484,223.5	1,856,629.4	488.85					
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,601.0	1,857,167.4	475.72				Average	
		point145	145	6,484,486.5	1,856,999.5	479.00				Average	
		point144	144	6,484,382.5	1,856,860.4	482.28				Average	
		point143	143	6,484,278.5	1,856,728.5	485.56				Average	
		point142	142	6,484,196.5	1,856,624.8	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	354	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,640.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	353	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,459.0	1,855,663.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,459.5	1,855,802.6	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,426.0	1,855,648.9	478.02				Average	
		point349	349	6,483,445.0	1,855,707.0	479.17				Average	
		point25	25	6,483,447.5	1,855,752.1	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point235	235	6,483,429.0	1,855,672.6	478.67				Average	
		point295	295	6,483,385.5	1,855,613.2	476.38				Average	
		point53	53	6,483,356.0	1,855,560.1	474.08				Average	
		point52	52	6,483,325.5	1,855,503.1	472.44				Average	
		point51	51	6,483,264.0	1,855,379.4	469.16				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,198.5	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,391.0	1,855,674.5	478.35				Average	
		point62	62	6,483,330.0	1,855,565.0	473.75				Average	
		point61	61	6,483,294.0	1,855,497.8	472.44				Average	
		point60	60	6,483,232.0	1,855,375.1	469.16				Average	
		point59	59	6,483,208.0	1,855,325.5	467.52				Average	
		point58	58	6,483,177.0	1,855,222.2	464.57					

INPUT: ROADWAYS <Project Name?>

Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,225.0	1,855,219.5	465.22				Average	
		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point28	28	6,483,340.5	1,855,476.6	472.44					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point16	16	6,483,347.5	1,855,465.2	472.44					
Glendale Blvd NB -N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,276.5	1,855,286.4	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36				Average	
		point83	83	6,483,527.5	1,855,717.1	479.00				Average	
		point82	82	6,483,580.5	1,855,779.8	482.28				Average	
		point81	81	6,483,641.5	1,855,850.4	487.20				Average	
		point80	80	6,483,685.0	1,855,901.5	490.49				Average	
		point79	79	6,483,727.0	1,855,950.2	493.77				Average	
		point78	78	6,483,779.0	1,856,010.4	497.05				Average	
		point77	77	6,483,840.5	1,856,083.1	500.33				Average	
		point76	76	6,483,862.0	1,856,106.5	501.31				Average	
		point75	75	6,483,882.5	1,856,127.8	500.33				Average	
		point74	74	6,483,927.5	1,856,180.4	500.33				Average	
		point73	73	6,484,026.0	1,856,294.8	498.69				Average	
		point72	72	6,484,137.5	1,856,415.9	495.41				Average	
		point71	71	6,484,243.0	1,856,533.5	492.78				Average	
		point70	70	6,484,300.0	1,856,596.6	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,504.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	

		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	359	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	358	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,459.5	1,855,804.0	482.61				Average	
		point252	252	6,483,458.0	1,855,819.2	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,457.5	1,855,819.5	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,357.5	1,855,972.1	490.81				Average	
		point271	271	6,483,393.5	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77				Average	
		point267	267	6,483,408.5	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,411.5	1,855,751.6	482.61				Average	
		point55	55	6,483,414.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,408.5	1,855,766.0	484.25				Average	
		point268	268	6,483,411.0	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,394.0	1,855,751.2	483.92				Average	
		point272	272	6,483,397.0	1,855,737.4	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,400.0	1,855,719.8	480.31				Average	
		point63	63	6,483,391.5	1,855,674.5	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,447.5	1,855,752.6	480.31				Average	
		point286	286	6,483,444.0	1,855,786.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,444.0	1,855,787.9	481.57				Average	
		point287	287	6,483,442.5	1,855,802.2	482.83					
Glendale Blvd NB -N of Alessandro -	12.0	point289	289	6,483,442.0	1,855,803.6	482.83				Average	
		point282	282	6,483,438.5	1,855,835.9	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					

Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	
		point301	301	6,483,132.0	1,854,904.0	457.68					
Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,409.5	1,855,669.1	478.67				Average	
		point303	303	6,483,352.0	1,855,581.4	474.08				Average	
		point304	304	6,483,324.5	1,855,528.9	472.44				Average	
		point305	305	6,483,263.0	1,855,401.9	469.16				Average	
		point306	306	6,483,235.5	1,855,348.0	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,196.0	1,856,622.4	488.85				Average	
		point312	312	6,484,100.0	1,856,499.4	492.13				Average	
		point313	313	6,484,061.0	1,856,451.8	493.77				Average	
		point314	314	6,483,972.5	1,856,340.4	497.05				Average	
		point315	315	6,483,876.5	1,856,229.1	500.33				Average	
		point316	316	6,483,728.0	1,856,056.9	497.05				Average	
		point317	317	6,483,626.0	1,855,937.5	493.77				Average	
		point318	318	6,483,492.5	1,855,792.4	490.49					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,228.0	1,856,633.5	488.85				Average	
		point320	320	6,484,123.0	1,856,504.5	492.13				Average	
		point321	321	6,483,937.0	1,856,279.5	498.69				Average	
		point322	322	6,483,799.0	1,856,120.6	501.97				Average	
		point323	323	6,483,641.5	1,855,936.6	505.25				Average	
		point324	324	6,483,490.5	1,855,764.4	506.89					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,241.5	1,856,636.4	488.85				Average	
		point326	326	6,484,139.5	1,856,508.1	492.13				Average	
		point327	327	6,483,950.5	1,856,281.1	498.69				Average	
		point328	328	6,483,804.0	1,856,109.4	501.97				Average	
		point329	329	6,483,656.0	1,855,937.1	505.25				Average	
		point330	330	6,483,489.5	1,855,744.8	506.89					
Glendale Blvd SB - S of Alessandro--2	12.0	point331	331	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	
		point310	310	6,483,137.5	1,854,857.1	454.07					
SR 2 NB - 3	12.0	point332	332	6,483,463.0	1,855,677.5	477.69				Average	
		point333	333	6,483,611.5	1,855,852.4	485.56				Average	
		point334	334	6,483,675.0	1,855,925.2	490.49				Average	
		point335	335	6,483,744.5	1,856,002.9	495.41				Average	
		point336	336	6,483,804.5	1,856,076.1	498.69				Average	
		point337	337	6,483,856.5	1,856,132.9	500.33				Average	

		point338	338	6,483,912.5	1,856,198.8	500.33				Average	
		point339	339	6,484,061.5	1,856,370.4	495.41				Average	
		point340	340	6,484,162.5	1,856,482.4	493.77				Average	
		point341	341	6,484,232.0	1,856,558.0	492.13				Average	
		point342	342	6,484,295.0	1,856,630.0	489.83					
Glendale Blvd NB -N of Alessandro -2-	12.0	point344	344	6,483,355.0	1,855,458.1	472.44				Average	
		point345	345	6,483,394.0	1,855,534.1	474.08				Average	
		point346	346	6,483,453.0	1,855,645.2	477.69					
Glendale Blvd NB -N of Alessandro - 2-	12.0	point347	347	6,483,453.0	1,855,645.2	477.69				Average	
		point348	348	6,483,461.0	1,855,657.2	477.69					
Glendale Blvd NB -N of Alessandro - 2-	12.0	point350	350	6,483,347.5	1,855,465.2	472.44				Average	
		point15	15	6,483,382.5	1,855,533.5	474.08				Average	
		point292	292	6,483,444.0	1,855,649.2	475.89				Average	
		point14	14	6,483,459.0	1,855,683.8	477.69					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point351	351	6,483,340.5	1,855,476.6	472.44				Average	
		point27	27	6,483,384.5	1,855,563.1	474.41				Average	
		point26	26	6,483,425.5	1,855,647.9	478.02					
Glendale Blvd NB -N of Alessandro-2-2	12.0	point352	352	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,405.0	1,855,529.4	472.11				Average	
		point2	9	6,483,432.5	1,855,584.2	475.72				Average	
		point1	10	6,483,461.5	1,855,637.6	476.71					

Jones & Stokes			**25 April 2007**										
M Greene			**TNM 2.5**										
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:	**<Project Name?>**												
RUN:	**SR 2 Alt B PM Conditions**												
Roadway	**Points**												
Name	**Name**	**No.**	**Segment**										
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**		
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35	
	point283	355	1263	35	32	35	0	0	17	30	15	35	
	point9	2	1263	35	32	35	0	0	17	30	15	35	
	point8	3	1263	35	32	35	0	0	17	30	15	35	
	point7	4											
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35	
	point284	356	1263	35	32	35	0	0	17	30	15	35	
	point21	21	1263	35	32	35	0	0	17	30	15	35	
	point20	20	1263	35	32	35	0	0	17	30	15	35	
	point19	19											
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35	
	point285	357	1263	35	32	35	0	0	17	30	15	35	
	point33	33	1263	35	32	35	0	0	17	30	15	35	
	point32	32	1263	35	32	35	0	0	17	30	15	35	
	point31	31											
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35	
	point40	40	383	35	10	35	0	0	5	30	4	35	
	point39	39											
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35	
	point43	43											
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35	
	point45	45											

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1114	65	12	65	20	60	4	60	0	0
	point97	97	1114	65	12	65	20	60	4	60	0	0
	point96	96	1114	65	12	65	20	60	4	60	0	0
	point95	95	1114	65	12	65	20	60	4	60	0	0
	point94	94	1114	65	12	65	20	60	4	60	0	0
	point93	93	1114	65	12	65	20	60	4	60	0	0
	point92	92	1114	65	12	65	20	60	4	60	0	0
	point91	91	1114	65	12	65	20	60	4	60	0	0
	point90	90	1114	65	12	65	20	60	4	60	0	0
	point89	89	1114	65	12	65	20	60	4	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	711	50	8	50	13	45	3	45	0	0
	point277	277	711	65	8	65	13	60	3	60	0	0
	point115	115	711	65	8	65	13	60	3	60	0	0
	point114	114	711	65	8	65	13	60	3	60	0	0
	point113	113	711	50	8	50	13	45	3	45	0	0
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	711	65	8	65	13	60	3	60	0	0
	point276	276	711	65	8	65	13	60	3	60	0	0
	point118	118	711	65	8	65	13	60	3	60	0	0
	point119	119	711	65	8	65	13	60	3	60	0	0
	point120	120	711	50	8	50	13	45	3	45	0	0
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	711	65	8	65	13	60	3	60	0	0
	point275	275	711	65	8	65	13	60	3	60	0	0
	point145	145	711	65	8	65	13	60	3	60	0	0
	point144	144	711	65	8	65	13	60	3	60	0	0
	point143	143	711	50	8	50	13	45	3	45	0	0
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

	point150	150											
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	354	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	12	65	20	60	4	60	0	0

	point203	203	1114	65	12	65	20	60	4	60	0	0
	point202	202	1114	65	12	65	20	60	4	60	0	0
	point201	201	1114	65	12	65	20	60	4	60	0	0
	point279	279	1114	65	12	65	20	60	4	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	353	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	383	35	10	35	0	0	5	30	4	35

	point349	349	383	35	10	35	0	0	5	30	4	35
	point25	25										
Glendale Blvd SB - N of Alessandro	point235	235	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point28	28										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point16	16										
Glendale Blvd NB -N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6	1285	35	32	35	0	0	18	30	15	35
	point4	7										
SR 2 NB - 2-2	point243	243	1114	65	12	65	20	60	4	60	0	0
	point87	87	1114	65	12	65	20	60	4	60	0	0
	point86	86	1114	65	12	65	20	60	4	60	0	0
	point278	278	1114	65	12	65	20	60	4	60	0	0
	point85	85										
SR2 NB	point84	84	1114	65	12	65	20	60	4	60	0	0
	point83	83	1114	65	12	65	20	60	4	60	0	0

	point82	82	1114	65	12	65	20	60	4	60	0	0
	point81	81	1114	65	12	65	20	60	4	60	0	0
	point80	80	1114	65	12	65	20	60	4	60	0	0
	point79	79	1114	65	12	65	20	60	4	60	0	0
	point78	78	1114	65	12	65	20	60	4	60	0	0
	point77	77	1114	65	12	65	20	60	4	60	0	0
	point76	76	1114	65	12	65	20	60	4	60	0	0
	point75	75	1114	65	12	65	20	60	4	60	0	0
	point74	74	1114	65	12	65	20	60	4	60	0	0
	point73	73	1114	65	12	65	20	60	4	60	0	0
	point72	72	1114	65	12	65	20	60	4	60	0	0
	point71	71	1114	65	12	65	20	60	4	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	878	35	22	35	0	0	12	30	10	35
	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	359	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	358	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	292	35	7	35	0	0	4	30	3	35

	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	292	35	7	35	0	0	4	30	3	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	843	35	21	35	0	0	12	30	10	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	292	35	7	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	292	35	7	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB -N of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	878	35	22	35	0	0	12	30	10	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	878	35	22	35	0	0	12	30	10	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	711	50	8	50	13	45	3	45	0	0
	point312	312	711	35	8	35	13	30	3	30	0	0
	point313	313	711	35	8	35	13	30	3	30	0	0

	point314	314	711	35	8	35	13	30	3	30	0	0
	point315	315	711	35	8	35	13	30	3	30	0	0
	point316	316	711	35	8	35	13	30	3	30	0	0
	point317	317	711	35	8	35	13	30	3	30	0	0
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	711	50	8	50	13	45	3	45	0	0
	point320	320	711	35	8	35	13	30	3	30	0	0
	point321	321	711	35	8	35	13	30	3	30	0	0
	point322	322	711	35	8	35	13	30	3	30	0	0
	point323	323	711	35	8	35	13	30	3	30	0	0
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	711	50	8	50	13	45	3	45	0	0
	point326	326	711	35	8	35	13	30	3	30	0	0
	point327	327	711	35	8	35	13	30	3	30	0	0
	point328	328	711	35	8	35	13	30	3	30	0	0
	point329	329	711	35	8	35	13	30	3	30	0	0
	point330	330										
Glendale Blvd SB - S of Alessandro--2	point331	331	878	35	22	35	0	0	12	30	10	35
	point308	308	878	35	22	35	0	0	12	30	10	35
	point309	309	878	35	22	35	0	0	12	30	10	35
	point310	310										
SR 2 NB - 3	point332	332	1114	65	12	65	20	60	4	60	0	0
	point333	333	1114	65	12	65	20	60	4	60	0	0
	point334	334	1114	65	12	65	20	60	4	60	0	0
	point335	335	1114	65	12	65	20	60	4	60	0	0
	point336	336	1114	65	12	65	20	60	4	60	0	0
	point337	337	1114	65	12	65	20	60	4	60	0	0
	point338	338	1114	65	12	65	20	60	4	60	0	0
	point339	339	1114	65	12	65	20	60	4	60	0	0
	point340	340	1114	65	12	65	20	60	4	60	0	0
	point341	341	1114	65	12	65	20	60	4	60	0	0
	point342	342										
Glendale Blvd NB -N of Alessandro -2-	point344	344	964	35	24	35	0	0	13	30	11	35
	point345	345	964	35	24	35	0	0	13	30	11	35

	point346	346										
Glendale Blvd NB -N of Alessandro - 2-	point347	347	964	35	24	35	0	0	13	30	11	35
	point348	348										
Glendale Blvd NB -N of Alessandro - 2-	point350	350	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	964	35	24	35	0	0	13	30	11	35
	point14	14										
Glendale Blvd NB -N of Alessandro - 3-	point351	351	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										
Glendale Blvd NB -N of Alessandro-2-2	point352	352	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35
	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										

Jones & Stokes						**25 April 2007**					
M Greene						**TNM 2.5**					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	**<Project Name?>**										
RUN:	**SR 2 Alt B PM Conditions**										
Receiver											
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height**	**Input Sound Levels and Criteria**				**Active**
			X	**Y**	**Z**	**above**	**Existing**	**Impact Criteria**		**NR**	**in**
						Ground	**LAeq1h**	**LAeq1h**	**Sub'l**	**Goal**	**Calc.**
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	4	3	6,483,201.5	1,854,565.8	456.04	4.92	0.00	66	10.0	8.0	
M2	5	1	6,483,277.0	1,854,804.1	465.88	4.92	0.00	66	10.0	8.0	
M3	6	1	6,483,415.0	1,854,804.1	485.56	4.92	0.00	66	10.0	8.0	
LT1	7	3	6,483,420.5	1,855,201.2	490.00	4.92	0.00	66	10.0	8.0	Y
M4	8	2	6,483,477.0	1,855,442.9	513.45	4.92	0.00	66	10.0	8.0	
M4B	9	4	6,483,625.0	1,855,413.4	554.46	4.92	0.00	66	10.0	8.0	
M5	10	3	6,483,675.0	1,855,604.2	524.93	4.92	0.00	66	10.0	8.0	
M5B	11	5	6,483,842.5	1,855,604.2	600.39	4.92	0.00	66	10.0	8.0	
M6	12	1	6,483,798.0	1,855,847.1	540.00	4.92	0.00	66	10.0	8.0	
M6B	13	6	6,484,126.0	1,855,916.0	600.39	4.92	0.00	66	10.0	8.0	
ST2	14	11	6,484,036.5	1,856,041.5	545.00	4.92	0.00	66	10.0	8.0	
M7	15	5	6,484,234.5	1,856,282.2	535.00	4.92	0.00	66	10.0	8.0	
M7B	16	5	6,484,378.5	1,856,269.1	583.99	4.92	0.00	66	10.0	8.0	
ST3	17	9	6,484,498.0	1,856,566.2	514.00	4.92	0.00	66	10.0	8.0	
M8	18	6	6,484,612.5	1,856,728.8	505.00	4.92	0.00	66	10.0	8.0	
M8B	19	5	6,484,685.0	1,856,566.2	551.18	4.92	0.00	66	10.0	8.0	
ST4	20	11	6,484,708.0	1,856,841.0	487.00	4.92	0.00	66	10.0	8.0	
M8C	21	8	6,484,782.0	1,857,036.6	470.80	4.92	0.00	66	10.0	8.0	
ST5	22	5	6,484,494.5	1,857,197.4	492.13	4.92	0.00	66	10.0	8.0	
M9	23	4	6,484,366.0	1,856,999.4	500.00	4.92	0.00	66	10.0	8.0	
M9B	24	7	6,484,326.5	1,857,158.8	495.41	4.92	0.00	66	10.0	8.0	
M9C	25	4	6,484,384.5	1,857,338.4	497.05	4.92	0.00	66	10.0	8.0	

INPUT: RECEIVERS

M9D	27	4	6,484,216.0	1,856,963.4	503.94	4.92	0.00	66	10.0	8.0	
ST6	29	3	6,484,280.5	1,856,893.5	500.00	4.92	0.00	66	10.0	8.0	
M10	31	4	6,484,088.5	1,856,734.5	505.00	4.92	0.00	66	10.0	8.0	
M10B	32	4	6,484,049.0	1,856,859.2	514.11	4.92	0.00	66	10.0	8.0	
M11	34	5	6,483,887.0	1,856,580.8	518.00	4.92	0.00	66	10.0	8.0	
M11B	35	6	6,483,887.0	1,856,712.0	528.00	4.92	0.00	66	10.0	8.0	
ST7	37	5	6,483,618.0	1,856,267.6	507.00	4.92	0.00	66	10.0	8.0	
M12	39	5	6,483,496.5	1,856,186.9	502.00	4.92	0.00	66	10.0	8.0	
M12B	40	4	6,483,470.5	1,856,357.5	521.65	4.92	0.00	66	10.0	8.0	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
ST1	43	7	6,483,303.0	1,855,961.8	492.13	4.92	0.00	66	10.0	8.0	Y
M14	44	1	6,483,285.5	1,855,907.4	492.13	4.92	0.00	66	10.0	8.0	Y
M15	45	1	6,483,110.0	1,855,511.8	488.85	4.92	0.00	66	10.0	8.0	
M15B	47	6	6,483,001.5	1,855,616.8	495.41	4.92	0.00	66	10.0	8.0	

Jones & Stokes 25 April 2007
M Greene TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions

Barrier									Points						Segment				
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height					
		Min	Max	$ per Unit Area	$ per Unit Vol.	Top Width	Run:Rise	$ per Unit Length			X	Y	Z	at Point	Seg Ht Perturbs Incre-ment	#Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		

										point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00					0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
										point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
										point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00					0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
										point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00					0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
										point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
										point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
										point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
										point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
										point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
										point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
										point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
										point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
										point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
										point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
										point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
										point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
										point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
										point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
										point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
										point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
										point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00					0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
										point93	126	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
										point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
										point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
										point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
										point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
										point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
										point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
										point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier5	W	0.00	100.00	0.00					0.00	point28	28	6,484,006.5	1,856,432.1	490.49	0.00	0.00	0	0		
										point29	29	6,483,879.0	1,856,298.0	498.69	0.00	0.00	0	0		
										point30	30	6,483,673.0	1,856,071.0	503.61	0.00	0.00	0	0		
										point118	118	6,483,615.0	1,856,004.8	503.61	0.00	0.00	0	0		
										point119	119	6,483,500.0	1,855,895.5	505.25	0.00	0.00	0	0		
										point120	120	6,483,495.0	1,855,914.1	503.61	0.00	0.00	0	0	Y	
										point121	121	6,483,410.5	1,855,838.9	505.91	0.00	0.00	0	0	Y	
										point122	122	6,483,326.0	1,855,763.6	504.59	0.00	0.00	0	0		
										point123	123	6,483,329.5	1,855,725.1	504.59	0.00	0.00	0	0		
										point124	124	6,483,294.0	1,855,689.0	0.00	0.00	0.00	0	0		
										point125	125	6,483,235.5	1,855,623.8	500.33	0.00					

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: RECEIVER ADJUSTMENT FACTORS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Alt B PM Conditions				
Receiver					
Name	No.	Individual Roadway Segment Adjustment Factors			
		Roadway	Segment		
		Name	Name	No.	Adj. Factor
					dB
<< This table is empty >>					

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: "STRUCTURE" BARRIERS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Alt B PM Conditions				
Barrier	Segments		Shielded Roadways	Segments	
Name	Name	No.	Name	Name	No.
Barrier6	point38	38	Fargo St NB	point147	147
Barrier7	point40	40	Fargo St SB	point149	149
Barrier5	point120	120	Waterloo St	point154	154
Barrier5	point121	121	Waterloo St	point154	154

Jones & Stokes		25 April 2007
M Greene		TNM 2.5
		Calculated with TNM 2.5
RESULTS: SOUND LEVELS		
PROJECT/CONTRACT:	<Project Name?>	
RUN:	SR 2 Alt B PM Conditions	
BARRIER DESIGN:	INPUT HEIGHTS	Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.
ATMOSPHERICS:	68 deg F, 50% RH	

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	4	3	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0
M2	5	1	0.0	62.1	66	62.1	10	----	62.1	0.0	8	-8.0
M3	6	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
LT1	7	3	0.0	65.1	66	65.1	10	----	65.1	0.0	8	-8.0
M4	8	2	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
M4B	9	4	0.0	60.6	66	60.6	10	----	60.6	0.0	8	-8.0
M5	10	3	0.0	59.1	66	59.1	10	----	59.1	0.0	8	-8.0
M5B	11	5	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
M6	12	1	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
M6B	13	6	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0
ST2	14	11	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
M7	15	5	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0
M7B	16	5	0.0	68.4	66	68.4	10	Snd Lvl	68.4	0.0	8	-8.0
ST3	17	9	0.0	68.6	66	68.6	10	Snd Lvl	68.6	0.0	8	-8.0
M8	18	6	0.0	71.7	66	71.7	10	Snd Lvl	71.7	0.0	8	-8.0
M8B	19	5	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0
ST4	20	11	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0
M8C	21	8	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
ST5	22	5	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
M9	23	4	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
M9B	24	7	0.0	59.1	66	59.1	10	----	59.1	0.0	8	-8.0
M9C	25	4	0.0	60.2	66	60.2	10	----	60.2	0.0	8	-8.0
M9D	27	4	0.0	61.8	66	61.8	10	----	61.8	0.0	8	-8.0

ST6	29	3	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
M10	31	4	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
M10B	32	4	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0
M11	34	5	0.0	66.4	66	66.4	10	Snd Lvl	66.4	0.0	8	-8.0
M11B	35	6	0.0	64.4	66	64.4	10	----	64.4	0.0	8	-8.0
ST7	37	5	0.0	63.2	66	63.2	10	----	63.2	0.0	8	-8.0
M12	39	5	0.0	61.2	66	61.2	10	----	61.2	0.0	8	-8.0
M12B	40	4	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0
M13	41	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
ST1	43	7	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
M14	44	1	0.0	61.5	66	61.5	10	----	61.5	0.0	8	-8.0
M15	45	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
M15B	47	6	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0
Dwelling Units		**# DUs**	**Noise Reduction**									
			Min	**Avg**	**Max**							
			dB	**dB**	**dB**							
All Selected		165	0.0	0.0	0.0							
All Impacted		70	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Jones & Stokes 25 April 2007
M Greene TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	356	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,249.0	1,855,217.1	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	357	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.5	1,855,212.6	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	358	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.5	1,855,214.9	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,351.0	1,855,975.2	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,463.0	1,855,659.8	477.69				Average	

		point97	97	6,483,611.5	1,855,834.6	485.56				Average	
		point96	96	6,483,675.0	1,855,907.4	490.49				Average	
		point95	95	6,483,744.5	1,855,985.4	495.41				Average	
		point94	94	6,483,804.5	1,856,058.2	498.69				Average	
		point93	93	6,483,856.5	1,856,115.1	500.33				Average	
		point92	92	6,483,912.5	1,856,181.0	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,619.0	1,857,125.6	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,324.5	1,856,740.6	485.56				Average	
		point112	112	6,484,237.0	1,856,629.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,619.0	1,857,143.0	475.72				Average	
		point118	118	6,484,518.0	1,857,008.8	479.00				Average	
		point119	119	6,484,414.5	1,856,873.2	482.28				Average	
		point120	120	6,484,306.0	1,856,737.2	485.56				Average	
		point121	121	6,484,222.5	1,856,630.8	488.85					
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,601.0	1,857,167.4	475.72				Average	
		point145	145	6,484,486.5	1,856,999.5	479.00				Average	
		point144	144	6,484,382.5	1,856,860.4	482.28				Average	
		point143	143	6,484,282.0	1,856,732.2	485.56				Average	
		point142	142	6,484,199.0	1,856,625.9	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	355	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,641.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	354	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,459.0	1,855,683.9	477.69				Average	
		point13	13	6,483,463.0	1,855,775.4	480.31				Average	
		point251	251	6,483,459.5	1,855,802.6	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,425.5	1,855,649.9	478.02				Average	
		point331	331	6,483,443.5	1,855,700.0	479.17				Average	
		point25	25	6,483,448.5	1,855,751.8	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point235	235	6,483,419.5	1,855,676.2	478.67				Average	
		point295	295	6,483,385.0	1,855,630.9	476.38				Average	
		point53	53	6,483,348.5	1,855,575.5	474.08				Average	
		point52	52	6,483,325.0	1,855,535.9	472.44				Average	
		point51	51	6,483,257.0	1,855,397.5	469.16				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,198.5	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,383.5	1,855,675.5	478.35				Average	
		point62	62	6,483,322.0	1,855,572.9	473.75				Average	
		point61	61	6,483,269.0	1,855,481.5	472.44				Average	
		point60	60	6,483,219.5	1,855,367.9	469.16				Average	
		point59	59	6,483,206.0	1,855,326.1	467.52				Average	
		point58	58	6,483,178.0	1,855,225.5	464.57					

Glendale Blvd NB- N of Alessandro - 3-2	12.0	point237	237	6,483,224.5	1,855,220.2	465.22				Average	
		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point28	28	6,483,340.5	1,855,476.6	472.44					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point16	16	6,483,347.5	1,855,465.2	472.44					
Glendale Blvd NB - N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,276.5	1,855,286.4	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36				Average	
		point83	83	6,483,527.5	1,855,717.1	479.00				Average	
		point82	82	6,483,580.5	1,855,779.8	482.28				Average	
		point81	81	6,483,641.5	1,855,850.4	487.20				Average	
		point80	80	6,483,685.0	1,855,901.5	490.49				Average	
		point79	79	6,483,727.0	1,855,950.2	493.77				Average	
		point78	78	6,483,779.0	1,856,010.4	497.05				Average	
		point77	77	6,483,840.5	1,856,083.1	500.33				Average	
		point76	76	6,483,862.0	1,856,106.5	501.31				Average	
		point75	75	6,483,882.5	1,856,127.8	500.33				Average	
		point74	74	6,483,927.5	1,856,180.4	500.33				Average	
		point73	73	6,484,026.0	1,856,294.8	498.69				Average	
		point72	72	6,484,137.5	1,856,415.9	495.41				Average	
		point71	71	6,484,242.0	1,856,533.5	492.78				Average	
		point70	70	6,484,299.5	1,856,597.5	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,405.0	1,856,704.2	487.20				Average	
		point230	230	6,484,503.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point48	48	6,483,150.5	1,854,833.5	457.70				Average	

		point286	359	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	360	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,459.5	1,855,804.0	482.61				Average	
		point252	252	6,483,458.0	1,855,819.2	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,457.5	1,855,819.5	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,351.0	1,855,968.0	490.81				Average	
		point271	271	6,483,393.0	1,855,752.9	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77				Average	
		point267	267	6,483,416.5	1,855,775.8	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,419.5	1,855,759.6	482.61				Average	
		point55	55	6,483,424.5	1,855,730.9	480.31				Average	
		point54	54	6,483,420.0	1,855,677.8	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,416.5	1,855,775.8	484.25				Average	
		point268	268	6,483,419.5	1,855,760.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,394.0	1,855,751.2	483.92				Average	
		point272	272	6,483,396.5	1,855,737.4	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,399.0	1,855,720.4	480.31				Average	
		point63	63	6,483,384.0	1,855,675.2	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,447.5	1,855,752.6	480.31				Average	
		point286	286	6,483,444.0	1,855,786.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,444.0	1,855,787.9	481.57				Average	
		point287	287	6,483,442.5	1,855,802.2	482.83					
Glendale Blvd NB - S of Alessandro -	12.0	point289	289	6,483,442.0	1,855,803.6	482.83				Average	
		point282	282	6,483,438.5	1,855,835.9	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					
Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	

		point301	301	6,483,132.0	1,854,904.0	457.68					
Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,396.5	1,855,670.2	478.67				Average	
		point332	332	6,483,369.5	1,855,629.0	476.38				Average	
		point303	303	6,483,336.5	1,855,579.9	474.08				Average	
		point304	304	6,483,313.5	1,855,537.6	472.44				Average	
		point305	305	6,483,241.0	1,855,387.4	469.16				Average	
		point306	306	6,483,228.0	1,855,351.1	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,198.5	1,856,625.5	488.85				Average	
		point312	312	6,484,099.5	1,856,501.9	492.13				Average	
		point313	313	6,484,054.0	1,856,452.2	493.77				Average	
		point314	314	6,483,960.5	1,856,344.5	497.05				Average	
		point315	315	6,483,867.0	1,856,234.9	500.33				Average	
		point316	316	6,483,712.5	1,856,060.2	497.05				Average	
		point317	317	6,483,615.5	1,855,946.4	493.77				Average	
		point318	318	6,483,481.5	1,855,794.8	490.49					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,222.0	1,856,630.5	488.85				Average	
		point320	320	6,484,120.5	1,856,505.1	492.13				Average	
		point321	321	6,483,924.0	1,856,285.5	498.69				Average	
		point322	322	6,483,787.5	1,856,126.8	501.97				Average	
		point323	323	6,483,622.0	1,855,938.5	505.25				Average	
		point324	324	6,483,484.0	1,855,774.1	506.89					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,236.5	1,856,629.0	488.85				Average	
		point326	326	6,484,136.0	1,856,508.1	492.13				Average	
		point327	327	6,483,938.5	1,856,281.9	498.69				Average	
		point328	328	6,483,796.0	1,856,118.1	501.97				Average	
		point329	329	6,483,632.0	1,855,929.6	505.25				Average	
		point330	330	6,483,476.5	1,855,752.6	506.89					
Glendale Blvd SB - N of Alessandro-2 -	12.0	point335	335	6,483,359.5	1,855,972.0	493.77				Average	
		point334	334	6,483,411.5	1,855,725.1	480.31				Average	
		point333	333	6,483,397.0	1,855,669.9	478.67					
Glendale Blvd SB - S of Alessandro--2	12.0	point347	347	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	
		point310	310	6,483,137.5	1,854,857.1	454.07					
Glendale Blvd NB - N of Alessandro-2	12.0	point350	350	6,483,354.5	1,855,458.4	472.44				Average	
		point349	349	6,483,394.0	1,855,534.1	474.08				Average	
		point348	348	6,483,453.0	1,855,645.5	477.69					

INPUT: ROADWAYS

Glendale Blvd NB- N of Alessandro - 3-2-2	12.0	point351	351	6,483,340.5	1,855,476.6	472.44				Average	
		point27	27	6,483,384.5	1,855,563.1	474.41				Average	
		point26	26	6,483,424.5	1,855,647.9	478.02					
Glendale Blvd NB -N of Alessandro - 2	12.0	point352	352	6,483,347.5	1,855,465.2	472.44				Average	
		point15	15	6,483,382.5	1,855,533.5	474.08				Average	
		point292	292	6,483,444.0	1,855,649.2	475.89				Average	
		point14	14	6,483,459.0	1,855,683.8	477.69					
Glendale Blvd NB - N of Alessandro-2-2	12.0	point353	353	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,405.0	1,855,529.4	472.11				Average	
		point2	9	6,483,432.5	1,855,584.2	475.72				Average	
		point1	10	6,483,461.5	1,855,637.6	476.71					

Jones & Stokes				25 April 2007									
M Greene				TNM 2.5									
INPUT: TRAFFIC FOR LAeq1h Volumes													
PROJECT/CONTRACT:	<Project Name?>												
RUN:	SR 2 Alt C PM Conditions												
Roadway	Points												
Name	Name	No.	Segment										
			Autos		MTrucks		HTrucks		Buses		Motorcycles		
			V	S	V	S	V	S	V	S	V	S	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35	
	point283	356	1263	35	32	35	0	0	17	30	15	35	
	point9	2	1263	35	32	35	0	0	17	30	15	35	
	point8	3	1263	35	32	35	0	0	17	30	15	35	
	point7	4											
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35	
	point284	357	1263	35	32	35	0	0	17	30	15	35	
	point21	21	1263	35	32	35	0	0	17	30	15	35	
	point20	20	1263	35	32	35	0	0	17	30	15	35	
	point19	19											
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35	
	point285	358	1263	35	32	35	0	0	17	30	15	35	
	point33	33	1263	35	32	35	0	0	17	30	15	35	
	point32	32	1263	35	32	35	0	0	17	30	15	35	
	point31	31											
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35	
	point40	40	383	35	10	35	0	0	5	30	4	35	
	point39	39											
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35	
	point43	43											
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35	
	point45	45											

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	1017	50	21	50	12	45	5	45	2	50
	point277	277	1017	65	21	65	12	60	5	60	2	65
	point115	115	1017	65	21	65	12	60	5	60	2	65
	point114	114	1017	65	21	65	12	60	5	60	2	65
	point113	113	1017	50	21	50	12	45	5	45	2	50
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	1017	65	21	65	12	60	5	60	2	65
	point276	276	1017	65	21	65	12	60	5	60	2	65
	point118	118	1017	65	21	65	12	60	5	60	2	65
	point119	119	1017	65	21	65	12	60	5	60	2	65
	point120	120	1017	50	21	50	12	45	5	45	2	50
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	1017	65	21	65	12	60	5	60	2	65
	point275	275	1017	65	21	65	12	60	5	60	2	65
	point145	145	1017	65	21	65	12	60	5	60	2	65
	point144	144	1017	65	21	65	12	60	5	60	2	65
	point143	143	1017	50	21	50	12	45	5	45	2	50
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

	point150	150											
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153											
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156											
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	355	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157											
SR 2 NB - 3rd Lane	point204	204	1114	65	12	65	20	60	4	60	0	0

	point203	203	1114	65	12	65	20	60	4	60	0	0
	point202	202	1114	65	12	65	20	60	4	60	0	0
	point201	201	1114	65	12	65	20	60	4	60	0	0
	point279	279	1114	65	12	65	20	60	4	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	354	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	383	35	10	35	0	0	5	30	4	35

INPUT: TRAFFIC FOR LAeq1h Volumes

<Project Name?>

	point331	331	383	35	10	35	0	0	5	30	4	35
	point25	25										
Glendale Blvd SB - N of Alessandro	point235	235	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB- N of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point28	28										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point16	16										
Glendale Blvd NB - N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6	1285	35	32	35	0	0	18	30	15	35
	point4	7										
SR 2 NB - 2-2	point243	243	1114	65	12	65	20	60	4	60	0	0
	point87	87	1114	65	12	65	20	60	4	60	0	0
	point86	86	1114	65	12	65	20	60	4	60	0	0
	point278	278	1114	65	12	65	20	60	4	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0

	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0
	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	359	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	360	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	194	35	5	35	0	0	3	30	2	35
	point271	271										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB - N of Alessandro	point56	56	194	35	5	35	0	0	3	30	2	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	843	35	21	35	0	0	12	30	10	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	194	35	5	35	0	0	3	30	2	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	194	35	5	35	0	0	3	30	2	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB - S of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	878	35	22	35	0	0	12	30	10	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	878	35	22	35	0	0	12	30	10	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point332	332	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	1017	50	21	50	12	45	5	45	2	50
	point312	312	1017	35	21	35	12	30	5	30	2	35
	point313	313	1017	35	21	35	12	30	5	30	2	35

	point314	314	1017	35	21	35	12	30	5	30	2	35
	point315	315	1017	35	21	35	12	30	5	30	2	35
	point316	316	1017	35	21	35	12	30	5	30	2	35
	point317	317	1017	35	21	35	12	30	5	30	2	35
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	1017	50	21	50	12	45	5	45	2	50
	point320	320	1017	35	21	35	12	30	5	30	2	35
	point321	321	1017	35	21	35	12	30	5	30	2	35
	point322	322	1017	35	21	35	12	30	5	30	2	35
	point323	323	1017	35	21	35	12	30	5	30	2	35
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	1017	50	21	50	12	45	5	45	2	50
	point326	326	1017	35	21	35	12	30	5	30	2	35
	point327	327	1017	35	21	35	12	30	5	30	2	35
	point328	328	1017	35	21	35	12	30	5	30	2	35
	point329	329	1017	35	21	35	12	30	5	30	2	35
	point330	330										
Glendale Blvd SB - N of Alessandro-2 -	point335	335	194	35	5	35	0	0	3	30	2	35
	point334	334	843	35	21	35	0	0	12	30	10	35
	point333	333										
Glendale Blvd SB - S of Alessandro--2	point347	347	878	35	22	35	0	0	12	30	10	35
	point308	308	878	35	22	35	0	0	12	30	10	35
	point309	309	878	35	22	35	0	0	12	30	10	35
	point310	310										
Glendale Blvd NB - N of Alessandro-2	point350	350	964	35	24	35	0	0	13	30	11	35
	point349	349	964	35	24	35	0	0	13	30	11	35
	point348	348										
Glendale Blvd NB- N of Alessandro - 3-2-2	point351	351	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										
Glendale Blvd NB -N of Alessandro - 2	point352	352	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	383	35	10	35	0	0	5	30	4	35
	point14	14										

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

Glendale Blvd NB - N of Alessandro-2-2	point353	353	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35
	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										

Jones & Stokes						25 April 2007					
M Greene						TNM 2.5					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	<Project Name?>										
RUN:	SR 2 Alt C PM Conditions										
Receiver											
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height**	**Input Sound Levels and Criteria**				**Active**
			X	**Y**	**Z**	**above**	**Existing**	**Impact Criteria**		**NR**	**in**
						Ground	**LAeq1h**	**LAeq1h**	**Sub'l**	**Goal**	**Calc.**
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	4	3	6,483,201.5	1,854,565.8	456.04	4.92	0.00	66	10.0	8.0	
M2	5	1	6,483,277.0	1,854,804.1	465.88	4.92	0.00	66	10.0	8.0	
M3	6	1	6,483,415.0	1,854,804.1	485.56	4.92	0.00	66	10.0	8.0	
LT1	7	3	6,483,420.5	1,855,201.2	490.00	4.92	0.00	66	10.0	8.0	Y
M4	8	2	6,483,477.0	1,855,442.9	513.45	4.92	0.00	66	10.0	8.0	
M4B	9	4	6,483,625.0	1,855,413.4	554.46	4.92	0.00	66	10.0	8.0	
M5	10	3	6,483,675.0	1,855,604.2	524.93	4.92	0.00	66	10.0	8.0	
M5B	11	5	6,483,842.5	1,855,604.2	600.39	4.92	0.00	66	10.0	8.0	
M6	12	1	6,483,798.0	1,855,847.1	540.00	4.92	0.00	66	10.0	8.0	
M6B	13	6	6,484,126.0	1,855,916.0	600.39	4.92	0.00	66	10.0	8.0	
ST2	14	11	6,484,036.5	1,856,041.5	545.00	4.92	0.00	66	10.0	8.0	
M7	15	5	6,484,234.5	1,856,282.2	535.00	4.92	0.00	66	10.0	8.0	
M7B	16	5	6,484,378.5	1,856,269.1	583.99	4.92	0.00	66	10.0	8.0	
ST3	17	9	6,484,498.0	1,856,566.2	514.00	4.92	0.00	66	10.0	8.0	
M8	18	6	6,484,612.5	1,856,728.8	505.00	4.92	0.00	66	10.0	8.0	
M8B	19	5	6,484,685.0	1,856,566.2	551.18	4.92	0.00	66	10.0	8.0	
ST4	20	11	6,484,708.0	1,856,841.0	487.00	4.92	0.00	66	10.0	8.0	
M8C	21	8	6,484,782.0	1,857,036.6	470.80	4.92	0.00	66	10.0	8.0	
ST5	22	5	6,484,494.5	1,857,197.4	492.13	4.92	0.00	66	10.0	8.0	
M9	23	4	6,484,366.0	1,856,999.4	500.00	4.92	0.00	66	10.0	8.0	
M9B	24	7	6,484,326.5	1,857,158.8	495.41	4.92	0.00	66	10.0	8.0	
M9C	25	4	6,484,384.5	1,857,338.4	497.05	4.92	0.00	66	10.0	8.0	

INPUT: RECEIVERS <Project Name?>

M9D	27	4	6,484,216.0	1,856,963.4	503.94	4.92	0.00	66	10.0	8.0	
ST6	29	3	6,484,280.5	1,856,893.5	500.00	4.92	0.00	66	10.0	8.0	
M10	31	4	6,484,088.5	1,856,734.5	505.00	4.92	0.00	66	10.0	8.0	
M10B	32	4	6,484,049.0	1,856,859.2	514.11	4.92	0.00	66	10.0	8.0	
M11	34	5	6,483,887.0	1,856,580.8	518.00	4.92	0.00	66	10.0	8.0	
M11B	35	6	6,483,887.0	1,856,712.0	528.00	4.92	0.00	66	10.0	8.0	
ST7	37	5	6,483,618.0	1,856,267.6	507.00	4.92	0.00	66	10.0	8.0	
M12	39	5	6,483,496.5	1,856,186.9	502.00	4.92	0.00	66	10.0	8.0	
M12B	40	4	6,483,470.5	1,856,357.5	521.65	4.92	0.00	66	10.0	8.0	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
ST1	43	7	6,483,303.0	1,855,961.8	492.13	4.92	0.00	66	10.0	8.0	Y
M14	44	1	6,483,285.5	1,855,907.4	492.13	4.92	0.00	66	10.0	8.0	Y
M15	45	1	6,483,110.0	1,855,511.8	488.85	4.92	0.00	66	10.0	8.0	
M15B	47	6	6,483,001.5	1,855,616.8	495.41	4.92	0.00	66	10.0	8.0	

Jones & Stokes 25 April 2007
M Greene TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions

Barrier Name	Type	Height Min (ft)	Height Max (ft)	If Wall $ per Unit Area ($/sq ft)	If Berm $ per Unit Vol. ($/cu yd)	If Berm Top Width (ft)	If Berm Run:Rise (ft:ft)	Add'tnl $ per Unit Length ($/ft)	Points Name	No.	Coordinates (bottom) X (ft)	Coordinates (bottom) Y (ft)	Coordinates (bottom) Z (ft)	Height at Point (ft)	Segment Seg Ht Perturbs Increment (ft)	Segment Seg Ht Perturbs #Up	Segment Seg Ht Perturbs #Dn	Segment On Struct?	Segment Important Reflections?
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point133	133	6,483,542.5	1,856,015.5	505.36	0.00	0.00	0	0		
									point134	134	6,483,483.0	1,855,964.4	505.47	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		

INPUT: BARRIERS <Project Name?>

									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	140	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier18	W	0.00	100.00	0.00				0.00	point126	126	6,483,312.5	1,855,814.6	498.69	0.00	0.00	0	0		
									point127	127	6,483,316.5	1,855,765.0	503.61	0.00	0.00	0	0		
									point128	128	6,483,313.5	1,855,712.8	503.61	0.00	0.00	0	0		
									point129	129	6,483,294.0	1,855,689.0	501.97	0.00	0.00	0	0		
									point130	130	6,483,235.5	1,855,623.8	500.33	0.00					
Barrier4-2	W	0.00	100.00	0.00				0.00	point132	132	6,483,311.5	1,855,814.5	498.69	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier21	W	0.00	100.00	0.00				0.00	point136	136	6,483,615.0	1,856,004.8	501.97	0.00	0.00	0	0		
									point137	137	6,483,500.0	1,855,895.5	503.61	0.00	0.00	0	0		
									point138	138	6,483,495.0	1,855,914.1	505.25	0.00	0.00	0	0		
									point139	139	6,483,483.5	1,855,963.4	505.25	0.00					

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: RECEIVER ADJUSTMENT FACTORS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Alt C PM Conditions				
Receiver					
Name	No.	Individual Roadway Segment Adjustment Factors			
		Roadway	Segment		
		Name	Name	No.	Adj. Factor
					dB
<< This table is empty >>					

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: "STRUCTURE" BARRIERS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Alt C PM Conditions				
Barrier	Segments		Shielded Roadways	Segments	
Name	Name	No.	Name	Name	No.
Barrier6	point38	38	Fargo St NB	point147	147
Barrier7	point40	40	Fargo St SB	point149	149

Jones & Stokes							25 April 2007						
M Greene							TNM 2.5						
							Calculated with TNM 2.5						
RESULTS: SOUND LEVELS													
PROJECT/CONTRACT:	<Project Name?>												
RUN:	SR 2 Alt C PM Conditions												
BARRIER DESIGN:	INPUT HEIGHTS							Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.					
ATMOSPHERICS:	68 deg F, 50% RH												
Receiver													
Name	No.	#DUs	Existing	No Barrier					With Barrier				
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction			
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB	
M1	4	3	0.0	68.2	66	68.2	10	Snd Lvl	68.2	0.0	8	-8.0	
M2	5	1	0.0	61.8	66	61.8	10	----	61.8	0.0	8	-8.0	
M3	6	1	0.0	56.9	66	56.9	10	----	56.9	0.0	8	-8.0	
LT1	7	3	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0	
M4	8	2	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0	
M4B	9	4	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0	
M5	10	3	0.0	59.3	66	59.3	10	----	59.3	0.0	8	-8.0	
M5B	11	5	0.0	61.0	66	61.0	10	----	61.0	0.0	8	-8.0	
M6	12	1	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0	
M6B	13	6	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0	
ST2	14	11	0.0	64.4	66	64.4	10	----	64.4	0.0	8	-8.0	
M7	15	5	0.0	70.6	66	70.6	10	Snd Lvl	70.6	0.0	8	-8.0	
M7B	16	5	0.0	68.7	66	68.7	10	Snd Lvl	68.7	0.0	8	-8.0	
ST3	17	9	0.0	69.0	66	69.0	10	Snd Lvl	69.0	0.0	8	-8.0	
M8	18	6	0.0	72.1	66	72.1	10	Snd Lvl	72.1	0.0	8	-8.0	
M8B	19	5	0.0	67.9	66	67.9	10	Snd Lvl	67.9	0.0	8	-8.0	
ST4	20	11	0.0	70.8	66	70.8	10	Snd Lvl	70.8	0.0	8	-8.0	
M8C	21	8	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0	
ST5	22	5	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0	
M9	23	4	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0	
M9B	24	7	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0	
M9C	25	4	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0	
M9D	27	4	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0	

ST6	29	3	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0
M10	31	4	0.0	66.9	66	66.9	10	Snd Lvl	66.9	0.0	8	-8.0
M10B	32	4	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0
M11	34	5	0.0	66.5	66	66.5	10	Snd Lvl	66.5	0.0	8	-8.0
M11B	35	6	0.0	64.4	66	64.4	10	----	64.4	0.0	8	-8.0
ST7	37	5	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
M12	39	5	0.0	61.9	66	61.9	10	----	61.9	0.0	8	-8.0
M12B	40	4	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0
M13	41	1	0.0	63.2	66	63.2	10	----	63.2	0.0	8	-8.0
ST1	43	7	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0
M14	44	1	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
M15	45	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
M15B	47	6	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0

Dwelling Units		**# DUs**	**Noise Reduction**		
			Min	**Avg**	**Max**
			dB	**dB**	**dB**
All Selected		165	0.0	0.0	0.0
All Impacted		70	0.0	0.0	0.0
All that meet NR Goal		0	0.0	0.0	0.0

Jones & Stokes					25 April 2007							
M Greene					TNM 2.5							
INPUT: ROADWAYS							Average pavement type shall be used unless					
PROJECT/CONTRACT:	<Project Name?>						a State highway agency substantiates the use					
RUN:	SR 2 Alt D PM Conditions						of a different type with the approval of FHWA					
Roadway		Points										
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment		
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?	
	ft			ft	ft	ft		mph	%			
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average		
		point283	381	6,483,141.0	1,854,568.8	451.80				Average		
		point9	2	6,483,183.0	1,854,824.1	456.00				Average		
		point8	3	6,483,238.5	1,855,181.5	464.20				Average		
		point7	4	6,483,249.0	1,855,217.1	464.90						
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average		
		point284	382	6,483,131.5	1,854,567.5	452.10				Average		
		point21	21	6,483,172.0	1,854,834.5	457.70				Average		
		point20	20	6,483,229.0	1,855,182.5	464.90				Average		
		point19	19	6,483,239.5	1,855,212.6	465.20						
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average		
		point285	383	6,483,121.0	1,854,567.6	452.10				Average		
		point33	33	6,483,163.0	1,854,835.1	457.70				Average		
		point32	32	6,483,221.5	1,855,183.4	464.60				Average		
		point31	31	6,483,231.5	1,855,214.9	465.20						
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average		
		point40	40	6,483,331.5	1,856,249.1	505.25				Average		
		point39	39	6,483,246.5	1,856,520.5	515.09						
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average		
		point43	43	6,483,240.0	1,856,513.5	515.09						
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average		
		point45	45	6,483,365.0	1,855,978.2	490.81						
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average		
		point47	47	6,483,351.0	1,855,973.1	490.81						
SR 2 NB - 2	12.0	point98	98	6,483,456.0	1,855,646.2	477.69				Average		

		point97	97	6,483,615.0	1,855,831.5	485.56				Average	
		point96	96	6,483,678.5	1,855,904.8	490.49				Average	
		point95	95	6,483,746.5	1,855,983.9	495.41				Average	
		point94	94	6,483,806.5	1,856,056.4	498.69				Average	
		point93	93	6,483,853.0	1,856,108.0	500.33				Average	
		point92	92	6,483,914.5	1,856,178.0	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,625.5	1,857,134.4	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,433.5	1,856,878.0	482.28				Average	
		point113	113	6,484,326.0	1,856,741.4	485.56				Average	
		point112	112	6,484,235.5	1,856,629.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,619.0	1,857,143.0	475.72				Average	
		point118	118	6,484,518.0	1,857,008.8	479.00				Average	
		point119	119	6,484,414.5	1,856,873.2	482.28				Average	
		point120	120	6,484,306.0	1,856,737.4	485.56				Average	
		point121	121	6,484,224.5	1,856,634.9	488.85					
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,607.0	1,857,157.4	475.72				Average	
		point145	145	6,484,495.5	1,857,003.9	479.00				Average	
		point144	144	6,484,387.0	1,856,862.9	482.28				Average	
		point143	143	6,484,281.5	1,856,730.9	485.56				Average	
		point142	142	6,484,199.0	1,856,625.1	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90			Average	
		point181	380	6,484,769.5	1,857,081.8	469.20			Average	
		point180	180	6,484,678.5	1,856,985.1	472.40			Average	
		point179	179	6,484,601.0	1,856,861.6	482.30			Average	
		point178	178	6,484,562.5	1,856,793.4	488.80			Average	
		point177	177	6,484,519.0	1,856,721.0	495.40			Average	
		point176	176	6,484,448.0	1,856,618.6	505.20			Average	
		point175	175	6,484,393.0	1,856,549.1	510.20			Average	
		point174	174	6,484,344.0	1,856,494.6	511.80			Average	
		point173	173	6,484,195.5	1,856,344.8	513.50			Average	
		point172	172	6,484,114.5	1,856,271.8	515.10			Average	
		point171	171	6,483,949.5	1,856,120.6	523.30			Average	
		point170	170	6,483,868.0	1,856,036.8	524.60			Average	
		point169	169	6,483,788.5	1,855,944.5	523.30			Average	
		point168	168	6,483,718.0	1,855,862.2	520.00			Average	
		point167	167	6,483,634.0	1,855,763.4	513.50			Average	
		point166	166	6,483,550.5	1,855,668.0	506.90			Average	
		point165	165	6,483,468.5	1,855,568.9	500.30			Average	
		point164	164	6,483,428.5	1,855,507.2	497.00			Average	
		point163	163	6,483,402.0	1,855,415.4	492.10			Average	
		point162	162	6,483,394.0	1,855,320.8	485.60			Average	
		point161	161	6,483,390.0	1,855,284.4	482.30			Average	
		point160	160	6,483,373.5	1,855,248.9	477.40			Average	
		point159	159	6,483,333.5	1,855,222.5	470.80			Average	
		point158	158	6,483,303.0	1,855,220.0	467.50			Average	
		point157	157	6,483,263.0	1,855,225.4	465.60				
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49			Average	
		point203	203	6,484,349.0	1,856,657.0	487.20			Average	
		point202	202	6,484,457.5	1,856,789.8	485.56			Average	
		point201	201	6,484,558.5	1,856,928.1	482.28			Average	
		point279	279	6,484,641.5	1,857,053.4	479.00			Average	
		point200	200	6,484,828.5	1,857,328.1	479.00				
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60			Average	
		point227	227	6,483,309.0	1,855,185.6	467.50			Average	
		point226	226	6,483,338.5	1,855,189.0	470.80			Average	
		point225	225	6,483,391.0	1,855,226.4	477.40			Average	
		point224	224	6,483,418.0	1,855,273.5	482.30			Average	
		point223	223	6,483,422.5	1,855,316.0	485.60			Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	379	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,460.5	1,855,694.5	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,460.5	1,855,802.0	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,425.5	1,855,650.1	478.02				Average	
		point342	342	6,483,446.5	1,855,702.8	479.17				Average	
		point25	25	6,483,453.0	1,855,753.9	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point344	344	6,483,409.0	1,855,642.4	477.53				Average	
		point295	295	6,483,388.5	1,855,612.1	476.38				Average	
		point53	53	6,483,356.5	1,855,560.1	474.08				Average	
		point52	52	6,483,325.5	1,855,503.1	472.44				Average	
		point51	51	6,483,264.0	1,855,379.4	469.16				Average	
		point343	343	6,483,236.0	1,855,323.2	468.34				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,198.5	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,391.0	1,855,674.5	478.35				Average	
		point62	62	6,483,336.0	1,855,565.8	473.75				Average	
		point61	61	6,483,294.0	1,855,497.8	472.44				Average	
		point60	60	6,483,232.0	1,855,375.1	469.16				Average	
		point59	59	6,483,208.5	1,855,325.9	467.52				Average	

		point58	58	6,483,177.5	1,855,222.6	464.57					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,224.5	1,855,220.2	465.22				Average	
		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point375	375	6,483,311.0	1,855,420.5	471.62					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point373	373	6,483,320.0	1,855,411.5	470.80					
Glendale Blvd NB -N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,276.5	1,855,286.4	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,467.5	1,855,637.9	477.36				Average	
		point83	83	6,483,531.5	1,855,713.5	479.00				Average	
		point82	82	6,483,584.0	1,855,775.9	482.28				Average	
		point81	81	6,483,645.5	1,855,846.9	487.20				Average	
		point80	80	6,483,690.0	1,855,897.8	490.49				Average	
		point79	79	6,483,730.5	1,855,947.5	493.77				Average	
		point78	78	6,483,782.0	1,856,008.6	497.05				Average	
		point77	77	6,483,842.5	1,856,078.5	500.33				Average	
		point76	76	6,483,865.0	1,856,104.4	501.31				Average	
		point75	75	6,483,884.5	1,856,125.8	500.33				Average	
		point74	74	6,483,929.5	1,856,176.9	500.33				Average	
		point73	73	6,484,024.0	1,856,290.8	498.69				Average	
		point72	72	6,484,138.0	1,856,414.4	495.41				Average	
		point71	71	6,484,242.0	1,856,530.6	492.78				Average	
		point70	70	6,484,300.0	1,856,596.6	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,502.0	1,856,829.2	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	

		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	384	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	385	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,460.5	1,855,804.0	482.61				Average	
		point252	252	6,483,459.0	1,855,819.8	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,459.0	1,855,820.6	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,349.5	1,855,968.8	490.81				Average	
		point271	271	6,483,393.5	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,363.5	1,855,969.9	493.77				Average	
		point267	267	6,483,404.0	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,407.0	1,855,752.4	482.61				Average	
		point55	55	6,483,411.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,404.0	1,855,766.0	484.25				Average	
		point268	268	6,483,406.5	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,393.5	1,855,752.4	483.92				Average	
		point272	272	6,483,396.0	1,855,738.5	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,399.0	1,855,719.8	480.31				Average	
		point63	63	6,483,390.5	1,855,675.2	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,453.0	1,855,754.1	480.31				Average	
		point286	286	6,483,448.0	1,855,789.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,448.5	1,855,789.4	481.57				Average	
		point287	287	6,483,447.0	1,855,803.5	482.83					
Glendale Blvd NB - S of Alessandro -	12.0	point289	289	6,483,447.0	1,855,804.4	482.83				Average	
		point282	282	6,483,441.0	1,855,836.6	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					

Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	
		point301	301	6,483,132.0	1,854,904.0	457.68					
Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,409.5	1,855,669.1	478.67				Average	
		point303	303	6,483,354.5	1,855,576.1	474.08				Average	
		point304	304	6,483,327.5	1,855,528.6	472.44				Average	
		point305	305	6,483,263.0	1,855,401.9	469.16				Average	
		point306	306	6,483,235.5	1,855,348.0	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,197.5	1,856,623.4	488.85				Average	
		point312	312	6,484,087.5	1,856,493.8	492.13				Average	
		point313	313	6,484,054.0	1,856,455.8	493.77				Average	
		point314	314	6,483,935.5	1,856,323.1	497.05				Average	
		point315	315	6,483,858.0	1,856,233.5	500.33				Average	
		point316	316	6,483,735.5	1,856,091.6	497.05				Average	
		point317	317	6,483,628.5	1,855,937.5	492.13				Average	
		point348	348	6,483,570.5	1,855,847.4	485.56				Average	
		point349	349	6,483,508.5	1,855,770.6	479.00				Average	
		point318	318	6,483,484.0	1,855,758.2	479.00					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,224.5	1,856,635.0	488.85				Average	
		point320	320	6,484,115.5	1,856,504.4	492.13				Average	
		point321	321	6,483,919.0	1,856,282.6	498.69				Average	
		point322	322	6,483,779.5	1,856,123.8	492.13				Average	
		point323	323	6,483,641.5	1,855,938.6	485.56				Average	
		point347	347	6,483,583.0	1,855,842.6	479.00				Average	
		point324	324	6,483,474.5	1,855,715.1	479.00					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,241.5	1,856,636.4	488.85				Average	
		point326	326	6,484,135.0	1,856,507.6	492.13				Average	
		point327	327	6,483,936.0	1,856,283.1	498.69				Average	
		point328	328	6,483,791.5	1,856,120.2	501.97				Average	
		point329	329	6,483,657.5	1,855,937.1	492.13				Average	
		point345	345	6,483,593.5	1,855,839.8	485.56				Average	
		point346	346	6,483,536.5	1,855,765.6	479.00				Average	
		point330	330	6,483,475.0	1,855,696.0	477.36					
Glendale Blvd SB - S of Alessandro--2	12.0	point368	368	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	
		point310	310	6,483,137.5	1,854,857.1	454.07					
Glendale Blvd NB - S of Alessandro - 3-	12.0	point371	371	6,483,332.0	1,855,414.9	470.80				Average	

		point370	370	6,483,394.0	1,855,534.1	474.08				Average	
		point369	369	6,483,453.0	1,855,645.5	477.69					
Glendale Blvd NB -N of Alessandro-2-2	12.0	point372	372	6,483,324.5	1,855,378.5	469.16				Average	
		point374	374	6,483,340.0	1,855,408.0	470.31					
Glendale Blvd NB -N of Alessandro-2-2-2	12.0	point376	376	6,483,340.0	1,855,408.0	470.31				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,405.0	1,855,529.4	472.11				Average	
		point2	9	6,483,432.5	1,855,584.2	475.72				Average	
		point1	10	6,483,462.5	1,855,635.0	476.71					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point377	377	6,483,320.0	1,855,411.5	470.80				Average	
		point16	16	6,483,347.5	1,855,465.2	472.44				Average	
		point15	15	6,483,382.5	1,855,533.5	474.08				Average	
		point292	292	6,483,445.0	1,855,651.6	475.89				Average	
		point14	14	6,483,459.5	1,855,691.5	477.69					
Glendale Blvd NB - S of Alessandro - 3-2-2	12.0	point378	378	6,483,311.0	1,855,420.5	471.62				Average	
		point28	28	6,483,340.5	1,855,476.6	472.44				Average	
		point27	27	6,483,384.5	1,855,563.1	474.41				Average	
		point26	26	6,483,425.0	1,855,648.2	478.02					

Jones & Stokes 25 April 2007
M Greene TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	381	1263	35	32	35	0	0	17	30	15	35
	point9	2	1263	35	32	35	0	0	17	30	15	35
	point8	3	1263	35	32	35	0	0	17	30	15	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	382	1263	35	32	35	0	0	17	30	15	35
	point21	21	1263	35	32	35	0	0	17	30	15	35
	point20	20	1263	35	32	35	0	0	17	30	15	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point285	383	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35
	point40	40	383	35	10	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	1017	65	21	65	12	60	5	60	2	65
	point277	277	1017	65	21	65	12	60	5	60	2	65
	point115	115	1017	65	21	65	12	60	5	60	2	65
	point114	114	1017	65	21	65	12	60	5	60	2	65
	point113	113	1017	50	21	50	12	45	5	45	2	50
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	1017	65	21	65	12	60	5	60	2	65
	point276	276	1017	65	21	65	12	60	5	60	2	65
	point118	118	1017	65	21	65	12	60	5	60	2	65
	point119	119	1017	65	21	65	12	60	5	60	2	65
	point120	120	80	50	80	50	72	45	72	45	80	50
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	1017	65	21	65	12	60	5	60	2	65
	point275	275	1017	65	21	65	12	60	5	60	2	65
	point145	145	1017	65	21	65	12	60	5	60	2	65
	point144	144	1017	65	21	65	12	60	5	60	2	65
	point143	143	1017	50	21	50	12	45	5	45	2	50
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	380	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	18	65	30	60	6	60	0	0

	point203	203	1114	65	18	65	30	60	6	60	0	0
	point202	202	1114	65	18	65	30	60	6	60	0	0
	point201	201	1114	65	18	65	30	60	6	60	0	0
	point279	279	1114	65	18	65	30	60	6	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	379	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	964	35	24	35	0	0	13	30	11	35

	point342	342	383	35	10	35	0	0	5	30	4	35
	point25	25										
Glendale Blvd SB - N of Alessandro	point344	344	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point343	343	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point375	375										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point373	373										
Glendale Blvd NB -N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6										
SR 2 NB - 2-2	point243	243	1114	65	18	65	30	60	6	60	0	0
	point87	87	1114	65	18	65	30	60	6	60	0	0
	point86	86	1114	65	18	65	30	60	6	60	0	0
	point278	278	1114	65	18	65	30	60	6	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0

	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0
	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	18	65	30	60	6	60	0	0
	point242	242	1114	65	18	65	30	60	6	60	0	0
	point230	230	1114	65	18	65	30	60	6	60	0	0
	point281	280	1114	65	18	65	30	60	6	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	878	35	22	35	0	0	12	30	10	35
	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	384	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	385	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	292	35	7	35	0	0	4	30	3	35

	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	292	35	7	35	0	0	4	30	3	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	292	35	7	35	0	0	4	30	3	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	292	35	7	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	292	35	7	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB - S of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	1330	35	34	35	0	0	18	30	16	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	1330	35	34	35	0	0	18	30	16	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	1017	35	21	35	12	30	5	30	2	35
	point312	312	1017	35	21	35	12	30	5	30	2	35
	point313	313	1017	35	21	35	12	30	5	30	2	35

	point314	314	1017	35	21	35	12	30	5	30	2	35
	point315	315	1017	35	21	35	12	30	5	30	2	35
	point316	316	1017	35	21	35	12	30	5	30	2	35
	point317	317	1017	35	21	35	12	30	5	30	2	35
	point348	348	1017	35	21	35	12	30	5	30	2	35
	point349	349	1017	35	21	35	12	30	5	30	2	35
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	1017	35	21	35	12	30	5	30	2	35
	point320	320	1017	35	21	35	12	30	5	30	2	35
	point321	321	1017	35	21	35	12	30	5	30	2	35
	point322	322	1017	35	21	35	12	30	5	30	2	35
	point323	323	1017	35	21	35	12	30	5	30	2	35
	point347	347	1017	35	21	35	12	30	5	30	2	35
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	1017	35	21	35	12	30	5	30	2	35
	point326	326	1017	35	21	35	12	30	5	30	2	35
	point327	327	1017	35	21	35	12	30	5	30	2	35
	point328	328	1017	35	21	35	12	30	5	30	2	35
	point329	329	1017	35	21	35	12	30	5	30	2	35
	point345	345	1017	35	21	35	12	30	5	30	2	35
	point346	346	1017	35	21	35	12	30	5	30	2	35
	point330	330										
Glendale Blvd SB - S of Alessandro--2	point368	368	1330	35	34	35	0	0	18	30	16	35
	point308	308	1330	35	34	35	0	0	18	30	16	35
	point309	309	1306	35	33	35	0	0	18	30	15	35
	point310	310										
Glendale Blvd NB - S of Alessandro - 3-	point371	371	964	35	24	35	0	0	13	30	11	35
	point370	370	964	35	24	35	0	0	13	30	11	35
	point369	369										
Glendale Blvd NB -N of Alessandro-2-2	point372	372	1285	35	32	35	0	0	18	30	15	35
	point374	374										
Glendale Blvd NB -N of Alessandro-2-2-2	point376	376	964	35	24	35	0	0	13	30	11	35
	point4	7	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										
Glendale Blvd NB - S of Alessandro - 2-2-2	point377	377	964	35	24	35	0	0	13	30	11	35
	point16	16	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	964	35	24	35	0	0	13	30	11	35
	point14	14										
Glendale Blvd NB - S of Alessandro - 3-2-2	point378	378	964	35	24	35	0	0	13	30	11	35
	point28	28	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										

Jones & Stokes 25 April 2007
M Greene TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	4	3	6,483,201.5	1,854,565.8	456.04	4.92	0.00	66	10.0	8.0	
M2	5	1	6,483,277.0	1,854,804.1	465.88	4.92	0.00	66	10.0	8.0	
M3	6	1	6,483,415.0	1,854,804.1	485.56	4.92	0.00	66	10.0	8.0	
LT1	7	3	6,483,420.5	1,855,201.2	490.00	4.92	0.00	66	10.0	8.0	Y
M4	8	2	6,483,477.0	1,855,442.9	513.45	4.92	0.00	66	10.0	8.0	
M4B	9	4	6,483,625.0	1,855,413.4	554.46	4.92	0.00	66	10.0	8.0	
M5	10	3	6,483,675.0	1,855,604.2	524.93	4.92	0.00	66	10.0	8.0	
M5B	11	5	6,483,842.5	1,855,604.2	600.39	4.92	0.00	66	10.0	8.0	
M6	12	1	6,483,798.0	1,855,847.1	540.00	4.92	0.00	66	10.0	8.0	
M6B	13	6	6,484,126.0	1,855,916.0	600.39	4.92	0.00	66	10.0	8.0	
ST2	14	11	6,484,036.5	1,856,041.5	545.00	4.92	0.00	66	10.0	8.0	
M7	15	5	6,484,234.5	1,856,282.2	535.00	4.92	0.00	66	10.0	8.0	
M7B	16	5	6,484,378.5	1,856,269.1	583.99	4.92	0.00	66	10.0	8.0	
ST3	17	9	6,484,498.0	1,856,566.2	514.00	4.92	0.00	66	10.0	8.0	
M8	18	6	6,484,612.5	1,856,728.8	505.00	4.92	0.00	66	10.0	8.0	
M8B	19	5	6,484,685.0	1,856,566.2	551.18	4.92	0.00	66	10.0	8.0	
ST4	20	11	6,484,708.0	1,856,841.0	487.00	4.92	0.00	66	10.0	8.0	
M8C	21	8	6,484,782.0	1,857,036.6	470.80	4.92	0.00	66	10.0	8.0	
ST5	22	5	6,484,494.5	1,857,197.4	492.13	4.92	0.00	66	10.0	8.0	
M9	23	4	6,484,366.0	1,856,999.4	500.00	4.92	0.00	66	10.0	8.0	
M9B	24	7	6,484,326.5	1,857,158.8	495.41	4.92	0.00	66	10.0	8.0	
M9C	25	4	6,484,384.5	1,857,338.4	497.05	4.92	0.00	66	10.0	8.0	

M9D	27	4	6,484,216.0	1,856,963.4	503.94	4.92	0.00	66	10.0	8.0	
ST6	29	3	6,484,280.5	1,856,893.5	500.00	4.92	0.00	66	10.0	8.0	
M10	31	4	6,484,088.5	1,856,734.5	505.00	4.92	0.00	66	10.0	8.0	
M10B	32	4	6,484,049.0	1,856,859.2	514.11	4.92	0.00	66	10.0	8.0	
M11	34	5	6,483,887.0	1,856,580.8	518.00	4.92	0.00	66	10.0	8.0	
M11B	35	6	6,483,887.0	1,856,712.0	528.00	4.92	0.00	66	10.0	8.0	
ST7	37	5	6,483,618.0	1,856,267.6	507.00	4.92	0.00	66	10.0	8.0	
M12	39	5	6,483,496.5	1,856,186.9	502.00	4.92	0.00	66	10.0	8.0	
M12B	40	4	6,483,470.5	1,856,357.5	521.65	4.92	0.00	66	10.0	8.0	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
ST1	43	7	6,483,303.0	1,855,961.8	492.13	4.92	0.00	66	10.0	8.0	Y
M14	44	1	6,483,285.5	1,855,907.4	492.13	4.92	0.00	66	10.0	8.0	Y
M15	45	1	6,483,110.0	1,855,511.8	488.85	4.92	0.00	66	10.0	8.0	
M15B	47	6	6,483,001.5	1,855,616.8	495.41	4.92	0.00	66	10.0	8.0	

Jones & Stokes 25 April 2007
M Greene TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht Perturbs			On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		

									point69	69	6,483,288.0	1,854,734.2	475.72	0.00				
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0	
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0	
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00				
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0	
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00				
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0	
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0	
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0	
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0	
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0	
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0	
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0	
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0	
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0	
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0	
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0	
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0	
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0	
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0	
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0	
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0	
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0	
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00				
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0	
									point93	138	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0	
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0	
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0	
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0	
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0	
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0	
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0	
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00				
Barrier18	W	0.00	100.00	0.00				0.00	point126	126	6,483,293.0	1,855,687.4	501.97	0.00	0.00	0	0	
									point127	127	6,483,345.5	1,855,732.9	505.25	0.00	0.00	0	0	Y
									point128	128	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0	
									point129	129	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0	
									point130	130	6,483,673.0	1,856,071.0	503.61	0.00				
Barrier19	W	0.00	99.99	0.00				0.00	point131	131	6,483,516.5	1,855,800.9	479.00	0.00	0.00	0	0	
									point132	132	6,483,621.0	1,855,953.1	493.77	0.00	0.00	0	0	
									point133	133	6,483,708.0	1,856,080.4	497.05	0.00	0.00	0	0	
									point134	134	6,483,845.0	1,856,245.9	500.33	0.00	0.00	0	0	
									point135	135	6,483,931.0	1,856,348.0	497.05	0.00	0.00	0	0	
									point136	136	6,484,016.0	1,856,443.1	493.77	0.00	0.00	0	0	
									point137	137	6,484,055.0	1,856,488.1	492.13	0.00				

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: RECEIVER ADJUSTMENT FACTORS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Alt D PM Conditions				
Receiver					
Name	No.	Individual Roadway Segment Adjustment Factors			
		Roadway	Segment		
		Name	Name	No.	Adj. Factor
					dB
<< This table is empty >>					

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: "STRUCTURE" BARRIERS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Alt D PM Conditions				
Barrier	Segments		Shielded Roadways	Segments	
Name	Name	No.	Name	Name	No.
Barrier6	point38	38	Fargo St NB	point147	147
Barrier7	point40	40	Fargo St SB	point149	149
Barrier18	point127	127	Fargo St SB	point149	149

Jones & Stokes
M Greene

25 April 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	4	3	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
M2	5	1	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0
M3	6	1	0.0	58.3	66	58.3	10	----	58.3	0.0	8	-8.0
LT1	7	3	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0
M4	8	2	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
M4B	9	4	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
M5	10	3	0.0	58.7	66	58.7	10	----	58.7	0.0	8	-8.0
M5B	11	5	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
M6	12	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
M6B	13	6	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0
ST2	14	11	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
M7	15	5	0.0	70.2	66	70.2	10	Snd Lvl	70.2	0.0	8	-8.0
M7B	16	5	0.0	68.5	66	68.5	10	Snd Lvl	68.5	0.0	8	-8.0
ST3	17	9	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
M8	18	6	0.0	72.4	66	72.4	10	Snd Lvl	72.4	0.0	8	-8.0
M8B	19	5	0.0	68.1	66	68.1	10	Snd Lvl	68.1	0.0	8	-8.0
ST4	20	11	0.0	71.1	66	71.1	10	Snd Lvl	71.1	0.0	8	-8.0
M8C	21	8	0.0	70.6	66	70.6	10	Snd Lvl	70.6	0.0	8	-8.0
ST5	22	5	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
M9	23	4	0.0	67.6	66	67.6	10	Snd Lvl	67.6	0.0	8	-8.0
M9B	24	7	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
M9C	25	4	0.0	60.7	66	60.7	10	----	60.7	0.0	8	-8.0
M9D	27	4	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0

ST6	29	3	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
M10	31	4	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	8	-8.0
M10B	32	4	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0
M11	34	5	0.0	66.6	66	66.6	10	Snd Lvl	66.6	0.0	8	-8.0
M11B	35	6	0.0	64.6	66	64.6	10	----	64.6	0.0	8	-8.0
ST7	37	5	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0
M12	39	5	0.0	60.6	66	60.6	10	----	60.6	0.0	8	-8.0
M12B	40	4	0.0	61.1	66	61.1	10	----	61.1	0.0	8	-8.0
M13	41	1	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0
ST1	43	7	0.0	65.2	66	65.2	10	----	65.2	0.0	8	-8.0
M14	44	1	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0
M15	45	1	0.0	64.4	66	64.4	10	----	64.4	0.0	8	-8.0
M15B	47	6	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
Dwelling Units		**# DUs**	**Noise Reduction**									
			Min	**Avg**	**Max**							
			dB	**dB**	**dB**							
All Selected		165	0.0	0.0	0.0							
All Impacted		70	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Jones & Stokes				25 April 2007							
M Greene				TNM 2.5							
INPUT: ROADWAYS							Average pavement type shall be used unless				
PROJECT/CONTRACT:	<Project Name?>						a State highway agency substantiates the use				
RUN:	SR 2 Alt E PM Conditions						of a different type with the approval of FHWA				
Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	2	6,483,141.0	1,854,568.8	451.80				Average	
		point9	3	6,483,183.0	1,854,824.1	456.00				Average	
		point8	4	6,483,238.5	1,855,181.5	464.20					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	21	6,483,131.5	1,854,567.5	452.10				Average	
		point21	20	6,483,172.0	1,854,834.5	457.70				Average	
		point20	19	6,483,229.0	1,855,182.5	464.90					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point33	33	6,483,121.0	1,854,567.6	452.10				Average	
		point32	32	6,483,163.0	1,854,835.1	457.70				Average	
		point31	31	6,483,221.5	1,855,183.4	464.60					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,365.0	1,855,978.2	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,351.0	1,855,973.1	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,472.0	1,855,649.2	477.69				Average	
		point380	380	6,483,547.5	1,855,737.2	481.63				Average	
		point97	97	6,483,619.5	1,855,825.4	485.56				Average	
		point96	96	6,483,678.5	1,855,904.8	490.49				Average	

		point95	95	6,483,747.5	1,855,983.9	495.41			Average	
		point94	94	6,483,807.5	1,856,056.4	498.69			Average	
		point93	93	6,483,853.0	1,856,108.0	500.33			Average	
		point92	92	6,483,914.5	1,856,178.0	500.33			Average	
		point91	91	6,484,061.5	1,856,352.8	495.41			Average	
		point90	90	6,484,162.5	1,856,464.5	493.77			Average	
		point89	89	6,484,232.0	1,856,540.5	492.13			Average	
		point88	88	6,484,295.0	1,856,612.1	489.83				
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72			Average	
		point277	277	6,484,625.5	1,857,134.4	475.72			Average	
		point115	115	6,484,539.5	1,857,015.6	479.00			Average	
		point114	114	6,484,433.5	1,856,878.0	482.28			Average	
		point113	113	6,484,326.0	1,856,741.4	485.56			Average	
		point112	112	6,484,235.5	1,856,629.8	488.85				
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72			Average	
		point276	276	6,484,617.5	1,857,154.2	475.72			Average	
		point118	118	6,484,518.0	1,857,008.8	479.00			Average	
		point119	119	6,484,414.5	1,856,873.2	482.28			Average	
		point120	120	6,484,306.0	1,856,737.4	485.56			Average	
		point121	121	6,484,224.5	1,856,634.9	488.85				
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72			Average	
		point275	275	6,484,598.5	1,857,161.2	475.72			Average	
		point145	145	6,484,488.5	1,857,004.4	479.00			Average	
		point144	144	6,484,387.0	1,856,865.0	482.28			Average	
		point143	143	6,484,280.5	1,856,732.2	485.56			Average	
		point142	142	6,484,199.0	1,856,625.1	488.85				
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49			Average	
		point148	148	6,482,907.0	1,856,191.5	505.25				
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25			Average	
		point150	150	6,483,334.0	1,855,959.0	490.49				
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41			Average	
		point152	152	6,483,267.5	1,855,806.0	489.83			Average	
		point153	153	6,483,342.5	1,855,907.1	489.50				
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41			Average	
		point155	155	6,483,256.5	1,855,813.2	489.83			Average	
		point156	156	6,483,333.5	1,855,925.4	490.49				
Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90			Average	
		point181	386	6,484,769.5	1,857,081.8	469.20			Average	

		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,641.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	
		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	

		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	385	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,458.5	1,855,696.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,460.0	1,855,802.9	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,425.5	1,855,650.1	478.02				Average	
		point342	342	6,483,446.5	1,855,702.8	479.17				Average	
		point25	25	6,483,453.0	1,855,753.9	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point344	344	6,483,409.0	1,855,642.0	477.53				Average	
		point295	295	6,483,388.5	1,855,612.1	476.38				Average	
		point53	53	6,483,357.5	1,855,560.6	474.08				Average	
		point52	52	6,483,325.5	1,855,503.1	472.44				Average	
		point51	51	6,483,264.0	1,855,379.4	469.16				Average	
		point343	343	6,483,236.0	1,855,324.9	468.34				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,199.0	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,391.5	1,855,667.6	478.35				Average	
		point62	62	6,483,337.0	1,855,565.8	473.75				Average	
		point61	61	6,483,294.5	1,855,497.8	472.44				Average	
		point60	60	6,483,232.0	1,855,375.1	469.16				Average	
		point59	59	6,483,208.5	1,855,325.9	467.52				Average	
		point58	58	6,483,177.5	1,855,222.6	464.57					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,224.5	1,855,220.2	465.22				Average	

		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point375	375	6,483,310.5	1,855,420.5	471.62					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point373	373	6,483,320.0	1,855,411.5	470.80					
Glendale Blvd NB -N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,277.0	1,855,287.6	466.54				Average	
		point5	6	6,483,326.0	1,855,378.5	469.16					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,471.5	1,855,632.2	477.36				Average	
		point83	83	6,483,537.5	1,855,706.6	479.00				Average	
		point82	82	6,483,593.5	1,855,771.0	482.28				Average	
		point81	81	6,483,651.0	1,855,846.9	487.20				Average	
		point80	80	6,483,690.0	1,855,897.8	490.49				Average	
		point79	79	6,483,730.5	1,855,947.5	493.77				Average	
		point78	78	6,483,782.0	1,856,008.6	497.05				Average	
		point77	77	6,483,842.5	1,856,078.5	500.33				Average	
		point76	76	6,483,865.0	1,856,104.4	501.31				Average	
		point75	75	6,483,884.5	1,856,125.8	500.33				Average	
		point74	74	6,483,929.5	1,856,176.9	500.33				Average	
		point73	73	6,484,024.0	1,856,290.8	498.69				Average	
		point72	72	6,484,138.0	1,856,414.4	495.41				Average	
		point71	71	6,484,242.0	1,856,530.6	492.78				Average	
		point70	70	6,484,300.0	1,856,596.6	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,502.0	1,856,829.2	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	
		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	387	6,483,108.0	1,854,579.8	452.10				Average	

		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	388	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,459.5	1,855,804.0	482.61				Average	
		point252	252	6,483,458.0	1,855,819.8	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,458.0	1,855,820.6	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,349.5	1,855,968.8	490.81				Average	
		point271	271	6,483,393.5	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,363.5	1,855,969.9	493.77				Average	
		point267	267	6,483,404.0	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,407.0	1,855,752.4	482.61				Average	
		point55	55	6,483,411.0	1,855,732.9	480.31				Average	
		point54	54	6,483,407.0	1,855,670.9	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,404.0	1,855,766.0	484.25				Average	
		point268	268	6,483,406.5	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,393.5	1,855,752.4	483.92				Average	
		point272	272	6,483,396.0	1,855,738.5	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,399.0	1,855,719.8	480.31				Average	
		point63	63	6,483,391.0	1,855,670.0	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,453.0	1,855,754.1	480.31				Average	
		point286	286	6,483,448.0	1,855,789.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,448.5	1,855,789.4	481.57				Average	
		point287	287	6,483,447.0	1,855,803.5	482.83					
Glendale Blvd NB - S of Alessandro -	12.0	point289	289	6,483,447.0	1,855,804.4	482.83				Average	
		point282	282	6,483,441.0	1,855,836.6	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					
Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	
		point301	301	6,483,132.0	1,854,904.0	457.68					

Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,408.5	1,855,670.5	478.67				Average	
		point303	303	6,483,356.5	1,855,577.0	474.08				Average	
		point304	304	6,483,325.0	1,855,529.0	472.44				Average	
		point305	305	6,483,263.0	1,855,401.9	469.16				Average	
		point306	306	6,483,235.5	1,855,348.0	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,197.5	1,856,623.4	488.85				Average	
		point312	312	6,484,087.5	1,856,493.8	492.13				Average	
		point313	313	6,484,054.0	1,856,455.8	493.77				Average	
		point314	314	6,483,935.5	1,856,323.1	497.05				Average	
		point315	315	6,483,858.0	1,856,233.5	500.33				Average	
		point316	316	6,483,735.5	1,856,091.6	497.05				Average	
		point382	382	6,483,681.5	1,856,016.6	494.59				Average	
		point317	317	6,483,630.0	1,855,937.5	492.13				Average	
		point348	348	6,483,572.0	1,855,848.2	485.56				Average	
		point349	349	6,483,508.5	1,855,770.6	479.00				Average	
		point318	318	6,483,485.0	1,855,757.4	479.00					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,224.5	1,856,635.0	488.85				Average	
		point320	320	6,484,115.5	1,856,504.4	492.13				Average	
		point321	321	6,483,919.0	1,856,282.6	498.69				Average	
		point322	322	6,483,779.5	1,856,123.8	492.13				Average	
		point383	383	6,483,710.5	1,856,033.0	488.85				Average	
		point323	323	6,483,645.0	1,855,938.6	485.56				Average	
		point347	347	6,483,583.0	1,855,842.6	479.00				Average	
		point381	381	6,483,530.0	1,855,777.9	479.00				Average	
		point324	324	6,483,475.0	1,855,714.8	479.00					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,241.5	1,856,636.4	488.85				Average	
		point326	326	6,484,135.0	1,856,507.6	492.13				Average	
		point327	327	6,483,936.0	1,856,283.1	498.69				Average	
		point328	328	6,483,791.5	1,856,120.2	501.97				Average	
		point384	384	6,483,722.5	1,856,030.0	497.05				Average	
		point329	329	6,483,657.5	1,855,937.1	492.13				Average	
		point345	345	6,483,597.0	1,855,842.8	485.56				Average	
		point346	346	6,483,536.5	1,855,765.6	479.00				Average	
		point330	330	6,483,475.0	1,855,695.1	477.36					
Glendale Blvd SB - S of Alessandro--2	12.0	point368	368	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	

		point310	310	6,483,137.5	1,854,857.1	454.07					
Glendale Blvd NB - S of Alessandro - 3-	12.0	point371	371	6,483,332.0	1,855,414.9	470.80				Average	
		point370	370	6,483,394.0	1,855,534.1	474.08				Average	
		point379	379	6,483,423.5	1,855,589.8	475.89				Average	
		point369	369	6,483,461.0	1,855,637.6	477.69					
Glendale Blvd NB -N of Alessandro-2-2	12.0	point372	372	6,483,326.0	1,855,378.5	469.16				Average	
		point374	374	6,483,342.5	1,855,406.6	470.31					
Glendale Blvd NB -N of Alessandro-2-2-2	12.0	point376	376	6,483,342.5	1,855,408.0	470.31				Average	
		point4	7	6,483,359.0	1,855,437.4	471.46				Average	
		point3	8	6,483,405.0	1,855,529.4	472.11				Average	
		point2	9	6,483,438.0	1,855,586.0	475.72				Average	
		point1	10	6,483,471.0	1,855,630.6	476.71					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point377	377	6,483,320.0	1,855,411.5	470.80				Average	
		point16	16	6,483,347.5	1,855,465.2	472.44				Average	
		point15	15	6,483,382.5	1,855,533.5	474.08				Average	
		point292	292	6,483,442.0	1,855,651.6	475.89				Average	
		point14	14	6,483,457.5	1,855,695.8	477.69					
Glendale Blvd NB - S of Alessandro - 3-2-2	12.0	point378	378	6,483,310.0	1,855,420.0	471.62				Average	
		point28	28	6,483,340.5	1,855,476.6	472.44				Average	
		point27	27	6,483,384.5	1,855,563.1	474.41				Average	
		point26	26	6,483,425.0	1,855,648.2	478.02					

Jones & Stokes			25 April 2007									
M Greene			TNM 2.5									
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	<Project Name?>											
RUN:	SR 2 Alt E PM Conditions											
Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	2	1263	35	32	35	0	0	17	30	15	35
	point9	3	1263	35	32	35	0	0	17	30	15	35
	point8	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	21	1263	35	32	35	0	0	17	30	15	35
	point21	20	1263	35	32	35	0	0	17	30	15	35
	point20	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35
	point40	40	383	35	10	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										
Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0

	point380	380	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	1017	65	21	65	12	60	5	60	2	65
	point277	277	1017	65	21	65	12	60	5	60	2	65
	point115	115	1017	65	21	65	12	60	5	60	2	65
	point114	114	1017	65	21	65	12	60	5	60	2	65
	point113	113	1017	50	21	50	12	45	5	45	2	50
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	1017	65	21	65	12	60	5	60	2	65
	point276	276	1017	65	21	65	12	60	5	60	2	65
	point118	118	1017	65	21	65	12	60	5	60	2	65
	point119	119	1017	65	21	65	12	60	5	60	2	65
	point120	120	1017	50	21	50	12	45	5	45	2	50
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	1017	50	21	50	12	45	5	45	2	50
	point275	275	1017	65	21	65	12	60	5	60	2	65
	point145	145	1017	65	21	65	12	60	5	60	2	65
	point144	144	1017	65	21	65	12	60	5	60	2	65
	point143	143	1017	50	21	50	12	45	5	45	2	50
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0
	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0

	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	386	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	18	65	30	60	6	60	0	0
	point203	203	1114	65	18	65	30	60	6	60	0	0
	point202	202	1114	65	18	65	30	60	6	60	0	0

	point201	201	1114	65	18	65	30	60	6	60	0	0
	point279	279	1114	65	18	65	30	60	6	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	385	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	964	35	24	35	0	0	13	30	11	35
	point342	342	383	35	10	35	0	0	5	30	4	35
	point25	25										

Glendale Blvd SB - N of Alessandro	point344	344	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point343	343	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point375	375										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point373	373										
Glendale Blvd NB -N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6										
SR 2 NB - 2-2	point243	243	1114	65	18	65	30	60	6	60	0	0
	point87	87	1114	65	18	65	30	60	6	60	0	0
	point86	86	1114	65	18	65	30	60	6	60	0	0
	point278	278	1114	65	18	65	30	60	6	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0
	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0

	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	18	65	30	60	6	60	0	0
	point242	242	1114	65	18	65	30	60	6	60	0	0
	point230	230	1114	65	18	65	30	60	6	60	0	0
	point281	280	1114	65	18	65	30	60	6	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	878	35	22	35	0	0	12	30	10	35
	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	387	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	388	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	292	35	7	35	0	0	4	30	3	35
	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	292	35	7	35	0	0	4	30	3	35

	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	292	35	7	35	0	0	4	30	3	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	292	35	7	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	292	35	7	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB - S of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	1330	35	34	35	0	0	18	30	16	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	1330	35	34	35	0	0	18	30	16	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	1017	50	21	50	12	45	5	45	2	50
	point312	312	1017	35	21	35	12	30	5	30	2	35
	point313	313	1017	35	21	35	12	30	5	30	2	35
	point314	314	1017	35	21	35	12	30	5	30	2	35
	point315	315	1017	35	21	35	12	30	5	30	2	35

	point316	316	1017	35	21	35	12	30	5	30	2	35
	point382	382	1017	35	21	35	12	30	5	30	2	35
	point317	317	1017	35	21	35	12	30	5	30	2	35
	point348	348	1017	35	21	35	12	30	5	30	2	35
	point349	349	1017	35	21	35	12	30	5	30	2	35
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	1017	50	21	50	12	45	5	45	2	50
	point320	320	1017	35	21	35	12	30	5	30	2	35
	point321	321	1017	35	21	35	12	30	5	30	2	35
	point322	322	1017	35	21	35	12	30	5	30	2	35
	point383	383	1017	35	21	35	12	30	5	30	2	35
	point323	323	1017	35	21	35	12	30	5	30	2	35
	point347	347	1017	35	21	35	12	30	5	30	2	35
	point381	381	1017	35	21	35	12	30	5	30	2	35
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	1017	50	21	50	12	45	5	45	2	50
	point326	326	1017	35	21	35	12	30	5	30	2	35
	point327	327	1017	35	21	35	12	30	5	30	2	35
	point328	328	1017	35	21	35	12	30	5	30	2	35
	point384	384	1017	35	21	35	12	30	5	30	2	35
	point329	329	1017	35	21	35	12	30	5	30	2	35
	point345	345	1017	35	21	35	12	30	5	30	2	35
	point346	346	1017	35	21	35	12	30	5	30	2	35
	point330	330										
Glendale Blvd SB - S of Alessandro--2	point368	368	1330	35	34	35	0	0	18	30	16	35
	point308	308	1330	35	34	35	0	0	18	30	16	35
	point309	309	1306	35	33	35	0	0	18	30	15	35
	point310	310										
Glendale Blvd NB - S of Alessandro - 3-	point371	371	964	35	24	35	0	0	13	30	11	35
	point370	370	964	35	24	35	0	0	13	30	11	35
	point379	379	964	35	24	35	0	0	13	30	11	35
	point369	369										
Glendale Blvd NB -N of Alessandro-2-2	point372	372	1285	35	32	35	0	0	18	30	15	35
	point374	374										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd NB -N of Alessandro-2-2-2	point376	376	964	35	24	35	0	0	13	30	11	35
	point4	7	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35
	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										
Glendale Blvd NB - S of Alessandro - 2-2-2	point377	377	964	35	24	35	0	0	13	30	11	35
	point16	16	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	964	35	24	35	0	0	13	30	11	35
	point14	14										
Glendale Blvd NB - S of Alessandro - 3-2-2	point378	378	964	35	24	35	0	0	13	30	11	35
	point28	28	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										

Jones & Stokes						25 April 2007						
M Greene						TNM 2.5						
INPUT: RECEIVERS												
PROJECT/CONTRACT:	<Project Name?>											
RUN:	SR 2 Alt E PM Conditions											
Receiver												
Name	No.	#DUs	Coordinates (ground)			Height	Input Sound Levels and Criteria					Active
			X	Y	Z	above	Existing	Impact Criteria		NR		in
						Ground	LAeq1h	LAeq1h	Sub'l	Goal		Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB		
M1	4	3	6,483,201.5	1,854,565.8	456.04	4.92	0.00	66	10.0	8.0		
M2	5	1	6,483,277.0	1,854,804.1	465.88	4.92	0.00	66	10.0	8.0		
M3	6	1	6,483,415.0	1,854,804.1	485.56	4.92	0.00	66	10.0	8.0		
LT1	7	3	6,483,420.5	1,855,201.2	490.00	4.92	0.00	66	10.0	8.0		Y
M4	8	2	6,483,477.0	1,855,442.9	513.45	4.92	0.00	66	10.0	8.0		
M4B	9	4	6,483,625.0	1,855,413.4	554.46	4.92	0.00	66	10.0	8.0		
M5	10	3	6,483,675.0	1,855,604.2	524.93	4.92	0.00	66	10.0	8.0		
M5B	11	5	6,483,842.5	1,855,604.2	600.39	4.92	0.00	66	10.0	8.0		
M6	12	1	6,483,798.0	1,855,847.1	540.00	4.92	0.00	66	10.0	8.0		
M6B	13	6	6,484,126.0	1,855,916.0	600.39	4.92	0.00	66	10.0	8.0		
ST2	14	11	6,484,036.5	1,856,041.5	545.00	4.92	0.00	66	10.0	8.0		
M7	15	5	6,484,234.5	1,856,282.2	535.00	4.92	0.00	66	10.0	8.0		
M7B	16	5	6,484,378.5	1,856,269.1	583.99	4.92	0.00	66	10.0	8.0		
ST3	17	9	6,484,498.0	1,856,566.2	514.00	4.92	0.00	66	10.0	8.0		
M8	18	6	6,484,612.5	1,856,728.8	505.00	4.92	0.00	66	10.0	8.0		
M8B	19	5	6,484,685.0	1,856,566.2	551.18	4.92	0.00	66	10.0	8.0		
ST4	20	11	6,484,708.0	1,856,841.0	487.00	4.92	0.00	66	10.0	8.0		
M8C	21	8	6,484,782.0	1,857,036.6	470.80	4.92	0.00	66	10.0	8.0		
ST5	22	5	6,484,494.5	1,857,197.4	492.13	4.92	0.00	66	10.0	8.0		
M9	23	4	6,484,366.0	1,856,999.4	500.00	4.92	0.00	66	10.0	8.0		
M9B	24	7	6,484,326.5	1,857,158.8	495.41	4.92	0.00	66	10.0	8.0		
M9C	25	4	6,484,384.5	1,857,338.4	497.05	4.92	0.00	66	10.0	8.0		

M9D	27	4	6,484,216.0	1,856,963.4	503.94	4.92	0.00	66	10.0	8.0	
ST6	29	3	6,484,280.5	1,856,893.5	500.00	4.92	0.00	66	10.0	8.0	
M10	31	4	6,484,088.5	1,856,734.5	505.00	4.92	0.00	66	10.0	8.0	
M10B	32	4	6,484,049.0	1,856,859.2	514.11	4.92	0.00	66	10.0	8.0	
M11	34	5	6,483,887.0	1,856,580.8	518.00	4.92	0.00	66	10.0	8.0	
M11B	35	6	6,483,887.0	1,856,712.0	528.00	4.92	0.00	66	10.0	8.0	
ST7	37	5	6,483,618.0	1,856,267.6	507.00	4.92	0.00	66	10.0	8.0	
M12	39	5	6,483,496.5	1,856,186.9	502.00	4.92	0.00	66	10.0	8.0	
M12B	40	4	6,483,470.5	1,856,357.5	521.65	4.92	0.00	66	10.0	8.0	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
ST1	43	7	6,483,303.0	1,855,961.8	492.13	4.92	0.00	66	10.0	8.0	Y
M14	44	1	6,483,285.5	1,855,907.4	492.13	4.92	0.00	66	10.0	8.0	Y
M15	45	1	6,483,110.0	1,855,511.8	488.85	4.92	0.00	66	10.0	8.0	
M15B	47	6	6,483,001.5	1,855,616.8	495.41	4.92	0.00	66	10.0	8.0	

Jones & Stokes				25 April 2007															
M Greene				TNM 2.5															
INPUT: BARRIERS																			
PROJECT/CONTRACT:	<Project Name?>																		
RUN:	SR 2 Alt E PM Conditions																		
Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht Perturbs			On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		

									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,792.5	1,855,979.1	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,888.0	520.01	0.00	0.00	0	0		
									point83	83	6,483,624.0	1,855,784.1	515.09	0.00	0.00	0	0		
									point84	84	6,483,531.0	1,855,675.1	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	138	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier18	W	0.00	100.00	0.00				0.00	point126	126	6,483,293.0	1,855,687.4	501.97	0.00	0.00	0	0		
									point127	127	6,483,345.5	1,855,732.9	505.25	0.00	0.00	0	0	Y	
									point128	128	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0		
									point129	129	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point130	130	6,483,673.0	1,856,071.0	503.61	0.00					
Barrier19	W	0.00	99.99	0.00				0.00	point131	131	6,483,516.5	1,855,800.9	479.00	0.00	0.00	0	0		
									point132	132	6,483,621.0	1,855,953.1	493.77	0.00	0.00	0	0		
									point133	133	6,483,708.0	1,856,080.4	497.05	0.00	0.00	0	0		
									point134	134	6,483,845.0	1,856,245.9	500.33	0.00	0.00	0	0		
									point135	135	6,483,931.0	1,856,348.0	497.05	0.00	0.00	0	0		
									point136	136	6,484,016.0	1,856,443.1	493.77	0.00	0.00	0	0		
									point137	137	6,484,055.0	1,856,488.1	492.13	0.00					

Jones & Stokes			25 April 2007		
M Greene			TNM 2.5		
INPUT: "STRUCTURE" BARRIERS					
PROJECT/CONTRACT:	<Project Name?>				
RUN:	SR 2 Alt E PM Conditions				
Barrier	Segments		Shielded Roadways	Segments	
Name	Name	No.	Name	Name	No.
Barrier6	point38	38	Fargo St NB	point147	147
Barrier7	point40	40	Fargo St SB	point149	149
Barrier18	point127	127	Fargo St NB	point147	147

Jones & Stokes					25 April 2007		
M Greene					TNM 2.5		
INPUT: BARRIER NOISE REDUCTION COEFFICIENTS							
PROJECT/CONTRACT:	<Project Name?>						
RUN:	SR 2 Alt E PM Conditions						
Barrier	**Segments**				**Reflected Roadways**	**Segments**	
Name	**Name**	**No.**	**NRC**		**Name**	**Name**	**No.**
			LSide	**RSide**			
Barrier1	point1	1	0.0	0.0	---	---	0
	point2	2	0.0	0.0	---	---	0
	point3	3	0.0	0.0	---	---	0
	point4	4	0.0	0.0	---	---	0
	point5	5	0.0	0.0	---	---	0
Barrier2	point7	7	0.0	0.0	---	---	0
	point8	8	0.0	0.0	---	---	0
	point9	9	0.0	0.0	---	---	0
	point10	10	0.0	0.0	---	---	0
	point11	11	0.0	0.0	---	---	0
	point12	12	0.0	0.0	---	---	0
Barrier3	point14	14	0.0	0.0	---	---	0
	point15	15	0.0	0.0	---	---	0
	point16	16	0.0	0.0	---	---	0
	point17	17	0.0	0.0	---	---	0
	point101	101	0.0	0.0	---	---	0
Barrier4	point19	19	0.0	0.0	---	---	0
	point20	20	0.0	0.0	---	---	0
	point21	21	0.0	0.0	---	---	0
	point22	22	0.0	0.0	---	---	0
	point23	23	0.0	0.0	---	---	0
	point24	24	0.0	0.0	---	---	0
	point25	25	0.0	0.0	---	---	0

	point26	26	0.0	0.0	---	---	0
Barrier6	point38	38	0.0	0.0	---	---	0
Barrier7	point40	40	0.0	0.0	---	---	0
Barrier9	point66	66	0.0	0.0	---	---	0
	point67	67	0.0	0.0	---	---	0
	point68	68	0.0	0.0	---	---	0
Barrier10	point70	70	0.0	0.0	---	---	0
	point71	71	0.0	0.0	---	---	0
Barrier11	point73	73	0.0	0.0	---	---	0
Barrier12	point75	75	0.0	0.0	---	---	0
	point76	76	0.0	0.0	---	---	0
	point77	77	0.0	0.0	---	---	0
	point78	78	0.0	0.0	---	---	0
	point79	79	0.0	0.0	---	---	0
	point80	80	0.0	0.0	---	---	0
	point81	81	0.0	0.0	---	---	0
	point82	82	0.0	0.0	---	---	0
	point83	83	0.0	0.0	---	---	0
	point84	84	0.0	0.0	---	---	0
	point85	85	0.0	0.0	---	---	0
	point86	86	0.0	0.0	---	---	0
	point87	87	0.0	0.0	---	---	0
	point88	88	0.0	0.0	---	---	0
	point89	89	0.0	0.0	---	---	0
	point90	90	0.0	0.0	---	---	0
	point91	91	0.0	0.0	---	---	0
Barrier13	point121	93	0.0	0.0	---	---	0
	point93	138	0.0	0.0	---	---	0
	point94	94	0.0	0.0	---	---	0
	point95	95	0.0	0.0	---	---	0
	point96	96	0.0	0.0	---	---	0
	point97	97	0.0	0.0	---	---	0
	point98	98	0.0	0.0	---	---	0
	point99	99	0.0	0.0	---	---	0

INPUT: BARRIER NOISE REDUCTION COEFFICIENTS

Barrier18	point126	126	0.0	0.0	---	---	0
	point127	127	0.0	0.0	---	---	0
	point128	128	0.0	0.0	---	---	0
	point129	129	0.0	0.0	---	---	0
Barrier19	point131	131	0.0	0.0	---	---	0
	point132	132	0.0	0.0	---	---	0
	point133	133	0.0	0.0	---	---	0
	point134	134	0.0	0.0	---	---	0
	point135	135	0.0	0.0	---	---	0
	point136	136	0.0	0.0	---	---	0

Jones & Stokes		25 April 2007
M Greene		TNM 2.5
		Calculated with TNM 2.5
RESULTS: SOUND LEVELS		
PROJECT/CONTRACT:	<Project Name?>	
RUN:	SR 2 Alt E PM Conditions	
BARRIER DESIGN:	INPUT HEIGHTS	Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.
ATMOSPHERICS:	68 deg F, 50% RH	

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	4	3	0.0	68.3	66	68.3	10	Snd Lvl	68.3	0.0	8	-8.0
M2	5	1	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0
M3	6	1	0.0	58.2	66	58.2	10	----	58.2	0.0	8	-8.0
LT1	7	3	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
M4	8	2	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
M4B	9	4	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
M5	10	3	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0
M5B	11	5	0.0	60.7	66	60.7	10	----	60.7	0.0	8	-8.0
M6	12	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
M6B	13	6	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
ST2	14	11	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
M7	15	5	0.0	70.3	66	70.3	10	Snd Lvl	70.3	0.0	8	-8.0
M7B	16	5	0.0	68.6	66	68.6	10	Snd Lvl	68.6	0.0	8	-8.0
ST3	17	9	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0
M8	18	6	0.0	72.3	66	72.3	10	Snd Lvl	72.3	0.0	8	-8.0
M8B	19	5	0.0	68.1	66	68.1	10	Snd Lvl	68.1	0.0	8	-8.0
ST4	20	11	0.0	70.9	66	70.9	10	Snd Lvl	70.9	0.0	8	-8.0
M8C	21	8	0.0	70.5	66	70.5	10	Snd Lvl	70.5	0.0	8	-8.0
ST5	22	5	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
M9	23	4	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
M9B	24	7	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0
M9C	25	4	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0
M9D	27	4	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0

RESULTS: SOUND LEVELS **<Project Name?>**

ST6	29	3	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
M10	31	4	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0
M10B	32	4	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
M11	34	5	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
M11B	35	6	0.0	64.7	66	64.7	10	----	64.7	0.0	8	-8.0
ST7	37	5	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0
M12	39	5	0.0	60.4	66	60.4	10	----	60.4	0.0	8	-8.0
M12B	40	4	0.0	60.9	66	60.9	10	----	60.9	0.0	8	-8.0
M13	41	1	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0
ST1	43	7	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
M14	44	1	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0
M15	45	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
M15B	47	6	0.0	59.3	66	59.3	10	----	59.3	0.0	8	-8.0
Dwelling Units		**# DUs**	**Noise Reduction**									
			Min	**Avg**	**Max**							
			dB	**dB**	**dB**							
All Selected		165	0.0	0.0	0.0							
All Impacted		70	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions ST-10

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	283	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.04				Average	
		point8	3	6,483,238.5	1,855,181.5	464.24				Average	
		point7	4	6,483,249.0	1,855,217.1	464.89					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	284	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.68				Average	
		point20	20	6,483,229.0	1,855,182.5	464.89				Average	
		point19	19	6,483,239.5	1,855,212.6	465.22					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	285	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.68				Average	
		point32	32	6,483,221.5	1,855,183.4	464.57				Average	
		point31	31	6,483,231.5	1,855,214.9	465.22					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,356.0	1,855,974.2	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,470.0	1,855,670.1	477.69				Average	

		point97	97	6,483,613.0	1,855,832.8	485.56				Average	
		point96	96	6,483,677.5	1,855,905.5	490.49				Average	
		point95	95	6,483,745.5	1,855,983.9	495.41				Average	
		point94	94	6,483,806.5	1,856,055.2	498.69				Average	
		point93	93	6,483,856.0	1,856,110.6	500.33				Average	
		point92	92	6,483,917.5	1,856,182.1	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,614.5	1,857,120.5	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,318.0	1,856,741.2	485.56				Average	
		point112	112	6,484,225.0	1,856,631.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,602.0	1,857,131.4	475.72				Average	
		point118	118	6,484,511.5	1,857,009.9	479.00				Average	
		point119	119	6,484,409.0	1,856,873.8	482.28				Average	
		point120	120	6,484,297.5	1,856,736.6	485.56				Average	
		point121	121	6,484,199.5	1,856,624.9	488.85					
SR 2 SB Off at Glendale Blvd	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,588.5	1,857,167.4	475.72				Average	
		point145	145	6,484,481.5	1,857,001.8	479.00				Average	
		point144	144	6,484,378.0	1,856,861.0	482.28				Average	
		point143	143	6,484,272.0	1,856,729.6	485.56				Average	
		point142	142	6,484,169.5	1,856,610.9	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	282	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,640.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	281	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point233	233	6,483,459.0	1,855,663.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,454.5	1,855,797.6	482.61					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point234	234	6,483,442.0	1,855,661.2	478.02				Average	
		point25	25	6,483,447.5	1,855,752.8	480.31				Average	
		point253	253	6,483,441.0	1,855,783.4	482.83					
Glendale Blvd SB - S of Alessandro	12.0	point235	235	6,483,409.5	1,855,669.1	478.67				Average	
		point53	53	6,483,359.5	1,855,543.0	474.08				Average	
		point52	52	6,483,332.0	1,855,477.0	472.44				Average	
		point51	51	6,483,273.0	1,855,365.4	469.16				Average	
		point50	50	6,483,245.0	1,855,302.5	467.52				Average	
		point49	49	6,483,208.5	1,855,187.2	464.89					
Glendale Blvd SB - S of Alessandro - 2	12.0	point236	236	6,483,395.5	1,855,673.0	478.35				Average	
		point62	62	6,483,351.5	1,855,560.6	473.75				Average	
		point61	61	6,483,328.5	1,855,512.2	472.44				Average	
		point60	60	6,483,267.0	1,855,388.6	469.16				Average	
		point59	59	6,483,238.5	1,855,324.8	467.52				Average	
		point58	58	6,483,197.5	1,855,188.0	464.57					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,231.5	1,855,214.9	465.22				Average	

		point30	30	6,483,263.0	1,855,298.0	469.16				Average	
		point29	29	6,483,295.0	1,855,361.8	470.80				Average	
		point28	28	6,483,351.5	1,855,470.0	472.44				Average	
		point27	27	6,483,385.0	1,855,538.5	474.41				Average	
		point26	26	6,483,442.0	1,855,661.2	478.02					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,239.5	1,855,212.6	465.22				Average	
		point18	18	6,483,272.0	1,855,294.5	467.52				Average	
		point17	17	6,483,304.0	1,855,357.9	469.16				Average	
		point16	16	6,483,359.5	1,855,467.4	472.44				Average	
		point15	15	6,483,394.0	1,855,534.1	474.08				Average	
		point14	14	6,483,459.0	1,855,663.8	477.69					
Glendale Blvd NB - S of Alessandro-2	12.0	point239	239	6,483,249.0	1,855,217.1	464.89				Average	
		point6	5	6,483,279.0	1,855,286.0	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,402.0	1,855,528.2	472.11				Average	
		point2	9	6,483,431.0	1,855,584.6	475.72				Average	
		point1	10	6,483,459.0	1,855,633.6	476.71					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36				Average	
		point83	83	6,483,529.0	1,855,715.2	479.00				Average	
		point82	82	6,483,583.0	1,855,778.6	482.28				Average	
		point81	81	6,483,644.0	1,855,848.9	487.20				Average	
		point80	80	6,483,687.5	1,855,899.6	490.49				Average	
		point79	79	6,483,729.5	1,855,948.1	493.77				Average	
		point78	78	6,483,782.5	1,856,009.1	497.05				Average	
		point77	77	6,483,842.5	1,856,076.1	500.33				Average	
		point76	76	6,483,864.0	1,856,102.6	501.31				Average	
		point75	75	6,483,886.0	1,856,126.8	500.33				Average	
		point74	74	6,483,935.5	1,856,180.9	500.33				Average	
		point73	73	6,484,051.0	1,856,300.9	498.69				Average	
		point72	72	6,484,157.0	1,856,423.1	495.41				Average	
		point71	71	6,484,255.0	1,856,531.4	492.78				Average	
		point70	70	6,484,317.0	1,856,597.1	490.49					

SR2 NB-2	12.0	point247	247	6,484,317.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,504.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.89				Average	
		point48	48	6,483,150.5	1,854,833.5	457.68				Average	
		point286	286	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.57				Average	
		point57	57	6,483,146.0	1,854,849.0	457.68				Average	
		point287	287	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
SR 2 SB Trans into Glendale SB-2	12.0	point248	248	6,484,225.0	1,856,631.8	488.85				Average	
		point111	111	6,484,094.5	1,856,495.6	492.13				Average	
		point110	110	6,483,913.5	1,856,298.6	498.69				Average	
		point109	109	6,483,774.0	1,856,145.2	501.97				Average	
		point108	108	6,483,586.5	1,855,941.2	505.25				Average	
		point107	107	6,483,461.0	1,855,805.0	506.89				Average	
		point106	106	6,483,334.0	1,855,670.1	505.25				Average	
		point105	105	6,483,242.0	1,855,554.9	499.34				Average	
		point104	104	6,483,197.0	1,855,452.4	489.50				Average	
		point103	103	6,483,182.0	1,855,380.8	482.28				Average	
		point102	102	6,483,179.5	1,855,244.9	469.16				Average	
		point101	101	6,483,177.5	1,855,121.4	462.93				Average	
		point100	100	6,483,162.5	1,855,030.4	460.96				Average	
		point99	99	6,483,141.0	1,854,874.1	457.68					
SR 2 SB Trans into Glendale SB - 2-2	12.0	point249	249	6,484,199.5	1,856,624.9	488.85				Average	
		point122	122	6,484,075.0	1,856,492.1	492.13				Average	
		point123	123	6,483,898.5	1,856,300.9	498.69				Average	
		point124	124	6,483,766.0	1,856,156.8	501.97				Average	
		point125	125	6,483,564.5	1,855,937.8	505.25				Average	
		point126	126	6,483,456.0	1,855,817.4	506.89				Average	
		point127	127	6,483,297.0	1,855,647.1	505.25				Average	
		point128	128	6,483,229.0	1,855,556.1	500.33				Average	
		point129	129	6,483,186.5	1,855,455.9	490.49				Average	
		point130	130	6,483,165.5	1,855,374.0	482.28				Average	
		point131	131	6,483,166.0	1,855,239.1	469.16				Average	

		point132	132	6,483,167.0	1,855,136.4	462.60				Average	
		point133	133	6,483,156.5	1,855,051.0	460.96				Average	
		point134	134	6,483,133.5	1,854,905.6	457.68					
SR 2 SB Off at Glendale Blvd-2	12.0	point250	250	6,484,169.5	1,856,610.9	488.85				Average	
		point141	141	6,484,053.0	1,856,491.1	492.13				Average	
		point140	140	6,483,989.5	1,856,433.4	493.77				Average	
		point139	139	6,483,874.5	1,856,341.0	497.05				Average	
		point138	138	6,483,733.0	1,856,227.0	500.33				Average	
		point137	137	6,483,615.0	1,856,141.8	497.05				Average	
		point136	136	6,483,539.0	1,856,086.4	493.77				Average	
		point135	135	6,483,428.5	1,855,998.8	490.49					
Glendale Blvd NB - S of Alessandro - 3-2-2	12.0	point255	255	6,483,440.5	1,855,784.2	482.83				Average	
		point254	254	6,483,437.5	1,855,797.2	485.35					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,454.5	1,855,799.0	482.61				Average	
		point252	252	6,483,452.0	1,855,812.1	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,451.5	1,855,813.5	484.91				Average	
		point12	12	6,483,421.0	1,855,939.5	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd NB - S of Alessandro - 3-2-2-2	12.0	point258	258	6,483,437.0	1,855,798.6	485.35				Average	
		point24	24	6,483,406.5	1,855,934.2	487.86				Average	
		point23	23	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,357.5	1,855,972.1	490.81				Average	
		point271	271	6,483,395.0	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77				Average	
		point267	267	6,483,408.5	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,411.5	1,855,751.6	482.61				Average	
		point55	55	6,483,414.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,408.5	1,855,766.0	484.25				Average	
		point268	268	6,483,411.0	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,395.5	1,855,751.8	483.92				Average	
		point272	272	6,483,397.5	1,855,738.2	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,397.5	1,855,737.1	482.28				Average	
		point64	64	6,483,399.0	1,855,719.8	480.31				Average	
		point63	63	6,483,395.5	1,855,673.0	478.35					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions ST-10

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1024	35	26	35	0	0	14	30	12	35
	point283	283	1024	35	26	35	0	0	14	30	12	35
	point9	2	1024	35	26	35	0	0	14	30	12	35
	point8	3	1024	35	26	35	0	0	14	30	12	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1024	35	26	35	0	0	14	30	12	35
	point284	284	1024	35	26	35	0	0	14	30	12	35
	point21	21	1024	35	26	35	0	0	14	30	12	35
	point20	20	1024	35	26	35	0	0	14	30	12	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1024	35	26	35	0	0	14	30	12	35
	point285	285	1024	35	26	35	0	0	14	30	12	35
	point33	33	1024	35	26	35	0	0	14	30	12	35
	point32	32	1024	35	26	35	0	0	14	30	12	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	328	35	8	35	0	0	5	30	4	35
	point40	40	328	35	8	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	328	35	8	35	0	0	5	30	4	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	243	35	6	35	0	0	3	30	3	35
	point45	45										

Glendale Blvd SB N of SR2 Off -2	point46	46	243	35	6	35	0	0	3	30	3	35
	point47	47										
SR 2 NB - 2	point98	98	1375	65	15	65	25	60	5	60	0	0
	point97	97	1375	65	15	65	25	60	5	60	0	0
	point96	96	1375	65	15	65	25	60	5	60	0	0
	point95	95	1375	65	15	65	25	60	5	60	0	0
	point94	94	1375	65	15	65	25	60	5	60	0	0
	point93	93	1375	65	15	65	25	60	5	60	0	0
	point92	92	1375	65	15	65	25	60	5	60	0	0
	point91	91	1375	65	15	65	25	60	5	60	0	0
	point90	90	1375	65	15	65	25	60	5	60	0	0
	point89	89	1375	65	15	65	25	60	5	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	686	65	14	65	8	60	4	60	2	65
	point277	277	686	65	14	65	8	60	4	60	2	65
	point115	115	686	65	14	65	8	60	4	60	2	65
	point114	114	686	65	14	65	8	60	4	60	2	65
	point113	113	686	65	14	65	8	60	4	60	2	65
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	686	65	14	65	8	60	4	60	2	65
	point276	276	686	65	14	65	8	60	4	60	2	65
	point118	118	686	65	14	65	8	60	4	60	2	65
	point119	119	686	65	14	65	8	60	4	60	2	65
	point120	120	686	65	14	65	8	60	4	60	2	65
	point121	121										
SR 2 SB Off at Glendale Blvd	point146	146	238	65	3	65	4	60	1	60	0	0
	point275	275	238	65	3	65	4	60	1	60	0	0
	point145	145	238	65	3	65	4	60	1	60	0	0
	point144	144	238	65	3	65	4	60	1	60	0	0
	point143	143	238	65	3	65	4	60	1	60	0	0
	point142	142										
Fargo St NB	point147	147	96	25	4	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	45	25	2	25	0	0	0	0	0	0

	point150	150										
Waterloo St - 2	point151	151	26	25	1	25	0	0	0	0	0	0
	point152	152	26	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	26	25	1	25	0	0	0	0	0	0
	point155	155	26	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	230	35	7	35	0	0	13	30	0	0
	point181	282	230	35	7	35	0	0	13	30	0	0
	point180	180	230	35	7	35	0	0	13	30	0	0
	point179	179	230	35	7	35	0	0	13	30	0	0
	point178	178	230	35	7	35	0	0	13	30	0	0
	point177	177	230	35	7	35	0	0	13	30	0	0
	point176	176	230	35	7	35	0	0	13	30	0	0
	point175	175	230	35	7	35	0	0	13	30	0	0
	point174	174	230	35	7	35	0	0	13	30	0	0
	point173	173	230	35	7	35	0	0	13	30	0	0
	point172	172	230	35	7	35	0	0	13	30	0	0
	point171	171	230	35	7	35	0	0	13	30	0	0
	point170	170	230	35	7	35	0	0	13	30	0	0
	point169	169	230	35	7	35	0	0	13	30	0	0
	point168	168	230	35	7	35	0	0	13	30	0	0
	point167	167	230	35	7	35	0	0	13	30	0	0
	point166	166	230	35	7	35	0	0	13	30	0	0
	point165	165	230	35	7	35	0	0	13	30	0	0
	point164	164	230	35	7	35	0	0	13	30	0	0
	point163	163	230	35	7	35	0	0	13	30	0	0
	point162	162	230	35	7	35	0	0	13	30	0	0
	point161	161	230	35	7	35	0	0	13	30	0	0
	point160	160	230	35	7	35	0	0	13	30	0	0
	point159	159	230	35	7	35	0	0	13	30	0	0
	point158	158	230	35	7	35	0	0	13	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	916	65	10	65	17	60	3	60	0	0

	point203	203	916	65	10	65	17	60	3	60	0	0
	point202	202	916	65	10	65	17	60	3	60	0	0
	point201	201	916	65	10	65	17	60	3	60	0	0
	point279	279	916	65	10	65	17	60	3	60	0	0
	point200	200										
Alessandro NB	point228	228	124	35	4	35	0	0	7	30	0	0
	point227	227	124	35	4	35	0	0	7	30	0	0
	point226	226	124	35	4	35	0	0	7	30	0	0
	point225	225	124	35	4	35	0	0	7	30	0	0
	point224	224	124	35	4	35	0	0	7	30	0	0
	point223	223	124	35	4	35	0	0	7	30	0	0
	point222	222	124	35	4	35	0	0	7	30	0	0
	point221	221	124	35	4	35	0	0	7	30	0	0
	point220	220	124	35	4	35	0	0	7	30	0	0
	point219	219	124	35	4	35	0	0	7	30	0	0
	point218	218	124	35	4	35	0	0	7	30	0	0
	point217	217	124	35	4	35	0	0	7	30	0	0
	point216	216	124	35	4	35	0	0	7	30	0	0
	point215	215	124	35	4	35	0	0	7	30	0	0
	point214	214	124	35	4	35	0	0	7	30	0	0
	point213	213	124	35	4	35	0	0	7	30	0	0
	point212	212	124	35	4	35	0	0	7	30	0	0
	point211	211	124	35	4	35	0	0	7	30	0	0
	point210	210	124	35	4	35	0	0	7	30	0	0
	point209	209	124	35	4	35	0	0	7	30	0	0
	point208	208	124	35	4	35	0	0	7	30	0	0
	point207	207	124	35	4	35	0	0	7	30	0	0
	point206	206	124	35	4	35	0	0	7	30	0	0
	point205	281	124	35	4	35	0	0	7	30	0	0
	point286	205										
Glendale Blvd NB - S of Alessandro - 2-2	point233	233	224	35	6	35	0	0	3	30	3	35
	point13	13	224	35	6	35	0	0	3	30	3	35
	point251	251										
Glendale Blvd NB - S of Alessandro - 3-2	point234	234	224	35	6	35	0	0	3	30	3	35

	point25	25	224	35	6	35	0	0	3	30	3	35
	point253	253										
Glendale Blvd SB - S of Alessandro	point235	235	213	35	5	35	0	0	3	30	3	35
	point53	53	213	35	5	35	0	0	3	30	3	35
	point52	52	213	35	5	35	0	0	3	30	3	35
	point51	51	213	35	5	35	0	0	3	30	3	35
	point50	50	213	35	5	35	0	0	3	30	3	35
	point49	49										
Glendale Blvd SB - S of Alessandro - 2	point236	236	213	35	5	35	0	0	3	30	3	35
	point62	62	213	35	5	35	0	0	3	30	3	35
	point61	61	213	35	5	35	0	0	3	30	3	35
	point60	60	213	35	5	35	0	0	3	30	3	35
	point59	59	213	35	5	35	0	0	3	30	3	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1050	35	27	35	0	0	15	30	12	35
	point30	30	1050	35	27	35	0	0	15	30	12	35
	point29	29	1050	35	27	35	0	0	15	30	12	35
	point28	28	1050	35	27	35	0	0	15	30	12	35
	point27	27	1050	35	27	35	0	0	15	30	12	35
	point26	26										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1050	35	27	35	0	0	15	30	12	35
	point18	18	1050	35	27	35	0	0	15	30	12	35
	point17	17	1050	35	27	35	0	0	15	30	12	35
	point16	16	1050	35	27	35	0	0	15	30	12	35
	point15	15	1050	35	27	35	0	0	15	30	12	35
	point14	14										
Glendale Blvd NB - S of Alessandro-2	point239	239	1050	35	27	35	0	0	15	30	12	35
	point6	5	1050	35	27	35	0	0	15	30	12	35
	point5	6	1050	35	27	35	0	0	15	30	12	35
	point4	7	1050	35	27	35	0	0	15	30	12	35
	point3	8	1050	35	27	35	0	0	15	30	12	35
	point2	9	1050	35	27	35	0	0	15	30	12	35
	point1	10										
SR 2 NB - 2-2	point243	243	916	65	10	65	17	60	3	60	0	0

	point87	87	916	65	10	65	17	60	3	60	0	0
	point86	86	916	65	10	65	17	60	3	60	0	0
	point278	278	916	65	10	65	17	60	3	60	0	0
	point85	85										
SR2 NB	point84	84	1375	65	15	65	25	60	5	60	0	0
	point83	83	1375	65	15	65	25	60	5	60	0	0
	point82	82	1375	65	15	65	25	60	5	60	0	0
	point81	81	1375	65	15	65	25	60	5	60	0	0
	point80	80	1375	65	15	65	25	60	5	60	0	0
	point79	79	1375	65	15	65	25	60	5	60	0	0
	point78	78	1375	65	15	65	25	60	5	60	0	0
	point77	77	1375	65	15	65	25	60	5	60	0	0
	point76	76	1375	65	15	65	25	60	5	60	0	0
	point75	75	1375	65	15	65	25	60	5	60	0	0
	point74	74	1375	65	15	65	25	60	5	60	0	0
	point73	73	1375	65	15	65	25	60	5	60	0	0
	point72	72	1375	65	15	65	25	60	5	60	0	0
	point71	71	1375	65	15	65	25	60	5	60	0	0
	point70	70										
SR2 NB-2	point247	247	916	65	10	65	17	60	3	60	0	0
	point242	242	916	65	10	65	17	60	3	60	0	0
	point230	230	916	65	10	65	17	60	3	60	0	0
	point281	280	916	65	10	65	17	60	3	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	965	35	24	35	0	0	13	30	11	35
	point48	48	965	35	24	35	0	0	13	30	11	35
	point286	286	965	35	24	35	0	0	13	30	11	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	965	35	24	35	0	0	13	30	11	35
	point57	57	965	35	24	35	0	0	13	30	11	35
	point287	287	965	35	24	35	0	0	13	30	11	35
	point68	68										
SR 2 SB Trans into Glendale SB-2	point248	248	749	65	8	65	14	60	3	60	0	0
	point111	111	749	65	8	65	14	60	3	60	0	0

	point110	110	749	65	8	65	14	60	3	60	0	0
	point109	109	749	65	8	65	14	60	3	60	0	0
	point108	108	749	65	8	65	14	60	3	60	0	0
	point107	107	749	65	8	65	14	60	3	60	0	0
	point106	106	749	65	8	65	14	60	3	60	0	0
	point105	105	749	50	8	50	14	45	3	45	0	0
	point104	104	749	50	8	50	14	45	3	45	0	0
	point103	103	749	35	8	35	14	30	3	30	0	0
	point102	102	749	35	8	35	14	30	3	30	0	0
	point101	101	749	35	8	35	14	30	3	30	0	0
	point100	100	749	35	8	35	14	30	3	30	0	0
	point99	99										
SR 2 SB Trans into Glendale SB - 2-2	point249	249	749	65	8	65	14	60	3	60	0	0
	point122	122	749	65	8	65	14	60	3	60	0	0
	point123	123	749	65	8	65	14	60	3	60	0	0
	point124	124	749	65	8	65	14	60	3	60	0	0
	point125	125	749	65	8	65	14	60	3	60	0	0
	point126	126	749	65	8	65	14	60	3	60	0	0
	point127	127	749	65	8	65	14	60	3	60	0	0
	point128	128	749	50	8	50	14	45	3	45	0	0
	point129	129	749	50	8	50	14	45	3	45	0	0
	point130	130	749	35	8	35	14	30	3	30	0	0
	point131	131	749	35	8	35	14	30	3	30	0	0
	point132	132	749	35	8	35	14	30	3	30	0	0
	point133	133	749	35	8	35	14	30	3	30	0	0
	point134	134										
SR 2 SB Off at Glendale Blvd-2	point250	250	238	35	3	35	4	30	1	30	0	0
	point141	141	238	35	3	35	4	30	1	30	0	0
	point140	140	238	35	3	35	4	30	1	30	0	0
	point139	139	238	35	3	35	4	30	1	30	0	0
	point138	138	238	35	3	35	4	30	1	30	0	0
	point137	137	238	35	3	35	4	30	1	30	0	0
	point136	136	238	35	3	35	4	30	1	30	0	0
	point135	135										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd NB - S of Alessandro - 3-2-2	point255	255	224	35	6	35	0	0	3	30	3	35
	point254	254										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	224	35	6	35	0	0	3	30	3	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	224	35	6	35	0	0	3	30	3	35
	point12	12	224	35	6	35	0	0	3	30	3	35
	point11	11										
Glendale Blvd NB - S of Alessandro - 3-2-2-	point258	258	224	35	6	35	0	0	3	30	3	35
	point24	24	224	35	6	35	0	0	3	30	3	35
	point23	23										
Glendale Blvd SB - N of Alessandro - 2	point65	65	256	35	6	35	0	0	4	30	3	35
	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	256	35	6	35	0	0	4	30	3	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	256	35	6	35	0	0	4	30	3	35
	point55	55	256	35	6	35	0	0	4	30	3	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	256	35	6	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	256	35	6	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	256	35	6	35	0	0	4	30	3	35
	point64	64	256	35	6	35	0	0	4	30	3	35
	point63	63										

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TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions ST-10

Receiver											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST-10	52	1	6,483,278.0	1,854,984.0	485.00	4.92	0.00	66	10.0	8.0	Y

Jones & Stokes 13 December 2007
M Greene TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions ST-10

Barrier Name	Type	Height Min	Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	Top Width	Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Incre-ment	Perturbs #Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier5	W	0.00	99.99	0.00				0.00	point28	28	6,484,006.5	1,856,432.1	490.49	0.00	0.00	0	0		
									point29	29	6,483,879.0	1,856,298.0	498.69	0.00	0.00	0	0		
									point30	30	6,483,673.0	1,856,071.0	503.61	0.00	0.00	0	0		
									point31	31	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point32	32	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0	Y	
									point33	33	6,483,344.5	1,855,732.9	505.25	0.00	0.00	0	0		

									point34	34	6,483,292.0	1,855,687.4	501.97	0.00	0.00	0	0		
									point35	35	6,483,204.5	1,855,575.1	497.05	0.00	0.00	0	0		
									point36	36	6,483,174.0	1,855,507.8	492.13	0.00	0.00	0	0		
									point37	37	6,483,161.5	1,855,451.5	488.85	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	121	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier14	W	0.00	100.00	0.00				0.00	point102	102	6,483,189.0	1,855,295.9	472.44	2.89	0.00	0	0		
									point103	103	6,483,194.5	1,855,393.2	482.28	2.89	0.00	0	0		
									point104	104	6,483,217.5	1,855,478.6	492.13	2.89	0.00	0	0		
									point105	105	6,483,274.0	1,855,583.6	501.97	2.89	0.00	0	0		

INPUT: BARRIERS

<Project Name?>

									point106	106	6,483,349.0	1,855,675.5	506.89	2.89	0.00	0	0	Y	
									point107	107	6,483,459.0	1,855,793.0	506.89	2.89	0.00	0	0	Y	
									point108	119	6,483,608.5	1,855,945.5	505.25	2.89	0.00	0	0		
									point109	120	6,483,777.5	1,856,132.9	501.97	2.89	0.00	0	0		
									point110	108	6,483,988.5	1,856,337.5	497.05	2.89					
Barrier15	W	0.00	100.00	0.00				0.00	point109	109	6,483,150.0	1,855,277.6	472.44	2.89	0.00	0	0		
									point110	110	6,483,153.5	1,855,373.0	482.28	2.89	0.00	0	0		
									point111	111	6,483,174.0	1,855,458.8	492.13	2.89	0.00	0	0		
									point112	112	6,483,216.0	1,855,560.0	501.97	2.89	0.00	0	0		
									point113	113	6,483,279.0	1,855,649.6	506.89	2.89	0.00	0	0	Y	
									point114	114	6,483,446.5	1,855,826.8	506.89	2.89	0.00	0	0	Y	
									point115	115	6,483,554.0	1,855,943.2	505.25	2.89					
Barrier18	W	0.00	99.99	0.00				0.00	point122	122	6,483,298.5	1,855,167.1	468.00	11.00	0.00	0	0		
									point123	123	6,483,249.0	1,855,176.5	465.00	11.00	0.00	0	0		
									point124	124	6,483,205.0	1,854,904.4	465.00	11.00					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions ST-10
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST-10	52	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions M-13

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width (ft)	Points Name	No.	Coordinates (pavement) X (ft)	Y (ft)	Z (ft)	Flow Control Control Device	Speed Constraint (mph)	Percent Vehicles Affected (%)	Segment Pvmt Type	On Struct?
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	283	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.04				Average	
		point8	3	6,483,238.5	1,855,181.5	464.24				Average	
		point7	4	6,483,249.0	1,855,217.1	464.89					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	284	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.68				Average	
		point20	20	6,483,229.0	1,855,182.5	464.89				Average	
		point19	19	6,483,239.5	1,855,212.6	465.22					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	285	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.68				Average	
		point32	32	6,483,221.5	1,855,183.4	464.57				Average	
		point31	31	6,483,231.5	1,855,214.9	465.22					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,356.0	1,855,974.2	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,470.0	1,855,670.1	477.69				Average	

		point97	97	6,483,613.0	1,855,832.8	485.56				Average	
		point96	96	6,483,677.5	1,855,905.5	490.49				Average	
		point95	95	6,483,745.5	1,855,983.9	495.41				Average	
		point94	94	6,483,806.5	1,856,055.2	498.69				Average	
		point93	93	6,483,856.0	1,856,110.6	500.33				Average	
		point92	92	6,483,917.5	1,856,182.1	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,614.5	1,857,120.5	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,318.0	1,856,741.2	485.56				Average	
		point112	112	6,484,225.0	1,856,631.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,602.0	1,857,131.4	475.72				Average	
		point118	118	6,484,511.5	1,857,009.9	479.00				Average	
		point119	119	6,484,409.0	1,856,873.8	482.28				Average	
		point120	120	6,484,297.5	1,856,736.6	485.56				Average	
		point121	121	6,484,199.5	1,856,624.9	488.85					
SR 2 SB Off at Glendale Blvd	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,588.5	1,857,167.4	475.72				Average	
		point145	145	6,484,481.5	1,857,001.8	479.00				Average	
		point144	144	6,484,378.0	1,856,861.0	482.28				Average	
		point143	143	6,484,272.0	1,856,729.6	485.56				Average	
		point142	142	6,484,169.5	1,856,610.9	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	282	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,640.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	281	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point233	233	6,483,459.0	1,855,663.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,454.5	1,855,797.6	482.61					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point234	234	6,483,442.0	1,855,661.2	478.02				Average	
		point25	25	6,483,447.5	1,855,752.8	480.31				Average	
		point253	253	6,483,441.0	1,855,783.4	482.83					
Glendale Blvd SB - S of Alessandro	12.0	point235	235	6,483,409.5	1,855,669.1	478.67				Average	
		point53	53	6,483,359.5	1,855,543.0	474.08				Average	
		point52	52	6,483,332.0	1,855,477.0	472.44				Average	
		point51	51	6,483,273.0	1,855,365.4	469.16				Average	
		point50	50	6,483,245.0	1,855,302.5	467.52				Average	
		point49	49	6,483,208.5	1,855,187.2	464.89					
Glendale Blvd SB - S of Alessandro - 2	12.0	point236	236	6,483,395.5	1,855,673.0	478.35				Average	
		point62	62	6,483,351.5	1,855,560.6	473.75				Average	
		point61	61	6,483,328.5	1,855,512.2	472.44				Average	
		point60	60	6,483,267.0	1,855,388.6	469.16				Average	
		point59	59	6,483,238.5	1,855,324.8	467.52				Average	
		point58	58	6,483,197.5	1,855,188.0	464.57					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,231.5	1,855,214.9	465.22				Average	

		point30	30	6,483,263.0	1,855,298.0	469.16				Average	
		point29	29	6,483,295.0	1,855,361.8	470.80				Average	
		point28	28	6,483,351.5	1,855,470.0	472.44				Average	
		point27	27	6,483,385.0	1,855,538.5	474.41				Average	
		point26	26	6,483,442.0	1,855,661.2	478.02					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,239.5	1,855,212.6	465.22				Average	
		point18	18	6,483,272.0	1,855,294.5	467.52				Average	
		point17	17	6,483,304.0	1,855,357.9	469.16				Average	
		point16	16	6,483,359.5	1,855,467.4	472.44				Average	
		point15	15	6,483,394.0	1,855,534.1	474.08				Average	
		point14	14	6,483,459.0	1,855,663.8	477.69					
Glendale Blvd NB - S of Alessandro-2	12.0	point239	239	6,483,249.0	1,855,217.1	464.89				Average	
		point6	5	6,483,279.0	1,855,286.0	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,402.0	1,855,528.2	472.11				Average	
		point2	9	6,483,431.0	1,855,584.6	475.72				Average	
		point1	10	6,483,459.0	1,855,633.6	476.71					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36				Average	
		point83	83	6,483,529.0	1,855,715.2	479.00				Average	
		point82	82	6,483,583.0	1,855,778.6	482.28				Average	
		point81	81	6,483,644.0	1,855,848.9	487.20				Average	
		point80	80	6,483,687.5	1,855,899.6	490.49				Average	
		point79	79	6,483,729.5	1,855,948.1	493.77				Average	
		point78	78	6,483,782.5	1,856,009.1	497.05				Average	
		point77	77	6,483,842.5	1,856,076.1	500.33				Average	
		point76	76	6,483,864.0	1,856,102.6	501.31				Average	
		point75	75	6,483,886.0	1,856,126.8	500.33				Average	
		point74	74	6,483,935.5	1,856,180.9	500.33				Average	
		point73	73	6,484,051.0	1,856,300.9	498.69				Average	
		point72	72	6,484,157.0	1,856,423.1	495.41				Average	
		point71	71	6,484,255.0	1,856,531.4	492.78				Average	
		point70	70	6,484,317.0	1,856,597.1	490.49					

SR2 NB-2	12.0	point247	247	6,484,317.0	1,856,597.1	490.49					Average	
		point242	242	6,484,406.0	1,856,704.2	487.20					Average	
		point230	230	6,484,504.0	1,856,830.1	484.91					Average	
		point281	280	6,484,649.0	1,857,042.4	479.66					Average	
		point229	229	6,484,841.5	1,857,323.5	479.66						
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.89					Average	
		point48	48	6,483,150.5	1,854,833.5	457.68					Average	
		point286	286	6,483,108.0	1,854,579.8	452.10					Average	
		point66	66	6,483,077.5	1,854,375.0	448.00						
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.57					Average	
		point57	57	6,483,146.0	1,854,849.0	457.68					Average	
		point287	287	6,483,096.5	1,854,582.0	451.80					Average	
		point68	68	6,483,066.5	1,854,378.0	448.00						
SR 2 SB Trans into Glendale SB-2	12.0	point248	248	6,484,225.0	1,856,631.8	488.85					Average	
		point111	111	6,484,094.5	1,856,495.6	492.13					Average	
		point110	110	6,483,913.5	1,856,298.6	498.69					Average	
		point109	109	6,483,774.0	1,856,145.2	501.97					Average	
		point108	108	6,483,586.5	1,855,941.2	505.25					Average	
		point107	107	6,483,461.0	1,855,805.0	506.89					Average	
		point106	106	6,483,334.0	1,855,670.1	505.25					Average	
		point105	105	6,483,242.0	1,855,554.9	499.34					Average	
		point104	104	6,483,197.0	1,855,452.4	489.50					Average	
		point103	103	6,483,182.0	1,855,380.8	482.28					Average	
		point102	102	6,483,179.5	1,855,244.9	469.16					Average	
		point101	101	6,483,177.5	1,855,121.4	462.93					Average	
		point100	100	6,483,162.5	1,855,030.4	460.96					Average	
		point99	99	6,483,141.0	1,854,874.1	457.68						
SR 2 SB Trans into Glendale SB - 2-2	12.0	point249	249	6,484,199.5	1,856,624.9	488.85					Average	
		point122	122	6,484,075.0	1,856,492.1	492.13					Average	
		point123	123	6,483,898.5	1,856,300.9	498.69					Average	
		point124	124	6,483,766.0	1,856,156.8	501.97					Average	
		point125	125	6,483,564.5	1,855,937.8	505.25					Average	
		point126	126	6,483,456.0	1,855,817.4	506.89					Average	
		point127	127	6,483,297.0	1,855,647.1	505.25					Average	
		point128	128	6,483,229.0	1,855,556.1	500.33					Average	
		point129	129	6,483,186.5	1,855,455.9	490.49					Average	
		point130	130	6,483,165.5	1,855,374.0	482.28					Average	
		point131	131	6,483,166.0	1,855,239.1	469.16					Average	

		point132	132	6,483,167.0	1,855,136.4	462.60					Average	
		point133	133	6,483,156.5	1,855,051.0	460.96					Average	
		point134	134	6,483,133.5	1,854,905.6	457.68						
SR 2 SB Off at Glendale Blvd-2	12.0	point250	250	6,484,169.5	1,856,610.9	488.85					Average	
		point141	141	6,484,053.0	1,856,491.1	492.13					Average	
		point140	140	6,483,989.5	1,856,433.4	493.77					Average	
		point139	139	6,483,874.5	1,856,341.0	497.05					Average	
		point138	138	6,483,733.0	1,856,227.0	500.33					Average	
		point137	137	6,483,615.0	1,856,141.8	497.05					Average	
		point136	136	6,483,539.0	1,856,086.4	493.77					Average	
		point135	135	6,483,428.5	1,855,998.8	490.49						
Glendale Blvd NB - S of Alessandro - 3-2-2	12.0	point255	255	6,483,440.5	1,855,784.2	482.83					Average	
		point254	254	6,483,437.5	1,855,797.2	485.35						
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,454.5	1,855,799.0	482.61					Average	
		point252	252	6,483,452.0	1,855,812.1	484.91						
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,451.5	1,855,813.5	484.91					Average	
		point12	12	6,483,421.0	1,855,939.5	487.20					Average	
		point11	11	6,483,406.5	1,855,991.9	490.49						
Glendale Blvd NB - S of Alessandro - 3-2-2-2	12.0	point258	258	6,483,437.0	1,855,798.6	485.35					Average	
		point24	24	6,483,406.5	1,855,934.2	487.86					Average	
		point23	23	6,483,395.0	1,855,980.1	490.49						
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,357.5	1,855,972.1	490.81					Average	
		point271	271	6,483,395.0	1,855,753.1	483.92						
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77					Average	
		point267	267	6,483,408.5	1,855,767.1	484.25						
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,411.5	1,855,751.6	482.61					Average	
		point55	55	6,483,414.0	1,855,732.9	480.31					Average	
		point54	54	6,483,409.5	1,855,669.1	478.67						
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,408.5	1,855,766.0	484.25					Average	
		point268	268	6,483,411.0	1,855,753.1	482.61						
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,395.5	1,855,751.8	483.92					Average	
		point272	272	6,483,397.5	1,855,738.2	482.28						
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,397.5	1,855,737.1	482.28					Average	
		point64	64	6,483,399.0	1,855,719.8	480.31					Average	
		point63	63	6,483,395.5	1,855,673.0	478.35						

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions M-13

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1024	35	26	35	0	0	14	30	12	35
	point283	283	1024	35	26	35	0	0	14	30	12	35
	point9	2	1024	35	26	35	0	0	14	30	12	35
	point8	3	1024	35	26	35	0	0	14	30	12	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1024	35	26	35	0	0	14	30	12	35
	point284	284	1024	35	26	35	0	0	14	30	12	35
	point21	21	1024	35	26	35	0	0	14	30	12	35
	point20	20	1024	35	26	35	0	0	14	30	12	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1024	35	26	35	0	0	14	30	12	35
	point285	285	1024	35	26	35	0	0	14	30	12	35
	point33	33	1024	35	26	35	0	0	14	30	12	35
	point32	32	1024	35	26	35	0	0	14	30	12	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	328	35	8	35	0	0	5	30	4	35
	point40	40	328	35	8	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	328	35	8	35	0	0	5	30	4	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	243	35	6	35	0	0	3	30	3	35
	point45	45										

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

Glendale Blvd SB N of SR2 Off -2	point46	46	243	35	6	35	0	0	3	30	3	35
	point47	47										
SR 2 NB - 2	point98	98	1375	65	15	65	25	60	5	60	0	0
	point97	97	1375	65	15	65	25	60	5	60	0	0
	point96	96	1375	65	15	65	25	60	5	60	0	0
	point95	95	1375	65	15	65	25	60	5	60	0	0
	point94	94	1375	65	15	65	25	60	5	60	0	0
	point93	93	1375	65	15	65	25	60	5	60	0	0
	point92	92	1375	65	15	65	25	60	5	60	0	0
	point91	91	1375	65	15	65	25	60	5	60	0	0
	point90	90	1375	65	15	65	25	60	5	60	0	0
	point89	89	1375	65	15	65	25	60	5	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	686	65	14	65	8	60	4	60	2	65
	point277	277	686	65	14	65	8	60	4	60	2	65
	point115	115	686	65	14	65	8	60	4	60	2	65
	point114	114	686	65	14	65	8	60	4	60	2	65
	point113	113	686	65	14	65	8	60	4	60	2	65
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	686	65	14	65	8	60	4	60	2	65
	point276	276	686	65	14	65	8	60	4	60	2	65
	point118	118	686	65	14	65	8	60	4	60	2	65
	point119	119	686	65	14	65	8	60	4	60	2	65
	point120	120	686	65	14	65	8	60	4	60	2	65
	point121	121										
SR 2 SB Off at Glendale Blvd	point146	146	238	65	3	65	4	60	1	60	0	0
	point275	275	238	65	3	65	4	60	1	60	0	0
	point145	145	238	65	3	65	4	60	1	60	0	0
	point144	144	238	65	3	65	4	60	1	60	0	0
	point143	143	238	65	3	65	4	60	1	60	0	0
	point142	142										
Fargo St NB	point147	147	96	25	4	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	45	25	2	25	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

	point150	150										
Waterloo St - 2	point151	151	26	25	1	25	0	0	0	0	0	0
	point152	152	26	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	26	25	1	25	0	0	0	0	0	0
	point155	155	26	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	230	35	7	35	0	0	13	30	0	0
	point181	282	230	35	7	35	0	0	13	30	0	0
	point180	180	230	35	7	35	0	0	13	30	0	0
	point179	179	230	35	7	35	0	0	13	30	0	0
	point178	178	230	35	7	35	0	0	13	30	0	0
	point177	177	230	35	7	35	0	0	13	30	0	0
	point176	176	230	35	7	35	0	0	13	30	0	0
	point175	175	230	35	7	35	0	0	13	30	0	0
	point174	174	230	35	7	35	0	0	13	30	0	0
	point173	173	230	35	7	35	0	0	13	30	0	0
	point172	172	230	35	7	35	0	0	13	30	0	0
	point171	171	230	35	7	35	0	0	13	30	0	0
	point170	170	230	35	7	35	0	0	13	30	0	0
	point169	169	230	35	7	35	0	0	13	30	0	0
	point168	168	230	35	7	35	0	0	13	30	0	0
	point167	167	230	35	7	35	0	0	13	30	0	0
	point166	166	230	35	7	35	0	0	13	30	0	0
	point165	165	230	35	7	35	0	0	13	30	0	0
	point164	164	230	35	7	35	0	0	13	30	0	0
	point163	163	230	35	7	35	0	0	13	30	0	0
	point162	162	230	35	7	35	0	0	13	30	0	0
	point161	161	230	35	7	35	0	0	13	30	0	0
	point160	160	230	35	7	35	0	0	13	30	0	0
	point159	159	230	35	7	35	0	0	13	30	0	0
	point158	158	230	35	7	35	0	0	13	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	916	65	10	65	17	60	3	60	0	0

	point203	203	916	65	10	65	17	60	3	60	0	0
	point202	202	916	65	10	65	17	60	3	60	0	0
	point201	201	916	65	10	65	17	60	3	60	0	0
	point279	279	916	65	10	65	17	60	3	60	0	0
	point200	200										
Alessandro NB	point228	228	124	35	4	35	0	0	7	30	0	0
	point227	227	124	35	4	35	0	0	7	30	0	0
	point226	226	124	35	4	35	0	0	7	30	0	0
	point225	225	124	35	4	35	0	0	7	30	0	0
	point224	224	124	35	4	35	0	0	7	30	0	0
	point223	223	124	35	4	35	0	0	7	30	0	0
	point222	222	124	35	4	35	0	0	7	30	0	0
	point221	221	124	35	4	35	0	0	7	30	0	0
	point220	220	124	35	4	35	0	0	7	30	0	0
	point219	219	124	35	4	35	0	0	7	30	0	0
	point218	218	124	35	4	35	0	0	7	30	0	0
	point217	217	124	35	4	35	0	0	7	30	0	0
	point216	216	124	35	4	35	0	0	7	30	0	0
	point215	215	124	35	4	35	0	0	7	30	0	0
	point214	214	124	35	4	35	0	0	7	30	0	0
	point213	213	124	35	4	35	0	0	7	30	0	0
	point212	212	124	35	4	35	0	0	7	30	0	0
	point211	211	124	35	4	35	0	0	7	30	0	0
	point210	210	124	35	4	35	0	0	7	30	0	0
	point209	209	124	35	4	35	0	0	7	30	0	0
	point208	208	124	35	4	35	0	0	7	30	0	0
	point207	207	124	35	4	35	0	0	7	30	0	0
	point206	206	124	35	4	35	0	0	7	30	0	0
	point205	281	124	35	4	35	0	0	7	30	0	0
	point286	205										
Glendale Blvd NB - S of Alessandro - 2-2	point233	233	224	35	6	35	0	0	3	30	3	35
	point13	13	224	35	6	35	0	0	3	30	3	35
	point251	251										
Glendale Blvd NB - S of Alessandro - 3-2	point234	234	224	35	6	35	0	0	3	30	3	35

	point25	25	224	35	6	35	0	0	3	30	3	35
	point253	253										
Glendale Blvd SB - S of Alessandro	point235	235	213	35	5	35	0	0	3	30	3	35
	point53	53	213	35	5	35	0	0	3	30	3	35
	point52	52	213	35	5	35	0	0	3	30	3	35
	point51	51	213	35	5	35	0	0	3	30	3	35
	point50	50	213	35	5	35	0	0	3	30	3	35
	point49	49										
Glendale Blvd SB - S of Alessandro - 2	point236	236	213	35	5	35	0	0	3	30	3	35
	point62	62	213	35	5	35	0	0	3	30	3	35
	point61	61	213	35	5	35	0	0	3	30	3	35
	point60	60	213	35	5	35	0	0	3	30	3	35
	point59	59	213	35	5	35	0	0	3	30	3	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1050	35	27	35	0	0	15	30	12	35
	point30	30	1050	35	27	35	0	0	15	30	12	35
	point29	29	1050	35	27	35	0	0	15	30	12	35
	point28	28	1050	35	27	35	0	0	15	30	12	35
	point27	27	1050	35	27	35	0	0	15	30	12	35
	point26	26										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1050	35	27	35	0	0	15	30	12	35
	point18	18	1050	35	27	35	0	0	15	30	12	35
	point17	17	1050	35	27	35	0	0	15	30	12	35
	point16	16	1050	35	27	35	0	0	15	30	12	35
	point15	15	1050	35	27	35	0	0	15	30	12	35
	point14	14										
Glendale Blvd NB - S of Alessandro-2	point239	239	1050	35	27	35	0	0	15	30	12	35
	point6	5	1050	35	27	35	0	0	15	30	12	35
	point5	6	1050	35	27	35	0	0	15	30	12	35
	point4	7	1050	35	27	35	0	0	15	30	12	35
	point3	8	1050	35	27	35	0	0	15	30	12	35
	point2	9	1050	35	27	35	0	0	15	30	12	35
	point1	10										
SR 2 NB - 2-2	point243	243	916	65	10	65	17	60	3	60	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

	point87	87	916	65	10	65	17	60	3	60	0	0
	point86	86	916	65	10	65	17	60	3	60	0	0
	point278	278	916	65	10	65	17	60	3	60	0	0
	point85	85										
SR2 NB	point84	84	1375	65	15	65	25	60	5	60	0	0
	point83	83	1375	65	15	65	25	60	5	60	0	0
	point82	82	1375	65	15	65	25	60	5	60	0	0
	point81	81	1375	65	15	65	25	60	5	60	0	0
	point80	80	1375	65	15	65	25	60	5	60	0	0
	point79	79	1375	65	15	65	25	60	5	60	0	0
	point78	78	1375	65	15	65	25	60	5	60	0	0
	point77	77	1375	65	15	65	25	60	5	60	0	0
	point76	76	1375	65	15	65	25	60	5	60	0	0
	point75	75	1375	65	15	65	25	60	5	60	0	0
	point74	74	1375	65	15	65	25	60	5	60	0	0
	point73	73	1375	65	15	65	25	60	5	60	0	0
	point72	72	1375	65	15	65	25	60	5	60	0	0
	point71	71	1375	65	15	65	25	60	5	60	0	0
	point70	70										
SR2 NB-2	point247	247	916	65	10	65	17	60	3	60	0	0
	point242	242	916	65	10	65	17	60	3	60	0	0
	point230	230	916	65	10	65	17	60	3	60	0	0
	point281	280	916	65	10	65	17	60	3	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	965	35	24	35	0	0	13	30	11	35
	point48	48	965	35	24	35	0	0	13	30	11	35
	point286	286	965	35	24	35	0	0	13	30	11	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	965	35	24	35	0	0	13	30	11	35
	point57	57	965	35	24	35	0	0	13	30	11	35
	point287	287	965	35	24	35	0	0	13	30	11	35
	point68	68										
SR 2 SB Trans into Glendale SB-2	point248	248	749	65	8	65	14	60	3	60	0	0
	point111	111	749	65	8	65	14	60	3	60	0	0

	point110	110	749	65	8	65	14	60	3	60	0	0
	point109	109	749	65	8	65	14	60	3	60	0	0
	point108	108	749	65	8	65	14	60	3	60	0	0
	point107	107	749	65	8	65	14	60	3	60	0	0
	point106	106	749	65	8	65	14	60	3	60	0	0
	point105	105	749	50	8	50	14	45	3	45	0	0
	point104	104	749	50	8	50	14	45	3	45	0	0
	point103	103	749	35	8	35	14	30	3	30	0	0
	point102	102	749	35	8	35	14	30	3	30	0	0
	point101	101	749	35	8	35	14	30	3	30	0	0
	point100	100	749	35	8	35	14	30	3	30	0	0
	point99	99										
SR 2 SB Trans into Glendale SB - 2-2	point249	249	749	65	8	65	14	60	3	60	0	0
	point122	122	749	65	8	65	14	60	3	60	0	0
	point123	123	749	65	8	65	14	60	3	60	0	0
	point124	124	749	65	8	65	14	60	3	60	0	0
	point125	125	749	65	8	65	14	60	3	60	0	0
	point126	126	749	65	8	65	14	60	3	60	0	0
	point127	127	749	65	8	65	14	60	3	60	0	0
	point128	128	749	50	8	50	14	45	3	45	0	0
	point129	129	749	50	8	50	14	45	3	45	0	0
	point130	130	749	35	8	35	14	30	3	30	0	0
	point131	131	749	35	8	35	14	30	3	30	0	0
	point132	132	749	35	8	35	14	30	3	30	0	0
	point133	133	749	35	8	35	14	30	3	30	0	0
	point134	134										
SR 2 SB Off at Glendale Blvd-2	point250	250	238	35	3	35	4	30	1	30	0	0
	point141	141	238	35	3	35	4	30	1	30	0	0
	point140	140	238	35	3	35	4	30	1	30	0	0
	point139	139	238	35	3	35	4	30	1	30	0	0
	point138	138	238	35	3	35	4	30	1	30	0	0
	point137	137	238	35	3	35	4	30	1	30	0	0
	point136	136	238	35	3	35	4	30	1	30	0	0
	point135	135										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd NB - S of Alessandro - 3-2-2	point255	255	224	35	6	35	0	0	3	30	3	35
	point254	254										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	224	35	6	35	0	0	3	30	3	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	224	35	6	35	0	0	3	30	3	35
	point12	12	224	35	6	35	0	0	3	30	3	35
	point11	11										
Glendale Blvd NB - S of Alessandro - 3-2-2-	point258	258	224	35	6	35	0	0	3	30	3	35
	point24	24	224	35	6	35	0	0	3	30	3	35
	point23	23										
Glendale Blvd SB - N of Alessandro - 2	point65	65	256	35	6	35	0	0	4	30	3	35
	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	256	35	6	35	0	0	4	30	3	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	256	35	6	35	0	0	4	30	3	35
	point55	55	256	35	6	35	0	0	4	30	3	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	256	35	6	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	256	35	6	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	256	35	6	35	0	0	4	30	3	35
	point64	64	256	35	6	35	0	0	4	30	3	35
	point63	63										

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions M-13

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	5	3	6,483,201.5	1,854,565.8	456.04	4.92	0.00	66	10.0	8.0	
M2	6	1	6,483,277.0	1,854,804.1	465.88	4.92	0.00	66	10.0	8.0	
M3	7	1	6,483,415.0	1,854,804.1	485.56	4.92	0.00	66	10.0	8.0	
LT1	8	3	6,483,420.5	1,855,201.2	490.00	4.92	0.00	66	10.0	8.0	
M4	9	2	6,483,477.0	1,855,442.9	513.45	4.92	0.00	66	10.0	8.0	
M4B	10	4	6,483,625.0	1,855,413.4	554.46	4.92	0.00	66	10.0	8.0	
M5	11	3	6,483,675.0	1,855,604.2	524.93	4.92	0.00	66	10.0	8.0	
M5B	12	5	6,483,842.5	1,855,604.2	600.39	4.92	0.00	66	10.0	8.0	
M6	13	1	6,483,798.0	1,855,847.1	540.00	4.92	0.00	66	10.0	8.0	
M6B	14	6	6,484,126.0	1,855,916.0	600.39	4.92	0.00	66	10.0	8.0	
ST2	15	11	6,484,036.5	1,856,041.5	545.00	4.92	0.00	66	10.0	8.0	
M7	16	5	6,484,234.5	1,856,282.2	535.00	4.92	0.00	66	10.0	8.0	
M7B	17	5	6,484,378.5	1,856,269.1	583.99	4.92	0.00	66	10.0	8.0	
ST3	18	9	6,484,498.0	1,856,566.2	514.00	4.92	0.00	66	10.0	8.0	
M8	19	6	6,484,612.5	1,856,728.8	505.00	4.92	0.00	66	10.0	8.0	
M8B	20	5	6,484,685.0	1,856,566.2	551.18	4.92	0.00	66	10.0	8.0	
ST4	21	11	6,484,708.0	1,856,841.0	487.00	4.92	0.00	66	10.0	8.0	
M8C	22	8	6,484,782.0	1,857,036.6	470.80	4.92	0.00	66	10.0	8.0	
ST5	23	5	6,484,494.5	1,857,197.4	492.13	4.92	0.00	66	10.0	8.0	
M9	24	4	6,484,366.0	1,856,999.4	500.00	4.92	0.00	66	10.0	8.0	
M9B	25	7	6,484,326.5	1,857,158.8	495.41	4.92	0.00	66	10.0	8.0	
M9C	27	4	6,484,384.5	1,857,338.4	497.05	4.92	0.00	66	10.0	8.0	

M9D	29	4	6,484,216.0	1,856,963.4	503.94	4.92	0.00	66	10.0	8.0	
ST6	31	3	6,484,280.5	1,856,893.5	500.00	4.92	0.00	66	10.0	8.0	
M10	32	4	6,484,088.5	1,856,734.5	505.00	4.92	0.00	66	10.0	8.0	
M10B	34	4	6,484,049.0	1,856,859.2	514.11	4.92	0.00	66	10.0	8.0	
M11	35	5	6,483,887.0	1,856,580.8	518.00	4.92	0.00	66	10.0	8.0	
M11B	37	6	6,483,887.0	1,856,712.0	528.00	4.92	0.00	66	10.0	8.0	
ST7	39	5	6,483,618.0	1,856,267.6	507.00	4.92	0.00	66	10.0	8.0	
M12	40	5	6,483,496.5	1,856,186.9	502.00	4.92	0.00	66	10.0	8.0	
M12B	41	4	6,483,470.5	1,856,357.5	521.65	4.92	0.00	66	10.0	8.0	
M13	43	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	Y
ST1	44	7	6,483,303.0	1,855,961.8	492.13	4.92	0.00	66	10.0	8.0	
M14	45	1	6,483,285.5	1,855,907.4	492.13	4.92	0.00	66	10.0	8.0	
M15	47	1	6,483,110.0	1,855,511.8	488.85	4.92	0.00	66	10.0	8.0	
M15B	49	6	6,483,001.5	1,855,616.8	495.41	4.92	0.00	66	10.0	8.0	

Jones & Stokes 13 December 2007
M Greene TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions M-13

Barrier Name	Type	Height Min	Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	Top Width	Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Incre-ment	Perturbs #Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier5	W	0.00	99.99	0.00				0.00	point28	28	6,484,006.5	1,856,432.1	490.49	0.00	0.00	0	0		
									point29	29	6,483,879.0	1,856,298.0	498.69	0.00	0.00	0	0		
									point30	30	6,483,673.0	1,856,071.0	503.61	0.00	0.00	0	0		
									point31	31	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point32	32	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0	Y	
									point33	33	6,483,344.5	1,855,732.9	505.25	0.00	0.00	0	0		

									point34	34	6,483,292.0	1,855,687.4	501.97	0.00	0.00	0	0		
									point35	35	6,483,204.5	1,855,575.1	497.05	0.00	0.00	0	0		
									point36	36	6,483,174.0	1,855,507.8	492.13	0.00	0.00	0	0		
									point37	37	6,483,161.5	1,855,451.5	488.85	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	121	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier14	W	0.00	100.00	0.00				0.00	point102	102	6,483,189.0	1,855,295.9	472.44	2.89	0.00	0	0		
									point103	103	6,483.194.5	1,855,393.2	482.28	2.89	0.00	0	0		
									point104	104	6,483,217.5	1,855,478.6	492.13	2.89	0.00	0	0		
									point105	105	6,483,274.0	1,855,583.6	501.97	2.89	0.00	0	0		

									point106	106	6,483,349.0	1,855,675.5	506.89	2.89	0.00	0	0	Y	
									point107	107	6,483,459.0	1,855,793.0	506.89	2.89	0.00	0	0	Y	
									point108	119	6,483,608.5	1,855,945.5	505.25	2.89	0.00	0	0		
									point109	120	6,483,777.5	1,856,132.9	501.97	2.89	0.00	0	0		
									point110	108	6,483,988.5	1,856,337.5	497.05	2.89					
Barrier15	W	0.00	100.00	0.00				0.00	point109	109	6,483,150.0	1,855,277.6	472.44	2.89	0.00	0	0		
									point110	110	6,483,153.5	1,855,373.0	482.28	2.89	0.00	0	0		
									point111	111	6,483,174.0	1,855,458.8	492.13	2.89	0.00	0	0		
									point112	112	6,483,216.0	1,855,560.0	501.97	2.89	0.00	0	0		
									point113	113	6,483,279.0	1,855,649.6	506.89	2.89	0.00	0	0	Y	
									point114	114	6,483,446.5	1,855,826.8	506.89	2.89	0.00	0	0	Y	
									point115	115	6,483,554.0	1,855,943.2	505.25	2.89					
SW at Saint Teresa School	W	0.00	99.99	0.00				0.00	point122	122	6,483,288.5	1,856,181.9	500.00	6.00	0.00	0	0		
									point124	124	6,483,331.0	1,856,016.1	492.00	6.00	0.00	0	0		
									point125	125	6,483,307.0	1,855,997.5	492.00	6.00					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Existing PM conditions M-13
BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	5	3	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M2	6	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M3	7	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
LT1	8	3	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M4	9	2	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M4B	10	4	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M5	11	3	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M5B	12	5	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M6	13	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M6B	14	6	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
ST2	15	11	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M7	16	5	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M7B	17	5	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
ST3	18	9	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M8	19	6	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M8B	20	5	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
ST4	21	11	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M8C	22	8	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
ST5	23	5	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M9	24	4	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M9B	25	7	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M9C	27	4	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M9D	29	4	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0

RESULTS: SOUND LEVELS <Project Name?>

ST6	31	3	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M10	32	4	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M10B	34	4	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M11	35	5	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M11B	37	6	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
ST7	39	5	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M12	40	5	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M12B	41	4	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M13	43	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0
ST1	44	7	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M14	45	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M15	47	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
M15B	49	6	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	165	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Fut No Build PM conditions ST-10

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	285	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,249.0	1,855,216.6	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	286	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.0	1,855,212.0	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	287	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.0	1,855,214.6	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,356.0	1,855,974.2	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,470.0	1,855,670.1	477.69				Average	

		point97	97	6,483,613.0	1,855,832.8	485.56				Average	
		point96	96	6,483,677.5	1,855,905.5	490.49				Average	
		point95	95	6,483,745.5	1,855,983.9	495.41				Average	
		point94	94	6,483,806.5	1,856,055.2	498.69				Average	
		point93	93	6,483,856.0	1,856,110.6	500.33				Average	
		point92	92	6,483,917.5	1,856,182.1	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,614.5	1,857,120.5	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,318.0	1,856,741.2	485.56				Average	
		point112	112	6,484,225.0	1,856,631.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,602.0	1,857,131.4	475.72				Average	
		point118	118	6,484,511.5	1,857,009.9	479.00				Average	
		point119	119	6,484,409.0	1,856,873.8	482.28				Average	
		point120	120	6,484,297.5	1,856,736.6	485.56				Average	
		point121	121	6,484,199.5	1,856,624.9	488.85					
SR 2 SB Off at Glendale Blvd	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,588.5	1,857,167.4	475.72				Average	
		point145	145	6,484,481.5	1,857,001.8	479.00				Average	
		point144	144	6,484,378.0	1,856,861.0	482.28				Average	
		point143	143	6,484,272.0	1,856,729.6	485.56				Average	
		point142	142	6,484,169.5	1,856,610.9	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	284	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,640.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	283	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2	12.0	point233	233	6,483,459.0	1,855,663.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,454.5	1,855,797.6	482.61					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point234	234	6,483,442.0	1,855,661.2	478.02				Average	
		point25	25	6,483,447.5	1,855,752.8	480.31				Average	
		point253	253	6,483,441.0	1,855,783.4	482.83					
Glendale Blvd SB - S of Alessandro	12.0	point235	235	6,483,409.5	1,855,669.1	478.67				Average	
		point53	53	6,483,359.5	1,855,543.0	474.08				Average	
		point52	52	6,483,332.0	1,855,477.0	472.44				Average	
		point51	51	6,483,273.0	1,855,365.4	469.16				Average	
		point50	50	6,483,245.0	1,855,302.5	467.52				Average	
		point49	49	6,483,208.5	1,855,187.8	464.89					
Glendale Blvd SB - S of Alessandro - 2	12.0	point236	236	6,483,395.5	1,855,673.0	478.35				Average	
		point62	62	6,483,351.5	1,855,560.6	473.75				Average	
		point61	61	6,483,328.5	1,855,512.2	472.44				Average	
		point60	60	6,483,267.0	1,855,388.6	469.16				Average	
		point59	59	6,483,238.5	1,855,325.1	467.52				Average	
		point58	58	6,483,197.5	1,855,188.4	464.57					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point237	237	6,483,231.5	1,855,214.9	465.22				Average	

		point30	30	6,483,263.0	1,855,298.0	469.16				Average	
		point29	29	6,483,295.0	1,855,361.8	470.80				Average	
		point28	28	6,483,351.5	1,855,470.0	472.44				Average	
		point27	27	6,483,385.0	1,855,538.5	474.41				Average	
		point26	26	6,483,442.0	1,855,661.2	478.02					
Glendale Blvd NB -N of Alessandro -2-	12.0	point238	238	6,483,239.5	1,855,212.6	465.22				Average	
		point18	18	6,483,272.0	1,855,294.5	467.52				Average	
		point17	17	6,483,304.0	1,855,357.9	469.16				Average	
		point16	16	6,483,359.5	1,855,467.4	472.44				Average	
		point15	15	6,483,394.0	1,855,534.1	474.08				Average	
		point14	14	6,483,459.0	1,855,663.8	477.69					
Glendale Blvd NB - N of Alessandro-2	12.0	point239	239	6,483,249.0	1,855,217.1	464.89				Average	
		point6	5	6,483,279.0	1,855,286.0	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,402.0	1,855,528.2	472.11				Average	
		point2	9	6,483,431.0	1,855,584.6	475.72				Average	
		point1	10	6,483,459.0	1,855,633.6	476.71					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36				Average	
		point83	83	6,483,529.0	1,855,715.2	479.00				Average	
		point82	82	6,483,583.0	1,855,778.6	482.28				Average	
		point81	81	6,483,644.0	1,855,848.9	487.20				Average	
		point80	80	6,483,687.5	1,855,899.6	490.49				Average	
		point79	79	6,483,729.5	1,855,948.1	493.77				Average	
		point78	78	6,483,782.5	1,856,009.1	497.05				Average	
		point77	77	6,483,842.5	1,856,076.1	500.33				Average	
		point76	76	6,483,864.0	1,856,102.6	501.31				Average	
		point75	75	6,483,886.0	1,856,126.8	500.33				Average	
		point74	74	6,483,935.5	1,856,180.9	500.33				Average	
		point73	73	6,484,051.0	1,856,300.9	498.69				Average	
		point72	72	6,484,157.0	1,856,423.1	495.41				Average	
		point71	71	6,484,255.0	1,856,531.4	492.78				Average	
		point70	70	6,484,317.0	1,856,597.1	490.49					

SR2 NB-2	12.0	point247	247	6,484,317.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,504.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	
		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	288	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	289	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
SR 2 SB Trans into Glendale SB-2	12.0	point248	248	6,484,225.0	1,856,631.8	488.85				Average	
		point111	111	6,484,094.5	1,856,495.6	492.13				Average	
		point110	110	6,483,913.5	1,856,298.6	498.69				Average	
		point109	109	6,483,774.0	1,856,145.2	501.97				Average	
		point108	108	6,483,586.5	1,855,941.2	505.25				Average	
		point107	107	6,483,461.0	1,855,805.0	506.89				Average	
		point106	106	6,483,334.0	1,855,670.1	505.25				Average	
		point105	105	6,483,242.0	1,855,554.9	499.34					
SR 2 SB Trans into Glendale SB - 2-2	12.0	point249	249	6,484,199.5	1,856,624.9	488.85				Average	
		point122	122	6,484,075.0	1,856,492.1	492.13				Average	
		point123	123	6,483,898.5	1,856,300.9	498.69				Average	
		point124	124	6,483,766.0	1,856,156.8	501.97				Average	
		point125	125	6,483,564.5	1,855,937.8	505.25				Average	
		point126	126	6,483,456.0	1,855,817.4	506.89				Average	
		point127	127	6,483,297.0	1,855,647.1	505.25				Average	
		point128	128	6,483,229.0	1,855,556.1	500.33					
SR 2 SB Off at Glendale Blvd-2	12.0	point250	250	6,484,169.5	1,856,610.9	488.85				Average	
		point141	141	6,484,053.0	1,856,491.1	492.13				Average	
		point140	140	6,483,989.5	1,856,433.4	493.77				Average	
		point139	139	6,483,874.5	1,856,341.0	497.05				Average	
		point138	138	6,483,733.0	1,856,227.0	500.33				Average	
		point137	137	6,483,615.0	1,856,141.8	497.05				Average	
		point136	136	6,483,539.0	1,856,086.4	493.77				Average	
		point135	135	6,483,428.5	1,855,998.8	490.49					
Glendale Blvd NB -N of Alessandro -3-2	12.0	point255	255	6,483,440.5	1,855,784.2	482.83				Average	

		point254	254	6,483,437.5	1,855,797.2	485.35					
Glendale Blvd NB - N of Alessandro -2	12.0	point256	256	6,483,454.5	1,855,799.0	482.61				Average	
		point252	252	6,483,452.0	1,855,812.1	484.91					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point257	257	6,483,451.5	1,855,813.5	484.91				Average	
		point12	12	6,483,421.0	1,855,939.5	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd NB - N of Alessandro - 3	12.0	point258	258	6,483,437.0	1,855,798.6	485.35				Average	
		point24	24	6,483,406.5	1,855,934.2	487.86				Average	
		point23	23	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,357.5	1,855,972.1	490.81				Average	
		point271	271	6,483,395.0	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77				Average	
		point267	267	6,483,408.5	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,411.5	1,855,751.6	482.61				Average	
		point55	55	6,483,414.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,408.5	1,855,766.0	484.25				Average	
		point268	268	6,483,411.0	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,395.5	1,855,751.8	483.92				Average	
		point272	272	6,483,397.5	1,855,738.2	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,397.5	1,855,737.1	482.28				Average	
		point64	64	6,483,399.0	1,855,719.8	480.31				Average	
		point63	63	6,483,395.5	1,855,673.0	478.35					
SR 2 SB Trans into Glendale SB - 2-2-2	12.0	point281	281	6,483,229.0	1,855,556.1	500.33				Average	
		point129	129	6,483,186.5	1,855,455.9	490.49				Average	
		point130	130	6,483,165.5	1,855,374.0	482.28				Average	
		point131	131	6,483,166.0	1,855,239.1	469.16				Average	
		point132	132	6,483,167.0	1,855,136.4	462.60				Average	
		point133	133	6,483,156.5	1,855,051.0	460.96				Average	
		point134	134	6,483,133.5	1,854,905.6	457.68					
SR 2 SB Trans into Glendale SB-2-2	12.0	point282	282	6,483,242.0	1,855,554.9	499.34				Average	
		point104	104	6,483,197.0	1,855,452.4	489.50				Average	
		point103	103	6,483,182.0	1,855,380.8	482.28				Average	
		point102	102	6,483,179.5	1,855,244.9	469.16				Average	
		point101	101	6,483,177.5	1,855,121.4	462.93				Average	
		point100	100	6,483,162.5	1,855,030.4	460.96				Average	
		point99	99	6,483,141.0	1,854,874.1	457.68					

Jones & Stokes 13 December 2007
M Greene TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Fut No Build PM conditions ST-10

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	285	1263	35	32	35	0	0	17	30	15	35
	point9	2	1263	35	32	35	0	0	17	30	15	35
	point8	3	1263	35	32	35	0	0	17	30	15	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	286	1263	35	32	35	0	0	17	30	15	35
	point21	21	1263	35	32	35	0	0	17	30	15	35
	point20	20	1263	35	32	35	0	0	17	30	15	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point285	287	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	393	35	10	35	0	0	5	30	5	35
	point40	40	328	35	8	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	393	35	10	35	0	0	5	30	5	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	923	65	10	65	17	60	3	60	0	0
	point277	277	923	65	10	65	17	60	3	60	0	0
	point115	115	923	65	10	65	17	60	3	60	0	0
	point114	114	923	65	10	65	17	60	3	60	0	0
	point113	113	923	65	10	65	17	60	3	60	0	0
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	923	65	10	65	17	60	3	60	0	0
	point276	276	923	65	10	65	17	60	3	60	0	0
	point118	118	923	65	10	65	17	60	3	60	0	0
	point119	119	923	65	10	65	17	60	3	60	0	0
	point120	120	923	65	10	65	17	60	3	60	0	0
	point121	121										
SR 2 SB Off at Glendale Blvd	point146	146	292	65	3	65	5	60	1	60	0	0
	point275	275	292	65	3	65	5	60	1	60	0	0
	point145	145	292	65	3	65	5	60	1	60	0	0
	point144	144	292	65	3	65	5	60	1	60	0	0
	point143	143	292	65	3	65	5	60	1	60	0	0
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	284	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	12	65	20	60	4	60	0	0

	point203	203	1114	65	12	65	20	60	4	60	0	0
	point202	202	1114	65	12	65	20	60	4	60	0	0
	point201	201	1114	65	12	65	20	60	4	60	0	0
	point279	279	1114	65	12	65	20	60	4	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	283	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2	point233	233	276	35	7	35	0	0	4	30	3	35
	point13	13	276	35	7	35	0	0	4	30	3	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-	point234	234	276	35	7	35	0	0	4	30	3	35

	point25	25	276	35	7	35	0	0	4	30	3	35
	point253	253										
Glendale Blvd SB - S of Alessandro	point235	235	263	35	7	35	0	0	4	30	3	35
	point53	53	263	35	7	35	0	0	4	30	3	35
	point52	52	263	35	7	35	0	0	4	30	3	35
	point51	51	263	35	7	35	0	0	4	30	3	35
	point50	50	263	35	7	35	0	0	4	30	3	35
	point49	49										
Glendale Blvd SB - S of Alessandro - 2	point236	236	263	35	7	35	0	0	4	30	3	35
	point62	62	263	35	7	35	0	0	4	30	3	35
	point61	61	263	35	7	35	0	0	4	30	3	35
	point60	60	263	35	7	35	0	0	4	30	3	35
	point59	59	263	35	7	35	0	0	4	30	3	35
	point58	58										
Glendale Blvd NB -N of Alessandro - 3-	point237	237	1295	35	33	35	0	0	18	30	15	35
	point30	30	1295	35	33	35	0	0	18	30	15	35
	point29	29	1295	35	33	35	0	0	18	30	15	35
	point28	28	1295	35	33	35	0	0	18	30	15	35
	point27	27	1295	35	33	35	0	0	18	30	15	35
	point26	26										
Glendale Blvd NB -N of Alessandro -2-	point238	238	1295	35	33	35	0	0	18	30	15	35
	point18	18	1295	35	33	35	0	0	18	30	15	35
	point17	17	1295	35	33	35	0	0	18	30	15	35
	point16	16	1295	35	33	35	0	0	18	30	15	35
	point15	15	1295	35	33	35	0	0	18	30	15	35
	point14	14										
Glendale Blvd NB - N of Alessandro-2	point239	239	1295	35	33	35	0	0	18	30	15	35
	point6	5	1295	35	33	35	0	0	18	30	15	35
	point5	6	1295	35	33	35	0	0	18	30	15	35
	point4	7	1295	35	33	35	0	0	18	30	15	35
	point3	8	1295	35	33	35	0	0	18	30	15	35
	point2	9	1295	35	33	35	0	0	18	30	15	35
	point1	10										
SR 2 NB - 2-2	point243	243	1114	65	12	65	20	60	4	60	0	0

	point87	87	1114	65	12	65	20	60	4	60	0	0
	point86	86	1114	65	12	65	20	60	4	60	0	0
	point278	278	1114	65	12	65	20	60	4	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0
	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0
	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	1273	35	32	35	0	0	18	30	15	35
	point48	48	1273	35	32	35	0	0	18	30	15	35
	point286	288	1273	35	32	35	0	0	18	30	15	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	1273	35	32	35	0	0	18	30	15	35
	point57	57	1273	35	32	35	0	0	18	30	15	35
	point287	289	1273	35	32	35	0	0	18	30	15	35
	point68	68										
SR 2 SB Trans into Glendale SB-2	point248	248	923	65	10	65	17	60	3	60	0	0
	point111	111	923	65	10	65	17	60	3	60	0	0

	point110	110	923	65	10	65	17	60	3	60	0	0
	point109	109	923	65	10	65	17	60	3	60	0	0
	point108	108	923	65	10	65	17	60	3	60	0	0
	point107	107	923	65	10	65	17	60	3	60	0	0
	point106	106	923	65	10	65	17	60	3	60	0	0
	point105	105										
SR 2 SB Trans into Glendale SB - 2-2	point249	249	923	65	10	65	17	60	3	60	0	0
	point122	122	923	65	10	65	17	60	3	60	0	0
	point123	123	923	65	10	65	17	60	3	60	0	0
	point124	124	923	65	10	65	17	60	3	60	0	0
	point125	125	923	65	10	65	17	60	3	60	0	0
	point126	126	923	65	10	65	17	60	3	60	0	0
	point127	127	923	65	10	65	17	60	3	60	0	0
	point128	128										
SR 2 SB Off at Glendale Blvd-2	point250	250	292	35	3	35	5	30	1	30	0	0
	point141	141	292	35	3	35	5	30	1	30	0	0
	point140	140	292	35	3	35	5	30	1	30	0	0
	point139	139	292	35	3	35	5	30	1	30	0	0
	point138	138	292	35	3	35	5	30	1	30	0	0
	point137	137	292	35	3	35	5	30	1	30	0	0
	point136	136	292	35	3	35	5	30	1	30	0	0
	point135	135										
Glendale Blvd NB -N of Alessandro -3-2	point255	255	276	35	7	35	0	0	4	30	3	35
	point254	254										
Glendale Blvd NB - N of Alessandro -2	point256	256	276	35	7	35	0	0	4	30	3	35
	point252	252										
Glendale Blvd NB -N of Alessandro - 2-2	point257	257	276	35	7	35	0	0	4	30	3	35
	point12	12	276	35	7	35	0	0	4	30	3	35
	point11	11										
Glendale Blvd NB - N of Alessandro - 3	point258	258	276	35	7	35	0	0	4	30	3	35
	point24	24	276	35	7	35	0	0	4	30	3	35
	point23	23										
Glendale Blvd SB - N of Alessandro - 2	point65	65	326	35	8	35	0	0	5	30	4	35
	point271	271										

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

Glendale Blvd SB - N of Alessandro	point56	56	326	35	8	35	0	0	5	30	4	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	326	35	8	35	0	0	5	30	4	35
	point55	55	326	35	8	35	0	0	5	30	4	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	326	35	8	35	0	0	5	30	4	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	326	35	8	35	0	0	5	30	4	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	326	35	8	35	0	0	5	30	4	35
	point64	64	326	35	8	35	0	0	5	30	4	35
	point63	63										
SR 2 SB Trans into Glendale SB - 2-2-2	point281	281	923	50	10	50	17	45	3	45	0	0
	point129	129	923	50	10	50	17	45	3	45	0	0
	point130	130	923	35	10	35	17	30	3	30	0	0
	point131	131	923	35	10	35	17	30	3	30	0	0
	point132	132	923	35	10	35	17	30	3	30	0	0
	point133	133	923	35	10	35	17	30	3	30	0	0
	point134	134										
SR 2 SB Trans into Glendale SB-2-2	point282	282	923	50	10	50	17	45	3	45	0	0
	point104	104	923	50	10	50	17	45	3	45	0	0
	point103	103	923	35	10	35	17	30	3	30	0	0
	point102	102	923	35	10	35	17	30	3	30	0	0
	point101	101	923	35	10	35	17	30	3	30	0	0
	point100	100	923	35	10	35	17	30	3	30	0	0
	point99	99										

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Fut No Build PM conditions ST-10

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST-10	49	1	6,483,278.0	1,854,984.0	485.00	4.92	0.00	66	10.0	8.0	Y

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Fut No Build PM conditions ST-10

Barrier Name	Type	Height Min	Height Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	Top Width	Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Incre-ment	#Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier5	W	0.00	99.99	0.00				0.00	point28	28	6,484,006.5	1,856,432.1	490.49	0.00	0.00	0	0		
									point29	29	6,483,879.0	1,856,298.0	498.69	0.00	0.00	0	0		
									point30	30	6,483,673.0	1,856,071.0	503.61	0.00	0.00	0	0		
									point31	31	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point32	32	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0	Y	
									point33	33	6,483,344.5	1,855,732.9	505.25	0.00	0.00	0	0		

									point34	34	6,483,292.0	1,855,687.4	501.97	0.00	0.00	0	0		
									point35	35	6,483,204.5	1,855,575.1	497.05	0.00	0.00	0	0		
									point36	36	6,483,174.0	1,855,507.8	492.13	0.00	0.00	0	0		
									point37	37	6,483,161.5	1,855,451.5	488.85	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	121	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier14	W	0.00	100.00	0.00				0.00	point102	102	6,483,189.0	1,855,295.9	472.44	2.89	0.00	0	0		
									point103	103	6,483,194.5	1,855,393.2	482.28	2.89	0.00	0	0		
									point104	104	6,483,217.5	1,855,478.6	492.13	2.89	0.00	0	0		
									point105	105	6,483,274.0	1,855,583.6	501.97	2.89	0.00	0	0		

									point106	106	6,483,349.0	1,855,675.5	506.89	2.89	0.00	0	0	Y	
									point107	107	6,483,459.0	1,855,793.0	506.89	2.89	0.00	0	0	Y	
									point108	119	6,483,608.5	1,855,945.5	505.25	2.89	0.00	0	0		
									point109	120	6,483,777.5	1,856,132.9	501.97	2.89	0.00	0	0		
									point110	108	6,483,988.5	1,856,337.5	497.05	2.89					
Barrier15	W	0.00	100.00	0.00				0.00	point109	109	6,483,150.0	1,855,277.6	472.44	2.89	0.00	0	0		
									point110	110	6,483,153.5	1,855,373.0	482.28	2.89	0.00	0	0		
									point111	111	6,483,174.0	1,855,458.8	492.13	2.89	0.00	0	0		
									point112	112	6,483,216.0	1,855,560.0	501.97	2.89	0.00	0	0		
									point113	113	6,483,279.0	1,855,649.6	506.89	2.89	0.00	0	0	Y	
									point114	114	6,483,446.5	1,855,826.8	506.89	2.89	0.00	0	0	Y	
									point115	115	6,483,554.0	1,855,943.2	505.25	2.89					
Barrier18	W	0.00	99.99	0.00				0.00	point122	122	6,483,298.5	1,855,167.1	468.00	11.00	0.00	0	0		
									point123	124	6,483,249.0	1,855,176.5	465.00	11.00	0.00	0	0		
									point124	123	6,483,205.0	1,854,904.4	465.00	11.00					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Future No Build PM M-13

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	285	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,249.0	1,855,216.6	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	286	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.0	1,855,212.0	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	287	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.0	1,855,214.6	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,356.0	1,855,974.2	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,470.0	1,855,670.1	477.69				Average	

		point97	97	6,483,613.0	1,855,832.8	485.56				Average	
		point96	96	6,483,677.5	1,855,905.5	490.49				Average	
		point95	95	6,483,745.5	1,855,983.9	495.41				Average	
		point94	94	6,483,806.5	1,856,055.2	498.69				Average	
		point93	93	6,483,856.0	1,856,110.6	500.33				Average	
		point92	92	6,483,917.5	1,856,182.1	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,614.5	1,857,120.5	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,318.0	1,856,741.2	485.56				Average	
		point112	112	6,484,225.0	1,856,631.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,602.0	1,857,131.4	475.72				Average	
		point118	118	6,484,511.5	1,857,009.9	479.00				Average	
		point119	119	6,484,409.0	1,856,873.8	482.28				Average	
		point120	120	6,484,297.5	1,856,736.6	485.56				Average	
		point121	121	6,484,199.5	1,856,624.9	488.85					
SR 2 SB Off at Glendale Blvd	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,588.5	1,857,167.4	475.72				Average	
		point145	145	6,484,481.5	1,857,001.8	479.00				Average	
		point144	144	6,484,378.0	1,856,861.0	482.28				Average	
		point143	143	6,484,272.0	1,856,729.6	485.56				Average	
		point142	142	6,484,169.5	1,856,610.9	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

INPUT: ROADWAYS

<Project Name?>

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	284	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,640.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	283	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2	12.0	point233	233	6,483,459.0	1,855,663.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,454.5	1,855,797.6	482.61					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point234	234	6,483,442.0	1,855,661.2	478.02				Average	
		point25	25	6,483,447.5	1,855,752.8	480.31				Average	
		point253	253	6,483,441.0	1,855,783.4	482.83					
Glendale Blvd SB - S of Alessandro	12.0	point235	235	6,483,409.5	1,855,669.1	478.67				Average	
		point53	53	6,483,359.5	1,855,543.0	474.08				Average	
		point52	52	6,483,332.0	1,855,477.0	472.44				Average	
		point51	51	6,483,273.0	1,855,365.4	469.16				Average	
		point50	50	6,483,245.0	1,855,302.5	467.52				Average	
		point49	49	6,483,208.5	1,855,187.8	464.89					
Glendale Blvd SB - S of Alessandro - 2	12.0	point236	236	6,483,395.5	1,855,673.0	478.35				Average	
		point62	62	6,483,351.5	1,855,560.6	473.75				Average	
		point61	61	6,483,328.5	1,855,512.2	472.44				Average	
		point60	60	6,483,267.0	1,855,388.6	469.16				Average	
		point59	59	6,483,238.5	1,855,325.1	467.52				Average	
		point58	58	6,483,197.5	1,855,188.4	464.57					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point237	237	6,483,231.5	1,855,214.9	465.22				Average	

		point30	30	6,483,263.0	1,855,298.0	469.16				Average	
		point29	29	6,483,295.0	1,855,361.8	470.80				Average	
		point28	28	6,483,351.5	1,855,470.0	472.44				Average	
		point27	27	6,483,385.0	1,855,538.5	474.41				Average	
		point26	26	6,483,442.0	1,855,661.2	478.02					
Glendale Blvd NB -N of Alessandro -2-	12.0	point238	238	6,483,239.5	1,855,212.6	465.22				Average	
		point18	18	6,483,272.0	1,855,294.5	467.52				Average	
		point17	17	6,483,304.0	1,855,357.9	469.16				Average	
		point16	16	6,483,359.5	1,855,467.4	472.44				Average	
		point15	15	6,483,394.0	1,855,534.1	474.08				Average	
		point14	14	6,483,459.0	1,855,663.8	477.69					
Glendale Blvd NB - N of Alessandro-2	12.0	point239	239	6,483,249.0	1,855,217.1	464.89				Average	
		point6	5	6,483,279.0	1,855,286.0	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,402.0	1,855,528.2	472.11				Average	
		point2	9	6,483,431.0	1,855,584.6	475.72				Average	
		point1	10	6,483,459.0	1,855,633.6	476.71					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36				Average	
		point83	83	6,483,529.0	1,855,715.2	479.00				Average	
		point82	82	6,483,583.0	1,855,778.6	482.28				Average	
		point81	81	6,483,644.0	1,855,848.9	487.20				Average	
		point80	80	6,483,687.5	1,855,899.6	490.49				Average	
		point79	79	6,483,729.5	1,855,948.1	493.77				Average	
		point78	78	6,483,782.5	1,856,009.1	497.05				Average	
		point77	77	6,483,842.5	1,856,076.1	500.33				Average	
		point76	76	6,483,864.0	1,856,102.6	501.31				Average	
		point75	75	6,483,886.0	1,856,126.8	500.33				Average	
		point74	74	6,483,935.5	1,856,180.9	500.33				Average	
		point73	73	6,484,051.0	1,856,300.9	498.69				Average	
		point72	72	6,484,157.0	1,856,423.1	495.41				Average	
		point71	71	6,484,255.0	1,856,531.4	492.78				Average	
		point70	70	6,484,317.0	1,856,597.1	490.49					

SR2 NB-2	12.0	point247	247	6,484,317.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,504.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	
		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	288	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	289	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
SR 2 SB Trans into Glendale SB-2	12.0	point248	248	6,484,225.0	1,856,631.8	488.85				Average	
		point111	111	6,484,094.5	1,856,495.6	492.13				Average	
		point110	110	6,483,913.5	1,856,298.6	498.69				Average	
		point109	109	6,483,774.0	1,856,145.2	501.97				Average	
		point108	108	6,483,586.5	1,855,941.2	505.25				Average	
		point107	107	6,483,461.0	1,855,805.0	506.89				Average	
		point106	106	6,483,334.0	1,855,670.1	505.25				Average	
		point105	105	6,483,242.0	1,855,554.9	499.34					
SR 2 SB Trans into Glendale SB - 2-2	12.0	point249	249	6,484,199.5	1,856,624.9	488.85				Average	
		point122	122	6,484,075.0	1,856,492.1	492.13				Average	
		point123	123	6,483,898.5	1,856,300.9	498.69				Average	
		point124	124	6,483,766.0	1,856,156.8	501.97				Average	
		point125	125	6,483,564.5	1,855,937.8	505.25				Average	
		point126	126	6,483,456.0	1,855,817.4	506.89				Average	
		point127	127	6,483,297.0	1,855,647.1	505.25				Average	
		point128	128	6,483,229.0	1,855,556.1	500.33					
SR 2 SB Off at Glendale Blvd-2	12.0	point250	250	6,484,169.5	1,856,610.9	488.85				Average	
		point141	141	6,484,053.0	1,856,491.1	492.13				Average	
		point140	140	6,483,989.5	1,856,433.4	493.77				Average	
		point139	139	6,483,874.5	1,856,341.0	497.05				Average	
		point138	138	6,483,733.0	1,856,227.0	500.33				Average	
		point137	137	6,483,615.0	1,856,141.8	497.05				Average	
		point136	136	6,483,539.0	1,856,086.4	493.77				Average	
		point135	135	6,483,428.5	1,855,998.8	490.49					
Glendale Blvd NB -N of Alessandro -3-2	12.0	point255	255	6,483,440.5	1,855,784.2	482.83				Average	

		point254	254	6,483,437.5	1,855,797.2	485.35					
Glendale Blvd NB - N of Alessandro -2	12.0	point256	256	6,483,454.5	1,855,799.0	482.61				Average	
		point252	252	6,483,452.0	1,855,812.1	484.91					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point257	257	6,483,451.5	1,855,813.5	484.91				Average	
		point12	12	6,483,421.0	1,855,939.5	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd NB - N of Alessandro - 3	12.0	point258	258	6,483,437.0	1,855,798.6	485.35				Average	
		point24	24	6,483,406.5	1,855,934.2	487.86				Average	
		point23	23	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,357.5	1,855,972.1	490.81				Average	
		point271	271	6,483,395.0	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77				Average	
		point267	267	6,483,408.5	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,411.5	1,855,751.6	482.61				Average	
		point55	55	6,483,414.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,408.5	1,855,766.0	484.25				Average	
		point268	268	6,483,411.0	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,395.5	1,855,751.8	483.92				Average	
		point272	272	6,483,397.5	1,855,738.2	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,397.5	1,855,737.1	482.28				Average	
		point64	64	6,483,399.0	1,855,719.8	480.31				Average	
		point63	63	6,483,395.5	1,855,673.0	478.35					
SR 2 SB Trans into Glendale SB - 2-2-2	12.0	point281	281	6,483,229.0	1,855,556.1	500.33				Average	
		point129	129	6,483,186.5	1,855,455.9	490.49				Average	
		point130	130	6,483,165.5	1,855,374.0	482.28				Average	
		point131	131	6,483,166.0	1,855,239.1	469.16				Average	
		point132	132	6,483,167.0	1,855,136.4	462.60				Average	
		point133	133	6,483,156.5	1,855,051.0	460.96				Average	
		point134	134	6,483,133.5	1,854,905.6	457.68					
SR 2 SB Trans into Glendale SB-2-2	12.0	point282	282	6,483,242.0	1,855,554.9	499.34				Average	
		point104	104	6,483,197.0	1,855,452.4	489.50				Average	
		point103	103	6,483,182.0	1,855,380.8	482.28				Average	
		point102	102	6,483,179.5	1,855,244.9	469.16				Average	
		point101	101	6,483,177.5	1,855,121.4	462.93				Average	
		point100	100	6,483,162.5	1,855,030.4	460.96				Average	
		point99	99	6,483,141.0	1,854,874.1	457.68					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Future No Build PM M-13

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	285	1263	35	32	35	0	0	17	30	15	35
	point9	2	1263	35	32	35	0	0	17	30	15	35
	point8	3	1263	35	32	35	0	0	17	30	15	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	286	1263	35	32	35	0	0	17	30	15	35
	point21	21	1263	35	32	35	0	0	17	30	15	35
	point20	20	1263	35	32	35	0	0	17	30	15	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point285	287	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	393	35	10	35	0	0	5	30	5	35
	point40	40	328	35	8	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	393	35	10	35	0	0	5	30	5	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	923	65	10	65	17	60	3	60	0	0
	point277	277	923	65	10	65	17	60	3	60	0	0
	point115	115	923	65	10	65	17	60	3	60	0	0
	point114	114	923	65	10	65	17	60	3	60	0	0
	point113	113	923	65	10	65	17	60	3	60	0	0
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	923	65	10	65	17	60	3	60	0	0
	point276	276	923	65	10	65	17	60	3	60	0	0
	point118	118	923	65	10	65	17	60	3	60	0	0
	point119	119	923	65	10	65	17	60	3	60	0	0
	point120	120	923	65	10	65	17	60	3	60	0	0
	point121	121										
SR 2 SB Off at Glendale Blvd	point146	146	292	65	3	65	5	60	1	60	0	0
	point275	275	292	65	3	65	5	60	1	60	0	0
	point145	145	292	65	3	65	5	60	1	60	0	0
	point144	144	292	65	3	65	5	60	1	60	0	0
	point143	143	292	65	3	65	5	60	1	60	0	0
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	284	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	12	65	20	60	4	60	0	0

	point203	203	1114	65	12	65	20	60	4	60	0	0
	point202	202	1114	65	12	65	20	60	4	60	0	0
	point201	201	1114	65	12	65	20	60	4	60	0	0
	point279	279	1114	65	12	65	20	60	4	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	283	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2	point233	233	276	35	7	35	0	0	4	30	3	35
	point13	13	276	35	7	35	0	0	4	30	3	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-	point234	234	276	35	7	35	0	0	4	30	3	35

	point25	25	276	35	7	35	0	0	4	30	3	35
	point253	253										
Glendale Blvd SB - S of Alessandro	point235	235	263	35	7	35	0	0	4	30	3	35
	point53	53	263	35	7	35	0	0	4	30	3	35
	point52	52	263	35	7	35	0	0	4	30	3	35
	point51	51	263	35	7	35	0	0	4	30	3	35
	point50	50	263	35	7	35	0	0	4	30	3	35
	point49	49										
Glendale Blvd SB - S of Alessandro - 2	point236	236	263	35	7	35	0	0	4	30	3	35
	point62	62	263	35	7	35	0	0	4	30	3	35
	point61	61	263	35	7	35	0	0	4	30	3	35
	point60	60	263	35	7	35	0	0	4	30	3	35
	point59	59	263	35	7	35	0	0	4	30	3	35
	point58	58										
Glendale Blvd NB -N of Alessandro - 3-	point237	237	1295	35	33	35	0	0	18	30	15	35
	point30	30	1295	35	33	35	0	0	18	30	15	35
	point29	29	1295	35	33	35	0	0	18	30	15	35
	point28	28	1295	35	33	35	0	0	18	30	15	35
	point27	27	1295	35	33	35	0	0	18	30	15	35
	point26	26										
Glendale Blvd NB -N of Alessandro -2-	point238	238	1295	35	33	35	0	0	18	30	15	35
	point18	18	1295	35	33	35	0	0	18	30	15	35
	point17	17	1295	35	33	35	0	0	18	30	15	35
	point16	16	1295	35	33	35	0	0	18	30	15	35
	point15	15	1295	35	33	35	0	0	18	30	15	35
	point14	14										
Glendale Blvd NB - N of Alessandro-2	point239	239	1295	35	33	35	0	0	18	30	15	35
	point6	5	1295	35	33	35	0	0	18	30	15	35
	point5	6	1295	35	33	35	0	0	18	30	15	35
	point4	7	1295	35	33	35	0	0	18	30	15	35
	point3	8	1295	35	33	35	0	0	18	30	15	35
	point2	9	1295	35	33	35	0	0	18	30	15	35
	point1	10										
SR 2 NB - 2-2	point243	243	1114	65	12	65	20	60	4	60	0	0

	point110	110	923	65	10	65	17	60	3	60	0	0
	point109	109	923	65	10	65	17	60	3	60	0	0
	point108	108	923	65	10	65	17	60	3	60	0	0
	point107	107	923	65	10	65	17	60	3	60	0	0
	point106	106	923	65	10	65	17	60	3	60	0	0
	point105	105										
SR 2 SB Trans into Glendale SB - 2-2	point249	249	923	65	10	65	17	60	3	60	0	0
	point122	122	923	65	10	65	17	60	3	60	0	0
	point123	123	923	65	10	65	17	60	3	60	0	0
	point124	124	923	65	10	65	17	60	3	60	0	0
	point125	125	923	65	10	65	17	60	3	60	0	0
	point126	126	923	65	10	65	17	60	3	60	0	0
	point127	127	923	65	10	65	17	60	3	60	0	0
	point128	128										
SR 2 SB Off at Glendale Blvd-2	point250	250	292	35	3	35	5	30	1	30	0	0
	point141	141	292	35	3	35	5	30	1	30	0	0
	point140	140	292	35	3	35	5	30	1	30	0	0
	point139	139	292	35	3	35	5	30	1	30	0	0
	point138	138	292	35	3	35	5	30	1	30	0	0
	point137	137	292	35	3	35	5	30	1	30	0	0
	point136	136	292	35	3	35	5	30	1	30	0	0
	point135	135										
Glendale Blvd NB -N of Alessandro -3-2	point255	255	276	35	7	35	0	0	4	30	3	35
	point254	254										
Glendale Blvd NB - N of Alessandro -2	point256	256	276	35	7	35	0	0	4	30	3	35
	point252	252										
Glendale Blvd NB -N of Alessandro - 2-2	point257	257	276	35	7	35	0	0	4	30	3	35
	point12	12	276	35	7	35	0	0	4	30	3	35
	point11	11										
Glendale Blvd NB - N of Alessandro - 3	point258	258	276	35	7	35	0	0	4	30	3	35
	point24	24	276	35	7	35	0	0	4	30	3	35
	point23	23										
Glendale Blvd SB - N of Alessandro - 2	point65	65	326	35	8	35	0	0	5	30	4	35
	point271	271										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB - N of Alessandro	point56	56	326	35	8	35	0	0	5	30	4	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	326	35	8	35	0	0	5	30	4	35
	point55	55	326	35	8	35	0	0	5	30	4	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	326	35	8	35	0	0	5	30	4	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	326	35	8	35	0	0	5	30	4	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	326	35	8	35	0	0	5	30	4	35
	point64	64	326	35	8	35	0	0	5	30	4	35
	point63	63										
SR 2 SB Trans into Glendale SB - 2-2-2	point281	281	923	50	10	50	17	45	3	45	0	0
	point129	129	923	50	10	50	17	45	3	45	0	0
	point130	130	923	35	10	35	17	30	3	30	0	0
	point131	131	923	35	10	35	17	30	3	30	0	0
	point132	132	923	35	10	35	17	30	3	30	0	0
	point133	133	923	35	10	35	17	30	3	30	0	0
	point134	134										
SR 2 SB Trans into Glendale SB-2-2	point282	282	923	50	10	50	17	45	3	45	0	0
	point104	104	923	50	10	50	17	45	3	45	0	0
	point103	103	923	35	10	35	17	30	3	30	0	0
	point102	102	923	35	10	35	17	30	3	30	0	0
	point101	101	923	35	10	35	17	30	3	30	0	0
	point100	100	923	35	10	35	17	30	3	30	0	0
	point99	99										

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt A PM conditions M-13 Mitigated

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	283	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,248.5	1,855,216.8	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	285	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.5	1,855,212.4	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	284	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.5	1,855,214.4	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,356.0	1,855,974.2	490.81					
SR 2 NB - 2	24.0	point98	98	6,483,469.0	1,855,685.4	477.69				Average	

		point97	97	6,483,602.0	1,855,840.1	485.56				Average	
		point96	96	6,483,668.0	1,855,913.0	490.49				Average	
		point95	95	6,483,736.5	1,855,992.0	495.41				Average	
		point94	94	6,483,798.0	1,856,063.1	498.69				Average	
		point93	93	6,483,847.5	1,856,117.6	500.33				Average	
		point92	92	6,483,909.0	1,856,188.4	500.33				Average	
		point91	91	6,484,055.0	1,856,356.4	495.41				Average	
		point90	90	6,484,155.5	1,856,468.0	493.77				Average	
		point89	89	6,484,224.5	1,856,545.2	492.13				Average	
		point88	88	6,484,292.5	1,856,616.5	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,614.5	1,857,120.5	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,331.5	1,856,740.1	485.56				Average	
		point112	112	6,484,244.0	1,856,632.5	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,602.0	1,857,131.4	475.72				Average	
		point118	118	6,484,511.5	1,857,009.9	479.00				Average	
		point119	119	6,484,409.0	1,856,873.8	482.28				Average	
		point120	120	6,484,313.5	1,856,740.6	485.56				Average	
		point121	121	6,484,228.0	1,856,635.2	488.85					
SR 2 SB Off at Glendale Blvd	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,588.5	1,857,167.4	475.72				Average	
		point145	145	6,484,481.5	1,857,001.8	479.00				Average	
		point144	144	6,484,378.0	1,856,861.0	482.28				Average	
		point143	143	6,484,293.0	1,856,736.9	485.56				Average	
		point142	142	6,484,187.5	1,856,618.6	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	289	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,640.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	288	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2	12.0	point233	233	6,483,443.0	1,855,672.5	477.69				Average	
		point13	13	6,483,460.0	1,855,770.1	480.31				Average	
		point251	251	6,483,454.0	1,855,797.0	482.61					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point234	234	6,483,429.0	1,855,662.9	478.02				Average	
		point25	25	6,483,447.5	1,855,752.8	480.31				Average	
		point253	253	6,483,441.0	1,855,783.4	482.83					
Glendale Blvd SB - S of Alessandro	12.0	point235	235	6,483,409.5	1,855,669.1	478.67				Average	
		point53	53	6,483,359.5	1,855,543.0	474.08				Average	
		point52	52	6,483,332.0	1,855,477.0	472.44				Average	
		point51	51	6,483,273.0	1,855,365.4	469.16				Average	
		point50	50	6,483,245.0	1,855,302.5	467.52				Average	
		point49	49	6,483,208.5	1,855,187.5	464.89					
Glendale Blvd SB - S of Alessandro - 2	12.0	point236	236	6,483,395.5	1,855,673.0	478.35				Average	
		point62	62	6,483,351.5	1,855,560.6	473.75				Average	
		point61	61	6,483,328.5	1,855,512.2	472.44				Average	
		point60	60	6,483,267.0	1,855,388.6	469.16				Average	
		point59	59	6,483,238.5	1,855,324.8	467.52				Average	
		point58	58	6,483,197.5	1,855,188.8	464.57					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point237	237	6,483,231.5	1,855,214.9	465.22				Average	

		point30	30	6,483,263.0	1,855,298.0	469.16			Average	
		point29	29	6,483,295.0	1,855,361.8	470.80			Average	
		point28	28	6,483,351.5	1,855,470.0	472.44			Average	
		point27	27	6,483,380.5	1,855,539.2	474.41			Average	
		point26	26	6,483,429.0	1,855,662.4	478.02				
Glendale Blvd NB -N of Alessandro -2-	12.0	point238	238	6,483,239.5	1,855,212.6	465.22			Average	
		point18	18	6,483,272.0	1,855,294.5	467.52			Average	
		point17	17	6,483,304.0	1,855,357.9	469.16			Average	
		point16	16	6,483,359.5	1,855,467.4	472.44			Average	
		point15	15	6,483,392.5	1,855,534.6	474.08			Average	
		point14	14	6,483,443.0	1,855,672.4	477.69				
Glendale Blvd NB - N of Alessandro-2	12.0	point239	239	6,483,249.0	1,855,217.1	464.89			Average	
		point6	5	6,483,279.0	1,855,286.0	466.54			Average	
		point5	6	6,483,324.5	1,855,378.5	469.16			Average	
		point4	7	6,483,356.0	1,855,437.4	471.46			Average	
		point3	8	6,483,402.0	1,855,528.2	472.11			Average	
		point2	9	6,483,431.0	1,855,584.6	475.72			Average	
		point1	10	6,483,459.0	1,855,633.6	476.71				
SR 2 NB - 2-2	12.0	point243	243	6,484,293.5	1,856,617.4	489.83			Average	
		point87	87	6,484,435.5	1,856,781.5	485.56			Average	
		point86	86	6,484,542.5	1,856,923.4	482.28			Average	
		point278	278	6,484,624.0	1,857,047.6	479.00			Average	
		point85	85	6,484,812.5	1,857,337.2	479.00				
SR2 NB	12.0	point84	84	6,483,463.0	1,855,646.1	477.36			Average	
		point83	83	6,483,521.0	1,855,721.9	479.00			Average	
		point82	82	6,483,577.0	1,855,783.9	482.28			Average	
		point81	81	6,483,638.5	1,855,850.5	487.20			Average	
		point80	80	6,483,683.5	1,855,902.5	490.49			Average	
		point79	79	6,483,726.0	1,855,951.0	493.77			Average	
		point78	78	6,483,778.5	1,856,012.5	497.05			Average	
		point77	77	6,483,838.0	1,856,081.1	500.33			Average	
		point76	76	6,483,860.0	1,856,105.5	501.31			Average	
		point75	75	6,483,882.5	1,856,129.6	500.33			Average	
		point74	74	6,483,930.0	1,856,184.2	500.33			Average	
		point73	73	6,484,047.5	1,856,308.6	498.69			Average	
		point72	72	6,484,157.0	1,856,423.1	495.41			Average	
		point71	71	6,484,255.0	1,856,531.4	492.78			Average	
		point70	70	6,484,317.0	1,856,597.1	490.49				

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt A PM conditions M-13 Mitigated

Roadway	Points												
Name	Name	No.	Segment										
			Autos		MTrucks		HTrucks		Buses		Motorcycles		
			V	S	V	S	V	S	V	S	V	S	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35	
	point283	283	1263	35	32	35	0	0	17	30	15	35	
	point9	2	1263	35	32	35	0	0	17	30	15	35	
	point8	3	1263	35	32	35	0	0	17	30	15	35	
	point7	4											
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35	
	point284	285	1263	35	32	35	0	0	17	30	15	35	
	point21	21	1263	35	32	35	0	0	17	30	15	35	
	point20	20	1263	35	32	35	0	0	17	30	15	35	
	point19	19											
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35	
	point285	284	1263	35	32	35	0	0	17	30	15	35	
	point33	33	1263	35	32	35	0	0	17	30	15	35	
	point32	32	1263	35	32	35	0	0	17	30	15	35	
	point31	31											
Glendale Blvd NB N of SR2 Off	point41	41	393	35	10	35	0	0	5	30	5	35	
	point40	40	328	35	8	35	0	0	5	30	4	35	
	point39	39											
Glendale Blvd NB N of SR2 Off - 2	point42	42	393	35	10	35	0	0	5	30	5	35	
	point43	43											
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35	
	point45	45											

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	923	65	10	65	17	60	3	60	0	0
	point277	277	923	65	10	65	17	60	3	60	0	0
	point115	115	923	65	10	65	17	60	3	60	0	0
	point114	114	923	65	10	65	17	60	3	60	0	0
	point113	113	923	65	10	65	17	60	3	60	0	0
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	923	65	10	65	17	60	3	60	0	0
	point276	276	923	65	10	65	17	60	3	60	0	0
	point118	118	923	65	10	65	17	60	3	60	0	0
	point119	119	923	65	10	65	17	60	3	60	0	0
	point120	120	923	65	10	65	17	60	3	60	0	0
	point121	121										
SR 2 SB Off at Glendale Blvd	point146	146	292	65	3	65	5	60	1	60	0	0
	point275	275	292	65	3	65	5	60	1	60	0	0
	point145	145	292	65	3	65	5	60	1	60	0	0
	point144	144	292	65	3	65	5	60	1	60	0	0
	point143	143	292	65	3	65	5	60	1	60	0	0
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	289	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	12	65	20	60	4	60	0	0

	point203	203	1114	65	12	65	20	60	4	60	0	0
	point202	202	1114	65	12	65	20	60	4	60	0	0
	point201	201	1114	65	12	65	20	60	4	60	0	0
	point279	279	1114	65	12	65	20	60	4	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	288	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2	point233	233	276	35	7	35	0	0	4	30	3	35
	point13	13	276	35	7	35	0	0	4	30	3	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-	point234	234	276	35	7	35	0	0	4	30	3	35

	point25	25	276	35	7	35	0	0	4	30	3	35
	point253	253										
Glendale Blvd SB - S of Alessandro	point235	235	263	35	7	35	0	0	4	30	3	35
	point53	53	263	35	7	35	0	0	4	30	3	35
	point52	52	263	35	7	35	0	0	4	30	3	35
	point51	51	263	35	7	35	0	0	4	30	3	35
	point50	50	263	35	7	35	0	0	4	30	3	35
	point49	49										
Glendale Blvd SB - S of Alessandro - 2	point236	236	263	35	7	35	0	0	4	30	3	35
	point62	62	263	35	7	35	0	0	4	30	3	35
	point61	61	263	35	7	35	0	0	4	30	3	35
	point60	60	263	35	7	35	0	0	4	30	3	35
	point59	59	263	35	7	35	0	0	4	30	3	35
	point58	58										
Glendale Blvd NB -N of Alessandro - 3-	point237	237	1295	35	33	35	0	0	18	30	15	35
	point30	30	1295	35	33	35	0	0	18	30	15	35
	point29	29	1295	35	33	35	0	0	18	30	15	35
	point28	28	1295	35	33	35	0	0	18	30	15	35
	point27	27	1295	35	33	35	0	0	18	30	15	35
	point26	26										
Glendale Blvd NB -N of Alessandro -2-	point238	238	1295	35	33	35	0	0	18	30	15	35
	point18	18	1295	35	33	35	0	0	18	30	15	35
	point17	17	1295	35	33	35	0	0	18	30	15	35
	point16	16	1295	35	33	35	0	0	18	30	15	35
	point15	15	1295	35	33	35	0	0	18	30	15	35
	point14	14										
Glendale Blvd NB - N of Alessandro-2	point239	239	1295	35	33	35	0	0	18	30	15	35
	point6	5	1295	35	33	35	0	0	18	30	15	35
	point5	6	1295	35	33	35	0	0	18	30	15	35
	point4	7	1295	35	33	35	0	0	18	30	15	35
	point3	8	1295	35	33	35	0	0	18	30	15	35
	point2	9	1295	35	33	35	0	0	18	30	15	35
	point1	10										
SR 2 NB - 2-2	point243	243	1114	65	12	65	20	60	4	60	0	0

	point87	87	1114	65	12	65	20	60	4	60	0	0
	point86	86	1114	65	12	65	20	60	4	60	0	0
	point278	278	1114	65	12	65	20	60	4	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0
	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0
	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	1273	35	32	35	0	0	18	30	15	35
	point48	48	1273	35	32	35	0	0	18	30	15	35
	point286	286	1273	35	32	35	0	0	18	30	15	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	1273	35	32	35	0	0	18	30	15	35
	point57	57	1273	35	32	35	0	0	18	30	15	35
	point287	287	1273	35	32	35	0	0	18	30	15	35
	point68	68										
SR 2 SB Trans into Glendale SB-2	point248	248	923	65	10	65	17	60	3	60	0	0
	point111	111	923	65	10	65	17	60	3	60	0	0

	point110	110	923	65	10	65	17	60	3	60	0	0
	point109	109	923	65	10	65	17	60	3	60	0	0
	point108	108	923	65	10	65	17	60	3	60	0	0
	point107	107	923	65	10	65	17	60	3	60	0	0
	point106	106	923	65	10	65	17	60	3	60	0	0
	point105	105										
SR 2 SB Trans into Glendale SB - 2-2	point249	249	923	65	10	65	17	60	3	60	0	0
	point122	122	923	65	10	65	17	60	3	60	0	0
	point123	123	923	65	10	65	17	60	3	60	0	0
	point124	124	923	65	10	65	17	60	3	60	0	0
	point125	125	923	65	10	65	17	60	3	60	0	0
	point126	126	923	65	10	65	17	60	3	60	0	0
	point127	127	923	65	10	65	17	60	3	60	0	0
	point128	128										
SR 2 SB Off at Glendale Blvd-2	point250	250	292	35	3	35	5	30	1	30	0	0
	point141	141	292	35	3	35	5	30	1	30	0	0
	point140	140	292	35	3	35	5	30	1	30	0	0
	point139	139	292	35	3	35	5	30	1	30	0	0
	point138	138	292	35	3	35	5	30	1	30	0	0
	point137	137	292	35	3	35	5	30	1	30	0	0
	point136	136	292	35	3	35	5	30	1	30	0	0
	point135	135										
Glendale Blvd NB -N of Alessandro -3-2	point255	255	276	35	7	35	0	0	4	30	3	35
	point254	254										
Glendale Blvd NB - N of Alessandro -2	point256	256	276	35	7	35	0	0	4	30	3	35
	point252	252										
Glendale Blvd NB -N of Alessandro - 2-2	point257	257	276	35	7	35	0	0	4	30	3	35
	point12	12	276	35	7	35	0	0	4	30	3	35
	point11	11										
Glendale Blvd NB - N of Alessandro - 3	point258	258	276	35	7	35	0	0	4	30	3	35
	point24	24	276	35	7	35	0	0	4	30	3	35
	point23	23										
Glendale Blvd SB - N of Alessandro - 2	point65	65	326	35	8	35	0	0	5	30	4	35
	point271	271										

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

Glendale Blvd SB - N of Alessandro	point56	56	326	35	8	35	0	0	5	30	4	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	326	35	8	35	0	0	5	30	4	35
	point55	55	326	35	8	35	0	0	5	30	4	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	326	35	8	35	0	0	5	30	4	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	326	35	8	35	0	0	5	30	4	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	326	35	8	35	0	0	5	30	4	35
	point64	64	326	35	8	35	0	0	5	30	4	35
	point63	63										
SR 2 SB Trans into Glendale SB - 2-2-2	point281	281	923	50	10	50	17	45	3	45	0	0
	point129	129	923	50	10	50	17	45	3	45	0	0
	point130	130	923	35	10	35	17	30	3	30	0	0
	point131	131	923	35	10	35	17	30	3	30	0	0
	point132	132	923	35	10	35	17	30	3	30	0	0
	point133	133	923	35	10	35	17	30	3	30	0	0
	point134	134										
SR 2 SB Trans into Glendale SB-2-2	point282	282	923	50	10	50	17	45	3	45	0	0
	point104	104	923	50	10	50	17	45	3	45	0	0
	point103	103	923	35	10	35	17	30	3	30	0	0
	point102	102	923	35	10	35	17	30	3	30	0	0
	point101	101	923	35	10	35	17	30	3	30	0	0
	point100	100	923	35	10	35	17	30	3	30	0	0
	point99	99										

Jones & Stokes 13 December 2007
M Greene TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt A PM conditions M-13 Mitigated

Receiver											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
M13 Classroom El	49	1	6,483,233.0	1,856,122.0	498.00	10.00	0.00	66	10.0	8.0	Y

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt A PM conditions M-13 Mitigated

Barrier Name	Type	Height Min	Height Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	If Berm Top Width	If Berm Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Coordinates (bottom) Y	Coordinates (bottom) Z	Height at Point	Segment Seg Ht Perturbs Incre-ment	Segment Seg Ht Perturbs #Up	Segment Seg Ht Perturbs #Dn	Segment On Struct?	Segment Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,860.0	1,856,367.2	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,432.0	493.77	0.00	0.00	0	0		
									point20	20	6,483,898.5	1,856,336.4	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.0	1,856,176.9	501.97	0.00	0.00	0	0		
									point23	23	6,483,587.0	1,856,061.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,446.5	1,855,939.6	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier5	W	0.00	99.99	0.00				0.00	point28	28	6,484,011.5	1,856,432.5	490.49	0.00	0.00	0	0		
									point29	29	6,483,879.0	1,856,298.0	498.69	0.00	0.00	0	0		
									point30	30	6,483,673.0	1,856,071.0	503.61	0.00	0.00	0	0		
									point31	31	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point32	32	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0	Y	
									point33	33	6,483,344.5	1,855,732.9	505.25	0.00	0.00	0	0		

									point34	34	6,483,292.0	1,855,687.4	501.97	0.00	0.00	0	0		
									point35	35	6,483,204.5	1,855,575.1	497.05	0.00	0.00	0	0		
									point36	36	6,483,174.0	1,855,507.8	492.13	0.00	0.00	0	0		
									point37	37	6,483,161.5	1,855,451.5	488.85	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	121	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier14	W	0.00	100.00	0.00				0.00	point102	102	6,483,189.0	1,855,295.9	472.44	2.89	0.00	0	0		
									point103	103	6,483,194.5	1,855,393.2	482.28	2.89	0.00	0	0		
									point104	104	6,483,217.5	1,855,478.6	492.13	2.89	0.00	0	0		
									point105	105	6,483,274.0	1,855,583.6	501.97	2.89	0.00	0	0		

									point106	106	6,483,349.0	1,855,675.5	506.89	2.89	0.00	0	0	Y	
									point107	107	6,483,459.0	1,855,793.0	506.89	2.89	0.00	0	0	Y	
									point108	119	6,483,608.5	1,855,945.5	505.25	2.89	0.00	0	0		
									point109	120	6,483,777.5	1,856,132.9	501.97	2.89	0.00	0	0		
									point110	108	6,483,988.5	1,856,337.5	497.05	2.89					
Barrier15	W	0.00	100.00	0.00				0.00	point109	109	6,483,150.0	1,855,277.6	472.44	2.89	0.00	0	0		
									point110	110	6,483,153.5	1,855,373.0	482.28	2.89	0.00	0	0		
									point111	111	6,483,174.0	1,855,458.8	492.13	2.89	0.00	0	0		
									point112	112	6,483,216.0	1,855,560.0	501.97	2.89	0.00	0	0		
									point113	113	6,483,279.0	1,855,649.6	506.89	2.89	0.00	0	0	Y	
									point114	114	6,483,446.5	1,855,826.8	506.89	2.89	0.00	0	0	Y	
									point115	115	6,483,554.0	1,855,943.2	505.25	2.89					
SW at Saint Teresa School	W	0.00	99.99	0.00				0.00	point122	122	6,483,280.0	1,856,217.2	500.00	6.00	2.00	5	0		
									point123	123	6,483,331.0	1,856,016.1	492.00	6.00	2.00	5	0		
									point125	125	6,483,310.5	1,855,999.5	492.00	6.00	2.00	5	0		
									point124	124	6,483,248.5	1,856,034.1	493.00	6.00					

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13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt A PM conditions M-13 Mitigated
BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M13	41	1	0.0	64.0	66	64.0	10	----	61.6	2.4	8	-5.6
M13 Classroom El	49	1	0.0	64.2	66	64.2	10	----	63.0	1.2	8	-6.8

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.2	1.8	2.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

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TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt A PM conditions ST10

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	283	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,248.5	1,855,216.8	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	285	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.5	1,855,212.4	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	284	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.5	1,855,214.4	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,356.0	1,855,974.2	490.81					
SR 2 NB - 2	24.0	point98	98	6,483,469.0	1,855,685.4	477.69				Average	

	point82	82	1114	65	12	65	20	60	4	60	0	0
	point81	81	1114	65	12	65	20	60	4	60	0	0
	point80	80	1114	65	12	65	20	60	4	60	0	0
	point79	79	1114	65	12	65	20	60	4	60	0	0
	point78	78	1114	65	12	65	20	60	4	60	0	0
	point77	77	1114	65	12	65	20	60	4	60	0	0
	point76	76	1114	65	12	65	20	60	4	60	0	0
	point75	75	1114	65	12	65	20	60	4	60	0	0
	point74	74	1114	65	12	65	20	60	4	60	0	0
	point73	73	1114	65	12	65	20	60	4	60	0	0
	point72	72	1114	65	12	65	20	60	4	60	0	0
	point71	71	1114	65	12	65	20	60	4	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	878	35	22	35	0	0	12	30	10	35
	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	359	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	358	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	292	35	7	35	0	0	4	30	3	35

	point271	271											
Glendale Blvd SB - N of Alessandro	point56	56	292	35	7	35	0	0	4	30	3	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	843	35	21	35	0	0	12	30	10	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	292	35	7	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	292	35	7	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB -N of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	878	35	22	35	0	0	12	30	10	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	878	35	22	35	0	0	12	30	10	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	711	50	8	50	13	45	3	45	0	0
	point312	312	711	35	8	35	13	30	3	30	0	0
	point313	313	711	35	8	35	13	30	3	30	0	0

	point314	314	711	35	8	35	13	30	3	30	0	0
	point315	315	711	35	8	35	13	30	3	30	0	0
	point316	316	711	35	8	35	13	30	3	30	0	0
	point317	317	711	35	8	35	13	30	3	30	0	0
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	711	50	8	50	13	45	3	45	0	0
	point320	320	711	35	8	35	13	30	3	30	0	0
	point321	321	711	35	8	35	13	30	3	30	0	0
	point322	322	711	35	8	35	13	30	3	30	0	0
	point323	323	711	35	8	35	13	30	3	30	0	0
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	711	50	8	50	13	45	3	45	0	0
	point326	326	711	35	8	35	13	30	3	30	0	0
	point327	327	711	35	8	35	13	30	3	30	0	0
	point328	328	711	35	8	35	13	30	3	30	0	0
	point329	329	711	35	8	35	13	30	3	30	0	0
	point330	330										
Glendale Blvd SB - S of Alessandro--2	point331	331	878	35	22	35	0	0	12	30	10	35
	point308	308	878	35	22	35	0	0	12	30	10	35
	point309	309	878	35	22	35	0	0	12	30	10	35
	point310	310										
SR 2 NB - 3	point332	332	1114	65	12	65	20	60	4	60	0	0
	point333	333	1114	65	12	65	20	60	4	60	0	0
	point334	334	1114	65	12	65	20	60	4	60	0	0
	point335	335	1114	65	12	65	20	60	4	60	0	0
	point336	336	1114	65	12	65	20	60	4	60	0	0
	point337	337	1114	65	12	65	20	60	4	60	0	0
	point338	338	1114	65	12	65	20	60	4	60	0	0
	point339	339	1114	65	12	65	20	60	4	60	0	0
	point340	340	1114	65	12	65	20	60	4	60	0	0
	point341	341	1114	65	12	65	20	60	4	60	0	0
	point342	342										
Glendale Blvd NB -N of Alessandro -2-	point344	344	964	35	24	35	0	0	13	30	11	35
	point345	345	964	35	24	35	0	0	13	30	11	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point346	346										
Glendale Blvd NB -N of Alessandro - 2-	point347	347	964	35	24	35	0	0	13	30	11	35
	point348	348										
Glendale Blvd NB -N of Alessandro - 2-	point350	350	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	964	35	24	35	0	0	13	30	11	35
	point14	14										
Glendale Blvd NB -N of Alessandro - 3-	point351	351	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										
Glendale Blvd NB -N of Alessandro-2-2	point352	352	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35
	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										

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13 December 2007
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions M-13 Mitigated

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
M13 Classroom El	49	1	6,483,233.0	1,856,122.0	498.00	10.00	0.00	66	10.0	8.0	Y

Jones & Stokes 13 December 2007
M Greene TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions M-13 Mitigated

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per Unit Area	$ per Unit Vol.	Top Width	Run:Rise	$ per Unit Length			X	Y	Z	at Point	Seg Ht Incre-ment	Perturbs #Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		

									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	126	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier5	W	0.00	100.00	0.00				0.00	point28	28	6,484,006.5	1,856,432.1	490.49	0.00	0.00	0	0		
									point29	29	6,483,879.0	1,856,298.0	498.69	0.00	0.00	0	0		
									point30	30	6,483,673.0	1,856,071.0	503.61	0.00	0.00	0	0		
									point118	118	6,483,615.0	1,856,004.8	503.61	0.00	0.00	0	0		
									point119	119	6,483,500.0	1,855,895.5	505.25	0.00	0.00	0	0		
									point120	120	6,483,495.0	1,855,914.1	503.61	0.00	0.00	0	0	Y	
									point121	121	6,483,410.5	1,855,838.9	505.91	0.00	0.00	0	0	Y	
									point122	122	6,483,326.0	1,855,763.6	504.59	0.00	0.00	0	0		
									point123	123	6,483,329.5	1,855,725.1	504.59	0.00	0.00	0	0		
									point124	124	6,483,294.0	1,855,689.0	0.00	0.00	0.00	0	0		
									point125	125	6,483,235.5	1,855,623.8	500.33	0.00					
SW at St Teresa School	W	0.00	99.99	0.00				0.00	point127	127	6,483,280.0	1,856,217.2	500.00	6.00	2.00	5	0		
									point128	128	6,483,331.0	1,856,016.1	492.00	6.00	2.00	5	0		
									point130	130	6,483,310.5	1,855,999.5	492.00	6.00	2.00	5	0		

									point129	129	6,483,248.5	1,856,034.1	493.00	6.00					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions M-13 Mitigated
BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M13	41	1	0.0	63.1	66	63.1	10	----	59.8	3.3	8	-4.7
M13 Classroom El	49	1	0.0	63.1	66	63.1	10	----	61.5	1.6	8	-6.4

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	2	1.6	2.4	3.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions ST10

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	355	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,249.0	1,855,217.1	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	356	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.5	1,855,212.6	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	357	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.5	1,855,214.9	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,356.0	1,855,974.2	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,463.0	1,855,659.8	477.69				Average	

		point97	97	6,483,611.5	1,855,834.6	485.56				Average	
		point96	96	6,483,675.0	1,855,907.4	490.49				Average	
		point95	95	6,483,744.5	1,855,985.4	495.41				Average	
		point94	94	6,483,804.5	1,856,058.2	498.69				Average	
		point93	93	6,483,856.5	1,856,115.1	500.33				Average	
		point92	92	6,483,912.5	1,856,181.0	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,614.5	1,857,120.5	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,324.5	1,856,740.6	485.56				Average	
		point112	112	6,484,234.0	1,856,629.0	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,619.0	1,857,143.0	475.72				Average	
		point118	118	6,484,517.5	1,857,008.8	479.00				Average	
		point119	119	6,484,414.0	1,856,873.2	482.28				Average	
		point120	120	6,484,304.5	1,856,736.1	485.56				Average	
		point121	121	6,484,223.5	1,856,629.4	488.85					
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,601.0	1,857,167.4	475.72				Average	
		point145	145	6,484,486.5	1,856,999.5	479.00				Average	
		point144	144	6,484,382.5	1,856,860.4	482.28				Average	
		point143	143	6,484,278.5	1,856,728.5	485.56				Average	
		point142	142	6,484,196.5	1,856,624.8	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	354	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,640.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	353	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,459.0	1,855,663.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,459.5	1,855,802.6	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,426.0	1,855,648.9	478.02				Average	
		point349	349	6,483,445.0	1,855,707.0	479.17				Average	
		point25	25	6,483,447.5	1,855,752.1	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point235	235	6,483,429.0	1,855,672.6	478.67				Average	
		point295	295	6,483,385.5	1,855,613.2	476.38				Average	
		point53	53	6,483,356.0	1,855,560.1	474.08				Average	
		point52	52	6,483,325.5	1,855,503.1	472.44				Average	
		point51	51	6,483,264.0	1,855,379.4	469.16				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,198.5	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,391.0	1,855,674.5	478.35				Average	
		point62	62	6,483,330.0	1,855,565.0	473.75				Average	
		point61	61	6,483,294.0	1,855,497.8	472.44				Average	
		point60	60	6,483,232.0	1,855,375.1	469.16				Average	
		point59	59	6,483,208.0	1,855,325.5	467.52				Average	
		point58	58	6,483,177.0	1,855,222.2	464.57					

INPUT: ROADWAYS <Project Name?>

Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,225.0	1,855,219.5	465.22				Average	
		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point28	28	6,483,340.5	1,855,476.6	472.44					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point16	16	6,483,347.5	1,855,465.2	472.44					
Glendale Blvd NB -N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,276.5	1,855,286.4	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36				Average	
		point83	83	6,483,527.5	1,855,717.1	479.00				Average	
		point82	82	6,483,580.5	1,855,779.8	482.28				Average	
		point81	81	6,483,641.5	1,855,850.4	487.20				Average	
		point80	80	6,483,685.0	1,855,901.5	490.49				Average	
		point79	79	6,483,727.0	1,855,950.2	493.77				Average	
		point78	78	6,483,779.0	1,856,010.4	497.05				Average	
		point77	77	6,483,840.5	1,856,083.1	500.33				Average	
		point76	76	6,483,862.0	1,856,106.5	501.31				Average	
		point75	75	6,483,882.5	1,856,127.8	500.33				Average	
		point74	74	6,483,927.5	1,856,180.4	500.33				Average	
		point73	73	6,484,026.0	1,856,294.8	498.69				Average	
		point72	72	6,484,137.5	1,856,415.9	495.41				Average	
		point71	71	6,484,243.0	1,856,533.5	492.78				Average	
		point70	70	6,484,300.0	1,856,596.6	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,504.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	

		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	359	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	358	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,459.5	1,855,804.0	482.61				Average	
		point252	252	6,483,458.0	1,855,819.2	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,457.5	1,855,819.5	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,357.5	1,855,972.1	490.81				Average	
		point271	271	6,483,393.5	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77				Average	
		point267	267	6,483,408.5	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,411.5	1,855,751.6	482.61				Average	
		point55	55	6,483,414.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,408.5	1,855,766.0	484.25				Average	
		point268	268	6,483,411.0	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,394.0	1,855,751.2	483.92				Average	
		point272	272	6,483,397.0	1,855,737.4	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,400.0	1,855,719.8	480.31				Average	
		point63	63	6,483,391.5	1,855,674.5	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,447.5	1,855,752.6	480.31				Average	
		point286	286	6,483,444.0	1,855,786.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,444.0	1,855,787.9	481.57				Average	
		point287	287	6,483,442.5	1,855,802.2	482.83					
Glendale Blvd NB -N of Alessandro -	12.0	point289	289	6,483,442.0	1,855,803.6	482.83				Average	
		point282	282	6,483,438.5	1,855,835.9	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					

Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	
		point301	301	6,483,132.0	1,854,904.0	457.68					
Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,409.5	1,855,669.1	478.67				Average	
		point303	303	6,483,352.0	1,855,581.4	474.08				Average	
		point304	304	6,483,324.5	1,855,528.9	472.44				Average	
		point305	305	6,483,263.0	1,855,401.9	469.16				Average	
		point306	306	6,483,235.5	1,855,348.0	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,196.0	1,856,622.4	488.85				Average	
		point312	312	6,484,100.0	1,856,499.4	492.13				Average	
		point313	313	6,484,061.0	1,856,451.8	493.77				Average	
		point314	314	6,483,972.5	1,856,340.4	497.05				Average	
		point315	315	6,483,876.5	1,856,229.1	500.33				Average	
		point316	316	6,483,728.0	1,856,056.9	497.05				Average	
		point317	317	6,483,626.0	1,855,937.5	493.77				Average	
		point318	318	6,483,492.5	1,855,792.4	490.49					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,228.0	1,856,633.5	488.85				Average	
		point320	320	6,484,123.0	1,856,504.5	492.13				Average	
		point321	321	6,483,937.0	1,856,279.5	498.69				Average	
		point322	322	6,483,799.0	1,856,120.6	501.97				Average	
		point323	323	6,483,641.5	1,855,936.6	505.25				Average	
		point324	324	6,483,490.5	1,855,764.4	506.89					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,241.5	1,856,636.4	488.85				Average	
		point326	326	6,484,139.5	1,856,508.1	492.13				Average	
		point327	327	6,483,950.5	1,856,281.1	498.69				Average	
		point328	328	6,483,804.0	1,856,109.4	501.97				Average	
		point329	329	6,483,656.0	1,855,937.1	505.25				Average	
		point330	330	6,483,489.5	1,855,744.8	506.89					
Glendale Blvd SB - S of Alessandro--2	12.0	point331	331	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	
		point310	310	6,483,137.5	1,854,857.1	454.07					
SR 2 NB - 3	12.0	point332	332	6,483,463.0	1,855,677.5	477.69				Average	
		point333	333	6,483,611.5	1,855,852.4	485.56				Average	
		point334	334	6,483,675.0	1,855,925.2	490.49				Average	
		point335	335	6,483,744.5	1,856,002.9	495.41				Average	
		point336	336	6,483,804.5	1,856,076.1	498.69				Average	
		point337	337	6,483,856.5	1,856,132.9	500.33				Average	

		point338	338	6,483,912.5	1,856,198.8	500.33				Average	
		point339	339	6,484,061.5	1,856,370.4	495.41				Average	
		point340	340	6,484,162.5	1,856,482.4	493.77				Average	
		point341	341	6,484,232.0	1,856,558.0	492.13				Average	
		point342	342	6,484,295.0	1,856,630.0	489.83					
Glendale Blvd NB -N of Alessandro -2-	12.0	point344	344	6,483,355.0	1,855,458.1	472.44				Average	
		point345	345	6,483,394.0	1,855,534.1	474.08				Average	
		point346	346	6,483,453.0	1,855,645.2	477.69					
Glendale Blvd NB -N of Alessandro - 2-	12.0	point347	347	6,483,453.0	1,855,645.2	477.69				Average	
		point348	348	6,483,461.0	1,855,657.2	477.69					
Glendale Blvd NB -N of Alessandro - 2-	12.0	point350	350	6,483,347.5	1,855,465.2	472.44				Average	
		point15	15	6,483,382.5	1,855,533.5	474.08				Average	
		point292	292	6,483,444.0	1,855,649.2	475.89				Average	
		point14	14	6,483,459.0	1,855,683.8	477.69					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point351	351	6,483,340.5	1,855,476.6	472.44				Average	
		point27	27	6,483,384.5	1,855,563.1	474.41				Average	
		point26	26	6,483,425.5	1,855,647.9	478.02					
Glendale Blvd NB -N of Alessandro-2-2	12.0	point352	352	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,405.0	1,855,529.4	472.11				Average	
		point2	9	6,483,432.5	1,855,584.2	475.72				Average	
		point1	10	6,483,461.5	1,855,637.6	476.71					

Jones & Stokes 13 December 2007
M Greene TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions ST10

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	355	1263	35	32	35	0	0	17	30	15	35
	point9	2	1263	35	32	35	0	0	17	30	15	35
	point8	3	1263	35	32	35	0	0	17	30	15	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	356	1263	35	32	35	0	0	17	30	15	35
	point21	21	1263	35	32	35	0	0	17	30	15	35
	point20	20	1263	35	32	35	0	0	17	30	15	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point285	357	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35
	point40	40	383	35	10	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1114	65	12	65	20	60	4	60	0	0
	point97	97	1114	65	12	65	20	60	4	60	0	0
	point96	96	1114	65	12	65	20	60	4	60	0	0
	point95	95	1114	65	12	65	20	60	4	60	0	0
	point94	94	1114	65	12	65	20	60	4	60	0	0
	point93	93	1114	65	12	65	20	60	4	60	0	0
	point92	92	1114	65	12	65	20	60	4	60	0	0
	point91	91	1114	65	12	65	20	60	4	60	0	0
	point90	90	1114	65	12	65	20	60	4	60	0	0
	point89	89	1114	65	12	65	20	60	4	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	711	50	8	50	13	45	3	45	0	0
	point277	277	711	65	8	65	13	60	3	60	0	0
	point115	115	711	65	8	65	13	60	3	60	0	0
	point114	114	711	65	8	65	13	60	3	60	0	0
	point113	113	711	50	8	50	13	45	3	45	0	0
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	711	65	8	65	13	60	3	60	0	0
	point276	276	711	65	8	65	13	60	3	60	0	0
	point118	118	711	65	8	65	13	60	3	60	0	0
	point119	119	711	65	8	65	13	60	3	60	0	0
	point120	120	711	50	8	50	13	45	3	45	0	0
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	711	65	8	65	13	60	3	60	0	0
	point275	275	711	65	8	65	13	60	3	60	0	0
	point145	145	711	65	8	65	13	60	3	60	0	0
	point144	144	711	65	8	65	13	60	3	60	0	0
	point143	143	711	50	8	50	13	45	3	45	0	0
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	354	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	12	65	20	60	4	60	0	0

	point203	203	1114	65	12	65	20	60	4	60	0	0
	point202	202	1114	65	12	65	20	60	4	60	0	0
	point201	201	1114	65	12	65	20	60	4	60	0	0
	point279	279	1114	65	12	65	20	60	4	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	353	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	383	35	10	35	0	0	5	30	4	35

	point349	349	383	35	10	35	0	0	5	30	4	35
	point25	25										
Glendale Blvd SB - N of Alessandro	point235	235	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point28	28										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point16	16										
Glendale Blvd NB -N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6	1285	35	32	35	0	0	18	30	15	35
	point4	7										
SR 2 NB - 2-2	point243	243	1114	65	12	65	20	60	4	60	0	0
	point87	87	1114	65	12	65	20	60	4	60	0	0
	point86	86	1114	65	12	65	20	60	4	60	0	0
	point278	278	1114	65	12	65	20	60	4	60	0	0
	point85	85										
SR2 NB	point84	84	1114	65	12	65	20	60	4	60	0	0
	point83	83	1114	65	12	65	20	60	4	60	0	0

	point82	82	1114	65	12	65	20	60	4	60	0	0
	point81	81	1114	65	12	65	20	60	4	60	0	0
	point80	80	1114	65	12	65	20	60	4	60	0	0
	point79	79	1114	65	12	65	20	60	4	60	0	0
	point78	78	1114	65	12	65	20	60	4	60	0	0
	point77	77	1114	65	12	65	20	60	4	60	0	0
	point76	76	1114	65	12	65	20	60	4	60	0	0
	point75	75	1114	65	12	65	20	60	4	60	0	0
	point74	74	1114	65	12	65	20	60	4	60	0	0
	point73	73	1114	65	12	65	20	60	4	60	0	0
	point72	72	1114	65	12	65	20	60	4	60	0	0
	point71	71	1114	65	12	65	20	60	4	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	878	35	22	35	0	0	12	30	10	35
	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	359	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	358	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	292	35	7	35	0	0	4	30	3	35

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	292	35	7	35	0	0	4	30	3	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	843	35	21	35	0	0	12	30	10	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	292	35	7	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	292	35	7	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB -N of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	878	35	22	35	0	0	12	30	10	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	878	35	22	35	0	0	12	30	10	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	711	50	8	50	13	45	3	45	0	0
	point312	312	711	35	8	35	13	30	3	30	0	0
	point313	313	711	35	8	35	13	30	3	30	0	0

	point314	314	711	35	8	35	13	30	3	30	0	0
	point315	315	711	35	8	35	13	30	3	30	0	0
	point316	316	711	35	8	35	13	30	3	30	0	0
	point317	317	711	35	8	35	13	30	3	30	0	0
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	711	50	8	50	13	45	3	45	0	0
	point320	320	711	35	8	35	13	30	3	30	0	0
	point321	321	711	35	8	35	13	30	3	30	0	0
	point322	322	711	35	8	35	13	30	3	30	0	0
	point323	323	711	35	8	35	13	30	3	30	0	0
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	711	50	8	50	13	45	3	45	0	0
	point326	326	711	35	8	35	13	30	3	30	0	0
	point327	327	711	35	8	35	13	30	3	30	0	0
	point328	328	711	35	8	35	13	30	3	30	0	0
	point329	329	711	35	8	35	13	30	3	30	0	0
	point330	330										
Glendale Blvd SB - S of Alessandro--2	point331	331	878	35	22	35	0	0	12	30	10	35
	point308	308	878	35	22	35	0	0	12	30	10	35
	point309	309	878	35	22	35	0	0	12	30	10	35
	point310	310										
SR 2 NB - 3	point332	332	1114	65	12	65	20	60	4	60	0	0
	point333	333	1114	65	12	65	20	60	4	60	0	0
	point334	334	1114	65	12	65	20	60	4	60	0	0
	point335	335	1114	65	12	65	20	60	4	60	0	0
	point336	336	1114	65	12	65	20	60	4	60	0	0
	point337	337	1114	65	12	65	20	60	4	60	0	0
	point338	338	1114	65	12	65	20	60	4	60	0	0
	point339	339	1114	65	12	65	20	60	4	60	0	0
	point340	340	1114	65	12	65	20	60	4	60	0	0
	point341	341	1114	65	12	65	20	60	4	60	0	0
	point342	342										
Glendale Blvd NB -N of Alessandro -2-	point344	344	964	35	24	35	0	0	13	30	11	35
	point345	345	964	35	24	35	0	0	13	30	11	35

	point82	82	1114	65	12	65	20	60	4	60	0	0
	point81	81	1114	65	12	65	20	60	4	60	0	0
	point80	80	1114	65	12	65	20	60	4	60	0	0
	point79	79	1114	65	12	65	20	60	4	60	0	0
	point78	78	1114	65	12	65	20	60	4	60	0	0
	point77	77	1114	65	12	65	20	60	4	60	0	0
	point76	76	1114	65	12	65	20	60	4	60	0	0
	point75	75	1114	65	12	65	20	60	4	60	0	0
	point74	74	1114	65	12	65	20	60	4	60	0	0
	point73	73	1114	65	12	65	20	60	4	60	0	0
	point72	72	1114	65	12	65	20	60	4	60	0	0
	point71	71	1114	65	12	65	20	60	4	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	878	35	22	35	0	0	12	30	10	35
	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	359	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	358	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	292	35	7	35	0	0	4	30	3	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	292	35	7	35	0	0	4	30	3	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	843	35	21	35	0	0	12	30	10	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	292	35	7	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	292	35	7	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB -N of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	878	35	22	35	0	0	12	30	10	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	878	35	22	35	0	0	12	30	10	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	711	50	8	50	13	45	3	45	0	0
	point312	312	711	35	8	35	13	30	3	30	0	0
	point313	313	711	35	8	35	13	30	3	30	0	0

	point314	314	711	35	8	35	13	30	3	30	0	0
	point315	315	711	35	8	35	13	30	3	30	0	0
	point316	316	711	35	8	35	13	30	3	30	0	0
	point317	317	711	35	8	35	13	30	3	30	0	0
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	711	50	8	50	13	45	3	45	0	0
	point320	320	711	35	8	35	13	30	3	30	0	0
	point321	321	711	35	8	35	13	30	3	30	0	0
	point322	322	711	35	8	35	13	30	3	30	0	0
	point323	323	711	35	8	35	13	30	3	30	0	0
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	711	50	8	50	13	45	3	45	0	0
	point326	326	711	35	8	35	13	30	3	30	0	0
	point327	327	711	35	8	35	13	30	3	30	0	0
	point328	328	711	35	8	35	13	30	3	30	0	0
	point329	329	711	35	8	35	13	30	3	30	0	0
	point330	330										
Glendale Blvd SB - S of Alessandro--2	point331	331	878	35	22	35	0	0	12	30	10	35
	point308	308	878	35	22	35	0	0	12	30	10	35
	point309	309	878	35	22	35	0	0	12	30	10	35
	point310	310										
SR 2 NB - 3	point332	332	1114	65	12	65	20	60	4	60	0	0
	point333	333	1114	65	12	65	20	60	4	60	0	0
	point334	334	1114	65	12	65	20	60	4	60	0	0
	point335	335	1114	65	12	65	20	60	4	60	0	0
	point336	336	1114	65	12	65	20	60	4	60	0	0
	point337	337	1114	65	12	65	20	60	4	60	0	0
	point338	338	1114	65	12	65	20	60	4	60	0	0
	point339	339	1114	65	12	65	20	60	4	60	0	0
	point340	340	1114	65	12	65	20	60	4	60	0	0
	point341	341	1114	65	12	65	20	60	4	60	0	0
	point342	342										
Glendale Blvd NB -N of Alessandro -2-	point344	344	964	35	24	35	0	0	13	30	11	35
	point345	345	964	35	24	35	0	0	13	30	11	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point346	346										
Glendale Blvd NB -N of Alessandro - 2-	point347	347	964	35	24	35	0	0	13	30	11	35
	point348	348										
Glendale Blvd NB -N of Alessandro - 2-	point350	350	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	964	35	24	35	0	0	13	30	11	35
	point14	14										
Glendale Blvd NB -N of Alessandro - 3-	point351	351	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										
Glendale Blvd NB -N of Alessandro-2-2	point352	352	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35
	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions M-13 Mitigated

Receiver												
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
M13 Classroom El	49	1	6,483,233.0	1,856,122.0	498.00	10.00	0.00	66	10.0	8.0	Y

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions M-13 Mitigated

Barrier Name	Type	Height Min	Height Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	If Berm Top Width	If Berm Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Coordinates (bottom) Y	Coordinates (bottom) Z	Height at Point	Segment Seg Ht Incre-ment	Segment Perturbs #Up	Segment Perturbs #Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		

									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	126	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier5	W	0.00	100.00	0.00				0.00	point28	28	6,484,006.5	1,856,432.1	490.49	0.00	0.00	0	0		
									point29	29	6,483,879.0	1,856,298.0	498.69	0.00	0.00	0	0		
									point30	30	6,483,673.0	1,856,071.0	503.61	0.00	0.00	0	0		
									point118	118	6,483,615.0	1,856,004.8	503.61	0.00	0.00	0	0		
									point119	119	6,483,500.0	1,855,895.5	505.25	0.00	0.00	0	0		
									point120	120	6,483,495.0	1,855,914.1	503.61	0.00	0.00	0	0	Y	
									point121	121	6,483,410.5	1,855,838.9	505.91	0.00	0.00	0	0	Y	
									point122	122	6,483,326.0	1,855,763.6	504.59	0.00	0.00	0	0		
									point123	123	6,483,329.5	1,855,725.1	504.59	0.00	0.00	0	0		
									point124	124	6,483,294.0	1,855,689.0	0.00	0.00	0.00	0	0		
									point125	125	6,483,235.5	1,855,623.8	500.33	0.00					
SW at St Teresa School	W	0.00	99.99	0.00				0.00	point127	127	6,483,280.0	1,856,217.2	500.00	6.00	2.00	5	0		
									point128	128	6,483,331.0	1,856,016.1	492.00	6.00	2.00	5	0		
									point130	130	6,483,310.5	1,855,999.5	492.00	6.00	2.00	5	0		

									point129	129	6,483,248.5	1,856,034.1	493.00	6.00					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions M-13 Mitigated
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M13	41	1	0.0	63.1	66	63.1	10	----	59.8	3.3	8	-4.7
M13 Classroom El	49	1	0.0	63.1	66	63.1	10	----	61.5	1.6	8	-6.4

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.6	2.4	3.3
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions ST10

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	355	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,249.0	1,855,217.1	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	356	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.5	1,855,212.6	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	357	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.5	1,855,214.9	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,356.0	1,855,974.2	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,463.0	1,855,659.8	477.69				Average	

		point97	97	6,483,611.5	1,855,834.6	485.56				Average	
		point96	96	6,483,675.0	1,855,907.4	490.49				Average	
		point95	95	6,483,744.5	1,855,985.4	495.41				Average	
		point94	94	6,483,804.5	1,856,058.2	498.69				Average	
		point93	93	6,483,856.5	1,856,115.1	500.33				Average	
		point92	92	6,483,912.5	1,856,181.0	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,614.5	1,857,120.5	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,324.5	1,856,740.6	485.56				Average	
		point112	112	6,484,234.0	1,856,629.0	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,619.0	1,857,143.0	475.72				Average	
		point118	118	6,484,517.5	1,857,008.8	479.00				Average	
		point119	119	6,484,414.0	1,856,873.2	482.28				Average	
		point120	120	6,484,304.5	1,856,736.1	485.56				Average	
		point121	121	6,484,223.5	1,856,629.4	488.85					
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,601.0	1,857,167.4	475.72				Average	
		point145	145	6,484,486.5	1,856,999.5	479.00				Average	
		point144	144	6,484,382.5	1,856,860.4	482.28				Average	
		point143	143	6,484,278.5	1,856,728.5	485.56				Average	
		point142	142	6,484,196.5	1,856,624.8	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	354	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,640.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	353	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,459.0	1,855,663.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,459.5	1,855,802.6	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,426.0	1,855,648.9	478.02				Average	
		point349	349	6,483,445.0	1,855,707.0	479.17				Average	
		point25	25	6,483,447.5	1,855,752.1	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point235	235	6,483,429.0	1,855,672.6	478.67				Average	
		point295	295	6,483,385.5	1,855,613.2	476.38				Average	
		point53	53	6,483,356.0	1,855,560.1	474.08				Average	
		point52	52	6,483,325.5	1,855,503.1	472.44				Average	
		point51	51	6,483,264.0	1,855,379.4	469.16				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,198.5	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,391.0	1,855,674.5	478.35				Average	
		point62	62	6,483,330.0	1,855,565.0	473.75				Average	
		point61	61	6,483,294.0	1,855,497.8	472.44				Average	
		point60	60	6,483,232.0	1,855,375.1	469.16				Average	
		point59	59	6,483,208.0	1,855,325.5	467.52				Average	
		point58	58	6,483,177.0	1,855,222.2	464.57					

Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,225.0	1,855,219.5	465.22				Average	
		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point28	28	6,483,340.5	1,855,476.6	472.44					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point16	16	6,483,347.5	1,855,465.2	472.44					
Glendale Blvd NB -N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,276.5	1,855,286.4	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36				Average	
		point83	83	6,483,527.5	1,855,717.1	479.00				Average	
		point82	82	6,483,580.5	1,855,779.8	482.28				Average	
		point81	81	6,483,641.5	1,855,850.4	487.20				Average	
		point80	80	6,483,685.0	1,855,901.5	490.49				Average	
		point79	79	6,483,727.0	1,855,950.2	493.77				Average	
		point78	78	6,483,779.0	1,856,010.4	497.05				Average	
		point77	77	6,483,840.5	1,856,083.1	500.33				Average	
		point76	76	6,483,862.0	1,856,106.5	501.31				Average	
		point75	75	6,483,882.5	1,856,127.8	500.33				Average	
		point74	74	6,483,927.5	1,856,180.4	500.33				Average	
		point73	73	6,484,026.0	1,856,294.8	498.69				Average	
		point72	72	6,484,137.5	1,856,415.9	495.41				Average	
		point71	71	6,484,243.0	1,856,533.5	492.78				Average	
		point70	70	6,484,300.0	1,856,596.6	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,504.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	

		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	359	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	358	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,459.5	1,855,804.0	482.61				Average	
		point252	252	6,483,458.0	1,855,819.2	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,457.5	1,855,819.5	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,357.5	1,855,972.1	490.81				Average	
		point271	271	6,483,393.5	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77				Average	
		point267	267	6,483,408.5	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,411.5	1,855,751.6	482.61				Average	
		point55	55	6,483,414.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,408.5	1,855,766.0	484.25				Average	
		point268	268	6,483,411.0	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,394.0	1,855,751.2	483.92				Average	
		point272	272	6,483,397.0	1,855,737.4	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,400.0	1,855,719.8	480.31				Average	
		point63	63	6,483,391.5	1,855,674.5	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,447.5	1,855,752.6	480.31				Average	
		point286	286	6,483,444.0	1,855,786.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,444.0	1,855,787.9	481.57				Average	
		point287	287	6,483,442.5	1,855,802.2	482.83					
Glendale Blvd NB -N of Alessandro -	12.0	point289	289	6,483,442.0	1,855,803.6	482.83				Average	
		point282	282	6,483,438.5	1,855,835.9	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					

Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	
		point301	301	6,483,132.0	1,854,904.0	457.68					
Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,409.5	1,855,669.1	478.67				Average	
		point303	303	6,483,352.0	1,855,581.4	474.08				Average	
		point304	304	6,483,324.5	1,855,528.9	472.44				Average	
		point305	305	6,483,263.0	1,855,401.9	469.16				Average	
		point306	306	6,483,235.5	1,855,348.0	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,196.0	1,856,622.4	488.85				Average	
		point312	312	6,484,100.0	1,856,499.4	492.13				Average	
		point313	313	6,484,061.0	1,856,451.8	493.77				Average	
		point314	314	6,483,972.5	1,856,340.4	497.05				Average	
		point315	315	6,483,876.5	1,856,229.1	500.33				Average	
		point316	316	6,483,728.0	1,856,056.9	497.05				Average	
		point317	317	6,483,626.0	1,855,937.5	493.77				Average	
		point318	318	6,483,492.5	1,855,792.4	490.49					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,228.0	1,856,633.5	488.85				Average	
		point320	320	6,484,123.0	1,856,504.5	492.13				Average	
		point321	321	6,483,937.0	1,856,279.5	498.69				Average	
		point322	322	6,483,799.0	1,856,120.6	501.97				Average	
		point323	323	6,483,641.5	1,855,936.6	505.25				Average	
		point324	324	6,483,490.5	1,855,764.4	506.89					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,241.5	1,856,636.4	488.85				Average	
		point326	326	6,484,139.5	1,856,508.1	492.13				Average	
		point327	327	6,483,950.5	1,856,281.1	498.69				Average	
		point328	328	6,483,804.0	1,856,109.4	501.97				Average	
		point329	329	6,483,656.0	1,855,937.1	505.25				Average	
		point330	330	6,483,489.5	1,855,744.8	506.89					
Glendale Blvd SB - S of Alessandro--2	12.0	point331	331	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	
		point310	310	6,483,137.5	1,854,857.1	454.07					
SR 2 NB - 3	12.0	point332	332	6,483,463.0	1,855,677.5	477.69				Average	
		point333	333	6,483,611.5	1,855,852.4	485.56				Average	
		point334	334	6,483,675.0	1,855,925.2	490.49				Average	
		point335	335	6,483,744.5	1,856,002.9	495.41				Average	
		point336	336	6,483,804.5	1,856,076.1	498.69				Average	
		point337	337	6,483,856.5	1,856,132.9	500.33				Average	

		point338	338	6,483,912.5	1,856,198.8	500.33				Average	
		point339	339	6,484,061.5	1,856,370.4	495.41				Average	
		point340	340	6,484,162.5	1,856,482.4	493.77				Average	
		point341	341	6,484,232.0	1,856,558.0	492.13				Average	
		point342	342	6,484,295.0	1,856,630.0	489.83					
Glendale Blvd NB -N of Alessandro -2-	12.0	point344	344	6,483,355.0	1,855,458.1	472.44				Average	
		point345	345	6,483,394.0	1,855,534.1	474.08				Average	
		point346	346	6,483,453.0	1,855,645.2	477.69					
Glendale Blvd NB -N of Alessandro - 2-	12.0	point347	347	6,483,453.0	1,855,645.2	477.69				Average	
		point348	348	6,483,461.0	1,855,657.2	477.69					
Glendale Blvd NB -N of Alessandro - 2-	12.0	point350	350	6,483,347.5	1,855,465.2	472.44				Average	
		point15	15	6,483,382.5	1,855,533.5	474.08				Average	
		point292	292	6,483,444.0	1,855,649.2	475.89				Average	
		point14	14	6,483,459.0	1,855,683.8	477.69					
Glendale Blvd NB -N of Alessandro - 3-	12.0	point351	351	6,483,340.5	1,855,476.6	472.44				Average	
		point27	27	6,483,384.5	1,855,563.1	474.41				Average	
		point26	26	6,483,425.5	1,855,647.9	478.02					
Glendale Blvd NB -N of Alessandro-2-2	12.0	point352	352	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,405.0	1,855,529.4	472.11				Average	
		point2	9	6,483,432.5	1,855,584.2	475.72				Average	
		point1	10	6,483,461.5	1,855,637.6	476.71					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions ST10

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	355	1263	35	32	35	0	0	17	30	15	35
	point9	2	1263	35	32	35	0	0	17	30	15	35
	point8	3	1263	35	32	35	0	0	17	30	15	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	356	1263	35	32	35	0	0	17	30	15	35
	point21	21	1263	35	32	35	0	0	17	30	15	35
	point20	20	1263	35	32	35	0	0	17	30	15	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point285	357	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35
	point40	40	383	35	10	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1114	65	12	65	20	60	4	60	0	0
	point97	97	1114	65	12	65	20	60	4	60	0	0
	point96	96	1114	65	12	65	20	60	4	60	0	0
	point95	95	1114	65	12	65	20	60	4	60	0	0
	point94	94	1114	65	12	65	20	60	4	60	0	0
	point93	93	1114	65	12	65	20	60	4	60	0	0
	point92	92	1114	65	12	65	20	60	4	60	0	0
	point91	91	1114	65	12	65	20	60	4	60	0	0
	point90	90	1114	65	12	65	20	60	4	60	0	0
	point89	89	1114	65	12	65	20	60	4	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	711	50	8	50	13	45	3	45	0	0
	point277	277	711	65	8	65	13	60	3	60	0	0
	point115	115	711	65	8	65	13	60	3	60	0	0
	point114	114	711	65	8	65	13	60	3	60	0	0
	point113	113	711	50	8	50	13	45	3	45	0	0
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	711	65	8	65	13	60	3	60	0	0
	point276	276	711	65	8	65	13	60	3	60	0	0
	point118	118	711	65	8	65	13	60	3	60	0	0
	point119	119	711	65	8	65	13	60	3	60	0	0
	point120	120	711	50	8	50	13	45	3	45	0	0
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	711	65	8	65	13	60	3	60	0	0
	point275	275	711	65	8	65	13	60	3	60	0	0
	point145	145	711	65	8	65	13	60	3	60	0	0
	point144	144	711	65	8	65	13	60	3	60	0	0
	point143	143	711	50	8	50	13	45	3	45	0	0
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	354	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	12	65	20	60	4	60	0	0

	point203	203	1114	65	12	65	20	60	4	60	0	0
	point202	202	1114	65	12	65	20	60	4	60	0	0
	point201	201	1114	65	12	65	20	60	4	60	0	0
	point279	279	1114	65	12	65	20	60	4	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	353	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	383	35	10	35	0	0	5	30	4	35

	point349	349	383	35	10	35	0	0	5	30	4	35
	point25	25										
Glendale Blvd SB - N of Alessandro	point235	235	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point28	28										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point16	16										
Glendale Blvd NB -N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6	1285	35	32	35	0	0	18	30	15	35
	point4	7										
SR 2 NB - 2-2	point243	243	1114	65	12	65	20	60	4	60	0	0
	point87	87	1114	65	12	65	20	60	4	60	0	0
	point86	86	1114	65	12	65	20	60	4	60	0	0
	point278	278	1114	65	12	65	20	60	4	60	0	0
	point85	85										
SR2 NB	point84	84	1114	65	12	65	20	60	4	60	0	0
	point83	83	1114	65	12	65	20	60	4	60	0	0

	point82	82	1114	65	12	65	20	60	4	60	0	0
	point81	81	1114	65	12	65	20	60	4	60	0	0
	point80	80	1114	65	12	65	20	60	4	60	0	0
	point79	79	1114	65	12	65	20	60	4	60	0	0
	point78	78	1114	65	12	65	20	60	4	60	0	0
	point77	77	1114	65	12	65	20	60	4	60	0	0
	point76	76	1114	65	12	65	20	60	4	60	0	0
	point75	75	1114	65	12	65	20	60	4	60	0	0
	point74	74	1114	65	12	65	20	60	4	60	0	0
	point73	73	1114	65	12	65	20	60	4	60	0	0
	point72	72	1114	65	12	65	20	60	4	60	0	0
	point71	71	1114	65	12	65	20	60	4	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	878	35	22	35	0	0	12	30	10	35
	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	359	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	358	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	292	35	7	35	0	0	4	30	3	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	292	35	7	35	0	0	4	30	3	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	843	35	21	35	0	0	12	30	10	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	292	35	7	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	292	35	7	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB -N of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	878	35	22	35	0	0	12	30	10	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	878	35	22	35	0	0	12	30	10	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	711	50	8	50	13	45	3	45	0	0
	point312	312	711	35	8	35	13	30	3	30	0	0
	point313	313	711	35	8	35	13	30	3	30	0	0

	point314	314	711	35	8	35	13	30	3	30	0	0
	point315	315	711	35	8	35	13	30	3	30	0	0
	point316	316	711	35	8	35	13	30	3	30	0	0
	point317	317	711	35	8	35	13	30	3	30	0	0
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	711	50	8	50	13	45	3	45	0	0
	point320	320	711	35	8	35	13	30	3	30	0	0
	point321	321	711	35	8	35	13	30	3	30	0	0
	point322	322	711	35	8	35	13	30	3	30	0	0
	point323	323	711	35	8	35	13	30	3	30	0	0
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	711	50	8	50	13	45	3	45	0	0
	point326	326	711	35	8	35	13	30	3	30	0	0
	point327	327	711	35	8	35	13	30	3	30	0	0
	point328	328	711	35	8	35	13	30	3	30	0	0
	point329	329	711	35	8	35	13	30	3	30	0	0
	point330	330										
Glendale Blvd SB - S of Alessandro--2	point331	331	878	35	22	35	0	0	12	30	10	35
	point308	308	878	35	22	35	0	0	12	30	10	35
	point309	309	878	35	22	35	0	0	12	30	10	35
	point310	310										
SR 2 NB - 3	point332	332	1114	65	12	65	20	60	4	60	0	0
	point333	333	1114	65	12	65	20	60	4	60	0	0
	point334	334	1114	65	12	65	20	60	4	60	0	0
	point335	335	1114	65	12	65	20	60	4	60	0	0
	point336	336	1114	65	12	65	20	60	4	60	0	0
	point337	337	1114	65	12	65	20	60	4	60	0	0
	point338	338	1114	65	12	65	20	60	4	60	0	0
	point339	339	1114	65	12	65	20	60	4	60	0	0
	point340	340	1114	65	12	65	20	60	4	60	0	0
	point341	341	1114	65	12	65	20	60	4	60	0	0
	point342	342										
Glendale Blvd NB -N of Alessandro -2-	point344	344	964	35	24	35	0	0	13	30	11	35
	point345	345	964	35	24	35	0	0	13	30	11	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point346	346										
Glendale Blvd NB -N of Alessandro - 2-	point347	347	964	35	24	35	0	0	13	30	11	35
	point348	348										
Glendale Blvd NB -N of Alessandro - 2-	point350	350	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	964	35	24	35	0	0	13	30	11	35
	point14	14										
Glendale Blvd NB -N of Alessandro - 3-	point351	351	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										
Glendale Blvd NB -N of Alessandro-2-2	point352	352	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35
	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions ST10

Receiver							Input Sound Levels and Criteria				
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Existing	Impact Criteria		NR	Active in Calc.
			X	Y	Z		LAeq1h	LAeq1h	Sub'l	Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST-10	49	1	6,483,278.0	1,854,984.0	485.00	4.92	0.00	66	10.0	8.0	Y

Jones & Stokes 13 December 2007
M Greene TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions ST10

Barrier Name	Type	Height Min	Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	Top Width	Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Perturbs Incre-ment	#Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		

									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	126	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier5	W	0.00	100.00	0.00				0.00	point28	28	6,484,006.5	1,856,432.1	490.49	0.00	0.00	0	0		
									point29	29	6,483,879.0	1,856,298.0	498.69	0.00	0.00	0	0		
									point30	30	6,483,673.0	1,856,071.0	503.61	0.00	0.00	0	0		
									point118	118	6,483,615.0	1,856,004.8	503.61	0.00	0.00	0	0		
									point119	119	6,483,500.0	1,855,895.5	505.25	0.00	0.00	0	0		
									point120	120	6,483,495.0	1,855,914.1	503.61	0.00	0.00	0	0	Y	
									point121	121	6,483,410.5	1,855,838.9	505.91	0.00	0.00	0	0	Y	
									point122	122	6,483,326.0	1,855,763.6	504.59	0.00	0.00	0	0		
									point123	123	6,483,329.5	1,855,725.1	504.59	0.00	0.00	0	0		
									point124	124	6,483,294.0	1,855,689.0	0.00	0.00	0.00	0	0		
									point125	125	6,483,235.5	1,855,623.8	500.33	0.00					
Barrier18	W	0.00	99.99	0.00				0.00	point122	127	6,483,298.5	1,855,167.1	468.00	11.00	0.00	0	0		
									point123	129	6,483,249.0	1,855,176.5	465.00	11.00	0.00	0	0		
									point124	128	6,483,205.0	1,854,904.4	465.00	11.00					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt B PM Conditions ST10
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST-10	49	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions M-13 Mitigated

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	356	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,249.0	1,855,217.1	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	357	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.5	1,855,212.6	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	358	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.5	1,855,214.9	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,351.0	1,855,975.2	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,463.0	1,855,659.8	477.69				Average	

		point97	97	6,483,611.5	1,855,834.6	485.56				Average	
		point96	96	6,483,675.0	1,855,907.4	490.49				Average	
		point95	95	6,483,744.5	1,855,985.4	495.41				Average	
		point94	94	6,483,804.5	1,856,058.2	498.69				Average	
		point93	93	6,483,856.5	1,856,115.1	500.33				Average	
		point92	92	6,483,912.5	1,856,181.0	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,619.0	1,857,125.6	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,324.5	1,856,740.6	485.56				Average	
		point112	112	6,484,237.0	1,856,629.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,619.0	1,857,143.0	475.72				Average	
		point118	118	6,484,518.0	1,857,008.8	479.00				Average	
		point119	119	6,484,414.5	1,856,873.2	482.28				Average	
		point120	120	6,484,306.0	1,856,737.2	485.56				Average	
		point121	121	6,484,222.5	1,856,630.8	488.85					
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,601.0	1,857,167.4	475.72				Average	
		point145	145	6,484,486.5	1,856,999.5	479.00				Average	
		point144	144	6,484,382.5	1,856,860.4	482.28				Average	
		point143	143	6,484,282.0	1,856,732.2	485.56				Average	
		point142	142	6,484,199.0	1,856,625.9	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	355	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,641.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	354	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,459.0	1,855,683.9	477.69				Average	
		point13	13	6,483,463.0	1,855,775.4	480.31				Average	
		point251	251	6,483,459.5	1,855,802.6	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,425.5	1,855,649.9	478.02				Average	
		point331	331	6,483,443.5	1,855,700.0	479.17				Average	
		point25	25	6,483,448.5	1,855,751.8	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point235	235	6,483,419.5	1,855,676.2	478.67				Average	
		point295	295	6,483,385.0	1,855,630.9	476.38				Average	
		point53	53	6,483,348.5	1,855,575.5	474.08				Average	
		point52	52	6,483,325.0	1,855,535.9	472.44				Average	
		point51	51	6,483,257.0	1,855,397.5	469.16				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,198.5	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,383.5	1,855,675.5	478.35				Average	
		point62	62	6,483,322.0	1,855,572.9	473.75				Average	
		point61	61	6,483,269.0	1,855,481.5	472.44				Average	
		point60	60	6,483,219.5	1,855,367.9	469.16				Average	
		point59	59	6,483,206.0	1,855,326.1	467.52				Average	
		point58	58	6,483,178.0	1,855,225.5	464.57					

Glendale Blvd NB- N of Alessandro - 3-2	12.0	point237	237	6,483,224.5	1,855,220.2	465.22				Average	
		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point28	28	6,483,340.5	1,855,476.6	472.44					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point16	16	6,483,347.5	1,855,465.2	472.44					
Glendale Blvd NB - N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,276.5	1,855,286.4	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36				Average	
		point83	83	6,483,527.5	1,855,717.1	479.00				Average	
		point82	82	6,483,580.5	1,855,779.8	482.28				Average	
		point81	81	6,483,641.5	1,855,850.4	487.20				Average	
		point80	80	6,483,685.0	1,855,901.5	490.49				Average	
		point79	79	6,483,727.0	1,855,950.2	493.77				Average	
		point78	78	6,483,779.0	1,856,010.4	497.05				Average	
		point77	77	6,483,840.5	1,856,083.1	500.33				Average	
		point76	76	6,483,862.0	1,856,106.5	501.31				Average	
		point75	75	6,483,882.5	1,856,127.8	500.33				Average	
		point74	74	6,483,927.5	1,856,180.4	500.33				Average	
		point73	73	6,484,026.0	1,856,294.8	498.69				Average	
		point72	72	6,484,137.5	1,856,415.9	495.41				Average	
		point71	71	6,484,242.0	1,856,533.5	492.78				Average	
		point70	70	6,484,299.5	1,856,597.5	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,405.0	1,856,704.2	487.20				Average	
		point230	230	6,484,503.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point48	48	6,483,150.5	1,854,833.5	457.70				Average	

		point286	359	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	360	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,459.5	1,855,804.0	482.61				Average	
		point252	252	6,483,458.0	1,855,819.2	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,457.5	1,855,819.5	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,351.0	1,855,968.0	490.81				Average	
		point271	271	6,483,393.0	1,855,752.9	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77				Average	
		point267	267	6,483,416.5	1,855,775.8	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,419.5	1,855,759.6	482.61				Average	
		point55	55	6,483,424.5	1,855,730.9	480.31				Average	
		point54	54	6,483,420.0	1,855,677.8	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,416.5	1,855,775.8	484.25				Average	
		point268	268	6,483,419.5	1,855,760.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,394.0	1,855,751.2	483.92				Average	
		point272	272	6,483,396.5	1,855,737.4	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,399.0	1,855,720.4	480.31				Average	
		point63	63	6,483,384.0	1,855,675.2	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,447.5	1,855,752.6	480.31				Average	
		point286	286	6,483,444.0	1,855,786.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,444.0	1,855,787.9	481.57				Average	
		point287	287	6,483,442.5	1,855,802.2	482.83					
Glendale Blvd NB - S of Alessandro -	12.0	point289	289	6,483,442.0	1,855,803.6	482.83				Average	
		point282	282	6,483,438.5	1,855,835.9	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					
Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	

		point301	301	6,483,132.0	1,854,904.0	457.68					
Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,396.5	1,855,670.2	478.67				Average	
		point332	332	6,483,369.5	1,855,629.0	476.38				Average	
		point303	303	6,483,336.5	1,855,579.9	474.08				Average	
		point304	304	6,483,313.5	1,855,537.6	472.44				Average	
		point305	305	6,483,241.0	1,855,387.4	469.16				Average	
		point306	306	6,483,228.0	1,855,351.1	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,198.5	1,856,625.5	488.85				Average	
		point312	312	6,484,099.5	1,856,501.9	492.13				Average	
		point313	313	6,484,054.0	1,856,452.2	493.77				Average	
		point314	314	6,483,960.5	1,856,344.5	497.05				Average	
		point315	315	6,483,867.0	1,856,234.9	500.33				Average	
		point316	316	6,483,712.5	1,856,060.2	497.05				Average	
		point317	317	6,483,615.5	1,855,946.4	493.77				Average	
		point318	318	6,483,481.5	1,855,794.8	490.49					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,222.0	1,856,630.5	488.85				Average	
		point320	320	6,484,120.5	1,856,505.1	492.13				Average	
		point321	321	6,483,924.0	1,856,285.5	498.69				Average	
		point322	322	6,483,787.5	1,856,126.8	501.97				Average	
		point323	323	6,483,622.0	1,855,938.5	505.25				Average	
		point324	324	6,483,484.0	1,855,774.1	506.89					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,236.5	1,856,629.0	488.85				Average	
		point326	326	6,484,136.0	1,856,508.1	492.13				Average	
		point327	327	6,483,938.5	1,856,281.9	498.69				Average	
		point328	328	6,483,796.0	1,856,118.1	501.97				Average	
		point329	329	6,483,632.0	1,855,929.6	505.25				Average	
		point330	330	6,483,476.5	1,855,752.6	506.89					
Glendale Blvd SB - N of Alessandro-2 -	12.0	point335	335	6,483,359.5	1,855,972.0	493.77				Average	
		point334	334	6,483,411.5	1,855,725.1	480.31				Average	
		point333	333	6,483,397.0	1,855,669.9	478.67					
Glendale Blvd SB - S of Alessandro--2	12.0	point347	347	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	
		point310	310	6,483,137.5	1,854,857.1	454.07					
Glendale Blvd NB - N of Alessandro-2	12.0	point350	350	6,483,354.5	1,855,458.4	472.44				Average	
		point349	349	6,483,394.0	1,855,534.1	474.08				Average	
		point348	348	6,483,453.0	1,855,645.5	477.69					

INPUT: ROADWAYS <Project Name?>

Glendale Blvd NB- N of Alessandro - 3-2-2	12.0	point351	351	6,483,340.5	1,855,476.6	472.44				Average	
		point27	27	6,483,384.5	1,855,563.1	474.41				Average	
		point26	26	6,483,424.5	1,855,647.9	478.02					
Glendale Blvd NB -N of Alessandro - 2	12.0	point352	352	6,483,347.5	1,855,465.2	472.44				Average	
		point15	15	6,483,382.5	1,855,533.5	474.08				Average	
		point292	292	6,483,444.0	1,855,649.2	475.89				Average	
		point14	14	6,483,459.0	1,855,683.8	477.69					
Glendale Blvd NB - N of Alessandro-2-2	12.0	point353	353	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,405.0	1,855,529.4	472.11				Average	
		point2	9	6,483,432.5	1,855,584.2	475.72				Average	
		point1	10	6,483,461.5	1,855,637.6	476.71					

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Jones & Stokes 13 December 2007
M Greene TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions M-13 Mitigated

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	356	1263	35	32	35	0	0	17	30	15	35
	point9	2	1263	35	32	35	0	0	17	30	15	35
	point8	3	1263	35	32	35	0	0	17	30	15	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	357	1263	35	32	35	0	0	17	30	15	35
	point21	21	1263	35	32	35	0	0	17	30	15	35
	point20	20	1263	35	32	35	0	0	17	30	15	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point285	358	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35
	point40	40	383	35	10	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	1017	50	21	50	12	45	5	45	2	50
	point277	277	1017	65	21	65	12	60	5	60	2	65
	point115	115	1017	65	21	65	12	60	5	60	2	65
	point114	114	1017	65	21	65	12	60	5	60	2	65
	point113	113	1017	50	21	50	12	45	5	45	2	50
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	1017	65	21	65	12	60	5	60	2	65
	point276	276	1017	65	21	65	12	60	5	60	2	65
	point118	118	1017	65	21	65	12	60	5	60	2	65
	point119	119	1017	65	21	65	12	60	5	60	2	65
	point120	120	1017	50	21	50	12	45	5	45	2	50
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	1017	65	21	65	12	60	5	60	2	65
	point275	275	1017	65	21	65	12	60	5	60	2	65
	point145	145	1017	65	21	65	12	60	5	60	2	65
	point144	144	1017	65	21	65	12	60	5	60	2	65
	point143	143	1017	50	21	50	12	45	5	45	2	50
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	355	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	12	65	20	60	4	60	0	0

	point203	203	1114	65	12	65	20	60	4	60	0	0
	point202	202	1114	65	12	65	20	60	4	60	0	0
	point201	201	1114	65	12	65	20	60	4	60	0	0
	point279	279	1114	65	12	65	20	60	4	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	354	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	383	35	10	35	0	0	5	30	4	35

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

	point331	331	383	35	10	35	0	0	5	30	4	35
	point25	25										
Glendale Blvd SB - N of Alessandro	point235	235	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB- N of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point28	28										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point16	16										
Glendale Blvd NB - N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6	1285	35	32	35	0	0	18	30	15	35
	point4	7										
SR 2 NB - 2-2	point243	243	1114	65	12	65	20	60	4	60	0	0
	point87	87	1114	65	12	65	20	60	4	60	0	0
	point86	86	1114	65	12	65	20	60	4	60	0	0
	point278	278	1114	65	12	65	20	60	4	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0

	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0
	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	359	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	360	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	194	35	5	35	0	0	3	30	2	35
	point271	271										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB - N of Alessandro	point56	56	194	35	5	35	0	0	3	30	2	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	843	35	21	35	0	0	12	30	10	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	194	35	5	35	0	0	3	30	2	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	194	35	5	35	0	0	3	30	2	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB - S of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	878	35	22	35	0	0	12	30	10	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	878	35	22	35	0	0	12	30	10	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point332	332	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	1017	50	21	50	12	45	5	45	2	50
	point312	312	1017	35	21	35	12	30	5	30	2	35
	point313	313	1017	35	21	35	12	30	5	30	2	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point314	314	1017	35	21	35	12	30	5	30	2	35
	point315	315	1017	35	21	35	12	30	5	30	2	35
	point316	316	1017	35	21	35	12	30	5	30	2	35
	point317	317	1017	35	21	35	12	30	5	30	2	35
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	1017	50	21	50	12	45	5	45	2	50
	point320	320	1017	35	21	35	12	30	5	30	2	35
	point321	321	1017	35	21	35	12	30	5	30	2	35
	point322	322	1017	35	21	35	12	30	5	30	2	35
	point323	323	1017	35	21	35	12	30	5	30	2	35
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	1017	50	21	50	12	45	5	45	2	50
	point326	326	1017	35	21	35	12	30	5	30	2	35
	point327	327	1017	35	21	35	12	30	5	30	2	35
	point328	328	1017	35	21	35	12	30	5	30	2	35
	point329	329	1017	35	21	35	12	30	5	30	2	35
	point330	330										
Glendale Blvd SB - N of Alessandro-2 -	point335	335	194	35	5	35	0	0	3	30	2	35
	point334	334	843	35	21	35	0	0	12	30	10	35
	point333	333										
Glendale Blvd SB - S of Alessandro--2	point347	347	878	35	22	35	0	0	12	30	10	35
	point308	308	878	35	22	35	0	0	12	30	10	35
	point309	309	878	35	22	35	0	0	12	30	10	35
	point310	310										
Glendale Blvd NB - N of Alessandro-2	point350	350	964	35	24	35	0	0	13	30	11	35
	point349	349	964	35	24	35	0	0	13	30	11	35
	point348	348										
Glendale Blvd NB- N of Alessandro - 3-2-2	point351	351	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										
Glendale Blvd NB -N of Alessandro - 2	point352	352	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	383	35	10	35	0	0	5	30	4	35
	point14	14										

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

Glendale Blvd NB - N of Alessandro-2-2	point353	353	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35
	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions M-13 Mitigated

Receiver											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
M13 Classroom El	49	1	6,483,233.0	1,856,122.0	498.00	10.00	0.00	66	10.0	8.0	Y

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions M-13 Mitigated

Barrier Name	Type	Height Min	Height Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	If Berm Top Width	If Berm Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Coordinates (bottom) Y	Coordinates (bottom) Z	Height at Point	Segment Seg Ht Incre-ment	Segment Perturbs #Up	Segment Perturbs #Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point133	133	6,483,542.5	1,856,015.5	505.36	0.00	0.00	0	0		
									point134	134	6,483,483.0	1,855,964.4	505.47	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					

Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	140	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier18	W	0.00	100.00	0.00				0.00	point126	126	6,483,312.5	1,855,814.6	498.69	0.00	0.00	0	0		
									point127	127	6,483,316.5	1,855,765.0	503.61	0.00	0.00	0	0		
									point128	128	6,483,313.5	1,855,712.8	503.61	0.00	0.00	0	0		
									point129	129	6,483,294.0	1,855,689.0	501.97	0.00	0.00	0	0		
									point130	130	6,483,235.5	1,855,623.8	500.33	0.00					
Barrier4-2	W	0.00	100.00	0.00				0.00	point132	132	6,483,311.5	1,855,814.5	498.69	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier21	W	0.00	100.00	0.00				0.00	point136	136	6,483,615.0	1,856,004.8	501.97	0.00	0.00	0	0		
									point137	137	6,483,500.0	1,855,895.5	503.61	0.00	0.00	0	0		
									point138	138	6,483,495.0	1,855,914.1	505.25	0.00	0.00	0	0		
									point139	139	6,483,483.5	1,855,963.4	505.25	0.00					
SW at St Teresa School	W	0.00	99.99	0.00				0.00	point141	141	6,483,280.0	1,856,217.2	500.00	6.00	2.00	5	0		
									point142	142	6,483,331.0	1,856,016.1	492.00	6.00	2.00	5	0		
									point144	144	6,483,310.5	1,855,999.5	492.00	6.00	2.00	5	0		
									point143	143	6,483,248.5	1,856,034.1	493.00	6.00					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions M-13 Mitigated
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M13	41	1	0.0	63.4	66	63.4	10	----	60.0	3.4	8	-4.6
M13 Classroom El	49	1	0.0	63.2	66	63.2	10	----	61.5	1.7	8	-6.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.7	2.6	3.4
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	356	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,249.0	1,855,217.1	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	357	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.5	1,855,212.6	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	358	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.5	1,855,214.9	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,366.5	1,855,977.1	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,351.0	1,855,975.2	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,463.0	1,855,659.8	477.69				Average	

		point97	97	6,483,611.5	1,855,834.6	485.56				Average	
		point96	96	6,483,675.0	1,855,907.4	490.49				Average	
		point95	95	6,483,744.5	1,855,985.4	495.41				Average	
		point94	94	6,483,804.5	1,856,058.2	498.69				Average	
		point93	93	6,483,856.5	1,856,115.1	500.33				Average	
		point92	92	6,483,912.5	1,856,181.0	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,619.0	1,857,125.6	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,437.0	1,856,882.0	482.28				Average	
		point113	113	6,484,324.5	1,856,740.6	485.56				Average	
		point112	112	6,484,237.0	1,856,629.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,619.0	1,857,143.0	475.72				Average	
		point118	118	6,484,518.0	1,857,008.8	479.00				Average	
		point119	119	6,484,414.5	1,856,873.2	482.28				Average	
		point120	120	6,484,306.0	1,856,737.2	485.56				Average	
		point121	121	6,484,222.5	1,856,630.8	488.85					
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,601.0	1,857,167.4	475.72				Average	
		point145	145	6,484,486.5	1,856,999.5	479.00				Average	
		point144	144	6,484,382.5	1,856,860.4	482.28				Average	
		point143	143	6,484,282.0	1,856,732.2	485.56				Average	
		point142	142	6,484,199.0	1,856,625.9	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	355	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,641.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	354	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,459.0	1,855,683.9	477.69				Average	
		point13	13	6,483,463.0	1,855,775.4	480.31				Average	
		point251	251	6,483,459.5	1,855,802.6	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,425.5	1,855,649.9	478.02				Average	
		point331	331	6,483,443.5	1,855,700.0	479.17				Average	
		point25	25	6,483,448.5	1,855,751.8	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point235	235	6,483,419.5	1,855,676.2	478.67				Average	
		point295	295	6,483,385.0	1,855,630.9	476.38				Average	
		point53	53	6,483,348.5	1,855,575.5	474.08				Average	
		point52	52	6,483,325.0	1,855,535.9	472.44				Average	
		point51	51	6,483,257.0	1,855,397.5	469.16				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,198.5	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,383.5	1,855,675.5	478.35				Average	
		point62	62	6,483,322.0	1,855,572.9	473.75				Average	
		point61	61	6,483,269.0	1,855,481.5	472.44				Average	
		point60	60	6,483,219.5	1,855,367.9	469.16				Average	
		point59	59	6,483,206.0	1,855,326.1	467.52				Average	
		point58	58	6,483,178.0	1,855,225.5	464.57					

Glendale Blvd NB- N of Alessandro - 3-2	12.0	point237	237	6,483,224.5	1,855,220.2	465.22				Average	
		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point28	28	6,483,340.5	1,855,476.6	472.44					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point16	16	6,483,347.5	1,855,465.2	472.44					
Glendale Blvd NB - N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,276.5	1,855,286.4	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,464.0	1,855,640.1	477.36				Average	
		point83	83	6,483,527.5	1,855,717.1	479.00				Average	
		point82	82	6,483,580.5	1,855,779.8	482.28				Average	
		point81	81	6,483,641.5	1,855,850.4	487.20				Average	
		point80	80	6,483,685.0	1,855,901.5	490.49				Average	
		point79	79	6,483,727.0	1,855,950.2	493.77				Average	
		point78	78	6,483,779.0	1,856,010.4	497.05				Average	
		point77	77	6,483,840.5	1,856,083.1	500.33				Average	
		point76	76	6,483,862.0	1,856,106.5	501.31				Average	
		point75	75	6,483,882.5	1,856,127.8	500.33				Average	
		point74	74	6,483,927.5	1,856,180.4	500.33				Average	
		point73	73	6,484,026.0	1,856,294.8	498.69				Average	
		point72	72	6,484,137.5	1,856,415.9	495.41				Average	
		point71	71	6,484,242.0	1,856,533.5	492.78				Average	
		point70	70	6,484,299.5	1,856,597.5	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,405.0	1,856,704.2	487.20				Average	
		point230	230	6,484,503.0	1,856,830.1	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point48	48	6,483,150.5	1,854,833.5	457.70				Average	

		point286	359	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	360	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,459.5	1,855,804.0	482.61				Average	
		point252	252	6,483,458.0	1,855,819.2	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,457.5	1,855,819.5	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,351.0	1,855,968.0	490.81				Average	
		point271	271	6,483,393.0	1,855,752.9	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,369.0	1,855,970.2	493.77				Average	
		point267	267	6,483,416.5	1,855,775.8	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,419.5	1,855,759.6	482.61				Average	
		point55	55	6,483,424.5	1,855,730.9	480.31				Average	
		point54	54	6,483,420.0	1,855,677.8	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,416.5	1,855,775.8	484.25				Average	
		point268	268	6,483,419.5	1,855,760.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,394.0	1,855,751.2	483.92				Average	
		point272	272	6,483,396.5	1,855,737.4	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,399.0	1,855,720.4	480.31				Average	
		point63	63	6,483,384.0	1,855,675.2	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,447.5	1,855,752.6	480.31				Average	
		point286	286	6,483,444.0	1,855,786.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,444.0	1,855,787.9	481.57				Average	
		point287	287	6,483,442.5	1,855,802.2	482.83					
Glendale Blvd NB - S of Alessandro -	12.0	point289	289	6,483,442.0	1,855,803.6	482.83				Average	
		point282	282	6,483,438.5	1,855,835.9	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					
Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	

		point301	301	6,483,132.0	1,854,904.0	457.68					
Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,396.5	1,855,670.2	478.67				Average	
		point332	332	6,483,369.5	1,855,629.0	476.38				Average	
		point303	303	6,483,336.5	1,855,579.9	474.08				Average	
		point304	304	6,483,313.5	1,855,537.6	472.44				Average	
		point305	305	6,483,241.0	1,855,387.4	469.16				Average	
		point306	306	6,483,228.0	1,855,351.1	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,198.5	1,856,625.5	488.85				Average	
		point312	312	6,484,099.5	1,856,501.9	492.13				Average	
		point313	313	6,484,054.0	1,856,452.2	493.77				Average	
		point314	314	6,483,960.5	1,856,344.5	497.05				Average	
		point315	315	6,483,867.0	1,856,234.9	500.33				Average	
		point316	316	6,483,712.5	1,856,060.2	497.05				Average	
		point317	317	6,483,615.5	1,855,946.4	493.77				Average	
		point318	318	6,483,481.5	1,855,794.8	490.49					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,222.0	1,856,630.5	488.85				Average	
		point320	320	6,484,120.5	1,856,505.1	492.13				Average	
		point321	321	6,483,924.0	1,856,285.5	498.69				Average	
		point322	322	6,483,787.5	1,856,126.8	501.97				Average	
		point323	323	6,483,622.0	1,855,938.5	505.25				Average	
		point324	324	6,483,484.0	1,855,774.1	506.89					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,236.5	1,856,629.0	488.85				Average	
		point326	326	6,484,136.0	1,856,508.1	492.13				Average	
		point327	327	6,483,938.5	1,856,281.9	498.69				Average	
		point328	328	6,483,796.0	1,856,118.1	501.97				Average	
		point329	329	6,483,632.0	1,855,929.6	505.25				Average	
		point330	330	6,483,476.5	1,855,752.6	506.89					
Glendale Blvd SB - N of Alessandro-2 -	12.0	point335	335	6,483,359.5	1,855,972.0	493.77				Average	
		point334	334	6,483,411.5	1,855,725.1	480.31				Average	
		point333	333	6,483,397.0	1,855,669.9	478.67					
Glendale Blvd SB - S of Alessandro--2	12.0	point347	347	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	
		point310	310	6,483,137.5	1,854,857.1	454.07					
Glendale Blvd NB - N of Alessandro-2	12.0	point350	350	6,483,354.5	1,855,458.4	472.44				Average	
		point349	349	6,483,394.0	1,855,534.1	474.08				Average	
		point348	348	6,483,453.0	1,855,645.5	477.69					

Glendale Blvd NB- N of Alessandro - 3-2-2	12.0	point351	351	6,483,340.5	1,855,476.6	472.44				Average	
		point27	27	6,483,384.5	1,855,563.1	474.41				Average	
		point26	26	6,483,424.5	1,855,647.9	478.02					
Glendale Blvd NB -N of Alessandro - 2	12.0	point352	352	6,483,347.5	1,855,465.2	472.44				Average	
		point15	15	6,483,382.5	1,855,533.5	474.08				Average	
		point292	292	6,483,444.0	1,855,649.2	475.89				Average	
		point14	14	6,483,459.0	1,855,683.8	477.69					
Glendale Blvd NB - N of Alessandro-2-2	12.0	point353	353	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,405.0	1,855,529.4	472.11				Average	
		point2	9	6,483,432.5	1,855,584.2	475.72				Average	
		point1	10	6,483,461.5	1,855,637.6	476.71					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	356	1263	35	32	35	0	0	17	30	15	35
	point9	2	1263	35	32	35	0	0	17	30	15	35
	point8	3	1263	35	32	35	0	0	17	30	15	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	357	1263	35	32	35	0	0	17	30	15	35
	point21	21	1263	35	32	35	0	0	17	30	15	35
	point20	20	1263	35	32	35	0	0	17	30	15	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point285	358	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35
	point40	40	383	35	10	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	1017	50	21	50	12	45	5	45	2	50
	point277	277	1017	65	21	65	12	60	5	60	2	65
	point115	115	1017	65	21	65	12	60	5	60	2	65
	point114	114	1017	65	21	65	12	60	5	60	2	65
	point113	113	1017	50	21	50	12	45	5	45	2	50
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	1017	65	21	65	12	60	5	60	2	65
	point276	276	1017	65	21	65	12	60	5	60	2	65
	point118	118	1017	65	21	65	12	60	5	60	2	65
	point119	119	1017	65	21	65	12	60	5	60	2	65
	point120	120	1017	50	21	50	12	45	5	45	2	50
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	1017	65	21	65	12	60	5	60	2	65
	point275	275	1017	65	21	65	12	60	5	60	2	65
	point145	145	1017	65	21	65	12	60	5	60	2	65
	point144	144	1017	65	21	65	12	60	5	60	2	65
	point143	143	1017	50	21	50	12	45	5	45	2	50
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

	point150	150											
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	355	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	12	65	20	60	4	60	0	0

	point203	203	1114	65	12	65	20	60	4	60	0	0
	point202	202	1114	65	12	65	20	60	4	60	0	0
	point201	201	1114	65	12	65	20	60	4	60	0	0
	point279	279	1114	65	12	65	20	60	4	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	354	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	383	35	10	35	0	0	5	30	4	35

	point331	331	383	35	10	35	0	0	5	30	4	35
	point25	25										
Glendale Blvd SB - N of Alessandro	point235	235	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB- N of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point28	28										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point16	16										
Glendale Blvd NB - N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6	1285	35	32	35	0	0	18	30	15	35
	point4	7										
SR 2 NB - 2-2	point243	243	1114	65	12	65	20	60	4	60	0	0
	point87	87	1114	65	12	65	20	60	4	60	0	0
	point86	86	1114	65	12	65	20	60	4	60	0	0
	point278	278	1114	65	12	65	20	60	4	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0

	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0
	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	12	65	20	60	4	60	0	0
	point242	242	1114	65	12	65	20	60	4	60	0	0
	point230	230	1114	65	12	65	20	60	4	60	0	0
	point281	280	1114	65	12	65	20	60	4	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	359	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	360	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	194	35	5	35	0	0	3	30	2	35
	point271	271										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd SB - N of Alessandro	point56	56	194	35	5	35	0	0	3	30	2	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	843	35	21	35	0	0	12	30	10	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	194	35	5	35	0	0	3	30	2	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	194	35	5	35	0	0	3	30	2	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB - S of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	878	35	22	35	0	0	12	30	10	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	878	35	22	35	0	0	12	30	10	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point332	332	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	1017	50	21	50	12	45	5	45	2	50
	point312	312	1017	35	21	35	12	30	5	30	2	35
	point313	313	1017	35	21	35	12	30	5	30	2	35

	point314	314	1017	35	21	35	12	30	5	30	2	35
	point315	315	1017	35	21	35	12	30	5	30	2	35
	point316	316	1017	35	21	35	12	30	5	30	2	35
	point317	317	1017	35	21	35	12	30	5	30	2	35
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	1017	50	21	50	12	45	5	45	2	50
	point320	320	1017	35	21	35	12	30	5	30	2	35
	point321	321	1017	35	21	35	12	30	5	30	2	35
	point322	322	1017	35	21	35	12	30	5	30	2	35
	point323	323	1017	35	21	35	12	30	5	30	2	35
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	1017	50	21	50	12	45	5	45	2	50
	point326	326	1017	35	21	35	12	30	5	30	2	35
	point327	327	1017	35	21	35	12	30	5	30	2	35
	point328	328	1017	35	21	35	12	30	5	30	2	35
	point329	329	1017	35	21	35	12	30	5	30	2	35
	point330	330										
Glendale Blvd SB - N of Alessandro-2 -	point335	335	194	35	5	35	0	0	3	30	2	35
	point334	334	843	35	21	35	0	0	12	30	10	35
	point333	333										
Glendale Blvd SB - S of Alessandro--2	point347	347	878	35	22	35	0	0	12	30	10	35
	point308	308	878	35	22	35	0	0	12	30	10	35
	point309	309	878	35	22	35	0	0	12	30	10	35
	point310	310										
Glendale Blvd NB - N of Alessandro-2	point350	350	964	35	24	35	0	0	13	30	11	35
	point349	349	964	35	24	35	0	0	13	30	11	35
	point348	348										
Glendale Blvd NB- N of Alessandro - 3-2-2	point351	351	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										
Glendale Blvd NB -N of Alessandro - 2	point352	352	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	383	35	10	35	0	0	5	30	4	35
	point14	14										

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

Glendale Blvd NB - N of Alessandro-2-2	point353	353	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35
	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										

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TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions

Receiver												
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST-10	49	1	6,483,278.0	1,854,984.0	485.00	4.92	0.00	66	10.0	8.0	Y

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13 December 2007
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions

Barrier									Points						Segment				
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Seg Ht Perturbs			On	Important
		Min	Max	$ per Unit Area	$ per Unit Vol.	Top Width	Run:Rise	$ per Unit Length			X	Y	Z	at Point	Incre-ment	#Up	#Dn	Struct?	Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point133	133	6,483,542.5	1,856,015.5	505.36	0.00	0.00	0	0		
									point134	134	6,483,483.0	1,855,964.4	505.47	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		
									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					

Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	140	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier18	W	0.00	100.00	0.00				0.00	point126	126	6,483,312.5	1,855,814.6	498.69	0.00	0.00	0	0		
									point127	127	6,483,316.5	1,855,765.0	503.61	0.00	0.00	0	0		
									point128	128	6,483,313.5	1,855,712.8	503.61	0.00	0.00	0	0		
									point129	129	6,483,294.0	1,855,689.0	501.97	0.00	0.00	0	0		
									point130	130	6,483,235.5	1,855,623.8	500.33	0.00					
Barrier4-2	W	0.00	100.00	0.00				0.00	point132	132	6,483,311.5	1,855,814.5	498.69	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier21	W	0.00	100.00	0.00				0.00	point136	136	6,483,615.0	1,856,004.8	501.97	0.00	0.00	0	0		
									point137	137	6,483,500.0	1,855,895.5	503.61	0.00	0.00	0	0		
									point138	138	6,483,495.0	1,855,914.1	505.25	0.00	0.00	0	0		
									point139	139	6,483,483.5	1,855,963.4	505.25	0.00					
Barrier22	W	0.00	99.99	0.00				0.00	point122	141	6,483,298.5	1,855,167.1	468.00	11.00	0.00	0	0		
									point123	142	6,483,249.0	1,855,176.5	465.00	11.00	0.00	0	0		
									point124	143	6,483,205.0	1,854,904.4	465.00	11.00					

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13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt C PM Conditions
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST-10	49	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

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13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions M-13 Mitigated

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	381	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,249.0	1,855,217.1	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	382	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.5	1,855,212.6	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	383	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.5	1,855,214.9	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,365.0	1,855,978.2	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,351.0	1,855,973.1	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,456.0	1,855,646.2	477.69				Average	

		point97	97	6,483,615.0	1,855,831.5	485.56				Average	
		point96	96	6,483,678.5	1,855,904.8	490.49				Average	
		point95	95	6,483,746.5	1,855,983.9	495.41				Average	
		point94	94	6,483,806.5	1,856,056.4	498.69				Average	
		point93	93	6,483,853.0	1,856,108.0	500.33				Average	
		point92	92	6,483,914.5	1,856,178.0	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,625.5	1,857,134.4	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,433.5	1,856,878.0	482.28				Average	
		point113	113	6,484,326.0	1,856,741.4	485.56				Average	
		point112	112	6,484,235.5	1,856,629.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,619.0	1,857,143.0	475.72				Average	
		point118	118	6,484,518.0	1,857,008.8	479.00				Average	
		point119	119	6,484,414.5	1,856,873.2	482.28				Average	
		point120	120	6,484,306.0	1,856,737.4	485.56				Average	
		point121	121	6,484,224.5	1,856,634.9	488.85					
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,607.0	1,857,157.4	475.72				Average	
		point145	145	6,484,495.5	1,857,003.9	479.00				Average	
		point144	144	6,484,387.0	1,856,862.9	482.28				Average	
		point143	143	6,484,281.5	1,856,730.9	485.56				Average	
		point142	142	6,484,199.0	1,856,625.1	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

INPUT: ROADWAYS <Project Name?>

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	380	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,641.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	379	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,460.5	1,855,694.5	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,460.5	1,855,802.0	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,425.5	1,855,650.1	478.02				Average	
		point342	342	6,483,446.5	1,855,702.8	479.17				Average	
		point25	25	6,483,453.0	1,855,753.9	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point344	344	6,483,409.0	1,855,642.4	477.53				Average	
		point295	295	6,483,388.5	1,855,612.1	476.38				Average	
		point53	53	6,483,356.5	1,855,560.1	474.08				Average	
		point52	52	6,483,325.5	1,855,503.1	472.44				Average	
		point51	51	6,483,264.0	1,855,379.4	469.16				Average	
		point343	343	6,483,236.0	1,855,323.2	468.34				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,198.5	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,391.0	1,855,674.5	478.35				Average	
		point62	62	6,483,336.0	1,855,565.8	473.75				Average	
		point61	61	6,483,294.0	1,855,497.8	472.44				Average	
		point60	60	6,483,232.0	1,855,375.1	469.16				Average	
		point59	59	6,483,208.5	1,855,325.9	467.52				Average	

		point58	58	6,483,177.5	1,855,222.6	464.57					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,224.5	1,855,220.2	465.22				Average	
		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point375	375	6,483,311.0	1,855,420.5	471.62					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point373	373	6,483,320.0	1,855,411.5	470.80					
Glendale Blvd NB -N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,276.5	1,855,286.4	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,467.5	1,855,637.9	477.36				Average	
		point83	83	6,483,531.5	1,855,713.5	479.00				Average	
		point82	82	6,483,584.0	1,855,775.9	482.28				Average	
		point81	81	6,483,645.5	1,855,846.9	487.20				Average	
		point80	80	6,483,690.0	1,855,897.8	490.49				Average	
		point79	79	6,483,730.5	1,855,947.5	493.77				Average	
		point78	78	6,483,782.0	1,856,008.6	497.05				Average	
		point77	77	6,483,842.5	1,856,078.5	500.33				Average	
		point76	76	6,483,865.0	1,856,104.4	501.31				Average	
		point75	75	6,483,884.5	1,856,125.8	500.33				Average	
		point74	74	6,483,929.5	1,856,176.9	500.33				Average	
		point73	73	6,484,024.0	1,856,290.8	498.69				Average	
		point72	72	6,484,138.0	1,856,414.4	495.41				Average	
		point71	71	6,484,242.0	1,856,530.6	492.78				Average	
		point70	70	6,484,300.0	1,856,596.6	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,502.0	1,856,829.2	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	

		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	384	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	385	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,460.5	1,855,804.0	482.61				Average	
		point252	252	6,483,459.0	1,855,819.8	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,459.0	1,855,820.6	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,349.5	1,855,968.8	490.81				Average	
		point271	271	6,483,393.5	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,363.5	1,855,969.9	493.77				Average	
		point267	267	6,483,404.0	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,407.0	1,855,752.4	482.61				Average	
		point55	55	6,483,411.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,404.0	1,855,766.0	484.25				Average	
		point268	268	6,483,406.5	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,393.5	1,855,752.4	483.92				Average	
		point272	272	6,483,396.0	1,855,738.5	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,399.0	1,855,719.8	480.31				Average	
		point63	63	6,483,390.5	1,855,675.2	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,453.0	1,855,754.1	480.31				Average	
		point286	286	6,483,448.0	1,855,789.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,448.5	1,855,789.4	481.57				Average	
		point287	287	6,483,447.0	1,855,803.5	482.83					
Glendale Blvd NB - S of Alessandro -	12.0	point289	289	6,483,447.0	1,855,804.4	482.83				Average	
		point282	282	6,483,441.0	1,855,836.6	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					

Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	
		point301	301	6,483,132.0	1,854,904.0	457.68					
Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,409.5	1,855,669.1	478.67				Average	
		point303	303	6,483,354.5	1,855,576.1	474.08				Average	
		point304	304	6,483,327.5	1,855,528.6	472.44				Average	
		point305	305	6,483,263.0	1,855,401.9	469.16				Average	
		point306	306	6,483,235.5	1,855,348.0	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,197.5	1,856,623.4	488.85				Average	
		point312	312	6,484,087.5	1,856,493.8	492.13				Average	
		point313	313	6,484,054.0	1,856,455.8	493.77				Average	
		point314	314	6,483,935.5	1,856,323.1	497.05				Average	
		point315	315	6,483,858.0	1,856,233.5	500.33				Average	
		point316	316	6,483,735.5	1,856,091.6	497.05				Average	
		point317	317	6,483,628.5	1,855,937.5	492.13				Average	
		point348	348	6,483,570.5	1,855,847.4	485.56				Average	
		point349	349	6,483,508.5	1,855,770.6	479.00				Average	
		point318	318	6,483,484.0	1,855,758.2	479.00					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,224.5	1,856,635.0	488.85				Average	
		point320	320	6,484,115.5	1,856,504.4	492.13				Average	
		point321	321	6,483,919.0	1,856,282.6	498.69				Average	
		point322	322	6,483,779.5	1,856,123.8	492.13				Average	
		point323	323	6,483,641.5	1,855,938.6	485.56				Average	
		point347	347	6,483,583.0	1,855,842.6	479.00				Average	
		point324	324	6,483,474.5	1,855,715.1	479.00					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,241.5	1,856,636.4	488.85				Average	
		point326	326	6,484,135.0	1,856,507.6	492.13				Average	
		point327	327	6,483,936.0	1,856,283.1	498.69				Average	
		point328	328	6,483,791.5	1,856,120.2	501.97				Average	
		point329	329	6,483,657.5	1,855,937.1	492.13				Average	
		point345	345	6,483,593.5	1,855,839.8	485.56				Average	
		point346	346	6,483,536.5	1,855,765.6	479.00				Average	
		point330	330	6,483,475.0	1,855,696.0	477.36					
Glendale Blvd SB - S of Alessandro--2	12.0	point368	368	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	
		point310	310	6,483,137.5	1,854,857.1	454.07					
Glendale Blvd NB - S of Alessandro - 3-	12.0	point371	371	6,483,332.0	1,855,414.9	470.80				Average	

		point370	370	6,483,394.0	1,855,534.1	474.08				Average		
		point369	369	6,483,453.0	1,855,645.5	477.69						
Glendale Blvd NB -N of Alessandro-2-2	12.0	point372	372	6,483,324.5	1,855,378.5	469.16				Average		
		point374	374	6,483,340.0	1,855,408.0	470.31						
Glendale Blvd NB -N of Alessandro-2-2-2	12.0	point376	376	6,483,340.0	1,855,408.0	470.31				Average		
		point4	7	6,483,356.0	1,855,437.4	471.46				Average		
		point3	8	6,483,405.0	1,855,529.4	472.11				Average		
		point2	9	6,483,432.5	1,855,584.2	475.72				Average		
		point1	10	6,483,462.5	1,855,635.0	476.71						
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point377	377	6,483,320.0	1,855,411.5	470.80				Average		
		point16	16	6,483,347.5	1,855,465.2	472.44				Average		
		point15	15	6,483,382.5	1,855,533.5	474.08				Average		
		point292	292	6,483,445.0	1,855,651.6	475.89				Average		
		point14	14	6,483,459.5	1,855,691.5	477.69						
Glendale Blvd NB - S of Alessandro - 3-2-2	12.0	point378	378	6,483,311.0	1,855,420.5	471.62				Average		
		point28	28	6,483,340.5	1,855,476.6	472.44				Average		
		point27	27	6,483,384.5	1,855,563.1	474.41				Average		
		point26	26	6,483,425.0	1,855,648.2	478.02						

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions M-13 Mitigated

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	381	1263	35	32	35	0	0	17	30	15	35
	point9	2	1263	35	32	35	0	0	17	30	15	35
	point8	3	1263	35	32	35	0	0	17	30	15	35
	point7	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	382	1263	35	32	35	0	0	17	30	15	35
	point21	21	1263	35	32	35	0	0	17	30	15	35
	point20	20	1263	35	32	35	0	0	17	30	15	35
	point19	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point285	383	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35
	point40	40	383	35	10	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	1017	65	21	65	12	60	5	60	2	65
	point277	277	1017	65	21	65	12	60	5	60	2	65
	point115	115	1017	65	21	65	12	60	5	60	2	65
	point114	114	1017	65	21	65	12	60	5	60	2	65
	point113	113	1017	50	21	50	12	45	5	45	2	50
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	1017	65	21	65	12	60	5	60	2	65
	point276	276	1017	65	21	65	12	60	5	60	2	65
	point118	118	1017	65	21	65	12	60	5	60	2	65
	point119	119	1017	65	21	65	12	60	5	60	2	65
	point120	120	80	50	80	50	72	45	72	45	80	50
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	1017	65	21	65	12	60	5	60	2	65
	point275	275	1017	65	21	65	12	60	5	60	2	65
	point145	145	1017	65	21	65	12	60	5	60	2	65
	point144	144	1017	65	21	65	12	60	5	60	2	65
	point143	143	1017	50	21	50	12	45	5	45	2	50
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

	point150	150											
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	380	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	18	65	30	60	6	60	0	0

	point203	203	1114	65	18	65	30	60	6	60	0	0
	point202	202	1114	65	18	65	30	60	6	60	0	0
	point201	201	1114	65	18	65	30	60	6	60	0	0
	point279	279	1114	65	18	65	30	60	6	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	379	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	964	35	24	35	0	0	13	30	11	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point342	342	383	35	10	35	0	0	5	30	4	35
	point25	25										
Glendale Blvd SB - N of Alessandro	point344	344	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point343	343	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point375	375										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point373	373										
Glendale Blvd NB -N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6										
SR 2 NB - 2-2	point243	243	1114	65	18	65	30	60	6	60	0	0
	point87	87	1114	65	18	65	30	60	6	60	0	0
	point86	86	1114	65	18	65	30	60	6	60	0	0
	point278	278	1114	65	18	65	30	60	6	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0

	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0
	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	18	65	30	60	6	60	0	0
	point242	242	1114	65	18	65	30	60	6	60	0	0
	point230	230	1114	65	18	65	30	60	6	60	0	0
	point281	280	1114	65	18	65	30	60	6	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	878	35	22	35	0	0	12	30	10	35
	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	384	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	385	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	292	35	7	35	0	0	4	30	3	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	292	35	7	35	0	0	4	30	3	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	292	35	7	35	0	0	4	30	3	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	292	35	7	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	292	35	7	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB - S of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	1330	35	34	35	0	0	18	30	16	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	1330	35	34	35	0	0	18	30	16	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	1017	35	21	35	12	30	5	30	2	35
	point312	312	1017	35	21	35	12	30	5	30	2	35
	point313	313	1017	35	21	35	12	30	5	30	2	35

	point314	314	1017	35	21	35	12	30	5	30	2	35
	point315	315	1017	35	21	35	12	30	5	30	2	35
	point316	316	1017	35	21	35	12	30	5	30	2	35
	point317	317	1017	35	21	35	12	30	5	30	2	35
	point348	348	1017	35	21	35	12	30	5	30	2	35
	point349	349	1017	35	21	35	12	30	5	30	2	35
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	1017	35	21	35	12	30	5	30	2	35
	point320	320	1017	35	21	35	12	30	5	30	2	35
	point321	321	1017	35	21	35	12	30	5	30	2	35
	point322	322	1017	35	21	35	12	30	5	30	2	35
	point323	323	1017	35	21	35	12	30	5	30	2	35
	point347	347	1017	35	21	35	12	30	5	30	2	35
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	1017	35	21	35	12	30	5	30	2	35
	point326	326	1017	35	21	35	12	30	5	30	2	35
	point327	327	1017	35	21	35	12	30	5	30	2	35
	point328	328	1017	35	21	35	12	30	5	30	2	35
	point329	329	1017	35	21	35	12	30	5	30	2	35
	point345	345	1017	35	21	35	12	30	5	30	2	35
	point346	346	1017	35	21	35	12	30	5	30	2	35
	point330	330										
Glendale Blvd SB - S of Alessandro--2	point368	368	1330	35	34	35	0	0	18	30	16	35
	point308	308	1330	35	34	35	0	0	18	30	16	35
	point309	309	1306	35	33	35	0	0	18	30	15	35
	point310	310										
Glendale Blvd NB - S of Alessandro - 3-	point371	371	964	35	24	35	0	0	13	30	11	35
	point370	370	964	35	24	35	0	0	13	30	11	35
	point369	369										
Glendale Blvd NB -N of Alessandro-2-2	point372	372	1285	35	32	35	0	0	18	30	15	35
	point374	374										
Glendale Blvd NB -N of Alessandro-2-2-2	point376	376	964	35	24	35	0	0	13	30	11	35
	point4	7	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										
Glendale Blvd NB - S of Alessandro - 2-2-2	point377	377	964	35	24	35	0	0	13	30	11	35
	point16	16	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	964	35	24	35	0	0	13	30	11	35
	point14	14										
Glendale Blvd NB - S of Alessandro - 3-2-2	point378	378	964	35	24	35	0	0	13	30	11	35
	point28	28	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions M-13 Mitigated

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
M13 Classroom El	49	1	6,483,233.0	1,856,122.0	498.00	10.00	0.00	66	10.0	8.0	Y

Jones & Stokes 13 December 2007
M Greene TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions M-13 Mitigated

Barrier Name	Type	Height Min	Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	Top Width	Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Perturbs Incre-ment	#Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		

									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	138	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier18	W	0.00	100.00	0.00				0.00	point126	126	6,483,293.0	1,855,687.4	501.97	0.00	0.00	0	0		
									point127	127	6,483,345.5	1,855,732.9	505.25	0.00	0.00	0	0	Y	
									point128	128	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0		
									point129	129	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point130	130	6,483,673.0	1,856,071.0	503.61	0.00					
Barrier19	W	0.00	99.99	0.00				0.00	point131	131	6,483,516.5	1,855,800.9	479.00	0.00	0.00	0	0		
									point132	132	6,483,621.0	1,855,953.1	493.77	0.00	0.00	0	0		
									point133	133	6,483,708.0	1,856,080.4	497.05	0.00	0.00	0	0		
									point134	134	6,483,845.0	1,856,245.9	500.33	0.00	0.00	0	0		
									point135	135	6,483,931.0	1,856,348.0	497.05	0.00	0.00	0	0		
									point136	136	6,484,016.0	1,856,443.1	493.77	0.00	0.00	0	0		
									point137	137	6,484,055.0	1,856,488.1	492.13	0.00					
SW at St Teresa School	W	0.00	99.99	0.00				0.00	point139	139	6,483,280.0	1,856,217.2	500.00	6.00	2.00	5	0		
									point140	140	6,483,331.0	1,856,016.1	492.00	6.00	2.00	5	0		

								point142	142	6,483,310.5	1,855,999.5	492.00	6.00	2.00	5	0		
								point141	141	6,483,248.5	1,856,034.1	493.00	6.00					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions M-13 Mitigated
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M13	41	1	0.0	63.5	66	63.5	10	----	59.9	3.6	8	-4.4
M13 Classroom El	49	1	0.0	63.3	66	63.3	10	----	61.6	1.7	8	-6.3

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	1.7	2.6	3.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions ST-10

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	381	6,483,141.0	1,854,568.8	451.80				Average	
		point9	2	6,483,183.0	1,854,824.1	456.00				Average	
		point8	3	6,483,238.5	1,855,181.5	464.20				Average	
		point7	4	6,483,249.0	1,855,217.1	464.90					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	382	6,483,131.5	1,854,567.5	452.10				Average	
		point21	21	6,483,172.0	1,854,834.5	457.70				Average	
		point20	20	6,483,229.0	1,855,182.5	464.90				Average	
		point19	19	6,483,239.5	1,855,212.6	465.20					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point285	383	6,483,121.0	1,854,567.6	452.10				Average	
		point33	33	6,483,163.0	1,854,835.1	457.70				Average	
		point32	32	6,483,221.5	1,855,183.4	464.60				Average	
		point31	31	6,483,231.5	1,855,214.9	465.20					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,365.0	1,855,978.2	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,351.0	1,855,973.1	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,456.0	1,855,646.2	477.69				Average	

		point97	97	6,483,615.0	1,855,831.5	485.56				Average	
		point96	96	6,483,678.5	1,855,904.8	490.49				Average	
		point95	95	6,483,746.5	1,855,983.9	495.41				Average	
		point94	94	6,483,806.5	1,856,056.4	498.69				Average	
		point93	93	6,483,853.0	1,856,108.0	500.33				Average	
		point92	92	6,483,914.5	1,856,178.0	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,625.5	1,857,134.4	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,433.5	1,856,878.0	482.28				Average	
		point113	113	6,484,326.0	1,856,741.4	485.56				Average	
		point112	112	6,484,235.5	1,856,629.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,619.0	1,857,143.0	475.72				Average	
		point118	118	6,484,518.0	1,857,008.8	479.00				Average	
		point119	119	6,484,414.5	1,856,873.2	482.28				Average	
		point120	120	6,484,306.0	1,856,737.4	485.56				Average	
		point121	121	6,484,224.5	1,856,634.9	488.85					
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,607.0	1,857,157.4	475.72				Average	
		point145	145	6,484,495.5	1,857,003.9	479.00				Average	
		point144	144	6,484,387.0	1,856,862.9	482.28				Average	
		point143	143	6,484,281.5	1,856,730.9	485.56				Average	
		point142	142	6,484,199.0	1,856,625.1	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					

Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	380	6,484,769.5	1,857,081.8	469.20				Average	
		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,641.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	

		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	
		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	379	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,460.5	1,855,694.5	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,460.5	1,855,802.0	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,425.5	1,855,650.1	478.02				Average	
		point342	342	6,483,446.5	1,855,702.8	479.17				Average	
		point25	25	6,483,453.0	1,855,753.9	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point344	344	6,483,409.0	1,855,642.4	477.53				Average	
		point295	295	6,483,388.5	1,855,612.1	476.38				Average	
		point53	53	6,483,356.5	1,855,560.1	474.08				Average	
		point52	52	6,483,325.5	1,855,503.1	472.44				Average	
		point51	51	6,483,264.0	1,855,379.4	469.16				Average	
		point343	343	6,483,236.0	1,855,323.2	468.34				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,198.5	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,391.0	1,855,674.5	478.35				Average	
		point62	62	6,483,336.0	1,855,565.8	473.75				Average	
		point61	61	6,483,294.0	1,855,497.8	472.44				Average	
		point60	60	6,483,232.0	1,855,375.1	469.16				Average	
		point59	59	6,483,208.5	1,855,325.9	467.52				Average	

		point58	58	6,483,177.5	1,855,222.6	464.57					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,224.5	1,855,220.2	465.22				Average	
		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point375	375	6,483,311.0	1,855,420.5	471.62					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point373	373	6,483,320.0	1,855,411.5	470.80					
Glendale Blvd NB -N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,276.5	1,855,286.4	466.54				Average	
		point5	6	6,483,324.5	1,855,378.5	469.16					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,467.5	1,855,637.9	477.36				Average	
		point83	83	6,483,531.5	1,855,713.5	479.00				Average	
		point82	82	6,483,584.0	1,855,775.9	482.28				Average	
		point81	81	6,483,645.5	1,855,846.9	487.20				Average	
		point80	80	6,483,690.0	1,855,897.8	490.49				Average	
		point79	79	6,483,730.5	1,855,947.5	493.77				Average	
		point78	78	6,483,782.0	1,856,008.6	497.05				Average	
		point77	77	6,483,842.5	1,856,078.5	500.33				Average	
		point76	76	6,483,865.0	1,856,104.4	501.31				Average	
		point75	75	6,483,884.5	1,856,125.8	500.33				Average	
		point74	74	6,483,929.5	1,856,176.9	500.33				Average	
		point73	73	6,484,024.0	1,856,290.8	498.69				Average	
		point72	72	6,484,138.0	1,856,414.4	495.41				Average	
		point71	71	6,484,242.0	1,856,530.6	492.78				Average	
		point70	70	6,484,300.0	1,856,596.6	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,502.0	1,856,829.2	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	

		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	384	6,483,108.0	1,854,579.8	452.10				Average	
		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	385	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,460.5	1,855,804.0	482.61				Average	
		point252	252	6,483,459.0	1,855,819.8	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,459.0	1,855,820.6	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,349.5	1,855,968.8	490.81				Average	
		point271	271	6,483,393.5	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,363.5	1,855,969.9	493.77				Average	
		point267	267	6,483,404.0	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,407.0	1,855,752.4	482.61				Average	
		point55	55	6,483,411.0	1,855,732.9	480.31				Average	
		point54	54	6,483,409.5	1,855,669.1	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,404.0	1,855,766.0	484.25				Average	
		point268	268	6,483,406.5	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,393.5	1,855,752.4	483.92				Average	
		point272	272	6,483,396.0	1,855,738.5	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,399.0	1,855,719.8	480.31				Average	
		point63	63	6,483,390.5	1,855,675.2	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,453.0	1,855,754.1	480.31				Average	
		point286	286	6,483,448.0	1,855,789.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,448.5	1,855,789.4	481.57				Average	
		point287	287	6,483,447.0	1,855,803.5	482.83					
Glendale Blvd NB - S of Alessandro -	12.0	point289	289	6,483,447.0	1,855,804.4	482.83				Average	
		point282	282	6,483,441.0	1,855,836.6	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					

Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	
		point301	301	6,483,132.0	1,854,904.0	457.68					
Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,409.5	1,855,669.1	478.67				Average	
		point303	303	6,483,354.5	1,855,576.1	474.08				Average	
		point304	304	6,483,327.5	1,855,528.6	472.44				Average	
		point305	305	6,483,263.0	1,855,401.9	469.16				Average	
		point306	306	6,483,235.5	1,855,348.0	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,197.5	1,856,623.4	488.85				Average	
		point312	312	6,484,087.5	1,856,493.8	492.13				Average	
		point313	313	6,484,054.0	1,856,455.8	493.77				Average	
		point314	314	6,483,935.5	1,856,323.1	497.05				Average	
		point315	315	6,483,858.0	1,856,233.5	500.33				Average	
		point316	316	6,483,735.5	1,856,091.6	497.05				Average	
		point317	317	6,483,628.5	1,855,937.5	492.13				Average	
		point348	348	6,483,570.5	1,855,847.4	485.56				Average	
		point349	349	6,483,508.5	1,855,770.6	479.00				Average	
		point318	318	6,483,484.0	1,855,758.2	479.00					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,224.5	1,856,635.0	488.85				Average	
		point320	320	6,484,115.5	1,856,504.4	492.13				Average	
		point321	321	6,483,919.0	1,856,282.6	498.69				Average	
		point322	322	6,483,779.5	1,856,123.8	492.13				Average	
		point323	323	6,483,641.5	1,855,938.6	485.56				Average	
		point347	347	6,483,583.0	1,855,842.6	479.00				Average	
		point324	324	6,483,474.5	1,855,715.1	479.00					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,241.5	1,856,636.4	488.85				Average	
		point326	326	6,484,135.0	1,856,507.6	492.13				Average	
		point327	327	6,483,936.0	1,856,283.1	498.69				Average	
		point328	328	6,483,791.5	1,856,120.2	501.97				Average	
		point329	329	6,483,657.5	1,855,937.1	492.13				Average	
		point345	345	6,483,593.5	1,855,839.8	485.56				Average	
		point346	346	6,483,536.5	1,855,765.6	479.00				Average	
		point330	330	6,483,475.0	1,855,696.0	477.36					
Glendale Blvd SB - S of Alessandro--2	12.0	point368	368	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	
		point310	310	6,483,137.5	1,854,857.1	454.07					
Glendale Blvd NB - S of Alessandro - 3-	12.0	point371	371	6,483,332.0	1,855,414.9	470.80				Average	

		point370	370	6,483,394.0	1,855,534.1	474.08				Average	
		point369	369	6,483,453.0	1,855,645.5	477.69					
Glendale Blvd NB -N of Alessandro-2-2	12.0	point372	372	6,483,324.5	1,855,378.5	469.16				Average	
		point374	374	6,483,340.0	1,855,408.0	470.31					
Glendale Blvd NB -N of Alessandro-2-2-2	12.0	point376	376	6,483,340.0	1,855,408.0	470.31				Average	
		point4	7	6,483,356.0	1,855,437.4	471.46				Average	
		point3	8	6,483,405.0	1,855,529.4	472.11				Average	
		point2	9	6,483,432.5	1,855,584.2	475.72				Average	
		point1	10	6,483,462.5	1,855,635.0	476.71					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point377	377	6,483,320.0	1,855,411.5	470.80				Average	
		point16	16	6,483,347.5	1,855,465.2	472.44				Average	
		point15	15	6,483,382.5	1,855,533.5	474.08				Average	
		point292	292	6,483,445.0	1,855,651.6	475.89				Average	
		point14	14	6,483,459.5	1,855,691.5	477.69					
Glendale Blvd NB - S of Alessandro - 3-2-2	12.0	point378	378	6,483,311.0	1,855,420.5	471.62				Average	
		point28	28	6,483,340.5	1,855,476.6	472.44				Average	
		point27	27	6,483,384.5	1,855,563.1	474.41				Average	
		point26	26	6,483,425.0	1,855,648.2	478.02					

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Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions ST-10

Roadway	Points												
Name	Name	No.	Segment										
			Autos		MTrucks		HTrucks		Buses		Motorcycles		
			V	S	V	S	V	S	V	S	V	S	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35	
	point283	381	1263	35	32	35	0	0	17	30	15	35	
	point9	2	1263	35	32	35	0	0	17	30	15	35	
	point8	3	1263	35	32	35	0	0	17	30	15	35	
	point7	4											
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35	
	point284	382	1263	35	32	35	0	0	17	30	15	35	
	point21	21	1263	35	32	35	0	0	17	30	15	35	
	point20	20	1263	35	32	35	0	0	17	30	15	35	
	point19	19											
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35	
	point285	383	1263	35	32	35	0	0	17	30	15	35	
	point33	33	1263	35	32	35	0	0	17	30	15	35	
	point32	32	1263	35	32	35	0	0	17	30	15	35	
	point31	31											
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35	
	point40	40	383	35	10	35	0	0	5	30	4	35	
	point39	39											
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35	
	point43	43											
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35	
	point45	45											

Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	1017	65	21	65	12	60	5	60	2	65
	point277	277	1017	65	21	65	12	60	5	60	2	65
	point115	115	1017	65	21	65	12	60	5	60	2	65
	point114	114	1017	65	21	65	12	60	5	60	2	65
	point113	113	1017	50	21	50	12	45	5	45	2	50
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	1017	65	21	65	12	60	5	60	2	65
	point276	276	1017	65	21	65	12	60	5	60	2	65
	point118	118	1017	65	21	65	12	60	5	60	2	65
	point119	119	1017	65	21	65	12	60	5	60	2	65
	point120	120	80	50	80	50	72	45	72	45	80	50
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	1017	65	21	65	12	60	5	60	2	65
	point275	275	1017	65	21	65	12	60	5	60	2	65
	point145	145	1017	65	21	65	12	60	5	60	2	65
	point144	144	1017	65	21	65	12	60	5	60	2	65
	point143	143	1017	50	21	50	12	45	5	45	2	50
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0
	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	380	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	18	65	30	60	6	60	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

	point203	203	1114	65	18	65	30	60	6	60	0	0
	point202	202	1114	65	18	65	30	60	6	60	0	0
	point201	201	1114	65	18	65	30	60	6	60	0	0
	point279	279	1114	65	18	65	30	60	6	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	379	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	964	35	24	35	0	0	13	30	11	35

	point342	342	383	35	10	35	0	0	5	30	4	35
	point25	25										
Glendale Blvd SB - N of Alessandro	point344	344	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point343	343	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point375	375										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point373	373										
Glendale Blvd NB -N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6										
SR 2 NB - 2-2	point243	243	1114	65	18	65	30	60	6	60	0	0
	point87	87	1114	65	18	65	30	60	6	60	0	0
	point86	86	1114	65	18	65	30	60	6	60	0	0
	point278	278	1114	65	18	65	30	60	6	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0

	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0
	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	18	65	30	60	6	60	0	0
	point242	242	1114	65	18	65	30	60	6	60	0	0
	point230	230	1114	65	18	65	30	60	6	60	0	0
	point281	280	1114	65	18	65	30	60	6	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	878	35	22	35	0	0	12	30	10	35
	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	384	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	385	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	292	35	7	35	0	0	4	30	3	35

	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	292	35	7	35	0	0	4	30	3	35
	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	292	35	7	35	0	0	4	30	3	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	292	35	7	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	292	35	7	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB - S of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	1330	35	34	35	0	0	18	30	16	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	1330	35	34	35	0	0	18	30	16	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	1017	35	21	35	12	30	5	30	2	35
	point312	312	1017	35	21	35	12	30	5	30	2	35
	point313	313	1017	35	21	35	12	30	5	30	2	35

	point314	314	1017	35	21	35	12	30	5	30	2	35
	point315	315	1017	35	21	35	12	30	5	30	2	35
	point316	316	1017	35	21	35	12	30	5	30	2	35
	point317	317	1017	35	21	35	12	30	5	30	2	35
	point348	348	1017	35	21	35	12	30	5	30	2	35
	point349	349	1017	35	21	35	12	30	5	30	2	35
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	1017	35	21	35	12	30	5	30	2	35
	point320	320	1017	35	21	35	12	30	5	30	2	35
	point321	321	1017	35	21	35	12	30	5	30	2	35
	point322	322	1017	35	21	35	12	30	5	30	2	35
	point323	323	1017	35	21	35	12	30	5	30	2	35
	point347	347	1017	35	21	35	12	30	5	30	2	35
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	1017	35	21	35	12	30	5	30	2	35
	point326	326	1017	35	21	35	12	30	5	30	2	35
	point327	327	1017	35	21	35	12	30	5	30	2	35
	point328	328	1017	35	21	35	12	30	5	30	2	35
	point329	329	1017	35	21	35	12	30	5	30	2	35
	point345	345	1017	35	21	35	12	30	5	30	2	35
	point346	346	1017	35	21	35	12	30	5	30	2	35
	point330	330										
Glendale Blvd SB - S of Alessandro--2	point368	368	1330	35	34	35	0	0	18	30	16	35
	point308	308	1330	35	34	35	0	0	18	30	16	35
	point309	309	1306	35	33	35	0	0	18	30	15	35
	point310	310										
Glendale Blvd NB - S of Alessandro - 3-	point371	371	964	35	24	35	0	0	13	30	11	35
	point370	370	964	35	24	35	0	0	13	30	11	35
	point369	369										
Glendale Blvd NB -N of Alessandro-2-2	point372	372	1285	35	32	35	0	0	18	30	15	35
	point374	374										
Glendale Blvd NB -N of Alessandro-2-2-2	point376	376	964	35	24	35	0	0	13	30	11	35
	point4	7	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										
Glendale Blvd NB - S of Alessandro - 2-2-2	point377	377	964	35	24	35	0	0	13	30	11	35
	point16	16	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	964	35	24	35	0	0	13	30	11	35
	point14	14										
Glendale Blvd NB - S of Alessandro - 3-2-2	point378	378	964	35	24	35	0	0	13	30	11	35
	point28	28	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions ST-10

Receiver											
Name	No.	#DUs	Coordinates (ground)			Height above Ground	Input Sound Levels and Criteria				Active in Calc.
			X	Y	Z		Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST-10	49	1	6,483,278.0	1,854,984.0	485.00	4.92	0.00	66	10.0	8.0	Y

Jones & Stokes 13 December 2007
M Greene TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions ST-10

Barrier Name	Type	Height Min	Height Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	Top Width	Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Perturbs Incre-ment	#Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		

									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,790.0	1,855,980.4	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,893.6	520.01	0.00	0.00	0	0		
									point83	83	6,483,625.0	1,855,793.8	515.09	0.00	0.00	0	0		
									point84	84	6,483,529.0	1,855,682.0	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	138	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier18	W	0.00	100.00	0.00				0.00	point126	126	6,483,293.0	1,855,687.4	501.97	0.00	0.00	0	0		
									point127	127	6,483,345.5	1,855,732.9	505.25	0.00	0.00	0	0	Y	
									point128	128	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0		
									point129	129	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point130	130	6,483,673.0	1,856,071.0	503.61	0.00					
Barrier19	W	0.00	99.99	0.00				0.00	point131	131	6,483,516.5	1,855,800.9	479.00	0.00	0.00	0	0		
									point132	132	6,483,621.0	1,855,953.1	493.77	0.00	0.00	0	0		
									point133	133	6,483,708.0	1,856,080.4	497.05	0.00	0.00	0	0		
									point134	134	6,483,845.0	1,856,245.9	500.33	0.00	0.00	0	0		
									point135	135	6,483,931.0	1,856,348.0	497.05	0.00	0.00	0	0		
									point136	136	6,484,016.0	1,856,443.1	493.77	0.00	0.00	0	0		
									point137	137	6,484,055.0	1,856,488.1	492.13	0.00					
Barrier20	W	0.00	99.99	0.00				0.00	point122	139	6,483,298.5	1,855,167.1	468.00	11.00	0.00	0	0		
									point123	140	6,483,249.0	1,855,176.5	465.00	11.00	0.00	0	0		

									point124	141	6,483,205.0	1,854,904.4	465.00	11.00					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt D PM Conditions ST-10
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST-10	49	1	0.0	65.1	66	65.1	10	----	65.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt E PM Conditions M-13 Mitigated

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control: Control Device	Speed Constraint	Percent Vehicles Affected	Segment: Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	2	6,483,141.0	1,854,568.8	451.80				Average	
		point9	3	6,483,183.0	1,854,824.1	456.00				Average	
		point8	4	6,483,238.5	1,855,181.5	464.20					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	21	6,483,131.5	1,854,567.5	452.10				Average	
		point21	20	6,483,172.0	1,854,834.5	457.70				Average	
		point20	19	6,483,229.0	1,855,182.5	464.90					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point33	33	6,483,121.0	1,854,567.6	452.10				Average	
		point32	32	6,483,163.0	1,854,835.1	457.70				Average	
		point31	31	6,483,221.5	1,855,183.4	464.60					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,365.0	1,855,978.2	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,351.0	1,855,973.1	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,472.0	1,855,649.2	477.69				Average	
		point380	380	6,483,547.5	1,855,737.2	481.63				Average	
		point97	97	6,483,619.5	1,855,825.4	485.56				Average	
		point96	96	6,483,678.5	1,855,904.8	490.49				Average	

		point95	95	6,483,747.5	1,855,983.9	495.41				Average	
		point94	94	6,483,807.5	1,856,056.4	498.69				Average	
		point93	93	6,483,853.0	1,856,108.0	500.33				Average	
		point92	92	6,483,914.5	1,856,178.0	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,625.5	1,857,134.4	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,433.5	1,856,878.0	482.28				Average	
		point113	113	6,484,326.0	1,856,741.4	485.56				Average	
		point112	112	6,484,235.5	1,856,629.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,617.5	1,857,154.2	475.72				Average	
		point118	118	6,484,518.0	1,857,008.8	479.00				Average	
		point119	119	6,484,414.5	1,856,873.2	482.28				Average	
		point120	120	6,484,306.0	1,856,737.4	485.56				Average	
		point121	121	6,484,224.5	1,856,634.9	488.85					
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,598.5	1,857,161.2	475.72				Average	
		point145	145	6,484,488.5	1,857,004.4	479.00				Average	
		point144	144	6,484,387.0	1,856,865.0	482.28				Average	
		point143	143	6,484,280.5	1,856,732.2	485.56				Average	
		point142	142	6,484,199.0	1,856,625.1	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					
Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	386	6,484,769.5	1,857,081.8	469.20				Average	

		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,641.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	
		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	

		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	385	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,458.5	1,855,696.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,460.0	1,855,802.9	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,425.5	1,855,650.1	478.02				Average	
		point342	342	6,483,446.5	1,855,702.8	479.17				Average	
		point25	25	6,483,453.0	1,855,753.9	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point344	344	6,483,409.0	1,855,642.0	477.53				Average	
		point295	295	6,483,388.5	1,855,612.1	476.38				Average	
		point53	53	6,483,357.5	1,855,560.6	474.08				Average	
		point52	52	6,483,325.5	1,855,503.1	472.44				Average	
		point51	51	6,483,264.0	1,855,379.4	469.16				Average	
		point343	343	6,483,236.0	1,855,324.9	468.34				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,199.0	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,391.5	1,855,667.6	478.35				Average	
		point62	62	6,483,337.0	1,855,565.8	473.75				Average	
		point61	61	6,483,294.5	1,855,497.8	472.44				Average	
		point60	60	6,483,232.0	1,855,375.1	469.16				Average	
		point59	59	6,483,208.5	1,855,325.9	467.52				Average	
		point58	58	6,483,177.5	1,855,222.6	464.57					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,224.5	1,855,220.2	465.22				Average	

		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point375	375	6,483,310.5	1,855,420.5	471.62					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point373	373	6,483,320.0	1,855,411.5	470.80					
Glendale Blvd NB -N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,277.0	1,855,287.6	466.54				Average	
		point5	6	6,483,326.0	1,855,378.5	469.16					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,471.5	1,855,632.2	477.36				Average	
		point83	83	6,483,537.5	1,855,706.6	479.00				Average	
		point82	82	6,483,593.5	1,855,771.0	482.28				Average	
		point81	81	6,483,651.0	1,855,846.9	487.20				Average	
		point80	80	6,483,690.0	1,855,897.8	490.49				Average	
		point79	79	6,483,730.5	1,855,947.5	493.77				Average	
		point78	78	6,483,782.0	1,856,008.6	497.05				Average	
		point77	77	6,483,842.5	1,856,078.5	500.33				Average	
		point76	76	6,483,865.0	1,856,104.4	501.31				Average	
		point75	75	6,483,884.5	1,856,125.8	500.33				Average	
		point74	74	6,483,929.5	1,856,176.9	500.33				Average	
		point73	73	6,484,024.0	1,856,290.8	498.69				Average	
		point72	72	6,484,138.0	1,856,414.4	495.41				Average	
		point71	71	6,484,242.0	1,856,530.6	492.78				Average	
		point70	70	6,484,300.0	1,856,596.6	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,502.0	1,856,829.2	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	
		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	387	6,483,108.0	1,854,579.8	452.10				Average	

		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	388	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,459.5	1,855,804.0	482.61				Average	
		point252	252	6,483,458.0	1,855,819.8	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,458.0	1,855,820.6	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,349.5	1,855,968.8	490.81				Average	
		point271	271	6,483,393.5	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,363.5	1,855,969.9	493.77				Average	
		point267	267	6,483,404.0	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,407.0	1,855,752.4	482.61				Average	
		point55	55	6,483,411.0	1,855,732.9	480.31				Average	
		point54	54	6,483,407.0	1,855,670.9	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,404.0	1,855,766.0	484.25				Average	
		point268	268	6,483,406.5	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,393.5	1,855,752.4	483.92				Average	
		point272	272	6,483,396.0	1,855,738.5	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,399.0	1,855,719.8	480.31				Average	
		point63	63	6,483,391.0	1,855,670.0	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,453.0	1,855,754.1	480.31				Average	
		point286	286	6,483,448.0	1,855,789.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,448.5	1,855,789.4	481.57				Average	
		point287	287	6,483,447.0	1,855,803.5	482.83					
Glendale Blvd NB - S of Alessandro -	12.0	point289	289	6,483,447.0	1,855,804.4	482.83				Average	
		point282	282	6,483,441.0	1,855,836.6	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					
Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	
		point301	301	6,483,132.0	1,854,904.0	457.68					

Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,408.5	1,855,670.5	478.67				Average	
		point303	303	6,483,356.5	1,855,577.0	474.08				Average	
		point304	304	6,483,325.0	1,855,529.0	472.44				Average	
		point305	305	6,483,263.0	1,855,401.9	469.16				Average	
		point306	306	6,483,235.5	1,855,348.0	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,197.5	1,856,623.4	488.85				Average	
		point312	312	6,484,087.5	1,856,493.8	492.13				Average	
		point313	313	6,484,054.0	1,856,455.8	493.77				Average	
		point314	314	6,483,935.5	1,856,323.1	497.05				Average	
		point315	315	6,483,858.0	1,856,233.5	500.33				Average	
		point316	316	6,483,735.5	1,856,091.6	497.05				Average	
		point382	382	6,483,681.5	1,856,016.6	494.59				Average	
		point317	317	6,483,630.0	1,855,937.5	492.13				Average	
		point348	348	6,483,572.0	1,855,848.2	485.56				Average	
		point349	349	6,483,508.5	1,855,770.6	479.00				Average	
		point318	318	6,483,485.0	1,855,757.4	479.00					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,224.5	1,856,635.0	488.85				Average	
		point320	320	6,484,115.5	1,856,504.4	492.13				Average	
		point321	321	6,483,919.0	1,856,282.6	498.69				Average	
		point322	322	6,483,779.5	1,856,123.8	492.13				Average	
		point383	383	6,483,710.5	1,856,033.0	488.85				Average	
		point323	323	6,483,645.0	1,855,938.6	485.56				Average	
		point347	347	6,483,583.0	1,855,842.6	479.00				Average	
		point381	381	6,483,530.0	1,855,777.9	479.00				Average	
		point324	324	6,483,475.0	1,855,714.8	479.00					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,241.5	1,856,636.4	488.85				Average	
		point326	326	6,484,135.0	1,856,507.6	492.13				Average	
		point327	327	6,483,936.0	1,856,283.1	498.69				Average	
		point328	328	6,483,791.5	1,856,120.2	501.97				Average	
		point384	384	6,483,722.5	1,856,030.0	497.05				Average	
		point329	329	6,483,657.5	1,855,937.1	492.13				Average	
		point345	345	6,483,597.0	1,855,842.8	485.56				Average	
		point346	346	6,483,536.5	1,855,765.6	479.00				Average	
		point330	330	6,483,475.0	1,855,695.1	477.36					
Glendale Blvd SB - S of Alessandro--2	12.0	point368	368	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	

INPUT: ROADWAYS

		point310	310	6,483,137.5	1,854,857.1	454.07					
Glendale Blvd NB - S of Alessandro - 3-	12.0	point371	371	6,483,332.0	1,855,414.9	470.80				Average	
		point370	370	6,483,394.0	1,855,534.1	474.08				Average	
		point379	379	6,483,423.5	1,855,589.8	475.89				Average	
		point369	369	6,483,461.0	1,855,637.6	477.69					
Glendale Blvd NB -N of Alessandro-2-2	12.0	point372	372	6,483,326.0	1,855,378.5	469.16				Average	
		point374	374	6,483,342.5	1,855,406.6	470.31					
Glendale Blvd NB -N of Alessandro-2-2-2	12.0	point376	376	6,483,342.5	1,855,408.0	470.31				Average	
		point4	7	6,483,359.0	1,855,437.4	471.46				Average	
		point3	8	6,483,405.0	1,855,529.4	472.11				Average	
		point2	9	6,483,438.0	1,855,586.0	475.72				Average	
		point1	10	6,483,471.0	1,855,630.6	476.71					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point377	377	6,483,320.0	1,855,411.5	470.80				Average	
		point16	16	6,483,347.5	1,855,465.2	472.44				Average	
		point15	15	6,483,382.5	1,855,533.5	474.08				Average	
		point292	292	6,483,442.0	1,855,651.6	475.89				Average	
		point14	14	6,483,457.5	1,855,695.8	477.69					
Glendale Blvd NB - S of Alessandro - 3-2-2	12.0	point378	378	6,483,310.0	1,855,420.0	471.62				Average	
		point28	28	6,483,340.5	1,855,476.6	472.44				Average	
		point27	27	6,483,384.5	1,855,563.1	474.41				Average	
		point26	26	6,483,425.0	1,855,648.2	478.02					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt E PM Conditions M-13 Mitigated

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35
	point283	2	1263	35	32	35	0	0	17	30	15	35
	point9	3	1263	35	32	35	0	0	17	30	15	35
	point8	4										
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35
	point284	21	1263	35	32	35	0	0	17	30	15	35
	point21	20	1263	35	32	35	0	0	17	30	15	35
	point20	19										
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35
	point33	33	1263	35	32	35	0	0	17	30	15	35
	point32	32	1263	35	32	35	0	0	17	30	15	35
	point31	31										
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35
	point40	40	383	35	10	35	0	0	5	30	4	35
	point39	39										
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35
	point43	43										
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35
	point45	45										
Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35
	point47	47										
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0

	point380	380	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	1017	65	21	65	12	60	5	60	2	65
	point277	277	1017	65	21	65	12	60	5	60	2	65
	point115	115	1017	65	21	65	12	60	5	60	2	65
	point114	114	1017	65	21	65	12	60	5	60	2	65
	point113	113	1017	50	21	50	12	45	5	45	2	50
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	1017	65	21	65	12	60	5	60	2	65
	point276	276	1017	65	21	65	12	60	5	60	2	65
	point118	118	1017	65	21	65	12	60	5	60	2	65
	point119	119	1017	65	21	65	12	60	5	60	2	65
	point120	120	1017	50	21	50	12	45	5	45	2	50
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	1017	50	21	50	12	45	5	45	2	50
	point275	275	1017	65	21	65	12	60	5	60	2	65
	point145	145	1017	65	21	65	12	60	5	60	2	65
	point144	144	1017	65	21	65	12	60	5	60	2	65
	point143	143	1017	50	21	50	12	45	5	45	2	50
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0
	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	386	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	18	65	30	60	6	60	0	0
	point203	203	1114	65	18	65	30	60	6	60	0	0
	point202	202	1114	65	18	65	30	60	6	60	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point201	201	1114	65	18	65	30	60	6	60	0	0
	point279	279	1114	65	18	65	30	60	6	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	385	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	964	35	24	35	0	0	13	30	11	35
	point342	342	383	35	10	35	0	0	5	30	4	35
	point25	25										

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

Glendale Blvd SB - N of Alessandro	point344	344	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point343	343	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point375	375										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point373	373										
Glendale Blvd NB -N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6										
SR 2 NB - 2-2	point243	243	1114	65	18	65	30	60	6	60	0	0
	point87	87	1114	65	18	65	30	60	6	60	0	0
	point86	86	1114	65	18	65	30	60	6	60	0	0
	point278	278	1114	65	18	65	30	60	6	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0
	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0

	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	18	65	30	60	6	60	0	0
	point242	242	1114	65	18	65	30	60	6	60	0	0
	point230	230	1114	65	18	65	30	60	6	60	0	0
	point281	280	1114	65	18	65	30	60	6	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	878	35	22	35	0	0	12	30	10	35
	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	387	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	388	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	292	35	7	35	0	0	4	30	3	35
	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	292	35	7	35	0	0	4	30	3	35

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	292	35	7	35	0	0	4	30	3	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	292	35	7	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	292	35	7	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB - S of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	1330	35	34	35	0	0	18	30	16	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	1330	35	34	35	0	0	18	30	16	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	1017	50	21	50	12	45	5	45	2	50
	point312	312	1017	35	21	35	12	30	5	30	2	35
	point313	313	1017	35	21	35	12	30	5	30	2	35
	point314	314	1017	35	21	35	12	30	5	30	2	35
	point315	315	1017	35	21	35	12	30	5	30	2	35

	point316	316	1017	35	21	35	12	30	5	30	2	35
	point382	382	1017	35	21	35	12	30	5	30	2	35
	point317	317	1017	35	21	35	12	30	5	30	2	35
	point348	348	1017	35	21	35	12	30	5	30	2	35
	point349	349	1017	35	21	35	12	30	5	30	2	35
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	1017	50	21	50	12	45	5	45	2	50
	point320	320	1017	35	21	35	12	30	5	30	2	35
	point321	321	1017	35	21	35	12	30	5	30	2	35
	point322	322	1017	35	21	35	12	30	5	30	2	35
	point383	383	1017	35	21	35	12	30	5	30	2	35
	point323	323	1017	35	21	35	12	30	5	30	2	35
	point347	347	1017	35	21	35	12	30	5	30	2	35
	point381	381	1017	35	21	35	12	30	5	30	2	35
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	1017	50	21	50	12	45	5	45	2	50
	point326	326	1017	35	21	35	12	30	5	30	2	35
	point327	327	1017	35	21	35	12	30	5	30	2	35
	point328	328	1017	35	21	35	12	30	5	30	2	35
	point384	384	1017	35	21	35	12	30	5	30	2	35
	point329	329	1017	35	21	35	12	30	5	30	2	35
	point345	345	1017	35	21	35	12	30	5	30	2	35
	point346	346	1017	35	21	35	12	30	5	30	2	35
	point330	330										
Glendale Blvd SB - S of Alessandro--2	point368	368	1330	35	34	35	0	0	18	30	16	35
	point308	308	1330	35	34	35	0	0	18	30	16	35
	point309	309	1306	35	33	35	0	0	18	30	15	35
	point310	310										
Glendale Blvd NB - S of Alessandro - 3-	point371	371	964	35	24	35	0	0	13	30	11	35
	point370	370	964	35	24	35	0	0	13	30	11	35
	point379	379	964	35	24	35	0	0	13	30	11	35
	point369	369										
Glendale Blvd NB -N of Alessandro-2-2	point372	372	1285	35	32	35	0	0	18	30	15	35
	point374	374										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd NB -N of Alessandro-2-2-2	point376	376	964	35	24	35	0	0	13	30	11	35
	point4	7	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35
	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										
Glendale Blvd NB - S of Alessandro - 2-2-2	point377	377	964	35	24	35	0	0	13	30	11	35
	point16	16	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	964	35	24	35	0	0	13	30	11	35
	point14	14										
Glendale Blvd NB - S of Alessandro - 3-2-2	point378	378	964	35	24	35	0	0	13	30	11	35
	point28	28	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										

INPUT: RECEIVERS <Project Name?>

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt E PM Conditions M-13 Mitigated

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M13	41	1	6,483,263.0	1,856,115.2	497.05	4.92	0.00	66	10.0	8.0	
M13 Classroom El	49	1	6,483,233.0	1,856,122.0	498.00	10.00	0.00	66	10.0	8.0	Y

Jones & Stokes 13 December 2007
M Greene TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt E PM Conditions M-13 Mitigated

Barrier Name	Type	Height Min	Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	Top Width	Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Incre-ment	Perturbs #Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		

									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,792.5	1,855,979.1	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,888.0	520.01	0.00	0.00	0	0		
									point83	83	6,483,624.0	1,855,784.1	515.09	0.00	0.00	0	0		
									point84	84	6,483,531.0	1,855,675.1	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	138	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier18	W	0.00	100.00	0.00				0.00	point126	126	6,483,293.0	1,855,687.4	501.97	0.00	0.00	0	0		
									point127	127	6,483,345.5	1,855,732.9	505.25	0.00	0.00	0	0	Y	
									point128	128	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0		
									point129	129	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point130	130	6,483,673.0	1,856,071.0	503.61	0.00					
Barrier19	W	0.00	99.99	0.00				0.00	point131	131	6,483,516.5	1,855,800.9	479.00	0.00	0.00	0	0		
									point132	132	6,483,621.0	1,855,953.1	493.77	0.00	0.00	0	0		
									point133	133	6,483,708.0	1,856,080.4	497.05	0.00	0.00	0	0		
									point134	134	6,483,845.0	1,856,245.9	500.33	0.00	0.00	0	0		
									point135	135	6,483,931.0	1,856,348.0	497.05	0.00	0.00	0	0		
									point136	136	6,484,016.0	1,856,443.1	493.77	0.00	0.00	0	0		
									point137	137	6,484,055.0	1,856,488.1	492.13	0.00					
SW at St Teresa School	W	0.00	99.99	0.00				0.00	point139	139	6,483,280.0	1,856,217.2	500.00	6.00	2.00	5	0		
									point140	140	6,483,331.0	1,856,016.1	492.00	6.00	2.00	5	0		

INPUT: BARRIERS <Project Name?>

									point142	142	6,483,310.5	1,855,999.5	492.00	6.00	2.00	5	0		
									point141	141	6,483,248.5	1,856,034.1	493.00	6.00					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt E PM Conditions M-13 Mitigated
BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M13	41	1	0.0	63.4	66	63.4	10	----	59.8	3.6	8	-4.4
M13 Classroom El	49	1	0.0	63.1	66	63.1	10	----	61.4	1.7	8	-6.3

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	1.7	2.6	3.6
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt E PM Conditions ST-10

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Glendale Blvd NB - S of Alessandro	12.0	point10	1	6,483,109.5	1,854,369.5	447.80				Average	
		point283	2	6,483,141.0	1,854,568.8	451.80				Average	
		point9	3	6,483,183.0	1,854,824.1	456.00				Average	
		point8	4	6,483,238.5	1,855,181.5	464.20					
Glendale Blvd NB - S of Alessandro - 2	12.0	point22	22	6,483,101.5	1,854,370.0	448.00				Average	
		point284	21	6,483,131.5	1,854,567.5	452.10				Average	
		point21	20	6,483,172.0	1,854,834.5	457.70				Average	
		point20	19	6,483,229.0	1,855,182.5	464.90					
Glendale Blvd NB - S of Alessandro - 3	12.0	point34	34	6,483,093.0	1,854,373.0	448.00				Average	
		point33	33	6,483,121.0	1,854,567.6	452.10				Average	
		point32	32	6,483,163.0	1,854,835.1	457.70				Average	
		point31	31	6,483,221.5	1,855,183.4	464.60					
Glendale Blvd NB N of SR2 Off	12.0	point41	41	6,483,405.0	1,855,996.4	490.49				Average	
		point40	40	6,483,331.5	1,856,249.1	505.25				Average	
		point39	39	6,483,246.5	1,856,520.5	515.09					
Glendale Blvd NB N of SR2 Off - 2	12.0	point42	42	6,483,392.0	1,855,986.1	490.81				Average	
		point43	43	6,483,240.0	1,856,513.5	515.09					
Glendale Blvd SB N of SR2 Off	12.0	point44	44	6,483,232.0	1,856,513.5	515.09				Average	
		point45	45	6,483,365.0	1,855,978.2	490.81					
Glendale Blvd SB N of SR2 Off -2	12.0	point46	46	6,483,221.5	1,856,512.0	515.09				Average	
		point47	47	6,483,351.0	1,855,973.1	490.81					
SR 2 NB - 2	12.0	point98	98	6,483,472.0	1,855,649.2	477.69				Average	
		point380	380	6,483,547.5	1,855,737.2	481.63				Average	
		point97	97	6,483,619.5	1,855,825.4	485.56				Average	
		point96	96	6,483,678.5	1,855,904.8	490.49				Average	

		point95	95	6,483,747.5	1,855,983.9	495.41				Average	
		point94	94	6,483,807.5	1,856,056.4	498.69				Average	
		point93	93	6,483,853.0	1,856,108.0	500.33				Average	
		point92	92	6,483,914.5	1,856,178.0	500.33				Average	
		point91	91	6,484,061.5	1,856,352.8	495.41				Average	
		point90	90	6,484,162.5	1,856,464.5	493.77				Average	
		point89	89	6,484,232.0	1,856,540.5	492.13				Average	
		point88	88	6,484,295.0	1,856,612.1	489.83					
SR 2 SB Trans into Glendale SB	12.0	point116	116	6,484,780.0	1,857,363.4	475.72				Average	
		point277	277	6,484,625.5	1,857,134.4	475.72				Average	
		point115	115	6,484,539.5	1,857,015.6	479.00				Average	
		point114	114	6,484,433.5	1,856,878.0	482.28				Average	
		point113	113	6,484,326.0	1,856,741.4	485.56				Average	
		point112	112	6,484,235.5	1,856,629.8	488.85					
SR 2 SB Trans into Glendale SB - 2	12.0	point117	117	6,484,759.5	1,857,370.9	475.72				Average	
		point276	276	6,484,617.5	1,857,154.2	475.72				Average	
		point118	118	6,484,518.0	1,857,008.8	479.00				Average	
		point119	119	6,484,414.5	1,856,873.2	482.28				Average	
		point120	120	6,484,306.0	1,856,737.4	485.56				Average	
		point121	121	6,484,224.5	1,856,634.9	488.85					
SR 2 SB Trans into Glendale SB - 3	12.0	point146	146	6,484,725.0	1,857,384.1	475.72				Average	
		point275	275	6,484,598.5	1,857,161.2	475.72				Average	
		point145	145	6,484,488.5	1,857,004.4	479.00				Average	
		point144	144	6,484,387.0	1,856,865.0	482.28				Average	
		point143	143	6,484,280.5	1,856,732.2	485.56				Average	
		point142	142	6,484,199.0	1,856,625.1	488.85					
Fargo St NB	12.0	point147	147	6,483,332.0	1,855,972.4	490.49				Average	
		point148	148	6,482,907.0	1,856,191.5	505.25					
Fargo St SB	12.0	point149	149	6,482,905.0	1,856,181.2	505.25				Average	
		point150	150	6,483,334.0	1,855,959.0	490.49					
Waterloo St - 2	12.0	point151	151	6,482,990.5	1,855,551.0	495.41				Average	
		point152	152	6,483,267.5	1,855,806.0	489.83				Average	
		point153	153	6,483,342.5	1,855,907.1	489.50					
Waterloo St	12.0	point154	154	6,482,981.5	1,855,559.1	495.41				Average	
		point155	155	6,483,256.5	1,855,813.2	489.83				Average	
		point156	156	6,483,333.5	1,855,925.4	490.49					
Alessandro SB	12.0	point283	181	6,484,860.0	1,857,181.8	465.90				Average	
		point181	386	6,484,769.5	1,857,081.8	469.20				Average	

		point180	180	6,484,678.5	1,856,985.1	472.40				Average	
		point179	179	6,484,601.0	1,856,861.6	482.30				Average	
		point178	178	6,484,562.5	1,856,793.4	488.80				Average	
		point177	177	6,484,519.0	1,856,721.0	495.40				Average	
		point176	176	6,484,448.0	1,856,618.6	505.20				Average	
		point175	175	6,484,393.0	1,856,549.1	510.20				Average	
		point174	174	6,484,344.0	1,856,494.6	511.80				Average	
		point173	173	6,484,195.5	1,856,344.8	513.50				Average	
		point172	172	6,484,114.5	1,856,271.8	515.10				Average	
		point171	171	6,483,949.5	1,856,120.6	523.30				Average	
		point170	170	6,483,868.0	1,856,036.8	524.60				Average	
		point169	169	6,483,788.5	1,855,944.5	523.30				Average	
		point168	168	6,483,718.0	1,855,862.2	520.00				Average	
		point167	167	6,483,634.0	1,855,763.4	513.50				Average	
		point166	166	6,483,550.5	1,855,668.0	506.90				Average	
		point165	165	6,483,468.5	1,855,568.9	500.30				Average	
		point164	164	6,483,428.5	1,855,507.2	497.00				Average	
		point163	163	6,483,402.0	1,855,415.4	492.10				Average	
		point162	162	6,483,394.0	1,855,320.8	485.60				Average	
		point161	161	6,483,390.0	1,855,284.4	482.30				Average	
		point160	160	6,483,373.5	1,855,248.9	477.40				Average	
		point159	159	6,483,333.5	1,855,222.5	470.80				Average	
		point158	158	6,483,303.0	1,855,220.0	467.50				Average	
		point157	157	6,483,263.0	1,855,225.4	465.60					
SR 2 NB - 3rd Lane	12.0	point204	204	6,484,301.0	1,856,600.6	490.49				Average	
		point203	203	6,484,349.0	1,856,657.0	487.20				Average	
		point202	202	6,484,457.5	1,856,789.8	485.56				Average	
		point201	201	6,484,558.5	1,856,928.1	482.28				Average	
		point279	279	6,484,641.5	1,857,053.4	479.00				Average	
		point200	200	6,484,828.5	1,857,328.1	479.00					
Alessandro NB	12.0	point228	228	6,483,251.5	1,855,193.1	464.60				Average	
		point227	227	6,483,309.0	1,855,185.6	467.50				Average	
		point226	226	6,483,338.5	1,855,189.0	470.80				Average	
		point225	225	6,483,391.0	1,855,226.4	477.40				Average	
		point224	224	6,483,418.0	1,855,273.5	482.30				Average	
		point223	223	6,483,422.5	1,855,316.0	485.60				Average	
		point222	222	6,483,424.0	1,855,412.0	492.10				Average	
		point221	221	6,483,451.0	1,855,499.2	497.00				Average	

		point220	220	6,483,489.5	1,855,556.8	500.30				Average	
		point219	219	6,483,567.5	1,855,648.6	506.90				Average	
		point218	218	6,483,650.5	1,855,745.6	513.50				Average	
		point217	217	6,483,731.0	1,855,840.9	520.00				Average	
		point216	216	6,483,801.5	1,855,919.0	523.30				Average	
		point215	215	6,483,883.5	1,856,019.5	524.90				Average	
		point214	214	6,483,972.5	1,856,109.1	523.30				Average	
		point213	213	6,484,136.5	1,856,255.1	515.10				Average	
		point212	212	6,484,209.5	1,856,320.1	513.50				Average	
		point211	211	6,484,364.0	1,856,478.0	511.80				Average	
		point210	210	6,484,413.0	1,856,536.0	510.20				Average	
		point209	209	6,484,468.0	1,856,602.1	505.20				Average	
		point208	208	6,484,542.5	1,856,709.5	495.40				Average	
		point207	207	6,484,625.0	1,856,850.2	482.30				Average	
		point206	206	6,484,700.0	1,856,972.6	472.40				Average	
		point205	385	6,484,789.0	1,857,074.8	469.20				Average	
		point286	205	6,484,876.0	1,857,165.0	465.90					
Glendale Blvd NB -N of Alessandro - 2-2	12.0	point233	233	6,483,458.5	1,855,696.8	477.69				Average	
		point13	13	6,483,465.0	1,855,755.2	480.31				Average	
		point251	251	6,483,460.0	1,855,802.9	482.61					
Glendale Blvd NB -N of Alessandro - 3-2	12.0	point234	234	6,483,425.5	1,855,650.1	478.02				Average	
		point342	342	6,483,446.5	1,855,702.8	479.17				Average	
		point25	25	6,483,453.0	1,855,753.9	480.31					
Glendale Blvd SB - N of Alessandro	12.0	point344	344	6,483,409.0	1,855,642.0	477.53				Average	
		point295	295	6,483,388.5	1,855,612.1	476.38				Average	
		point53	53	6,483,357.5	1,855,560.6	474.08				Average	
		point52	52	6,483,325.5	1,855,503.1	472.44				Average	
		point51	51	6,483,264.0	1,855,379.4	469.16				Average	
		point343	343	6,483,236.0	1,855,324.9	468.34				Average	
		point50	50	6,483,210.0	1,855,253.9	467.52				Average	
		point49	49	6,483,199.0	1,855,189.8	464.89					
Glendale Blvd SB - N of Alessandro - 3	12.0	point236	236	6,483,391.5	1,855,667.6	478.35				Average	
		point62	62	6,483,337.0	1,855,565.8	473.75				Average	
		point61	61	6,483,294.5	1,855,497.8	472.44				Average	
		point60	60	6,483,232.0	1,855,375.1	469.16				Average	
		point59	59	6,483,208.5	1,855,325.9	467.52				Average	
		point58	58	6,483,177.5	1,855,222.6	464.57					
Glendale Blvd NB - S of Alessandro - 3-2	12.0	point237	237	6,483,224.5	1,855,220.2	465.22				Average	

		point30	30	6,483,252.0	1,855,301.6	469.16				Average	
		point29	29	6,483,281.0	1,855,364.2	470.80				Average	
		point375	375	6,483,310.5	1,855,420.5	471.62					
Glendale Blvd NB - S of Alessandro - 2-2	12.0	point238	238	6,483,236.0	1,855,214.8	465.22				Average	
		point18	18	6,483,264.0	1,855,296.9	467.52				Average	
		point17	17	6,483,292.5	1,855,357.9	469.16				Average	
		point373	373	6,483,320.0	1,855,411.5	470.80					
Glendale Blvd NB -N of Alessandro-2	12.0	point239	239	6,483,247.0	1,855,219.0	464.89				Average	
		point6	5	6,483,277.0	1,855,287.6	466.54				Average	
		point5	6	6,483,326.0	1,855,378.5	469.16					
SR 2 NB - 2-2	12.0	point243	243	6,484,295.0	1,856,612.1	489.83				Average	
		point87	87	6,484,435.5	1,856,781.5	485.56				Average	
		point86	86	6,484,542.5	1,856,923.4	482.28				Average	
		point278	278	6,484,624.0	1,857,047.6	479.00				Average	
		point85	85	6,484,812.5	1,857,337.2	479.00					
SR2 NB	12.0	point84	84	6,483,471.5	1,855,632.2	477.36				Average	
		point83	83	6,483,537.5	1,855,706.6	479.00				Average	
		point82	82	6,483,593.5	1,855,771.0	482.28				Average	
		point81	81	6,483,651.0	1,855,846.9	487.20				Average	
		point80	80	6,483,690.0	1,855,897.8	490.49				Average	
		point79	79	6,483,730.5	1,855,947.5	493.77				Average	
		point78	78	6,483,782.0	1,856,008.6	497.05				Average	
		point77	77	6,483,842.5	1,856,078.5	500.33				Average	
		point76	76	6,483,865.0	1,856,104.4	501.31				Average	
		point75	75	6,483,884.5	1,856,125.8	500.33				Average	
		point74	74	6,483,929.5	1,856,176.9	500.33				Average	
		point73	73	6,484,024.0	1,856,290.8	498.69				Average	
		point72	72	6,484,138.0	1,856,414.4	495.41				Average	
		point71	71	6,484,242.0	1,856,530.6	492.78				Average	
		point70	70	6,484,300.0	1,856,596.6	490.49					
SR2 NB-2	12.0	point247	247	6,484,311.0	1,856,597.1	490.49				Average	
		point242	242	6,484,406.0	1,856,704.2	487.20				Average	
		point230	230	6,484,502.0	1,856,829.2	484.91				Average	
		point281	280	6,484,649.0	1,857,042.4	479.66				Average	
		point229	229	6,484,841.5	1,857,323.5	479.66					
Glendale Blvd SB - S of Alessandro-2	12.0	point240	240	6,483,208.5	1,855,187.2	464.90				Average	
		point48	48	6,483,150.5	1,854,833.5	457.70				Average	
		point286	387	6,483,108.0	1,854,579.8	452.10				Average	

		point66	66	6,483,077.5	1,854,375.0	448.00					
Glendale Blvd SB - S of Alessandro - 2-2	12.0	point241	241	6,483,197.5	1,855,188.0	464.60				Average	
		point57	57	6,483,146.0	1,854,849.0	457.70				Average	
		point287	388	6,483,096.5	1,854,582.0	451.80				Average	
		point68	68	6,483,066.5	1,854,378.0	448.00					
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point256	256	6,483,459.5	1,855,804.0	482.61				Average	
		point252	252	6,483,458.0	1,855,819.8	484.91					
Glendale Blvd NB - S of Alessandro - 2-2-2-2	12.0	point257	257	6,483,458.0	1,855,820.6	484.91				Average	
		point291	291	6,483,454.5	1,855,848.1	485.48				Average	
		point290	290	6,483,442.0	1,855,882.5	486.06				Average	
		point12	12	6,483,421.5	1,855,939.0	487.20				Average	
		point11	11	6,483,406.5	1,855,991.9	490.49					
Glendale Blvd SB - N of Alessandro - 2	12.0	point65	65	6,483,349.5	1,855,968.8	490.81				Average	
		point271	271	6,483,393.5	1,855,753.1	483.92					
Glendale Blvd SB - N of Alessandro	12.0	point56	56	6,483,363.5	1,855,969.9	493.77				Average	
		point267	267	6,483,404.0	1,855,767.1	484.25					
Glendale Blvd SB - N of Alessandro-2	12.0	point269	269	6,483,407.0	1,855,752.4	482.61				Average	
		point55	55	6,483,411.0	1,855,732.9	480.31				Average	
		point54	54	6,483,407.0	1,855,670.9	478.67					
Glendale Blvd SB - N of Alessandro-2	12.0	point270	270	6,483,404.0	1,855,766.0	484.25				Average	
		point268	268	6,483,406.5	1,855,753.1	482.61					
Glendale Blvd SB - N of Alessandro - 2-2	12.0	point273	273	6,483,393.5	1,855,752.4	483.92				Average	
		point272	272	6,483,396.0	1,855,738.5	482.28					
Glendale Blvd SB - N of Alessandro - 2-2-2	12.0	point274	274	6,483,396.5	1,855,736.2	482.28				Average	
		point64	64	6,483,399.0	1,855,719.8	480.31				Average	
		point63	63	6,483,391.0	1,855,670.0	478.35					
Glendale Blvd NB - N of Alessandro - 2-	12.0	point281	281	6,483,453.0	1,855,754.1	480.31				Average	
		point286	286	6,483,448.0	1,855,789.5	481.57					
Glendale Blvd NB - N of Alessandro - 2	12.0	point288	288	6,483,448.5	1,855,789.4	481.57				Average	
		point287	287	6,483,447.0	1,855,803.5	482.83					
Glendale Blvd NB - S of Alessandro -	12.0	point289	289	6,483,447.0	1,855,804.4	482.83				Average	
		point282	282	6,483,441.0	1,855,836.6	484.09				Average	
		point283	283	6,483,410.5	1,855,934.2	487.86				Average	
		point284	284	6,483,395.0	1,855,980.1	490.49					
Glendale Blvd SB - S of Alessandro - 2	12.0	point297	297	6,483,131.5	1,854,903.6	457.35				Average	
		point296	296	6,483,084.5	1,854,582.5	451.44					
Glendale Blvd SB - S of Alessandro - 2	12.0	point300	300	6,483,178.5	1,855,224.5	464.57				Average	
		point301	301	6,483,132.0	1,854,904.0	457.68					

Glendale Blvd SB - N of Alessandro-	12.0	point302	302	6,483,408.5	1,855,670.5	478.67				Average	
		point303	303	6,483,356.5	1,855,577.0	474.08				Average	
		point304	304	6,483,325.0	1,855,529.0	472.44				Average	
		point305	305	6,483,263.0	1,855,401.9	469.16				Average	
		point306	306	6,483,235.5	1,855,348.0	467.52				Average	
		point307	307	6,483,203.0	1,855,278.5	465.88					
SR 2 SB Trans into Glendale SB - 3	12.0	point311	311	6,484,197.5	1,856,623.4	488.85				Average	
		point312	312	6,484,087.5	1,856,493.8	492.13				Average	
		point313	313	6,484,054.0	1,856,455.8	493.77				Average	
		point314	314	6,483,935.5	1,856,323.1	497.05				Average	
		point315	315	6,483,858.0	1,856,233.5	500.33				Average	
		point316	316	6,483,735.5	1,856,091.6	497.05				Average	
		point382	382	6,483,681.5	1,856,016.6	494.59				Average	
		point317	317	6,483,630.0	1,855,937.5	492.13				Average	
		point348	348	6,483,572.0	1,855,848.2	485.56				Average	
		point349	349	6,483,508.5	1,855,770.6	479.00				Average	
		point318	318	6,483,485.0	1,855,757.4	479.00					
SR 2 SB Trans into Glendale SB -	12.0	point319	319	6,484,224.5	1,856,635.0	488.85				Average	
		point320	320	6,484,115.5	1,856,504.4	492.13				Average	
		point321	321	6,483,919.0	1,856,282.6	498.69				Average	
		point322	322	6,483,779.5	1,856,123.8	492.13				Average	
		point383	383	6,483,710.5	1,856,033.0	488.85				Average	
		point323	323	6,483,645.0	1,855,938.6	485.56				Average	
		point347	347	6,483,583.0	1,855,842.6	479.00				Average	
		point381	381	6,483,530.0	1,855,777.9	479.00				Average	
		point324	324	6,483,475.0	1,855,714.8	479.00					
SR 2 SB Trans into Glendale SB	12.0	point325	325	6,484,241.5	1,856,636.4	488.85				Average	
		point326	326	6,484,135.0	1,856,507.6	492.13				Average	
		point327	327	6,483,936.0	1,856,283.1	498.69				Average	
		point328	328	6,483,791.5	1,856,120.2	501.97				Average	
		point384	384	6,483,722.5	1,856,030.0	497.05				Average	
		point329	329	6,483,657.5	1,855,937.1	492.13				Average	
		point345	345	6,483,597.0	1,855,842.8	485.56				Average	
		point346	346	6,483,536.5	1,855,765.6	479.00				Average	
		point330	330	6,483,475.0	1,855,695.1	477.36					
Glendale Blvd SB - S of Alessandro--2	12.0	point368	368	6,483,203.0	1,855,278.5	465.88				Average	
		point308	308	6,483,174.5	1,855,107.0	462.60				Average	
		point309	309	6,483,151.0	1,854,958.8	459.32				Average	

		point310	310	6,483,137.5	1,854,857.1	454.07						
Glendale Blvd NB - S of Alessandro - 3-	12.0	point371	371	6,483,332.0	1,855,414.9	470.80				Average		
		point370	370	6,483,394.0	1,855,534.1	474.08				Average		
		point379	379	6,483,423.5	1,855,589.8	475.89				Average		
		point369	369	6,483,461.0	1,855,637.6	477.69						
Glendale Blvd NB -N of Alessandro-2-2	12.0	point372	372	6,483,326.0	1,855,378.5	469.16				Average		
		point374	374	6,483,342.5	1,855,406.6	470.31						
Glendale Blvd NB -N of Alessandro-2-2-2	12.0	point376	376	6,483,342.5	1,855,408.0	470.31				Average		
		point4	7	6,483,359.0	1,855,437.4	471.46				Average		
		point3	8	6,483,405.0	1,855,529.4	472.11				Average		
		point2	9	6,483,438.0	1,855,586.0	475.72				Average		
		point1	10	6,483,471.0	1,855,630.6	476.71						
Glendale Blvd NB - S of Alessandro - 2-2-2	12.0	point377	377	6,483,320.0	1,855,411.5	470.80				Average		
		point16	16	6,483,347.5	1,855,465.2	472.44				Average		
		point15	15	6,483,382.5	1,855,533.5	474.08				Average		
		point292	292	6,483,442.0	1,855,651.6	475.89				Average		
		point14	14	6,483,457.5	1,855,695.8	477.69						
Glendale Blvd NB - S of Alessandro - 3-2-2	12.0	point378	378	6,483,310.0	1,855,420.0	471.62				Average		
		point28	28	6,483,340.5	1,855,476.6	472.44				Average		
		point27	27	6,483,384.5	1,855,563.1	474.41				Average		
		point26	26	6,483,425.0	1,855,648.2	478.02						

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13 December 2007
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt E PM Conditions ST-10

Roadway	Points												
Name	Name	No.	Segment										
			Autos		MTrucks		HTrucks		Buses		Motorcycles		
			V	S	V	S	V	S	V	S	V	S	
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	
Glendale Blvd NB - S of Alessandro	point10	1	1263	35	32	35	0	0	17	30	15	35	
	point283	2	1263	35	32	35	0	0	17	30	15	35	
	point9	3	1263	35	32	35	0	0	17	30	15	35	
	point8	4											
Glendale Blvd NB - S of Alessandro - 2	point22	22	1263	35	32	35	0	0	17	30	15	35	
	point284	21	1263	35	32	35	0	0	17	30	15	35	
	point21	20	1263	35	32	35	0	0	17	30	15	35	
	point20	19											
Glendale Blvd NB - S of Alessandro - 3	point34	34	1263	35	32	35	0	0	17	30	15	35	
	point33	33	1263	35	32	35	0	0	17	30	15	35	
	point32	32	1263	35	32	35	0	0	17	30	15	35	
	point31	31											
Glendale Blvd NB N of SR2 Off	point41	41	383	35	10	35	0	0	5	30	4	35	
	point40	40	383	35	10	35	0	0	5	30	4	35	
	point39	39											
Glendale Blvd NB N of SR2 Off - 2	point42	42	383	35	10	35	0	0	5	30	4	35	
	point43	43											
Glendale Blvd SB N of SR2 Off	point44	44	299	35	8	35	0	0	4	30	4	35	
	point45	45											
Glendale Blvd SB N of SR2 Off -2	point46	46	299	35	8	35	0	0	4	30	4	35	
	point47	47											
SR 2 NB - 2	point98	98	1670	65	18	65	30	60	6	60	0	0	

	point380	380	1670	65	18	65	30	60	6	60	0	0
	point97	97	1670	65	18	65	30	60	6	60	0	0
	point96	96	1670	65	18	65	30	60	6	60	0	0
	point95	95	1670	65	18	65	30	60	6	60	0	0
	point94	94	1670	65	18	65	30	60	6	60	0	0
	point93	93	1670	65	18	65	30	60	6	60	0	0
	point92	92	1670	65	18	65	30	60	6	60	0	0
	point91	91	1670	65	18	65	30	60	6	60	0	0
	point90	90	1670	65	18	65	30	60	6	60	0	0
	point89	89	1670	65	18	65	30	60	6	60	0	0
	point88	88										
SR 2 SB Trans into Glendale SB	point116	116	1017	65	21	65	12	60	5	60	2	65
	point277	277	1017	65	21	65	12	60	5	60	2	65
	point115	115	1017	65	21	65	12	60	5	60	2	65
	point114	114	1017	65	21	65	12	60	5	60	2	65
	point113	113	1017	50	21	50	12	45	5	45	2	50
	point112	112										
SR 2 SB Trans into Glendale SB - 2	point117	117	1017	65	21	65	12	60	5	60	2	65
	point276	276	1017	65	21	65	12	60	5	60	2	65
	point118	118	1017	65	21	65	12	60	5	60	2	65
	point119	119	1017	65	21	65	12	60	5	60	2	65
	point120	120	1017	50	21	50	12	45	5	45	2	50
	point121	121										
SR 2 SB Trans into Glendale SB - 3	point146	146	1017	50	21	50	12	45	5	45	2	50
	point275	275	1017	65	21	65	12	60	5	60	2	65
	point145	145	1017	65	21	65	12	60	5	60	2	65
	point144	144	1017	65	21	65	12	60	5	60	2	65
	point143	143	1017	50	21	50	12	45	5	45	2	50
	point142	142										
Fargo St NB	point147	147	119	25	5	25	0	0	0	0	0	0
	point148	148										
Fargo St SB	point149	149	56	25	2	25	0	0	0	0	0	0
	point150	150										
Waterloo St - 2	point151	151	32	25	1	25	0	0	0	0	0	0

	point152	152	32	25	1	25	0	0	0	0	0	0
	point153	153										
Waterloo St	point154	154	32	25	1	25	0	0	0	0	0	0
	point155	155	32	25	1	25	0	0	0	0	0	0
	point156	156										
Alessandro SB	point283	181	284	35	8	35	0	0	16	30	0	0
	point181	386	284	35	8	35	0	0	16	30	0	0
	point180	180	284	35	8	35	0	0	16	30	0	0
	point179	179	284	35	8	35	0	0	16	30	0	0
	point178	178	284	35	8	35	0	0	16	30	0	0
	point177	177	284	35	8	35	0	0	16	30	0	0
	point176	176	284	35	8	35	0	0	16	30	0	0
	point175	175	284	35	8	35	0	0	16	30	0	0
	point174	174	284	35	8	35	0	0	16	30	0	0
	point173	173	284	35	8	35	0	0	16	30	0	0
	point172	172	284	35	8	35	0	0	16	30	0	0
	point171	171	284	35	8	35	0	0	16	30	0	0
	point170	170	284	35	8	35	0	0	16	30	0	0
	point169	169	284	35	8	35	0	0	16	30	0	0
	point168	168	284	35	8	35	0	0	16	30	0	0
	point167	167	284	35	8	35	0	0	16	30	0	0
	point166	166	284	35	8	35	0	0	16	30	0	0
	point165	165	284	35	8	35	0	0	16	30	0	0
	point164	164	284	35	8	35	0	0	16	30	0	0
	point163	163	284	35	8	35	0	0	16	30	0	0
	point162	162	284	35	8	35	0	0	16	30	0	0
	point161	161	284	35	8	35	0	0	16	30	0	0
	point160	160	284	35	8	35	0	0	16	30	0	0
	point159	159	284	35	8	35	0	0	16	30	0	0
	point158	158	284	35	8	35	0	0	16	30	0	0
	point157	157										
SR 2 NB - 3rd Lane	point204	204	1114	65	18	65	30	60	6	60	0	0
	point203	203	1114	65	18	65	30	60	6	60	0	0
	point202	202	1114	65	18	65	30	60	6	60	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

	point201	201	1114	65	18	65	30	60	6	60	0	0
	point279	279	1114	65	18	65	30	60	6	60	0	0
	point200	200										
Alessandro NB	point228	228	154	35	4	35	0	0	9	30	0	0
	point227	227	154	35	4	35	0	0	9	30	0	0
	point226	226	154	35	4	35	0	0	9	30	0	0
	point225	225	154	35	4	35	0	0	9	30	0	0
	point224	224	154	35	4	35	0	0	9	30	0	0
	point223	223	154	35	4	35	0	0	9	30	0	0
	point222	222	154	35	4	35	0	0	9	30	0	0
	point221	221	154	35	4	35	0	0	9	30	0	0
	point220	220	154	35	4	35	0	0	9	30	0	0
	point219	219	154	35	4	35	0	0	9	30	0	0
	point218	218	154	35	4	35	0	0	9	30	0	0
	point217	217	154	35	4	35	0	0	9	30	0	0
	point216	216	154	35	4	35	0	0	9	30	0	0
	point215	215	154	35	4	35	0	0	9	30	0	0
	point214	214	154	35	4	35	0	0	9	30	0	0
	point213	213	154	35	4	35	0	0	9	30	0	0
	point212	212	154	35	4	35	0	0	9	30	0	0
	point211	211	154	35	4	35	0	0	9	30	0	0
	point210	210	154	35	4	35	0	0	9	30	0	0
	point209	209	154	35	4	35	0	0	9	30	0	0
	point208	208	154	35	4	35	0	0	9	30	0	0
	point207	207	154	35	4	35	0	0	9	30	0	0
	point206	206	154	35	4	35	0	0	9	30	0	0
	point205	385	154	35	4	35	0	0	9	30	0	0
	point286	205										
Glendale Blvd NB -N of Alessandro - 2-2	point233	233	383	35	10	35	0	0	5	30	4	35
	point13	13	383	35	10	35	0	0	5	30	4	35
	point251	251										
Glendale Blvd NB -N of Alessandro - 3-2	point234	234	964	35	24	35	0	0	13	30	11	35
	point342	342	383	35	10	35	0	0	5	30	4	35
	point25	25										

INPUT: TRAFFIC FOR LAeq1h Volumes **<Project Name?>**

Glendale Blvd SB - N of Alessandro	point344	344	843	35	21	35	0	0	12	30	10	35
	point295	295	843	35	21	35	0	0	12	30	10	35
	point53	53	843	35	21	35	0	0	12	30	10	35
	point52	52	843	35	21	35	0	0	12	30	10	35
	point51	51	843	35	21	35	0	0	12	30	10	35
	point343	343	843	35	21	35	0	0	12	30	10	35
	point50	50	843	35	21	35	0	0	12	30	10	35
	point49	49										
Glendale Blvd SB - N of Alessandro - 3	point236	236	843	35	21	35	0	0	12	30	10	35
	point62	62	843	35	21	35	0	0	12	30	10	35
	point61	61	843	35	21	35	0	0	12	30	10	35
	point60	60	843	35	21	35	0	0	12	30	10	35
	point59	59	843	35	21	35	0	0	12	30	10	35
	point58	58										
Glendale Blvd NB - S of Alessandro - 3-2	point237	237	1285	35	32	35	0	0	18	30	15	35
	point30	30	1285	35	32	35	0	0	18	30	15	35
	point29	29	1285	35	32	35	0	0	18	30	15	35
	point375	375										
Glendale Blvd NB - S of Alessandro - 2-2	point238	238	1285	35	32	35	0	0	18	30	15	35
	point18	18	1285	35	32	35	0	0	18	30	15	35
	point17	17	1285	35	32	35	0	0	18	30	15	35
	point373	373										
Glendale Blvd NB -N of Alessandro-2	point239	239	1285	35	32	35	0	0	18	30	15	35
	point6	5	1285	35	32	35	0	0	18	30	15	35
	point5	6										
SR 2 NB - 2-2	point243	243	1114	65	18	65	30	60	6	60	0	0
	point87	87	1114	65	18	65	30	60	6	60	0	0
	point86	86	1114	65	18	65	30	60	6	60	0	0
	point278	278	1114	65	18	65	30	60	6	60	0	0
	point85	85										
SR2 NB	point84	84	1670	65	18	65	30	60	6	60	0	0
	point83	83	1670	65	18	65	30	60	6	60	0	0
	point82	82	1670	65	18	65	30	60	6	60	0	0
	point81	81	1670	65	18	65	30	60	6	60	0	0

	point80	80	1670	65	18	65	30	60	6	60	0	0
	point79	79	1670	65	18	65	30	60	6	60	0	0
	point78	78	1670	65	18	65	30	60	6	60	0	0
	point77	77	1670	65	18	65	30	60	6	60	0	0
	point76	76	1670	65	18	65	30	60	6	60	0	0
	point75	75	1670	65	18	65	30	60	6	60	0	0
	point74	74	1670	65	18	65	30	60	6	60	0	0
	point73	73	1670	65	18	65	30	60	6	60	0	0
	point72	72	1670	65	18	65	30	60	6	60	0	0
	point71	71	1670	65	18	65	30	60	6	60	0	0
	point70	70										
SR2 NB-2	point247	247	1114	65	18	65	30	60	6	60	0	0
	point242	242	1114	65	18	65	30	60	6	60	0	0
	point230	230	1114	65	18	65	30	60	6	60	0	0
	point281	280	1114	65	18	65	30	60	6	60	0	0
	point229	229										
Glendale Blvd SB - S of Alessandro-2	point240	240	878	35	22	35	0	0	12	30	10	35
	point48	48	878	35	22	35	0	0	12	30	10	35
	point286	387	878	35	22	35	0	0	12	30	10	35
	point66	66										
Glendale Blvd SB - S of Alessandro - 2-2	point241	241	878	35	22	35	0	0	12	30	10	35
	point57	57	878	35	22	35	0	0	12	30	10	35
	point287	388	878	35	22	35	0	0	12	30	10	35
	point68	68										
Glendale Blvd NB - S of Alessandro - 2-2-2	point256	256	383	35	10	35	0	0	5	30	4	35
	point252	252										
Glendale Blvd NB - S of Alessandro - 2-2-2-	point257	257	383	35	10	35	0	0	5	30	4	35
	point291	291	383	35	10	35	0	0	5	30	4	35
	point290	290	383	35	10	35	0	0	5	30	4	35
	point12	12	383	35	10	35	0	0	5	30	4	35
	point11	11										
Glendale Blvd SB - N of Alessandro - 2	point65	65	292	35	7	35	0	0	4	30	3	35
	point271	271										
Glendale Blvd SB - N of Alessandro	point56	56	292	35	7	35	0	0	4	30	3	35

	point267	267										
Glendale Blvd SB - N of Alessandro-2	point269	269	292	35	7	35	0	0	4	30	3	35
	point55	55	843	35	21	35	0	0	12	30	10	35
	point54	54										
Glendale Blvd SB - N of Alessandro-2	point270	270	292	35	7	35	0	0	4	30	3	35
	point268	268										
Glendale Blvd SB - N of Alessandro - 2-2	point273	273	292	35	7	35	0	0	4	30	3	35
	point272	272										
Glendale Blvd SB - N of Alessandro - 2-2-2	point274	274	843	35	21	35	0	0	12	30	10	35
	point64	64	843	35	21	35	0	0	12	30	10	35
	point63	63										
Glendale Blvd NB - N of Alessandro - 2-	point281	281	383	35	10	35	0	0	5	30	4	35
	point286	286										
Glendale Blvd NB - N of Alessandro - 2	point288	288	383	35	10	35	0	0	5	30	4	35
	point287	287										
Glendale Blvd NB - S of Alessandro -	point289	289	383	35	10	35	0	0	5	30	4	35
	point282	282	383	35	10	35	0	0	5	30	4	35
	point283	283	383	35	10	35	0	0	5	30	4	35
	point284	284										
Glendale Blvd SB - S of Alessandro - 2	point297	297	1330	35	34	35	0	0	18	30	16	35
	point296	296										
Glendale Blvd SB - S of Alessandro - 2	point300	300	1330	35	34	35	0	0	18	30	16	35
	point301	301										
Glendale Blvd SB - N of Alessandro-	point302	302	843	35	21	35	0	0	12	30	10	35
	point303	303	843	35	21	35	0	0	12	30	10	35
	point304	304	843	35	21	35	0	0	12	30	10	35
	point305	305	843	35	21	35	0	0	12	30	10	35
	point306	306	843	35	21	35	0	0	12	30	10	35
	point307	307										
SR 2 SB Trans into Glendale SB - 3	point311	311	1017	50	21	50	12	45	5	45	2	50
	point312	312	1017	35	21	35	12	30	5	30	2	35
	point313	313	1017	35	21	35	12	30	5	30	2	35
	point314	314	1017	35	21	35	12	30	5	30	2	35
	point315	315	1017	35	21	35	12	30	5	30	2	35

	point316	316	1017	35	21	35	12	30	5	30	2	35
	point382	382	1017	35	21	35	12	30	5	30	2	35
	point317	317	1017	35	21	35	12	30	5	30	2	35
	point348	348	1017	35	21	35	12	30	5	30	2	35
	point349	349	1017	35	21	35	12	30	5	30	2	35
	point318	318										
SR 2 SB Trans into Glendale SB -	point319	319	1017	50	21	50	12	45	5	45	2	50
	point320	320	1017	35	21	35	12	30	5	30	2	35
	point321	321	1017	35	21	35	12	30	5	30	2	35
	point322	322	1017	35	21	35	12	30	5	30	2	35
	point383	383	1017	35	21	35	12	30	5	30	2	35
	point323	323	1017	35	21	35	12	30	5	30	2	35
	point347	347	1017	35	21	35	12	30	5	30	2	35
	point381	381	1017	35	21	35	12	30	5	30	2	35
	point324	324										
SR 2 SB Trans into Glendale SB	point325	325	1017	50	21	50	12	45	5	45	2	50
	point326	326	1017	35	21	35	12	30	5	30	2	35
	point327	327	1017	35	21	35	12	30	5	30	2	35
	point328	328	1017	35	21	35	12	30	5	30	2	35
	point384	384	1017	35	21	35	12	30	5	30	2	35
	point329	329	1017	35	21	35	12	30	5	30	2	35
	point345	345	1017	35	21	35	12	30	5	30	2	35
	point346	346	1017	35	21	35	12	30	5	30	2	35
	point330	330										
Glendale Blvd SB - S of Alessandro--2	point368	368	1330	35	34	35	0	0	18	30	16	35
	point308	308	1330	35	34	35	0	0	18	30	16	35
	point309	309	1306	35	33	35	0	0	18	30	15	35
	point310	310										
Glendale Blvd NB - S of Alessandro - 3-	point371	371	964	35	24	35	0	0	13	30	11	35
	point370	370	964	35	24	35	0	0	13	30	11	35
	point379	379	964	35	24	35	0	0	13	30	11	35
	point369	369										
Glendale Blvd NB -N of Alessandro-2-2	point372	372	1285	35	32	35	0	0	18	30	15	35
	point374	374										

INPUT: TRAFFIC FOR LAeq1h Volumes <Project Name?>

Glendale Blvd NB -N of Alessandro-2-2-2	point376	376	964	35	24	35	0	0	13	30	11	35
	point4	7	964	35	24	35	0	0	13	30	11	35
	point3	8	964	35	24	35	0	0	13	30	11	35
	point2	9	964	35	24	35	0	0	13	30	11	35
	point1	10										
Glendale Blvd NB - S of Alessandro - 2-2-2	point377	377	964	35	24	35	0	0	13	30	11	35
	point16	16	964	35	24	35	0	0	13	30	11	35
	point15	15	964	35	24	35	0	0	13	30	11	35
	point292	292	964	35	24	35	0	0	13	30	11	35
	point14	14										
Glendale Blvd NB - S of Alessandro - 3-2-2	point378	378	964	35	24	35	0	0	13	30	11	35
	point28	28	964	35	24	35	0	0	13	30	11	35
	point27	27	964	35	24	35	0	0	13	30	11	35
	point26	26										

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13 December 2007
TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt E PM Conditions ST-10

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST-10	49	1	6,483,278.0	1,854,984.0	485.00	4.92	0.00	66	10.0	8.0	Y

Jones & Stokes
M Greene

13 December 2007
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt E PM Conditions ST-10

Barrier Name	Type	Height Min	Max	If Wall $ per Unit Area	If Berm $ per Unit Vol.	Top Width	Run:Rise	Add'tnl $ per Unit Length	Points Name	No.	Coordinates (bottom) X	Y	Z	Height at Point	Segment Seg Ht Perturbs Incre-ment	#Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	99.99	0.00				0.00	point1	1	6,484,163.5	1,856,717.8	502.00	0.00	0.00	0	0		
									point2	2	6,484,068.0	1,856,631.0	505.00	0.00	0.00	0	0		
									point3	3	6,483,970.0	1,856,526.6	509.00	0.00	0.00	0	0		
									point4	4	6,483,765.5	1,856,365.5	512.00	0.00	0.00	0	0		
									point5	5	6,483,599.5	1,856,213.9	502.00	0.00	0.00	0	0		
									point6	6	6,483,448.0	1,856,042.9	498.69	0.00					
Barrier2	W	0.00	99.99	0.00				0.00	point7	7	6,483,589.0	1,856,167.4	505.25	0.00	0.00	0	0		
									point8	8	6,483,714.0	1,856,249.8	505.25	0.00	0.00	0	0		
									point9	9	6,483,861.0	1,856,355.8	498.69	0.00	0.00	0	0		
									point10	10	6,483,976.0	1,856,447.9	498.69	0.00	0.00	0	0		
									point11	11	6,484,039.0	1,856,503.9	498.69	0.00	0.00	0	0		
									point12	12	6,484,149.5	1,856,630.1	492.13	0.00	0.00	0	0		
									point13	13	6,484,208.0	1,856,683.5	492.13	0.00					
Barrier3	W	0.00	100.00	0.00				0.00	point14	14	6,484,242.0	1,856,720.4	510.17	0.00	0.00	0	0		
									point15	15	6,484,251.0	1,856,741.2	510.17	0.00	0.00	0	0		
									point16	16	6,484,354.5	1,856,879.8	501.97	0.00	0.00	0	0		
									point17	17	6,484,458.0	1,857,022.6	497.05	0.00	0.00	0	0		
									point101	101	6,484,561.0	1,857,196.9	491.31	0.00	0.00	0	0		
									point18	18	6,484,672.5	1,857,383.5	485.56	0.00					
Barrier4	W	0.00	100.00	0.00				0.00	point19	19	6,484,010.0	1,856,437.4	493.77	0.00	0.00	0	0		
									point20	20	6,483,900.5	1,856,334.9	497.05	0.00	0.00	0	0		
									point21	21	6,483,858.0	1,856,299.9	498.69	0.00	0.00	0	0		
									point22	22	6,483,720.5	1,856,174.5	501.97	0.00	0.00	0	0		
									point23	23	6,483,589.5	1,856,055.2	505.25	0.00	0.00	0	0		
									point24	24	6,483,448.5	1,855,936.1	505.58	0.00	0.00	0	0	Y	
									point25	25	6,483,356.5	1,855,854.6	505.25	0.00	0.00	0	0		
									point26	26	6,483,281.5	1,855,788.9	492.13	0.00	0.00	0	0		
									point27	27	6,483,184.0	1,855,690.9	493.77	0.00					
Barrier6	W	0.00	100.00	0.00				0.00	point38	38	6,484,176.5	1,856,715.0	511.81	2.89	0.00	0	0	Y	
									point39	39	6,484,358.0	1,856,561.2	510.17	2.89					
Barrier7	W	0.00	100.00	0.00				0.00	point40	40	6,484,241.0	1,856,716.5	510.17	2.89	0.00	0	0	Y	
									point41	41	6,484,385.5	1,856,592.9	510.17	2.89					
Barrier9	W	0.00	99.99	0.00				0.00	point66	66	6,483,183.0	1,854,735.9	475.72	0.00	0.00	0	0		
									point67	67	6,483,184.5	1,854,761.4	475.72	0.00	0.00	0	0		

									point68	68	6,483,191.5	1,854,778.8	475.72	0.00	0.00	0	0		
									point69	69	6,483,288.0	1,854,734.2	475.72	0.00					
Barrier10	W	0.00	99.99	0.00				0.00	point70	70	6,483,203.5	1,854,901.6	475.72	0.00	0.00	0	0		
									point71	71	6,483,197.0	1,854,858.5	475.72	0.00	0.00	0	0		
									point72	72	6,483,311.5	1,854,796.4	485.56	0.00					
Barrier11	W	0.00	99.99	0.00				0.00	point73	73	6,483,175.0	1,854,636.0	465.88	0.00	0.00	0	0		
									point74	74	6,483,255.5	1,854,602.9	475.72	0.00					
Barrier12	W	0.00	99.99	0.00				0.00	point75	75	6,484,358.0	1,856,553.5	510.17	0.00	0.00	0	0		
									point76	76	6,484,296.5	1,856,472.1	511.81	0.00	0.00	0	0		
									point77	77	6,484,166.5	1,856,348.4	511.81	0.00	0.00	0	0		
									point78	78	6,484,084.5	1,856,276.2	516.73	0.00	0.00	0	0		
									point79	79	6,483,911.0	1,856,117.1	523.29	0.00	0.00	0	0		
									point80	80	6,483,865.0	1,856,065.9	524.93	0.00	0.00	0	0		
									point81	81	6,483,792.5	1,855,979.1	523.29	0.00	0.00	0	0		
									point82	82	6,483,711.5	1,855,888.0	520.01	0.00	0.00	0	0		
									point83	83	6,483,624.0	1,855,784.1	515.09	0.00	0.00	0	0		
									point84	84	6,483,531.0	1,855,675.1	508.53	0.00	0.00	0	0		
									point85	85	6,483,460.5	1,855,594.0	500.33	0.00	0.00	0	0		
									point86	86	6,483,417.5	1,855,523.1	497.05	0.00	0.00	0	0		
									point87	87	6,483,383.5	1,855,421.8	492.13	0.00	0.00	0	0		
									point88	88	6,483,375.0	1,855,327.2	485.56	0.00	0.00	0	0		
									point89	89	6,483,375.0	1,855,291.8	482.28	0.00	0.00	0	0		
									point90	90	6,483,365.0	1,855,265.5	479.00	0.00	0.00	0	0		
									point91	91	6,483,327.0	1,855,237.9	470.80	0.00	0.00	0	0		
									point92	92	6,483,294.0	1,855,239.2	467.52	0.00					
Barrier13	W	0.00	99.99	0.00				0.00	point121	93	6,484,837.0	1,857,200.8	465.88	0.00	0.00	0	0		
									point93	138	6,484,752.0	1,857,100.1	469.16	0.00	0.00	0	0		
									point94	94	6,484,662.5	1,856,991.0	472.44	0.00	0.00	0	0		
									point95	95	6,484,622.0	1,856,932.0	477.36	0.00	0.00	0	0		
									point96	96	6,484,586.5	1,856,870.2	482.28	0.00	0.00	0	0		
									point97	97	6,484,547.0	1,856,801.8	488.85	0.00	0.00	0	0		
									point98	98	6,484,502.5	1,856,728.1	495.41	0.00	0.00	0	0		
									point99	99	6,484,435.5	1,856,628.4	505.25	0.00	0.00	0	0		
									point100	100	6,484,392.0	1,856,587.8	508.53	0.00					
Barrier18	W	0.00	100.00	0.00				0.00	point126	126	6,483,293.0	1,855,687.4	501.97	0.00	0.00	0	0		
									point127	127	6,483,345.5	1,855,732.9	505.25	0.00	0.00	0	0	Y	
									point128	128	6,483,463.5	1,855,853.9	505.25	0.00	0.00	0	0		
									point129	129	6,483,477.0	1,855,867.8	506.89	0.00	0.00	0	0		
									point130	130	6,483,673.0	1,856,071.0	503.61	0.00					
Barrier19	W	0.00	99.99	0.00				0.00	point131	131	6,483,516.5	1,855,800.9	479.00	0.00	0.00	0	0		
									point132	132	6,483,621.0	1,855,953.1	493.77	0.00	0.00	0	0		
									point133	133	6,483,708.0	1,856,080.4	497.05	0.00	0.00	0	0		
									point134	134	6,483,845.0	1,856,245.9	500.33	0.00	0.00	0	0		
									point135	135	6,483,931.0	1,856,348.0	497.05	0.00	0.00	0	0		
									point136	136	6,484,016.0	1,856,443.1	493.77	0.00	0.00	0	0		
									point137	137	6,484,055.0	1,856,488.1	492.13	0.00					
Barrier21	W	0.00	99.99	0.00				0.00	point122	143	6,483,298.5	1,855,167.1	468.00	11.00	0.00	0	0		
									point123	144	6,483,249.0	1,855,176.5	465.00	11.00	0.00	0	0		

									point124	145	6,483,205.0	1,854,904.4	465.00	11.00					

Jones & Stokes
M Greene

13 December 2007
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: <Project Name?>
RUN: SR 2 Alt E PM Conditions ST-10
BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

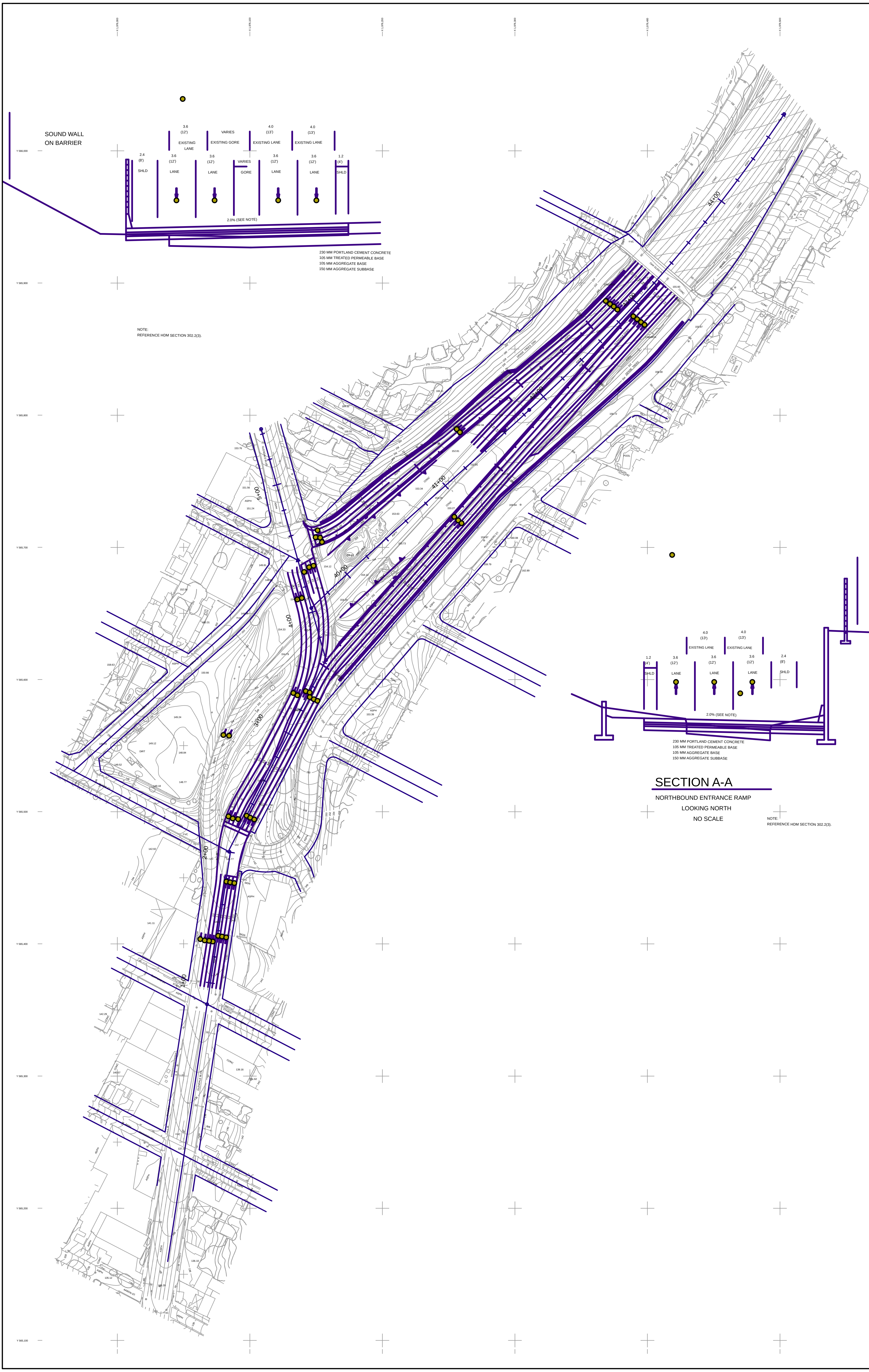
Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST-10	49	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0

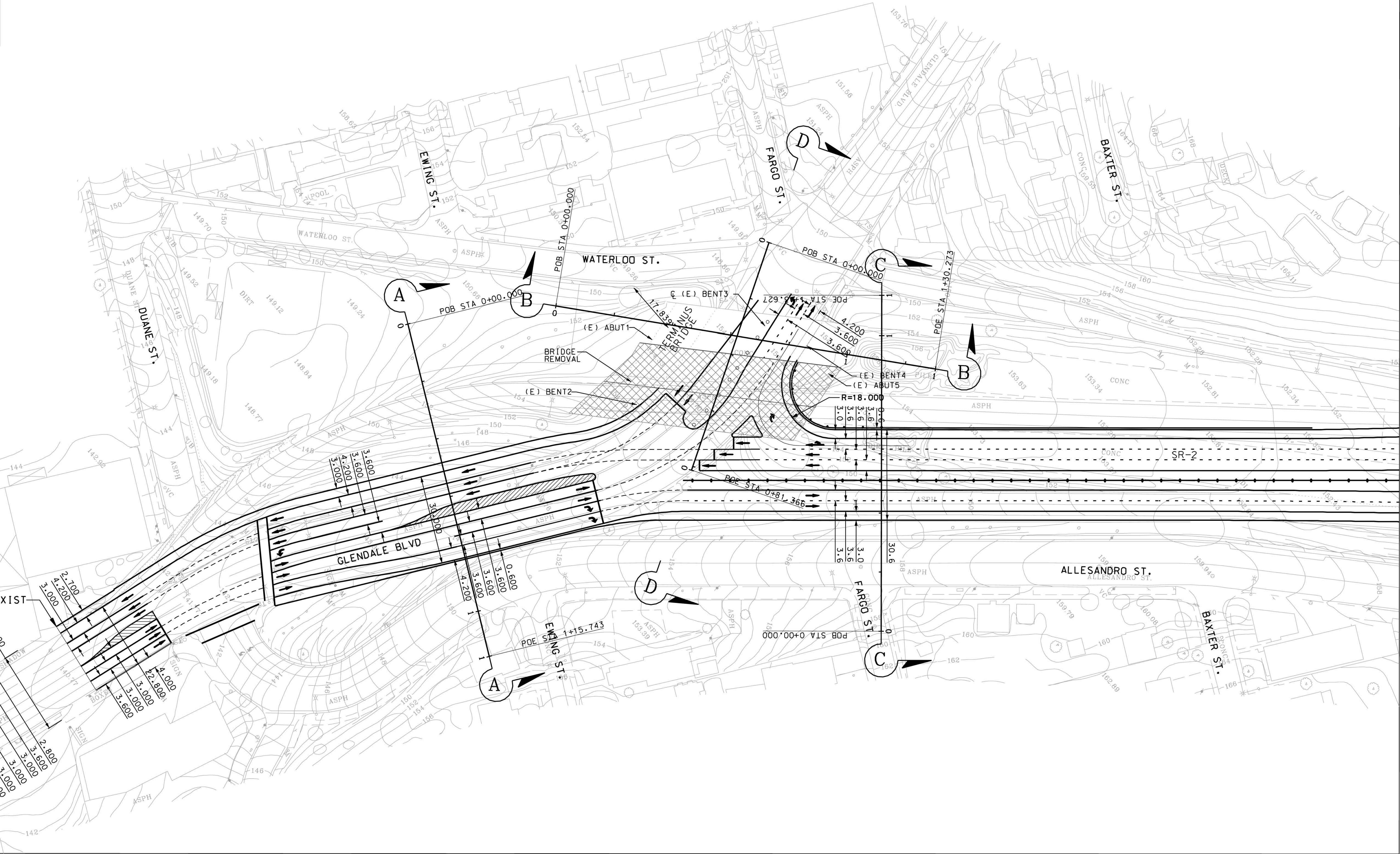
Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Appendix E

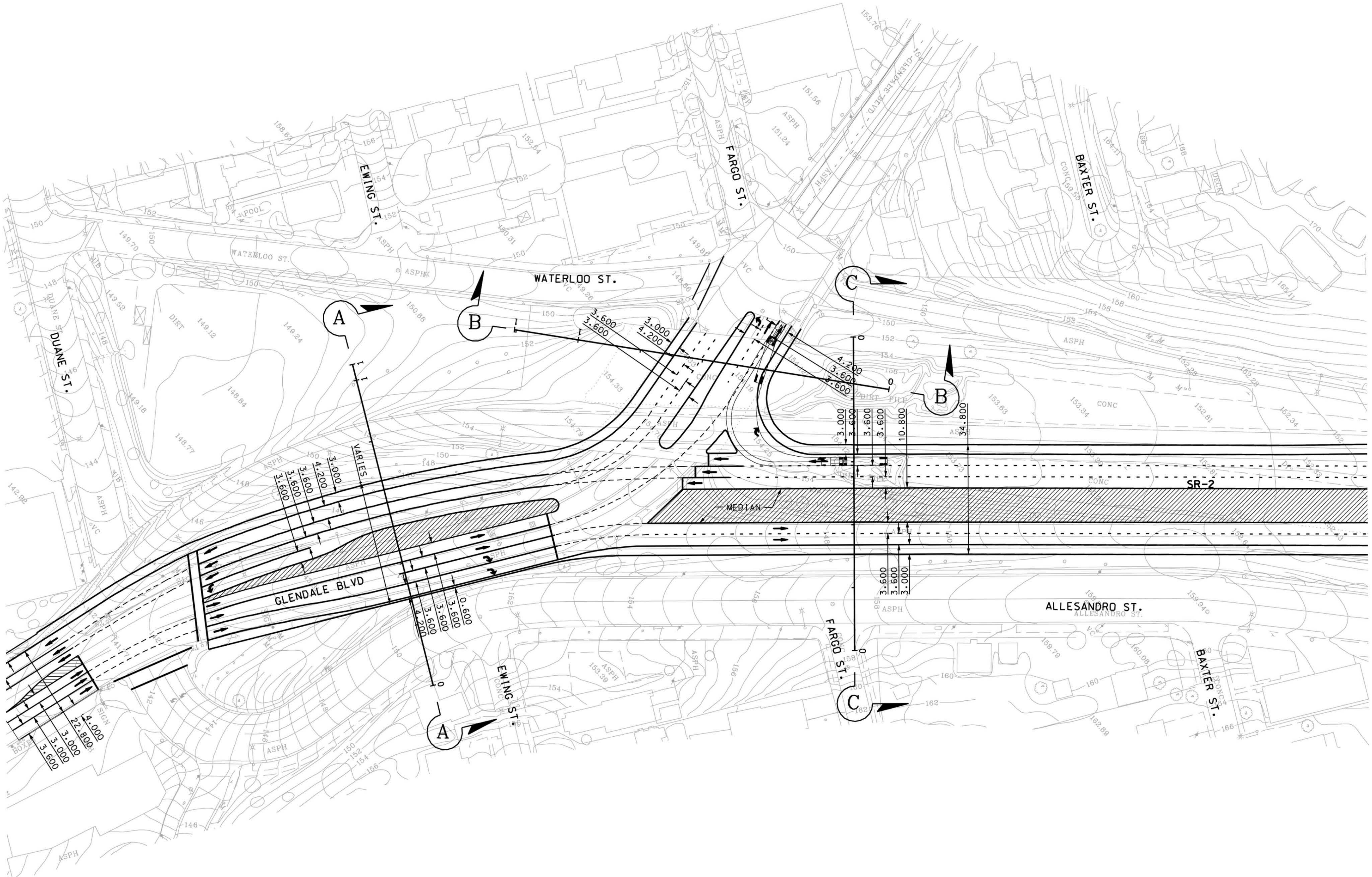
Alternatives A-E Drawings


SOUND WALL
ON BARRIER
3.6
(12')
EXISTING
LANE
VARIES
EXISTING GORE
4.0
(13')
EXISTING LANE
4.0
(13')
EXISTING LANE
2.4
(8')
SHLD
3.6
(12')
LANE
3.6
(12')
LANE
VARIES
GORE
3.6
(12')
LANE
3.6
(12')
LANE
1.2
(4')
SHLD
2.0% (SEE NOTE)
230 MM PORTLAND CEMENT CONCRETE
105 MM TREATED PERMEABLE BASE
105 MM AGGREGATE BASE
150 MM AGGREGATE SUBBASE
NOTE:
REFERENCE HDM SECTION 302.2(3).
44+00
43+00
42+00
41+00
40+00
5+00
4+00
3+00
2+00
1+00
4.0
(13')
EXISTING LANE
4.0
(13')
EXISTING LANE
1.2
(4')
SHLD
3.6
(12')
LANE
3.6
(12')
LANE
3.6
(12')
LANE
2.4
(8')
SHLD
2.0% (SEE NOTE)
230 MM PORTLAND CEMENT CONCRETE
105 MM TREATED PERMEABLE BASE
105 MM AGGREGATE BASE
150 MM AGGREGATE SUBBASE
SECTION A-A
NORTHBOUND ENTRANCE RAMP
LOOKING NORTH
NO SCALE
NOTE:
REFERENCE HDM SECTION 302.2(3).

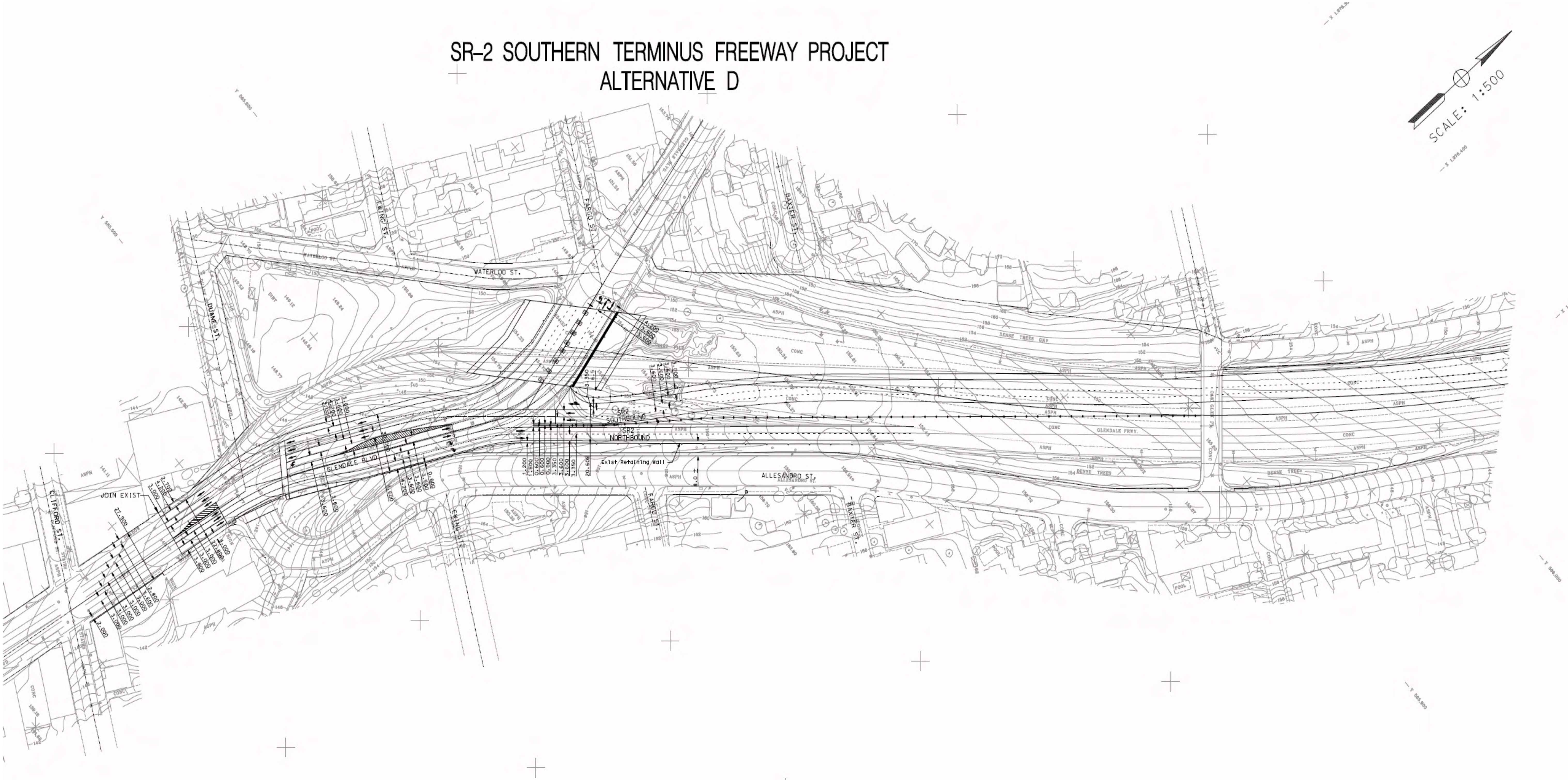
SR-2 SOUTHERN TERMINUS FREEWAY PROJECT
ALTERNATIVE 5B



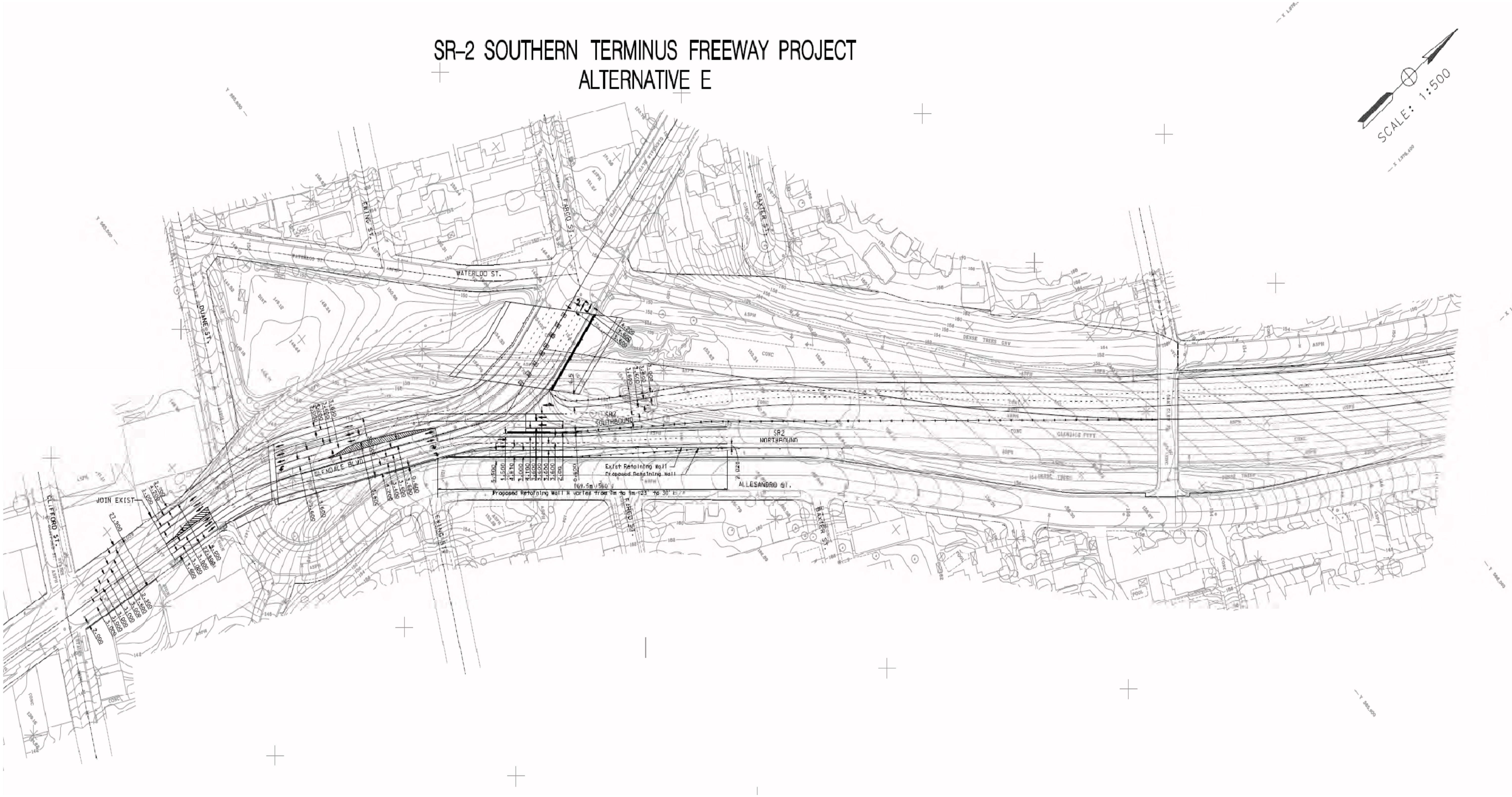
SR-2 SOUTHERN TERMINUS FREEWAY PROJECT
ALTERNATIVE 6A



SR-2 SOUTHERN TERMINUS FREEWAY PROJECT
ALTERNATIVE D



SR-2 SOUTHERN TERMINUS FREEWAY PROJECT
ALTERNATIVE E



2nd Draft

Natural Environment Study

(Minimal Impacts)

SR-2 Freeway, between the L.A. River and Aaron Street

Communities of Silver Lake and Echo Park in the City of Los Angeles

Los Angeles County, California

07-LA-2-PM 13.5/15.0

07-186-205500

June 2008

Prepared By: ________________________________ Date: ___________
Kurt Campbell, Senior Biologist
951-506-4038
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42145 Lyndie Lane, Suite 200
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Approved By: ________________________________ Date: ___________
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(213) 897-9016
Division of Environmental Planning
Caltrans, District 7

Contents

Tables

Figures

Appendices

Acronyms

ACOE	U.S. Army Corps of Engineers
BSA	biological study area
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CDFA	California Department of Food and Agriculture
CDFG	California Department of Fish and Game
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act
dbh	diameter at breast height
EO	Executive Order
FHWA	Federal Highway Administration
LADOT	Los Angeles Department of Transportation
MBTA	Migratory Bird Treaty Act
Metro	Los Angeles County Metropolitan Transportation Authority
NEPA	National Environmental Policy Act
PSR/PDS	Project Study Report/Project Development Study
SR-2	State Route 2
USGS	U.S. Geological Survey

Summary

The Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the California Department of Transportation (Caltrans) and the Los Angeles Department of Transportation (LADOT), is proposing to modify the southern terminus of State Route 2 (SR-2), also known as the Glendale Freeway, located in the City of Los Angeles, Los Angeles County, California (Figure 1). The proposed project construction limits are located approximately between Clifford Street to the south and Oak Glen Place to the north; however, the overall natural environment study area, or biological study area (BSA), for the project includes the right-of-way between Aaron Street to the south and the Los Angeles River to the north (Figure 2).

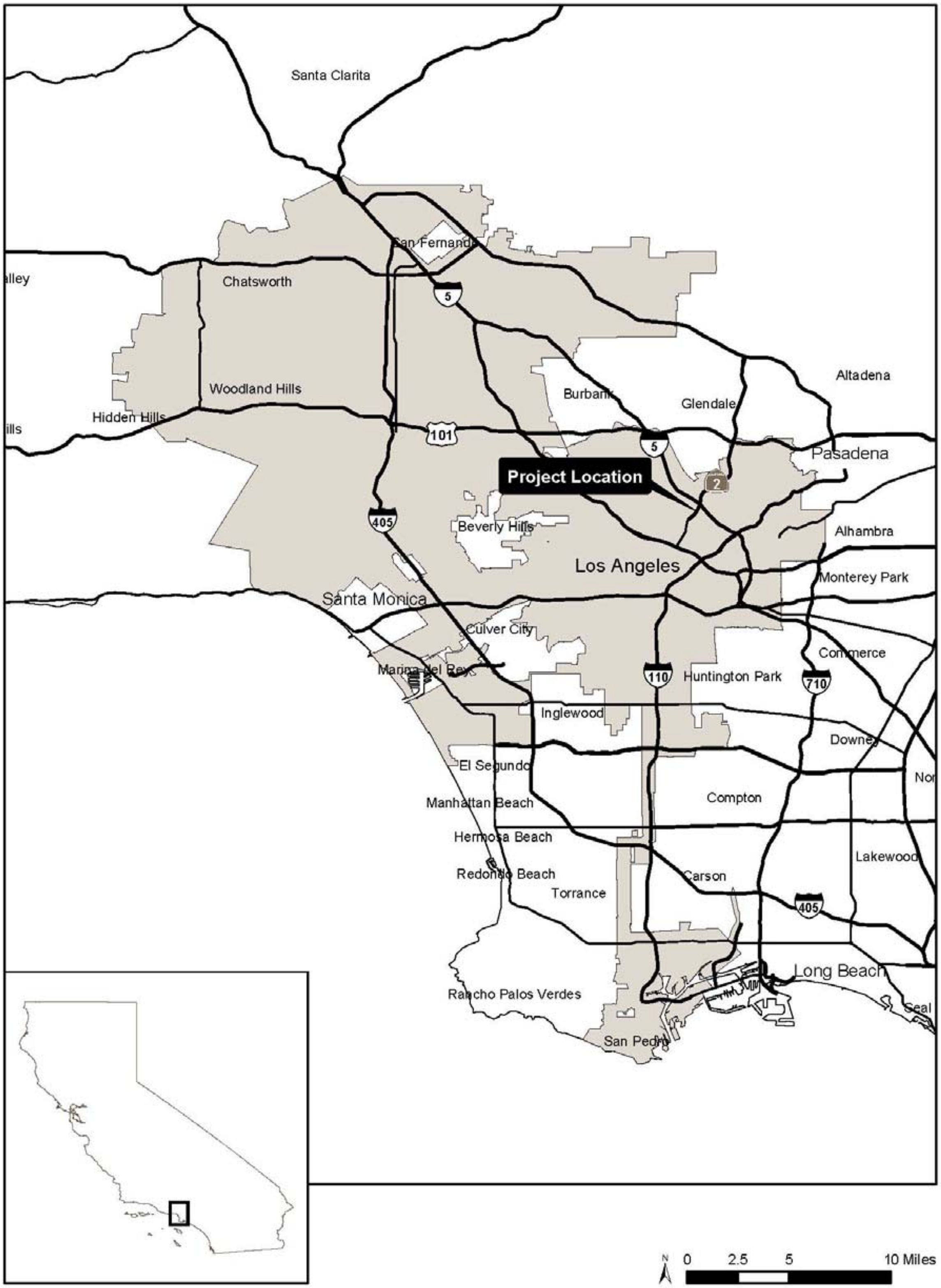
The purpose of the project is to develop a balanced transportation system serving local and regional transportation needs while reducing congestion and improving transportation mobility at the SR-2 freeway terminus. The objectives are to improve traffic flow at the freeway terminus, design the freeway terminus to be compatible with existing residential and commercial uses, provide pedestrian enhancements at the SR-2 freeway terminus, and create the opportunity for potential additional open space in the vicinity of the SR-2 terminus. The BSA is completely surrounded by urban development, including residences, commercial and light industrial structures, and one small recreational park (Tommy Lasorda Field of Dreams). No natural vegetative communities are supported within the BSA. Except for the No-Build Alternative, which would result in no alterations of the existing SR-2 terminus, all of the remaining alternatives (Alternatives A through E) would result in alterations to the existing roadway configuration. None the five build alternatives would result in any form of impact (i.e., direct, indirect, permanent, temporary, or cumulative) to natural communities or special-status species.

One small surface drainage feature is located near the southeast corner of the Tommy Lasorda Field of Dreams. Current engineering designs would indicate that approximately 9 square feet of this drainage would be rerouted underground. This area consists of a concrete-lined roadside ditch with a small extent of deposited soil and some rooted, nonnative and ruderal native, herbaceous vegetation. The U.S. Army Corps of Engineers (ACOE) has been consulted regarding this feature. It is anticipated that ACOE will waive the requirement for permitting under the Clean Water Act (CWA) due to the very minor extent and disturbed and temporary nature of the resources present. Because the project would result in a less-than-substantial alteration to state streambeds, no Streambed Alteration Agreement would be needed under the Streambed Alteration Program (California Fish and Game Code, Section 1602). No other jurisdictional features are located within the project boundaries.

Numerous invasive and exotic plant species are supported throughout the BSA. Measures are recommended to avoid the propagation of these species through project implementation.

Native birds protected under the Migratory Bird Treaty Act (MBTA), including raptors, may nest within and adjacent to the BSA. Measures are recommended to avoid incidental mortality and injury to native birds protected under this act.

Figure 1. Regional Vicinity Map



Source: Jones & Stokes, 2007.

Figure 2. Project Study Area

Source: Jones & Stokes, 2007.

Introduction

SR-2 was originally planned and constructed in 1959 to connect Interstate 5 with U.S. 101 through the neighborhoods of Silver Lake and Echo Park. In 1962, as a result of local community opposition, the full buildout plan was rescinded, resulting in the current SR-2 terminus configuration near Glendale Boulevard and Duane Street.

There have been three relevant studies related to the terminus segment of SR-2. Metro prepared a study in 1992 to develop a course of action for future traffic and transportation planning within the Glendale Freeway/Boulevard area. This included a review of existing traffic conditions, proposed transportation improvements, evaluation of those improvements, and recommendations for implementation of the improvements.

In 1994, the Glendale Boulevard Corridor Preliminary Planning Study – Phase II was completed by Metro and LADOT. That study analyzed existing constraints and opportunities within the corridor and developed urban design strategies and conceptual transportation measures to improve traffic congestion along Glendale Boulevard at the SR-2 terminus. A list of short-term and long-term measures, including alternative reconfigurations for the SR-2 terminus, was presented.

In January 2002, the Project Study Report/Project Development Study (PSR/PDS) was completed by Caltrans. The study addressed proposed reconstruction of the southern terminus of SR-2. The build alternatives ranged from widening the ramps in the existing interchange configuration to realigning the ramps to tie in to Glendale Boulevard in a new configuration. Since then, a request for additional design alternatives stemmed from community review of the PSR/PDS. To accommodate the community's request, Metro is undertaking this study and proceeding with the next project step of developing the environmental document and project approval.

Currently, Metro, in cooperation with Caltrans and LADOT, is proposing to modify the southern terminus of SR-2 . The proposed project site is generally located between Clifford Street to the south and Oak Glen Place to the north; however, the overall natural environment study area, or BSA, for the project includes the right-of-way between Aaron Street to the south and the Los Angeles River to the north. The location of the project site is shown on the Hollywood, California, U.S. Geological Survey (USGS) 7.5-minute quadrangle map (Township 1 South, Range 13 West [no sections for this area]) and on page 594, block E5, of the Thomas Brothers Guide for Los Angeles County (Thomas Bros. 2000).

Project Description

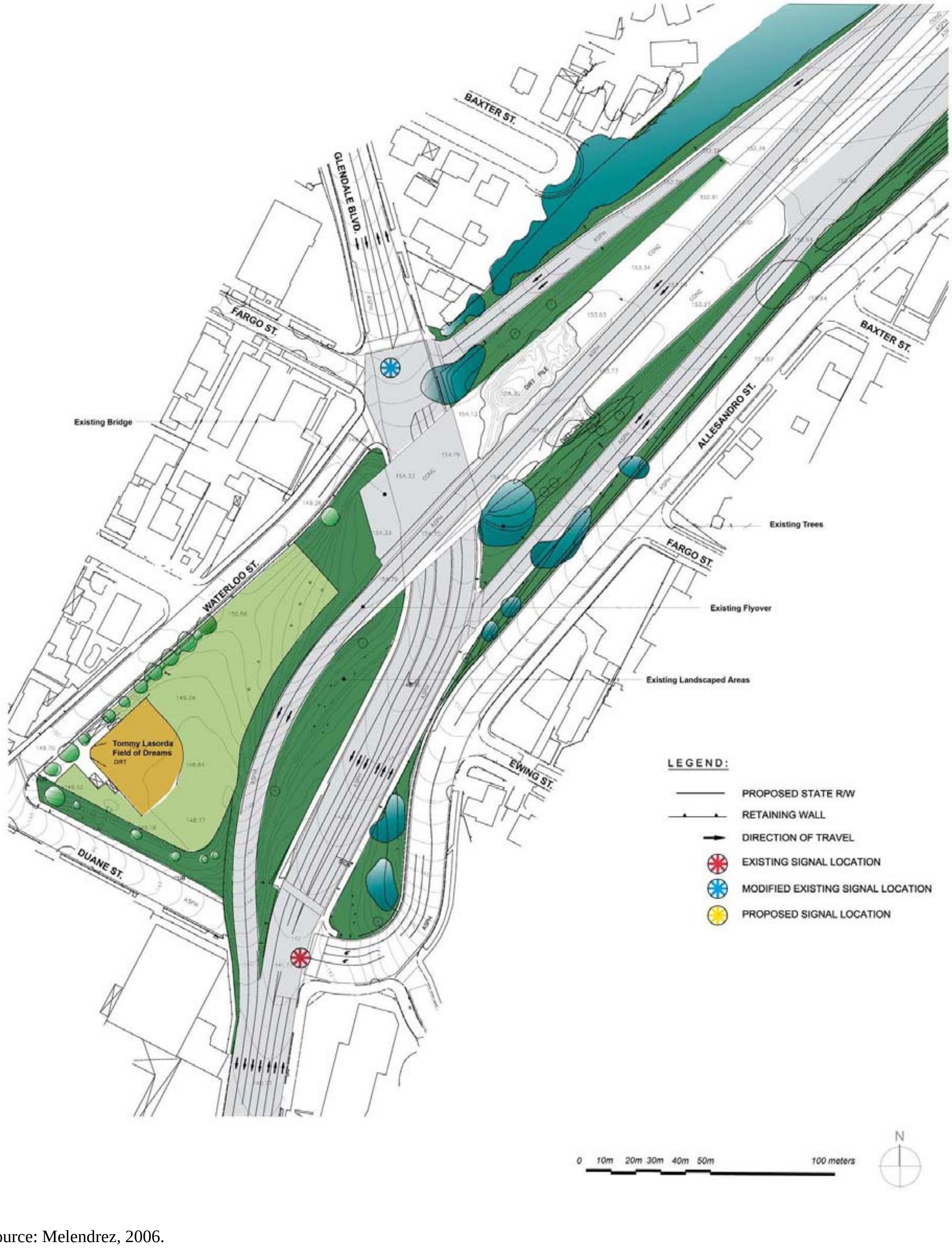
Metro, in cooperation with the Caltrans and LADOT, is proposing to modify the southern terminus of SR-2 at Glendale Boulevard to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the

SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses.

There are six proposed alternatives for the SR-2 Freeway Terminus Improvement Project, including the No-Build Alternative. The proposed project site is generally located between Clifford Street to the south and Oak Glen Place to the north. The six proposed alternatives are summarized as follows:

- **No-Build Alternative (Baseline Alternative):** This alternative requires no new construction (Figure 3).
- **Alternative A (Widen Existing Ramps):** This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp and bridge (two lanes). This alternative does not have the potential for new open space (Figure 4).
- **Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge):** This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would also remove the southbound flyover ramp and a portion of the bridge over Glendale Boulevard. The remaining portion of the bridge over Glendale Boulevard would be retained for community reuse and greening. This alternative offers the potential for new open space (Figure 5).
- **Alternative C (Realign Ramps East – Remove Flyover and Bridge):** This alternative would shift entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and bridge over Glendale Boulevard. This alternative provides a landscaped median and a parkway treatment. This alternative offers the potential for new open space (Figure 6).
- **Alternative D (Realign Ramps East – Retain Flyover and Bridge):** This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to community open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged (Figure 7). This alternative offers the potential for new open space.
- **Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining Wall):** This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to community open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. The existing retaining wall along Allesandro Street would be relocated to the east to maintain Caltrans streets and highway standards. (Figure 8). This alternative offers the potential for new open space.

Figure 3. No-Build Alternative (Baseline Alternative)



Source: Melendrez, 2006.

Figure 4. Alternative A (Widen Existing Ramps)

Source: Melendrez, 2006.

Figure 5. Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge)

Source: Melendrez, 2006.

Figure 6. Alternative C (Realign Ramps East – Remove Flyover and Bridge)

Source: Melendrez. 2006.

Figure 7. Alternative D (Realign Ramps East – Retain Flyover and Bridge)

Source: Melendrez, 2006.

Figure 8. Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining Wall)

Source: Melendrez, 2006.

The BSA is completely surrounded by urban development, including residences, commercial and light industrial structures, and one small recreational park (Tommy Lasorda Field of Dreams). No natural vegetative communities are supported within the BSA. Except for the No-Build Alternative, which would result in no alterations of the existing SR-2 terminus, all of the remaining alternatives (Alternatives A through E) would result in alterations to the existing roadway configuration. None the five build alternatives would result in any form of impact (i.e., direct, indirect, permanent, temporary, or cumulative) to natural communities or special-status species.

Study Methods

Potential natural resources issues and related issues within the BSA were identified through a review of existing information, including a search of the California Native Plant Society (CNPS) database and California Natural Diversity Database (CNDDB). The CNDDB query for the Hollywood, Los Angeles, Burbank, and Pasadena USGS 7.5-minute quadrangles identified 26 special-status plant species and 12 special-status animal species recorded as historically occurring in the vicinity of the BSA. Appendix C provides a full list of special-status species recorded as historically occurring within the general vicinity and a determination of the likelihood of occurrence for each species within the BSA.

Judgments regarding the conditions, habitats, and resources on and potentially on the BSA are based on a complex and carefully evaluated array of information. This includes (1) published and unpublished information on local and regional ecosystems and resources, (2) prior and current field identification and evaluation of resources, (3) extensive personal and professional experience and training, and (4) careful observations made during site visits.

Jones & Stokes senior biologist Kurt Campbell conducted the biological reconnaissance by carefully evaluating the entire BSA on-site. The proposed project site is generally located on the SR-2 between Interstate 5 (I-5) and Glendale Boulevard. However, the biological study area (BSA) for the project is extended to include the right-of-way between Aaron Street to the south and the Los Angeles River to the north (Figure 2). This field effort included mapping vegetation types, identifying the location of potential jurisdictional water features that would require further jurisdictional evaluation, compilation of detected flora and fauna, and a general assessment of conditions within the BSA as they relate to potentially occurring habitats of sensitive plants and wildlife. Photographs depicting conditions at the time of the survey are provided as Appendix A. A complete list of plant and animal species detected during the site visit is provided as Appendix B. A summary of the date, time, personnel, and weather conditions during the site visit is provided in Table 1.

Table 1. Date, Time, Personnel, and Conditions for the Site Visit

Date	Time	Personnel	Conditions
01/05/07	1130–1430	Kurt Campbell	63°F–66°F, sunny, no dew, wind 0–18 mph, good visibility

Source: Jones & Stokes, 2007.

Environmental Setting

The following section addresses general conditions and biological resources observed within the BSA.

Description of the Existing Biological and Physical Conditions

The terminus of SR-2 is located between the communities of Silver Lake to the west and Echo Park to the east in the City of Los Angeles. The BSA and adjoining properties are situated in an extensively urbanized setting. Development within the BSA and surrounding areas consists of single- and multiple-family residences and commercial and light industrial structures. No natural vegetative communities are supported on or adjacent to the BSA. Existing vegetation within the BSA consists of ornamental trees, shrubs, and ground cover and ruderal (disturbance-adapted) vegetation within landscaped and fallow areas. Unbroken patches of vegetation within the BSA are generally limited to the sides of SR-2. The Tommy Lasorda Field of Dreams is located adjacent to the proposed project site and consists of a baseball field, maintained lawns, and ornamental trees and shrubs. Several native plant species are supported within the BSA; however, these occurrences are limited to scattered individuals.

The project site is located in a broad valley with an elevation along SR-2 ranging from 470 feet above mean sea level at Duane Street to 500 feet at Oak Glenn Place. The elevation of SR-2 generally decreases gradually north of Oak Glenn Place. A large hill to the west of Oak Glenn Place reaches an elevation of approximately 630 feet, and the hill to the east reaches an elevation of 667 feet. The elevation at Tommy Lasorda Field of Dreams is 480 feet.

Open space in the vicinity of the BSA is limited to fragmented parks and fallow lots surrounded by extensive urban development. The channelized Los Angeles River abuts the northern end of the BSA but is located approximately 0.90 mile east of the project site. From the Tommy Lasorda Field of Dreams, Silver Lake Reservoir is located approximately 0.31 mile to the west, Elysian Park is located approximately 0.83 mile to the east, Echo Park is located approximately 1.0 mile to the southeast, and Griffith Park is located approximately 2.3 miles to the west-northwest. No wildlife linkages to surrounding parks exist from the BSA except for the adjacent Los Angeles River.

No existing soils mapping is available for the BSA. Nearly all soils examined during the fieldwork appeared to be placed or altered materials and dominated by moderately light-colored, silty to loamy soils. No evidence of hydric soils or substantial clays was detected.

One small surface drainage feature is located near the southeast corner of the Tommy Lasorda Field of Dreams. Current engineering designs would indicate that approximately 9 square feet of this drainage would be rerouted underground.

This area consists of a concrete-lined roadside ditch with a small extent of deposited soil and some rooted, nonnative and ruderal native, herbaceous vegetation. ACOE has been consulted regarding this feature (Hall pers. comm.). It is anticipated that ACOE will waive the requirement for permitting under the CWA due to the very minor extent and disturbed and temporary nature of the resources present. Because the project would result in a less-than-substantial alteration to state streambeds, no Streambed Alteration Agreement would be needed under the Streambed Alteration Program (California Fish and Game Code, Section 1602). No other potential jurisdictional features are located within the project boundaries.

Regional Species and Habitats of Concern

Plant and animal species are considered to have special status if they have been listed as such on maintained lists with explicit criteria by federal or state agencies or one or more special interest groups, such as CNPS. This generally excludes species not concluded to be currently under threat or endangerment (e.g., those simply on "watch" lists or for which further information is solicited). The California Department of Fish and Game (CDFG) publishes separate comprehensive lists for plants and animals through the CNDDB (CDFG 2006). These include taxa officially listed by the state and federal governments as endangered, threatened, or rare and candidates for state or federal listing. A query of the CNPS database and CNDDB for the Hollywood, Los Angeles, Burbank, and Pasadena USGS 7.5-minute quadrangles identified 26 special-status plant species, 12 special-status animal species, and five sensitive natural communities as historically occurring in the vicinity of the BSA. Additional species were added to the list, as applicable, based on biologist knowledge of the BSA and special-status species of the region. Appendix C provides a full list of special-status species and sensitive habitats identified from the database query and a determination of the likelihood of occurrence for each species within the BSA.

None of the special-status species or sensitive natural communities identified from the database query were observed during the site visit, and none are expected to provide any regulatory constraint to the project based on the lack of suitable habitat and extensive urbanization of the BSA.

Vegetation

The BSA is an extensively urbanized setting. The vegetation supported on the BSA consisted primarily of nonnative trees, shrubs, grasses, and ground cover. Tree species frequently encountered during the site visit included Peruvian pepper-tree (*Schinus molle*), Brazilian pepper-tree (*Schinus terebinthifolius*), Tasmanian blue gum (*Eucalyptus globulus*), ornamental pines (*Pinus* sp.), Mexican fan palm (*Washingtonia robusta*), and tree-of-heaven (*Ailanthus altissima*). Common shrub species included oleander (*Nerium oleander*) and cape plumbago (*Plumbago auriculata*). Frequently observed herbaceous plants included white amaranth (*Amaranthus albus*), short-pod mustard (*Hirschfeldia incana*), telegraph weed (*Conyza canadensis*), red-stemmed filaree (*Erodium cicutarium*), and castor-bean (*Ricinus communis*). Common grass species included Bermuda grass (*Cynodon dactylon*), foxtail chess (*Bromus madritensis*), annual bluegrass (*Poa annua*), and fountain grass (*Pennisetum setaceum*). In addition, sea-figs (*Carpobrotus chilensis* and *C. edulis*) were observed throughout the BSA.

Special-Status Plants

Prior to the fieldwork, a query of the CNDDB and CNPS was made to identify special-status plant species reported as occurring in the vicinity of the BSA (Hollywood, Los Angeles, Burbank, and Pasadena, California USGS quadrangles). No special-status plant species were observed during the site visit. No potentially suitable habitat for these species occurs within the BSA.

Trees

Under project Alternatives A through E, removal of some trees is anticipated. According to City of Los Angeles policies and ordinances, all removed trees must be replaced, whether native or not. Because very few native trees are present and many of the nonnative trees are invasive species (see below), and because of the lack of potential for those trees present to provide habitat for special-status species, impacts to trees under this project would not result in any loss of value or habitat to any native plants or wildlife.

Noxious Weeds

In addition to nonnative species typically found along road shoulders, noxious weeds were observed within the BSA. Noxious weed species include species designated as federal noxious weeds by the U.S. Department of Agriculture, species listed by the California Department of Food and Agriculture (CDFA), and other exotic pest plants designated by the California Invasive Plant Council (Cal-IPC). Roads, highways, and related construction projects are some of the principal dispersal vectors for noxious weeds. The introduction and spread of exotic pest plants adversely affect natural plant communities and displace native plant species that provide shelter and foraging habitat for wildlife species. Table 2 identifies the noxious weed species found within the BSA.

Invasive Species Executive Order (EO) 13112 directs federal agencies to expand and coordinate their efforts to combat the introduction and spread of plants and animals not native to the United States. The Federal Highway Administration (FHWA) has developed guidance to implement the EO, which provides a framework for preventing the introduction of and controlling the spread of invasive plant species on highway rights-of-way. Under the EO, federal agencies cannot authorize, fund, or carry out actions that they believe are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless all reasonable measures to minimize risk of harm have been analyzed and considered. Furthermore, federal-aid and Federal Highway Program funds cannot be used for construction, revegetation, or landscaping activities that purposely include the use of known invasive species.

Table 2. Noxious Weed Species Observed within the Biological Study Area

Scientific Name	English Name	California Department of Food and Agriculture Code[1]	California Invasive Plant Council[2]
Ailanthus altissima	Tree-of-heaven	None	Moderate
Avena fatua	Wild Oat	None	Moderate
Brassica nigra	Black Mustard	None	Moderate
Bromus madritensis	Spanish Brome	None	High
Carduus pycnocephalus	Italian Thistle	C	Moderate
Carpobrotus chilensis	Sea-fig	None	Moderate
Carpobrotus edulis	Hottentot-fig	None	High
Cortaderia selloana	Pampass Grass	None	High
Cotoneaster pannosa	Woolly Cotoneaster	None	Moderate
Cynodon dactylon	Bermuda Grass	C	Moderate
Eucalyptus globulus	Tasmanian Blue Gum	None	Moderate
Gazania linearis	Treasureflower	None	None
Hirschfeldia incana	Short-pod Mustard	None	Moderate
Nerium oleander	Oleander	None	None
Nicotiana glauca	Tree Tobacco	None	Moderate
Olea europaea	European Olive	None	Limited
Pennisetum clandestinum	Kikuyu Grass	C	Limited
Pennisetum setaceum	Fountain Grass	None	Moderate
Picris echioides	Bristly Ox-tongue	None	Limited
Piptatherum miliaceum	Smilo Grass	None	Limited
Ricinus communis	Castor-bean	None	Limited
Robinia pseudoacacia	Black Locust	None	Limited
Schinus molle	Peruvian Pepper-tree	None	Limited
Schinus terebinthifolius	Brazilian Pepper-tree	None	Limited
Sorghum halepense	Johnson Grass	C	None
Vinca major	Greater Periwinkle	None	Moderate

[1] Codes (California Department of Food and Agriculture 2006).
C = state-endorsed holding action and eradication only when found in a nursery; action to retard spread outside of nurseries at the discretion of the commissioner; reject only when found in a crop seed for planning or at the discretion of the commissioner.
[2] Codes (California Invasive Plant Council 2006).

Source: Jones & Stokes, 2006.

Determinations of the likelihood of introducing or spreading invasive species and a description of measures being taken to minimize their potential harm should be part of any process conducted to fulfill agency responsibilities under the National Environmental Policy Act (NEPA). Considerations of invasive species should occur during all phases of the environmental process to fulfill the requirements of NEPA. Under the National Vegetation Management Plan specified in the EO, NEPA analysis should rely on each state's noxious weed list to define the invasive plants that must be addressed and the measures to be implemented to minimize harm.

An invasive species is defined as a species that is (1) nonnative (or alien) to the ecosystem under consideration and (2) likely to cause economic or environmental harm or harm to human health as a result of its introduction. For a complete list of invasive plants of California, see the following web page: http://www.cal-ipc.org/ip/management/ipcw/index.php.

See Section 5 for recommended measures to reduce the potential spread of invasive plant species during construction operations.

Animals

Twenty-five species of vertebrate animals were detected during the site visit. These comprised 20 bird species and five mammal species. Several bird species typically associated with open water or riparian settings, such as American wigeon (*Anas americana*), mallard (*Anas platyrhynchos*), great blue heron (*Ardea herodias*), and double-crested cormorant (*Phalacrocorax auritus*), were observed in proximity to the Los Angeles River and/or Silver Lake Reservoir. All of the animal species detected are fairly common in urban settings and tolerant of human development.

Special-Status Wildlife

Prior to the fieldwork, a query of the CNDDB was made to identify special-status wildlife species reported as occurring in the vicinity of the BSA (Hollywood, Los Angeles, Burbank, and Pasadena, California USGS quadrangles). No special-status wildlife species were observed during the site visit. The only species for which potentially suitable habitat occurs within the BSA are Cooper's hawk, sharp-shinned hawk, and California gull. All of these are state Species of Special Concern that tolerate considerable human presence and utilize urban, residential areas, and parks to some degree during the nonbreeding seasons. If present, all would occur only as occasional visitors during the nonbreeding season, with no impacts anticipated from the project.

Project Impacts

Special-Status Species and Natural Communities

No natural vegetative communities are supported within the BSA. Except for the No-Build Alternative, which would result in no alterations to the existing SR-2 terminus, all of the remaining build alternatives (Alternatives A through E) would result in alterations to the existing roadway configuration. None of the five build alternatives would result in any form of impact (i.e., direct, indirect, permanent, temporary, or cumulative) to natural communities or special-status plant or wildlife species.

Tree Removal

Under project Alternatives A through E, removal of some trees is anticipated. According to City of Los Angeles policies (City of Los Angeles 1972) and ordinances1, all removed trees must be replaced, whether native or not. While impacts to trees under this project would not result in any loss of value or habitat to any native plants or wildlife, measures are proposed to address and comply with the relevant city policies and ordinances.

The City has both a 1972 policy and a more recent ordinance (Ordinance #177404). Applicable to the project, one or both of these require than all trees, native or not, be replaced at a ratio of two replacement trees for each one removed. Replacement trees must be 15-gallon size, at least 1 inch in diameter at 1 foot above the base, and at least 7 feet tall. Native trees should be replaced by native trees, and replacement trees should not be invasive species (e.g., Mexican fan palm, tree-of-heaven). A protected tree report is required for removal of protected species (native oaks other than scrub oak, southern California black walnut, western sycamore, or California bay). The policy, which includes nonnative trees in the requirement for replacement, does not define, "tree." The ordinance, which covers only the above, protected species, additionally defines a tree as having a cumulative diameter of at least 4 inches at 4.5 feet above the base.

Jurisdictional Wetlands

One small area (approximately 9 square feet) that is a potential jurisdictional drainage feature is located within the project footprint near the southeast corner of the Tommy Lasorda Field of Dreams. Given the extremely limited extent and heavily disturbed condition of this drainage feature, it is anticipated that ACOE would waive permit requirements (regarding wetlands or "waters of the United States"). Similarly, the project would not result in a substantial alteration of any state streambed and thus no Streambed Alteration Agreement is required. No other jurisdictional features are located within the project footprint.

[1] The City of Los Angeles Municipal Code (Section 1, Subdivision 12 of Subsection A of Section 12.21; Ordinance 177404) provides for the protection of native trees of four types: (1) oaks other than Scrub Oak (*Quercus dumosa*), (2) Southern California Black Walnut (*Juglans californica* var. *californica*), (3) Western Sycamore (*Platanus racemosa*), and (4) California Bay (*Umbellularia californica*). Individual plants must also measure 4 inches or more in cumulative diameter 4.5 feet above the ground level at the base of the tree.

Native Birds

Numerous trees and shrubs within the BSA provide suitable nesting and roosting habitat for native bird species, including raptors, protected under the MBTA. Furthermore, most of these bird species are also covered under similar protective statutes found in the California Fish and Game Code. See below for recommended measures to avoid or minimize impacts.

Noxious Weed Propagation

Numerous nonnative plants deemed noxious by the U.S. Department of Agriculture, CDFA, and Cal-IPC were observed within the BSA. See below for recommended measures to avoid propagation of noxious weeds.

Mitigation Measures

Nesting Birds

To avoid impacts to birds prohibited under the federal MBTA and similar state statutes, one of the following measures will be implemented: (1) no ground disturbance, site clearing, or removal of any potential nesting habitat shall be conducted within the typical breeding/nesting season for birds (February 15 to August 30) or (2) prior to any ground-disturbing activities, a qualified biologist shall conduct surveys for nesting birds (including raptors). The surveys shall occur a minimum of 3 days prior to the clearing, removal, or trimming of any vegetation. Surveys shall include areas within 200 feet of the edge of the project boundary (as legally accessible) and the entire project site. If active nests are found, a 50-foot (minimum) temporary fence barrier shall be erected around the nest site. A 200-foot barrier shall be required for any raptor nesting site. No habitat removal or any other work shall be allowed to occur within the fenced nest zone until a qualified biologist confirms that nesting is no longer active and/or the young have fledged and left the nest.

Noxious Weed Propagation

The proposed project is expected to disturb the ground and may remove both nonnative vegetation and small amounts of native vegetation. To ensure the project does not promote the introduction or spread of invasive species, the following measures shall apply.

- Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds before arriving at the site and before leaving the site during the course of construction.
- All targeted vegetative material will be immediately removed from the project area. This includes small cuttings, leaves, branches, leaves, seeds, and vegetative litter.
- Trucks with loads carrying vegetation shall be covered, and vegetation materials removed from the site shall be disposed of in accordance with applicable laws and regulations.
- All of the ground disturbed and remaining as open space post-construction will be hydroseeded with a seed mix restricted to local natives to promote recolonization of native vegetation and thus reducing the risk of providing optimal conditions for invasive species to colonize the area. Any landscaping within the study area will use native species.

Tree Removal

All trees removed will be replaced in accordance with applicable city regulations and guidelines as follows.

- Mark and replace all native trees greater than 1 inch diameter at breast height (dbh) (4.5 feet above surrounding grade) with the same species at a 2:1 ratio. Source materials should be of the same subspecies and/or variety locally present and from seeds or cuttings gathered within coastal southern California to ensure local provenance.
- Mark and replace all nonnative trees greater than 1 inch dbh (4.5 feet above surrounding grade) with native trees of appropriate local climate tolerance at a 2:1 ratio. Source materials should be from seeds or cuttings gathered within coastal southern California to ensure local provenance.
- All removed trees greater than 20 feet in height or 8 inches dbh (4.5 feet above surrounding grade) should be replaced with the same species (if native) or a suitable native tree of appropriate local climate tolerance on a two-for-one basis. Source materials should be from seeds or cuttings gathered within coastal southern California to ensure local provenance.

Permits Required

Because no special-status species, natural vegetative communities, or substantial jurisdictional waters would be adversely affected by the SR-2 Freeway Terminus Improvement Project under any of the alternatives, it is anticipated that no permits would be required.

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APPENDICES

Appendix A – Photographic Log

Appendix B – Observed Flora and Fauna

Appendix C – Special-Status Species Table

Appendix A – Photographic Log

Photo 1: View looking southwest (approximately) across Glendale Boulevard at SR-2 south terminus. Note view of typical vegetation dominated by nonnative ornamental species.

Photo 2: View looking northeast (approximately) along Waterloo Street toward Glendale Boulevard. Greenway at right is part of Tommy Lasorda Field of Dreams.

Photo 3: View looking northeast (approximately) across Glendale Boulevard at the north end of Waterloo Street.

Photo 4: View looking north (approximately) across Glendale Boulevard at the north end of Waterloo Street. This view is a pan to the left (west, approximately) from about 100 feet northwest of where Photo 3 was taken.

Photo 5: View looking south-southeast (approximately) along Glendale Boulevard where it passes under the SR-2 south terminus. Underside of bridge appears to support only nonnative rock pigeon and no bats or native bird nesting.

Photo 6: View looking southwest (approximately) from Glendale Boulevard into Tommy Lasorda Field of Dreams. Note nonnative ornamental plantings and weedy vegetation (oats, *Avena fatua*, brown grasses at lower-left corner of photo).

Photo 7: View looking north (approximately) across neighborhood to the west of SR-2 in study area. Typical ornamental vegetation, but this location includes a few planted Toyon (*Heteromeles arbutifolia*, in right foreground); this is one of the few native plants in the study area.

Photo 8: View looking south (approximately) across neighborhood and SR-2 in study area. Note fallow open space in foreground and freeway landscaping dominated by annual nonnative grasses; this is one of few such open areas in study area. Shrub at left is Castor-bean (*Ricinus communis*), an invasive nonnative plant.

Appendix B – Observed Flora and Fauna

Floral and Faunal List

Scientific Name	Common Name
PLANTS	
Class Magnoliopsida - Dicotyledons	
Aizoaceae – Fig-Marigold Family	
* *Aptenia cordifolia*	Baby Sun-rose (=Red Apple)
* *Carpobrotus chilensis*	Sea-fig (=Purple Sea-fig)
* *Carpobrotus edulis*	Hottentot-Fig (=Yellow Sea-fig)
Amaranthaceae - Amaranth Family	
* *Amaranthus albus*	White Amaranth (=Tumbleweed)
Anacardiaceae - Sumac Family	
Malosma laurina	Laurel Sumac
** *Schinus molle*	Peruvian Pepper-tree
** *Schinus terebinthifolius*	Brazilian Pepper-tree
Apocynaceae - Dogbane Family	
@ *Nerium oleander*	Oleander
** *Vinca major*	Greater Periwinkle
Araliaceae - Ginseng Family	
@ *Hedera canariensis*	Algerian Ivy
Asteraceae - Sunflower Family	
Ambrosia psilostachya	Western Ragweed
Baccharis pilularis	Coyote Brush
Baccharis salicifolia [*B. glutinosa, B. viminea*]	Mule Fat (Mulefat, Seep-willow, Water-wally)
* *Bidens pilosa*	Common Beggar-ticks
** *Carduus pycnocephalus*	Italian Thistle
** *Centaurea melitensis*	Tocalote (=Malta Starthistle)
* *Conyza bonariensis*	Flax-leaved Horseweed
Conyza canadensis	Common Horseweed
* *Gazania linearis*	Treasureflower (Gazania)
Helianthus annuus	Common Sunflower (Western Sunflower)
Heterotheca grandiflora	Telegraph Weed
* *Lactuca serriola*	Prickly Lettuce (=Wild Lettuce)
Malacothrix saxatilis	Cliff Malacothrix
* *Picris echioides*	Bristly Ox-tongue
* *Sonchus oleraceus*	Common Sow Thistle
Brassicaceae - Mustard Family	
** *Brassica nigra*	Black Mustard
** *Hirschfeldia incana* [*Brassica geniculata, H. adpressa*]	Short-pod Mustard (=Summer Mustard)
Caprifoliaceae - Honeysuckle Family	
Sambucus mexicana [*S. caerulea*]	Blue Elderberry (=Mexican Elderberry, Blue Elder)
Crassulaceae - Stonecrop Family	
@ *Crassula ovata*	Jade Plant

	Scientific Name	Common Name
	Euphorbiaceae - Spurge Family	
**	*Ricinus communis*	Castor-bean
	Fabaceae - Pea Family	
@	*Acacia cyclops*	Cyclops Acacia
@	*Acacia saligna*	Blue-leaved Wattle
@	*Ceratonia siliqua*	Carob
*	*Lotus corniculatus*	Bird's-foot Trefoil
*	*Medicago lupulina*	Black Medick
*	*Melilotus alba* [=*Melilotus albus*]	White Sweetclover
**	*Robinia pseudoacacia*	Black Locust
	Fagaceae - Oak Family	
	Quercus agrifolia	Coast Live Oak
	Geraniaceae - Geranium Family	
*	*Erodium cicutarium*	Red-stemmed Filaree
*	*Pelargonium* sp.	Geranium
	Lamiaceae - Mint Family	
@	*Rosmarinus officinalis*	Ornamental Rosemary
	Malvaceae - Mallow Family	
*	*Malva parviflora*	Cheeseweed (=Little Mallow)
	Moraceae - Mulberry Family	
*	*Morus alba*	White Mulberry
	Myrtaceae – Myrtle Family	
@	*Callistemon citrinus*	Crimson Bottlebrush
@	*Eucalyptus camaldulensis*	River Red Gum
**	*Eucalyptus globulus*	Tasmanian Blue Gum
	Nyctaginaceae – Four-o'clock Family	
@	*Bougainvillea glabra* x *B. spectabilis*	Paper Flower
	Oleaceae – Olive Family	
**	*Olea europaea*	European Olive
	Oxalidaceae – Wood-sorrel Family	
*	*Oxalis pes-caprae*	Bermuda-buttercup
	Papaveraceae – Poppy Family	
*	*Eschscholzia californica*	California Poppy
	Pinaceae – Pine Family	
@	*Pinus* sp.	Ornamental Pine
	Plantaginaceae – Plantain Family	
*	*Plantago lanceolata*	English Plantain
	Plumbaginaceae – Leadwort Family	
*	*Limonium perezii*	Perez's Sea-lavender (=Statice)
@	*Plumbago auriculata*	Cape Plumbago

Scientific Name	Common Name
Proteaceae – Proteus Family	
* *Grevillea robusta*	Silk-oak
Primulaceae – Primrose Family	
* *Anagallis arvensis*	Scarlet Pimpernel
Rosaceae – Rose Family	
**@*Cotoneaster pannosa*	Woolly Cotoneaster
Heteromeles arbutifolia	Toyon (=Christmas Berry)
Salicaceae – Willow Family	
Salix gooddingii	Goodding's Black Willow (=Goodinging's Willow)
Simaroubaceae - Quassia Family	
** *Ailanthus altissima*	Tree-of-heaven
Solanaceae - Nightshade Family	
* *Nicotiana glauca*	Tree Tobacco
Ulmaceae - Elm Family	
@ *Ulmus* sp.	Ornamental Elm
Vitaceae – Grape Family	
@ *Vitis vinifera*	Cultivated Grape (=Vineyard Grape, Wine Grape)
Class Liliopsida - Monocotyledons	
Arecaceae - Palm Family	
@ *Phoenix dactylifera*	Date Palm
* *Washingtonia robusta*	Mexican Fan Palm
Cyperaceae - Sedge Family	
Cyperus sp.	Flatsedge
Liliaceae - Lily Family	
@ *Yucca elephantipes* (=*gigantea*)	Giant Yucca
Poaceae - Grass Family	
* *Avena fatua*	Wild Oat (=Common Wild Oat)
** *Bromus madritensis*	Foxtail Chess (Spanish Brome, Compact Brome)
** *Cortaderia selloana*	Pampas Grass
** *Cynodon dactylon*	Bermuda Grass
* *Ehrharta longiflora*	Long-flowered Veldt Grass (=Panic Veldt Grass)
Muhlenbergia rigens	Deergrass
* *Pennisetum clandestinum*	Kikuyu Grass
* *Pennisetum setaceum*	Fountain Grass
* *Piptatherum miliaceum* [=*Oryzopsis miliaceum*]	Smilo Grass (=Rice Grass)
* *Poa annua*	Annual Bluegrass
* *Sorghum halepense*	Johnson Grass

Scientific Name	Common Name
ANIMALS	
BIRDS	
Anatidae – Swan, Goose, and Duck Family	
Anas americana	American Wigeon
(@)*Anas platyrhynchos*	Mallard
Oxyura jamaicensis	Ruddy Duck
Phalacrocoracidae - Cormorant Family	
Phalacrocorax auritus	Double-crested Cormorant
Ardeidae - Heron Family	
Ardea herodias	Great Blue Heron
Ardea alba	Great Egret
Egretta thula	Snowy Egret
Accipitridae - Hawk Family	
Buteo jamaicensis	Red-tailed Hawk
Rallidae – Rail and Coot Family	
Fulica americana	American Coot
Laridae – Gull and Tern Family	
Larus delawarensis	Ring-billed Gull
! *Larus californicus*	California Gull
Columbidae - Pigeon and Dove Family	
* *Columba livia*	Rock Pigeon (Rock Dove)
Zenaida macroura	Mourning Dove
Tyrannidae - Tyrant Flycatcher Family	
Sayornis nigricans	Black Phoebe
Corvidae - Jay and Crow Family	
Aphelocoma californica	Western Scrub-jay
Corvus brachyrhynchos	American Crow
Mimidae - Thrasher Family	
Mimus polyglottos	Northern Mockingbird
Sturnidae - Starling Family	
* *Sturnus vulgaris*	European Starling
Parulidae - Wood-Warbler Family	
Dendroica coronata	Yellow-rumped Warbler (Audubon’s Warbler)
Fringillidae - Finch Family	
Carpodacus mexicanus	House Finch
MAMMALS	
Sciuridae - Squirrel Family	
Spermophilus beecheyi	California Ground Squirrel
Geomyidae - Pocket Gopher Family	
Thomomys bottae	Botta's Pocket Gopher (Valley Pocket Gopher)

Scientific Name	Common Name
Muridae – Mouse, Rat, and Vole Family	
* *Rattus* sp.	Rat
Canidae - Canid Family	
@ *Canis familiaris*	Domestic Dog (=Feral Dog)
Felidae - Cat Family	
@ *Felis catus* [=*Felis cattus*, *Felis sylverstris*]	Domestic Cat (=Feral Cat)

STATUS CODES IN THE LIST

The following codes are applied in this list:

! Special regulatory status applies to all members of this taxa in the region, as defined above.

* Nonnative, with believed-to-be established populations. Cited sources are followed, especially for guidance on "cryptogenic" species, those whose native status in the region is relatively unclear.

** Nonnative; classified as an invasive species per Cal-IPC (2006; all Table 1 species).

@ Adventive; non-established "waifs" or "escapes" found sufficiently often to be noted as present. Includes some species that appeared to have established populations in the past but are now present only in this more limited role. Individuals of these species may be reproducing in the region (e.g., from seed), but the available evidence indicates no long-term establishment occurs.

Appendix C – Special-Status Species Table

SPECIAL-STATUS SPECIES

This appendix addresses all species with applicable special regulatory or management status that include the project site within their general range and for which grossly appropriate habitat is present on or near the project site. For each species we include: (1) definitions for the terms used to describe likelihood of occurrence, (2) a table listing the types of special status considered applicable (Table C1), and (3) a table of information for each species, listing the English and scientific names, current special status, likelihood of occurrence, and specific notes relevant to likelihood of occurrence (Table C2) Likelihood of occurrence status is specifically evaluated with regard to the biological study area (BSA) as defined in the report.

Conclusions here are limited to biology, with no reflection of regulatory or management issues. For interpretation of this information under applicable laws, regulations and court precedent, see the relevant portion(s) of the report. Judgments regarding likelihood of occurrence are based on evaluation of all available biological information regarding regional and local conditions, species biology, available evaluations of the project site and vicinity, and professional experience conducting field investigations across California over many years. Though professional, such judgments are necessarily subjective at least in part.

Specific factors substantially affect likelihood of occurrence for individual species on any particular project site. These factors are relevant at multiple scales, including regionally, locally, and within the project site. These factors include the presence or absence of many other particular species (e.g., predators, prey), climate, ongoing disturbances, historical land use and other past disturbances such as fire history, surface and subsurface hydrology, soil texture and chemistry, project site and habitat size and topology (i.e., shape and fragmentation), past population fluctuations of the species in response to random and nonrandom events, and many other factors, including many not readily visible. Note that some species, including some amphibians and many birds and bats, can occur in multiple roles. Thus, likelihood of occurrence, habitat use, and abundance may vary accordingly. Where multiple codes are given for a species, underlined codes refer to the likelihood of occurrence in potentially constraining roles (e.g., breeding, as opposed to migration or dispersal, for many state Species of Special Concern birds).

Finally, note that likelihood of occurrence for a given species refers to a time scale of a few years up to perhaps ten years under current or assumed resources and conditions.

Terms for Likelihood of Occurrence on the Site

CONFIRMED ABSENT: Confirmed to be absent on the site by some valid means. Often this is based on negative results of a focused survey for the species conducted in appropriate habitat at appropriate time(s) of year, using biologically sound methods and qualified personnel. It may alternatively be based on a simple site examination where it can be easily determined that the species is absent. Examples are (1) a marine mammal at a dry mountainside site and (2) a chaparral shrub where the site is long-standing grassland lacking shrubs and far from chaparral. The relevant fieldwork was also in all cases conducted within a time frame sufficiently recent to conclude that the species remains absent, based on site conditions and the species' known ecology. In most cases a specific, established survey protocol and/or guidelines have been followed.

NOT EXPECTED: May be remotely possible, however the probability of occurrence on the site is none or virtually none. The species may include the site within its general range. However, either (1) there is no appropriate habitat (either on or immediately adjacent to the site), or (2) any potentially suitable habitat is sufficiently limited in extent and/or isolated that, together with the biology of the species, there is no reasonable potential for use. Neither the species nor any indication of its presence was detected in relevant fieldwork. In some cases this likelihood may indicate that based on the best available information, the site has a very high probability of being outside of the species' current range. In all of these cases, the species cannot be definitively ruled out due to inherent uncertainties in predicting behavior of individual organisms, but the species is strongly expected to be absent based on the evaluation of all available evidence. In some cases, the species may have potential to occur on very rare occasions and in very low numbers, but such rare, stray individuals are unlikely to make more than very brief, incidental use of the site. Certainly, no substantial populations utilize the site at any time of year. Further evaluation should not be required.

LOW: The species is unlikely because of some combination of facts, including: (1) searches conducted under reasonable circumstances did not detect it but also did not prove absence, (2) only marginal or minimal habitat is present, (3) the best available information suggests the species is absent from the site, (4) available information sheds no clear light on the species likelihood on the site, but it is known to be rare or very uncommon in the vicinity, and/or (5) the species is documented from adjacent to the site, and may use marginal or normally-unsuitable habitat on the site on occasion. No individuals were detected, nor is there any direct indication of them on the site. Although individuals may have been missed, it is unlikely that substantial populations are present. Further evaluation should usually not be required for species unless state or federally listed as endangered or threatened (or biologically equivalent), or where the marginal habitat is quite extensive. Note however, that where several non-listed species hold this status, a higher likelihood of occurrence for "one or more" will often hold. This is due both to the incomplete correlation among habitats and the fact that an array of possibilities often correlates with greater site diversity and lower disturbance.

MODERATE: The site is within the range of the species and may contain suitable habitat. No individuals or diagnostic sign were detected during relevant fieldwork. It is nevertheless reasonable that some individuals have been overlooked. The best available information on the species with regard to the site is either very uncertain or about equally weighted for and against occurrence. Depending upon local status, legal status, extent of habitat, site context, and the nature and sensitivity of the project, focused surveys for the species may be warranted or presence may be assumed.

HIGH: The site is known to be within the range of the species, and appears to contain habitat with high potential for occupancy. This may be due to the apparent high quality of the habitat, or to other factors such as outdated but positive occurrence information or known presence adjacent to the site combined with potentially suitable habitat on the site. Although no individuals or diagnostic sign were detected, it is judged likely that it is present to some degree, given the best available information. Depending upon local status, legal status, extent of habitat, site context, and the nature and sensitivity of the project, focused surveys for the species may be warranted or presence may be assumed.

CONFIRMED PRESENT: Either (1) confirmed present by a qualified biologist or other reliable source (with no subsequent evidence the species is now absent), or (2) based on the best interests of time and effort, current presence has been assumed. Depending on the species and other information available, it may or may not be possible to determine what portions of the site are currently in use without further studies.

Table C1. Status Code Explanations

Status code	Explanation
FE	Federally Endangered
FT	Federally Threatened
FPE	Federally proposed Endangered
FPT	Federally proposed Threatened
FC	Federal Candidate species
FW	Federally “warranted for listing, but listing is precluded by higher priority actions”
EPA	Covered under the Federal “Bald and Golden Eagle Protection Act”
pt, pd	“pt” or “pd”: the taxon has been formally proposed to be down-listed, either from Endangered to Threatened (“pt”), or delisted completely (“pd”)
SE	State Endangered
ST	State Threatened
SR	State Rare (used for plants only)
SCE	State Candidate for Endangered listing
SCT	State Candidate for Threatened listing
SSC	State Species of Special Concern
CFP	California Fully Protected species
CSP	California Specially Protected species
CNDDB	Tracked by the California Department of Fish and Game “Natural Diversity Data Base”, but with no other special regulatory or management status
1A	California Native Plant Society (CPS) List 1A plant (“Plants presumed extinct in California”)
1B	CNPS List 1B plant (“Plants rare, threatened or endangered in California and elsewhere”)
2	CNPS List 2 plant (“Plants rare, threatened or endangered in California, but more common elsewhere”)

Table C2. Special Status Species Information

SPECIES / NATURAL COMMUNITIES[1]	SPECIAL STATUS[2]	REQUIREMENTS	LIKELIHOOD OF OCCURRENCE[3]	COMMENTS
PLANTS				
Greata's Aster (*Aster greatae*)	1B	*Life Form:* perennial rhizomatous herb *Counties:* Los Angeles, San Bernardino, Ventura *Veg. Comm.:* Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland/mesic *Blooming window:* Jun.-Oct. *Elevation window:* 300-2010m (984-6594ft)	Not Expected	Generally at higher elevation; extensive urban development reduces likelihood of occurrence
Braunton's Milk-Vetch (*Astragalus brauntonii*)	FE, 1B	*Life Form:* perennial herb *Counties:* Los Angeles, Orange, Riverside, Ventura *Veg. Comm.:* Closed-cone coniferous forest, Chaparral, Coastal scrub, Valley and foothill grassland/recent burns or disturbed areas, usually carbonate *Blooming Window:* Feb.-Jul *Elevation Window:* 4-640m (13-2099 ft)	Not Expected	Vegetative communities typically associated with this species is not present; extensive urban development reduces likelihood of occurrence
Ventura Marsh Milk-Vetch (*Astragalus pycnostachyus* var. *lanosissimus*)	1B	*Life Form:* perennial herb *Counties:* Los Angeles*, Orange*, Santa Barbara, Ventura *Veg. Comm.:* Coastal dunes, Coastal scrub, Marshes and swamps (edges, coastal salt or brackish) *Blooming window:* Jun.-Oct *Elevation Window:* 1-35m (3-114 ft)	Not Expected	Vegetative communities typically associated with this species is not present; extensive urban development reduces likelihood of occurrence
Coastal Dunes Milk-Vetch (*Astragalus tener* var. *titi*)	1B	*Life Form:* Annual herb *Counties:* Los Angeles, Monterey, San Diego *Veg. Comm.:* Coastal bluff scrub (CBScr)(sandy) Coastal dunes (CoDns) Coastal prairie (CoPrr)(mesic) *Blooming window:* Mar.-May *Elevation window:* 1-50m (3-164 ft)	Not Expected	Vegetative communities typically associated with this species is not present; extensive urban development reduces likelihood of occurrence
Parish's Brittlescale (*Atriplex parishii*)	1B	*Life Form:* Annual herb *Counties:* Los Angeles, Orange, Riverside, San Bernardino, San Diego, Baja California Counties *Veg. Comm.:* Chenopod scrub, Playas, Vernal pools *Blooming Window:* Jun.-Oct. *Elevation Window:* 25-1900 m (82-6234 ft)	Not Expected	Vegetative communities, playas, or vernal pools typically associated with this species are not present; extensive urban development reduces likelihood of occurrence

SPECIES / NATURAL COMMUNITIES[1]	SPECIAL STATUS[2]	REQUIREMENTS	LIKELIHOOD OF OCCURRENCE[3]	COMMENTS
Davidson's Saltscale (*Atriplex serenana* var. *davidsonii*)	1B	*Life Form:* Annual herb *Counties:* Los Angeles (*?), Orange, Riverside, Santa Barbara*, Santa Catalina Isl., Santa Cruz Isl.*, San Diego, San Luis Obispo, Santa Rosa Isl., Ventura, Baja California *Veg. Comm.:* Coastal bluff scrub, Coastal scrub/alkaline *Blooming Window:* Apr.-Oct. *Elevation Window:* 10-200m (32-656 ft)	Not Expected	Vegetative communities and alkaline soils typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
Nevin's Barberry (*Berberis nevinii*)	FE, SE, 1B	*Life Form:* Perennial evergreen shrub *Counties:* Los Angeles, Riverside, San Bernardino, San Diego Counties *Veg. Comm.:* Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub/sandy or gravelly *Blooming window:* Mar.-Jun. *Elevation Window:* 295-825 m (968-2707 ft)	Confirmed Absent	Conspicuous shrub not observed during site visit
Slender Mariposa Lily (*Calochortus clavatus* var. *gracilis*)	1B	*Life Form:* Perennial bulbiferous herb *Counties:* Los Angeles, Ventura *Veg. Comm.:* Chaparral, Coastal scrub, Valley and foothill grassland *Blooming Window:* Mar.-Jun. *Elevation window:* 360-1000m (1181-3280 ft.)	Not Expected	Vegetative communities typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
Plummer's Mariposa Lily (*Calochortus plummerae*)	1B	*Life Form:* Perennial bulbiferous herb *Counties:* Los Angeles, Orange, Riverside, San Bernardino, Ventura Counties *Veg. Comm.:* Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland/granitic, rocky *Blooming window:* May-Jul. *Elevation Window:* 100-1700m (328-5578 ft)	Not Expected	Vegetative communities typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
Santa Barbara Morning-glory (*Calystegia sepium ssp. binghamiae*)	1A	*Life Form:* Perennial rhizomatous herb *Counties:* Los Angeles*, Orange, Santa Barbara*, Ventura* *Veg. Comm.:* Marshes and swamps(coastal) *Blooming window:* Apr.-May *Elevation window:* 0-20 m (0-65 ft.)	Not Expected	Marsh and swamp settings typically associated with this species are not present; extensive urban development reduces likelihood of occurrence

SPECIES / NATURAL COMMUNITIES[1]	SPECIAL STATUS[2]	REQUIREMENTS	LIKELIHOOD OF OCCURRENCE[3]	COMMENTS
Southern Tarplant (*Centromadia parryi* ssp. *australis*)	1B	*Life Form:* Annual herb *Counties:* Los Angeles, Orange, Santa Barbara, Santa Catalina Isl.?, San Diego, Ventura, Baja California *Veg. Comm.:* Marshes and swamps(margins), Valley and foothill grassland(vernally mesic), Vernal pools *Blooming window:* May-Nov. *Elevation window:* 0-425m (0-1394 ft.)	Not Expected	Vegetative communities or vernal pools typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
San Fernando Valley Spineflower (*Chorizanthe parryi* var. *fernandina*)	FC, SE, 1B	*Life Form:* Annual herb *Counties:* Los Angeles, Orange*, Ventura *Veg. Comm.:* Coastal scrub(sandy) *Blooming window:* Apr.-Jul *Elevation window:* 150-1220m (492-4002 ft.)	Not Expected	Vegetative communities typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
Slender-horned Spineflower (*Dodecahema leptoceras*)	FE, SE, 1B	*Life Form:* Annual herb *Counties:* Los Angeles , Riverside, San Bernardino *Veg. Comm.:* Chaparral, Cismontane woodland, Coastal scrub (alluvial fan)/sandy *Blooming Window:* Apr.-Jun *Elevation Window:* 200-760m (656-2494 ft)	Not Expected	Vegetative communities typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
Many-stemmed Dudleya (*Dudleya multicaulis*)	1B	*Life Form:* Perennial herb *Counties:* Los Angeles, Orange, Riverside, San Bernardino, San Diego Counties *Veg. Comm.:* Chaparral, Coastal scrub, Valley and foothill grassland/often clay *Blooming Window:* Apr.-Jul. *Elevation Window:* 15-790m (49-2592 ft)	Not Expected	Vegetative communities and clay soils typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
Round-leaved Filaree (*Erodium macrophyllum*)	2	*Life Form:* Annual herb *Counties:* Alameda , Butte (BUT)(*?), Contra Costa, Colusa, Fresno, Glenn, Kings, Kern, Lake, Lassen, Los Angeles, Merced, Monterey, Napa, Riverside, Santa Barbara, San Benito, Santa Cruz Isl., San Diego, San Joaquin, San Luis Obispo, San Mateo, Solano, Sonoma, Stanislaus, Tehama, Ventura, Yolo, Baja California *Veg. Comm.:* Cismontane woodland, Valley and foothill grassland/clay *Blooming window:* Mar.-May *Elevation Window:* 15-1200 m (49-3937 ft)	Not Expected	Vegetative communities and clay soils typically associated with this species are not present; extensive urban development reduces likelihood of occurrence

SPECIES / NATURAL COMMUNITIES[1]	SPECIAL STATUS[2]	REQUIREMENTS	LIKELIHOOD OF OCCURRENCE[3]	COMMENTS
Los Angeles Sunflower (*Helianthus nuttallii ssp. parishii*)	1A	*Life Form:* Perennial rhizomatous herb *Counties:* Los Angeles, Orange, San Bernardino Counties *Veg. Comm.:* Marshes and swamps (coastal salt and freshwater) *Blooming window:* Aug.-Oct. *Elevation Window:* 10-1675 m (33-5496 ft)	Not Expected	Marsh and swamp settings typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
Mesa Horkelia (*Horkelia cuneata* ssp. *puberula*)	1B	*Life Form:* Perennial herb *Counties:* Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, Ventura Counties *Veg. Comm.:* Chaparral, Cismontane woodland, Coastal scrub/sandy or gravelly *Blooming window:* Feb.-Jul. *Elevation Window:* 70-810m (230-2658 ft)	Not Expected	Vegetative communities typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
Coulter's Goldfields (*Lasthenia glabrata* ssp. *coulteri*)	1B	*Life Form:* Annual herb *Counties:* Colusa, Kern, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, Santa Rosa Isl., Tulare (TUL)?, Ventura, Baja California Counties *Veg. Comm.:* Marshes and swamps (coastal salt), Playas, Vernal pools *Blooming window:* Feb.-Jun. *Elevation Window:* 1-1220m (3-4003 ft)	Not Expected	Vegetative communities, playas, or vernal pools typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
San Gabriel Linanthus (*Linanthus concinnus*)	1B	*Life Form:* Annual herb *Counties:* Los Angeles, San Bernardino *Veg. Comm.:* Chaparral, Lower montane coniferous forest, Upper montane coniferous forest/rocky, openings *Blooming window:* Apr.-Jul *Elevation window:* 1520-2800m (4986-9186 ft.)	Not Expected	Generally at higher elevation; vegetative communities typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
Orcutt's Linanthus (*Linanthus orcuttii*)	1B	*Life Form:* Annual herb *Counties:* Los Angeles*, Riverside, San Bernardino, San Diego, Baja California (BA) *Veg. Comm.:* Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland/openings *Blooming window:* May-Jun *Elevation window:* 915-2145m (3001-7037 ft.)	Not Expected	Generally at higher elevation; vegetative communities typically associated with this species are not present; extensive urban development reduces likelihood of occurrence

SPECIES / NATURAL COMMUNITIES[1]	SPECIAL STATUS[2]	REQUIREMENTS	LIKELIHOOD OF OCCURRENCE[3]	COMMENTS
Davidson's Bush Mallow (*Malacothamnus davidsonii*)	1B	*Life Form:* Perennial deciduous shrub *Counties:* Los Angeles, Monterey, Santa Clara, San Luis Obispo, San Mateo *Veg. Comm.:* Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland *Blooming window:* Jun-Jan *Elevation window:* 185-855m (606-2805 ft.)	Not Expected	Vegetative communities typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
Gambel’s Watercress (*Nasturtium gambelii*)	1B	*Life Form:* Perennial rhizomatous herb *Counties:* Los Angeles, Orange, Santa Barbara, San Bernardino, San Diego (SDG)?, San Luis Obispo, Baja California Counties *Veg. Comm.:* Marshes and swamps (freshwater or brackish) *Blooming window:* Apr.-Sep. *Elevation Window:* 5-330 m (16-1083 ft)	Not Expected	Marsh and swamp settings typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
Prostrate Navarretia (*Navarretia prostrata*)	1B	*Life Form:* Annual herb *Counties:* Alameda, Los Angeles, Merced, Monterey, Orange, Riverside, San Bernardino (*?), San Diego, San Luis Obispo *Veg. Comm.:* Coastal scrub, Meadows and seeps, Valley and foothill grassland(alkaline), Vernal pools/mesic *Blooming window:* Apr.-Jul *Elevation window:* 15-700m (49-2296 ft.)	Not Expected	Vegetative communities or vernal pools typically associated with this species are not present; extensive urban development reduces likelihood of occurrence
San Bernardino Aster (*Symphyotrichum defoliatum*)	IB	*Life Form:* Perennial rhizomatous herb *Counties:* Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo (SLO)? Counties *Veg. Comm.:* Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland (vernally mesic)/near ditches, streams__springs *Blooming window:* Jul.-Nov. *Elevation Window:* 2-2040m (7-6693 ft)	Not Expected	Vegetative communities or vernally mesic conditions typically associated with this species are not present; extensive urban development reduces likelihood of occurrence

SPECIES / NATURAL COMMUNITIES[1]	SPECIAL STATUS[2]	REQUIREMENTS	LIKELIHOOD OF OCCURRENCE[3]	COMMENTS
ANIMALS				
Coast Range California Newt (*Taricha torosa torosa*)	SSC	Range begins south of the Salinas River in Monterey County, extending nearly to the Mexican border. Coast Range Newts frequent terrestrial habitats, but breed in ponds, reservoirs, and slow-moving streams.	Not Expected	Hydrological requirements are not supported on project site
Mountain Yellow-legged Frog (*Rana muscosa*)	FE, SSC	Disjunct So. Cal. population persists as remnants in small streams in the San Gabriel, San Bernardino, and San Jacinto mountains; historical elevation range was about 370 to over 2290 m (1200-7500 ft), with remaining populations only toward the upper end of that range; inhabit varied lakes and streams, but avoid the smallest streams; show a tendency toward open stream and lakeshores that slope gently for the first 2 to 3 inches (5 - 8 cm) of depth; apparently rarely found far from water, though data on movements and ability to recolonize sites are lacking.	Not Expected	Hydrological requirements are not supported on project site
Southwestern Pond Turtle (*Clemmys marmorata pallida*)	SSC	Locally uncommon in southern California, in association with permanent or nearly permanent water in a fairly wide variety of habitat types. They are omnivorous, taking a wide variety of plant and animal food. Pond turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks.	Not Expected	Hydrological requirements are not supported on the project site
San Diego Coast Horned Lizard (*Phrynosoma coronatum blainvillei*)	SSC	Distributed from just north and west of Ventura County, along the coastal slope southeastward into northern Baja California; variety of vegetation communities, from grasslands and shrublands to woodlands, including coniferous forests. Critical factors are the presence of loose soils with a high sand fraction; an abundance of native ants or other insects, especially harvester ants (*Pogonomyrmex* spp.); and the availability of both sunny basking spots and dense cover for refuge.	Not Expected	Project site lacks native vegetation and loose soils; extensive urban development reduces likelihood of occurrence
Cooper's Hawk (*Accipiter cooperi*)	SSC	Distributed widely across North America, including southern California. In this region breeds primarily in riparian woodland and forest and oak woodlands with low to moderate human disturbance. Regionally widespread migrant and winter visitor.	Moderate (in small numbers, foraging only)	Site heavily urbanized throughout
Sharp-shinned Hawk (*Accipiter striatus*)	SSC	Distributed widely across North America. In southern California, breeds only rarely and then in high mountain forests. Widespread in southern California as migrant and winter visitor.	Moderate (in small numbers, foraging only)	Site heavily urbanized throughout

SPECIES / NATURAL COMMUNITIES[1]	SPECIAL STATUS[2]	REQUIREMENTS	LIKELIHOOD OF OCCURRENCE[3]	COMMENTS
American Peregrine Falcon (*Falco peregrinus anatum*)	SE, CFP	Breeds in small numbers through much of non-desert portions of California. Habitat at all seasons is primarily areas with accessible open water and high densities of prey species such as ducks and shorebirds. The American Peregrine Falcon was formally delisted under the federal Endangered Species Act on 25 August 1999 (USFWS 1999), as were individuals of all other subspecies occurring within the range of this subspecies. The latter had been listed as Endangered due to similarity of appearance, to protect the American Peregrine Falcon from unintentional take. The species as a whole remains listed as Endangered at the state level, throughout California.	Not Expected	Study area lacks potential breeding habitat
California Gull (*Larus californicus*)	SSC	Breeds in large colonies from San Francisco Bay and Mono Lake in central California, north and east to the central arctic areas of North America. Winters at and near water bodies in the Pacific states and northwest Mexico, including urban reservoirs; highly tolerant of human disturbance away from breeding colonies	Moderate (foraging during non-breeding seasons only)	Present at Silverwood Lake, west of BSA; may forage in BSA at parking lots or park lawns occasionally
Burrowing Owl (*Athene cunicularia*)	SSC	Inhabitats open, dry, nearly or quite level, grassland; prairie; desert floor; shrubland should be considered potential habitat if shrub cover is below 30% (CBOC 1997). In coastal So. Ca., a substantial fraction birds are found in microhabitats highly altered by man, including flood control and irrigation basins, dikes, and banks, abandoned fields surrounded by agriculture, and road cuts and margins. In the western United States are only rarely known to construct their own burrows (Haug et al. 1993); strong association between Burrowing Owls and burrowing mammals, especially ground squirrels (*Spermophilus* spp.); however will also occupy man-made niches such as banks and ditches, piles of broken concrete, and even abandoned structures (Haug et al. 1993).	Not Expected	No potential burrowing owl sign detected during survey; extensive urban development reduces likelihood of occurrence

SPECIES / NATURAL COMMUNITIES[1]	SPECIAL STATUS[2]	REQUIREMENTS	LIKELIHOOD OF OCCURRENCE[3]	COMMENTS
Southwestern Willow Flycatcher (*Empidonax traillii extimus*)	FE, SE	Occurs in riparian habitats along rivers, streams, or other wetlands, where dense growths of willows (*Salix* spp.), *Baccharis* spp., Arrowweed (*Pluchea* spp.), buttonbush (*Cephalanthus* spp.), tamarisk (*Tamarix* spp.) Russian olive (*Eleagnus* spp.) or other plants are present, often with a scattered overstory of cottonwood (*Populus* spp.).	Not Expected	Study area lacks riparian habitats
Coastal California Gnatcatcher (*Polioptila californica californica*)	FT, SSC	Year-round resident of sage scrub of several subtypes; within Ca. it is found from the Mexican border north to extreme eastern and southern Los Angeles County with several small, disjunct populations known north to the Moorpark area of Ventura County. It extends east into western San Bernardino County and well across cismontane Riverside County.	Not Expected	Study area lacks sage scrub
Big Free-tailed Bat (*Nyctinomops (=Tadarida) macrotis*)	SSC	Prefer rugged, rocky terrain. Roosts in buildings, caves, and occasionally in holes in trees. Also roosts in crevices in high cliffs or rock outcrops. Probably does not breed in California. In other areas, small nursery colonies are formed in rocky crevices in high cliffs.	Not Expected	Study area is well outside of geographical breeding range
Southern Grasshopper Mouse (*Onychomys torridus ramona*)	SSC	Wide variety of dry to moderately dry scrub, grassland and woodland habitats across southern California, exclusive of the more mesic coastal areas from Ventura County north.	Not Expected	The study area lacks native vegetative communities; extensive urban development reduces likelihood of occurrence
South Coast Marsh Vole (*Microtus californicus stephensi*)	SSC	Subspecies associated with marsh habitat.	Not Expected	The study area lacks marsh habitat
American Badger (*Taxidea taxus*)	SSC	Sighting reports indicate that the greatest badger abundance occurs in the northeastern region of the state and along the south coastal area, and a moderate number occurs in the southeastern desert areas, on the east side of the southern Sierra Nevada, and in the southernmost portion of the San Joaquin Valley.	Not Expected	The study area lacks native vegetative communities and native prey; extensive urban development reduces likelihood of occurrence

SPECIES / NATURAL COMMUNITIES[1]	SPECIAL STATUS[2]	REQUIREMENTS	LIKELIHOOD OF OCCURRENCE[3]	COMMENTS
NATURAL COMMUNITIES				
California Walnut Woodland	CNDDB			Not Present
Southern Coast Live Oak Riparian Forest	CNDDB			Not Present
Southern Cottonwood Willow Riparian Forest	CNDDB			Not Present
Southern Sycamore Alder Riparian Woodland	CNDDB			Not Present
Walnut Forest	CNDDB			Not Present

1 - English names and taxonomy of species and in categorization of vegetation types.
2 - See Table C1 in this appendix for explanation of status codes used in this table.
3 - See definitions given at the start of this appendix for the terms used to categorize likelihood of occurrence.

INITIAL SITE ASSESSMENT
PROPOSED STATE ROUTE 2 FREEWAY
TERMINUS IMPROVEMENT PROJECT
LOS ANGELES, CALIFORNIA

MARCH 2008

prepared for

CALIFORNIA DEPARTMENT OF TRANSPORTATION,
FEDERAL HIGHWAY ADMINISTRATION,
AND LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY

prepared by

GEOTECHNICAL CONSULTANTS, INC.
23072 Lake Center Drive, Suite 212
Lake Forest, CA 92630

TABLE OF CONTENTS

FIGURES

APPENDIX

EDR Radius Map with GeoCheck

INTRODUCTION

This Initial Site Assessment (ISA) Update presents our findings, conclusions, and recommendations regarding the potential for ground contamination resulting from the discharge of hazardous materials to adversely impact the proposed State Route 2 Freeway Terminus Improvement Project. This ISA update was prepared for the Los Angeles County Metropolitan Transportation Authority (Metro).

This site assessment was performed as a non-intrusive ISA study, evaluating land use and reviewing the status of regulatory agency oversight for indicators of the presence of potential hazardous materials. A review of public records and a site reconnaissance were performed to verify current conditions and potential impacts at the project site and from adjoining properties. This report discusses the work performed and our findings and conclusions regarding the likelihood that hazardous material may have been discharged to the soil, ground and/or groundwater environment at the project site. This study serves as an initial means of screening the property for potential contamination with the objective of identifying areas requiring additional assessment.

PROJECT DESCRIPTION

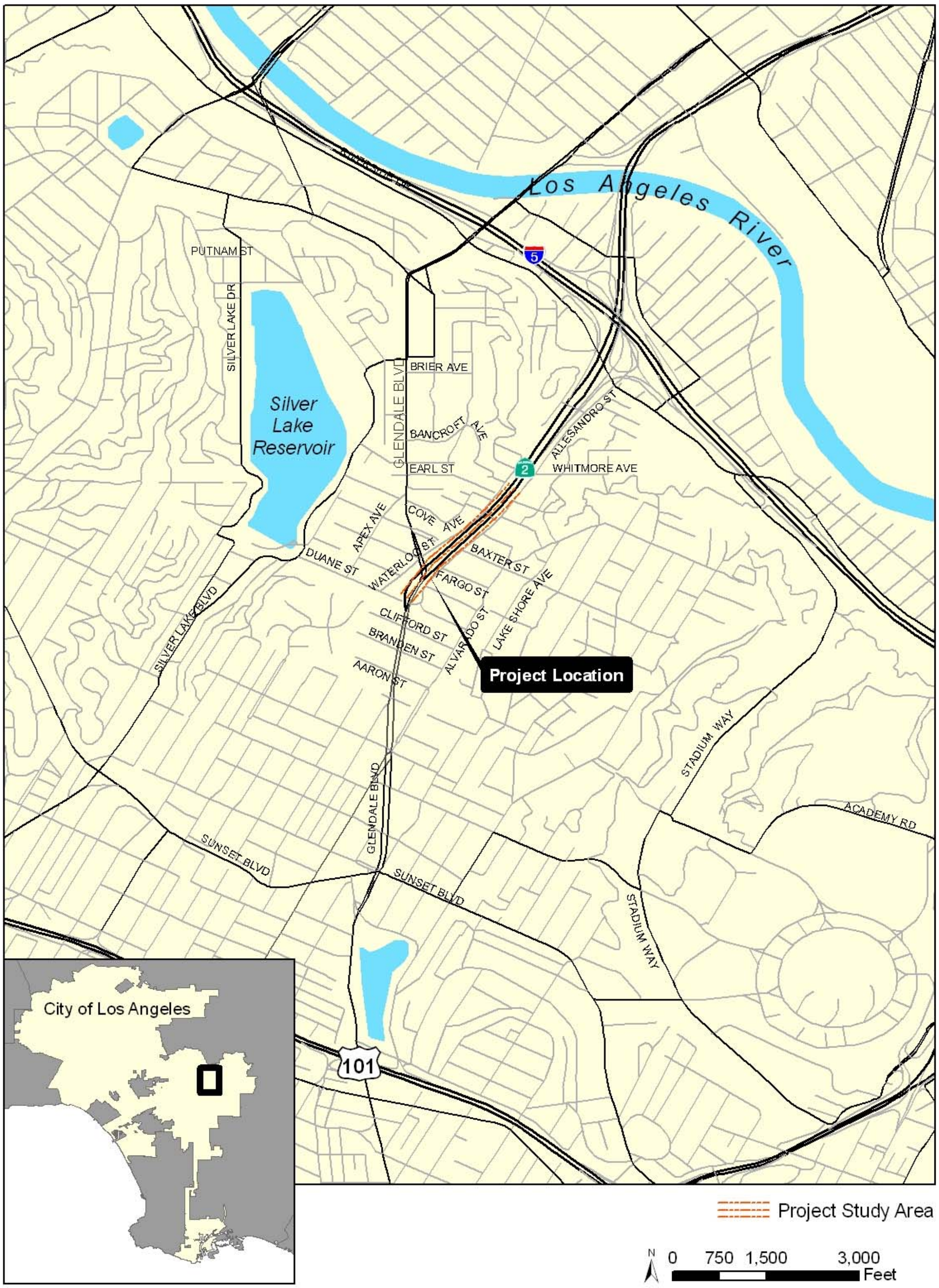
The Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the California Department of Transportation (Caltrans) and the Los Angeles Department of Transportation (LADOT), is proposing to modify the southern terminus of State Route 2 (SR-2), also known as the Glendale Freeway, located in the City of Los Angeles, Los Angeles County, California. The overall project extends along State Route 2 (SR-2) from Glendale Boulevard northward to the I-5. The physical improvements of the proposed project are located on SR-2 in Los Angeles between Branden Street and the Oak Glen Place overpass, and consist of modifications to the southern terminus of SR-2 (Glendale Freeway) near the intersection of Duane and Allesandro Streets in the Echo Park District of the City of Los Angeles. The purpose of the project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses. Several project alternatives have been proposed, listed below.

- No Build Alternative (Baseline Alternative): This alternative requires no new construction or capital cost.
- Alternative A (Widen Existing Ramps): This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp (two lanes). This alternative offers additional landscaping.

- Alternative B (Realign Ramp East – Remove Partial Bridge and Flyover): This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the on-ramp lanes. It would remove the southbound flyover ramp and a portion of the bridge. A portion of the existing bridge across Glendale Boulevard would remain for community reuse and greening. This alternative offers additional landscaping and a potential opportunity for excess land with public access.
- Alternative C (Realign Ramps East – Remove Bridge and Flyover): This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes.. It would remove the southbound flyover ramp and bridge. This alternative provides a landscaped median and parkway treatment. This alternative also offers additional landscaping and a potential opportunity for excess land with public access.
- Alternative D (Realign Ramps East – Retain Bridge and Flyover): This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. This alternative also offers additional landscaping and a potential opportunity for excess land with public access. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged.
- Alternative E (Realign Ramps East, Retain Bridge and Flyover, Relocate Retaining Wall): This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. This alternative also offers additional landscaping and a potential opportunity for excess land with public access. The existing retaining wall along Allesandro Street would be relocated to the east to maintain Caltran's streets and highway standards.

Physical improvements for the six above project alternatives are located in the same project area/footprint and only generally vary in orientation and design of project features such as ramps, bridges, and retaining walls. Therefore this ISA analyzes the project site as the full potential area of construction as covered by all of the above alternatives and is hence forth referred to as the project site. Location of the project site is depicted on Figure 1 - Project Location Map.

Figure 1: Project Location Map



WORK PERFORMED

A phased approach was utilized to evaluate the potential for hazardous materials at the project site, beginning with a review of the previous ISA completed for the project by URS for Caltrans in 2001. A brief review of the historical land use and the existing conditions was conducted, consisting of review of aerial photographs and Sanborn Maps for the project area, to identify land use and to verify possible sources of hazardous materials. Additional work performed for this ISA included review of an environmental database search (EDR, 2007) of records of Federal, State, and local regulatory agencies that oversee the storage, handling and/or unauthorized release of hazardous substances. A reconnaissance visit to the Project Site involved visual observation from public streets of the project area and adjacent parcels for evidence of hazardous materials storage or discharge.

The assembled data was analyzed for indicators of environmental contamination with the objective of determining the potential impacts to the project and the need for additional environmental assessment. Results of this assessment are discussed in this Initial Site Assessment report.

FINDINGS

SITE RECONNAISSANCE

The field reconnaissance component of the study, conducted by an environmental geologist, consisted of a visual survey of surface conditions. The purpose of the survey was to identify sites where storage containers (chemicals, paint, and oil) were present, and evidence of stained soil, or corroded pavement was visible suggesting chemical spillage to the ground. This survey concentrated on sites identified in the EDR database and previous URS report and was limited to viewing properties from adjacent public streets; no attempt was made to gain access to any properties.

SITE CONDITIONS

The proposed project area would consist of the portions of Glendale Boulevard and the SR-2 freeway, and adjacent and crossing features consisting of: on- and off-ramps for the SR-2 freeway, retaining walls and slopes, bridges, and the Tommy Lasorda Field of Dreams park. The general project area is located in the Echo Park/Sliver Lake community of Los Angeles, which in the project area contains a mix of residential, commercial, and light industrial properties.

East of Allesandro and north of Duane Streets, properties consist predominantly of single family residences and a few multi-family residences. North of Duane Street and west of Waterloo Street, properties are also primarily residential, with scattered commercial properties along Glendale Boulevard and a large church/school property, Saint Teresa of Avila School and Church on properties on the western corners of the intersections of Fargo Street, Waterloo Street, and Glendale Boulevard.

South of Duane Street, properties along Glendale Boulevard consist of a mix of commercial, light industrial, and automotive, with residential properties behind these on the side streets.

HISTORICAL LAND USE

A limited review of historic records was conducted using aerial photographs for the period of 1928 to 2002 (EDR Aerial Decade Package, January 30, 2007), and Sanborn Fire Insurance Maps for the period of 1919 to 1970 (EDR Sanborn Map Report, January 29, 2007). Cultural details depicted on the aerial photos and Sanborn maps show that land use in the early 1900's was primarily residential with a few scattered stores and shops, increasing in density over time. By the mid-1950's light industrial and commercial businesses were becoming more prevalent along the main thoroughfares such as Glendale Boulevard. The historic aerial photographs and Sanborn maps indicate that construction of the SR-2 terminus (SR-2 freeway/Glendale Blvd. interchange) was completed between 1961 and 1965. After completion of the SR-2 freeway into the area, urban density of the area began increasing significantly and by the late 1980's almost all open space in the area was occupied by residential or commercial buildings, with minor light industrial properties scattered along major roads.

REGULARTORY AGENCY RECORDS SEARCH

Environmental Data Resources, Inc. (EDR) (2007) performed an environmental data search of Federal, State and local directories listing sites with known releases of hazardous materials, facilities registered as hazardous waste generators, sites with registered underground storage tanks (USTs), and sites once considered likely to use or store hazardous substances. The EDR study identified all sites with active or closed environmental status, within a 1-mile radius of an approximate central point for the project area. The principal regulatory directories reviewed by EDR, including the date last updated, are listed in the appended Radius Map with GeoCheck Report (January 2007). These sites were mapped Using GIS software and sites within the project boundary and 0.25-miles of the boundary were reviewed for potential environmental impact to the project.

IMPACT ANALYSIS

IMPACT ANALYSIS CRITERIA

Nearby or adjacent activities associated with potential environmental contamination include active and former gas stations, automotive repair and body shops, and agricultural practices involving the use of pesticides and herbicides. Sites with leaking USTs, gas stations with USTs in service, and abandoned or closed USTs represent the greatest environmental risk. A high potential for adverse environmental impacts to the soil materials occurs with leaking underground tank sites (LUSTs).

Moderate potential for adverse environmental impacts results from sites with active USTs, and from sites with an unknown number and/or condition of USTs. Automotive repair shops without USTs, and large quantity hazardous waste generators represent a low potential for adverse environmental impacts. Potential impacts from hazardous waste generators, sites listed as case closed, and non-adjacent or distant properties are negligible. Table 1 - Contaminated Properties Impact Criteria presents the criteria used to evaluate the potential environmental impact to the project area resulting from types of businesses or land uses.

CONCLUSIONS AND RECOMMENDATIONS

Historic and current land use activities at and near the proposed project are not likely to have resulted in areas of significant hazardous substance contamination.

1.0 LISTED HAZARDOUS MATERIAL SITES

The EDR database was reviewed for properties listed as hazardous materials users/generators and potential or known dischargers of hazardous materials. The database search included properties within a one-mile radius of an approximate center point for the Project Area.   Approximately 33 properties were identified within the one-mile search radius of the approximate center point of the Project Area, with many of properties sites having multiple database listings and a number of the properties having duplicate listings under slightly differing names. Twenty properties listed as hazardous materials users/generators and potential or known dischargers of hazardous materials occur within the approximate limits of construction and a one quarter-mile buffer zone. These properties were screened using the criteria in Table 1, and no properties with high or moderate potential to impact the project were identified. One property, Bert-Co Graphics Inc., with low potential to impact the project site was identified, as shown on Figure 2, and is summarized in Table 2. The remainder of the properties were found to have no potential environmental contamination impacts to the project site. A complete listing of directory sources and identified sites is provided in the appended Radius Map with GeoCheck Report prepared by EDR (January 2007).

Table 1: Contaminated Properties Impact Criteria

Impact Potential	Criteria
High	- Sites within or immediately adjacent to the project site with leaking underground storage tanks that are reported as no action taken. - Sites within or immediately adjacent to the project site where site assessment efforts are reported to be in progress. - Sites within the project site or immediately adjacent to and upgradient from the project site where remediation/cleanup efforts are reported to be in progress.
Moderate	- Sites within or immediately adjacent to the project site where the number and/or status of underground storage tanks on site are not reported. - Sites within or immediately adjacent to the project site with active or inactive underground storage tanks.
Low	- Sites within or immediately adjacent to the project site where underground storage tanks have been removed. - Large quantity generators within the project site/boundaries near areas of potential ground disturbance.
None	- Active UST sites within ¼-mile of, but outside of or physically separated from, the project site (by major roads, etc.) and or downgradient of the project site. - UST sites located greater than ¼-mile from the project site. - RCRA Small Generator sites within and adjacent to the project area. - Large and small quantity generator sites outside of potential areas of ground disturbance for the proposed project and large generator sites downgradient from the project site. - Sites within or immediately adjacent to the project site where no further action is required. - Sites within or immediately adjacent to the project site where case has been closed following site remediation/cleanup.

Figure 2: Map of Properties with Potential Environmental Impact

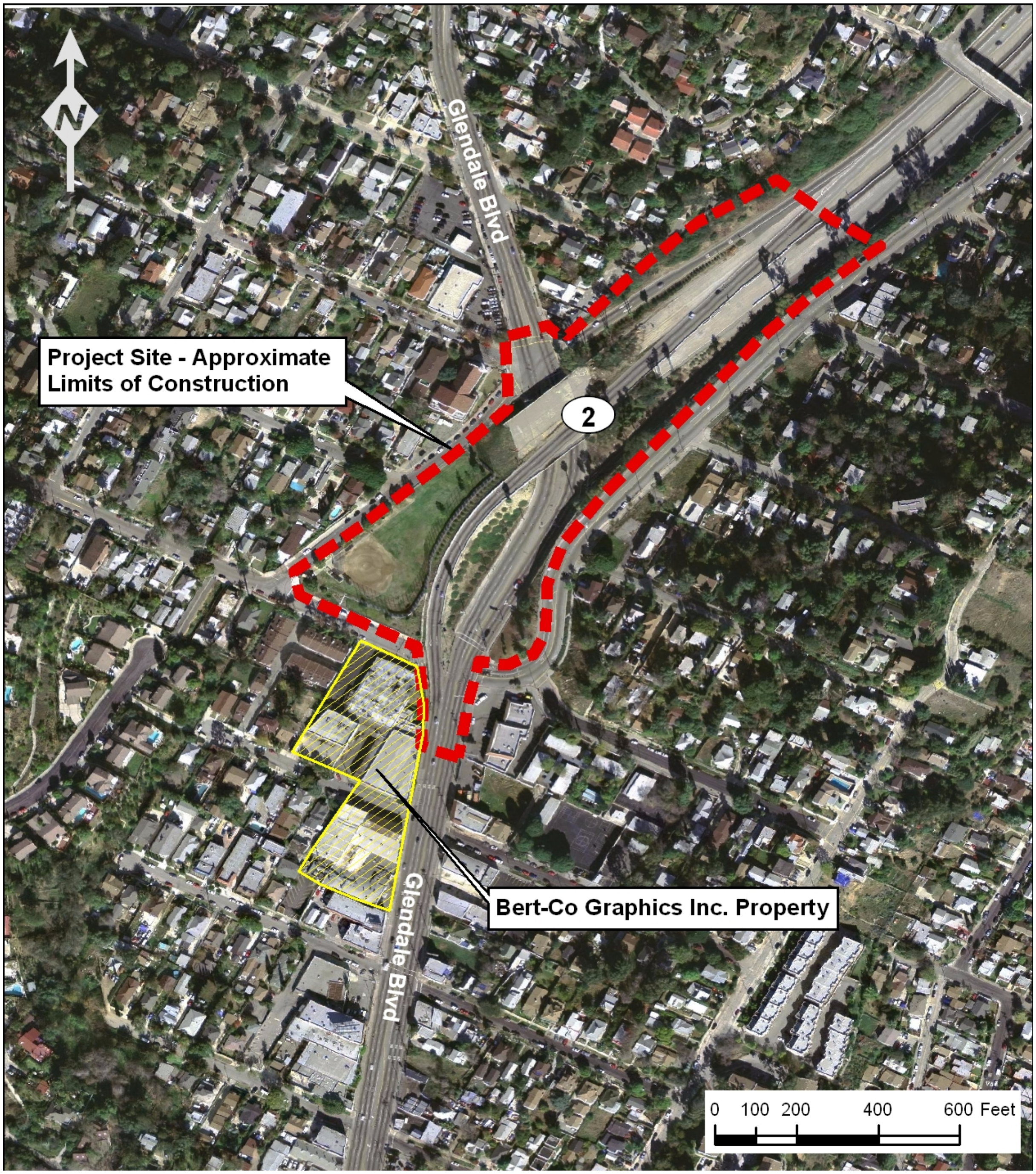


Table 2: Hazardous Material Sites/Properties with Potential Impact to the Project Site					
EDR ID[1]	Site Name	Address	Regulatory Agency List[2]	Potential to Impact the Project	Notes
D12/ D10/ D11/ D9/G19	Bert-Co Graphics Inc/Best Automotive Detail Co/ Sun Chemical Corp GPI DIV LA/ Mission Linen Supply/ Bert-Co Industries Inc	1855 Glendale Blvd 1819-1855 Glendale Blvd.	WDS, RCRIS-SQG, FINDS, CORTESE EMI, HAZNET	Low	Bert-Co no longer occupies this site, and the structures have been demolished. The properties from 1819 to 1855 Glendale Boulevard were sold in 2006 (personal communication, Rose Vanderzanden, Bert-Co Inc.) 1819-1835 Glendale Blvd. is currently for sale for future use as multi-family residential (LoopNet.com, 2007). Site was a industrial printing facility using and storing large quantities of hazardous materials and generating misc. chemical and oil containing wastes. Site immediately adjacent to the project work areas.

NOTES:

1) EDR Environmental Information Data Site I.D. Number.
2) See Appendix for Detailed Description of Regulatory Agency Listings.

FEDERAL RECORDS

RCRA-SQG: Resource Conservation and Recovery Act Information
FINDS: Facility Index System/Facility Registry System, contains both facility information and 'pointers' to other sources that contain more detail.

STATE AND LOCAL RECORDS

WDS: Waste Discharge System, sites which have been issued waste discharge requirements.
CORTESE: "Cortese" Hazardous Waste & Substances Sites List.
HAZNET: Facility and Manifest Data, data is extracted from the copies of hazardous waste manifests received each year by the DTSC.
EMI: Emissions Inventory Data, toxics and criteria pollutant emissions data collected by air pollution agencies.

2.0 AERIAL LEAD DEPOSITION

Aerially deposited lead due to exhaust emissions from leaded gasoline has been documented along major freeway routes. Aerially deposited lead is generally limited to the upper 2 feet of soil within unpaved shoulder and median areas. The presence and concentration of aerially deposited lead within the limits of the proposed project should be evaluated during the design phase. Soil sampling and laboratory testing are necessary to evaluate the requirements for excavating, reuse or offsite disposal for this project.

Aerially deposited lead contaminated soils are regulated under the Health and Safety Code (HSC), Section 25100, et seq., and Title 22 of the California Code of Regulations (CCR) Division 4.5. Cal EPA, Department of Toxic Substances Control (DTSC) has issued a variance (September 2000, extended through June 30, 2008) regarding the reuse and management of lead contaminated soil within Caltrans projects. The variance provides the following conditions regarding aerially deposited lead impacted soils to be used as fill material for construction projects and maintenance operations.

1. Soil containing 0.5 mg/L or less extractable lead (based on a modified waste extraction test using deionized water as the extractant [DI-WET]) and 1411 mg/kg or less total lead, may be used as fill material provided that the lead contaminated soil is covered with a minimum of 1 foot of nonhazardous soil and placed a minimum of 5 feet above the maximum water table.

2. Soil containing more than 0.5 mg/L and less than 50 mg/L extractable lead (based on the modified waste extraction test using deionized water as the extractant) and more than 1411 mg/kg total lead but less than 3397 mg/kg total lead, may be used as fill provided that the lead contaminated soil is placed a minimum of 5 feet above the maximum water table elevation and protected from infiltration by a pavement surface maintained by Caltrans.

3. Contaminated soil with a pH less than 5.0 shall be used as fill material under the paved portion of the roadway.

All lead contaminated soil that cannot be buried and covered within a Caltrans project shall be managed as a hazardous waste and disposed of at an appropriate disposal facility per Title 22 of the CCR.

3.0 ASBESTOS, LEAD, AND CHROMIUM CONTAINING MATERIAL

Reconstruction and restriping of the SR-2 freeway terminus may require the removal of existing bridge structures and pavement. Based on the age of the SR-2 structures and overpasses, there is a potential that asbestos containing material (ACM) and lead-based paint may be present in the structures. Demolition of these structures could potentially result in exposure and mobilization of ACM and/or lead-based paint contaminants. Additionally, the yellow thermoplastic and painted stripes, and pavement markings may contain lead and chromium, and destruction of pavement surfaces containing these materials may result in mobilization of these contaminants into the environment.

4.0 MITIGATION MEASURES

Based upon the criteria outlined in Table 1, properties listed in the EDR database were screened and assigned a potential to impact the project of none, low, moderate, and high. The minor amount and type of industrial activities within the study area suggests environmental contamination is likely confined to individual or immediately adjacent properties that should be evaluated on a site-specific basis. One site with low potential to impact the proposed project was identified.

The presence of a hazardous waste sites and potential environmental contamination within and adjacent to the proposed project site represents a potential significant (Class II), but mitigable, impact due to the potential health hazards to construction workers and the public. The following mitigation measures would provide an assessment of actual or potential site contamination, resulting in the development of appropriate safeguards and methods to reduce potential risk prior to construction. Implementation of the mitigation measures would reduce these impacts to less than significant. The mitigation measures outlined below must be accomplished prior to construction to allow development of appropriate worker protection and waste management plans that discuss proper handling, treatment and storage of hazardous waste from the project (prior to construction).

Mitigation Measure 1 was developed for the low potential site, summarized in Table 2. Mitigation Measure 2 is proposed to address potential discovery of previously unknown/unsuspected soil contamination. Mitigation Measure 3 addresses the concern for aerial lead contamination in the median and shoulder areas along State Highway 2 within the project boundaries. The potential presence and contamination from asbestos, lead, and chromium containing materials is addressed in Mitigation Measure 4.

4.1 **Mitigation Measure 1 – Low Potential.** Prior to project construction, thoroughly review current environmental records and perform a site-specific inspection to verify environmental status of the site. Results of the record review or visual inspection that indicate environmental contamination may be present at the property shall cause low potential sites to be reevaluated in further detail to confirm presence or absence of off-site contamination. Additionally, low potential sites require re-evaluation if location of potential ground disturbance varies from previous construction parameters, bring ground disturbance closer to hazardous material sites. A qualified and approved environmental consultant (California registered geologist, environmental assessor, or civil engineer experienced in environmental assessments acceptable to Metro/Caltrans) shall perform the review and evaluation, and the results reviewed and approved by the appropriate County Health Department or DTSC prior to construction.

4.2 **Mitigation Measure 2 – Discovery of Unknown Contaminants:** Mitigation Measure 2 was developed to address concerns of unknown contamination that may be encountered during project construction, which may have resulted from past or present on and/or offsite practices. This mitigation measure would provide an assessment of actual or potential site contamination, resulting in the development of appropriate safeguards and methods to reduce potential risk prior to and during construction.

During excavation and ground disturbance for project construction, the contractor shall observe the exposed soil for visual evidence of contamination. If visual contamination indicators are observed during construction, the contractor shall stop work until the material is properly characterized and appropriate measures are taken to protect human health and the environment. The contractor shall comply with all local, State, and federal requirements for sampling and testing, and subsequent removal, transport, and disposal of hazardous materials. Additionally, In the event that evidence of contamination is observed, the contractor shall document the exact location of the contamination and shall immediately notify the Caltrans and/or the MTA, as appropriate, describing proposed actions.

4.3 **Mitigation Measure 3 - Aerially Deposited Lead.** The presence of aerially deposited lead contaminated soil must be confirmed before or during the design phase of the project to develop proper plans to reuse the impacted soil within the project limits. The aerial lead site investigation study and report must conform to the requirements of Caltrans and DTSC. The aerial lead study will require subsurface soil sampling and laboratory testing using the DI-WET and Toxicity Characteristic Leaching Procedure (TCLP) methods for lead, soluble lead, and soil pH within existing unpaved areas that will be disturbed or regraded for the project.

4.4 **Mitigation Measure 4 – Asbestos, Lead, and Chromium Containing Material.** Conduct a survey of buildings, structures, and pavement areas to be removed or demolished to assess the presence and extent of asbestos, lead, and chromium containing materials. This study should be conducted prior to final project design by a qualified and approved environmental specialist. The investigation shall include collecting samples for laboratory analysis and quantification of contaminant levels within the buildings and structures proposed for demolition, and in pavement disturbance areas. Based on these findings appropriate measures for handling, removal, and disposal of these materials can be developed. Regulatory agencies for the State of California and County of Los

Angeles should be contacted to plan handling, treatment, and/or disposal options.

5.0 CLOSURE

This review of environmental conditions was performed to identify environmental contamination and potential impacts to the proposed Project Site. This assessment relied on review of a database of sites recently under regulatory agency oversight, review of limited historical records, and visual reconnaissance as indicators of potential contamination.

LIMITATIONS

This ISA does not include an analysis or discussion of radon, methane, or wetlands. No interviews with local business people and city employees familiar with the site were conducted. The findings and opinions presented in this ISA report are based on information obtained from a variety of sources listed herein, and which Geotechnical Consultants, Inc. (GTC) believes are reliable. GTC cannot and does not guarantee the authenticity or reliability of the information relied upon. ESA reports, by their nature, are limited. GTC has endeavored to meet applicable standards of care and, in so doing, is obliged to advise of these limitations.

Prepared by:
GEOTECHNICAL CONSULTANTS, INC
Aurie C. Patterson
Professional Geologist No. 7083
.

REFERENCES

California Code of Regulation, 11/17/2000, Title 22, Division 4.5, Chapter 11, Article 3 - Characteristics of Hazardous Waste, Register 2003.

EDR Information Solutions, Inc., January 29, 2007, Radius Map with GeoCheck.

EDR Information Solutions, Inc., March 18, 2003, The EDR Aerial Photo Decade Package, Select Years - 1928 to 2002.

EDR Information Solutions, Inc., March 18, 2003, Sanborn Map Report, Select Years - 1919 to 1970.

LoopNet.com, website accessed March 2007, Silver Lake Development Site, 1819 - 835 Glendale Blvd./217 & 219 Branden Street, http://www.loopnet.com/xNet/MainSite/Listing/Profile/ProfileSE.aspx?LID=14999149&linkcode=10850&sourcecode=1lww2t006a00001

Rose Vanderzanden, Bert-Co Inc., March 15, 2007, Personal communication.

APPENDIX

EDR Radius Map with GeoCheck

EDR® Environmental Data Resources Inc

The EDR Radius Map
with GeoCheck®

State Route 2 Terminous
SR-2/Glendale Blvd.
LOS ANGELES, CA 90039

Inquiry Number: 1845663.2s

January 29, 2007

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

SECTION **PAGE**

GEOCHECK ADDENDUM

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

SR-2/GLENDALE BLVD.
LOS ANGELES, CA 90039

COORDINATES

Latitude (North):	34.090600 - 34˚ 5' 26.2''
Longitude (West):	118.258800 - 118˚ 15' 31.7''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	383870.0
UTM Y (Meters):	3772722.0
Elevation:	480 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	34118-A3 HOLLYWOOD, CA
Most Recent Revision:	1994
East Map:	34118-A2 LOS ANGELES, CA
Most Recent Revision:	1994

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

FEDERAL RECORDS

Proposed NPL - Proposed National Priority List Sites
Delisted NPL - National Priority List Deletions
NPL RECOVERY - Federal Superfund Liens
CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP - CERCLIS No Further Remedial Action Planned
CORRACTS - Corrective Action Report

EXECUTIVE SUMMARY

RCRA-TSDF ---------------- Resource Conservation and Recovery Act Information
RCRA-LQG ---------------- Resource Conservation and Recovery Act Information
ERNS ---------------- Emergency Response Notification System
HMIRS ---------------- Hazardous Materials Information Reporting System
US ENG CONTROLS -------- Engineering Controls Sites List
US INST CONTROL -------- Sites with Institutional Controls
DOD ---------------- Department of Defense Sites
FUDS ---------------- Formerly Used Defense Sites
US BROWNFIELDS -------- A Listing of Brownfields Sites
CONSENT ---------------- Superfund (CERCLA) Consent Decrees
ROD ---------------- Records Of Decision
UMTRA ---------------- Uranium Mill Tailings Sites
ODI ---------------- Open Dump Inventory
TRIS ---------------- Toxic Chemical Release Inventory System
TSCA ---------------- Toxic Substances Control Act
FTTS ---------------- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
SSTS ---------------- Section 7 Tracking Systems
ICIS ---------------- Integrated Compliance Information System
RADINFO ---------------- Radiation Information Database
CDL ---------------- Clandestine Drug Labs
LUCIS ---------------- Land Use Control Information System
PADS ---------------- PCB Activity Database System
MLTS ---------------- Material Licensing Tracking System
MINES ---------------- Mines Master Index File
RAATS ---------------- RCRA Administrative Action Tracking System

STATE AND LOCAL RECORDS

CA BOND EXP. PLAN -------- Bond Expenditure Plan
SCH ---------------- School Property Evaluation Program
Toxic Pits ---------------- Toxic Pits Cleanup Act Sites
SWF/LF ---------------- Solid Waste Information System
WMUDS/SWAT ---------------- Waste Management Unit Database
SLIC ---------------- Statewide SLIC Cases
AOCONCERN ---------------- San Gabriel Valley Areas of Concern
UST ---------------- Active UST Facilities
HIST UST ---------------- Hazardous Substance Storage Container Database
AST ---------------- Aboveground Petroleum Storage Tank Facilities
CHMIRS ---------------- California Hazardous Material Incident Report System
LA Co. Site Mitigation -------- Site Mitigation List
DEED ---------------- Deed Restriction Listing
VCP ---------------- Voluntary Cleanup Program Properties
CLEANERS ---------------- Cleaner Facilities
WIP ---------------- Well Investigation Program Case List
LOS ANGELES CO. HMS ---- HMS: Street Number List
CDL ---------------- Clandestine Drug Labs
RESPONSE ---------------- State Response Sites

TRIBAL RECORDS

INDIAN RESERV ---------------- Indian Reservations
INDIAN LUST ---------------- Leaking Underground Storage Tanks on Indian Land
INDIAN UST ---------------- Underground Storage Tanks on Indian Land

EDR PROPRIETARY RECORDS

Manufactured Gas Plants --- EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL RECORDS

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 09/27/2006 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
SAN FERNANDO VALLEY (AREA 4)	***POLLOCK WELLFIELD***	***1/2 - 1 NE***	***0***	***6***

RCRAInfo: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store , treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/13/2006 has revealed that there are 4 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
LA ECHO PARK CHILD CARE CENTER	***1953 LAKESHORE AVE***	***1/8 - 1/4 ESE***	***27***	***28***

Lower Elevation	Address	Dist / Dir	Map ID	Page
BEST AUTOMOTIVE DETAIL CO THE	1855 GLENDALE BLVD	0 - 1/8 SSW	D10	14
SUN CHEMICAL CORP GPI DIV LA	***1855 GLENDALE BLVD***	***0 - 1/8 SSW***	***D11***	***15***
TIERNOS FABRICATION	***1769 GLENDALE BLVD***	***1/8 - 1/4 SSW***	***I23***	***26***

EXECUTIVE SUMMARY

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 10/11/2006 has revealed that there are 5 FINDS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
CLIFFORD STREET ELEMENTARY	2150 DUANE ST.	0 - 1/8 SE	E7	13
LA ECHO PARK CHILD CARE CENTER	***1953 LAKESHORE AVE***	***1/8 - 1/4 ESE***	***27***	***28***

Lower Elevation	Address	Dist / Dir	Map ID	Page
SUN CHEMICAL CORP GPI DIV LA	***1855 GLENDALE BLVD***	***0 - 1/8 SSW***	***D11***	***15***
TIERNOS FABRICATION	***1769 GLENDALE BLVD***	***1/8 - 1/4 SSW***	***I23***	***26***
ARTISAN HOUSE INCORPORATED	***1755 GLENDALE BOULEVARD***	***1/8 - 1/4 SSW***	***I28***	***29***

STATE AND LOCAL RECORDS

HIST CAL-SITES: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 HIST Cal-Sites site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
SAN FERNANDO VALLEY (AREA 4)	***POLLOCK WELLFIELD***	***1/2 - 1 NE***	***0***	***6***

WDS: California Water Resources Control Board - Waste Discharge System.

A review of the CA WDS list, as provided by EDR, and dated 12/19/2006 has revealed that there is 1 CA WDS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
BERT CO GRAPHICS INC	1855 GLENDALE BLVD	0 - 1/8 SSW	D12	16

CORTESE: This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

A review of the Cortese list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3

EXECUTIVE SUMMARY

Cortese sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
MISSION LINEN SUPPLY	1855 GLENDALE	0 - 1/8 SSW	D9	14
GATEWAY HOSPITAL	***1891 EFFIE ST***	***1/4 - 1/2 SSE***	***32***	***34***
ARCO #1597	***1601 GLENDALE BLVD***	***1/4 - 1/2 S***	***33***	***37***

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 01/08/2007 has revealed that there are 2 SWRCY sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
VICTAR RECYCLING	2100 AARON ST	1/4 - 1/2 S	30	31

Lower Elevation	Address	Dist / Dir	Map ID	Page
GLENDALE RECYCLING	1850 GLENDALE BLVD	0 - 1/8 SSW	B4	12

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 01/09/2007 has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
O. J. PLUMBING Facility Status: Remediation Plan	1661 ALLESANDRO ST	1/4 - 1/2 SSW	31	32
GATEWAY HOSPITAL Facility Status: Leak being confirmed	***1891 EFFIE ST***	***1/4 - 1/2 SSE***	***32***	***34***
ARCO #1597 Facility Status: Case Closed Facility Status: Pollution Characterization	***1601 GLENDALE BLVD***	***1/4 - 1/2 S***	***33***	***37***

CA FID: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
TIERNO’S GEMERAL FABRICATION	***1769 GLENDALE BLVD***	***1/8 - 1/4 SSW***	***I25***	***27***

EXECUTIVE SUMMARY

SWEEPS: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
TIERNO'S GEMERAL FABRICATION	***1769 GLENDALE BLVD***	***1/8 - 1/4 SSW***	***I25***	***27***

NOTIFY 65: Notify 65 records contain facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk. The data come from the State Water Resources Control Board's Proposition 65 database.

A review of the Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
HOLLOWAY DRY CLEANERS	1159 ECHO PARK BLVD	1/2 - 1 S	34	43

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency

A review of the HAZNET list, as provided by EDR, and dated 12/31/2005 has revealed that there are 10 HAZNET sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ST TERESA OF AVILA CHURCH	2216 FARGO ST	0 - 1/8 N	C5	13
LAUSD/ CLIFFORD ST ELEM	2150 DUANE ST	0 - 1/8 SE	E8	14
SAINT THERESA CHURCH	2223 FARGO ST	0 - 1/8 NNW	C13	16
BROADWAY DEPT. STORE	2100 GLENDALE	1/8 - 1/4 N	H21	25

Lower Elevation	Address	Dist / Dir	Map ID	Page
BERT-CO INDUSTIES INC	1830 GLENDALE BLVD	1/8 - 1/4 SSW	G16	17
BERT-CO INDUSTRIES INC	***1819-1855 GLENDALE BLVD***	***1/8 - 1/4 SSW***	***G19***	***19***
WELTON ROLLED THREAD	1818 GLENDALE BLVD.	1/8 - 1/4 SSW	G20	24
TIERNOS FABRICATION	***1769 GLENDALE BLVD***	***1/8 - 1/4 SSW***	***I23***	***26***
ARTISAN HOUSE INCORPORATED	***1755 GLENDALE BOULEVARD***	***1/8 - 1/4 SSW***	***I28***	***29***
ARTISAN HOUSE INC	1755 GLENDALE BOULEVARD	1/8 - 1/4 SSW	I29	30

EXECUTIVE SUMMARY

Emissions Inventory Data: Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies

A review of the EMI list, as provided by EDR, and dated 12/31/2004 has revealed that there are 2 EMI sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Dist / Dir	Map ID	Page
BERT-CO INDUSTRIES INC	***1819-1855 GLENDALE BLVD***	***1/8 - 1/4 SSW***	***G19***	***19***
ARTISAN HOUSE INCORPORATED	***1755 GLENDALE BOULEVARD***	***1/8 - 1/4 SSW***	***I28***	***29***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 11/28/2006 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
SAN FERNANDO VALLEY (AREA 4)	***POLLOCK WELLFIELD***	***1/2 - 1 NE***	***0***	***6***
Facility Status: Certified / Operation & Maintenance				

EDR PROPRIETARY RECORDS

EDR Historical Auto Stations: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

A review of the EDR Historical Auto Stations list, as provided by EDR, has revealed that there are 5 EDR Historical Auto Stations sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
PITTEL M H	2000 GLENDALE BLVD	1/8 - 1/4 N	F17	19
GILLESPIE C A	2101 GLENDALE BLVD	1/8 - 1/4 N	H22	26

Lower Elevation	Address	Dist / Dir	Map ID	Page
GIBSON L O	1824 GLENDALE BLVD	1/8 - 1/4 SSW	G18	19
BRIGHTON H T	1769 GLENDALE BLVD	1/8 - 1/4 SSW	I24	27
TRAUTMAN ORION	1763 GLENDALE BLVD	1/8 - 1/4 SSW	I26	28

EXECUTIVE SUMMARY

EDR Historical Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

A review of the EDR Historical Cleaners list, as provided by EDR, has revealed that there are 6 EDR Historical Cleaners sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
DUANE CLEANERS	1927 GLENDALE BLVD	0 - 1/8 NNE	A1	11
WILDERMAN LEROY	1931 GLENDALE BLVD	0 - 1/8 NNE	A2	12
OVERSTREET J C	1968 GLENDALE BLVD	1/8 - 1/4 N	F14	17

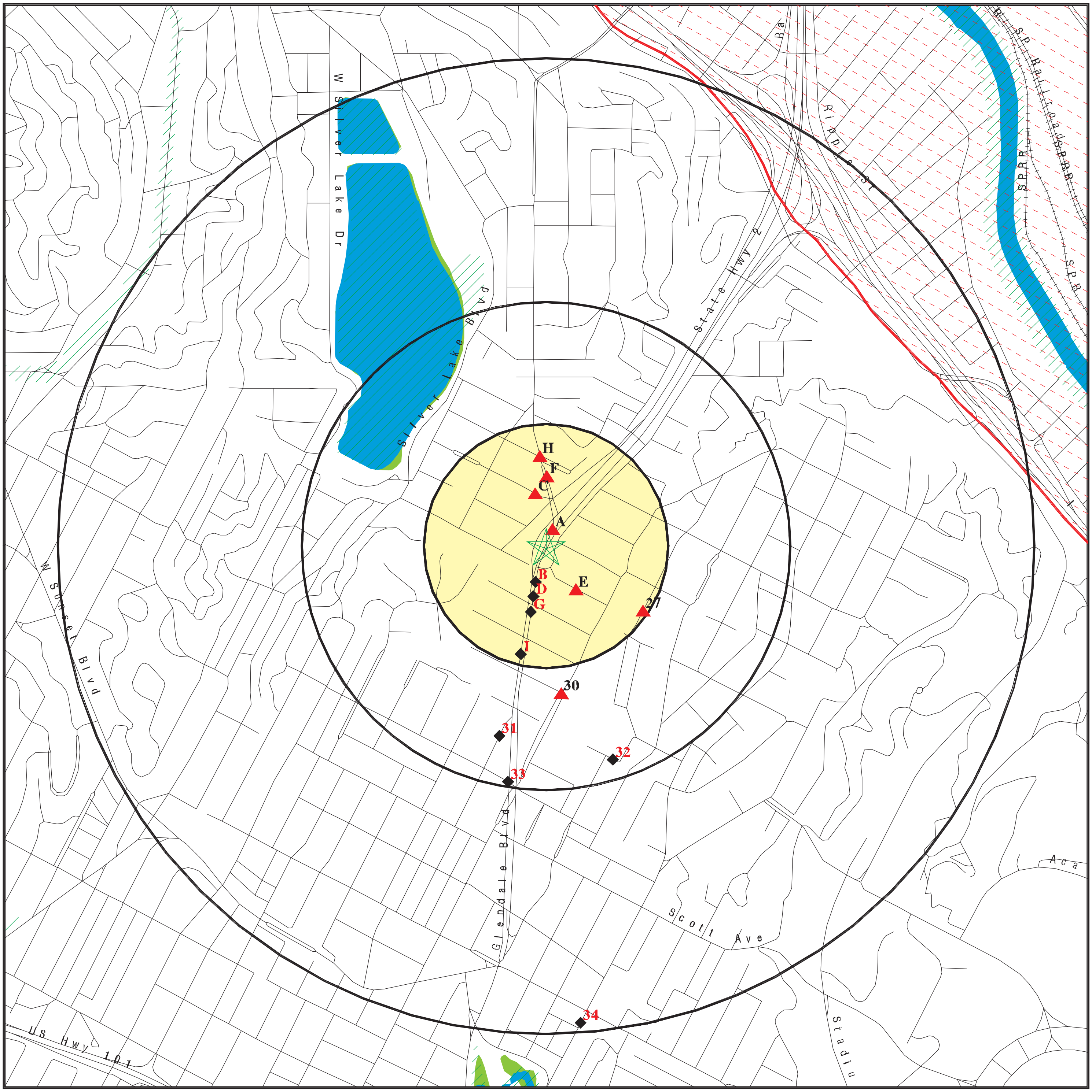
Lower Elevation	Address	Dist / Dir	Map ID	Page
MATHWIG L H	1862 GLENDALE BLVD	0 - 1/8 SSW	B3	12
WESSLER ISAAC	1848 GLENDALE BLVD	0 - 1/8 SSW	D6	13
BERNSTEIN C H	1835 GLENDALE BLVD	1/8 - 1/4 SSW	D15	17

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
1357 W BELLEVUE	CDL
141 N ALVARADO ST (HOL. INN EX	CDL
VEH STOP @ SO ON HWY 5/N OF ST	CDL
MURPHY INDUSTRIAL COATINGS INC	HAZNET
MURPHY IND COATING LOS ANGELES	HAZNET
CORONADO APARTMENTS	HAZNET
CARMEN STARK	HAZNET
TUTOR SLIBA	HAZNET
ANGELUS TEMPLE	HAZNET
BARNARD TRANSPORTATION	HAZNET
UNOCAL SO CAL. DIV. PIPE LINE	HAZNET
PHIL OF THE FUTURE	HAZNET
1X MOUNTAINS RECRTN & CONCV AUTHOR	HAZNET
PACIFIC RIM TRANSPORTATION INC	HAZNET
NB GOLDEN STATE HWY 5	ERNS
EN ROUTE LOS ANGELES	ERNS
WB WESTERN OFF RAMP & SB GOLDEN ST	ERNS
ADVANCED & BOSTON AUTO SALVAGE	CA WDS
SHELL OIL #204-2928-0538	LOS ANGELES CO. HMS
BERT-CO INDUSTRIES, BERT-CO GR	EMI

OVERVIEW MAP - 1845663.2s



Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
National Priority List Sites
Landfill Sites
Dept. Defense Sites

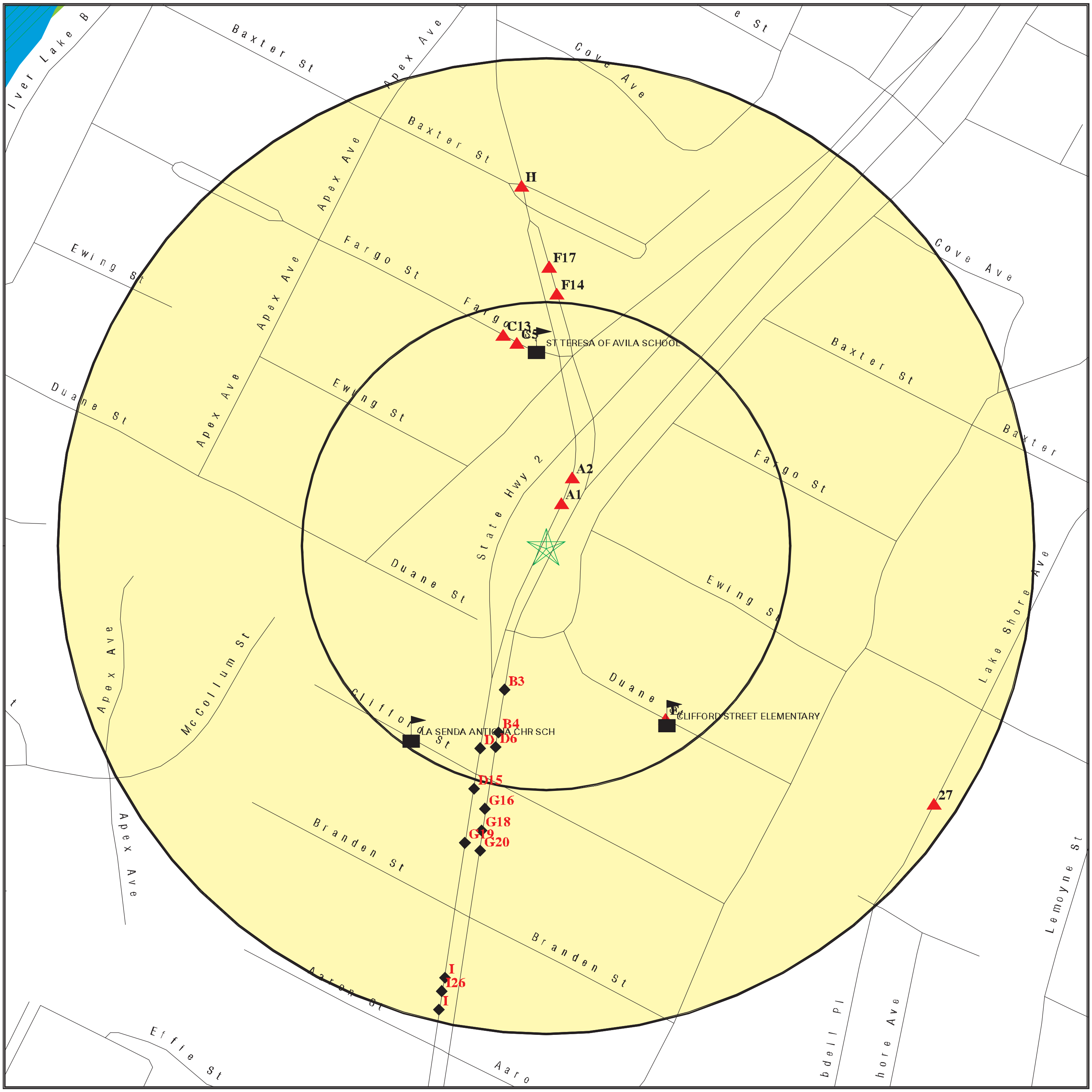
Indian Reservations BIA
Oil & Gas pipelines
100-year flood zone
500-year flood zone
National Wetland Inventory

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	State Route 2 Terminous	CLIENT:	Geotechnical Conslt. Inc.
ADDRESS:	SR-2/Glendale Blvd.	CONTACT:	Aurie Patterson
	LOS ANGELES CA 90039	INQUIRY #:	1845663.2s
LAT/LONG:	34.0906 / 118.2588	DATE:	January 29, 2007 6:59 pm

DETAIL MAP - 1845663.2s



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	State Route 2 Terminous	CLIENT:	Geotechnical Conslt. Inc.
ADDRESS:	SR-2/Glendale Blvd.	CONTACT:	Aurie Patterson
	LOS ANGELES CA 90039	INQUIRY #:	1845663.2s
LAT/LONG:	34.0906 / 118.2588	DATE:	January 29, 2007 6:59 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL RECORDS								
NPL		1.000	0	0	0	1	NR	1
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL RECOVERY		0.250	0	0	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.		0.250	2	2	NR	NR	NR	4
ERNS		0.250	0	0	NR	NR	NR	0
HMIRS		0.250	0	0	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS		0.250	0	0	NR	NR	NR	0
TSCA		0.250	0	0	NR	NR	NR	0
FTTS		0.250	0	0	NR	NR	NR	0
SSTS		0.250	0	0	NR	NR	NR	0
ICIS		0.250	0	0	NR	NR	NR	0
RADINFO		0.250	0	0	NR	NR	NR	0
CDL		0.250	0	0	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
PADS		0.250	0	0	NR	NR	NR	0
MLTS		0.250	0	0	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS		0.250	2	3	NR	NR	NR	5
RAATS		0.250	0	0	NR	NR	NR	0
STATE AND LOCAL RECORDS								
Hist Cal-Sites		1.000	0	0	0	1	NR	1
CA Bond Exp. Plan		1.000	0	0	0	0	NR	0
SCH		0.250	0	0	NR	NR	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
CA WDS		0.250	1	0	NR	NR	NR	1
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
Cortese		0.500	1	0	2	NR	NR	3
SWRCY		0.500	1	0	1	NR	NR	2
LUST		0.500	0	0	3	NR	NR	3
CA FID UST		0.250	0	1	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC		0.500	0	0	0	NR	NR	0
AOCONCERN		1.000	0	0	0	0	NR	0
UST		0.250	0	0	NR	NR	NR	0
HIST UST		0.250	0	0	NR	NR	NR	0
AST		0.250	0	0	NR	NR	NR	0
SWEEPS UST		0.250	0	1	NR	NR	NR	1
CHMIRS		0.250	0	0	NR	NR	NR	0
Notify 65		1.000	0	0	0	1	NR	1
LA Co. Site Mitigation		0.250	0	0	NR	NR	NR	0
DEED		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
WIP		0.250	0	0	NR	NR	NR	0
Los Angeles Co. HMS		0.250	0	0	NR	NR	NR	0
CDL		0.250	0	0	NR	NR	NR	0
RESPONSE		1.000	0	0	0	0	NR	0
HAZNET		0.250	3	7	NR	NR	NR	10
EMI		0.250	0	2	NR	NR	NR	2
ENVIROSTOR		1.000	0	0	0	1	NR	1
TRIBAL RECORDS								
INDIAN RESERV		1.000	0	0	0	0	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
EDR PROPRIETARY RECORDS								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0
EDR Historical Auto Stations		0.250	0	5	NR	NR	NR	5
EDR Historical Cleaners		0.250	4	2	NR	NR	NR	6

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
NPL Region	**SAN FERNANDO VALLEY (AREA 4)**	**CERCLIS**	**1000710135**
NE	**POLLOCK WELLFIELD**	**FINDS**	**CAD980894976**
1/2-1	**LOS ANGELES, CA 90086**	**NPL**	
4344 ft.		**Cortese**	
		ENVIROSTOR	
		HIST Cal-Sites	

CERCLIS:
Site ID: 0902253
Federal Facility: Not a Federal Facility
NPL Status: Currently on the Final NPL
Non NPL Status: Not reported

CERCLIS Site Contact Name(s):
Contact Name: David Stensby
Contact Tel: (415) 972-3246
Contact Title: Remedial Project Manager (RPM)

Contact Name: Jere Johnson
Contact Tel: (415) 972-3094
Contact Title: Site Assessment Manager (SAM)

Contact Name: Dawn Richmond
Contact Tel: (415) 972-3097
Contact Title: Site Assessment Manager (SAM)

Contact Name: Matt Mitguard
Contact Tel: (415) 972-3096
Contact Title: Site Assessment Manager (SAM)

CERCLIS Site Alias Name(s):
Alias Name: SAN FERNANDO VLY BASIN - POLLOCK AREA
Alias Address: Not reported
CA
Alias Name: SAN FERNANDO VALLEY (AREA 4)
Alias Address: POLLOCK WELLFIELD
LOS ANGELES, CA 90086
Site Description: SAN FERNANDO #4 IS AN AREA OF CONTAM GRD WTR IN POLLOCK WELLFLD AEA IN LOS ANGELES,CA.PART OF SAN FERNANDO VLY BASIN,A NATURAL UNDGRD RESERVOIR THAT IS SOURCE OF DRK WTR FOR 3 MILGRD WTR CONTAM WITH TCE & PCE.

CERCLIS Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 12/01/1983
Priority Level: Not reported

Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: Not reported
Date Completed: 04/01/1984
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 04/01/1984
Priority Level: High

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported

SAN FERNANDO VALLEY (AREA 4) (Continued) **1000710135**

Date Completed:	04/01/1984
Priority Level:	High
Action:	PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started:	Not reported
Date Completed:	10/15/1984
Priority Level:	Not reported
Action:	NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started:	09/30/1984
Date Completed:	08/15/1985
Priority Level:	Not reported
Action:	COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	08/16/1985
Date Completed:	Not reported
Priority Level:	Not reported
Action:	FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started:	Not reported
Date Completed:	06/10/1986
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	06/17/1991
Date Completed:	06/17/1991
Priority Level:	Not reported
Action:	COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	09/28/1992
Date Completed:	Not reported
Priority Level:	Not reported
Action:	RISK/HEALTH ASSESSMENT
Date Started:	Not reported
Date Completed:	12/15/1992
Priority Level:	Not reported
Action:	ECOLOGICAL RISK ASSESSMENT
Date Started:	Not reported
Date Completed:	12/15/1992
Priority Level:	Not reported
Action:	NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started:	10/01/1989
Date Completed:	06/30/1993
Priority Level:	Not reported

FINDS:

Other Pertinent Environmental Activity Identified at Site

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

SAN FERNANDO VALLEY (AREA 4) (Continued) **1000710135**

NPL:
EPA ID: CAD980894976
EPA Region: 09
Federal: General
Final Date: 06/10/1986

Category Details:
Site ID: Not reported
NPL Status: Currently on the Final NPL
Category Description: Depth To Aquifer-<= 10 Feet
Category Value: 1

Site ID: Not reported
NPL Status: Currently on the Final NPL
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value: 10

Site Details:
Site Name: SAN FERNANDO VALLEY (AREA 4)
Site Status: Final
Status Date: 6/10/1986
Site City: LOS ANGELES
Site State: CA
Federal Site: Not a Federal Facility
HRS Score: 35.57
GW Score: 61.54
SW Score: Not reported
Air Score: Not reported
Soil Score: Not reported
DC Score: Not reported
FE Score: Not reported

Substance Details:
Site ID: Not reported
NPL Status: Currently on the Final NPL
Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

Site ID: Not reported
NPL Status: Currently on the Final NPL
Substance ID: U078
Substance: DICHLOROETHENE, 1,1-
CAS #: 75-35-4
Pathway: GROUND WATER PATHWAY
Scoring: 4

Site ID: Not reported
NPL Status: Currently on the Final NPL
Substance ID: U210
Substance: TETRACHLOROETHENE
CAS #: 127-18-4
Pathway: GROUND WATER PATHWAY

SAN FERNANDO VALLEY (AREA 4) (Continued) **1000710135**

Scoring: 2

Site ID: Not reported
NPL Status: Currently on the Final NPL
Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)
CAS #: 79-01-6
Pathway: GROUND WATER PATHWAY
Scoring: 2

Summary Details:

Conditions at proposal October 15, 1984): San Fernando Valley Area 4) is an area of contaminated ground water in the Pollock Well Field area in the City of Los Angeles, Los Angeles County, California. The area is part of the San Fernando V
alley Basin, a natural underground reservoir that represents an important source of drinking water for at least 3 million people in the Los Angeles metropolitan area. The contaminated ground water, which underlies an area of approximately 5,860
acres, contains perchloroethylene PCE), according to tests conducted by the California Department of Health Services, as well as numerous local government agencies. The State s recommended drinking water guideline for PCE 4 parts per billion)
is exceeded in a number of public wells in this area. To alleviate this contamination, wells are either taken out of service or blended with water from clean sources to ensure that the public receives water with concentrations below the State s
guideline. Status June 10, 1986): EPA and the Los Angeles Department of Water and Power are entering into a cooperative agreement for a remedial investigation of the San Fernando Valley Basin and a feasibility study targeted at Area 1,
the most contaminated area. The RI is scheduled to begin in early 1986.

Site Status Details:
NPL Status: Final
Proposed Date: 10/15/1984
Final Date: 06/10/1986
Deleted Date: Not reported

Narratives Details:
NPL Name: SAN FERNANDO VALLEY (AREA 4)
City: LOS ANGELES
State: CA

Cortese:
Region: CORTESE
Facility Addr2: Not reported

ENVIROSTOR:
Site Type: Federal Superfund
Site Type Detailed: State Response or NPL
Acres: 5829
NPL: YES
Regulatory Agencies: US EPA
Lead Agency: NONE SPECIFIED
Program Manager: TEDD YARGEAU

SAN FERNANDO VALLEY (AREA 4) (Continued) **1000710135**

Supervisor:	RITA KAMAT
Division Branch:	So Cal - Glendale
Facility ID:	19990009
Site Code:	Not reported
Assembly:	43
Senate:	21
Special Program:	EPA - Multi-Site Cooperative Agreement
Status:	**Certified / Operation & Maintenance**
Status Date:	1999-01-01 00:00:00
Restricted Use:	NO
Funding:	Joint State/Federal-Funded
Latitude:	34.1294444444444
Longitude:	-118.264166666667
Alias Name:	P31034
	19990009
	POLLOCK AREA; OVERALL BASIN SCHEDULE
	SAN FERNANDO VALLEY GW BASIN AREA 4
Alias Type:	PCode
	Calsites ID Number
	Alternate Name
	Alternate Name
APN:	NONE SPECIFIED
APN Description:	Not reported
Comments:	Not reported
Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Confirmed:	30022,30026,30027,30152,30153
Confirmed Description:	Tetrachloroethylene (PCE)
Confirmed Description:	1,1,1-Trichloroethane (TCA)
Confirmed Description:	Trichloroethylene (TCE)
Confirmed Description:	Chromium III
Confirmed Description:	Chromium VI
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Media Affected:	AQUI, SOIL, WELL
Media Affected Desc:	Aquifer used for drinking water supply affected
Media Affected Desc:	Soil
Media Affected Desc:	Well used for drinking water supply affected
Management Required:	NONE SPECIFIED
Management Required Desc:	Not reported
Potential:	30022, 30026, 30027, 30152, 30153
Potenital Description:	Tetrachloroethylene (PCE)
Potenital Description:	1,1,1-Trichloroethane (TCA)
Potenital Description:	Trichloroethylene (TCE)
Potenital Description:	Chromium III
Potenital Description:	Chromium VI
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported
PastUse:	AEROSPACE MANUFACTURING/MAINTENANCE, METAL PLATING - CHROME, RESEARCH - AEROSPACE

SAN FERNANDO VALLEY (AREA 4) (Continued) **1000710135**

HISTORICAL CAL-SITES:

Facility ID:	19990009
Region:	3
Region Name:	GLENDALE
Branch:	SA
Branch Name:	SO CAL - GLENDALE
File Name:	Not reported
State Senate District:	01011984
Status:	AWP - ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name:	ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency:	EPA
Lead Agency:	ENVIRONMENTAL PROTECTION AGENCY
Facility Type:	NPJF
Type Name:	NPL SITE, JOINT STATE/FEDERAL-FUNDED
NPL:	Listed
SIC Code:	99
SIC Name:	NONCLASSIFIABLE ESTABLISHMENTS
Access:	Not reported
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Confirmed
Staff Member Responsible for Site:	TYARGEAU
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	LA
Region Water Control Board Name:	LOS ANGELES
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	43
State Senate District Code:	21

Click this hyperlink while viewing on your computer to access additional CA_CALSITE: detail in the EDR Site Report.

A1 **NNE** **< 1/8** **123 ft.**	**DUANE CLEANERS** **1927 GLENDALE BLVD** **LOS ANGELES, CA**	**EDR Historical Cleaners**	**1009190043** **N/A**
Relative: **Higher** **Actual:** **482 ft.**	**Site 1 of 2 in cluster A**		

EDR Historical Cleaners:

Name:	DUANE CLEANERS
Year:	1933
Type:	CLOTHES PRESSERS AND CLEANERS

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
A2 **NNE** **< 1/8** **198 ft.**	**WILDERMAN LEROY** **1931 GLENDALE BLVD** **LOS ANGELES, CA**	**EDR Historical Cleaners**	**1009192688** **N/A**

Site 2 of 2 in cluster A

Relative: **Equal**

Actual: **480 ft.**

EDR Historical Cleaners:

Name:	WILDERMAN LEROY
Year:	1937
Type:	LAUNDRIES HAND

B3 **SSW** **< 1/8** **404 ft.**	**MATHWIG L H** **1862 GLENDALE BLVD** **LOS ANGELES, CA**	**EDR Historical Cleaners**	**1009189714** **N/A**

Site 1 of 2 in cluster B

Relative: **Lower**

Actual: **470 ft.**

EDR Historical Cleaners:

Name:	MATHWIG L H
Year:	1929
Type:	CLOTHES PRESSERS CLEANERS AND REPAIRERS
Name:	MATHWIG L H
Year:	1933
Type:	CLOTHES PRESSERS AND CLEANERS

B4 **SSW** **< 1/8** **521 ft.**	**GLENDALE RECYCLING** **1850 GLENDALE BLVD** **LOS ANGELES, CA 90026**	**SWRCY**	**S107137053** **N/A**

Site 2 of 2 in cluster B

Relative: **Lower**

Actual: **465 ft.**

SWRCY:

Certification Status:	O
Facility Phone Number:	(818) 237-7070
Date facility became certified:	04/13/03
Date facility began operating:	04/25/03
Date facility ceased operating:	Still operating
Whether The Facility Is Grandfathered:	Not reported
Convenience Zone Where Faciltiy Located:	0
Convenience Zone Where Faciltiy Located 2:	0
Convenience Zone Where Faciltiy Located 3:	0
Convenience Zone Where Faciltiy Located 4:	0
Convenience Zone Where Faciltiy Located 5:	0
Convenience Zone Where Faciltiy Located 6:	0
Convenience Zone Where Faciltiy Located 7:	0
Aluminum Beverage Containers Redeemed:	AL
Glass Beverage Containers Redeemed:	GL
Plastic Beverage Containers Redeemed:	PL
Other mat beverage containers redeemed:	Not reported
Refillable Beverage Containers Redeemed:	Not reported

C5
North
< 1/8
555 ft.

Relative: Higher

Actual: 493 ft.

ST TERESA OF AVILA CHURCH — **HAZNET** — **S104566002** / **N/A**
2216 FARGO ST
LOS ANGELES, CA 90039

Site 1 of 2 in cluster C

HAZNET:

Gepaid:	CAC001180560
Contact:	DIOCESE OF LOS ANGELES
Telephone:	2136377850
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3424 WILSHIRE BLVD
Mailing City,St,Zip:	LOS ANGELES, CA 900100000
Gen County:	Los Angeles
TSD EPA ID:	CAD009007626
TSD County:	Los Angeles
Waste Category:	Asbestos-containing waste
Disposal Method:	Disposal, Land Fill
Tons:	5.8996
Facility County:	Los Angeles

D6
SSW
< 1/8
561 ft.

Relative: Lower

Actual: 464 ft.

WESSLER ISAAC — **EDR Historical Cleaners** — **1009191586** / **N/A**
1848 GLENDALE BLVD
LOS ANGELES, CA

Site 1 of 6 in cluster D

EDR Historical Cleaners:

Name:	WESSLER ISAAC
Year:	1929
Type:	CLOTHES PRESSERS CLEANERS AND REPAIRERS

E7
SE
< 1/8
568 ft.

Relative: Higher

Actual: 535 ft.

CLIFFORD STREET ELEMENTARY — **FINDS** — **1008307679** / **110022044367**
2150 DUANE ST.
LOS ANGELES, CA 90039

Site 1 of 2 in cluster E

FINDS:

Other Pertinent Environmental Activity Identified at Site

NCES (National Center for Education Statistics) is the primary federal entity for collecting and analyzing data related to education in the United States and other nations and the institute of education sciences.

E8 **LAUSD/ CLIFFORD ST ELEM** **HAZNET** **S105722055**
SE **2150 DUANE ST** **N/A**
< 1/8 **LOS ANGELES, CA 90036**
573 ft.

Site 2 of 2 in cluster E

Relative:
Higher

Actual:
535 ft.

HAZNET:

Gepaid:	CAD982043820
Contact:	YI HWA KIM DEPUTY DIRECTOR
Telephone:	2137435086
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	333 S Beaudry Ave 20th Fl
Mailing City,St,Zip:	Los Angeles, CA 900170000
Gen County:	Los Angeles
TSD EPA ID:	CAD008252405
TSD County:	Los Angeles
Waste Category:	Other organic solids
Disposal Method:	Not reported
Tons:	0.02
Facility County:	Not reported

Gepaid:	CAD982043820
Contact:	YI HWA KIM DEPUTY DIRECTOR
Telephone:	2137435086
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1449 S SAN PEDRO ST
Mailing City,St,Zip:	LOS ANGELES, CA 900153119
Gen County:	Los Angeles
TSD EPA ID:	Not reported
TSD County:	99
Waste Category:	Other inorganic solid waste
Disposal Method:	Disposal, Land Fill
Tons:	0.22
Facility County:	Not reported

D9 **MISSION LINEN SUPPLY** **Cortese** **S105024617**
SSW **1855 GLENDALE** **N/A**
< 1/8 **LOS ANGELES, CA 90024**
576 ft.

Site 2 of 6 in cluster D

Relative:
Lower

Actual:
460 ft.

Cortese:

Region:	CORTESE
Facility Addr2:	Not reported

D10 **BEST AUTOMOTIVE DETAIL CO THE** **RCRA-SQG** **1000391032**
SSW **1855 GLENDALE BLVD** **CAD981450273**
< 1/8 **LOS ANGELES, CA 90024**
576 ft.

Site 3 of 6 in cluster D

Relative:
Lower

Actual:
460 ft.

BEST AUTOMOTIVE DETAIL CO THE (Continued) **1000391032**

RCRAInfo:
Owner: THE BERT-CO ENTERPRISES, INC
(415) 555-1212
EPA ID: CAD981450273

Contact: Not reported

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

D11
SSW
< 1/8
576 ft.

Relative:
Lower

Actual:
460 ft.

SUN CHEMICAL CORP GPI DIV LA
1855 GLENDALE BLVD
LOS ANGELES, CA 90026

RCRA-SQG **1000106839**
FINDS **CAD000630012**

Site 4 of 6 in cluster D

RCRAInfo:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAD000630012

Contact: Not reported

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

D12 **BERT CO GRAPHICS INC** **CA WDS** **S106103226**
SSW **1855 GLENDALE BLVD** **N/A**
< 1/8 **LOS ANGELES, CA 90026**
576 ft.

Site 5 of 6 in cluster D

Relative:
Lower

Actual:
460 ft.

CA WDS:

Facility ID:	4 19I016788
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	4
Facility Telephone:	3236695726
Facility Contact:	SCHEIER, ROBERT E
Agency Name:	BERT CO GRAPHICS INC
Agency Address:	1855 Glendale Blvd
Agency City,St,Zip:	Los Angeles 900261763
Agency Contact:	SCHEIER, ROBERT E
Agency Telephone:	3236695726
Agency Type:	Private
SIC Code:	Not reported
SIC Code 2:	Not reported
Primary Waste:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	Not reported
Baseline Flow:	Not reported
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

C13 **SAINT THERESA CHURCH** **HAZNET** **S106090353**
NNW **2223 FARGO ST** **N/A**
< 1/8 **LOS ANGELES, CA 90039**
583 ft.

Site 2 of 2 in cluster C

Relative:
Higher

Actual:
495 ft.

HAZNET:

Gepaid:	CAC002560131
Contact:	TONY HELVING
Telephone:	6263575311
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	3424 WILSHIRE BLVD

SAINT THERESA CHURCH (Continued) **S106090353**

Mailing City,St,Zip: LOS ANGELES, CA 90010
Gen County: Los Angeles
TSD EPA ID: Not reported
TSD County: Los Angeles
Waste Category: Asbestos-containing waste
Disposal Method: Disposal, Land Fill
Tons: 2.94
Facility County: Not reported

F14
North
1/8-1/4
684 ft.

OVERSTREET J C
1968 GLENDALE BLVD
LOS ANGELES, CA

EDR Historical Cleaners **1009191971** **N/A**

Site 1 of 2 in cluster F

Relative: Higher

Actual: 504 ft.

EDR Historical Cleaners:
Name: OVERSTREET J C
Year: 1933
Type: CLOTHES PRESSERS AND CLEANERS

D15
SSW
1/8-1/4
685 ft.

BERNSTEIN C H
1835 GLENDALE BLVD
LOS ANGELES, CA

EDR Historical Cleaners **1009187248** **N/A**

Site 6 of 6 in cluster D

Relative: Lower

Actual: 457 ft.

EDR Historical Cleaners:
Name: BERNSTEIN C H
Year: 1924
Type: CLOTHES CLEANERS PRESSERS AND DYERS

G16
SSW
1/8-1/4
730 ft.

BERT-CO INDUSTIES INC
1830 GLENDALE BLVD
LOS ANGELES, CA 90026

HAZNET **S103637473** **N/A**

Site 1 of 4 in cluster G

Relative: Lower

Actual: 460 ft.

HAZNET:
Gepaid: CAL000162676
Contact: BERT-CO INDUSTRIES INC
Telephone: 2136695700
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1855 GLENDALE BLVD
Mailing City,St,Zip: LOS ANGELES, CA 900261763
Gen County: Los Angeles
TSD EPA ID: CAD108040858
TSD County: Los Angeles
Waste Category: Photochemicals/photoprocessing waste
Disposal Method: Recycler
Tons: 4.2691
Facility County: Los Angeles

Gepaid: CAL000162676
Contact: BERT-CO INDUSTRIES INC

BERT-CO INDUSTIES INC (Continued) **S103637473**

Telephone: 2136695700
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1855 GLENDALE BLVD
Mailing City,St,Zip: LOS ANGELES, CA 900261763
Gen County: Los Angeles
TSD EPA ID: CAD108040858
TSD County: Los Angeles
Waste Category: Photochemicals/photoprocessing waste
Disposal Method: Not reported
Tons: .0792
Facility County: Los Angeles

Gepaid: CAL000162676
Contact: R.E. SCHEIER
Telephone: 2136695700
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1855 GLENDALE BLVD
Mailing City,St,Zip: LOS ANGELES, CA 900261763
Gen County: Los Angeles
TSD EPA ID: Not reported
TSD County: Los Angeles
Waste Category: Photochemicals/photoprocessing waste
Disposal Method: Recycler
Tons: 4.67
Facility County: Not reported

Gepaid: CAL000162676
Contact: BERT-CO INDUSTRIES INC
Telephone: 2136695700
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1855 GLENDALE BLVD
Mailing City,St,Zip: LOS ANGELES, CA 900261763
Gen County: Los Angeles
TSD EPA ID: CAD108040858
TSD County: Los Angeles
Waste Category: Photochemicals/photoprocessing waste
Disposal Method: Recycler
Tons: 4.3856
Facility County: Los Angeles

Gepaid: CAL000162676
Contact: ROSE VANDERZANDEN, CONTROLLER
Telephone: 3236695700
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1855 GLENDALE BLVD
Mailing City,St,Zip: LOS ANGELES, CA 900261763
Gen County: Los Angeles
TSD EPA ID: CAD108040858
TSD County: Los Angeles
Waste Category: Photochemicals/photoprocessing waste
Disposal Method: Recycler
Tons: 1.87
Facility County: Los Angeles

BERT-CO INDUSTIES INC (Continued) **S103637473**

Click this hyperlink while viewing on your computer to access
2 additional CA_HAZNET: record(s) in the EDR Site Report.

F17
North
1/8-1/4
756 ft.

Relative:
Higher

Actual:
508 ft.

PITTEL M H
2000 GLENDALE BLVD
LOS ANGELES, CA

EDR Historical Auto Stations **1009079801**
N/A

Site 2 of 2 in cluster F

EDR Historical Auto Stations:

Name:	BOWIE E L
Year:	1933
Type:	GASOLINE AND OIL SERVICE STATIONS
Name:	WEINSTEIN S J
Year:	1937
Type:	GASOLINE AND OIL SERVICE STATIONS
Name:	PITTEL M H
Year:	1942
Type:	GASOLINE AND OIL SERVICE STATIONS

G18
SSW
1/8-1/4
790 ft.

Relative:
Lower

Actual:
460 ft.

GIBSON L O
1824 GLENDALE BLVD
LOS ANGELES, CA

EDR Historical Auto Stations **1009081456**
N/A

Site 2 of 4 in cluster G

EDR Historical Auto Stations:

Name:	GIBSON L O
Year:	1933
Type:	AUTOMOBILE REPAIRING

G19
SSW
1/8-1/4
833 ft.

Relative:
Lower

Actual:
458 ft.

BERT-CO INDUSTRIES INC
1819-1855 GLENDALE BLVD.
LOS ANGELES, CA 90026

HAZNET **S103952429**
EMI **N/A**

Site 3 of 4 in cluster G

HAZNET:

Gepaid:	CAD981450273
Contact:	BERT-CO INDUSTRIES INC
Telephone:	2136695841
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1855 GLENDALE BLVD
Mailing City,St,Zip:	LOS ANGELES, CA 900261763
Gen County:	Los Angeles
TSD EPA ID:	CAD982444481
TSD County:	San Bernardino
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Transfer Station
Tons:	12.1762
Facility County:	Los Angeles

BERT-CO INDUSTRIES INC (Continued) **S103952429**

Gepaid:	CAD981450273
Contact:	BERT-CO INDUSTRIES INC
Telephone:	2136695841
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1855 GLENDALE BLVD
Mailing City,St,Zip:	LOS ANGELES, CA 900261763
Gen County:	Los Angeles
TSD EPA ID:	CAD099452708
TSD County:	Los Angeles
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Recycler
Tons:	4.6287
Facility County:	Los Angeles

Gepaid:	CAD981450273
Contact:	BERT-CO INDUSTRIES INC
Telephone:	2136695841
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1855 GLENDALE BLVD
Mailing City,St,Zip:	LOS ANGELES, CA 900261763
Gen County:	Los Angeles
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Unspecified aqueous solution
Disposal Method:	Recycler
Tons:	.6880
Facility County:	Los Angeles

Gepaid:	CAD981450273
Contact:	BERT-CO INDUSTRIES INC
Telephone:	2136695841
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1855 GLENDALE BLVD
Mailing City,St,Zip:	LOS ANGELES, CA 900261763
Gen County:	Los Angeles
TSD EPA ID:	CAT080025711
TSD County:	San Bernardino
Waste Category:	Waste oil and mixed oil
Disposal Method:	Not reported
Tons:	1.8348
Facility County:	Los Angeles

Gepaid:	CAD981450273
Contact:	BERT-CO INDUSTRIES INC
Telephone:	2136695841
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1855 GLENDALE BLVD
Mailing City,St,Zip:	LOS ANGELES, CA 900261763
Gen County:	Los Angeles
TSD EPA ID:	CAD008252405
TSD County:	Los Angeles
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Recycler

BERT-CO INDUSTRIES INC (Continued) **S103952429**

Tons:	3.6696
Facility County:	Los Angeles

Click this hyperlink while viewing on your computer to access
68 additional CA_HAZNET: record(s) in the EDR Site Report.

EMI:

Year:	1987
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2753
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	12
Reactive Organic Gases Tons/Yr:	11
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2752
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	37
Reactive Organic Gases Tons/Yr:	10
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1993
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2752
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	43
Reactive Organic Gases Tons/Yr:	37
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

BERT-CO INDUSTRIES INC (Continued) **S103952429**

Year:	1995
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2752
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	43
Reactive Organic Gases Tons/Yr:	37
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1997
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2752
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	20
Reactive Organic Gases Tons/Yr:	20
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1998
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2752
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	20
Reactive Organic Gases Tons/Yr:	20
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1999
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2752

BERT-CO INDUSTRIES INC (Continued) **S103952429**

Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	20
Reactive Organic Gases Tons/Yr:	20
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2000
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2752
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	20
Reactive Organic Gases Tons/Yr:	20
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2001
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2752
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	B
Total Organic Hydrocarbon Gases Tons/Yr:	13
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	2002
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2752
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	7
Reactive Organic Gases Tons/Yr:	7
Carbon Monoxide Emissions Tons/Yr:	0

BERT-CO INDUSTRIES INC (Continued) **S103952429**

NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2003
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2752
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	7
Reactive Organic Gases Tons/Yr:	7
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0
Year:	2004
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	11692
Air District Name:	SC
SIC Code:	2752
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	7.095174
Reactive Organic Gases Tons/Yr:	6.92
Carbon Monoxide Emissions Tons/Yr:	0.1775
NOX - Oxides of Nitrogen Tons/Yr:	0.658
SOX - Oxides of Sulphur Tons/Yr:	0.0041992
Particulate Matter Tons/Yr:	0.03795
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0.04

G20
SSW
1/8-1/4
843 ft.

Relative:
Lower

Actual:
460 ft.

WELTON ROLLED THREAD
1818 GLENDALE BLVD.
LOS ANGELES, CA 90026

HAZNET **1000417278**
N/A

Site 4 of 4 in cluster G

HAZNET:

Gepaid:	CAC000927320
Contact:	Not reported
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	2301 HOLLYRIDGE DRIVE
Mailing City,St,Zip:	LOS ANGELES, CA 900680000
Gen County:	Los Angeles
TSD EPA ID:	CAD000088252
TSD County:	Los Angeles
Waste Category:	Other organic solids
Disposal Method:	Transfer Station

WELTON ROLLED THREAD (Continued) **1000417278**

Tons: .2500
Facility County: Los Angeles

Gepaid: CAC000927320
Contact: Not reported
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2301 HOLLYRIDGE DRIVE
Mailing City,St,Zip: LOS ANGELES, CA 900680000
Gen County: Los Angeles
TSD EPA ID: CAD099452708
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: 1.2510
Facility County: Los Angeles

Gepaid: CAC000927320
Contact: Not reported
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2301 HOLLYRIDGE DRIVE
Mailing City,St,Zip: LOS ANGELES, CA 900680000
Gen County: Los Angeles
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Not reported
Tons: 4.1700
Facility County: Los Angeles

H21
North
1/8-1/4
977 ft.

BROADWAY DEPT. STORE **HAZNET** **S106084791**
2100 GLENDALE **N/A**
LOS ANGELES, CA 91210

Site 1 of 2 in cluster H

Relative:
Higher

Actual:
521 ft.

HAZNET:
Gepaid: CAC000918448
Contact: CAROL CHIEKRUSCEWSKI, ANALYST
Telephone: 2132272219
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2100 GLENDALE
Mailing City,St,Zip: LOS ANGELES, CA 912100000
Gen County: Los Angeles
TSD EPA ID: Not reported
TSD County: Los Angeles
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Transfer Station
Tons: 0.11
Facility County: Not reported

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number

H22
North
1/8-1/4
977 ft.

GILLESPIE C A
2101 GLENDALE BLVD
LOS ANGELES, CA

EDR Historical Auto Stations — **1009078141** / **N/A**

Site 2 of 2 in cluster H

Relative: **Higher**

Actual: **521 ft.**

EDR Historical Auto Stations:

Name: GILLESPIE C A
Year: 1929
Type: AUTOMOBILE REPAIRING AND SERVICE STATIONS

Name: GILLESPIE C A
Year: 1933
Type: GASOLINE AND OIL SERVICE STATIONS

I23
SSW
1/8-1/4
1200 ft.

TIERNOS FABRICATION
1769 GLENDALE BLVD
LOS ANGELES, CA 90026

RCRA-SQG
FINDS
HAZNET

1000686223
CAD983634593

Site 1 of 6 in cluster I

Relative: **Lower**

Actual: **452 ft.**

RCRAInfo:

Owner: ANTHONY AND JEANNE TIERNO
(213) 661-2332
EPA ID: CAD983634593

Contact: JEANNE TIERNO
(213) 661-2332

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

Gepaid: CAD983634593
Contact: ANTHONY & JEANNE_TIERNO
Telephone: 2136612332
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 1769 GLENDALE BLVD
Mailing City,St,Zip: LOS ANGELES, CA 900261761
Gen County: Los Angeles
TSD EPA ID: CAD099452708
TSD County: Los Angeles
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: 0.62

TIERNOS FABRICATION (Continued) **1000686223**

Facility County: Not reported

I24
SSW
1/8-1/4
1200 ft.

Relative:
Lower

Actual:
452 ft.

BRIGHTON H T
1769 GLENDALE BLVD
LOS ANGELES, CA

EDR Historical Auto Stations **1009079715**
N/A

Site 2 of 6 in cluster I

EDR Historical Auto Stations:

Name:	BALLOU MARY MRS
Year:	1929
Type:	GASOLINE AND OIL SERVICE STATION
Name:	BORNSTEIN SAML
Year:	1933
Type:	GASOLINE AND OIL SERVICE STATIONS
Name:	BRIGHTON H T
Year:	1937
Type:	GASOLINE AND OIL SERVICE STATIONS

I25
SSW
1/8-1/4
1200 ft.

Relative:
Lower

Actual:
452 ft.

TIERNO’S GEMERAL FABRICATION
1769 GLENDALE BLVD
LOS ANGELES, CA 90026

CA FID UST **S101585986**
SWEEPS UST **N/A**

Site 3 of 6 in cluster I

CA FID UST:

Facility ID:	19035526
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2130000000
Mail To:	Not reported
Mailing Address:	1769 GLENDALE BLVD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	LOS ANGELES 900260000
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

SWEEPS UST:

Status:	Not reported
Comp Number:	4732
Number:	Not reported
Board Of Equalization:	Not reported
Ref Date:	Not reported
Act Date:	Not reported
Created Date:	Not reported
Tank Status:	Not reported
Owner Tank Id:	Not reported

TIERNO'S GEMERAL FABRICATION (Continued) **S101585986**

Swrcb Tank Id:	Not reported
Actv Date:	Not reported
Capacity:	Not reported
Tank Use:	Not reported
Stg:	Not reported
Content:	Not reported
Number Of Tanks:	Not reported

I26
SSW
1/8-1/4
1237 ft.

TRAUTMAN ORION
1763 GLENDALE BLVD
LOS ANGELES, CA

EDR Historical Auto Stations **1009079626**
N/A

Site 4 of 6 in cluster I

Relative:
Lower

Actual:
451 ft.

EDR Historical Auto Stations:

Name:	TRAUTMAN ORION
Year:	1924
Type:	AUTOMOBILE REPAIRING

27
ESE
1/8-1/4
1260 ft.

LA ECHO PARK CHILD CARE CENTER
1953 LAKESHORE AVE
LOS ANGELES, CA 90039

RCRA-SQG **1000200890**
FINDS **CAD981987563**

Relative:
Higher

Actual:
536 ft.

RCRAInfo:

Owner:	CITY OF LOS ANGELES (415) 555-1212
EPA ID:	CAD981987563
Contact:	ENVIRONMENTAL MANAGER (213) 485-7527
Classification:	Small Quantity Generator
TSDF Activities:	Not reported
Violation Status:	No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number
I28 **SSW** **1/8-1/4** **1287 ft.** **Relative:** **Lower** **Actual:** **449 ft.**	**ARTISAN HOUSE INCORPORATED** **1755 GLENDALE BOULEVARD** **LOS ANGELES, CA 90026** **Site 5 of 6 in cluster I**	**FINDS** **HAZNET** **EMI**	**1006840738** **110014018758**

FINDS:

Other Pertinent Environmental Activity Identified at Site

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

HAZNET:

Gepaid:	CAL000229971
Contact:	RICK BENVENISTE
Telephone:	3236641111
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1755 GLENDALE BLVD
Mailing City,St,Zip:	LOS ANGELES, CA 900260000
Gen County:	Los Angeles
TSD EPA ID:	Not reported
TSD County:	Los Angeles
Waste Category:	Tank bottom waste
Disposal Method:	Recycler
Tons:	4.36
Facility County:	Not reported

EMI:

Year:	1987
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	10388
Air District Name:	SC
SIC Code:	3479
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
Carbon Monoxide Emissions Tons/Yr:	19
Air Basin:	SC
Facility ID:	10388
Air District Name:	SC
SIC Code:	3479
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported

ARTISAN HOUSE INCORPORATED (Continued) **1006840738**

Total Organic Hydrocarbon Gases Tons/Yr:	9
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

I29
SSW
1/8-1/4
1287 ft.

Relative:
Lower

Actual:
449 ft.

ARTISAN HOUSE INC
1755 GLENDALE BOULEVARD
LOS ANGELES, CA 90026

HAZNET **S103951056**
N/A

Site 6 of 6 in cluster I

HAZNET:

Gepaid:	CAL000013707
Contact:	DECOR GROUP INC
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 26566
Mailing City,St,Zip:	LOS ANGELES, CA 900260566
Gen County:	Los Angeles
TSD EPA ID:	CAT000613893
TSD County:	Los Angeles
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Transfer Station
Tons:	.0500
Facility County:	Los Angeles

Gepaid:	CAL000013707
Contact:	DECOR GROUP INC
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 26566
Mailing City,St,Zip:	LOS ANGELES, CA 900260566
Gen County:	Los Angeles
TSD EPA ID:	CAT000613893
TSD County:	Los Angeles
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Treatment, Tank
Tons:	.0583
Facility County:	Los Angeles

Gepaid:	CAL000013707
Contact:	RICK BENVENISTE
Telephone:	2136641111
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1755 GLENDALE BLVD
Mailing City,St,Zip:	LOS ANGELES, CA 900261247
Gen County:	Los Angeles
TSD EPA ID:	Not reported
TSD County:	Los Angeles
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Transfer Station
Tons:	0.01

ARTISAN HOUSE INC (Continued) **S103951056**

Facility County:	Not reported
Gepaid:	CAL000013707
Contact:	DECOR GROUP INC
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 26566
Mailing City,St,Zip:	LOS ANGELES, CA 900260566
Gen County:	Los Angeles
TSD EPA ID:	CAT080033681
TSD County:	Los Angeles
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Disposal, Land Fill
Tons:	3.8989
Facility County:	Los Angeles
Gepaid:	CAL000013707
Contact:	DECOR GROUP INC
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 26566
Mailing City,St,Zip:	LOS ANGELES, CA 900260566
Gen County:	Los Angeles
TSD EPA ID:	CAT080033681
TSD County:	Los Angeles
Waste Category:	Liquids with pH <UN-> 2
Disposal Method:	Disposal, Land Fill
Tons:	0.2293
Facility County:	Los Angeles

Click this hyperlink while viewing on your computer to access
2 additional CA_HAZNET: record(s) in the EDR Site Report.

30
South
1/4-1/2
1601 ft.

VICTAR RECYCLING
2100 AARON ST
LOS ANGELES, CA 90026

SWRCY **S107138297**
N/A

Relative:
Higher

Actual:
484 ft.

SWRCY:

Certification Status:	O
Facility Phone Number:	(213) 484-4980
Date facility became certified:	09/25/97
Date facility began operating:	11/17/97
Date facility ceased operating:	Still operating
Whether The Facility Is Grandfathered:	Not reported
Convenience Zone Where Faciltiy Located:	516
Convenience Zone Where Faciltiy Located 2:	0
Convenience Zone Where Faciltiy Located 3:	0
Convenience Zone Where Faciltiy Located 4:	0
Convenience Zone Where Faciltiy Located 5:	0
Convenience Zone Where Faciltiy Located 6:	0
Convenience Zone Where Faciltiy Located 7:	0
Aluminum Beverage Containers Redeemed:	AL
Glass Beverage Containers Redeemed:	GL
Plastic Beverage Containers Redeemed:	PL
Other mat beverage containers redeemed:	Not reported

VICTAR RECYCLING (Continued) **S107138297**

Refillable Beverage Containers Redeemed: Not reported

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31 **O. J. PLUMBING** **LUST** **S104773302**
SSW **1661 ALLESANDRO ST** **N/A**
1/4-1/2 **LOS ANGELES, CA 90026**
2117 ft.

Relative:
Lower

Actual:
431 ft.

LUST:

Region:	STATE
Case Type:	Other ground water affected
Cross Street:	EFFIE ST
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global Id:	T0603792982
Stop Date:	Not reported
Confirm Leak:	2000-04-24 00:00:00
Workplan:	2000-07-24 00:00:00
Prelim Assess:	2000-07-24 00:00:00
Pollution Char:	2004-08-10 00:00:00
Remed Plan:	2006-10-10 00:00:00
Remed Action:	Not reported
Monitoring:	2000-06-22 00:00:00
Close Date:	Not reported
Discover Date:	Not reported
Enforcement Dt:	Not reported
Release Date:	2000-06-22 00:00:00
Review Date:	2000-09-25 00:00:00
Enter Date:	Not reported
MTBE Date:	1965-01-01 00:00:00
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Max MTBE GW ppb:	2,774
Max MTBE Soil ppb:	0.63
County:	19
Org Name:	Not reported
Reg Board:	Los Angeles Region
Status:	Remediation Plan
Chemical:	Gasoline
Contact Person:	Not reported
Responsible Party:	MR. GREG MCLUCAS
RP Address:	8 HAMMOND DR., STE. #104
Interim:	Not reported
Oversight Prgm:	LUST
MTBE Class:	*
MTBE Conc:	2
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE and MTBE detected
Staff:	JW
Staff Initials:	PEJ
Lead Agency:	Regional Board
Local Agency:	19050
Hydr Basin #:	UNNAMED BASIN
Beneficial:	Not reported
Priority:	Not reported

O. J. PLUMBING (Continued) **S104773302**

Cleanup Fund Id: Not reported
Work Suspended: Not reported
Local Case #: Not reported
Case Number: 900260316
Qty Leaked: Not reported
Abate Method: Not reported
Operator: Not reported
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary: REQUEST UN URF FROM LA CITY FD (DAVID R. CASTANEDA)

LUST:
Region: 4
Staff: JW
County: Los Angeles
Local Agency: 19050
Lead Agency: Regional Board
Case Type: Groundwater
Status: Pollution Characterization
Substance: Gasoline
Cross Street: EFFIE ST
Global ID: T0603792982
Enforcement Type: SEL
Date Leak Discovered: Not reported
Date Leak Record Entered: Not reported
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: Not reported
Date Leak Stopped: Not reported
Date Confirmation Began: 4/24/2000
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 3299.35622103608710032801204
Abatement Method Used at the Site: Not reported
Source of Cleanup Funding: Not reported
Date Leak First Reported: 6/22/2000
Preliminary Site Assessment Workplan Submitted: 7/24/2000
Preliminary Site Assessment Began: 7/24/2000
Pollution Characterization Began: 10/15/2002
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: 6/22/2000
Date the Case was Closed: Not reported
Date Case Last Changed on Database: 9/25/2000
Enforcement Action Date: Not reported
Historical Max MTBE Date: 4/29/2004
Hist Max MTBE Conc in Groundwater: 12945
Hist Max MTBE Conc in Soil: .63
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: =
Soil Qualifier: Not reported
Organization: Not reported

O. J. PLUMBING (Continued) **S104773302**

Regional Board:	04
Owner Contact:	Not reported
Responsible Party:	MR. JOE FREY
RP Address:	8 HAMMOND DR., STE. #104
Program:	LUST
Lat/Long:	34.085008 / -1
Local Agency Staff:	PEJ
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Local Case No:	Not reported
Substance Quantity:	Not reported
Assigned Name:	Not reported
W Global ID:	Not reported
Summary:	REQUEST UN URF FROM LA CITY FD (DAVID R. CASTANEDA)

32
SSE
1/4-1/2
2419 ft.

GATEWAY HOSPITAL
1891 EFFIE ST
LOS ANGELES, CA 90026

HAZNET **LUST** **Cortese**

S104234267
N/A

Relative: **Lower**

Actual: **464 ft.**

HAZNET:

Gepaid:	CAC002561982
Contact:	KEN WILCOX
Telephone:	3236442000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1891 EFFIE ST
Mailing City,St,Zip:	LOS ANGELES, CA 900260000
Gen County:	Los Angeles
TSD EPA ID:	AZC950823111
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Not reported
Tons:	0.84
Facility County:	Los Angeles

Gepaid:	CAC002579146
Contact:	CARLOS MONARREZ/SENIOR LEAD TECHNIC
Telephone:	3236442000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	1891 EFFIE ST
Mailing City,St,Zip:	LOS ANGELES, CA 900260000
Gen County:	Los Angeles
TSD EPA ID:	AZC950823111
TSD County:	99
Waste Category:	Asbestos-containing waste
Disposal Method:	Not reported
Tons:	0.84
Facility County:	Not reported

Gepaid:	CAC002574326
Contact:	CARLOS MONARREZ
Telephone:	3236442000
Facility Addr2:	Not reported
Mailing Name:	Not reported

GATEWAY HOSPITAL (Continued) **S104234267**

Mailing Address: 1891 EFFIE ST
Mailing City,St,Zip: LOS ANGELES, CA 900260000
Gen County: Los Angeles
TSD EPA ID: CAD009007626
TSD County: Los Angeles
Waste Category: Asbestos-containing waste
Disposal Method: Disposal, Land Fill
Tons: 1.68
Facility County: Not reported

LUST:
Region: STATE
Case Type: Soil only
Cross Street: LAKE SHORE AVE
Enf Type: Not reported
Funding: Not reported
How Discovered: Repair Tank
How Stopped: Not reported
Leak Cause: Not reported
Leak Source: UNK
Global Id: T0603700731
Stop Date: 1999-05-18 00:00:00
Confirm Leak: 1999-06-07 00:00:00
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: Not reported
Discover Date: 1999-05-18 00:00:00
Enforcement Dt: Not reported
Release Date: 1999-06-07 00:00:00
Review Date: 1999-06-07 00:00:00
Enter Date: Not reported
MTBE Date: Not reported
GW Qualifier: Not reported
Soil Qualifier: <
Max MTBE GW ppb: Not reported
Max MTBE Soil ppb: 0.035
County: 19
Org Name: Not reported
Reg Board: Los Angeles Region
Status: Leak being confirmed
Chemical: Hydrocarbons
Contact Person: Not reported
Responsible Party: GATEWAYS HOSPITAL
RP Address: 1891 EFFIE ST., LOS ANGELES, CA 90026
Interim: Not reported
Oversight Prgm: LUST
MTBE Class: *
MTBE Conc: 1
MTBE Fuel: 0
MTBE Tested: MTBE Detected. Site tested for MTBE and MTBE detected
Staff: YR
Staff Initials: NR
Lead Agency: Local Agency

GATEWAY HOSPITAL (Continued) **S104234267**

Local Agency: 19050
Hydr Basin #: UNNAMED BASIN
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Local Case #: Not reported
Case Number: 900260289
Qty Leaked: Not reported
Abate Method: No Action Required - incident is minor, requiring no remedial action
Operator: KEN WILCOX
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary: NOT INSPECTED ; REQUEST CUQ(5/8/01), CUQ RECEIVED(06/11/01);

LUST:
Region: 4
Staff: UNK
County: Los Angeles
Local Agency: 19050
Lead Agency: Local Agency
Case Type: Soil
Status: Leak being confirmed
Substance: Hydrocarbons
Cross Street: LAKE SHORE AVE
Global ID: T0603700731
Enforcement Type: Not reported
Date Leak Discovered: 5/18/1999
Date Leak Record Entered: Not reported
How Leak Discovered: Repair Tank
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: UNK
Date Leak Stopped: 5/18/1999
Date Confirmation Began: 6/7/1999
Operator: KEN WILCOX
Water System: FIRSTONE SCOUT RESRVTN (BOY SCOUT COUN)
Well Name: Not reported
Approx. Dist To Production Well (ft): 3921.7094982907843646858607577
Abatement Method Used at the Site: No Action Required
Source of Cleanup Funding: No Action Required
Date Leak First Reported: 6/7/1999
Preliminary Site Assessment Workplan Submitted: Not reported
Preliminary Site Assessment Began: Not reported
Pollution Characterization Began: Not reported
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Date the Case was Closed: Not reported
Date Case Last Changed on Database: 6/7/1999
Enforcement Action Date: Not reported
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: .035

GATEWAY HOSPITAL (Continued) **S104234267**

Significant Interim Remedial Action Taken:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	<
Organization:	Not reported
Regional Board:	04
Owner Contact:	Not reported
Responsible Party:	GATEWAYS HOSPITAL
RP Address:	1891 EFFIE ST., LOS ANGELES, CA 90026
Program:	LUST
Lat/Long:	34.0843805 / -1
Local Agency Staff:	PEJ
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Local Case No:	Not reported
Substance Quantity:	Not reported
Assigned Name:	1900547-001GEN
W Global ID:	W0603700547
Summary:	Not reported

Cortese:

Region:	CORTESE
Facility Addr2:	1891 EFFIE ST

33
South
1/4-1/2
2583 ft.

ARCO #1597
1601 GLENDALE BLVD
LOS ANGELES, CA 90026

LUST
CHMIRS
Cortese

S102424175
N/A

Relative:
Lower

Actual:
421 ft.

LUST:

Region:	STATE
Case Type:	Other ground water affected
Cross Street:	BERKELEY
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global Id:	T0603700716
Stop Date:	Not reported
Confirm Leak:	Not reported
Workplan:	Not reported
Prelim Assess:	1992-12-04 00:00:00
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Close Date:	1996-11-19 00:00:00
Discover Date:	Not reported
Enforcement Dt:	Not reported
Release Date:	1992-12-04 00:00:00
Review Date:	1997-01-31 00:00:00
Enter Date:	1992-11-25 00:00:00
MTBE Date:	1965-01-01 00:00:00
GW Qualifier:	Not reported

ARCO #1597 (Continued) **S102424175**

Soil Qualifier: Not reported
Max MTBE GW ppb: 33000
Max MTBE Soil ppb: Not reported
County: 19
Org Name: Not reported
Reg Board: Los Angeles Region
Status: Case Closed
Chemical: Gasoline
Contact Person: Not reported
Responsible Party: ARCO PRODUCTS CO
RP Address: P.O. BOX 5077, BUENA PARK, CA 90622-5077
Interim: Not reported
Oversight Prgm: LUST
MTBE Class: Not reported
MTBE Conc: 1
MTBE Fuel: 1
MTBE Tested: MTBE Detected. Site tested for MTBE and MTBE detected
Staff: YR
Staff Initials: PEJ
Lead Agency: Regional Board
Local Agency: 19050
Hydr Basin #: UNNAMED BASIN
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Local Case #: Not reported
Case Number: 900260125
Qty Leaked: Not reported
Abate Method: Not reported
Operator: OLD CASE #120992-01
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary: 10/01/96 QUARTERLY UPDATE REPORT 96' 10/07/96 WORK PLAN FOR SVE PILOT TEST 01/31/97 4TH QUARTERLY REPORT MTBE DATA INCLUDEDUST 228 ALSO KNOWN AS IR SITE 14. FORMER BIOREMEDIATION RESEARCH SITE

Region: STATE
Case Type: Other ground water affected
Cross Street: BERKELEY/GLENDALE BLVD
Enf Type: SEL
Funding: Not reported
How Discovered: OM
How Stopped: Other Means
Leak Cause: Spill
Leak Source: Other Source
Global Id: T0603797967
Stop Date: Not reported
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: 2003-03-12 00:00:00
Remed Plan: Not reported

ARCO #1597 (Continued) **S102424175**

Remed Action: Not reported
Monitoring: Not reported
Close Date: Not reported
Discover Date: 2003-03-12 00:00:00
Enforcement Dt: Not reported
Release Date: 2003-03-12 00:00:00
Review Date: Not reported
Enter Date: Not reported
MTBE Date: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Max MTBE GW ppb: Not reported
Max MTBE Soil ppb: Not reported
County: 19
Org Name: Not reported
Reg Board: Los Angeles Region
Status: Pollution Characterization
Chemical: Gasoline
Contact Person: Not reported
Responsible Party: TERESA SANTANA
RP Address: FOUR CENTERPOINTE DR., LPR4-460
Interim: Not reported
Oversight Prgm: LUST
MTBE Class: *
MTBE Conc: 0
MTBE Fuel: 1
MTBE Tested: MTBE Detected. Site tested for MTBE and MTBE detected
Staff: YL
Staff Initials: ML
Lead Agency: Regional Board
Local Agency: 19050
Hydr Basin #: Not reported
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Local Case #: Not reported
Case Number: 900260125A
Qty Leaked: Not reported
Abate Method: Not reported
Operator: Not reported
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary: 10/01/96 QUARTERLY UPDATE REPORT 96' 10/07/96 WORK PLAN FOR SVE PILOT TEST 01/31/97 4TH QUARTERLY REPORT MTBE DATA INCLUDEDUST 228 ALSO KNOWN AS IR SITE 14. FORMER BIOREMEDIATION RESEARCH SITE

LUST:
Region: 4
Staff: UNK
County: Los Angeles
Local Agency: 19050
Lead Agency: Regional Board

ARCO #1597 (Continued) **S102424175**

Case Type: Groundwater
Status: Case Closed
Substance: Gasoline
Cross Street: BERKELEY
Global ID: T0603700716
Enforcement Type: Not reported
Date Leak Discovered: Not reported
Date Leak Record Entered: 11/25/1992
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: UNK
Leak Source: UNK
Date Leak Stopped: Not reported
Date Confirmation Began: Not reported
Operator: OLD CASE #120992-01
Water System: FIRSTONE SCOUT RESRVTN (BOY SCOUT COUN)
Well Name: Not reported
Approx. Dist To Production Well (ft): 3532.5164104819803466137405217
Abatement Method Used at the Site: Not reported
Source of Cleanup Funding: Not reported
Date Leak First Reported: 12/4/1992
Preliminary Site Assessment Workplan Submitted: Not reported
Preliminary Site Assessment Began: 12/4/1992
Pollution Characterization Began: Not reported
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Date the Case was Closed: 11/19/1996
Date Case Last Changed on Database: 1/31/1997
Enforcement Action Date: Not reported
Historical Max MTBE Date: 1/1/1965
Hist Max MTBE Conc in Groundwater: 33000
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Regional Board: 04
Owner Contact: Not reported
Responsible Party: ARCO PRODUCTS CO
RP Address: P.O. BOX 5077, BUENA PARK, CA 90622-5077
Program: LUST
Lat/Long: 34.0855164 / -1
Local Agency Staff: PEJ
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Local Case No: Not reported
Substance Quantity: Not reported
Assigned Name: 1900547-001GEN
W Global ID: W0603700547
Summary: 10/01/96 QUARTERLY UPDATE REPORT 96' 10/07/96 WORK PLAN FOR SVE PILOT TEST 01/31/97 4TH QUARTERLY REPORT MTBE DATA INCLUDED

Region: 4

ARCO #1597 (Continued) **S102424175**

Staff: RVJ
County: Los Angeles
Local Agency: 19050
Lead Agency: Regional Board
Case Type: Groundwater
Status: Pollution Characterization
Substance: Gasoline
Cross Street: BERKELEY/GLENDALE BLVD
Global ID: T0603797967
Enforcement Type: SEL
Date Leak Discovered: 3/12/2003
Date Leak Record Entered: Not reported
How Leak Discovered: OM
How Leak Stopped: Other Means
Cause of Leak: Spill
Leak Source: Other Source
Date Leak Stopped: Not reported
Date Confirmation Began: Not reported
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): Not reported
Abatement Method Used at the Site: Not reported
Source of Cleanup Funding: Not reported
Date Leak First Reported: 3/12/2003
Preliminary Site Assessment Workplan Submitted: Not reported
Preliminary Site Assessment Began: Not reported
Pollution Characterization Began: 3/12/2003
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Date the Case was Closed: Not reported
Date Case Last Changed on Database: Not reported
Enforcement Action Date: Not reported
Historical Max MTBE Date: 9/3/2003
Hist Max MTBE Conc in Groundwater: 36000
Hist Max MTBE Conc in Soil: 42
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: =
Soil Qualifier: =
Organization: Not reported
Regional Board: 04
Owner Contact: Not reported
Responsible Party: TERESA SANTANA
RP Address: FOUR CENTERPOINTE DR., LPR4-460
Program: LUST
Lat/Long: 0 / 0
Local Agency Staff: Not reported
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Local Case No: Not reported
Substance Quantity: Not reported
Assigned Name: Not reported
W Global ID: Not reported
Summary: Not reported

ARCO #1597 (Continued) **S102424175**

CHMIRS:

OES Incident Number:	01-4389
OES notification:	7/31/200101:08:41 PM
OES Date:	Not reported
OES Time:	Not reported
Incident Date:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
Special Studies 1:	Not reported
Special Studies 2:	Not reported
Special Studies 3:	Not reported
Special Studies 4:	Not reported
Special Studies 5:	Not reported
Special Studies 6:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA/DOT/PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Comments:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Contractor
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2001
Agency:	Atlantic Richfield Co
Incident Date:	5/3/200112:00:00 AM
Admin Agency:	Los Angeles City Fire Department
Amount:	Not reported
Contained:	Yes
Site Type:	Service Station
E Date:	Not reported
Substance:	Gasoline;;;

ARCO #1597 (Continued) **S102424175**

Quantity Released:	Not reported
BBLS:	0
Cups:	0
CUFT:	0
Gallons:	0
Grams:	0
Pounds:	0
Liters:	0
Ounces:	0
Pints:	0
Quarts:	0
Sheen:	0
Tons:	0
Unknown:	Unknown
Description:	Contaminate was discovered in laboratory samples
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0

Cortese:

Region:	CORTESE
Facility Addr2:	1601 GLENDALE BLVD

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34 **South** **1/2-1** **5171 ft.**	**HOLLOWAY DRY CLEANERS** **1159 ECHO PARK BLVD** **LOS ANGELES, CA 90026**	**Notify 65**	**S100178588** **N/A**

Relative: **Lower**

Actual: **399 ft.**

Notify 65:

Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Incident Description:	90026-4212

City	EDR ID	Site Name	Site Address	Zip	Database(s)
LOS ANGELES	S103679782	MURPHY INDUSTRIAL COATINGS INC	RTE 10 AT 10/60 SEPERATION		HAZNET
LOS ANGELES	S103679783	MURPHY IND COATING LOS ANGELES	RTE 134 / PASS ST OC LA RVR		HAZNET
LOS ANGELES	S103657719	CORONADO APARTMENTS	404 TO 410 CORONADO ST		HAZNET
LOS ANGELES	S105085985	CARMEN STARK	2844 ALLESANDRO ST UNITS B / C	90039	HAZNET
LOS ANGELES	S107528513		141 N ALVARADO ST (HOL. INN EX	90026	CDL
LOS ANGELES	S103671349	TUTOR SLIBA	751 EARL ST	90039	HAZNET
LOS ANGELES	S108197725	ANGELUS TEMPLE	1100 GLENDALE BLVD / 1801 PA	90026	HAZNET
LOS ANGELES	S106826901	BERT-CO INDUSTRIES, BERT-CO GR	1819- 1855 GLENDALE BLVD	90026	EMI
LOS ANGELES	91234847	NB GOLDEN STATE HWY 5	NB GOLDEN STATE HWY 5		ERNS
LOS ANGELES	S102804827	BARNARD TRANSPORTATION	I-5 HWY / HWY 118 AT THE PAX		HAZNET
LOS ANGELES	S102801764	UNOCAL SO CAL. DIV. PIPE LINE	SO. IMPERIAL HWY, E. OF BLOOM-		HAZNET
LOS ANGELES	S108216866	PHIL OF THE FUTURE	201 N OCCIDENTAL BLVD BLDG 1	90026	HAZNET
LOS ANGELES	S102058052	SHELL OIL #204-2928-0538	1695 W PACIFIC COAST HWY		LOS ANGELES CO. HMS
LOS ANGELES	2002594000	EN ROUTE LOS ANGELES	EN ROUTE LOS ANGELES		ERNS
LOS ANGELES	S102798959	1X MOUNTAINS RECRTN & CONCV AUTHOR	LA TUNA CANYON ROAD / HWY 21		HAZNET
LOS ANGELES	S105083391	PACIFIC RIM TRANSPORTATION INC	VAN NUYS OFF RAMP WB 101 FREEW		HAZNET
LOS ANGELES	S107541008		VEH STOP @ SO ON HWY 5/N OF ST		CDL
LOS ANGELES	92266045	WB WESTERN OFF RAMP & SB GOLDEN ST	WB WESTERN OFF RAMP & SB GOLDE		ERNS
ECHO PARK	S107528325		1357 W BELLEVUE	90026	CDL
LOS ANGELES	S106102530	ADVANCED & BOSTON AUTO SALVAGE	546 N -556 MISSION RD		CA WDS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 09/27/2006
Date Data Arrived at EDR: 11/01/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 11/01/2006
Next Scheduled EDR Contact: 01/29/2007
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

Date of Government Version: 09/27/2006
Date Data Arrived at EDR: 11/01/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 11/01/2006
Next Scheduled EDR Contact: 01/29/2007
Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 09/27/2006
Date Data Arrived at EDR: 11/01/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 11/01/2006
Next Scheduled EDR Contact: 01/29/2007
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPL RECOVERY: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 12/19/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 41

Source: EPA
Telephone: 703-603-8960
Last EDR Contact: 12/19/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA’s knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/10/2006
Date Data Arrived at EDR: 10/25/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 28

Source: EPA
Telephone: 703-603-8960
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/27/2006
Date Data Arrived at EDR: 10/11/2006
Date Made Active in Reports: 12/13/2006
Number of Days to Update: 63

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/04/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Quarterly

RCRA: Resource Conservation and Recovery Act Information

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/13/2006
Date Data Arrived at EDR: 06/28/2006
Date Made Active in Reports: 08/23/2006
Number of Days to Update: 56

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/10/2007
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Quarterly

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 01/12/2006
Date Made Active in Reports: 02/21/2006
Number of Days to Update: 40

Source: National Response Center, United States Coast Guard
Telephone: 202-260-2342
Last EDR Contact: 01/24/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 08/01/2006
Date Data Arrived at EDR: 10/18/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 35

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/17/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Annually

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/18/2006
Date Data Arrived at EDR: 12/14/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 28

Source: Environmental Protection Agency
Telephone: 703-603-8905
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/18/2006
Date Data Arrived at EDR: 12/14/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 28

Source: Environmental Protection Agency
Telephone: 703-603-8905
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 11/10/2006
Next Scheduled EDR Contact: 02/05/2007
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 09/20/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 63

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Varies

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 10/17/2006
Date Data Arrived at EDR: 10/20/2006
Date Made Active in Reports: 12/13/2006
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/11/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Semi-Annually

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/2004
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 04/25/2005
Number of Days to Update: 69

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 01/22/2007
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/07/2006
Date Data Arrived at EDR: 10/13/2006
Date Made Active in Reports: 12/13/2006
Number of Days to Update: 61

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/08/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 82

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 06/22/2006
Date Made Active in Reports: 08/23/2006
Number of Days to Update: 62

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 12/19/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 04/14/2006
Date Made Active in Reports: 05/30/2006
Number of Days to Update: 46

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 10/27/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 26

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 10/27/2006
Date Made Active in Reports: 11/22/2006
Number of Days to Update: 26

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 05/11/2006
Date Made Active in Reports: 05/22/2006
Number of Days to Update: 11

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/13/2006
Date Data Arrived at EDR: 04/21/2006
Date Made Active in Reports: 05/11/2006
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Quarterly

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 12/11/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 11/03/2006
Date Data Arrived at EDR: 11/03/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/24/2006
Next Scheduled EDR Contact: 01/29/2007
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 01/08/2007
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 3

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/17/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 43

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 11/29/2006
Next Scheduled EDR Contact: 02/05/2007
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 10/31/2006
Date Made Active in Reports: 12/13/2006
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Quarterly

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/15/2006
Date Data Arrived at EDR: 12/28/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 32

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/28/2006
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Semi-Annually

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/11/2006
Date Data Arrived at EDR: 10/18/2006
Date Made Active in Reports: 12/13/2006
Number of Days to Update: 56

Source: EPA
Telephone: N/A
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 12/04/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2003
Date Data Arrived at EDR: 06/17/2005
Date Made Active in Reports: 08/04/2005
Number of Days to Update: 48

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 01/19/2007
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Biennially

STATE AND LOCAL RECORDS

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 11/27/2006
Next Scheduled EDR Contact: 02/26/2007
Data Release Frequency: No Update Planned

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/29/2006
Next Scheduled EDR Contact: 02/26/2007
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: No Update Planned

SWF/LF (SWIS): Solid Waste Information System
Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/11/2006
Date Data Arrived at EDR: 12/13/2006
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 42

Source: Integrated Waste Management Board
Telephone: 916-341-6320
Last EDR Contact: 12/13/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CA WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 12/19/2006
Date Data Arrived at EDR: 12/19/2006
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 36

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 12/19/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Quarterly

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 12/07/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 05/29/2001
Date Made Active in Reports: 07/26/2001
Number of Days to Update: 58

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 01/08/2007
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 01/09/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Quarterly

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 01/09/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Quarterly

LUST REG 5: Leaking Underground Storage Tank Database

Date of Government Version: 09/30/2006
Date Data Arrived at EDR: 10/25/2006
Date Made Active in Reports: 11/28/2006
Number of Days to Update: 34

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 01/23/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-346-7491
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-4130
Last EDR Contact: 11/07/2006
Next Scheduled EDR Contact: 02/05/2007
Data Release Frequency: Varies

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-346-7491
Last EDR Contact: 11/16/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 916-542-5424
Last EDR Contact: 12/04/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 12/27/2006
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-576-2220
Last EDR Contact: 11/16/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 11/13/2006
Next Scheduled EDR Contact: 02/12/2007
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The Spills, Leaks, Investigations, and Cleanups (SLIC) listings includes unauthorized discharges from spills and leaks, other than from underground storage tanks or other regulated sites.

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 01/09/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 11/16/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 11/13/2006
Next Scheduled EDR Contact: 02/12/2007
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 01/03/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 12/04/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 11/16/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 04/06/2006
Date Data Arrived at EDR: 04/06/2006
Date Made Active in Reports: 05/11/2006
Number of Days to Update: 35

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 01/02/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 11/27/2006
Date Data Arrived at EDR: 11/27/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 37

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 11/27/2006
Next Scheduled EDR Contact: 02/26/2007
Data Release Frequency: Annually

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 14

Source: SWRCB
Telephone: 916-480-1028
Last EDR Contact: 01/09/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Semi-Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 11/02/2006
Date Data Arrived at EDR: 11/03/2006
Date Made Active in Reports: 12/08/2006
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 916-341-5712
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: Quarterly

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 11/30/2005
Date Made Active in Reports: 01/19/2006
Number of Days to Update: 50

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 11/20/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Varies

NOTIFY 65: Proposition 65 Records
Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: No Update Planned

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 10/04/2006
Date Data Arrived at EDR: 10/05/2006
Date Made Active in Reports: 10/25/2006
Number of Days to Update: 20

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/16/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Semi-Annually

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/29/2006
Next Scheduled EDR Contact: 02/26/2007
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 04/18/2005
Date Data Arrived at EDR: 04/18/2005
Date Made Active in Reports: 05/06/2005
Number of Days to Update: 18

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 10/25/2006
Date Data Arrived at EDR: 10/31/2006
Date Made Active in Reports: 11/28/2006
Number of Days to Update: 28

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Varies

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 05/17/2006
Date Data Arrived at EDR: 05/17/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 11/28/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/29/2006	Telephone: 916-323-3400
Date Made Active in Reports: 01/03/2007	Last EDR Contact: 11/29/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/26/2007
	Data Release Frequency: Quarterly

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2005	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 11/20/2006	Telephone: 916-255-1136
Date Made Active in Reports: 01/03/2007	Last EDR Contact: 11/20/2006
Number of Days to Update: 44	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2004	Source: California Air Resources Board
Date Data Arrived at EDR: 04/14/2006	Telephone: 916-322-2990
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 01/19/2007
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/16/2007
	Data Release Frequency: Varies

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 11/28/2006	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/29/2006	Telephone: 916-323-3400
Date Made Active in Reports: 01/03/2007	Last EDR Contact: 11/29/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/26/2007
	Data Release Frequency: Quarterly

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 02/06/2006	Telephone: 202-208-3710
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 11/10/2006
Number of Days to Update: 339	Next Scheduled EDR Contact: 02/05/2007
	Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 12/01/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 59

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/04/2005
Date Data Arrived at EDR: 01/21/2005
Date Made Active in Reports: 02/28/2005
Number of Days to Update: 38

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 11/30/2006
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 52

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/21/2006
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 52

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 12/19/2006
Date Data Arrived at EDR: 12/19/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/06/2006
Date Data Arrived at EDR: 10/04/2006
Date Made Active in Reports: 11/08/2006
Number of Days to Update: 35

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Minnesota, Mississippi and North Carolina.

Date of Government Version: 08/24/2006
Date Data Arrived at EDR: 09/11/2006
Date Made Active in Reports: 11/08/2006
Number of Days to Update: 58

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R4: Underground Storage Tanks on Indian Land

Date of Government Version: 08/24/2006
Date Data Arrived at EDR: 09/11/2006
Date Made Active in Reports: 11/08/2006
Number of Days to Update: 58

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land

Date of Government Version: 11/21/2006
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 52

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land

Date of Government Version: 12/02/2004
Date Data Arrived at EDR: 12/29/2004
Date Made Active in Reports: 02/04/2005
Number of Days to Update: 37

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

Date of Government Version: 11/30/2006
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 52

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Quarterly

INDIAN UST R6: Underground Storage Tanks on Indian Land

Date of Government Version: 01/11/2007
Date Data Arrived at EDR: 01/12/2007
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 17

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land
A listing of underground storage tank locations on Indian Land.

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 12/01/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 59

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006
Date Data Arrived at EDR: 10/04/2006
Date Made Active in Reports: 11/08/2006
Number of Days to Update: 35

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

Date of Government Version: 12/19/2006
Date Data Arrived at EDR: 12/19/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 41

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Quarterly

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Historical Cleaners: EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 10/26/2006
Date Data Arrived at EDR: 10/27/2006
Date Made Active in Reports: 11/28/2006
Number of Days to Update: 32

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Semi-Annually

Underground Tanks

Date of Government Version: 10/26/2006
Date Data Arrived at EDR: 10/27/2006
Date Made Active in Reports: 11/13/2006
Number of Days to Update: 17

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 35

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 11/27/2006
Next Scheduled EDR Contact: 02/26/2007
Data Release Frequency: Semi-Annually

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 11/22/2006
Date Data Arrived at EDR: 11/27/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 37

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 01/16/2007
Next Scheduled EDR Contact: 05/07/2007
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 12/06/2006
Date Data Arrived at EDR: 12/07/2006
Date Made Active in Reports: 01/04/2007
Number of Days to Update: 28

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 12/04/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 07/07/1999
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 05/16/2006
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/31/2006
Date Data Arrived at EDR: 12/29/2006
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 26

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 11/13/2006
Next Scheduled EDR Contact: 02/12/2007
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Date of Government Version: 11/13/2006
Date Data Arrived at EDR: 11/28/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 36

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 11/15/2006
Next Scheduled EDR Contact: 02/12/2007
Data Release Frequency: Varies

City of Los Angeles Landfills

Date of Government Version: 03/01/2006
Date Data Arrived at EDR: 04/06/2006
Date Made Active in Reports: 05/11/2006
Number of Days to Update: 35

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 12/11/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 12/04/2006
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 11/13/2006
Next Scheduled EDR Contact: 02/12/2007
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Date of Government Version: 12/14/2006
Date Data Arrived at EDR: 12/15/2006
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 39

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 12/14/2006
Next Scheduled EDR Contact: 02/12/2007
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 11/21/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Date of Government Version: 11/13/2006
Date Data Arrived at EDR: 11/13/2006
Date Made Active in Reports: 12/12/2006
Number of Days to Update: 29

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 11/13/2006
Next Scheduled EDR Contact: 02/12/2007
Data Release Frequency: Semi-Annually

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 11/06/2006
Date Data Arrived at EDR: 11/28/2006
Date Made Active in Reports: 01/04/2007
Number of Days to Update: 37

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/30/2007
Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/10/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 14

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Semi-Annually

Closed and Operating Underground Storage Tank Sites

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/10/2007
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 13

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Annually

ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 01/04/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 20

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 12/06/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 01/04/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 20

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 12/06/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 01/04/2007
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 19

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 12/06/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/30/2006
Date Data Arrived at EDR: 08/31/2006
Date Made Active in Reports: 10/05/2006
Number of Days to Update: 35

Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 12/29/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 11/09/2006
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 11/28/2006
Number of Days to Update: 18

Source: Department of Public Health
Telephone: 951-358-5055
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Quarterly

Underground Storage Tank Tank List

Date of Government Version: 11/09/2006
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 12/21/2006
Number of Days to Update: 41

Source: Health Services Agency
Telephone: 951-358-5055
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Contaminated Sites

Date of Government Version: 11/21/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 35

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 01/29/2007
Data Release Frequency: Quarterly

ML - Regulatory Compliance Master List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/21/2006
Date Data Arrived at EDR: 12/01/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 33

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 11/17/2006
Next Scheduled EDR Contact: 01/29/2007
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 01/04/2007
Date Data Arrived at EDR: 01/05/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 19

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 12/04/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/16/2005
Date Data Arrived at EDR: 05/18/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 29

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 01/03/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/2006
Date Data Arrived at EDR: 01/03/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 21

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 11/20/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Varies

SAN FRANCISCO COUNTY:

Local Oversite Facilities

Date of Government Version: 12/21/2006
Date Data Arrived at EDR: 12/22/2006
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 33

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Quarterly

Underground Storage Tank Information

Date of Government Version: 12/21/2006
Date Data Arrived at EDR: 12/22/2006
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 32

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 10/16/2006
Date Data Arrived at EDR: 12/13/2006
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 41

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 01/15/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Semi-Annually

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 35

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Annually

Fuel Leak List

Date of Government Version: 01/09/2007
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Semi-Annually

SANTA CLARA COUNTY:

LOP Listing

A listing of open leaking underground storage tanks.

Date of Government Version: 09/29/2006
Date Data Arrived at EDR: 10/02/2006
Date Made Active in Reports: 10/25/2006
Number of Days to Update: 23

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 12/27/2006
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Varies

Hazardous Material Facilities

Date of Government Version: 12/07/2006
Date Data Arrived at EDR: 12/07/2006
Date Made Active in Reports: 01/03/2007
Number of Days to Update: 27

Source: City of San Jose Fire Department
Telephone: 408-277-4659
Last EDR Contact: 12/04/2006
Next Scheduled EDR Contact: 03/05/2007
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks

Date of Government Version: 11/01/2006
Date Data Arrived at EDR: 11/13/2006
Date Made Active in Reports: 12/20/2006
Number of Days to Update: 37

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/27/2006
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Quarterly

Underground Storage Tanks

Date of Government Version: 01/02/2007
Date Data Arrived at EDR: 01/16/2007
Date Made Active in Reports: 01/23/2007
Number of Days to Update: 7

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/27/2006
Next Scheduled EDR Contact: 03/26/2007
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites

Date of Government Version: 10/23/2006
Date Data Arrived at EDR: 10/24/2006
Date Made Active in Reports: 11/28/2006
Number of Days to Update: 35

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 01/22/2007
Next Scheduled EDR Contact: 04/23/2007
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Date of Government Version: 12/31/0005
Date Data Arrived at EDR: 01/05/2006
Date Made Active in Reports: 01/31/2006
Number of Days to Update: 26

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/13/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2006
Date Data Arrived at EDR: 09/05/2006
Date Made Active in Reports: 10/05/2006
Number of Days to Update: 30

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 11/16/2006
Next Scheduled EDR Contact: 02/19/2007
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 11/28/2006
Date Data Arrived at EDR: 01/09/2007
Date Made Active in Reports: 01/24/2007
Number of Days to Update: 15

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/13/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 09/27/2006
Date Data Arrived at EDR: 11/01/2006
Date Made Active in Reports: 12/12/2006
Number of Days to Update: 41

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/10/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Date of Government Version: 11/13/2006
Date Data Arrived at EDR: 11/28/2006
Date Made Active in Reports: 01/04/2007
Number of Days to Update: 37

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 01/29/2007
Next Scheduled EDR Contact: 04/16/2007
Data Release Frequency: Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 02/17/2006
Date Made Active in Reports: 04/07/2006
Number of Days to Update: 49

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 12/11/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 11/01/2006
Date Data Arrived at EDR: 11/13/2006
Date Made Active in Reports: 12/13/2006
Number of Days to Update: 30

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/04/2007
Next Scheduled EDR Contact: 04/02/2007
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 10/26/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/05/2007
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/29/2006
Next Scheduled EDR Contact: 02/26/2007
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 03/17/2006
Date Made Active in Reports: 06/06/2006
Number of Days to Update: 81

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 12/11/2006
Next Scheduled EDR Contact: 03/12/2007
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 04/11/2006
Date Data Arrived at EDR: 10/31/2006
Date Made Active in Reports: 12/18/2006
Number of Days to Update: 48

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 12/18/2006
Next Scheduled EDR Contact: 03/19/2007
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 03/17/2006
Date Made Active in Reports: 05/02/2006
Number of Days to Update: 46

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 01/08/2007
Next Scheduled EDR Contact: 04/09/2007
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: PennWell Corporation
Telephone: (800) 823-6277
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

GEOCHECK ® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

STATE ROUTE 2 TERMINOUS
SR-2/GLENDALE BLVD.
LOS ANGELES, CA 90039

TARGET PROPERTY COORDINATES

Latitude (North):	34.09060 - 34˚ 5’ 26.2’’
Longitude (West):	118.2588 - 118˚ 15’ 31.7’’
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	383870.0
UTM Y (Meters):	3772722.0
Elevation:	480 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	34118-A3 HOLLYWOOD, CA
Most Recent Revision:	1994
East Map:	34118-A2 LOS ANGELES, CA
Most Recent Revision:	1994

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

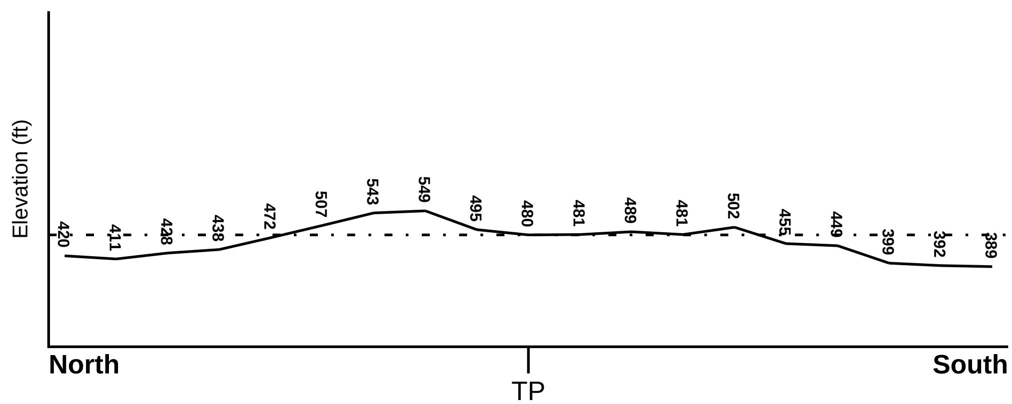
TOPOGRAPHIC INFORMATION

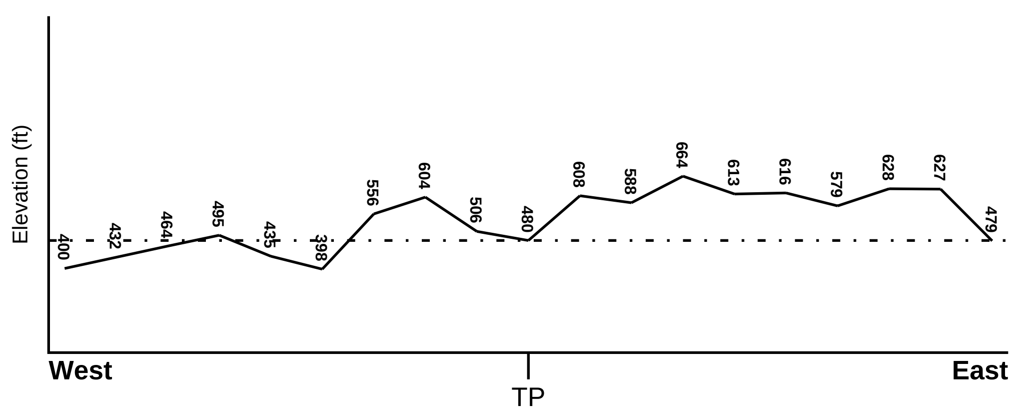
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 480 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
LOS ANGELES, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 0601370065C

Additional Panels in search area: 0601370056C

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HOLLYWOOD	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era: Cenozoic
System: Tertiary
Series: Miocene
Code: Tm *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: HAMBRIGHT

Soil Surface Texture: gravelly - loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 10 inches

Depth to Bedrock Max: > 20 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	7 inches	gravelly - loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 2.00 Min: 0.60	Max: 7.30 Min: 6.10
2	7 inches	16 inches	very gravelly - loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 6.10
3	16 inches	20 inches	unweathered bedrock	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: loam
silty clay loam
shaly - clay loam
sandy loam
loamy sand
clay
clay loam

Surficial Soil Types: loam
silty clay loam
shaly - clay loam
sandy loam
loamy sand
clay
clay loam

Shallow Soil Types: silty clay

Deeper Soil Types: weathered bedrock
clay loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

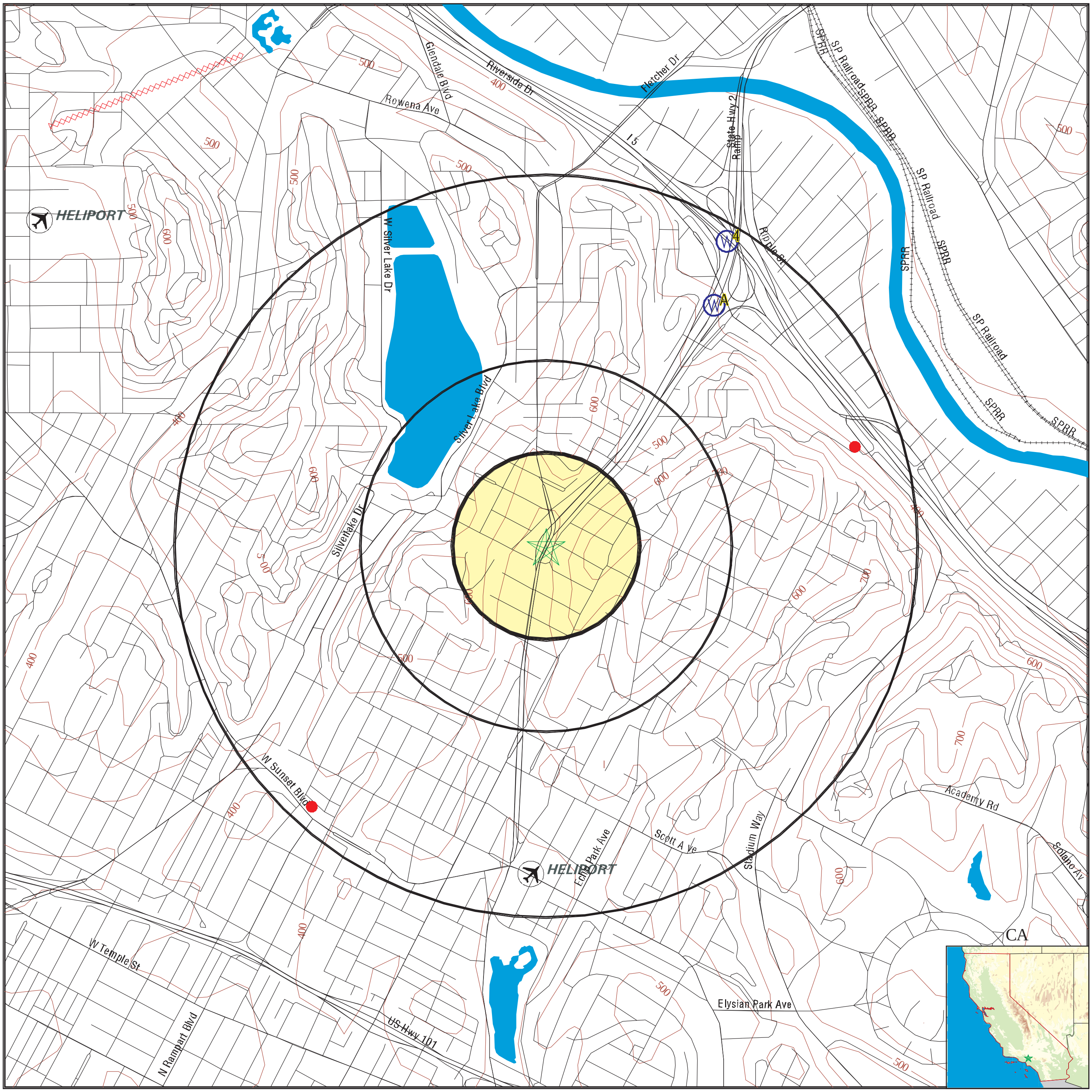
MAP ID	WELL ID	LOCATION FROM TP
A1	1495	1/2 - 1 Mile NE
A2	1493	1/2 - 1 Mile NE
A3	1494	1/2 - 1 Mile NE
4	22820	1/2 - 1 Mile NNE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

DISTANCE FROM TP (Miles)	DISTANCE FROM TP (Miles)
1/2 - 1 Mile ENE	1/2 - 1 Mile SW

PHYSICAL SETTING SOURCE MAP - 1845663.2s



County Boundary
Major Roads
Contour Lines
Earthquake Fault Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Closest Hydrogeological Data
Oil, gas or related wells

SITE NAME:	State Route 2 Terminous	CLIENT:	Geotechnical Conslt. Inc.
ADDRESS:	SR-2/Glendale Blvd. LOS ANGELES CA 90039	CONTACT:	Aurie Patterson
		INQUIRY #:	1845663.2s
LAT/LONG:	34.0906 / 118.2588	DATE:	January 29, 2007 6:59 pm

Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **NE** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**1495**

Water System Information:

Prime Station Code:	01S/13W-04L04 S	User ID:	MET
FRDS Number:	1910067109	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340600.0 1181500.0	Precision:	Undefined
Source Name:	POLLOCK WELL 05		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420 LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		

Map ID Direction Distance Elevation	Database	EDR ID Number
A2 **NE** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**1493**

Water System Information:

Prime Station Code:	01S/13W-04L02 S	User ID:	MET
FRDS Number:	1910067108	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340600.0 1181500.0	Precision:	Undefined
Source Name:	POLLOCK WELL 04		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420 LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	08/22/2000 00:00:00	Findings:	6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08/22/2000 00:00:00	Findings:	11 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08/29/2000 00:00:00	Findings:	36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/01/2000 00:00:00	Findings:	21 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	09/01/2000 00:00:00	Findings:	5.4 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	09/01/2000 00:00:00	Findings:	11.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09/01/2000 00:00:00	Findings:	35.73 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/30/2005 00:00:00	Findings:	3.11 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/30/2005 00:00:00	Findings:	38.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/30/2005 00:00:00	Findings:	.581 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/30/2005 00:00:00	Findings:	8680 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04/13/2005 00:00:00	Findings:	18.3 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	04/13/2005 00:00:00	Findings:	4 UNITS
Chemical:	COLOR		
Sample Collected:	04/13/2005 00:00:00	Findings:	890 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/13/2005 00:00:00	Findings:	7.15
Chemical:	PH, FIELD		
Sample Collected:	04/13/2005 00:00:00	Findings:	7.17
Chemical:	PH, LABORATORY		
Sample Collected:	04/13/2005 00:00:00	Findings:	201 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	04/13/2005 00:00:00	Findings:	245 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	04/13/2005 00:00:00	Findings:	.249 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	04/13/2005 00:00:00	Findings:	.417 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	04/13/2005 00:00:00	Findings:	335 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	04/13/2005 00:00:00	Findings:	78.1 MG/L
Chemical:	CALCIUM		
Sample Collected:	04/13/2005 00:00:00	Findings:	26.6 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	04/13/2005 00:00:00	Findings:	54.8 MG/L
Chemical:	SODIUM		
Sample Collected:	04/13/2005 00:00:00	Findings:	3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	04/13/2005 00:00:00	Findings:	73.4 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/13/2005 00:00:00	Findings:	.337 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

Sample Collected:	04/13/2005 00:00:00	Findings:	35.4 MG/L
Chemical:	SILICA		
Sample Collected:	04/13/2005 00:00:00	Findings:	250 UG/L
Chemical:	BORON		
Sample Collected:	04/13/2005 00:00:00	Findings:	5.3 UG/L
Chemical:	VANADIUM		
Sample Collected:	04/13/2005 00:00:00	Findings:	.831 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/13/2005 00:00:00	Findings:	2.45 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10/06/2000 00:00:00	Findings:	21 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	10/06/2000 00:00:00	Findings:	1.22 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	10/06/2000 00:00:00	Findings:	4.13 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	10/06/2000 00:00:00	Findings:	2.5 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	10/06/2000 00:00:00	Findings:	5.19 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10/06/2000 00:00:00	Findings:	9.54 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10/06/2000 00:00:00	Findings:	35.19 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/03/2000 00:00:00	Findings:	20 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	11/03/2000 00:00:00	Findings:	3.52 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	11/03/2000 00:00:00	Findings:	5.04 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04/13/2005 00:00:00	Findings:	3.61 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/13/2005 00:00:00	Findings:	568 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	04/13/2005 00:00:00	Findings:	- .16
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	04/13/2005 00:00:00	Findings:	38.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/13/2005 00:00:00	Findings:	.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	04/13/2005 00:00:00	Findings:	.831 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	04/13/2005 00:00:00	Findings:	.286 MG/L
Chemical:	BROMIDE		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	04/13/2005 00:00:00	Findings:	8610 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	11/03/2000 00:00:00	Findings:	10.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11/03/2000 00:00:00	Findings:	35.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/26/2001 00:00:00	Findings:	22.4 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	07/26/2001 00:00:00	Findings:	4 UNITS
Chemical:	COLOR		
Sample Collected:	07/26/2001 00:00:00	Findings:	863 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07/26/2001 00:00:00	Findings:	7.16
Chemical:	PH, LABORATORY		
Sample Collected:	07/26/2001 00:00:00	Findings:	210 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	07/26/2001 00:00:00	Findings:	256 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	07/26/2001 00:00:00	Findings:	.114 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	07/26/2001 00:00:00	Findings:	1.25 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	07/26/2001 00:00:00	Findings:	337 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	07/26/2001 00:00:00	Findings:	82 MG/L
Chemical:	CALCIUM		
Sample Collected:	07/26/2001 00:00:00	Findings:	30.4 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	07/26/2001 00:00:00	Findings:	52.3 MG/L
Chemical:	SODIUM		
Sample Collected:	07/26/2001 00:00:00	Findings:	2.5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	07/26/2001 00:00:00	Findings:	69.9 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07/26/2001 00:00:00	Findings:	.38 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/26/2001 00:00:00	Findings:	35.8 MG/L
Chemical:	SILICA		
Sample Collected:	07/26/2001 00:00:00	Findings:	340 UG/L
Chemical:	BORON		
Sample Collected:	07/26/2001 00:00:00	Findings:	3.2 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	07/26/2001 00:00:00	Findings:	.7 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	07/26/2001 00:00:00	Findings:	2.18 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	07/26/2001 00:00:00	Findings:	5.17 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07/26/2001 00:00:00	Findings:	9.14 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/26/2001 00:00:00	Findings:	510 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	07/26/2001 00:00:00	Findings:	- .05
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	07/26/2001 00:00:00	Findings:	39.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/26/2001 00:00:00	Findings:	.25 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	07/26/2001 00:00:00	Findings:	.029 MG/L
Chemical:	BROMIDE		
Sample Collected:	07/26/2001 00:00:00	Findings:	8990 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08/16/2001 00:00:00	Findings:	20.6 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	08/16/2001 00:00:00	Findings:	.1 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	08/16/2001 00:00:00	Findings:	370 UG/L
Chemical:	BORON		
Sample Collected:	08/16/2001 00:00:00	Findings:	3.5 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	08/16/2001 00:00:00	Findings:	5.33 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08/16/2001 00:00:00	Findings:	9.64 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08/16/2001 00:00:00	Findings:	41.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/16/2001 00:00:00	Findings:	.5 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/13/2001 00:00:00	Findings:	20 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	09/13/2001 00:00:00	Findings:	.098 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	09/13/2001 00:00:00	Findings:	430 UG/L
Chemical:	BORON		
Sample Collected:	09/13/2001 00:00:00	Findings:	3.2 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	09/13/2001 00:00:00	Findings:	4.48 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	09/13/2001 00:00:00	Findings:	7.84 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09/13/2001 00:00:00	Findings:	41.22 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/17/2001 00:00:00	Findings:	19.7 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	10/17/2001 00:00:00	Findings:	.094 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	10/17/2001 00:00:00	Findings:	350 UG/L
Chemical:	BORON		
Sample Collected:	10/17/2001 00:00:00	Findings:	.622 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/17/2001 00:00:00	Findings:	3.72 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10/17/2001 00:00:00	Findings:	6.93 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10/17/2001 00:00:00	Findings:	38.39 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/17/2001 00:00:00	Findings:	.622 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	01/31/2002 00:00:00	Findings:	.78 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/31/2002 00:00:00	Findings:	4.6 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	01/31/2002 00:00:00	Findings:	2.26 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	01/31/2002 00:00:00	Findings:	4.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	01/31/2002 00:00:00	Findings:	8.36 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/31/2002 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/15/2002 00:00:00	Findings:	4.49 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03/15/2002 00:00:00	Findings:	7.93 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/15/2002 00:00:00	Findings:	37.83 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/12/2002 00:00:00	Findings:	.535 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/12/2002 00:00:00	Findings:	4.85 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04/12/2002 00:00:00	Findings:	7.77 UG/L
Chemical:	TRICHLOROETHYLENE		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	04/12/2002 00:00:00	Findings:	38.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/12/2002 00:00:00	Findings:	.535 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05/24/2002 00:00:00	Findings:	.849 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	05/24/2002 00:00:00	Findings:	4.89 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05/24/2002 00:00:00	Findings:	7.98 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05/24/2002 00:00:00	Findings:	38.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/24/2002 00:00:00	Findings:	.849 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/10/2002 00:00:00	Findings:	.983 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/10/2002 00:00:00	Findings:	3.67 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09/10/2002 00:00:00	Findings:	6.24 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09/10/2002 00:00:00	Findings:	35.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/10/2002 00:00:00	Findings:	.983 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	11/18/2002 00:00:00	Findings:	3.74 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11/18/2002 00:00:00	Findings:	6.55 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11/18/2002 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/29/2003 00:00:00	Findings:	.099 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	01/29/2003 00:00:00	Findings:	260 UG/L
Chemical:	BORON		
Sample Collected:	01/29/2003 00:00:00	Findings:	3.84 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	01/29/2003 00:00:00	Findings:	6.34 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/29/2003 00:00:00	Findings:	38.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/27/2003 00:00:00	Findings:	.1 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	02/27/2003 00:00:00	Findings:	.37 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	02/27/2003 00:00:00	Findings:	260 UG/L
Chemical:	BORON		
Sample Collected:	02/27/2003 00:00:00	Findings:	.716 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	02/27/2003 00:00:00	Findings:	3.86 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	02/27/2003 00:00:00	Findings:	6.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	02/27/2003 00:00:00	Findings:	38.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/27/2003 00:00:00	Findings:	.716 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/14/2003 00:00:00	Findings:	20 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	03/14/2003 00:00:00	Findings:	.1 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	03/14/2003 00:00:00	Findings:	.456 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/14/2003 00:00:00	Findings:	280 UG/L
Chemical:	BORON		
Sample Collected:	03/14/2003 00:00:00	Findings:	.78 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/14/2003 00:00:00	Findings:	3.97 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03/14/2003 00:00:00	Findings:	6.59 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/14/2003 00:00:00	Findings:	39.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/22/1999 00:00:00	Findings:	19 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	03/22/1999 00:00:00	Findings:	3 UNITS
Chemical:	COLOR		
Sample Collected:	03/22/1999 00:00:00	Findings:	805 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/22/1999 00:00:00	Findings:	7.21
Chemical:	PH, LABORATORY		
Sample Collected:	03/22/1999 00:00:00	Findings:	204 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03/22/1999 00:00:00	Findings:	249 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/22/1999 00:00:00	Findings:	.09 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	03/22/1999 00:00:00	Findings:	298 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		

Sample Collected:	03/22/1999 00:00:00	Findings:	79.2 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/22/1999 00:00:00	Findings:	30.1 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/22/1999 00:00:00	Findings:	53.6 MG/L
Chemical:	SODIUM		
Sample Collected:	03/22/1999 00:00:00	Findings:	5.12 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/22/1999 00:00:00	Findings:	63.3 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/22/1999 00:00:00	Findings:	.39 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/1999 00:00:00	Findings:	35 MG/L
Chemical:	SILICA		
Sample Collected:	03/22/1999 00:00:00	Findings:	2.3 UG/L
Chemical:	ARSENIC		
Sample Collected:	03/22/1999 00:00:00	Findings:	107 UG/L
Chemical:	BARIUM		
Sample Collected:	03/14/2003 00:00:00	Findings:	.78 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	04/25/2003 00:00:00	Findings:	.097 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	04/25/2003 00:00:00	Findings:	260 UG/L
Chemical:	BORON		
Sample Collected:	04/25/2003 00:00:00	Findings:	.915 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/25/2003 00:00:00	Findings:	4.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04/25/2003 00:00:00	Findings:	6.39 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/25/2003 00:00:00	Findings:	37.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/25/2003 00:00:00	Findings:	.915 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05/15/2003 00:00:00	Findings:	.099 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	05/15/2003 00:00:00	Findings:	220 UG/L
Chemical:	BORON		
Sample Collected:	05/15/2003 00:00:00	Findings:	1.06 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	05/15/2003 00:00:00	Findings:	5.48 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03/22/1999 00:00:00	Findings:	12.5 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	03/22/1999 00:00:00	Findings:	18 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/22/1999 00:00:00	Findings:	535 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/22/1999 00:00:00	Findings:	- .07
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	03/22/1999 00:00:00	Findings:	39.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/22/1999 00:00:00	Findings:	.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	03/22/1999 00:00:00	Findings:	.26 MG/L
Chemical:	BROMIDE		
Sample Collected:	03/22/1999 00:00:00	Findings:	8900 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03/22/1999 00:00:00	Findings:	3.3 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	03/22/1999 00:00:00	Findings:	1.12 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/22/1999 00:00:00	Findings:	5.14 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	03/22/1999 00:00:00	Findings:	3.12 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	07/19/1999 00:00:00	Findings:	10.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07/19/1999 00:00:00	Findings:	15.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05/15/2003 00:00:00	Findings:	6.85 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05/15/2003 00:00:00	Findings:	37.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/15/2003 00:00:00	Findings:	1.06 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/23/2003 00:00:00	Findings:	.096 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	06/23/2003 00:00:00	Findings:	310 UG/L
Chemical:	BORON		
Sample Collected:	06/23/2003 00:00:00	Findings:	1.02 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	06/23/2003 00:00:00	Findings:	6.83 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06/23/2003 00:00:00	Findings:	6.94 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06/23/2003 00:00:00	Findings:	36.2 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	07/19/1999 00:00:00	Findings:	34.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/17/1999 00:00:00	Findings:	9.52 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08/17/1999 00:00:00	Findings:	16.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08/17/1999 00:00:00	Findings:	37.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/23/2003 00:00:00	Findings:	1.02 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	01/28/2004 00:00:00	Findings:	4.37 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	01/28/2004 00:00:00	Findings:	1.52 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/28/2004 00:00:00	Findings:	4.56 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	01/28/2004 00:00:00	Findings:	1.09 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	01/28/2004 00:00:00	Findings:	.169 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	01/28/2004 00:00:00	Findings:	.487 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	01/29/2004 00:00:00	Findings:	.064 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	01/29/2004 00:00:00	Findings:	300 UG/L
Chemical:	BORON		
Sample Collected:	01/29/2004 00:00:00	Findings:	.6 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/29/2004 00:00:00	Findings:	3.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	01/29/2004 00:00:00	Findings:	5.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/29/2004 00:00:00	Findings:	33.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/29/2004 00:00:00	Findings:	.6 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	02/27/2004 00:00:00	Findings:	.097 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	02/27/2004 00:00:00	Findings:	.889 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	02/27/2004 00:00:00	Findings:	300 UG/L
Chemical:	BORON		
Sample Collected:	02/27/2004 00:00:00	Findings:	.773 UG/L
Chemical:	CHLOROFORM (THM)		

Sample Collected:	02/27/2004 00:00:00	Findings:	3.27 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09/14/1999 00:00:00	Findings:	9.35 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09/14/1999 00:00:00	Findings:	16.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09/14/1999 00:00:00	Findings:	37.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/21/2000 00:00:00	Findings:	5.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06/21/2000 00:00:00	Findings:	11.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06/21/2000 00:00:00	Findings:	36.59 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/27/2004 00:00:00	Findings:	4.99 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	02/27/2004 00:00:00	Findings:	34.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/27/2004 00:00:00	Findings:	.773 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/16/2004 00:00:00	Findings:	.128 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	03/16/2004 00:00:00	Findings:	1.01 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/16/2004 00:00:00	Findings:	280 UG/L
Chemical:	BORON		
Sample Collected:	03/16/2004 00:00:00	Findings:	.834 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/16/2004 00:00:00	Findings:	4.14 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03/16/2004 00:00:00	Findings:	5.22 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/16/2004 00:00:00	Findings:	34.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/16/2004 00:00:00	Findings:	.834 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	07/07/2000 00:00:00	Findings:	1 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/07/2000 00:00:00	Findings:	2 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	07/07/2000 00:00:00	Findings:	6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07/07/2000 00:00:00	Findings:	11 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	07/07/2000 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/25/2000 00:00:00	Findings:	68 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07/25/2000 00:00:00	Findings:	420 UG/L
Chemical:	BORON		
Sample Collected:	04/08/2004 00:00:00	Findings:	.178 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	04/08/2004 00:00:00	Findings:	1.34 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	04/08/2004 00:00:00	Findings:	270 UG/L
Chemical:	BORON		
Sample Collected:	04/08/2004 00:00:00	Findings:	.914 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/08/2004 00:00:00	Findings:	3.81 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04/08/2004 00:00:00	Findings:	4.86 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/08/2004 00:00:00	Findings:	31.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/08/2004 00:00:00	Findings:	.914 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/30/2005 00:00:00	Findings:	19.6 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	03/30/2005 00:00:00	Findings:	7.08
Chemical:	PH, FIELD		
Sample Collected:	03/30/2005 00:00:00	Findings:	.249 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	03/30/2005 00:00:00	Findings:	.47 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/30/2005 00:00:00	Findings:	5.2 UG/L
Chemical:	VANADIUM		
Sample Collected:	03/30/2005 00:00:00	Findings:	.92 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/30/2005 00:00:00	Findings:	1.38 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	03/30/2005 00:00:00	Findings:	.497 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	03/30/2005 00:00:00	Findings:	.581 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/30/2005 00:00:00	Findings:	2.07 UG/L
Chemical:	TETRACHLOROETHYLENE		

A3
NE
1/2 - 1 Mile
Lower

CA WELLS 1494

Water System Information:

Prime Station Code:	01S/13W-04L03 S	User ID:	MET
FRDS Number:	1910067110	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340600.0 1181500.0	Precision:	Undefined
Source Name:	POLLOCK WELL 06		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		

Organization That Operates System:
P.O. BOX 51111, ROOM 1420
LOS ANGELES, CA 90051

Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		

Sample Collected:	03/22/2001 00:00:00	Findings:	14.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/22/2001 00:00:00	Findings:	40.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/22/2001 00:00:00	Findings:	.557 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/22/2001 00:00:00	Findings:	9070 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04/19/2001 00:00:00	Findings:	2.5 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	07/26/2001 00:00:00	Findings:	22.5 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	07/26/2001 00:00:00	Findings:	4 UNITS
Chemical:	COLOR		
Sample Collected:	07/26/2001 00:00:00	Findings:	922 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07/26/2001 00:00:00	Findings:	7.15
Chemical:	PH, LABORATORY		
Sample Collected:	07/26/2001 00:00:00	Findings:	218 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	07/26/2001 00:00:00	Findings:	266 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	07/26/2001 00:00:00	Findings:	.117 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	07/26/2001 00:00:00	Findings:	364 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	07/26/2001 00:00:00	Findings:	92.2 MG/L
Chemical:	CALCIUM		
Sample Collected:	07/26/2001 00:00:00	Findings:	33.4 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	07/26/2001 00:00:00	Findings:	52.2 MG/L
Chemical:	SODIUM		

Sample Collected:	07/26/2001 00:00:00	Findings:	2.33 MG/L
Chemical:	POTASSIUM		
Sample Collected:	07/26/2001 00:00:00	Findings:	75.4 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07/26/2001 00:00:00	Findings:	.284 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07/26/2001 00:00:00	Findings:	37.2 MG/L
Chemical:	SILICA		
Sample Collected:	07/26/2001 00:00:00	Findings:	340 UG/L
Chemical:	BORON		
Sample Collected:	07/26/2001 00:00:00	Findings:	4.5 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	07/26/2001 00:00:00	Findings:	.745 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/26/2001 00:00:00	Findings:	13.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11/03/2004 00:00:00	Findings:	591 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11/03/2004 00:00:00	Findings:	.01
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	11/03/2004 00:00:00	Findings:	42.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/03/2004 00:00:00	Findings:	.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	11/03/2004 00:00:00	Findings:	.605 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	11/03/2004 00:00:00	Findings:	.735 MG/L
Chemical:	BROMIDE		
Sample Collected:	11/03/2004 00:00:00	Findings:	9560 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	12/17/2004 00:00:00	Findings:	19.7 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	12/17/2004 00:00:00	Findings:	7.15
Chemical:	PH, FIELD		
Sample Collected:	12/17/2004 00:00:00	Findings:	.551 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	12/17/2004 00:00:00	Findings:	7.77 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	12/17/2004 00:00:00	Findings:	10.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12/17/2004 00:00:00	Findings:	41 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/17/2004 00:00:00	Findings:	.551 UG/L
Chemical:	TOTAL TRIHALOMETHANES		

Sample Collected:	03/22/1999 00:00:00	Findings:	20 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	03/22/1999 00:00:00	Findings:	3 UNITS
Chemical:	COLOR		
Sample Collected:	03/22/1999 00:00:00	Findings:	890 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/22/1999 00:00:00	Findings:	7.15
Chemical:	PH, LABORATORY		
Sample Collected:	03/22/1999 00:00:00	Findings:	238 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03/22/1999 00:00:00	Findings:	291 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/22/1999 00:00:00	Findings:	.08 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	03/22/1999 00:00:00	Findings:	343 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03/22/1999 00:00:00	Findings:	94.4 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/22/1999 00:00:00	Findings:	33.3 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/22/1999 00:00:00	Findings:	59.6 MG/L
Chemical:	SODIUM		
Sample Collected:	03/22/1999 00:00:00	Findings:	2.15 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/22/1999 00:00:00	Findings:	26.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/22/1999 00:00:00	Findings:	.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/22/1999 00:00:00	Findings:	37.3 MG/L
Chemical:	SILICA		
Sample Collected:	03/22/1999 00:00:00	Findings:	125 UG/L
Chemical:	BARIUM		
Sample Collected:	03/22/1999 00:00:00	Findings:	7.6 UG/L
Chemical:	LEAD		
Sample Collected:	03/22/1999 00:00:00	Findings:	.655 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/26/2001 00:00:00	Findings:	19.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/26/2001 00:00:00	Findings:	514 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	07/26/2001 00:00:00	Findings:	43.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/26/2001 00:00:00	Findings:	.1 NTU
Chemical:	TURBIDITY, LABORATORY		

Sample Collected: Chemical:	07/26/2001 00:00:00 TOTAL TRIHALOMETHANES	Findings:	.745 UG/L
Sample Collected: Chemical:	07/26/2001 00:00:00 BROMIDE	Findings:	.036 MG/L
Sample Collected: Chemical:	07/26/2001 00:00:00 NITRATE + NITRITE (AS N)	Findings:	9780 UG/L
Sample Collected: Chemical:	08/16/2001 00:00:00 SOURCE TEMPERATURE C	Findings:	20.9 C
Sample Collected: Chemical:	08/16/2001 00:00:00 PHOSPHATE (AS PO4)	Findings:	.101 UG/L
Sample Collected: Chemical:	08/16/2001 00:00:00 BORON	Findings:	380 UG/L
Sample Collected: Chemical:	08/16/2001 00:00:00 CHROMIUM, HEXAVALENT	Findings:	4.2 UG/L
Sample Collected: Chemical:	08/16/2001 00:00:00 CHLOROFORM (THM)	Findings:	.61 UG/L
Sample Collected: Chemical:	08/16/2001 00:00:00 TETRACHLOROETHYLENE	Findings:	11.8 UG/L
Sample Collected: Chemical:	08/16/2001 00:00:00 TRICHLOROETHYLENE	Findings:	12 UG/L
Sample Collected: Chemical:	08/16/2001 00:00:00 NITRATE (AS NO3)	Findings:	42.57 MG/L
Sample Collected: Chemical:	03/22/1999 00:00:00 TETRACHLOROETHYLENE	Findings:	22.4 UG/L
Sample Collected: Chemical:	03/22/1999 00:00:00 TRICHLOROETHYLENE	Findings:	22.8 UG/L
Sample Collected: Chemical:	03/22/1999 00:00:00 TOTAL DISSOLVED SOLIDS	Findings:	603 MG/L
Sample Collected: Chemical:	03/22/1999 00:00:00 LANGELIER INDEX @ 60 C	Findings:	.03
Sample Collected: Chemical:	03/22/1999 00:00:00 NITRATE (AS NO3)	Findings:	39.9 MG/L
Sample Collected: Chemical:	03/22/1999 00:00:00 TURBIDITY, LABORATORY	Findings:	.1 NTU
Sample Collected: Chemical:	03/22/1999 00:00:00 TOTAL TRIHALOMETHANES	Findings:	.655 UG/L
Sample Collected: Chemical:	03/22/1999 00:00:00 BROMIDE	Findings:	.32 MG/L
Sample Collected: Chemical:	03/22/1999 00:00:00 NITRATE + NITRITE (AS N)	Findings:	9000 UG/L
Sample Collected: Chemical:	04/15/1999 00:00:00 SOURCE TEMPERATURE C	Findings:	20 C
Sample Collected: Chemical:	04/15/1999 00:00:00 COLOR	Findings:	3 UNITS

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	04/15/1999 00:00:00	Findings:	918 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/15/1999 00:00:00	Findings:	7.16
Chemical:	PH, LABORATORY		
Sample Collected:	04/15/1999 00:00:00	Findings:	238 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	04/15/1999 00:00:00	Findings:	291 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	04/15/1999 00:00:00	Findings:	.08 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	04/15/1999 00:00:00	Findings:	363 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	04/15/1999 00:00:00	Findings:	93.1 MG/L
Chemical:	CALCIUM		
Sample Collected:	04/15/1999 00:00:00	Findings:	34.3 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	04/15/1999 00:00:00	Findings:	55.2 MG/L
Chemical:	SODIUM		
Sample Collected:	04/15/1999 00:00:00	Findings:	2.32 MG/L
Chemical:	POTASSIUM		
Sample Collected:	04/15/1999 00:00:00	Findings:	72.7 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/15/1999 00:00:00	Findings:	.27 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	04/15/1999 00:00:00	Findings:	15.2 MG/L
Chemical:	SILICA		
Sample Collected:	04/15/1999 00:00:00	Findings:	106 UG/L
Chemical:	BARIUM		
Sample Collected:	04/15/1999 00:00:00	Findings:	.687 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	08/16/2001 00:00:00	Findings:	.61 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/13/2001 00:00:00	Findings:	20.5 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	09/13/2001 00:00:00	Findings:	.097 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	09/13/2001 00:00:00	Findings:	400 UG/L
Chemical:	BORON		
Sample Collected:	09/13/2001 00:00:00	Findings:	3.4 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	09/13/2001 00:00:00	Findings:	41.58 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/17/2001 00:00:00	Findings:	20.1 C
Chemical:	SOURCE TEMPERATURE C		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected: Chemical:	10/17/2001 00:00:00 PHOSPHATE (AS PO4)	Findings:	.102 UG/L
Sample Collected: Chemical:	10/17/2001 00:00:00 BORON	Findings:	330 UG/L
Sample Collected: Chemical:	10/17/2001 00:00:00 CHLOROFORM (THM)	Findings:	.629 UG/L
Sample Collected: Chemical:	10/17/2001 00:00:00 TETRACHLOROETHYLENE	Findings:	20.6 UG/L
Sample Collected: Chemical:	10/17/2001 00:00:00 1,1-DICHLOROETHYLENE	Findings:	1.88 UG/L
Sample Collected: Chemical:	10/17/2001 00:00:00 TRICHLOROETHYLENE	Findings:	15.2 UG/L
Sample Collected: Chemical:	10/17/2001 00:00:00 NITRATE (AS NO3)	Findings:	38.79 MG/L
Sample Collected: Chemical:	10/17/2001 00:00:00 CIS-1,2-DICHLOROETHYLENE	Findings:	.578 UG/L
Sample Collected: Chemical:	10/17/2001 00:00:00 TOTAL TRIHALOMETHANES	Findings:	.629 UG/L
Sample Collected: Chemical:	01/31/2002 00:00:00 CHROMIUM, HEXAVALENT	Findings:	3.8 UG/L
Sample Collected: Chemical:	01/31/2002 00:00:00 CHLOROFORM (THM)	Findings:	.617 UG/L
Sample Collected: Chemical:	04/15/1999 00:00:00 TETRACHLOROETHYLENE	Findings:	24.3 UG/L
Sample Collected: Chemical:	04/15/1999 00:00:00 TRICHLOROETHYLENE	Findings:	21.7 UG/L
Sample Collected: Chemical:	04/15/1999 00:00:00 TOTAL DISSOLVED SOLIDS	Findings:	612 MG/L
Sample Collected: Chemical:	04/15/1999 00:00:00 LANGELIER INDEX AT SOURCE TEMP.	Findings:	.02
Sample Collected: Chemical:	04/15/1999 00:00:00 NITRATE (AS NO3)	Findings:	38.7 MG/L
Sample Collected: Chemical:	04/15/1999 00:00:00 TURBIDITY, LABORATORY	Findings:	.3 NTU
Sample Collected: Chemical:	04/15/1999 00:00:00 TOTAL TRIHALOMETHANES	Findings:	.687 UG/L
Sample Collected: Chemical:	04/15/1999 00:00:00 BROMIDE	Findings:	330 MG/L
Sample Collected: Chemical:	04/15/1999 00:00:00 NITRATE + NITRITE (AS N)	Findings:	8740 UG/L
Sample Collected: Chemical:	05/12/1999 00:00:00 CHLOROFORM (THM)	Findings:	.656 UG/L
Sample Collected: Chemical:	05/12/1999 00:00:00 TETRACHLOROETHYLENE	Findings:	25.4 UG/L

Sample Collected:	01/31/2002 00:00:00	Findings:	11 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	01/31/2002 00:00:00	Findings:	13.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/31/2002 00:00:00	Findings:	42.53 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/31/2002 00:00:00	Findings:	.617 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/15/2002 00:00:00	Findings:	8 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/15/2002 00:00:00	Findings:	9.64 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03/15/2002 00:00:00	Findings:	12.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/15/2002 00:00:00	Findings:	43.02 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/12/1999 00:00:00	Findings:	20.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05/12/1999 00:00:00	Findings:	38.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/12/1999 00:00:00	Findings:	.656 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05/12/1999 00:00:00	Findings:	8690 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03/15/2002 00:00:00	Findings:	8 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/26/2002 00:00:00	Findings:	3.61 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	04/26/2002 00:00:00	Findings:	3.61 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	04/26/2002 00:00:00	Findings:	.543 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/26/2002 00:00:00	Findings:	10.4 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04/26/2002 00:00:00	Findings:	11.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/26/2002 00:00:00	Findings:	43.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/26/2002 00:00:00	Findings:	.543 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05/24/2002 00:00:00	Findings:	3.51 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	05/24/2002 00:00:00	Findings:	.682 UG/L
Chemical:	CHLOROFORM (THM)		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected: Chemical:	05/24/2002 00:00:00 TETRACHLOROETHYLENE	Findings:	11.5 UG/L
Sample Collected: Chemical:	06/10/1999 00:00:00 CHLOROFORM (THM)	Findings:	.645 UG/L
Sample Collected: Chemical:	06/10/1999 00:00:00 TETRACHLOROETHYLENE	Findings:	31.5 UG/L
Sample Collected: Chemical:	06/10/1999 00:00:00 TRICHLOROETHYLENE	Findings:	20.2 UG/L
Sample Collected: Chemical:	06/10/1999 00:00:00 NITRATE (AS NO3)	Findings:	38.2 MG/L
Sample Collected: Chemical:	06/10/1999 00:00:00 TOTAL TRIHALOMETHANES	Findings:	.645 UG/L
Sample Collected: Chemical:	07/19/1999 00:00:00 CHLOROFORM (THM)	Findings:	.764 UG/L
Sample Collected: Chemical:	07/19/1999 00:00:00 TETRACHLOROETHYLENE	Findings:	31.4 UG/L
Sample Collected: Chemical:	07/19/1999 00:00:00 TRICHLOROETHYLENE	Findings:	20.7 UG/L
Sample Collected: Chemical:	07/19/1999 00:00:00 NITRATE (AS NO3)	Findings:	37 MG/L
Sample Collected: Chemical:	07/19/1999 00:00:00 CIS-1,2-DICHLOROETHYLENE	Findings:	.713 UG/L
Sample Collected: Chemical:	05/24/2002 00:00:00 TRICHLOROETHYLENE	Findings:	12.5 UG/L
Sample Collected: Chemical:	05/24/2002 00:00:00 NITRATE (AS NO3)	Findings:	43.3 MG/L
Sample Collected: Chemical:	05/24/2002 00:00:00 TOTAL TRIHALOMETHANES	Findings:	.682 UG/L
Sample Collected: Chemical:	06/18/2002 00:00:00 CHROMIUM, HEXAVALENT	Findings:	3.85 UG/L
Sample Collected: Chemical:	06/18/2002 00:00:00 VANADIUM	Findings:	6.3 UG/L
Sample Collected: Chemical:	06/18/2002 00:00:00 CHLOROFORM (THM)	Findings:	.603 UG/L
Sample Collected: Chemical:	06/18/2002 00:00:00 TETRACHLOROETHYLENE	Findings:	11 UG/L
Sample Collected: Chemical:	06/18/2002 00:00:00 TRICHLOROETHYLENE	Findings:	13.5 UG/L
Sample Collected: Chemical:	06/18/2002 00:00:00 NITRATE (AS NO3)	Findings:	37.3 MG/L
Sample Collected: Chemical:	06/18/2002 00:00:00 TOTAL TRIHALOMETHANES	Findings:	.603 UG/L
Sample Collected: Chemical:	07/19/1999 00:00:00 TOTAL TRIHALOMETHANES	Findings:	.764 UG/L

Sample Collected:	08/17/1999 00:00:00	Findings:	.937 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	08/17/1999 00:00:00	Findings:	36 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08/17/1999 00:00:00	Findings:	22.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08/17/1999 00:00:00	Findings:	36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/17/1999 00:00:00	Findings:	1.16 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	08/17/1999 00:00:00	Findings:	.937 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/21/2002 00:00:00	Findings:	37.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/16/2002 00:00:00	Findings:	3.57 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	07/16/2002 00:00:00	Findings:	.578 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/16/2002 00:00:00	Findings:	15.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07/16/2002 00:00:00	Findings:	.533 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/16/2002 00:00:00	Findings:	12.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/16/2002 00:00:00	Findings:	37.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/16/2002 00:00:00	Findings:	.578 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	08/09/2002 00:00:00	Findings:	565 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	08/09/2002 00:00:00	Findings:	19.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08/09/2002 00:00:00	Findings:	11.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08/09/2002 00:00:00	Findings:	37.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/14/1999 00:00:00	Findings:	.924 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/14/1999 00:00:00	Findings:	41.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09/14/1999 00:00:00	Findings:	.894 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/14/1999 00:00:00	Findings:	21.3 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	09/14/1999 00:00:00	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/14/1999 00:00:00	Findings:	1.45 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	09/14/1999 00:00:00	Findings:	.924 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/02/2000 00:00:00	Findings:	1 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/02/2000 00:00:00	Findings:	16 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03/02/2000 00:00:00	Findings:	13 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08/09/2002 00:00:00	Findings:	.565 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/10/2002 00:00:00	Findings:	3.24 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	09/10/2002 00:00:00	Findings:	.721 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/10/2002 00:00:00	Findings:	21.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09/10/2002 00:00:00	Findings:	1.42 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/10/2002 00:00:00	Findings:	13.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09/10/2002 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/10/2002 00:00:00	Findings:	.709 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	09/10/2002 00:00:00	Findings:	.721 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	11/18/2002 00:00:00	Findings:	3.36 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	11/18/2002 00:00:00	Findings:	.506 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/02/2000 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/02/2000 00:00:00	Findings:	1 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	04/12/2000 00:00:00	Findings:	.809 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/12/2000 00:00:00	Findings:	22.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04/12/2000 00:00:00	Findings:	.601 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	04/12/2000 00:00:00	Findings:	18.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/12/2000 00:00:00	Findings:	36.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/12/2000 00:00:00	Findings:	.946 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04/12/2000 00:00:00	Findings:	.809 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	04/12/2000 00:00:00	Findings:	8290 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	11/18/2002 00:00:00	Findings:	8.72 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11/18/2002 00:00:00	Findings:	12.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11/18/2002 00:00:00	Findings:	39.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/18/2002 00:00:00	Findings:	.506 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	07/28/2003 00:00:00	Findings:	.111 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	07/28/2003 00:00:00	Findings:	280 UG/L
Chemical:	BORON		
Sample Collected:	07/28/2003 00:00:00	Findings:	8.7 UG/L
Chemical:	VANADIUM		
Sample Collected:	07/28/2003 00:00:00	Findings:	.559 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/28/2003 00:00:00	Findings:	15.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07/28/2003 00:00:00	Findings:	10.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/28/2003 00:00:00	Findings:	38.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/17/2000 00:00:00	Findings:	.912 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	05/17/2000 00:00:00	Findings:	24.3 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05/17/2000 00:00:00	Findings:	.723 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/17/2000 00:00:00	Findings:	20.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05/17/2000 00:00:00	Findings:	40 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/17/2000 00:00:00	Findings:	1.1 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		

Sample Collected:	05/17/2000 00:00:00	Findings:	.912 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06/07/2000 00:00:00	Findings:	.671 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	06/07/2000 00:00:00	Findings:	22.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06/07/2000 00:00:00	Findings:	.637 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/07/2000 00:00:00	Findings:	16.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06/07/2000 00:00:00	Findings:	36.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/07/2000 00:00:00	Findings:	.814 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/28/2003 00:00:00	Findings:	.559 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	08/14/2003 00:00:00	Findings:	.107 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	08/14/2003 00:00:00	Findings:	220 UG/L
Chemical:	BORON		
Sample Collected:	08/14/2003 00:00:00	Findings:	2.72 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	08/14/2003 00:00:00	Findings:	1.06 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/14/2003 00:00:00	Findings:	2.03 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	08/14/2003 00:00:00	Findings:	.296 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	08/14/2003 00:00:00	Findings:	.689 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	08/14/2003 00:00:00	Findings:	17.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08/14/2003 00:00:00	Findings:	12.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06/07/2000 00:00:00	Findings:	.671 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	07/07/2000 00:00:00	Findings:	1 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/07/2000 00:00:00	Findings:	30 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07/07/2000 00:00:00	Findings:	1 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07/07/2000 00:00:00	Findings:	18 UG/L
Chemical:	TRICHLOROETHYLENE		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	07/07/2000 00:00:00	Findings:	36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/07/2000 00:00:00	Findings:	1 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07/07/2000 00:00:00	Findings:	1 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	07/25/2000 00:00:00	Findings:	420 UG/L
Chemical:	BORON		
Sample Collected:	07/25/2000 00:00:00	Findings:	75 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/22/2000 00:00:00	Findings:	1 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	08/14/2003 00:00:00	Findings:	39.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/14/2003 00:00:00	Findings:	.689 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	09/25/2003 00:00:00	Findings:	.11 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	09/25/2003 00:00:00	Findings:	250 UG/L
Chemical:	BORON		
Sample Collected:	09/25/2003 00:00:00	Findings:	2.89 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	09/25/2003 00:00:00	Findings:	.573 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	09/25/2003 00:00:00	Findings:	14.4 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09/25/2003 00:00:00	Findings:	10.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08/22/2000 00:00:00	Findings:	31 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08/22/2000 00:00:00	Findings:	3 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/22/2000 00:00:00	Findings:	20 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08/22/2000 00:00:00	Findings:	1 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	08/22/2000 00:00:00	Findings:	1 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	08/29/2000 00:00:00	Findings:	36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/01/2000 00:00:00	Findings:	21 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	09/01/2000 00:00:00	Findings:	1.02 UG/L
Chemical:	CHLOROFORM (THM)		

Sample Collected:	09/01/2000 00:00:00	Findings:	32 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09/01/2000 00:00:00	Findings:	3.48 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/01/2000 00:00:00	Findings:	20.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09/01/2000 00:00:00	Findings:	36.09 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/01/2000 00:00:00	Findings:	1.43 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	09/25/2003 00:00:00	Findings:	37.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/25/2003 00:00:00	Findings:	.573 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/16/2003 00:00:00	Findings:	.114 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	10/16/2003 00:00:00	Findings:	.853 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	10/16/2003 00:00:00	Findings:	270 UG/L
Chemical:	BORON		
Sample Collected:	10/16/2003 00:00:00	Findings:	.741 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/16/2003 00:00:00	Findings:	21.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10/16/2003 00:00:00	Findings:	1.22 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/16/2003 00:00:00	Findings:	10.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10/16/2003 00:00:00	Findings:	34.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/16/2003 00:00:00	Findings:	1.4 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	10/16/2003 00:00:00	Findings:	.741 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/23/2003 00:00:00	Findings:	3.04 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	11/20/2003 00:00:00	Findings:	2.89 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	12/03/2003 00:00:00	Findings:	.127 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	09/01/2000 00:00:00	Findings:	1.02 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/06/2000 00:00:00	Findings:	20 C
Chemical:	SOURCE TEMPERATURE C		

Sample Collected:	10/06/2000 00:00:00	Findings:	.963 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/06/2000 00:00:00	Findings:	31 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10/06/2000 00:00:00	Findings:	5.16 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/06/2000 00:00:00	Findings:	.904 UG/L
Chemical:	1,1,1-TRICHLOROETHANE		
Sample Collected:	10/06/2000 00:00:00	Findings:	19.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10/06/2000 00:00:00	Findings:	35.91 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/06/2000 00:00:00	Findings:	1.37 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	10/06/2000 00:00:00	Findings:	.963 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/26/2000 00:00:00	Findings:	1.02 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/26/2000 00:00:00	Findings:	32.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10/26/2000 00:00:00	Findings:	6.98 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10/26/2000 00:00:00	Findings:	1.1 UG/L
Chemical:	1,1,1-TRICHLOROETHANE		
Sample Collected:	12/03/2003 00:00:00	Findings:	240 UG/L
Chemical:	BORON		
Sample Collected:	12/03/2003 00:00:00	Findings:	17.3 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	12/03/2003 00:00:00	Findings:	1.62 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12/03/2003 00:00:00	Findings:	.634 UG/L
Chemical:	DICHLORODIFLUOROMETHANE (FREON 12)		
Sample Collected:	12/03/2003 00:00:00	Findings:	11.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12/03/2003 00:00:00	Findings:	34.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/03/2003 00:00:00	Findings:	.939 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	12/04/2003 00:00:00	Findings:	2.5 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	01/28/2004 00:00:00	Findings:	.074 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	01/28/2004 00:00:00	Findings:	220 UG/L
Chemical:	BORON		

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Sample Collected:	01/28/2004 00:00:00	Findings:	2.6 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	01/28/2004 00:00:00	Findings:	.7 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/28/2004 00:00:00	Findings:	11 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	01/28/2004 00:00:00	Findings:	11 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/28/2004 00:00:00	Findings:	42.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/26/2000 00:00:00	Findings:	20.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10/26/2000 00:00:00	Findings:	1.48 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	10/26/2000 00:00:00	Findings:	1.02 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	11/01/2000 00:00:00	Findings:	.617 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	11/01/2000 00:00:00	Findings:	1.01 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	11/01/2000 00:00:00	Findings:	33.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11/01/2000 00:00:00	Findings:	8.1 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/01/2000 00:00:00	Findings:	1.52 UG/L
Chemical:	1,1,1-TRICHLOROETHANE		
Sample Collected:	11/01/2000 00:00:00	Findings:	24.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11/01/2000 00:00:00	Findings:	1.52 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	11/01/2000 00:00:00	Findings:	1.01 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	11/03/2000 00:00:00	Findings:	20 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	11/03/2000 00:00:00	Findings:	4.2 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	11/03/2000 00:00:00	Findings:	.503 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	01/28/2004 00:00:00	Findings:	.7 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	02/25/2004 00:00:00	Findings:	2.4 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	02/25/2004 00:00:00	Findings:	1.01 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		

Sample Collected:	02/25/2004 00:00:00	Findings:	.954 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	02/25/2004 00:00:00	Findings:	.473 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	02/25/2004 00:00:00	Findings:	.895 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	02/25/2004 00:00:00	Findings:	9.29 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	02/25/2004 00:00:00	Findings:	.532 UG/L
Chemical:	DICHLORODIFLUOROMETHANE (FREON 12)		
Sample Collected:	02/25/2004 00:00:00	Findings:	12.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	02/25/2004 00:00:00	Findings:	41.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/25/2004 00:00:00	Findings:	.895 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/18/2004 00:00:00	Findings:	.109 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	03/18/2004 00:00:00	Findings:	.588 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03/18/2004 00:00:00	Findings:	230 UG/L
Chemical:	BORON		
Sample Collected:	03/18/2004 00:00:00	Findings:	2.84 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	11/03/2000 00:00:00	Findings:	.938 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	11/03/2000 00:00:00	Findings:	36.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11/03/2000 00:00:00	Findings:	8.75 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11/03/2000 00:00:00	Findings:	1.34 UG/L
Chemical:	1,1,1-TRICHLOROETHANE		
Sample Collected:	11/03/2000 00:00:00	Findings:	25.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11/03/2000 00:00:00	Findings:	36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/03/2000 00:00:00	Findings:	1.54 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	11/03/2000 00:00:00	Findings:	.938 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	01/25/2001 00:00:00	Findings:	2.2 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	01/25/2001 00:00:00	Findings:	50 UG/L
Chemical:	CHROMIUM (TOTAL)		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	01/25/2001 00:00:00	Findings:	.598 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/25/2001 00:00:00	Findings:	12.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	01/25/2001 00:00:00	Findings:	17.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/25/2001 00:00:00	Findings:	38.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/18/2004 00:00:00	Findings:	.669 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/18/2004 00:00:00	Findings:	11.5 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03/18/2004 00:00:00	Findings:	.73 UG/L
Chemical:	DICHLORODIFLUOROMETHANE (FREON 12)		
Sample Collected:	03/18/2004 00:00:00	Findings:	10.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/18/2004 00:00:00	Findings:	43.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/18/2004 00:00:00	Findings:	.669 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	04/22/2004 00:00:00	Findings:	.103 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	04/22/2004 00:00:00	Findings:	1.52 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	04/22/2004 00:00:00	Findings:	250 UG/L
Chemical:	BORON		
Sample Collected:	04/22/2004 00:00:00	Findings:	2.83 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	04/22/2004 00:00:00	Findings:	.64 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/22/2004 00:00:00	Findings:	13 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04/22/2004 00:00:00	Findings:	11 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/22/2004 00:00:00	Findings:	41.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/25/2001 00:00:00	Findings:	.598 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	02/27/2001 00:00:00	Findings:	7.34 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	02/27/2001 00:00:00	Findings:	12.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	02/27/2001 00:00:00	Findings:	37.3 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	02/27/2001 00:00:00	Findings:	8430 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03/22/2001 00:00:00	Findings:	2.6 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	03/22/2001 00:00:00	Findings:	.557 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	03/22/2001 00:00:00	Findings:	10.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04/22/2004 00:00:00	Findings:	.6 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/08/2004 00:00:00	Findings:	19.8 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	10/08/2004 00:00:00	Findings:	7.1
Chemical:	PH, FIELD		
Sample Collected:	10/08/2004 00:00:00	Findings:	1.1 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	10/08/2004 00:00:00	Findings:	1.87 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	10/08/2004 00:00:00	Findings:	.608 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	10/20/2004 00:00:00	Findings:	20.6 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	10/20/2004 00:00:00	Findings:	7.11
Chemical:	PH, FIELD		
Sample Collected:	10/20/2004 00:00:00	Findings:	3.7 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	11/03/2004 00:00:00	Findings:	20.4 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	11/03/2004 00:00:00	Findings:	4 UNITS
Chemical:	COLOR		
Sample Collected:	11/03/2004 00:00:00	Findings:	2 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	11/03/2004 00:00:00	Findings:	933 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11/03/2004 00:00:00	Findings:	7.2
Chemical:	PH, FIELD		
Sample Collected:	11/03/2004 00:00:00	Findings:	7.17
Chemical:	PH, LABORATORY		
Sample Collected:	11/03/2004 00:00:00	Findings:	215 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	11/03/2004 00:00:00	Findings:	262 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	11/03/2004 00:00:00	Findings:	.264 UG/L
Chemical:	PHOSPHATE (AS PO4)		

Sample Collected:	11/03/2004 00:00:00	Findings:	.42 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	11/03/2004 00:00:00	Findings:	347 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	11/03/2004 00:00:00	Findings:	92 MG/L
Chemical:	CALCIUM		
Sample Collected:	11/03/2004 00:00:00	Findings:	30.4 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	11/03/2004 00:00:00	Findings:	52.9 MG/L
Chemical:	SODIUM		
Sample Collected:	11/03/2004 00:00:00	Findings:	2.55 MG/L
Chemical:	POTASSIUM		
Sample Collected:	11/03/2004 00:00:00	Findings:	76.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/03/2004 00:00:00	Findings:	.283 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	11/03/2004 00:00:00	Findings:	41.6 MG/L
Chemical:	SILICA		
Sample Collected:	11/03/2004 00:00:00	Findings:	240 UG/L
Chemical:	BORON		
Sample Collected:	11/03/2004 00:00:00	Findings:	3.48 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	11/03/2004 00:00:00	Findings:	7.2 UG/L
Chemical:	VANADIUM		
Sample Collected:	11/03/2004 00:00:00	Findings:	.605 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	11/03/2004 00:00:00	Findings:	7.79 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11/03/2004 00:00:00	Findings:	8.71 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/26/2005 00:00:00	Findings:	20.3 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	01/26/2005 00:00:00	Findings:	7.14
Chemical:	PH, FIELD		
Sample Collected:	01/26/2005 00:00:00	Findings:	2.9 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	01/26/2005 00:00:00	Findings:	3.14 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	01/26/2005 00:00:00	Findings:	1.06 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/26/2005 00:00:00	Findings:	1.75 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	01/26/2005 00:00:00	Findings:	.67 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		

Sample Collected:	01/26/2005 00:00:00	Findings:	.621 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	01/26/2005 00:00:00	Findings:	9.63 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	01/26/2005 00:00:00	Findings:	9.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	01/26/2005 00:00:00	Findings:	40.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/26/2005 00:00:00	Findings:	.621 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	02/17/2005 00:00:00	Findings:	18.7 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	02/17/2005 00:00:00	Findings:	7.08
Chemical:	PH, FIELD		
Sample Collected:	02/17/2005 00:00:00	Findings:	3.09 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	02/22/2005 00:00:00	Findings:	20.3 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	02/22/2005 00:00:00	Findings:	7.11
Chemical:	PH, FIELD		
Sample Collected:	02/22/2005 00:00:00	Findings:	.576 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	02/22/2005 00:00:00	Findings:	9.66 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	02/22/2005 00:00:00	Findings:	8.47 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	02/22/2005 00:00:00	Findings:	40.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/22/2005 00:00:00	Findings:	.576 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/30/2005 00:00:00	Findings:	19.6 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	03/30/2005 00:00:00	Findings:	7.03
Chemical:	PH, FIELD		
Sample Collected:	03/30/2005 00:00:00	Findings:	6.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03/30/2005 00:00:00	Findings:	8.36 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03/30/2005 00:00:00	Findings:	46.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/21/2005 00:00:00	Findings:	19.3 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	04/21/2005 00:00:00	Findings:	7.19
Chemical:	PH, FIELD		

Sample Collected:	04/21/2005 00:00:00	Findings:	2.24 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	04/27/2005 00:00:00	Findings:	19.9 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	04/27/2005 00:00:00	Findings:	7.05
Chemical:	PH, FIELD		
Sample Collected:	04/27/2005 00:00:00	Findings:	3.21 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	04/27/2005 00:00:00	Findings:	.88 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	04/27/2005 00:00:00	Findings:	1.15 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	04/27/2005 00:00:00	Findings:	.535 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	04/27/2005 00:00:00	Findings:	3.05 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	04/27/2005 00:00:00	Findings:	.614 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/27/2005 00:00:00	Findings:	8.37 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04/27/2005 00:00:00	Findings:	8.79 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04/27/2005 00:00:00	Findings:	46.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/27/2005 00:00:00	Findings:	.614 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	04/27/2005 00:00:00	Findings:	1.06 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	05/25/2005 00:00:00	Findings:	21.2 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	05/25/2005 00:00:00	Findings:	7.11
Chemical:	PH, FIELD		
Sample Collected:	05/25/2005 00:00:00	Findings:	3.31 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	05/25/2005 00:00:00	Findings:	.562 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	05/25/2005 00:00:00	Findings:	7.34 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05/25/2005 00:00:00	Findings:	9.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05/25/2005 00:00:00	Findings:	39.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/25/2005 00:00:00	Findings:	.562 UG/L
Chemical:	TOTAL TRIHALOMETHANES		

Sample Collected:	06/16/2005 00:00:00	Findings:	20.7 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	06/16/2005 00:00:00	Findings:	7.06
Chemical:	PH, FIELD		
Sample Collected:	06/16/2005 00:00:00	Findings:	3.17 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	06/16/2005 00:00:00	Findings:	.565 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	06/16/2005 00:00:00	Findings:	9.13 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06/16/2005 00:00:00	Findings:	7.56 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06/16/2005 00:00:00	Findings:	40.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/16/2005 00:00:00	Findings:	.565 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	07/14/2005 00:00:00	Findings:	20.7 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	07/14/2005 00:00:00	Findings:	7.09
Chemical:	PH, FIELD		
Sample Collected:	07/14/2005 00:00:00	Findings:	2.96 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	07/14/2005 00:00:00	Findings:	3.08 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	07/14/2005 00:00:00	Findings:	1.14 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/14/2005 00:00:00	Findings:	1.65 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	07/14/2005 00:00:00	Findings:	.444 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	07/14/2005 00:00:00	Findings:	3.5 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	07/14/2005 00:00:00	Findings:	.662 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	07/14/2005 00:00:00	Findings:	10.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07/14/2005 00:00:00	Findings:	9.11 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07/14/2005 00:00:00	Findings:	39.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/14/2005 00:00:00	Findings:	.662 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	07/14/2005 00:00:00	Findings:	1.22 PCI/L
Chemical:	URANIUM COUNTING ERROR		

Sample Collected:	08/11/2005 00:00:00	Findings:	20.6 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	08/11/2005 00:00:00	Findings:	7.11
Chemical:	PH, FIELD		
Sample Collected:	08/11/2005 00:00:00	Findings:	2.92 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	08/11/2005 00:00:00	Findings:	.653 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	08/11/2005 00:00:00	Findings:	11.3 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08/11/2005 00:00:00	Findings:	8.65 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08/11/2005 00:00:00	Findings:	37.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/11/2005 00:00:00	Findings:	.653 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/13/2005 00:00:00	Findings:	21.4 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	10/13/2005 00:00:00	Findings:	7
Chemical:	PH, FIELD		
Sample Collected:	10/13/2005 00:00:00	Findings:	2.83 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	10/13/2005 00:00:00	Findings:	.88 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	10/13/2005 00:00:00	Findings:	2.11 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	10/13/2005 00:00:00	Findings:	.512 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	10/13/2005 00:00:00	Findings:	.52 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	10/13/2005 00:00:00	Findings:	7.84 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10/13/2005 00:00:00	Findings:	8.33 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10/13/2005 00:00:00	Findings:	39.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/13/2005 00:00:00	Findings:	.52 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	10/13/2005 00:00:00	Findings:	.91 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	11/15/2005 00:00:00	Findings:	20.1 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	11/15/2005 00:00:00	Findings:	7.07
Chemical:	PH, FIELD		

Sample Collected:	11/15/2005 00:00:00	Findings:	5.9 UG/L
Chemical:	VANADIUM		
Sample Collected:	11/15/2005 00:00:00	Findings:	.514 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	11/15/2005 00:00:00	Findings:	10.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11/15/2005 00:00:00	Findings:	7.28 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11/15/2005 00:00:00	Findings:	35.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/15/2005 00:00:00	Findings:	.514 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	11/29/2005 00:00:00	Findings:	19 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	11/29/2005 00:00:00	Findings:	7.14
Chemical:	PH, FIELD		
Sample Collected:	11/29/2005 00:00:00	Findings:	2.6 UG/L
Chemical:	CHROMIUM, HEXAVALENT		

4
NNE
1/2 - 1 Mile
Lower

CA WELLS 22820

Water System Information:

Prime Station Code:	G19/067-SYSRVSD	User ID:	MET
FRDS Number:	1910067001	County:	Los Angeles
District Number:	15	Station Type:	SYSTEM/AMBNT/MUN
Water Type:	Surface Water	Well Status:	Distribution System Sample Point Treated
Source Lat/Long:	340609.0 1181458.0	Precision:	1 Mile (One Minute)
Source Name:	2195 RIVERSIDE DR-BLEND OF WELLS,LAAF-TD		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:	P.O. BOX 51111, ROOM 1420 LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		

Direction Distance		Database	EDR ID Number

ENE
1/2 - 1 Mile — **OIL_GAS** — **CA10029801**

Apinumber:	03706112	Operator:	ChevronTexaco
Lease:	Park	Well no:	1
Field:	LOS ANGELES COUNTY	Cagaso m3 area:	Not Reported
Map:	W1-5	Status cod:	006
Source:	hud		
Latitude:	34.094467		
Longitude:	-118.243398		
Td:	2300	Sec:	9
Twn:	1S	Rge:	13W
Bm:	SB	X coord:	0
Y coord:	0	Zone:	Not Reported
Spuddate:	Not Reported	Abanddate:	Not Reported
Comments:	Not Reported	District:	1

SW
1/2 - 1 Mile — **OIL_GAS** — **CA10029765**

Apinumber:	03705178	Operator:	ARCO Western Energy
Lease:	Silver Lake Comm.	Well no:	A-1
Field:	LOS ANGELES COUNTY	Cagaso m3 area:	Not Reported
Map:	116	Status cod:	006
Source:	hud		
Latitude:	34.080403		
Longitude:	-118.268889		
Td:	0	Sec:	17
Twn:	1S	Rge:	13W
Bm:	SB	X coord:	0
Y coord:	0	Zone:	Not Reported
Spuddate:	Not Reported	Abanddate:	Not Reported
Comments:	Not Reported	District:	1

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
90039	6	0	0.00

Federal EPA Radon Zone for LOS ANGELES County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 90039

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.200 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR’s Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California’s Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

SR-2 Freeway Terminus Improvement Project

Historic Property Survey Report

Historical Resources Evaluation Report

Archeological Survey Report

for the

City of Los Angeles
County of Los Angeles
District 07-LA-2-KP (21.82/ 24.1 KP and PM 13.5/15.0)
EA 205500
3rd Draft Submittal

Prepared for:

Los Angeles County Metropolitan Transportation Authority
California Department of Transportation
Federal Highway Administration

June 2008

1. UNDERTAKING DESCRIPTION AND LOCATION						
District	County	Route *(Local Agency)*	Kilo Posts *(Project prefix)*	Post Miles *(Project No.)*	Charge Unit *(Agreement)*	Expenditure Authorization *(Location)*
7	Los Angeles	SR-2	21.82/24.1	13.5/15.0	N/A	205500

(Both kilometer posts and post miles must be completed above. For Local Assistance projects off the highway system, use headers in italics)

Project Description: (*Insert project description below; refer reader to location and vicinity maps in HPSR)*

- The Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the California Department of Transportation (Caltrans) and the Los Angeles Department of Transportation (LADOT), is proposing to modify the southern terminus of SR-2 at Glendale Boulevard to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus Additional concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses. See Exhibit 4, in the Maps section attached to this Historic Property Survey Report.
- <u>No Build Alternative (Baseline Alternative):</u> This alternative requires no new construction or capital cost.
- <u>Alternative A (Widen Existing Ramps):</u> This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp (two lanes). This alternative offers additional landscaping.
- <u>Alternative B (Realign Ramp East – Remove Partial Bridge and Flyover):</u> This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would also remove the southbound flyover ramp and a portion of the bridge over Glendale Boulevard. The remaining portion of the bridge over Glendale Boulevard would be retained for community reuse and greening. This alternative offers the potential for new open space for recreational opportunities.
- <u>Alternative C (Realign Ramps East – Remove Bridge and Flyover):</u> This alternative would shift entrance and exit ramps to the west. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and bridge over Glendale Boulevard. This alternative provides a landscaped median and a parkway treatment. This alternative offers the potential for new open space but not recreational opportunities.
- <u>Alternative D (Realign Ramps East – Retain Bridge and Flyover):</u> This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to community open space and a recreational area. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. his alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged. This alternative offers the potential for new open space.
- <u>Alternative E (Realign Ramps East, Retain Bridge and Flyover, Relocate Retaining Wall):</u> This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to community open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. The existing retaining wall along Allesandro Street would be relocated to the east to maintain Caltrans streets and highway standards. This alternative offers the potential for new open space.

2. AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) for the proposed project was established in consultation with APE for the project was established in consultation with Claudia Harbert, Caltrans PQS, Principal Architectural Historian and Javad Rahimzadeh, Caltrans Project Manager in District 7. The APE maps can be found in Exhibit 3 in the Maps section attached to this Historic Property Survey Report. The APE Map was signed April 17, 2008.

The APE established as: the direct Area of Potential Effects (APE) for the proposed project includes the maximum existing or proposed right-of-way for all alternatives currently under consideration, easements (temporary and permanent), and any area where ground may be disturbed by construction activities. The indirect APE includes all built environment properties subject to acquisition (partial and full), changes in access, or where visual or audible changes could affect their use.

3. CONSULTING PARTIES / PUBLIC PARTICIPATION

(For the following, check the appropriate line, list names, dates, and locations and results of contacts, as appropriate. List organizations/persons contacted and attach correspondence and summarize verbal comments received as appropriate.)

Local Government *(Head of local government, Preservation Office / Planning Department)*

On September 12, 2006, a letter as sent to the following local agencies:

- City of Los Angeles Planning Department
  City Hall, Room 667
  200 North Spring Street
  Los Angeles, CA 90012-4801

- City of Los Angeles Cultural Heritage Commission
  Ken Bernstein – Director of Historic Preservation
  City Hall, MS 395
  200 North Spring Street
  Los Angeles, CA 90012-4801

- City of Los Angeles Community Redevelopment Agency
  Pauline Lewicki – Head of Environmental Planning
  354 South Spring Street
  Los Angeles, CA 90013

  Comments received from Pauline Lewicki:

  "CRA has no information on any properties within the boundaries of the APE. The closest redevelopment project area is Chinatown."

X Native American Tribes, Groups and Individuals

A letter dated May 15, 2006, including a USGS topographic map depicting the project area was sent to the Native American Heritage Commission (NAHC) requesting a review of the Sacred Lands file. The NAHC responded on June 7, 2006 and indicated that there were no sacred lands in the project area. The NAHC also provided a list of 12 local Native American groups and individuals.

The NAHC response letter and contact list was sent to Caltrans District 7 on June 7, 2006 to initiate the consultation process. Caltrans District 7 sent letters regarding the project to Native American groups and individuals from the Caltrans office.

X Local Historical Society / Historic Preservation Group *(also if applicable, city archives, etc.)*

On September 12, 2006, the following groups and individuals were contacted:

ARCHITECTURE AND CONSERVATION

AIA Los Angeles
3780 Wilshire Blvd., Suite 800
Los Angeles, CA 90010

L.A. Forum for Architecture and Urban Design
Warren Techentin, President
P.O. Box 291774
Los Angeles, CA 90029-8774

Friends of the Los Angeles River
Joe Linton, Outreach Director
Lewis MacAdams, Chair, Board of Directors
570 W. Ave 26, #250
Los Angeles, CA 90065

Getty Conservation Institute
Timothy P. Whalen - Director
1200 Getty Center Drive, #700
Brentwood, CA 90049

PRESERVATION ORGANIZATIONS AND ARCHIVES

Mark Wanamaker
Bison Archives
650 N. Bronson Avenue, B112
Los Angeles, California 90004

California Preservation Foundation
5 Third St., Suite 424,
San Francisco, CA 94103.

Los Angeles Conservancy
Jay Platt – Preservation Advocate
523 West 6th Street, Suite 800
Los Angeles, CA 90014

RAILROAD ORGANIZATIONS

The Electric Railway Historical Association of Southern California
1 World Trade Center
P.O. Box 32161
Long Beach, CA 90832-2161

HISTORICAL SOCIETIES

Echo Park Historical Society
Kevin Kuzma, Interim President
P.O. Box 261022,
Los Angeles, CA 90026

California Historical Society
1120 Old Mill Road
San Marino, CA 91108

Historical Society of Southern California
200 East Avenue 43
Los Angeles, CA 90048

Los Angeles City Historical Society
P.O. Box 41046
Los Angeles, CA 90041

Society of Architectural Historians,
Southern California Chapter
Merry Ovnick, President
P.O. Box 56478
Sherman Oaks, CA 91413

MUSEUMS

Natural History Museum
Tom Sitton
900 Exposition Boulevard
Los Angeles, CA 90007

COMMISSIONS

Los Angeles County Historic Landmarks and Records Commission
Luis Skeleton
500 West Temple Street
Los Angeles, CA 90012

One letter was received from the L.A. Forum for Architecture and Urban Design on October 11, 2006, reporting historic information in the organization's files. One letter was received from the Echo Park Historical Society on September 12, 2006, reporting historic information in the organization's files. See Exhibit 5, in the Maps section attached to this Historic Property Survey Report.

X Public Information Meetings *(list locations, dates below and attach copies of notices)*

- St. Teresa of Avila Church
  2215 Fargo Street
  April 11, 2006, at 6 p.m.
- Metro Headquarters
  One Gateway Plaza
  April 19, 2006, at 2 p.m.
- Barlow Hospital
  2000 Stadium Way
  April 20, 2006, at 6 p.m.
- Mayberry Element
  2414 Mayberry Street
  June 28, 2006, at 6:30 p.m.

_ Other Public Participation and Consultation

4. SUMMARY OF IDENTIFICATION EFFORTS

X	National Register of Historic Places	Month & Year: 1979-2002 & supplements
X	California Register of Historical Resources	Year: 1992 & supplemental information to date
X	California Inventory of Historic Resources	Year: 1976
X	California Historical Landmarks	Year: 1995 & supplemental information to date
X	California Points of Historical Interest	Year: 1992 & supplemental information to date
_	State Historic Resources Commission	Year: 1980-present, minutes from quarterly meetings
X	Caltrans Historic Highway Bridge Inventory	Year: 2003 & supplemental information to date

X Archaeological Site Records [*List names of Institutions & date below*]

- South Central Coastal Information Center, on May 18, 2006.

X Other sources consulted *[e.g., historical societies, city archives, etc. List names and dates below]*

- California State Historic Resources Inventory June 1, 2006
- Caltrans District 8 Library, January 15, 2007
- Caltrans Headquarters Library, January 15, 2007

X **Results:** *(provide a brief summary of records search and research results, as well as inventory findings)*

- None of the properties within the APE appear on any federal, state, or local lists of historical resource

5. PROPERTIES IDENTIFIED

(Check the appropriate category, list properties, or refer reader to appropriate technical study attached, according to their National Register status. Provide, as appropriate, complete address, period and level of significance, criteria, map reference, and any existing state or local designation. Do not include properties that are not within the APE. Attach previous SHPO determinations, as applicable.)

_ **No cultural resources in project APE**

X *Richard Starzak,Jones & Stokes Senior Architectural Historian*, who meets the Professionally Qualified Staff Standards in Section 106 Programmatic Agreement (Section 106 PA) Attachment 1 as a(n) *[Indicate applicable PQS level]*, has determined that the only other properties present within the APE meet the criteria for Section 106 PA Attachment 4 (**Properties Exempt from Evaluation**).

X **Bridges listed as Category 5** in the Caltrans Historic Highway Bridge Inventory. Appropriate pages from the Caltrans Historic Bridge Inventory are attached.

_ Properties **previously determined not eligible** *(include date of determination)*:

X On behalf of **FHWA**, **Caltrans** has **determined** the following properties are **not eligible**:

Name	Address/Location	Community	OHP Status Code	Map Ref #
Residence	2219 Baxter Street	Echo Park	6Z	10
Duplex Residence	2227-2229 Ewing Street	Echo Park	6Z	3
St. Teresa of Avila Rectory	2216 Fargo Street	Echo Park	6Z	5
St. Teresa of Avila School	2223 Fargo Street	Echo Park	6Z	6
St. Teresa of Avila Convent	2213 Fargo Street	Echo Park	6Z	7

Commercial Building	1840-1842 Glendale Boulevard	Echo Park	6Z	1
Commercial Building	1855 Glendale Boulevard	Echo Park	6Z	2
Western Ukrainian Baptist Church	2030 Glendale Boulevard	Echo Park	6Z	8
Residence	2038 ½ Glendale Boulevard	Echo Park	6Z	9
St. Teresa of Avila Chapel	2204 Fargo Street	Echo Park	3S	4

Saint Teresa of Avila Chapel has been determined eligible for the California Register of Historical Resources under Criterion 3 and has been given a 3CS Status Code, appears eligible for the California Register as a individual property through survey evaluation.

_ Properties previously listed or determined eligible *(include date of listing or determination*

None

_ On behalf of FHWA, Caltrans has determined the following properties are **eligible**:

Name	Address/Location	Community	OHP Status Code	Map Ref #
None				

_ Caltrans, on behalf of FHWA, has determined that the following **archaeological sites** shall be considered eligible for the National Register without conducting subsurface testing or surface collection within the APE, for which the **establishment of an ESA** will protect the sites from any potential effects, in accordance with Section 106 PA Stipulation VIII.C. See attached documentation

_ **State-owned** buildings and structures that are **not eligible** for the National Register or as a State Historical Landmark:

6. LIST OF ATTACHED DOCUMENTATION

(Provide the author/date and peer reviewer/date of the technical report)

X Project Vicinity, Location, and APE Maps

X California Historic Bridge Inventory sheet

-

X Historical Resources Evaluation Report (HRER)

- Portia Lee, Jones & Stokes Associates, 4/18/2007

X Archaeological Survey Report (ASR)

- Catherine M. Wood, Jones & Stokes Associates, 4/18/2007

_ Archaeological Evaluation Report (CARIDAP, XPI, PII, PIII)

-

X Other *(Specify below)*

- Native American correspondence and other interested parties

7. FINDINGS – HPSR to File

(Check all that apply. Do not transmit to SHPO; file copy to CCSO)

_ **One property requiring evaluation** is present within the project's APE.

_ Properties **previously determined not eligible** in consultation with the SHPO, or formally determined not eligible by the Keeper of the National Register are present within the project's APE. Copy of SHPO/Keeper correspondence is attached.

_ Properties **previously determined eligible** in consultation with the SHPO, or formally determined eligible by the Keeper of the National Register are present within the project's APE, but **will not be affected** by the undertaking. Copy of SHPO/Keeper correspondence is attached.

_ Under the authority of FHWA, Caltrans has determined a Finding of **No Historic Properties Affected**, according to Section 106 PA Stipulation IX.A and 36 CFR 800.4(d)(1), is appropriate for this undertaking.

8. FINDINGS – HPSR to SHPO

(Check all that apply. Transmit to SHPO, copy to FHWA and CCSO)

X Under the authority of FHWA, Caltrans has determined that there are properties evaluated as a result of the project that are **not eligible** for inclusion the National Register within the project's APE. Under Section 106 PA Stipulation VIII.C, Caltrans requests SHPO's concurrence in this determination.

Under the authority of FHWA, Caltrans has determined that there are properties evaluated as a result of the project that are **eligible** for inclusion in the National Register within the project's APE. Under Section 106 PA Stipulation VIII.C, Caltrans requests SHPO's concurrence in this determination.

X Under the authority of FHWA, Caltrans has determined a Finding of **No Historic Properties Affected**, according to Section 106 PA Stipulation IX.A and 36 CFR 800.4(d)(1), is appropriate for this undertaking.

_ Under the authority of FHWA, Caltrans has determined a **Finding of No Adverse Effect with Standard Conditions - ESAs**, according to Section 106 PA Stipulation X.B(2) and 36 CFR 800.5(b), is appropriate for this undertaking. *(Include description of ESAs and enforcement measures below; attach ESA Action Plan as appropriate.)*

_ Under the authority of FHWA, Caltrans has determined a **Finding of No Adverse Effect with Standard Conditions – Rehabilitation**, according to Section 106 PA Stipulation X.B(2) and 36 CFR 800.5(b), is appropriate for this undertaking. *[Name]*, who meets the Professionally Qualified Staff Standards in Section 106 PA Attachment 1 as Principal Architectural Historian, and has the appropriate education and experience, has reviewed the rehabilitation documentation and determined that the rehabilitation meets the Secretary of the Interior's Standards for the Treatment of Historic Properties. *(Include description of rehabilitation below or indicate below the title of the HPSR attachment that contains the description.)*

Findings for State-Owned Properties

_ Caltrans has determined that there are **state-owned buildings and structures** within the project limits that meet **National Register and/or the State Historical Landmarks eligibility criteria** and requests that SHPO add such resources to the Master List of Historical Resources pursuant to PRC §5024(d).

– Caltrans has determined that this project will have **no effect/no adverse effect** to **state-owned archaeological sites, objects, districts, landscapes** within the project limits that meet National Register and/or State Historical Landmarks eligibility criteria and is providing notice and summary to SHPO pursuant to PRC §5024(f). *(Indicate reference to Standard Conditions – ESA above, or include description of proposed treatments, ESAs, protective covenants, etc., below or indicate below which HPSR attachment contains the description.)*

-

– Caltrans has determined that this project will have **no effect** on **state-owned buildings and structures** within the project limits that meet National Register and/or State Historical Landmarks eligibility criteria and is providing notice and summary to SHPO pursuant to PRC §5024(f).

-

– Caltrans has determined that this project will have n**o adverse effect** on **state-owned buildings and structures** within the project limits that meet National Register and/or State Historical Landmarks eligibility criteria. *[Name of Caltrans PQS]*, *[applicable PQS discipline/level]* has reviewed the documentation and determined that it meets the <u>Secretary of the Interior's Standards for the Treatment of Historic Properties</u>. Caltrans is providing notice and summary to SHPO pursuant to PRC §5024.5. *(Indicate reference to Standard Conditions – Rehabilitation above, or include description of proposed repairs, rehabilitation, ESAs, protective covenants, etc., below or indicate below, which HPSR attachment contains the description.)*

-

– Caltrans has determined that this project will have an **adverse effect** to **state-owned archaeological sites, objects, districts, landscapes** within the project limits that meet National Register and/or State Historical Landmarks eligibility criteria and is providing notice and summary to SHPO pursuant to PRC §5024(f). *(Include below a description of alternatives considered and proposed mitigation measures, or indicate below which HPSR attachment contains the description.)*

-

– Caltrans has determined that this project will have an **adverse effect** on **state-owned buildings and structures** within the project limits that meet National Register and/or State Historical Landmarks eligibility criteria. Caltrans is providing notice and summary to SHPO pursuant to PRC §5024.5. *(Include below a description of alternatives considered and proposed mitigation measures, or indicate below which HPSR attachment contains the description.)*

-

– For **state-owned qualified historical buildings and properties** within the project limits, Caltrans has **applied the California Historical Building Code** (CHBC) to relevant sections of the current code(s) and/or standards and, if applicable, has consulted with the State Historical Building Safety Board (SHBSB) through its Executive Director pursuant to Health and Safety Code Section 18961 and its implementing regulations at California Code of Regulations Title 24 Part 8 Section8-103.2. [*Indicate below whether use of current code(s) and standards adversely affected character-defining features of the property and describe the alternative solutions under the CHBC, or indicate below which HPSR attachment contains the description. If applicable, attach copies of correspondence with the SHBSB or its Executive Director.)*

9. HPSR PREPARATION AND DEPARTMENT APPROVAL

Prepared by *(sign on line)*:

District 7 Caltrans PQS	*PQS level and discipline]*	4/2008

Prepared by: *(sign on line)*

	Portia Lee	4/2008
Portia Lee	Principal Investigator—Architectural History	
Jones & Stokes Associates	*811 West 7th Street, Suite 800, Los Angeles, 90017*	

Reviewed for approval by: *(sign on line)*	Claudia Harbert	11-20-08
Claudia Harbert,	*Principal Architectural Historian*	Date
Approved by: *(sign on line)*	Gary Swenson	11/20/08
District EBC:	*Division of Environmental Planning*	Date

ATTACHMENTS

Maps

Exhibit 1: Project Vicinity Map

Exhibit 2: Project Location Map

Exhibit 3: Area of Potential Effects Maps

Exhibit 4: Project Alternative Maps

Attached Documentation

California Historic Bridge Inventory

Historical Resource Evaluation Report

Archaeological Survey Report

Letters from Historical Societies, Native American Groups, Local Governments, etc.

MAPS

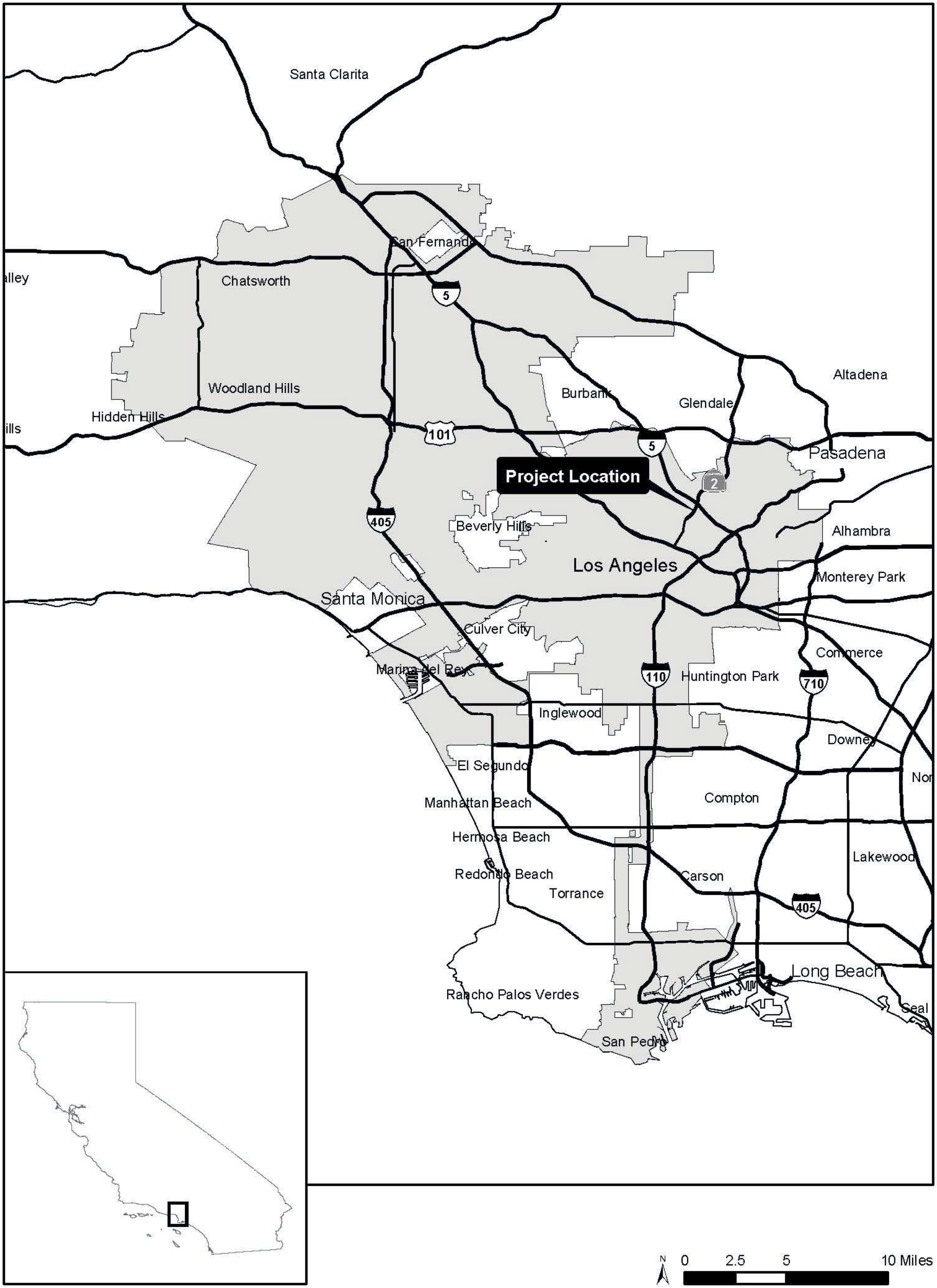
Exhibit 1: Project Vicinity Map

Exhibit 2: Project Location Map

Exhibit 3: Area of Potential Effects Maps

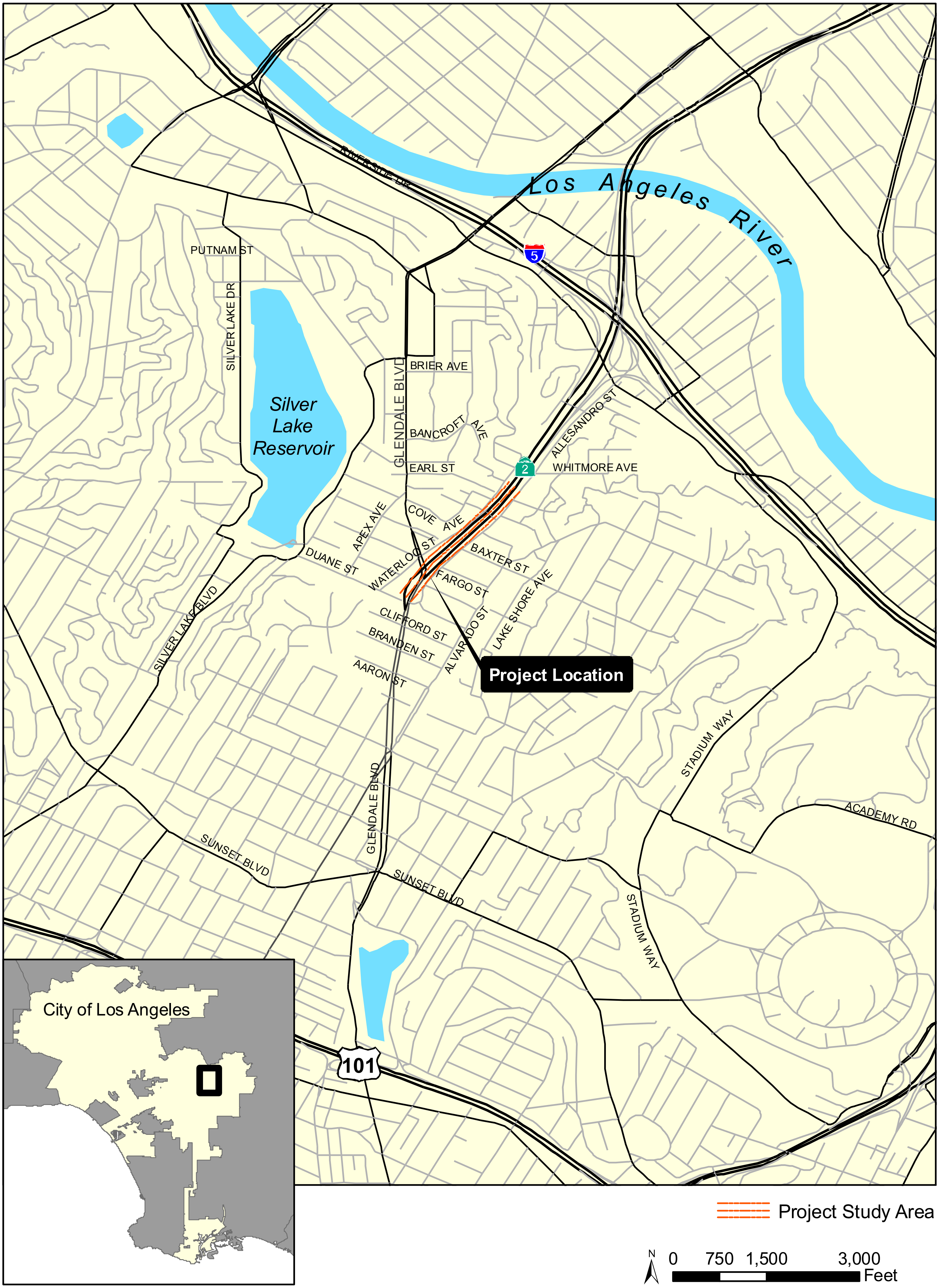
Exhibit 4: Project Alternative Maps

Exhibit 1: Project Vicinity Map



Santa Clarita
San Fernando
Chatsworth
Woodland Hills
Hidden Hills
Burbank
Glendale
Altadena
Pasadena
Project Location
Beverly Hills
Los Angeles
Alhambra
Monterey Park
Santa Monica
Culver City
Marina del Rey
Commerce
Huntington Park
Inglewood
Downey
El Segundo
Manhattan Beach
Compton
Hermosa Beach
Redondo Beach
Torrance
Carson
Lakewood
Long Beach
Rancho Palos Verdes
San Pedro
Seal
5
101
405
2
110
710
N
0
2.5
5
10 Miles

Exhibit 2: Project Location Map



Los Angeles River
RIVERSIDE DR
5
PUTNAM ST
SILVER LAKE DR
Silver Lake Reservoir
GLENDALE BLVD
BRIER AVE
BANCROFT AVE
EARL ST
ALLESANDRO ST
2
WHITMORE AVE
APEX AVE
COVE AVE
DUANE ST
WATERLOO ST
BAXTER ST
FARGO ST
LAKE SHORE AVE
ALVARADO ST
CLIFFORD ST
BRANDEN ST
AARON ST
SILVER LAKE BLVD
Project Location
STADIUM WAY
ACADEMY RD
SUNSET BLVD
GLENDALE BLVD
SUNSET BLVD
STADIUM WAY
101
City of Los Angeles
Project Study Area
N
0 750 1,500 3,000
Feet

Exhibit 3: Area of Potential Effects Maps

AREA OF POTENTIAL EFFECTS
SR-2 Freeway Terminus Improvement Project
Los Angeles County, California
E.A. No.: 07186-20550K PM 13.5 to 15.0; KP 21.8 to 24.1 Date Prepared: November 1, 2006

SOURCE: TeleAtlas (2006); USGS UrbanArea - 0.25 m (2004)

0 250 500 1,000 Feet

APE Map Approvals
[signature] / Prin Arch Hist Date 4-17-2008
Caltrans PQS/Discipline/Level
[signature] Date 4-17-2008
Caltrans Project Manager

Map 1

0 50 100 200
Feet

Map 2

0 50 100 200
Feet

Map 3

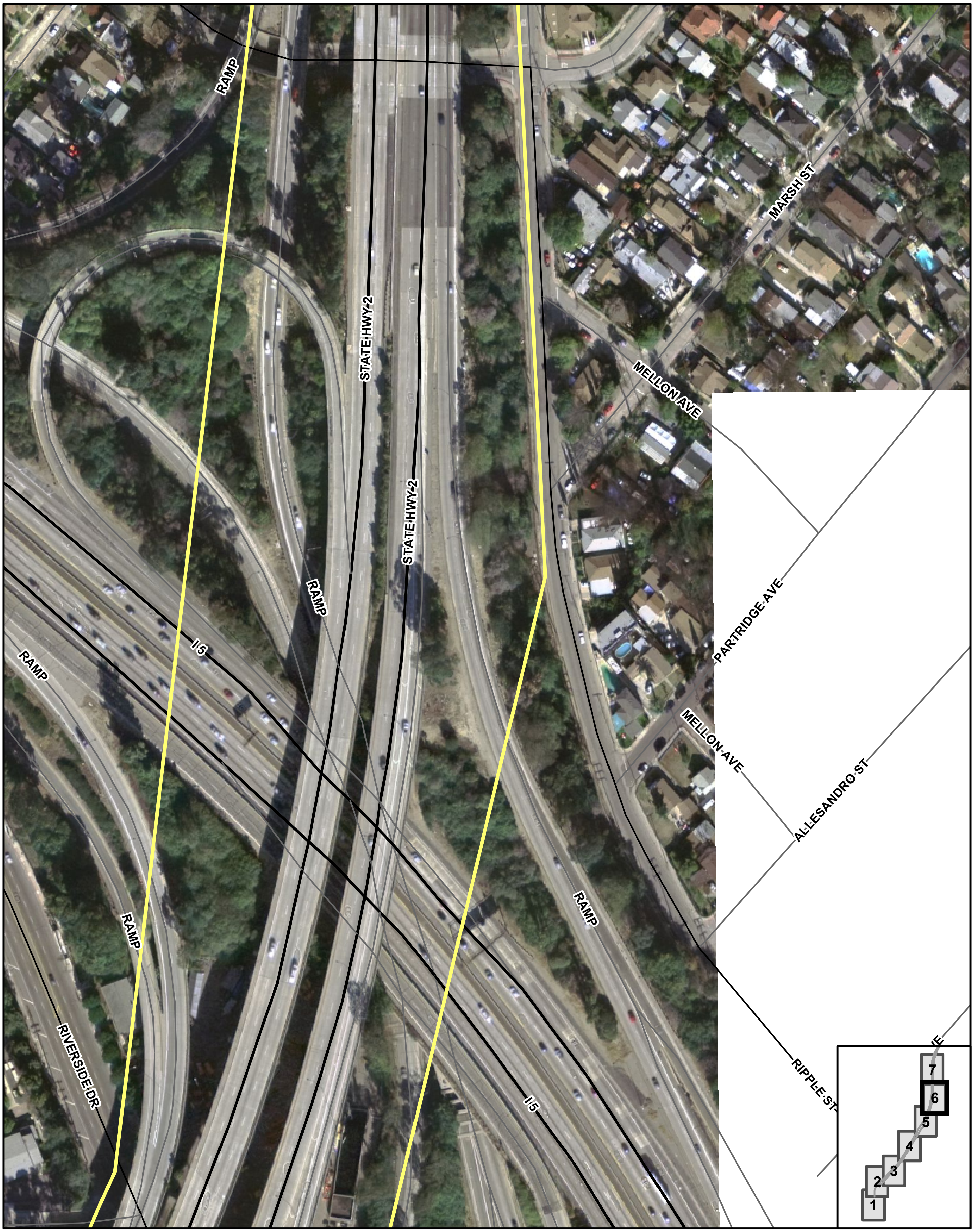
0 50 100 200
Feet

Map 4

0 50 100 200
Feet

Map 5

0 50 100 200
Feet



Map 6

0 50 100 200 Feet

Map 7

0 50 100 200 Feet

Exhibit 4: Project Alternative Maps

No Build and Alternatives A through E

No-Build Alternative (Baseline Alternative)

Source: Melendrez, 2006.

Alternative A (Widen Existing Ramps)

Source: Melendrez, 2006.

Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge)

Source: Melendrez, 2006.

Alternative C (Realign Ramps West – Remove Flyover and Bridge)

Source: Melendrez, 2006.

Alternative D (Realign Ramps East – Retain Flyover and Bridge)

Source: Melendrez, 2006.

Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining Wall)

Source: Melendrez, 2006.

ATTACHED DOCUMENTATION

California Historic Bridge Inventory

Historical Resource Evaluation Report

Archaeological Survey Report

California Historic Inventory Sheets

Structure Maintenance & Investigations

SM&I

Historical Significance - State Agency Bridges

January 2006

District 07

Los Angeles County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
53 1776R	FRAZIER MOUNTAIN UC	07-LA-005-R88.56	5: Not eligible for NRHP	1966	
53 1778L	GORMAN UC	07-LA-005-R85.8	5: Not eligible for NRHP	1966	
53 1778R	GORMAN UC	07-LA-005-R85.8	5: Not eligible for NRHP	1966	
53 1779	TEJON PASS OC	07-LA-005-R87.37	5: Not eligible for NRHP	1966	
53 1782S	HOLLY DRIVE UC RAMP	07-LA-101-7.4-LA	5: Not eligible for NRHP	1965	1977
53 1783	PICO LYONS OC	07-LA-005-R50.33	5: Not eligible for NRHP	1967	
53 1784	HACIENDA BLVD UC	07-LA-060-15.93	5: Not eligible for NRHP	1967	
53 1785	STIMSON AVE UC	07-LA-060-16.3	5: Not eligible for NRHP	1967	
53 1786	FULLERTON ROAD UC	07-LA-060-19.46-IDY	5: Not eligible for NRHP	1967	
53 1787	LEMON AVE UC	07-LA-060-R22.38-DMBR	5: Not eligible for NRHP	1970	
53 1788	FAIRWAY DRIVE UC	07-LA-060-R21.48-IDY	5: Not eligible for NRHP	1970	
53 1789	AZUSA AVE OC	07-LA-060-17.97	5: Not eligible for NRHP	1967	1974
53 1790	LOS ANGELES RIVER BOH	07-LA-134-R5.67-LA	5: Not eligible for NRHP	1967	
53 1790H	W134-5 CONNECTOR BOH	07-LA-134-R5.67-LA	5: Not eligible for NRHP	1967	
53 1792L	CALGROVE BLVD UC	07-LA-005-R49.03-SCTA	5: Not eligible for NRHP	1967	
53 1792R	CALGROVE BLVD UC	07-LA-005-R49.03-SCTA	5: Not eligible for NRHP	1967	
53 1793	WARD WASH	07-LA-014-46.6	5: Not eligible for NRHP	1963	
53 1794	BARREL SPRINGS ROAD OC	07-LA-014-R57.37	5: Not eligible for NRHP	1966	
53 1795	RIVER ACCESS ROAD UC	07-LA-060-11.51-IDY	5: Not eligible for NRHP	1967	
53 1796	WELDON CANYON OC	07-LA-005-R46.58	5: Not eligible for NRHP	1967	
53 1798L	ROUTE 5/138 SEPARATION	07-LA-005-R81.47	5: Not eligible for NRHP	1967	
53 1798R	ROUTE 5/138 SEPARATION	07-LA-005-R81.47	5: Not eligible for NRHP	1967	
53 1799L	QUAIL LAKE ROAD UC	07-LA-005-R81.76	5: Not eligible for NRHP	1967	
53 1799R	QUAIL LAKE ROAD UC	07-LA-005-R81.76	5: Not eligible for NRHP	1967	
53 1800L	ROUTE 5/138 SEPARATION	07-LA-005-R82.08	5: Not eligible for NRHP	1967	
53 1800R	ROUTE 5/138 SEPARATION	07-LA-005-R82.08	5: Not eligible for NRHP	1967	
53 1801E	QUAIL LAKE ROAD UC	07-LA-138-R.24	5: Not eligible for NRHP	1967	
53 1802E	ROUTE 5-138 CONNECTOR	07-LA-138-R.14	5: Not eligible for NRHP	1967	
53 1803F	S5-E138 CONNECTOR OC	07-LA-005-R81.77	5: Not eligible for NRHP	1967	
53 1804	TWEEDY LANE POC	07-LA-005-9.15-DNY	5: Not eligible for NRHP	1982	
53 1805L	SMOKEY BEAR ROAD UC	07-LA-005-R77.96	5: Not eligible for NRHP	1967	
53 1805R	SMOKEY BEAR ROAD UC	07-LA-005-R77.96	5: Not eligible for NRHP	1967	
53 1806	NOGALES STREET OC	07-LA-060-20.43	5: Not eligible for NRHP	1970	
53 1807	HONOR RANCH ROAD OC	07-LA-005-R56.12	5: Not eligible for NRHP	1968	
53 1809	HASLEY CANYON ROAD OC	07-LA-005-R56.6	5: Not eligible for NRHP	1968	
53 1810L	TEMPLIN HIGHWAY UC	07-LA-005-R65.97	5: Not eligible for NRHP	1967	
53 1810R	TEMPLIN HIGHWAY UC	07-LA-005-R65.97	5: Not eligible for NRHP	1967	
53 1811	KWIS AVE POC	07-LA-060-15.58	5: Not eligible for NRHP	1967	
53 1812	BARFORD POC	07-LA-060-16.55	5: Not eligible for NRHP	1967	
53 1813	RIDERWOOD POC	07-LA-060-14.71	5: Not eligible for NRHP	1967	
53 1814	CLIFFORD STREET PUC	07-LA-002-14.02-LA	5: Not eligible for NRHP		
53 1817	MAGNOLIA AVNUE UC	07-LA-210-R33.67-MNRO	5: Not eligible for NRHP	1966	
53 1818	MYRTLE AVENUE UC	07-LA-210-R33.91-MNRO	5: Not eligible for NRHP	1966	

District 07

Los Angeles County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
53 1460	DUVALL STREET ON-RAMP UC	07-LA-005-20.94-LA	5: Not eligible for NRHP	1961	1975
53 1460S	DUVALL STREET ON-RAMP UC	07-LA-005-20.94-LA	5: Not eligible for NRHP	1961	
53 1461	ELMGROVE STREET OFF-RAMP UC	07-LA-005-20.99-LA	5: Not eligible for NRHP	1961	1975
53 1461S	ELMGROVE STREET OFF-RAMP UC	07-LA-005-20.99-LA	5: Not eligible for NRHP	1961	
53 1462R	EB 60 / SB5 SEPARATION	07-LA-060-.45-LA	5: Not eligible for NRHP	1960	
53 1463	PHILADELPHIA STREET STORM DRAIN	07-LA-071-3.88-POM	5: Not eligible for NRHP	1958	1982
53 1464	BEL AIR CREST ROAD N UC	07-LA-405-35.81-LA	5: Not eligible for NRHP	1962	
53 1465	CENTRAL OUTFALL OC	07-LA-405-23.52-ING	5: Not eligible for NRHP	1961	
53 1466	MANCHESTER BLVD OC (N COLLECTOR)	07-LA-405-23.36-ING	5: Not eligible for NRHP	1961	
53 1467	OLINDA STREET POC	07-LA-005-33.98-LA	5: Not eligible for NRHP	1961	
53 1468	STAGG STREET PUC	07-LA-405-43.13-LA	5: Not eligible for NRHP	1962	
53 1469	DISNEY EQUESTRIAN UC	07-LA-134-3.17-LA	5: Not eligible for NRHP	1962	
53 1470M	RUBIO AVE STORM DRAIN	07-LA-101-18.69-LA	5: Not eligible for NRHP	1958	1972
53 1471	VINCENT THOMAS BRIDGE	07-LA-047-.86-LA	5: Not eligible for NRHP	1963	1990
53 1472	WICKS STREET POC	07-LA-005-35.63-LA	5: Not eligible for NRHP	1963	
53 1473H	710-S405 CONNECTOR OC	07-LA-710-9.2-LBCH	5: Not eligible for NRHP	1963	
53 1474	GLENDALE BLVD UC	07-LA-002-14.21-LA	5: Not eligible for NRHP	1962	
53 1475G	ROSEBUD AVE UC	07-LA-002-14.84-LA	5: Not eligible for NRHP	1962	
53 1475L	ROSEBUD AVE UC	07-LA-002-14.84-LA	5: Not eligible for NRHP	1962	
53 1475R	ROSEBUD AVE UC	07-LA-002-14.84-LA	5: Not eligible for NRHP	1962	
53 1476G	N405-N710 CONNECTOR	07-LA-405-7.2-LBCH	5: Not eligible for NRHP	1963	
53 1477	PECK ROAD OC	07-LA-605-R16.65-IDY	5: Not eligible for NRHP	1963	
53 1480	WILLOW STREET UC	07-LA-405-3.01-LBCH	5: Not eligible for NRHP	1963	
53 1481G	N19-N405 CONNECTOR OC	07-LA-019-1.26-LBCH	5: Not eligible for NRHP	1964	
53 1484S	MANCHESTER BLVD ON-RAMP OC	07-LA-405-23.32-ING	5: Not eligible for NRHP	1963	
53 1485F	CADILLAC RAMP SEPARATION (W10-W187)	07-LA-010-R9.22-LA	5: Not eligible for NRHP	1964	
53 1487M	WENTWORTH STREET PUC	07-LA-005-36.59-LA	5: Not eligible for NRHP	1963	
53 1488M	MONTAGUE STREET PUC	07-LA-005-37.16-LA	5: Not eligible for NRHP	1963	
53 1489	STATE UNIVERSITY UP	07-LA-710-R26.59-MONP	5: Not eligible for NRHP	1974	
53 1490	SKIRBALL CENTER DRIVE	07-LA-405-36.72-LA	5: Not eligible for NRHP	1962	
53 1492K	5TH STREET SB VIADUCT	07-LA-110-22.9-LA	5: Not eligible for NRHP	1958	
53 1493S	RIVERSIDE DRIVE OFF-RAMP OC	07-LA-134-.01-LA	5: Not eligible for NRHP	1959	
53 1495M	TUPPER STREET PUC	07-LA-405-44.99-LA	5: Not eligible for NRHP	1963	
53 1496	PLUMMER STREET UC	07-LA-405-45.24-LA	5: Not eligible for NRHP	1963	
53 1497	SUPERIOR STREET PUC	07-LA-405-45.48-LA	5: Not eligible for NRHP	1963	
53 1498	LASSEN STREET UC	07-LA-405-45.74-LA	5: Not eligible for NRHP	1963	1977
53 1499M	MAYALL STREET PUC	07-LA-405-46-LA	5: Not eligible for NRHP	1963	1977
53 1500	DEVONSHIRE STREET UC	07-LA-405-46.24-LA	5: Not eligible for NRHP	1963	1977
53 1501	CHATSWORTH STREET UC	07-LA-405-46.74-LA	5: Not eligible for NRHP	1963	1977
53 1502	TULSA STREET PUC	07-LA-405-46.98-LA	5: Not eligible for NRHP	1963	1977
53 1503	MAGNOLIA BLVD UC	07-LA-170-R15.37-LA	5: Not eligible for NRHP	1962	
53 1504	MORRISON STREET PUC	07-LA-170-R15-LA	5: Not eligible for NRHP	1962	
53 1505	OTSEGO STREET PUC	07-LA-170-R15.3-LA	5: Not eligible for NRHP	1962	

Structure Maintenance & Investigations

SM&I

January 2006

Historical Significance - State Agency Bridges

District 07

Los Angeles County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
53 0435	ORANGE GROVE AVENUE OC	07-LA-110-30.59-SPAS	2: Eligible for NRHP	1939	
53 0436	PROSPECT AVENUE OC	07-LA-110-30.7-SPAS	2: Eligible for NRHP	1939	
53 0437	MERIDIAN AVENUE OC	07-LA-110-30.78-SPAS	2: Eligible for NRHP	1940	
53 0438	FREMONT AVENUE OC	07-LA-110-31.01-SPAS	2: Eligible for NRHP	1940	
53 0439	FREMONT AVE UP	07-LA-110-31.03-SPAS	2: Eligible for NRHP	1940	
53 0440	FAIR OAKS AVENUE OC	07-LA-110-31.17-SPAS	2: Eligible for NRHP	1940	
53 0442	FORD BLVD UC	07-LA-060-R3.3	5: Not eligible for NRHP	1967	
53 0445	MARMION WAY OC	07-LA-110-29.28-LA	2: Eligible for NRHP	1940	
53 0446K	3RD STREET ON-RAMP UC	07-LA-060-R2.54	5: Not eligible for NRHP	1965	
53 0450M	BROAD AVE PUC	07-LA-001-10.47-LA	5: Not eligible for NRHP	1939	
53 0455	CALABASAS CREEK	07-LA-027-13.93-LA	5: Not eligible for NRHP	1962	
53 0456M	GUNDRY AVE PUC	07-LA-001-5.39-LBCH	5: Not eligible for NRHP	1939	1967
53 0466	BARHAM BLVD OC	07-LA-101-9.22-LA	5: Not eligible for NRHP	1940	
53 0467M	OAKCREST DRIVE PUC	07-LA-101-9.03-LA	5: Not eligible for NRHP	1940	
53 0468	PILGRIMAGE OC	07-LA-101-8.05-LA	5: Not eligible for NRHP	1940	
53 0477L	ELYSIAN PARK PUC	07-LA-110-25.36-LA	5: Not eligible for NRHP	1942	
53 0477R	ELYSIAN PARK PUC	07-LA-110-25.33-LA	5: Not eligible for NRHP	1931	
53 0485M	PILGRIMAGE PUC	07-LA-101-8.03-LA	5: Not eligible for NRHP	1940	1954
53 0486M	FIREY AVE WASH	07-LA-066-.92-LVN	5: Not eligible for NRHP		1929
53 0489M	SHERIFFS RANGE WASH	07-LA-010-21.41-MONP	5: Not eligible for NRHP	1974	
53 0490	WHITSETT AVENUE OC	07-LA-170-R18.65-LA	5: Not eligible for NRHP	1968	
53 0498	BEACH PUC	07-LA-001-36.89-LA	5: Not eligible for NRHP	1934	
53 0499	ROOSEVELT PUC	07-LA-001-37.05-LA	5: Not eligible for NRHP	1934	1951
53 0502M	COBBLE PUC	07-LA-001-39.94-LA	5: Not eligible for NRHP		
53 0504L	AMADOR STREET UC	07-LA-110-25.04-LA	5: Not eligible for NRHP	1942	2001
53 0515	NORTH FORK SAN GABRIEL RIVER	07-LA-039-32.5	5: Not eligible for NRHP	1932	
53 0527L	ROUTE 2/5 SEPARATION	07-LA-002-14.98-LA	5: Not eligible for NRHP	1961	
53 0527R	ROUTE 2/5 SEPARATION	07-LA-002-14.98-LA	5: Not eligible for NRHP	1961	
53 0532R	SOLANO AVENUE PUC	07-LA-110-25.10-LA	5: Not eligible for NRHP	1931	1942
53 0533L	FIGUEROA STREET OFF-RAMP UC	07-LA-110-25.78-LA	2: Eligible for NRHP	1940	
53 0534	FLOOD FLOW CHANNEL	07-LA-164-2.06	5: Not eligible for NRHP	1952	
53 0535K	SAN FERNANDO BLVD UC	07-LA-005-30.76-BRB	5: Not eligible for NRHP	1942	
53 0538	CYPRESS AVE POC	07-LA-110-26.19-LA	5: Not eligible for NRHP	1961	
53 0539C	HILL STREET 0FF-RAMP OC	07-LA-110-24.55-LA	5: Not eligible for NRHP	1942	
53 0540L	STADIUM WAY UC	07-LA-110-24.73-LA	2: Eligible for NRHP	1942	2001
53 0540R	STADIUM WAY OC	07-LA-110-24.76-LA	2: Eligible for NRHP	1942	
53 0541L	SOLANO AVENUE UC	07-LA-110-25.09-LA	5: Not eligible for NRHP	1942	2001
53 0542L	PARK ROW OC	07-LA-110-25.2-LA	5: Not eligible for NRHP	1942	
53 0546M	FRIES AVE PUC	07-LA-001-10.71-LA	5: Not eligible for NRHP	1939	
53 0551	WOODROW WILSON DRIVE PUC	07-LA-101-8.82-LA	5: Not eligible for NRHP	1940	1958
53 0552	DOUGLAS PUC SOUTH	07-LA-019-2.72-LBCH	5: Not eligible for NRHP	1941	
53 0553	DOUGLAS PUC NORTH	07-LA-019-2.83-LBCH	5: Not eligible for NRHP	1941	
53 0555L	MISSION ROAD ON-RAMP UC	07-LA-101-S1.28-LA	5: Not eligible for NRHP	1947	

Structure Maintenance & Investigations

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Historical Significance - State Agency Bridges

January 2006

District 07

Los Angeles County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
53 0147R	RED ROVER MINE ROAD UC	07-LA-014-R47.34	5: Not eligible for NRHP	1965	
53 0148	TELEPHONE OC	07-LA-405-23.30-ING	5: Not eligible for NRHP	1961	
53 0162	NEWELL STREET UC	07-LA-005-22.26-LA	5: Not eligible for NRHP	1961	
53 0162H	NEWELL STREET UC	07-LA-002-14.97-LA	5: Not eligible for NRHP	1961	
53 0162K	NEWELL STREET UC	07-LA-005-22.26-LA	5: Not eligible for NRHP	1961	
53 0163	RIVERSIDE DRIVE UC	07-LA-005-21.94-LA	5: Not eligible for NRHP	1961	
53 0164	GILROY STREET UC	07-LA-005-22.78-LA	5: Not eligible for NRHP	1961	1974
53 0164H	GILROY STRET UC	07-LA-002-15.3-LA	5: Not eligible for NRHP	1961	
53 0166	ARROYO SECO	07-LA-134-R12.57-PAS	5: Not eligible for NRHP	1953	1971
53 0171	FLORENCE AVENUE OC	07-LA-005-6.38-SFSP	5: Not eligible for NRHP	1953	
53 0183	EL NIDO UP	07-LA-107-3.73-TOR	5: Not eligible for NRHP	1926	1958
53 0184	ANGELES CREST TUNNEL 1	07-LA-002-62.82	5: Not eligible for NRHP	1950	
53 0199R	FIGUEROA STREET TUNNEL	07-LA-110-24.9-LA	5: Not eligible for NRHP	1936	
53 0200R	FIGUEROA STREET TUNNEL	07-LA-110-25.14-LA	5: Not eligible for NRHP	1931	
53 0201R	FIGUEROA STREET TUNNEL	07-LA-110-25.28-LA	5: Not eligible for NRHP	1931	
53 0202R	FIGUEROA STREET TUNNEL	07-LA-110-25.37-LA	5: Not eligible for NRHP	1931	
53 0213	SAN GABRIEL RIVER	07-LA-005-7.06-DNY	5: Not eligible for NRHP	1953	1965
53 0214	CARMENITA ROAD OC	07-LA-005-2.41-NRW	5: Not eligible for NRHP	1955	
53 0215L	LOS CERRITOS CHANNEL	07-LA-022-1.09-LBCH	5: Not eligible for NRHP	1959	2000
53 0215R	LOS CERRITOS CHANNEL	07-LA-022-1.09-LBCH	5: Not eligible for NRHP	1955	2000
53 0232	RIVERA UP	07-LA-019-13.30-PRV	5: Not eligible for NRHP	1937	1971
53 0233	PICO UP	07-LA-019-15.69-PRV	5: Not eligible for NRHP	1938	
53 0235	RIO HONDO	07-LA-164-4.91-EMTE	5: Not eligible for NRHP	1937	1951
53 0237	ROSEMEAD UNDERPASS	07-LA-164-5.63-RSMD	5: Not eligible for NRHP	1951	1972
53 0238	RUDELL UNDERPASS	07-LA-164-6.89-TMPC	5: Not eligible for NRHP	1938	
53 0240	TEMPLE STREET UC	07-LA-110-23.61-LA	5: Not eligible for NRHP	1948	
53 0240G	TEMPLE STREET UC	07-LA-110-23.61-LA	5: Not eligible for NRHP	1948	
53 0240H	TEMPLE STREET UC	07-LA-101-1.63-LA	5: Not eligible for NRHP	1948	1996
53 0242	PALMS BLVD OC	07-LA-405-28.51-LA	5: Not eligible for NRHP	1959	
53 0246	SUNSET BLVD OC	07-LA-110-23.83-LA	5: Not eligible for NRHP	1948	
53 0255	LOS ANGELES RIVER	07-LA-002-15.52-LA	5: Not eligible for NRHP	1961	
53 0256	RIPPLE STREET UC	07-LA-002-15.32-LA	5: Not eligible for NRHP	1961	
53 0256F	RIPPLE STREET UC	07-LA-002-15.32-LA	5: Not eligible for NRHP	1961	
53 0276	ARROYO SECO	07-LA-110-30.1-SPAS	2: Eligible for NRHP	1939	
53 0278M	EASTMAN AVE PUC	07-LA-005-14.60-VER	5: Not eligible for NRHP	1951	
53 0279	COYOTE CREEK	07-LA-005-.34-LMRD	5: Not eligible for NRHP	1934	1959
53 0283F	RIPPLE STREET UC	07-LA-002-15.44-LA	5: Not eligible for NRHP	1961	
53 0301	MULHOLLAND OC	07-LA-101-8.75-LA	5: Not eligible for NRHP	1940	
53 0302L	SAN GABRIEL RIVER	07-LA-022-1.42-LBCH	5: Not eligible for NRHP	1959	2000
53 0302R	SAN GABRIEL RIVER	07-LA-022-1.42-LBCH	5: Not eligible for NRHP	1941	2000
53 0303L	LITTLE ROCK CREEK	07-LA-138-53.55	5: Not eligible for NRHP	1952	
53 0303R	LITTLE ROCK CREEK	07-LA-138-53.55	4: Hist sign not determi	1995	
53 0308	MARSHALL CREEK	07-LA-030-2.73-LVN	5: Not eligible for NRHP	1966	1983

Structure Maintenance & Investigations

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Historical Significance - State Agency Bridges

January 2006

District 07

Los Angeles County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
53 1373	NORTH BROADWAY OC	07-LA-005-19.73-LA	5: Not eligible for NRHP	1960	
53 1374	HUMBOLDT STREET UP	07-LA-005-20.12-LA	5: Not eligible for NRHP	1962	1972
53 1375	KESTER AVE UC	07-LA-101-16.43-LA	5: Not eligible for NRHP	1959	1992
53 1376	VAN NUYS BLVD UC	07-LA-101-15.91-LA	5: Not eligible for NRHP	1959	1992
53 1377	MARIPOSA EQUESTRIAN UC	07-LA-134-3.69-BRB	5: Not eligible for NRHP	1962	
53 1378	RUBERTA EQUESTRAIN UC	07-LA-134-4.43-LA	5: Not eligible for NRHP	1962	
53 1379	PASADENA AVE OC	07-LA-005-19.86-LA	5: Not eligible for NRHP	1960	
53 1380	ETIWANDA AVE PUC	07-LA-101-20.95-LA	5: Not eligible for NRHP	1959	
53 1381	YOLANDA AVE PUC	07-LA-101-21.54-LA	5: Not eligible for NRHP	1959	
53 1382	ZELZAH AVE PUC	07-LA-101-20.44-LA	5: Not eligible for NRHP	1959	
53 1384	CAMARILLO STREET PUC	07-LA-405-39.25-LA	5: Not eligible for NRHP	1958	
53 1385	VANALDEN AVE PUC	07-LA-101-22.07-LA	5: Not eligible for NRHP	1959	
53 1386F	S5-E60 CONNECTOR OC	07-LA-005-16.59-LA	5: Not eligible for NRHP	1960	
53 1387R	MARIETTA STREET UC	07-LA-005-16.29-LA	5: Not eligible for NRHP	1960	
53 1388S	EUCLID AVE ON-RAMP OC	07-LA-005-16.13-LA	5: Not eligible for NRHP	1960	
53 1389L	EUCLID AVE OFF-RAMP UC	07-LA-005-16.14-LA	5: Not eligible for NRHP	1960	
53 1390R	SOTO STREET UC	07-LA-005-16.59-LA	5: Not eligible for NRHP	1960	
53 1391L	ROUTE 5/60 SEPARATION	07-LA-005-16.59-LA	5: Not eligible for NRHP	1960	
53 1392L	MARIETTA STREET UC	07-LA-005-16.29-LA	5: Not eligible for NRHP	1960	
53 1393R	EB 60/5 SEPARATION	07-LA-060-R.63-LA	5: Not eligible for NRHP	1965	
53 1394G	MARIETTA STREET UC (E60-S5)	07-LA-060-R.69-LA	5: Not eligible for NRHP	1960	
53 1395S	SOTO STREET OFF-RAMP OC	07-LA-005-16.37-LA	5: Not eligible for NRHP	1960	
53 1396L	BOYLE AVENUE OC	07-LA-060-.28-LA	5: Not eligible for NRHP	1960	
53 1397R	ROUTE 5/60 SEPARATION (N5-W60)	07-LA-005-16.36-LA	5: Not eligible for NRHP	1960	1965
53 1398L	MARIETTA STREET OC	07-LA-060-R.73-LA	5: Not eligible for NRHP	1960	
53 1399	SHIRLEY AVE PUC	07-LA-101-22.52-LA	5: Not eligible for NRHP	1959	
53 1400	OAKDALE AVE PUC	07-LA-101-22.99-LA	5: Not eligible for NRHP	1959	
53 1401	SLAUSON AVENUE UC	07-LA-405-26.08-CLC	5: Not eligible for NRHP	1960	
53 1401F	W90-N405 CONNECTOR OC (SLAUSON)	07-LA-090-2.62-CLC	5: Not eligible for NRHP	1968	
53 1402	PORT ROAD UC	07-LA-405-26.29-CLC	5: Not eligible for NRHP	1960	1968
53 1403	SAWTELLE BLVD UC	07-LA-405-27.08-CLC	5: Not eligible for NRHP	1960	
53 1404S	PASADENA AVE ON-RAMP OC	07-LA-005-20-LA	5: Not eligible for NRHP	1959	
53 1405	LACY STREET UP	07-LA-005-20.26-LA	5: Not eligible for NRHP	1962	
53 1407L	TIMES SPUR UP	07-LA-060-.15-LA	5: Not eligible for NRHP	1960	
53 1408	VAN OWEN STREET UC	07-LA-405-41.86-LA	5: Not eligible for NRHP	1963	
53 1409	ROSCOE BLVD UC	07-LA-405-43.76-LA	5: Not eligible for NRHP	1963	
53 1410	NORDHOFF STREET UC	07-LA-405-44.74-LA	5: Not eligible for NRHP	1963	
53 1411K	NORTH BROADWAY OFF-RAMP UC	07-LA-005-19.5-LA	5: Not eligible for NRHP	1960	
53 1414	OAK GLEN PLACE OC	07-LA-002-14.46-LA	5: Not eligible for NRHP	1962	
53 1415	WEST WHITTIER UP	07-LA-605-R14.08-PRV	5: Not eligible for NRHP	1964	
53 1416	SAN JOSE DIVERSION CHANNEL	07-LA-605-R17.69-IDY	5: Not eligible for NRHP	1964	
53 1417L	AVENUE S UC	07-LA-014-R58.17	5: Not eligible for NRHP	1966	
53 1417R	AVENUE S UC	07-LA-014-R58.17	5: Not eligible for NRHP	1966	

District 07

Los Angeles County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
53 0555R	MISSION ROAD ON-RAMP UC	07-LA-101-S1.28-LA	5: Not eligible for NRHP	1947	
53 0556F	S101-E10 CONNECTOR OC	07-LA-101-S1.32-LA	5: Not eligible for NRHP	1944	
53 0559F	RIVERSIDE DRIVE UC (S5-W2)	07-LA-005-22.48-LA	5: Not eligible for NRHP	1961	
53 0560	SPRING STREET STORM DRAIN	07-LA-019-1.57-LBCH	5: Not eligible for NRHP	1958	
53 0562G	NW CONNECTOR SEPARATION	07-LA-005-22.63-LA	5: Not eligible for NRHP	1961	
53 0567G	RIVERSIDE DRIVE UC	07-LA-002-14.96-LA	5: Not eligible for NRHP	1961	
53 0568	NORTH RANCHITO PUC	07-LA-019-15.9-PRV	5: Not eligible for NRHP	1938	
53 0569	HOLLYWD BOWL PUC	07-LA-170-10.57-LA	5: Not eligible for NRHP	1937	1954
53 0570G	RIVERSIDE DRIVE UC	07-LA-002-14.95-LA	5: Not eligible for NRHP	1961	
53 0571L	RUBIO WASH	07-LA-010-26.73-RSMD	5: Not eligible for NRHP	1953	1972
53 0571R	RUBIO WASH	07-LA-010-26.73-RSMD	5: Not eligible for NRHP	1953	1972
53 0577	CONNECTOR UC	07-LA-005-22.51-LA	5: Not eligible for NRHP	1961	
53 0579	FLINT CANYON WASH	07-LA-210-R21.84-PAS	5: Not eligible for NRHP	1974	
53 0580	CONANT STREET PUC	07-LA-019-2.5-LBCH	5: Not eligible for NRHP	1941	
53 0582	1ST STREET UC	07-LA-101-S.91-LA	5: Not eligible for NRHP	1947	
53 0583	FOURTH STREET OC	07-LA-101-S.62-LA	5: Not eligible for NRHP	1947	
53 0586M	YALE STREET PUC	07-LA-110-24.4-LA	5: Not eligible for NRHP	1940	
53 0592	ALPINE STREET OC	07-LA-110-23.96-LA	5: Not eligible for NRHP	1948	
53 0593	IMPERIAL HIGHWAY UC	07-LA-005-4.91-NRW	5: Not eligible for NRHP	1954	1958
53 0594	SAN ANTONIO DRIVE UC	07-LA-005-4.41-NRW	5: Not eligible for NRHP	1954	1958
53 0595	SIXTH STREET OC	07-LA-101-S.2-LA	2: Eligible for NRHP	1932	
53 0596	SEVENTH STREET OC	07-LA-101-S.02-LA	5: Not eligible for NRHP	1948	
53 0597	BOYLE AVENUE OC	07-LA-005-16.76-LA	5: Not eligible for NRHP	1947	1960
53 0598	SOTO STREET UC	07-LA-005-16.59-LA	5: Not eligible for NRHP	1948	
53 0598F	SOTO STREET UC (W60-N101)	07-LA-060-.39-LA	5: Not eligible for NRHP	1960	
53 0599	ROUTE 5/60 SEPARATION	07-LA-005-16.44-LA	5: Not eligible for NRHP	1948	
53 0600	MARIETTA STREET UC	07-LA-005-16.29-LA	5: Not eligible for NRHP	1948	
53 0600S	MARIETTA STREET UC	07-LA-005-16.29-LA	5: Not eligible for NRHP	1960	
53 0601	EUCLID AVENUE UC	07-LA-005-16.05-LA	5: Not eligible for NRHP	1948	1960
53 0602	LORENA STREET OC	07-LA-005-15.65-LA	5: Not eligible for NRHP	1947	
53 0603	ESPERANZA STREET OC	07-LA-005-15.33-LA	5: Not eligible for NRHP	1948	
53 0604	INDIANA STREET UC	07-LA-005-14.94-LA	5: Not eligible for NRHP	1948	1975
53 0605M	9TH ST STORM DRAIN (N)	07-LA-071-1.9-POM	5: Not eligible for NRHP	1958	
53 0606	OLYMPIC BLVD OC	07-LA-005-14.16	5: Not eligible for NRHP	1951	
53 0607	EASTERN AVE OC	07-LA-005-13.89-CMRC	5: Not eligible for NRHP	1951	
53 0609	VERMONT AVENUE OC	07-LA-101-4.4-LA	5: Not eligible for NRHP	1949	
53 0610M	9TH ST STORM DRAIN (S)	07-LA-071-1.92-POM	5: Not eligible for NRHP	1958	
53 0611L	VIRGIL AVENUE UC	07-LA-101-4.08-LA	5: Not eligible for NRHP	1949	1963
53 0611R	VIRGIL AVENUE UC	07-LA-101-4.08-LA	5: Not eligible for NRHP	1949	
53 0612	HOOVER STREET UC	07-LA-101-3.94-LA	5: Not eligible for NRHP	1949	1963
53 0613	SILVER LAKE BLVD UC	07-LA-101-3.76-LA	5: Not eligible for NRHP	1948	
53 0614	BENTON WAY OC	07-LA-101-3.34-LA	5: Not eligible for NRHP	1947	
53 0615	CORONADO STREET UC	07-LA-101-3.2-LA	5: Not eligible for NRHP	1949	

Historical Resources Evaluation Report

State Route 2 Freeway Terminus Project

Historical Resources Evaluation Report

State Route 2 Freeway Terminus Improvement Project

City of Los Angeles, County of Los Angeles, California

District 07-LA-2-KP 21.8/24.1 (PM 13.5/15.0)

EA 205500

3rd Draft, June 2008

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to the California Department of Transportation, Attn: Marie J. Petry, Environmental Studies/Support B, 464 W. 4th St., 6th Floor, MS 821, San Bernardino, CA 92401, (909) 383-6379; or use the California Relay Service TTY number, (909) 383-6300.

Standards and formats used in this template are taken from the *Department Style Guide for Environmental Documents*, April 2002, and from the following Department guidance:

- California Department of Transportation. *Streamlined Environmental Impact Report/Environmental Impact Statement (EIR/EIS) Outline*. Available: <http://www.dot.ca.gov/ser/forms.htm>. March 10, 2003. Accessed May 2004.
- California Department of Transportation. *Initial Study/Environmental Assessment (IS/EA) Annotated Outline*. Available: <http://www.dot.ca.gov/ser/forms.htm>. March 2004. Accessed May 2004.

- California Department of Transportation *Environmental Handbook Volume 2 Cultural Resources*. January 2004 Draft.

State Route 2 Freeway Terminus Improvement Project

07-LA-2-KP 21.8/24.1 (PM 13.5/15.0)

EA 205500

Prepared By: ______________________________ Date: May 5, 2008

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June 2008

Summary of Findings

The Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the California Department of Transportation (Caltrans) and the Los Angeles Department of Transportation (LADOT), proposes to modify the southern terminus of State Route 2 (SR-2), also known as the Glendale Freeway, located in the City of Los Angeles, Los Angeles County, California (Exhibit 1). The proposed project construction limits are located approximately between Clifford Street to the south and Oak Glen Place to the north; however, the overall project study area is generally located between Aaron Street to the south and Interstate 5 (I-5) to the north (Exhibit 2.) The purpose of the project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses. The proposed project traverses a populated urban rural area of commercial properties along Glendale Boulevard, residential neighborhoods to the west and east of Glendale Boulevard and adjacent hillside areas above SR-2 as it approaches I-5.

This Historical Resources Evaluation Report (HRER) has been prepared in order to comply with Section 106 of the National Historic Preservation Act of 1966, as amended. The HRER is used to document identification, recordation, and evaluation efforts for historical archaeological resources, built environment resources, and linear features. This HRER implements the revised regulations (amendments effective August 5, 2004) of the Advisory Council on Historic Preservation for the Protection of Historic Properties (36 CFR 800) and was prepared in accordance with the format set forth in the Department's Environmental Handbook, Volume 2, Exhibit 6.2 (January 2004 DRAFT) and under the provisions of the Section 106 PA..

A records search at the South Central Coastal Information Center was undertaken on November 20, 2005. An architectural field survey of all properties within the Area of Potential Effects (APE) was undertaken on April 3, 2006 according to standard Department of Transportation guidelines and procedures (Exhibit 3). Nine properties were evaluated in this HRER; however, none were found to be eligible for inclusion in the National Register of Historic Places. Richard Starzak and Portia Lee, Jones and Stokes staff members who meet the Professionally Qualified Staff Standards in Section 106 PA Attachment 1, have determined that all other properties present within the APE, including state-owned resources, meet the criteria for Section 106 PA Attachment 4 (Properties Exempt from Evaluation).

One institutional property within the APE of the survey area meets the criteria for eligibility to the California Register of Historic Places: St. Teresa of Avila Church at 2216 Fargo Street. Nine residential and commercial properties at 1840-1842 Glendale Boulevard; 1855 Glendale Boulevard (Van Lines, Bert Co. Graphics); 2030 Glendale Boulevard (Edendale Library, Ukrainian Church); 2038 ½ Glendale Blvd.; 2227-2229 Ewing Street; 2215, 2223 Fargo Street (St. Teresa School and Convent); and 2219 Baxter Street do not meet the criteria for inclusion on the National Register of Historic Place or the California Register of Historic Resources.

Table of Contents

List of Tables

Exhibits

Appendices

List of Abbreviated Terms

APE	Area of Potential Effect
CEQA	California Environmental Quality Act
CHRIS	California Inventory of Historic Resources
Caltrans	California Department of Transportation
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
FHWA	Federal Highway Administration
Ft	foot/feet
GIS	geographic information system
Km	kilometer(s)
LADOT	Los Angeles Department of Transportation
LADRP	Los Angeles Department of Recreation and Parks
M	meter(s)
Metro	Los Angeles County Metropolitan Transportation Authority
Mi	mile(s)
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PM	post mile
PQS	Professionally Qualified Staff
ROW	Right-of-Way
Section 106 PA	Programmatic Agreement among the FHWA, Advisory Council, SHPO, and the Department regarding compliance with Section 106 of the National Historic Preservation Act, as it pertains to the administration of the Federal-Aid Highway Program in California, effective January 1, 2004.
SR	State Route
TBD	to be determined
USACE	United States Army Corps of Engineers

Chapter 1 Project Description

1.1 Scope of Proposed Project

Metro, in cooperation with the Caltrans and LADOT, is proposing to modify the southern terminus of SR-2 at Glendale Boulevard to develop a balanced transportation system serving local and regional transportation needs while reducing congestion and improving transportation mobility at the SR-2 freeway terminus. The objectives are to improve traffic flow at the freeway terminus, design the freeway terminus to be compatible with existing residential and commercial uses, provide pedestrian enhancements at the SR-2 freeway terminus, and create the opportunity for potential additional open space in the vicinity of the SR-2 terminus.

The proposed project construction limits are located approximately between Clifford Street to the south and Oak Glen Place to the north; however, the overall project study area is generally located between Aaron Street to the south and I-5 to the north (Exhibit 2). The proposed project traverses a populated urban rural area of commercial properties along Glendale Boulevard and residential neighborhoods west and east of Glendale Boulevard and on the adjacent hillside areas above SR-2 as it approaches I-5.

There are six proposed alternatives for the SR-2 Freeway Terminus Improvement Project, including the No-Build Alternative. The proposed project site is generally located between Clifford Street to the south and Oak Glen Place to the north. The six proposed alternatives are summarized as follows: (See Exhibit 4 in the Maps Section attached to this HRER.)

- **No-Build Alternative (Baseline Alternative):** This alternative requires no new construction.
- **Alternative A (Widen Existing Ramps):** This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp and bridge (two lanes). This alternative does not have the potential for new open space.
- **Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge):** This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would also remove the southbound flyover ramp and a portion of the bridge over Glendale Boulevard. The remaining portion of the bridge over Glendale Boulevard would be retained for community reuse and greening. This alternative offers the potential for new open space for recreational opportunities.

- **<u>Alternative C (Realign Ramps West – Remove Flyover and Bridge):</u>** This alternative would shift entrance and exit ramps to the west. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and bridge over Glendale Boulevard. This alternative provides a landscaped median and a parkway treatment. This alternative offers the potential for new open space but not recreational opportunities.
- **<u>Alternative D (Realign Ramps East – Retain Flyover and Bridge):</u>** This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to community open space and a recreational area. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged. This alternative offers the potential for new open space.
- **<u>Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining Wall):</u>** This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to community open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. The existing retaining wall along Allesandro Street would be relocated to the east to maintain Caltrans streets and highway standards. This alternative offers the potential for new open space. See Exhibit 4, in the Maps section attached to this Historic Resources Evaluation Report.

Caltrans is the lead agency under the California Environmental Quality Act (CEQA), and Federal Highway Administration (FHWA) is the lead agency under the National Environmental Policy Act (NEPA). Proposed project construction is jointly funded by a combination of local, state, and federal funds.

1.2 Area of Potential Effects

The direct Area of Potential Effects (APE) for the proposed project includes the maximum existing or proposed right-of-way for all alternatives currently under consideration, easements (temporary and permanent), and any area where ground may be disturbed by construction activities. The indirect APE includes all built environment properties subject to acquisition (partial and full), changes in access, or where visual or audible changes could affect their use (see Exhibit 3). On May 18, 2006, the draft APE map was reviewed in a meeting with the Department, and comments were received. The APE map was approved by Caltrans on [date to be inserted when approved].

Chapter 2 Research Methods

2.1 Sources of Information

Jones & Stokes Associates conducted archival research to determine the location of previously documented historic and architectural resources proximate to the proposed project and help establish a context for resource significance. Pre-field research included a records search conducted at the South Central Coastal Information Center, California Historical Resources Information System, on April 6, 2006 and June 7, 2006. Background research was obtained from various cultural resources studies previously completed in the proposed project area, including:

Books and Pamphlets

Fogelson, Robert M.
The Fragmented Metropolis, Los Angeles 1850–1830. Berkeley: University of California Press, c1993.

Mullaly, Larry, and Bruce Petty
The Southern Pacific in Los Angeles, 1873–1996. Golden West Books and the Los Angeles Railroad Heritage Foundation, P.O. Box 80250, San Marino, California 91118.

National, state, and local inventories of architectural/historic resources were examined in order to identify local historical events and personages, development patterns, and interpretations of architectural styles.
The following standard sources of information were consulted in the process of compiling this report:

- National Register web site (www.cr.nps.gov/nr), through October 1, 2004;
- California Historical Landmarks (State of California, 1996) et seq.;
- California Points of Historical Interest (State of California, 1992) et seq.;
- California Department of Transportation Historic Bridge Inventory;

According to the above-mentioned sources, none of the properties within the APE appear on any federal, state, or local lists of historical resources.
Other sources consulted:

- Academy of Motion Pictures Arts and Sciences, Margaret Herrick Margaret Herrick Library

- Bruce Torrance Hollywood Photography Collection
- Bison Archives Los Angeles
- California Department of Transportation District 7 Library, 5/2006
- California Department of Transportation Department Headquarters Library, 6/2006
- Los Angeles Department of Recreation and Parks
- Echo Park Historical Society Archives
- Riordan Los Angeles Public Library; California Index and Photography Collection
- Silver Lake Research Association

2.2 Themes to Establish Historic Context

Robert Fogelson's The *Fragmented Metropolis, and* the Los Angeles Public Library's California Index, together with the exhaustive coverage of the Los Times and the comprehensive coverage of the historical Los Angeles was used to establish the historical context and appropriate research themes within which the resources within the APE were evaluated. The research themes included:

a. **Development of the Edendale Tract.** The early 20th century settlement of Edendale as a suburb of downtown Los Angeles through the subdivision of farmland and unoccupied land holdings in the context of the extension of the street railway system.

b. **Establishment of the motion picture industry in Los Angeles.** Pioneers of the motion picture industry in Los Angeles established their studios along Allesandro Avenue (Glendale Boulevard). Nearly a dozen studios operated in the Edendale area, building stages, sets, workshops, and offices along Allesandro Avenue in the first decades of the 20th century.

2.3 Public Participation and Consultation

On September 25, 2006, a letter and map set was sent to consulting and interested parties who may have knowledge or concerns with historic properties in the area, and to request information regarding any historic buildings, districts, sites, objects, or archeological sites of significance within the proposed project area. The letter was sent to the following recipients:

ARCHITECTURE AND CONSERVATION

AIA Los Angeles
3780 Wilshire Blvd., Suite 800
Los Angeles, CA 90010

Los Angeles Forum for Architecture and Urban Design
Warren Techentin - President
P.O. Box 291774
Los Angeles, CA 90029-8774

Friends of the Los Angeles River
Joe Linton
Outreach Director
Lewis MacAdams - Chair of the Board of Directors
570 W. Ave 26, #250
Los Angeles, CA 90065

Getty Conservation Institute
Timothy P. Whalen - Director
1200 Getty Center Drive, #700
Brentwood, Ca 90049

PRESERVATION ORGANIZATIONS AND ARCHIVES

Mark Wanamaker
Bison Archives
650 N. Bronson Avenue B112
Los Angeles, California 90004

California Preservation Foundation
5 Third St., Ste 424,
San Francisco, CA 94103.

Los Angeles Conservancy
Jay Platt – Preservation Advocate
523 West 6th Street, Suite 800
Los Angeles, CA 90014

HISTORICAL SOCIETIES

Echo Park Historical Society
Kevin Kuzma – Interim President
P.O. Box 261022,
Los Angeles, CA 90026

California Historical Society
1120 Old Mill Road
San Marino, CA 91108
Historical Society of Southern California
200 East Avenue 43
Los Angeles, CA 90048

Los Angeles City Historical Society
P.O. Box 41046
Los Angeles, CA 90041

Society of Architectural Historians, Southern California Chapter
Merry Ovnick– President
PO Box 56478
Sherman Oaks, CA 91413

MUSEUMS

Natural History Museum
Tom Sitton
900 Exposition Boulevard
Los Angeles, CA 90007

COMMISSIONS

Los Angeles County Historic Landmarks and Records Commission
Luis Skeleton
500 West Temple Street
Los Angeles, CA 90012

CITY OF LOS ANGELES

City of Los Angeles Planning Department
City Hall, Room 667
200 North Spring Street
Los Angeles, CA 90012-4801

City of Los Angeles Cultural Heritage Commission
Ken Bernstein – Director of Historic Preservation
City Hall, MS 395
200 North Spring Street
Los Angeles, CA 90012-4801

City of Los Angeles Community Redevelopment Agency
Pauline Lewicki – Head of Environmental Planning
354 South Spring Street
Los Angeles, CA 90013

RAILROAD ORGANIZATIONS

The Electric Railway Historical Association of Southern California
1 World Trade Center
P.O. Box 32161
Long Beach, CA 90832-2161

On September 15, 2006, revised maps and a letter were sent out. Three comment letters were received.

1. Letter received from Pauline Lewicki, Principal Environmental Planner of the Community Redevelopment Agency, Los Angeles on Friday, September 22, 2006, indicating that CRA has no information on properties in the APE.

2. Letter received from Kevin Kuzma of the Echo Park Historical Society October 10, 2006, reporting historic information in the organization’s files.

3. Email communication received from Warren Techentin, President of the Los Angeles Forum for Architecture and Urban Design, October 11, 2006, reporting historic information in the organization’s files.

Chapter 3 Field Methods

3.1 Historic Architecture

A field survey of all properties developed with buildings or structures within the APE of the proposed project was undertaken according to standard Caltrans guidelines and procedures on March 20, 2006. Richard Starzak, Senior Architectural Historian, Jones & Stokes Associates, acted as Principal Investigator for the proposed project. Mr. Starzak has a Master of Arts in Architecture from the University of California Los Angeles, and over 25 years of experience. Architectural Historians Portia Lee and Daniel Paul, with assistance by historic preservation consultant John English, performed the field survey. Portia Lee is certified by the California Council for the Promotion of History as California Registered Professional Historian #547. She has 12 years of experience as a Los Angeles architectural historian. Her specialties include historic property evaluations, neighborhood surveys, and National Register nominations. She has prepared Section 106 and NEPA compliance studies for the City of Los Angeles Bureau of Engineering and the nine historic bridges over the Los Angeles River and served as Project Historian for three intensive Historic American Engineering projects. The architectural history and historic preservation activities of Daniel D. Paul span over a period of 13 years. Paul's current projects with Jones & Stokes include the survey and documentation of a 29-mile National Register linear district on the former U.S. Route 66 between Victorville and Barstow, CA, and the completion of a 33-part National Register Multiple Property Submission for every WPA-era border inspection station owned by the General Services Administration across the United States. John English has 7 years of cultural resources experience with a focus on post–World War II and Modern architecture, including historic surveys, determinations of eligibility, CEQA analyses and mitigation options, archival research, HABS/HAER documentation, and preparation of historic property inventory forms for projects such as the Raymond Avenue/SR 110 Connector Project, I-5 Interim HOV Supplemental HPSR, and the Los Angeles Union Station Run-Through Tracks EIR/EIS.

Each parcel was observed from the public right-of-way. Digital photographs and notes were taken of all buildings and structures visible on the property, and application of the various criteria for properties exempt from evaluation in Attachment 4 of the Section 106 PA were made in the field.

Based on field observation, buildings likely to be eligible for the National Register were left out of the APE. The buildings include properties more than 50 feet or more outside the existing right-of-way. Leaving these buildings out of the APE is consistent with the guidance in Attachment 3 of the Section 106 PA for large rural parcels.

Chapter 4 Historical Overview

4.1 Early 20th Century Settlement

Edendale

Properties surveyed for the SR-2 project are situated in Edendale, a small historic settlement populated in the first half of the 20th Century, now contained within the Echo Park neighborhood north of Sunset Boulevard surrounding Echo Park Lake. Both areas are located in the Glendale Corridor, a residential and commercial area northwest of downtown Los Angeles. The original Edendale tract was acquired, surveyed, platted and named in late 1902 by Moses Wicks, a native of Mississippi who emigrated to California and practiced law in Anaheim, Orange County. After moving to Los Angeles in the late 1880s, he became a prominent real estate speculator, opening up many new areas in the farmland and chaparral surrounding downtown Los Angeles (Newmark, 476).

Development of the Edendale Tract

The Edendale tract formed the northern boundary of the 28 square mile original city of Los Angeles, extending from Effie Street on the South to Baxter Street on the North between Alvarado and Fanning Streets on the East and West (LA County Assessors Map, Book 2, Numbers 81 and 82). Like many other Los Angeles tracts developed during this era, Edendale developed as a classic “streetcar suburb” carved out of an area of hilly farmland within easy reach of downtown. Wicks’ plan for Edendale was designed to take advantage of the arrival of the Glendale line of the Los Angeles and Glendale Railway, whose electric streetcars began running through the tract along Lake Shore Avenue (later Alessandro Avenue, now Glendale Boulevard) in mid-1904 (LA Times, 6/30/1903, 7/28/1912; Fogelson, 39-42).

By late 1903 and early 1904 Wicks was selling lots in the new tract, offering “easy terms” on “large lots” with “building restrictions such as can be legally enforced.” He asked between $100 and $200 for the 50x150 foot lots, and predicted that with Edendale and surrounding developments “the hill portion of Los Angeles will have its awakening.” Sales were brisk; in the month of April, 1904 alone he sold 90 Edendale lots. “Evidently,” remarked the *Los Angeles Times*, “this beautiful close-in part of the city is coming into its own, and the moderate prices at which lots can still be bought here are sure to attract many.” By 1906 the *Times* was observing that the rapid growth of population in the northwestern hill districts like Edendale and neighboring Elysian Park had been one of the chief factors spurring the city’s overall population explosion since 1900. (LA Times, 11/28/1903; 2/8/1904; 7/9/1904; 4/10/1904; 5/1/1904; 4/14/1906).

Edendale Improvement Association, 1904-1912

In the years immediately following the tract’s founding, the new citizens of the Edendale tract built their homes and organized the Edendale Improvement Association, which met at the new Edendale Hall on Lake Shore Avenue between C and D Streets (later renamed Clifford and Duane). This body requested new schools to match the tract’s growing population, campaigned for street paving and boulevard beautification programs, and forced the Railway Company to bring Alessandro Street to the grade of its tracks and to build a bridge at Baxter Street over the railroad right of way. In addition, since Edendale had been planned as a restricted development, community members organized to keep Edendale an all-white tract. In 1907, for instance, when a homeowner threatened to sell to an African-American buyer, other residents called a mass meeting to resist the transaction. Outright conflict was avoided when one of Edendale's leading citizens, Raymond R. Carew, negotiated a compromise and the African-American buyer agreed not to move to the tract. [LA Times, 3/26/1905; 7/1219/05; 11/1/1905; 10/4/1907; 11/2/1907; 5/23/1908; 10/2419/09; 12/2/1910; 7/28/1912]

Bohemian Edendale

Despite this overall conformity to the racial norms of the era, Edendale and the surrounding area developed a reputation as a haven for non-conformists, intellectuals, bohemians, political activists, and artists. As early as 1909, for instance, a group of "spiritualists" took to setting up camp at Edendale's Semi-Tropic Park, offering open-air readings, lectures, and "religious services." Throughout the early decades of the 20th century the neighborhood and surrounding areas hosted many artistic and political groups, most notably one of the first gay rights groups in the country, the Mattachine Society. For the perceived liberality of the sentiments of their residents, the slopes east of Glendale Avenue and Alessandro Streets were widely known as "Red Hill" in these years. [LA Times, 6/20/09; Daniel Hurewitz, *Bohemian Los Angeles and the Making of Modern Politics*.]

4.2 Development of the Motion Picture Industry

Selig Polyscope

Edendale gained its most lasting fame with the arrival of the motion picture industry. The community was the precursor to and prototype for Hollywood: an area on the fringes of the built-up city with ample room for studio facilities and nearby open land for shooting westerns and slapstick comedy. The first studio to open in Edendale was also the first in Los Angeles. In 1907 and 1908, William Selig, a Chicago film producer, visited Los Angeles to shoot three one-reelers. In the fall of 1908, Selig's assistant Francis Boggs returned to Los Angeles and established headquarters in a small bungalow on Allesandro Street in Edendale. At first, Selig balked at establishing a permanent satellite studio, but Boggs and actor Hobart Bosworth touted the advantages of California and Selig discovered that his Los Angeles films were selling better than his Chicago-made product. Convinced that the Southern California climate provided the ideal environment for making pictures,. Selig bought the Edendale Hall and two adjoining lots and began to build studio facilities. The Pacific Coast Branch of the Selig Polyscope Co. opened in mid-1909 at 1845 Allesandro Avenue, between Clifford and Duane, in a building that Selig modeled after San Gabriel Mission.

A number of other silent film producers followed Selig to Edendale in the next decade. At one time or another, at least ten studios, including Fox, Norbig, Imp, Bronx, Garson, and Pathe made pictures along Allesandro Avenue. A little further up Glendale Avenue the cowboy star Tom Mix had his own compound, complete with horse stables, that he called Mixville. [LA Times, 10/10/1909; 12/28/1931; 5/23/1936; 4/16/1945; 8/31/1980; 12/26/1983; 9/16/2001]; Hollywood Heritage: www.hollywoodheritage.oeg/newsarchive/summer99/boggs.html.

Mack Sennett

The most extensive operation, however, was at 1712 Allesandro (corner of Effie Street), where the New York Motion Picture Co. built a studio for its Bison and Keystone operations in 1910. In 1912 they sent producer Mack Sennett west to take over the Keystone studio. Bison relocated its facilities to Santa Ynez Canyon on the coast. Sennett directed such stars and future stars as the Keystone Kops, Charlie Chaplin, Gloria Swanson, Mabel Normand, Ben Turpin, Fatty Arbuckle, and Buster Keaton in Edendale. The Keystone studio was the site of the first pie-throwing episode ever filmed. Over the next few years Sennett expanded his operations across Allesandro, building a series of indoor and outdoor stages (including an open, circular revolving stage), workshops, offices, dressing rooms, prop warehouses, garages, shops, sets, and the first permanent, concrete-reinforced indoor movie studio ever built. In 1917 Sennett bought out Keystone and created his own company, remaining at that location until 1928. In later years Sennett's old studio buildings hosted King's Roller Palace, the Palace Barn Dance, workshops where craftsman built the 500-foot long Great Map of California (exhibited for many years in the Ferry Building on San Francisco's waterfront), warehouses for a theater group, and, most recently, a storage facility. [LA Times, 5/23/1960; 8/31/1980; 3/24/1984; 12/26/1983; 4/14/1984; 7/29/1984; 9/16/2001; Silver Lake Residents Association, "From Our Historical Committee: Mack Sennett and Company, A Silver Lake Legacy," June 1990, California Index Vertical File, LAPL.]

4.3 Surrounding Communities: Silver Lake and Echo Park

Over the years, Edendale has lost its identity as a separate neighborhood. Although the name is retained in the official names of the local post office and branch library, its larger neighbors, Echo Park and Silver Lake, have absorbed the historic settlement. The area, whose commercial and residential buildings lost value during the 1960s and 70s, has benefited from the gentrification that the larger Echo Park-Silver Lake area has experienced since the 1980s.

4.4 Transportation Development

Pacific Electric Street Railway

When streetcars first began rolling between 6th Street in Los Angeles and the Edendale residential district, they comprised part of the Los Angeles Inter-Urban Railway, a subsidiary of Huntington's Pacific Electric. After 1910 this route, together with the suburban lines to Glendale and Burbank, which used its tracks to leave Los Angeles, became part of Southern Pacific's newly merged Pacific Electric Empire.

The Glendale-Burbank Line served Edendale and the communities of Silver Lake and Echo Park. For many years it was considered Pacific Electric's finest example of suburban rail service. It presented multiple unit PCC cars, considerable private way and the subway entry into downtown Los Angeles. The route began at the Subway Terminal, Los Angeles and entered Glendale Boulevard at Beverly Boulevard. At Sunset Boulevard the line entered three-track private way, continuing to Effie Street where double track street operation was resumed. At Glendale Boulevard and Allesandro Street the double tracks entered a spectacular private right-of-way cut from the sides of the Ivanhoe Hills, continuing to Monte Sano – named after an hospital at the crest of the hill above Glendale Boulevard and Riverside Drive, where a long bridge carried the line over the Los Angeles River. A historic review of the route in *Timepoints #13,* “Rail Routes of Yesteryear” was published in September 1951.

Road Development

In the late 1950s and early 60s, Caltrans proposed an extension of the Glendale Freeway south into the neighborhood from the Golden State Freeway. The Glendale Freeway, originally intended to go across the neighborhood to the Hollywood Freeway and then west as the Beverly Hills Freeway, was truncated as widespread community opposition forced Caltrans to abandon its plans. An elevated bridge, designed for the point where the proposed freeway would cross Glendale Boulevard, was redesigned to function as an off- ramp from the Golden State Freeway (SR-5) south and the Glendale Freeway (SR-2) west to Glendale Boulevard. [LA Times, 1/14/1962; 1/28/1963; http://cahighways.org/001-008.html.

Field of Dreams

Mitigation for the development of the elevated bridge was agreed on with the neighborhood. Accordingly, Caltrans leases a portion of land to the north and west of the flyover to the City of Los Angeles Department of Recreation and Parks (LADRP) for a T-Ball field for youth baseball. The field was designated the Tommy Lasorda Field of Dreams. Dedicated on July 7, 1990, it opened with a celebration attended by the Los Angeles Dodgers coach Lasorda on April 8, 1991. (LADRP; e-mail communication from Paul Liles and Santiago Cuevas).

Chapter 5 Findings and Conclusions

5.1 Findings

- There are no properties listed in the National Register in the APE.
- There are no properties previously determined eligible for the National Register in the APE.
- There are no properties previously determined not eligible for the National Register in the APE.
- There are no properties determined eligible for the National Register as a result of the current study in the APE.
- There are nine properties determined not eligible for the National Register as a result of the current study as shown in the table below.
- There is one property, St. Theresa Catholic Church, eligible for listing in the California Register of Historical Resources and historical for the purposes of CEQA.

Name	Address/Location	Community	OHP Status Code	Map Ref #
Residence	2219 Baxter Street	Echo Park	6Z	10
Duplex Residence	2227-2229 Ewing Street	Echo Park	6Z	3
St. Teresa of Avila Rectory	2216 Fargo Street	Echo Park	6Z	5
St. Teresa of Avila School	2223 Fargo Street	Echo Park	6Z	6
St. Teresa of Avila Convent	2213 Fargo Street	Echo Park	6Z	7
Commercial Building	1840-1842 Glendale Boulevard	Echo Park	6Z	1
Commercial Building	1855 Glendale Boulevard	Echo Park	6Z	2
Western Ukrainian Baptist Church	2030 Glendale Boulevard	Echo Park	6Z	8
Residence	2038 ½ Glendale Boulevard	Echo Park	6Z	9
St. Teresa of Avila Chapel	2204 Fargo Street	Echo Park	3CS	4

Richard Starzak and Portia Lee, Jones & Stokes Associates, who meet the Professionally Qualified Staff Standards in Section 106 PA Attachment 1 as an Architectural Historian or above, have determined that the only other properties present within the APE, including state-owned resources, meet the criteria for Section 106 PA Attachment 4 (Properties Exempt from Evaluation).

5.2 Conclusions

There is one historic resource under CEQA in the project APE. This is detailed below:

- Historic name: Saint Teresa of Avila Church
- Map Reference Number: 4
- Applicable Criteria: Eligible under Criterion 3 of the California Register of Historical Resources for the architectural rendering of the ecclesiastical Mission Revival style and the integrity of its design plan and ornamentation.
- Period of Significance: 1929
- Level of Significance: California Register of Historical Resources
- Rough Boundary Description: The church parcel is bounded by Fargo Street on the north, Waterloo Street on the east and other parcels on the south and the west in Silver Lake area of Los Angeles city. This boundary of the parcel is consistent with legal boundaries of the parcel.
- Contributing and Noncontributing Elements: Character-defining features of the Mission Revival style include planar stucco walls, a tall arched bell tower attached to an espadana parapet and a compound Gothic arch balcony window with an elaborated metal railing. Plaster molding outlines the upper edges of the tower and the parapet front which features a small spire and rose medallion. The church is substantially intact and has retained its contributing elements.
- State and Local Designations: No designations at the present; eligibility derived from project survey.

5.3 References Cited

Monographs and Articles

Electric Railway Historical Association of Southern California

Timepoints #13, “Rail Routes of Yesteryear.” No.3, September 1951.

Fogelson, Robert M.

The Fragmented Metropolis: Los Angeles 1850-1930. University of California Berkeley Press, 1992.

Newmark, Harris

Sixty Years in Southern California. Los Angeles, Dawson’s Book Shop, 1984

Library and Internet Reference

California Index Vertical File, Los Angeles Public Library.
“Silver Lake Residents Association, “From Our Historical Committee: Mack Sennett and Company, A Silver Lake Legacy,” June 1990.

Glendale Freeway Extension

Available: <http://cahighways.org/001-008.html>.

Hurewitz, Daniel.
Bohemian Los Angeles and the Making of Modern Politics. Hollywood Heritage. Available: <www.hollywoodheritage.oeg/newsarchive/summer99/boggs.html>.

Historical Los Angeles Times

1903-1912. Proquest *Data Base*, Los Angeles Public Library.

Los Angeles Times.

1960-2001.

Liles, Paul, and Santiago Cuevas. Los Angeles Department of Recreation and Parks.
April 8, 2007—email communication to the author regarding the Field of Dreams.

Chapter 6 Preparers Qualifications

Richard Starzak, Senior Architectural Historian, Jones & Stokes Associates, acted as Principal Investigator for the proposed project. Mr. Starzak has a Master of Arts in Architecture from the University of California Los Angeles, and over 25 years of experience.

John English, historic preservation consultant, has 7 years of cultural resources experience with a focus on post–World War II and Modern architecture, including historic surveys, determinations of eligibility, CEQA analyses and mitigation options, archival research, HABS/HAER documentation, and preparation of historic property inventory forms for projects such as the Raymond Avenue/SR-110 Connector Project, I-5 Interim HOV Supplemental HPSR, and the Los Angeles Union Station Run-Through Tracks EIR/EIS.

Portia Lee is certified by the California Council for the Promotion of History as California Registered Professional Historian #547. She has 12 years of experience as a Los Angeles architectural historian. Her specialties include historic property evaluations, neighborhood surveys, and National Register nominations. She has prepared Section 106 and NEPA compliance studies for the City of Los Angeles Bureau of Engineering and the nine historic bridges over the Los Angeles River and served as Project Historian for three intensive Historic American Engineering Record projects.

The architectural history and historic preservation activities of Daniel D. Paul span over a period of 13 years. Paul's current projects with Jones & Stokes include the survey and documentation of a 29-mile National Register linear district on the former U.S. Route 66 between Victorville and Barstow, CA, and the completion of a 33-part National Register Multiple Property Submission for every WPA-era border inspection station owned by the General Services Administration across the United States.

Exhibits 1, 2, & 3
Project Vicinity, Location, and APE Maps

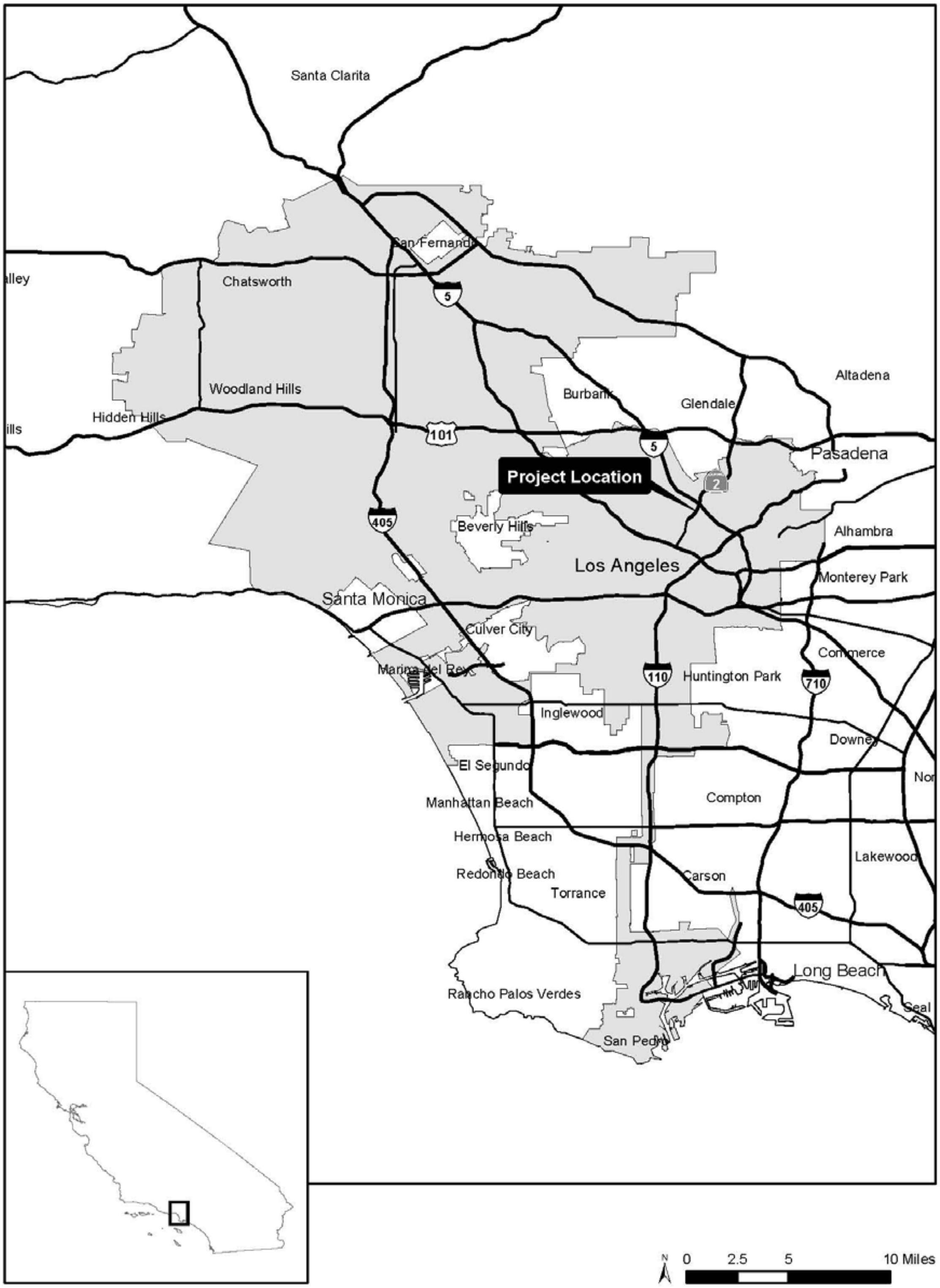


Exhibit 1: Project Vicinity Map

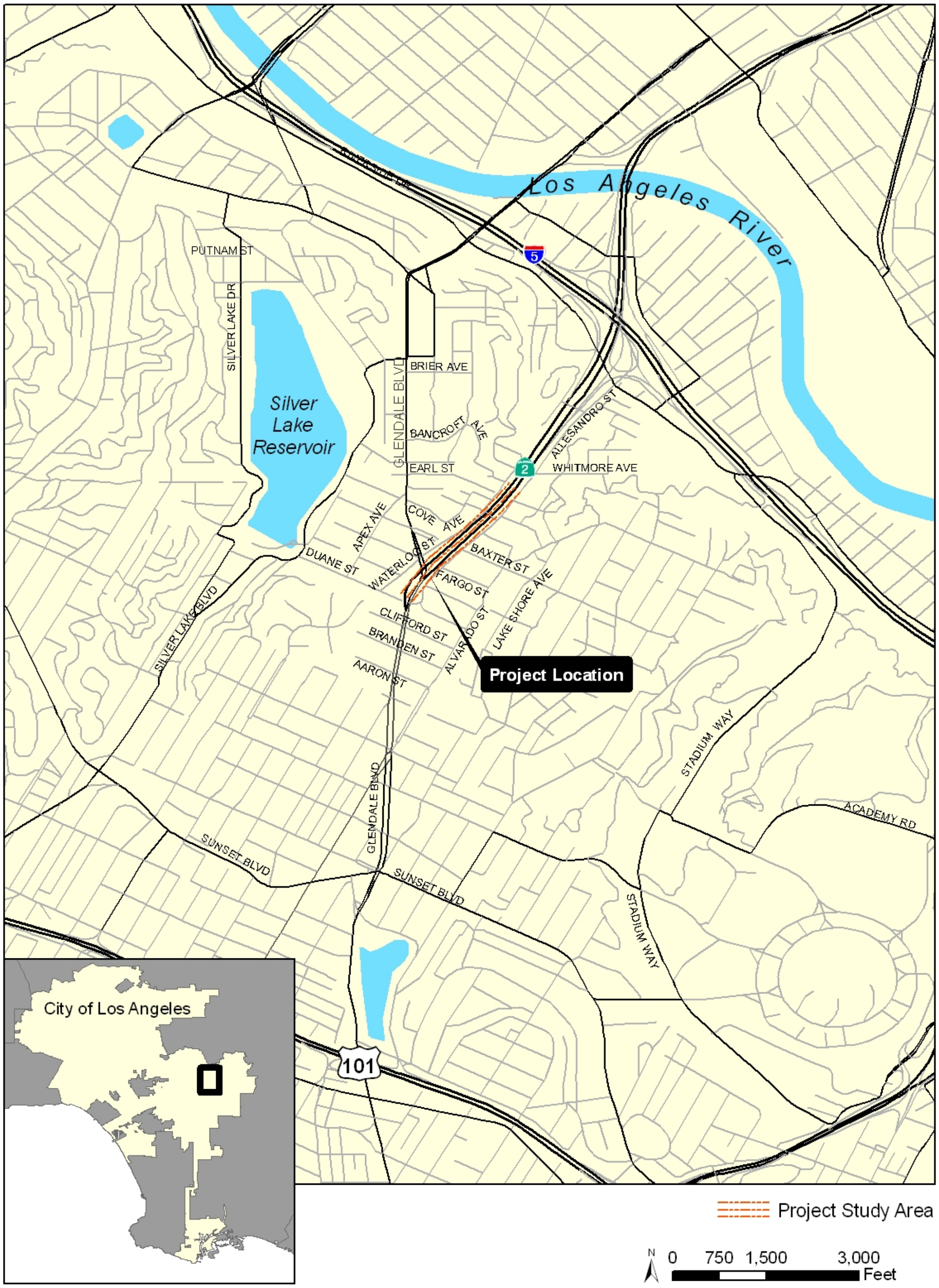


Exhibit 2: Project Location Map

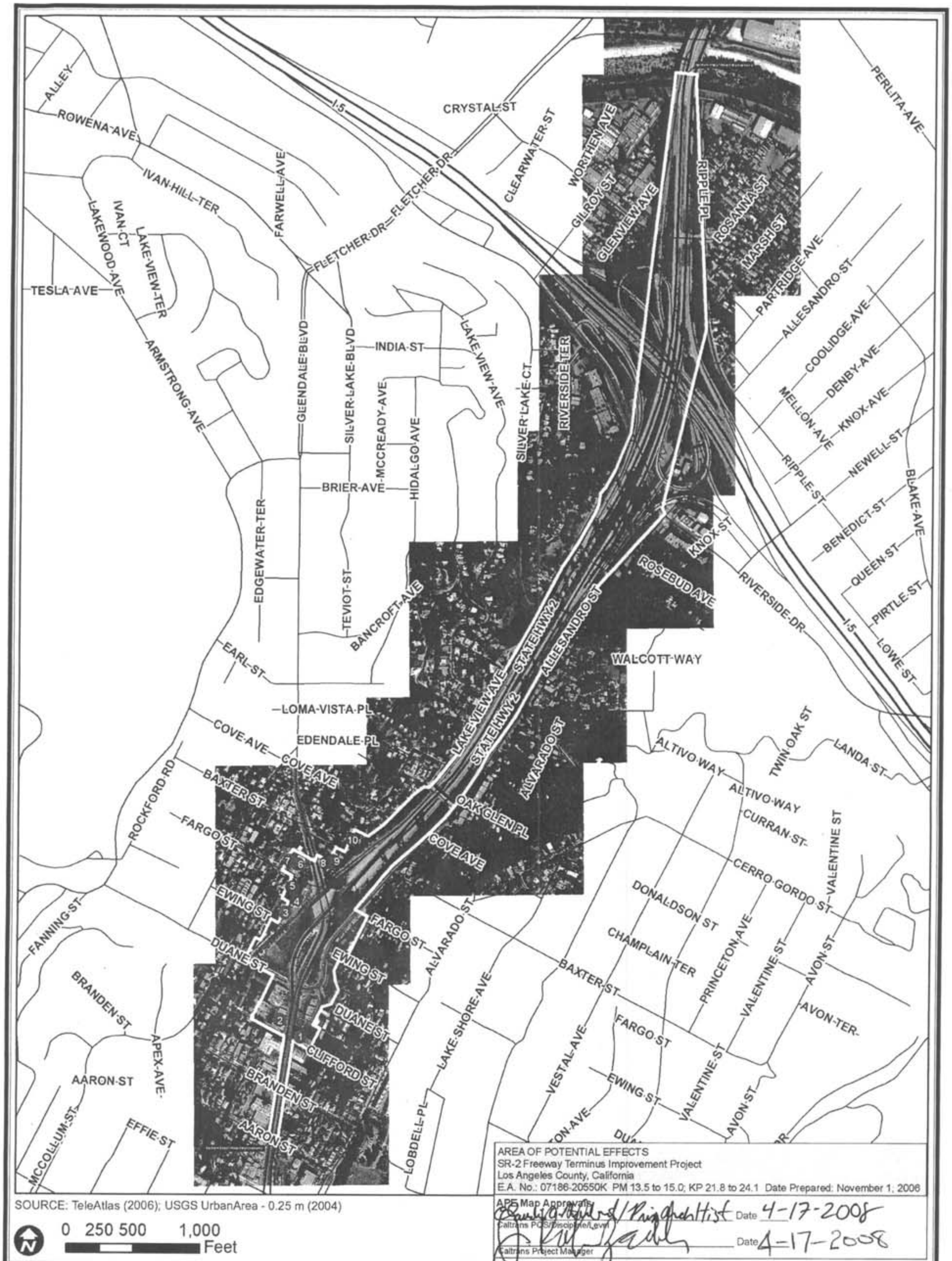


Exhibit 3: Area of Potential Effects Map

Exhibit 3: Area of Potential Effects Map (1 of 7)

Exhibit 3: Area of Potential Effects Map (2 of 7)

Exhibit 3: Area of Potential Effects Map (3 of 7)

Exhibit 3: Area of Potential Effects Map (4 of 7)

Exhibit 3: Area of Potential Effects Map (5 of 7)

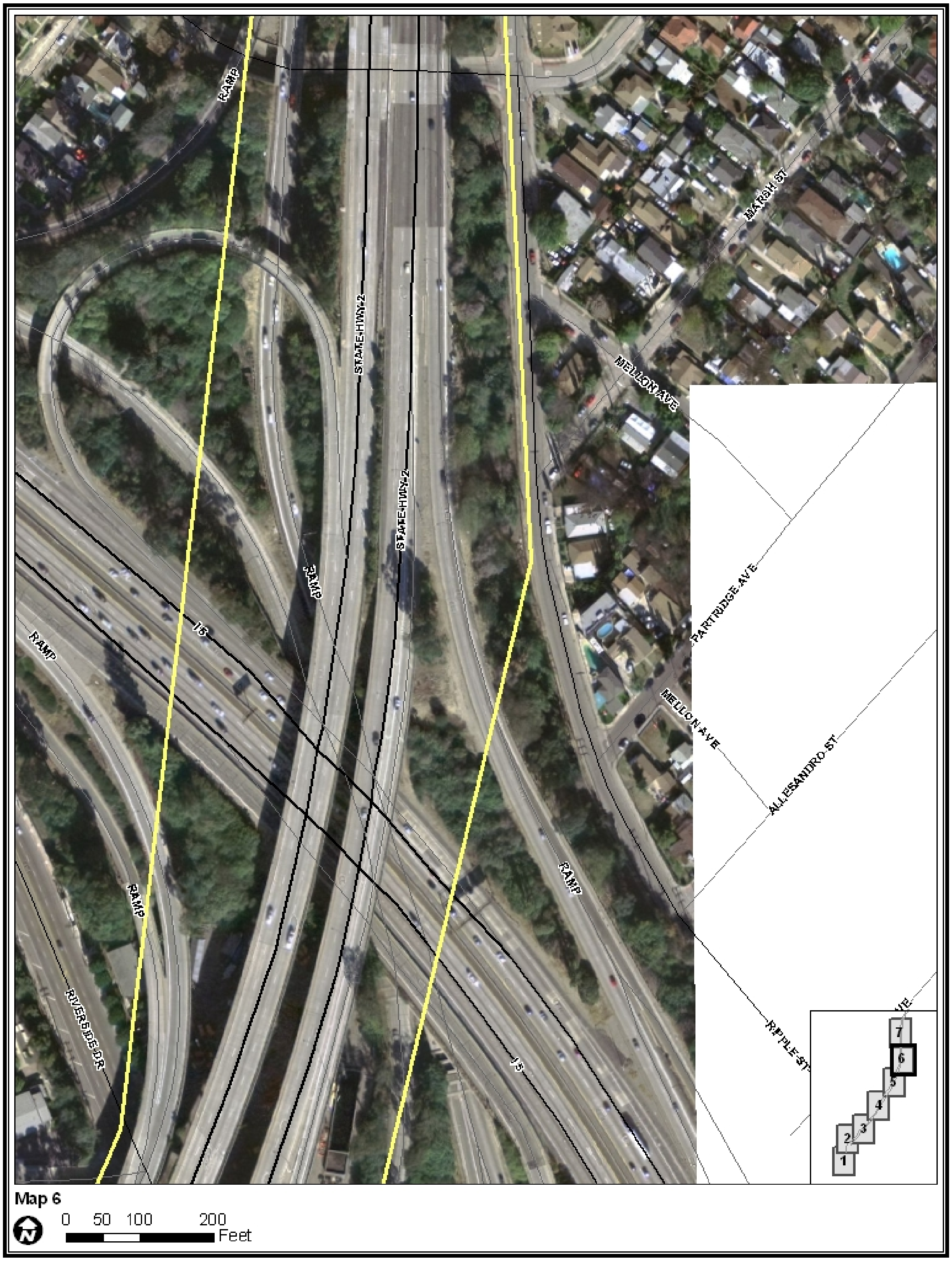


Exhibit 3: Area of Potential Effects Map (6 of 7)

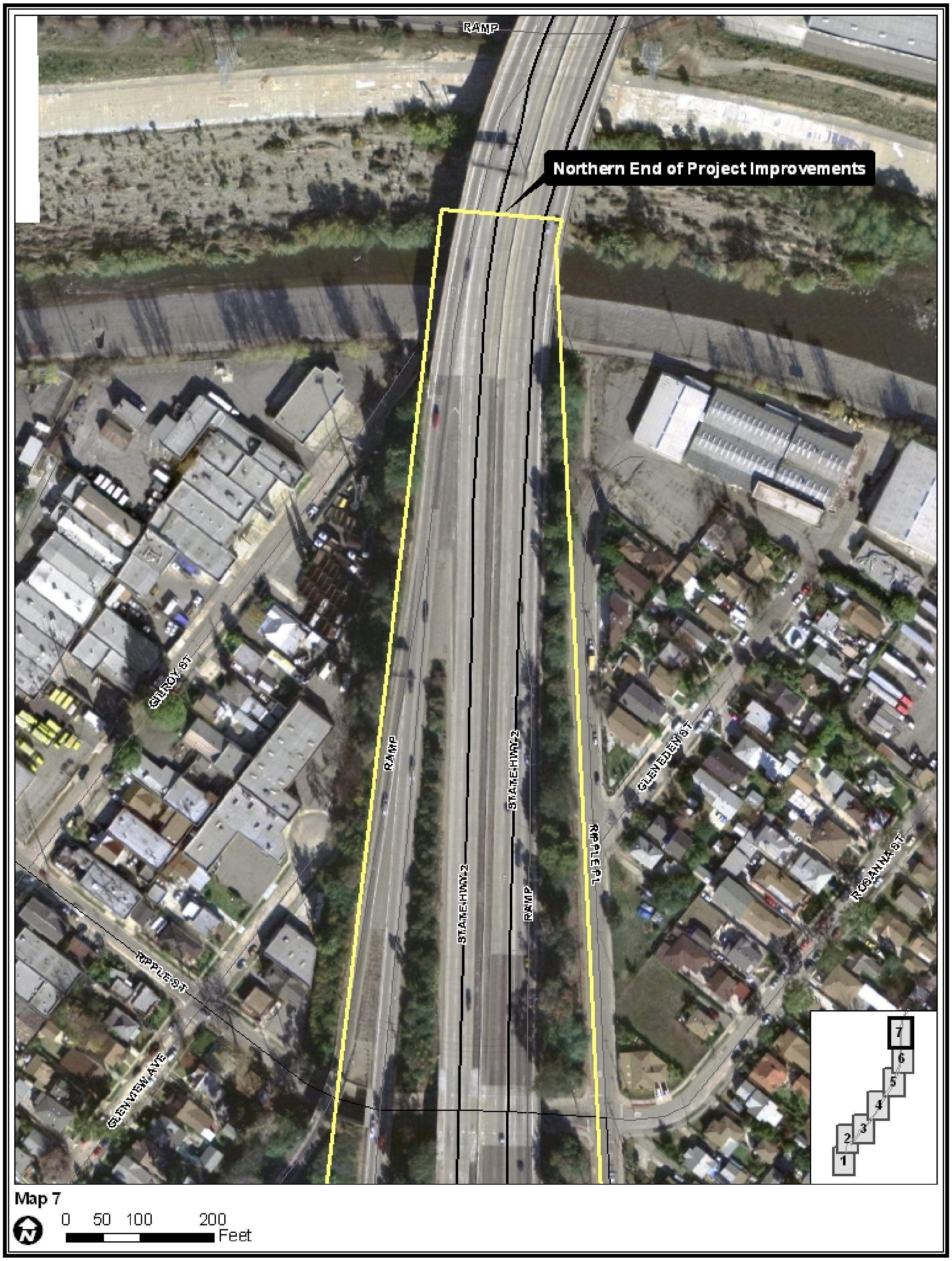
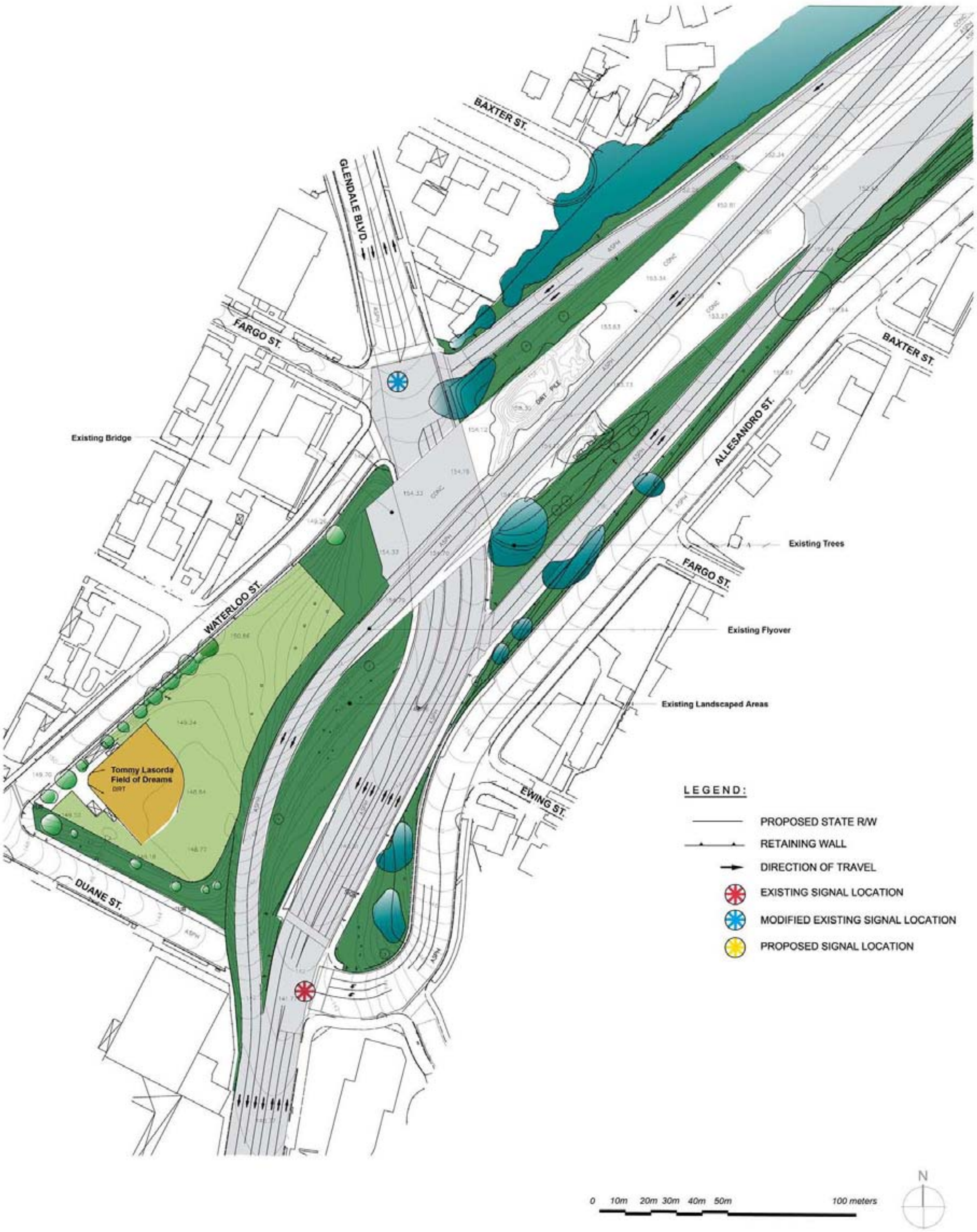


Exhibit 3: Area of Potential Effects Map (7 of 7)

Exhibit 4
Project Alternatives: No Build, A through E

No-Build Alternative (Baseline Alternative)



Source: Melendrez, 2006.

Alternative A (Widen Existing Ramps)

Source: Melendrez, 2006.

Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge)

Source: Melendrez, 2006.

Alternative C (Realign Ramps West – Remove Flyover and Bridge)

Source: Melendrez, 2006.

Alternative D (Realign Ramps East – Retain Flyover and Bridge)

Source: Melendrez, 2006.

Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining Wall)

Source: Melendrez, 2006.

Department of Parks and Recreation Forms: DPR 523

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HR #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

Page 1 **of** 2

* **Resource Name or #:** 1840-1842 Glendale Boulevard

P1. Other Identifier: Map Reference #1

* **P2. Location:** ☑ **Not for Publication** ☐ **Unrestricted** **a. County** Los Angeles

b. USGS 7.5' Quad ____ **Date** ____ **T** ____; **R** ____; ____ **1/4 of** ____ **1/4 of Sec** ____; ____ **B.M.**

c. Address 1840-1842 Glendale Blvd **City** Los Angeles **Zip** 90026

d. UTM: (Give more than one for large and/or linear feature) **Zone** ____, ____ **mE/** ____ **mN**

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTMs, etc. as app

Assessor's Parcel Number: 5423-001-006. EDENDALE TRACT LOT 261.

* **P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

1840 Glendale Boulevard is a two story, 50 feet by 79.6 feet commercial store front with residential units at the side and rear of the property. The building has a composition flat parapet roof from the midpoint to the rear elevation. On the front elevation the roof is hipped and covered with Spanish tile. A parapet wall appears on the north elevation. Cladding is stucco over concrete. Wide Tudor arches characterize the ground story of the front elevation separated by square columns with plain caps below a plain cornice. On the upper story of the front elevation, fenestration is varied and asymmetrical. A centered balcony with paired double-hung windows is flanked on the north by two sets of similar paired double hung windows and on the south by a single large group of four double hung windows.

* **P3b. Resource Attributes:** (List attributes and codes) HP6 1-3 story commercial & residential building

* **P4. Resources Present:** ☑ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing

P5b. Description of Photo: (View, date, etc.)

Looking northeast; 3/21/2007

* **P6. Date Constructed/Age and Sources:** ☐ Prehistoric ☑ Historic ☐ Both

1912

* **P7. Owner and Address:**

Elaine Paredes Trust
11271 Ventura Blvd., #420
Studio City, CA 91604-3136
P--Private

* **P8. Recorded by:** (Name, affiliation, address)

Portia Lee
Jones & Stokes
811 W 7th ST, Suite 800
Los Angeles, CA 90017

* **P9. Date Recorded:** August 18, 2006

* **P10. Survey Type:** (Describe)

Intensive Level
Section 106 Compliance
P--Project Review

* **P11. Report Citation:** (Cite survey report/other sources or "none") State Route 2 Freeway Terminus Improvement Project Historical Resources Evaluation Report, May 2007. Prepared for Caltrans District 7.

* **Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☑ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other: (List)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HR #

BUILDING, STRUCTURE, AND OBJECT RECORD

* NRHP Status Code 6Z

* **Resource Name or #:** 1840-1842 Glendale Boulevard

B1. Historic Name:

B2. Common Name 1840-1842 Glendale Blvd

B3. Original Use: Commercial/Residential B4. Present Use: Multi-Family Residential

* **B5. Architectural Style:** Mission Revival

* **B6. Construction History:** (Construction date, alterations, and date of alterations.)
Permits# LA 23699 and 23700 issued May 24, 1923 for store and garage A one-room building was existing on the lot. The owner was Ben L. Bear. A garage permit was also taken out on the same date. On June 25, 1923 an alteration permit was granted 'to change area at rear of n. store room to have rear door and stairway changing position of Col. # 9 as shown." Permit #HO17035 provided for Davison 38 compliance and a moment frame relocation in 1992.

* **B7. Moved?** ☑ No ☐ Yes ☐ Unknown Date: Original Location:

* **B8. Related Features:**
Parking Lot

B9a. Architect: Unknown b. Builder: H.P. Siberell

* **B10. Significance:** Theme Residential Building Area Edendale (Los Angeles)
Period of Significance 1908-1950 Property Type Residence Applicable Criteria N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

On May 24, 1923 a permit was issued to Ben L. Bear for a Class D building and garage at 1840 Glendale Boulevard. The purpose of the building was listed as "store and residence" with alteration noted as "construct new bldg as per plans using wall of old bldg." This commercial store front and multifamily unit complex appears to have been constructed as a remodel of a smaller existing building. No history was found concerning the property with the exception of monthly display advertisements in the Los Angeles Times listing the name of Ben L. Bear as an area distributor of W.P. Fuller paints. No information was found associating the property or Ben L. Bear to person or events important in state, local or national history that would warrant consideration for eligibility under Criteria A or B of the National Register of Historic Places. The property has not retained sufficient integrity to meet the requirements of Criterion C of the National Register of Historic Places.

B11. Additional Resource Attributes: (List attributes and codes):

* **B12. References:**
Los Angeles City Assessors Records

TRW/Experian property records

B13. Remarks: Map Reference #1

* **B14. Evaluator:** Portia Lee/Jones & Stokes
Date of Evaluation: November 19, 2006

(This space reserved for official comments.)

(Sketch map with north arrow required)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HR #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

* **Resource Name or #:** 1855 Glendale Boulevard

P1. Other Identifier: Map Reference #2

* **P2. Location:** ☑ Not for Publication ☐ Unrestricted **a. County** Los Angeles

b. USGS 7.5' Quad **Date** **T** ; **R** ; **1/4 of** **1/4 of Sec** ; **B.M.**

c. Address 1855 Glendale Blvd **City** Los Angeles **Zip** 90026

d. UTM: (Give more than one for large and/or linear feature) **Zone** 11, 383809 **mE/** 3772793 **mN**

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTMs, etc. as app

Assessor's Parcel Number: 5423-002-037. LOT 248 AND POR OF VAC ST EDENDALE TRACT.

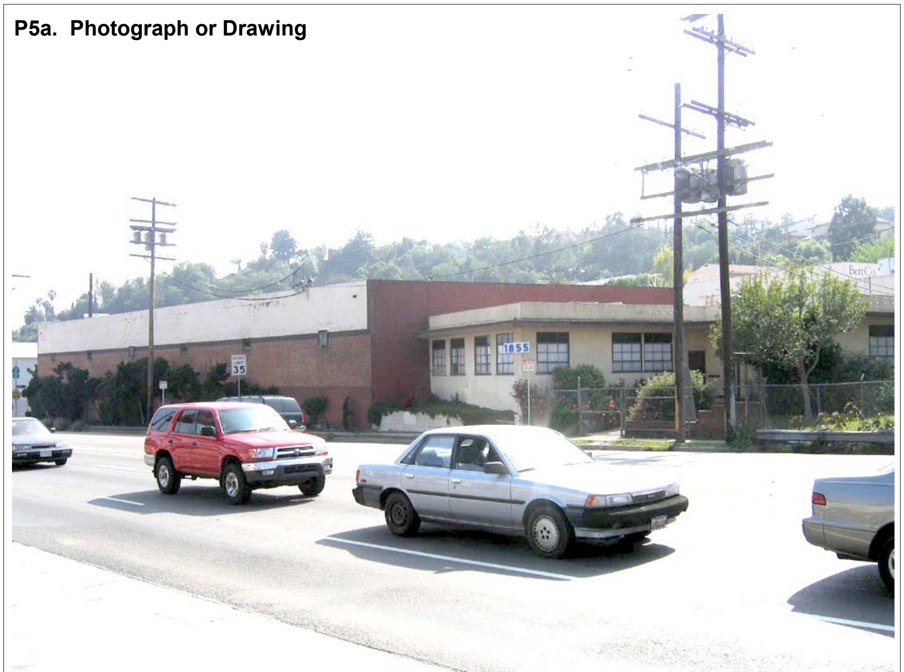
* **P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

1855 Glendale Boulevard is a grouping of three separate structures. The primary structure is an irregular plan, one story commercial structure consisting of two attached components. The first component is an L-plan, one story, stucco clad, flat roofed office structure in the Modern style. The Modern elements of this structure include the combination of asymmetrical and abstracted rectangular massing, flat roof, and a non-decorated exterior except for a protruding and sub-roofline metal running eave. Parallel to and below this eave are a row of repeating rectangular window bays across the east and north elevations. Within each window bay is a 12 unit fixed wood frame glazing with wood sills. Located behind the front courtyard within the crux of the L plan are two recessed, congruent single panel entry doors. The courtyard is enclosed by red brick planter and boundary walls that are stepped in height likely added in the 1960s. A concrete walk leads through the courtyard to the entrances. Within the courtyard is mature domestic llandscaping and a granite obelisk honoring the site as the former location of Selig Studios. This monument is believed to have been moved from another nearby location. Chain link fencing abuts the sidewalk in front of the courtyard. A low brick planter is affixed to the southern portion wall of the east facing front elevation. (contd.)

* **P3b. Resource Attributes:** (List attributes and codes) HP8 Industrial building

* **P4. Resources Present:** ☑ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing



P5b. Description of Photo: (View, date, etc.)
Looking southwest

* **P6. Date Constructed/Age and Sources:** ☐ Prehistoric ☑ Historic ☐ Both
1964(factual) city bldg permits.
#Error

* **P7. Owner and Address:**
Silver Lake Skyline LLC.
14524 Delano Street, #200
Van Nuys, CA 91411-2819
P--Private

* **P8. Recorded by:** (Name, affiliation, address)
Daniel D. Paul
Jones & Stokes
811 W 7th ST, Suite 800
Los Angeles, CA 90017

* **P9. Date Recorded:** 18 August 2006

* **P10. Survey Type:** (Describe)
Intensive Level
Section 106 Compliance
P--Project Review

* **P11. Report Citation:** (Cite survey report/other sources or "none") State Route 2 Freeway Terminus Improvement Project City Planning ZIMAS info viewed 18 Aug. 2006. HRER, May 2007, for Caltrans District 7.

* **Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☑ Continuation Sheet ☑ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other: (List)

Primary #
HR #

BUILDING, STRUCTURE, AND OBJECT RECORD

* NRHP Status Code 6Z

* **Resource Name or #:** 1855 Glendale Boulevard

B1. Historic Name: BertCo Graphics

B2. Common Name BertCo Graphics

B3. Original Use: Warehouse B4. Present Use: Commercial Graphics

* **B5. Architectural Style:** Modernist

* **B6. Construction History:** (Construction date, alterations, and date of alterations.)

Building permit on file for 1855 Glendale Blvd dated 12/5/1952: L-shaped, flat roofed office component visible due south on Glendale Blvd. The majority of the Bert Co. Graphics property was completed in 1965, and a Los Angeles Times article discusses two tilt-up concrete structures totaling 30,000 square feet being erected on the former site of the Mack Sennett studios. Two more additional "new construction" building permits exist for the years 1969 and 1974 upon this property.

* **B7. Moved?** ☑ No ☐ Yes ☐ Unknown Date: Original Location:

* **B8. Related Features:**

Office and warehouse space

B9a. Architect: Joseph Illig and Sons, Inc. (1964) b. Builder: John R. Anderson (1964 addition)

* **B10. Significance:** Theme Motion Pictures Area Historical development

Period of Significance 1910 Property Type Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

An obelisk on this property states the location as the former site of the Mack Sennett studios. Mack Sennett Studios were not at this location, but were located at 1712 Glendale Boulevard. This monument was moved to this location c. early 1960s. This commemorative marker does not meet National Register Criteria Consideration F, because it has not gained its own historic significance. This location was, however, the former site of the Bud Selig Studios: Selig , like Sennett, was an early pioneer in the history of the Los Angeles film industry. The Selig studios at this site was the first purpose-built permanent film studio in California, with a groundbreaking in 1908 and completion in 1910. There are no known on-site remnants of the original Selig studios. Therefore, the site lacks adequate integrity to be eligible for the National Register of Historic Places under criterion A or B. The buildings currently on the site are not good examples of an architectural style or building type, and do not meet National Register Criterion C.

B11. Additional Resource Attributes: (List attributes and codes):

* **B12. References:**

Building and Safety Department, City of Los Angeles; TRW/Experian property records

Telephone interview with Marc Wanamaker, Director, Bison Archives: 10 May 2007.

"To Build Where Mack Sennett Acted." Los Angeles Times, 20 June 1965: L8.

B13. Remarks: Map Reference #2

* **B14. Evaluator:** Daniel Paul/Jones & Stokes

Date of Evaluation: November 18, 2006

(This space reserved for official comments.)

(Sketch map with north arrow required)

P3a. Description continued

The second component of 1855 Glendale Blvd is affixed to the south wall of the aforementioned building and was added in the late 1960s. The walls of this structure have three different types of red brick course; one at the north elevation, and two at the east elevation, upper and lower section. At the east facing side elevation are present repeating bays of small sash milled vents and small sash fixed fenestration. The upper section of this elevation is painted brick. A narrow planter strip with mature cypress specimens separates this structure from the sidewalk. A separate rectangular plan, concrete industrial warehouse building was added c.1969, is located at the rear (west end) of the property. It is built upon a higher grade than the primary, Glendale Boulevard adjacent structure, and its upper portion is visible from Glendale Boulevard.

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HR #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

* **Resource Name or #:** 2227-2229 Ewing Street

P1. Other Identifier: Map Reference #3

* **P2. Location:** ☑ Not for Publication ☐ Unrestricted **a. County** Los Angeles

b. USGS 7.5' Quad **Date** **T** ; **R** ; **1/4 of** **1/4 of Sec** ; **B.M.**

c. Address 2227-2229 Ewing Street **City** Los Angeles **Zip** 90039

d. UTM: (Give more than one for large and/or linear feature) **Zone** , **mE/** **mN**

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTMs, etc. as app

Assessor's Parcel Number: 5422-017-031. EDENDALE TRACT EX OF ST LOT 101.

* **P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

2227-2229 Ewing Street is a five-room duplex. A metal fence with decorative arrow pickets encloses the front yard and a concrete block wall encloses the side yard. The residence's stepped parapet composition roof has a row of running Spanish tile on the parapet ridge and is elaborated into a hipped tile cap on each of the twin towers of the front elevation. The towers are pierced with narrow windows which appear to have been closed in by wood. A narrow pent between the towers has a double row of tiles. The front elevation of each of the units is similar, although somewhat obscured by specimen trees and shrubs.. Below the towers, each of the units projects slightly forward to shelter a front porch which features a flat arch opening on the front and a narrow round arch opening on the side elevation whose fenestration varies in size, but consists generally of casements. A row of moderately steep stairs leads to the back entrance.

* **P3b. Resource Attributes:** (List attributes and codes) HP3 Multifamily property

* **P4. Resources Present:** ☑ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing

P5b. Description of Photo: (View, date, etc.)
3/21/2006, looking northeast

* **P6. Date Constructed/Age and Sources:** ☐ Prehistoric ☑ Historic ☐ Both

1924Factual, Building Permit

* **P7. Owner and Address:**
Dolores Altamirano & Juana Guerrero
2229 Ewing Street
Los Angeles, CA 90039-3105

* **P8. Recorded by:** (Name, affiliation, address)
Portia Lee
Jones & Stokes
811 W 7th ST, Suite 800
Los Angeles, CA 90017

* **P9. Date Recorded:** September 7, 2006

* **P10. Survey Type:** (Describe)
Intensive Level
Section 106 Compliance
Project Review

* **P11. Report Citation:** (Cite survey report/other sources or "none") State Route 2 Freeway Terminus Improvement Project Historical Resources Evaluation Report, May 2007. Prepared for Caltrans District 7.

* **Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☑ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other: (List)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HR #

BUILDING, STRUCTURE, AND OBJECT RECORD

* NRHP Status Code 6Z

* **Resource Name or #:** 2227-2229 Ewing Street

B1. Historic Name:

B2. Common Name 2227-2229 Ewing Street

B3. Original Use: Duplex Residential B4. Present Use: Duplex Residential

* **B5. Architectural Style:** Mediterranean Revival

* **B6. Construction History:** (Construction date, alterations, and date of alterations.)

Building Permit #7254. February 9, 1924 The exterior walls have been sandblasted and restuccoed and magnetite removed

* **B7. Moved?** ☐ No ☐ Yes ☑ Unknown Date: Original Location:

* **B8. Related Features:**

Domestic Landscaping

B9a. Architect: Unknown b. Builder: M. Perrin

* **B10. Significance:** Theme Residential Development Area Edendale (Los Angeles)

Period of Significance 1908-1940 Property Type Duplex Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The residence at 2227-2229 Ewing Street is a two-family, five-room duplex constructed in 1924 in the Mission Revival architectural style. The building permit for this structure was issued on February 9, 1924, to Louis Halpern and Rebecca Burman; contractor, M. Perrin. 2227-2229 Ewing Street is not associated with events or persons significant in state or local history and therefore does not qualify under Criterion A or B of the National Register of Historic Places. While it is an interesting example of the use of Mediterranean style in a residential duplex, the residence does not meet the requirements of Criterion C of the National Register as it is not the work of a master builder, of high artistic value, or a significant example of its architectural type or style.

B11. Additional Resource Attributes: (List attributes and codes):

* **B12. References:**

City of Los Angeles Building Permit Division

B13. Remarks: Map Reference #3

* **B14. Evaluator:** Portia Lee/Jones and Stokes

Date of Evaluation: 12/02/2007

(This space reserved for official comments.)

(Sketch map with north arrow required)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HR #
Trinomial
NRHP Status Code 3CS
Other Listings
Review Code Reviewer Date

Page 1 **of** 3

* **Resource Name or #:** St. Teresa of Avila Church

P1. Other Identifier: Map Reference #4

* **P2. Location:** ☑ Not for Publication ☐ Unrestricted **a. County** Los Angeles

b. USGS 7.5' Quad **Date** **T** ; **R** ; **1/4 of** **1/4 of Sec** ; **B.M.**

c. Address 2210 Fargo ST **City** Los Angeles **Zip** 90039

d. UTM: (Give more than one for large and/or linear feature) **Zone** , **mE/** **mN**

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTMs, etc. as app

Assessor's Parcel Number: 5422-017-036. EDENDALE TRACT LOTS 100 AND 103 AND EX OF STS LOTS 102 AND 104 AND EX OF ST.

* **P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

St. Teresa of Avila Church was designed in 1929 by architect Emmett Martin in a refined Mission Revival style. The roof is laid with Spanish tiles. In plan the church is cruciform. The front elevation has a double door central entrance surmounted by a compound arch tympanum decorated with an art glass image of Saint Teresa. A pair of lanterns flank the entrance doors. The south elevation features a row of art glass windows and a double-door side entrance that opens to a side aisle of the nave. Character-defining features of the Mission Revival style include planar stucco walls, a tall arched bell tower attached to an espadana parapet and a compound Gothic arch balcony window with an elaborated metal railing. Plaster molding outlines the upper edges of the tower and the parapet front which features a small spire and rose medallion.

* **P3b. Resource Attributes:** (List attributes and codes) HP16 Religious building

* **P4. Resources Present:** ☑ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing

P5b. Description of Photo: (View, date, etc.)
3/21/2006, Primary façade, looking south.

* **P6. Date Constructed/Age and Sources:** ☐ Prehistoric ☑ Historic ☐ Both
1929 Southwest Builder& Contractor

* **P7. Owner and Address:**
Roman Catholic Archbishop of Los Angeles
3424 Wilshire Blvd.
Los Angeles, CA 90010-2202
P--Private

* **P8. Recorded by:** (Name, affiliation, address)
Portia Lee
Jones & Stokes
811 W 7th ST, Suite 800
Los Angeles, CA 90017

* **P9. Date Recorded:**

* **P10. Survey Type:** (Describe)
Intensive Level
Section 106 Compliance
Project Review

* **P11. Report Citation:** (Cite survey report/other sources or "none") State Route 2 Freeway Terminus Improvement Project Historical Resources Evaluation Report, May 2007. Prepared for Caltrans District 7.

* **Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☑ Continuation Sheet ☑ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other: (List) Continuation Sheet

DPR 523A (1/95) *** Required Information**

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HR #

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 3 *** NRHP Status Code** 3CS

* **Resource Name or #:** St. Teresa of Avila Church

B1. Historic Name: St. Teresa of Avila Church

B2. Common Name St. Teresa of Avila Church

B3. Original Use: Church B4. Present Use: Church

* **B5. Architectural Style:** Mission Revival

* **B6. Construction History:** (Construction date, alterations, and date of alterations.)

Building Permit: 1929

* **B7. Moved?** ☑ No ☐ Yes ☐ Unknown Date: Original Location:

* **B8. Related Features:**

Specimen Landscaping

B9a. Architect: Emmett G. Martin b. Builder: Don S. Ely

* **B10. Significance:** Theme Church Building Area Los Angeles, California

Period of Significance 1929 Property Type Church Applicable Criteria CRHR 3

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

St. Teresa of Avila Parish Church

The Los Angeles Archdiocese established the Parish of St. Teresa of Avilla in 1921, at the intersection of Fargo Street and what is now Glendale Boulevard. A temporary wood frame church structure was immediately constructed on the north side of Fargo Street, to serve the new parish. In 1929, the present church was constructed across Fargo Street to the south. The building was designed in the Mission Revival Style by Los Angeles architect Emmett G. Martin. Emmet G. Martin was born in 1889, andtrained in architecture at the University of Illinois. After service in World War I, he completed his studies at the Ecole des Beaux Arts in Paris in 1919 and received his California license in 1923. After working with the firm of his brothers A.C. Martin and Associates, he opened his own practice in 1927 with an office in the Chester Williams Building. In addition to churches, Martin designed single-family residential projects for individual clients and the eight-story English Apartments on Normandie and Fourth Street, one of the larger examples of the building type. (Contd.)

B11. Additional Resource Attributes: (List attributes and codes):

* **B12. References:**

“The Los Angeles Churches of Emmet G. Martin.” Records of the Los Angeles Archdiocese

Southwest Builder and Contractor: 7/18/1924, 2/13/1925,

Nelson, Mike, The Tidings, “Spirited” St Teresa's Marks 75th Anniversary”, December 13, 1996, pg. 5.

B13. Remarks: Map Reference #4

* **B14. Evaluator:** Portia Lee/Jones & Stokes

Date of Evaluation: August 17, 2007

(This space reserved for official comments.)

(Sketch map with north arrow required)

B10. Significance (Contd.)

Martin developed his own specialty in ecclesiastical architecture, designing an abundant collection of churches, schools and other building for the Los Angeles Archdiocese during the 1920's and 30's. In addition to St Theresa of Avilla Church, other examples include: Our Lady of Solitude in East Los Angeles, 1924; St Raphael's Church and Rectory, Los Angeles, 1925, as well as churches in Hollywood and the El Sereno areas of Los Angeles during the 1920's and 1930's. His most noted projects were St Brendan's Catholic Church at Third Street and Van Ness, in Los Angeles, constructed in 1925, and St Augustine's in Culver City, constructed in 1936, which was notable at the time for a new type of steel construction.

While St. Teresa of Avila Church does not meet the criteria for listing in the National Register, it does appear eligible for listing in the California Register under Criterion 3, as a notable example of the work of a well-known and highly skillful Los Angeles church architect memorializing the Mission Revival style. As a fine example of the Mission Revival style from the late 1920s period, and as a good example of the work of an important local ecclesiastical architect, St. Teresa of Avila Church appears eligible for listing in the California Register of Historical Resources under criterion 3. The subject building is relatively modest in design terms however, and Martin's larger, critically acclaimed commissions for St Brendan's and St Augustine's parishes better showcase the design abilities of this talented yet prolific architect. Therefore, St. Teresa of Avila Church, does not appear to meet Criterion C for National Register listing.

References

1."The Los Angeles Churches of Emmet G. Martin." http://stbrendanchurch.org/abouthistory/martin.html.

Nelson, Mike, The Tidings, "Spirited" St Teresa marks 75th Anniversary", December 13, 1996, pg. 5.

The Tidings," New School for St Teresa Parish," March 4, 1949.

The Tidings, "St Teresa's School Convent to be Blessed," December 15, 1950.

Emit G. Martin Obituary, Architect and Engineer, December, 1937, pg. 58.

Southwest Builder and Contractor: 7/18/1924, 2/13/1925, 2/27/1925, 1/22/1926, 10/07/1927.

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HR #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

Page 1 **of** 2

* **Resource Name or #:** St. Teresa of Avila Church Rectory

P1. Other Identifier: Map Resource # 5

* **P2. Location:** ☑ **Not for Publication** ☐ **Unrestricted** **a. County** Los Angeles

b. USGS 7.5' Quad ____ **Date** ____ **T** ___; **R** ___; ___ **1/4 of** ___ **1/4 of Sec** ___; ____ **B.M.**

c. Address 2216 Fargo Street **City** Los Angeles **Zip** 90039

d. UTM: (Give more than one for large and/or linear feature) **Zone** ____, ____ **mE/** ____ **mN**

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTMs, etc. as app

Assessor's Parcel Number: 5422-017-034. EDENDALE TRACT LOT 99.

* **P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

St. Teresa of Avila Rectory is a two-story wood frame and stucco residence building for St. Teresa of Avila clergy and personnel. The building has a shallow pitch hipped roof with a wide overhang, closed eaves and a flat applied cornice. The front elevation features a one and one- half story deeply recessed entryway below signage that carries the legend "St. Teresa of Avila Rectory" surmounted by a plain cross. A row of moderately steep stairs accesses the closed stairway leading to the entryway. Windows flanking the entryway on the first floor level are obscured by security bars. Upper story fenestration consists of symmetrical sliders with a centered smaller light above the entryway. The east side elevation has a row of similar small sliders on the second story. On the first story slightly larger windows are irregularly placed and secured with bars. A rear entrance is placed at the far end of this elevation.

* **P3b. Resource Attributes:** (List attributes and codes) HP16 Religious building

* **P4. Resources Present:** ☑ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing

P5b. Description of Photo: (View, date, etc.)
March 12, 2007; Looking south from Fargo Street

* **P6. Date Constructed/Age and Sources:**
☐ Prehistoric ☑ Historic ☐ Both

1961Archdiocesan Records

* **P7. Owner and Address:**
Roman Catholic Archbishop of Los Angeles
3424 Wilshire Blvd.
Los Angeles, CA 90010-2202
P--Private

* **P8. Recorded by:** (Name, affiliation, address)
John English
Jones & Stokes
811 W 7th ST, Suite 800
Los Angeles, CA 90017

* **P9. Date Recorded:** 3/12/07

* **P10. Survey Type:** (Describe)
Intensive Survey Level
Section 106 Compliance
Project Review

* **P11. Report Citation:** (Cite survey report/other sources or "none") State Route 2 Freeway Terminus Improvement Project Records of the Los Angeles Archdiocese HRER, May 2007, for Caltrans District 7.

* **Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☑ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record
☐ Photograph Record ☐ Other: (List)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HR #

BUILDING, STRUCTURE, AND OBJECT RECORD

* NRHP Status Code 6Z

* Resource Name or #: St. Teresa of Avila Church Rectory

B1. Historic Name: St Teresa of Avila Rectory

B2. Common Name St. Teresa of Avila Rectory

B3. Original Use: Unknown

B4. Present Use: Rectory

* B5. Architectural Style: Contemporary

* B6. Construction History: (Construction date, alterations, and date of alterations.)
Built 1961 (estimated)

* B7. Moved? ☐ No ☑ Yes ☐ Unknown Date: Original Location:

* B8. Related Features:
Convent and School

B9a. Architect: Unknown b. Builder: Unknown

* B10. Significance: Theme Church Construction Area Los Angeles
Period of Significance 1961 Property Type Religious facility Applicable Criteria N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The St Teresa of Avila Rectory appears to have been built about 10 years after the convent and school and 20 years after the church. It may have originally served another purpose as a church facility. The building is associated with the growth of Teresa of Avila Parish, to serve an expanding Catholic congregation in the area. The building does not appear of exceptional importance in the growth of the Parish or the Archdiocese during the second half of the 20th century and is not associated with historic events or persons as required by Criteria A and B of the National Register. Alterations to the building have compromised its original integrity precluding its qualification for the National Register under Criterion C.

B11. Additional Resource Attributes: (List attributes and codes):

* B12. References:
Records of the Los Angeles Archdiocese

(Sketch map with north arrow required)

B13. Remarks: Map Resource # 5

* B14. Evaluator: Portia Lee
Date of Evaluation: 3/12/07

(This space reserved for official comments.)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HR #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

* **Resource Name or #:** St. Teresa of Avila School

P1. Other Identifier: Map Reference #6

* **P2. Location:** ☑ Not for Publication ☐ Unrestricted **a. County** Los Angeles

b. USGS 7.5' Quad **Date** **T** ; **R** ; 1/4 of 1/4 of Sec ; **B.M.**

c. Address 2215 Fargo Street **City** Los Angeles **Zip** 90039

d. UTM: (Give more than one for large and/or linear feature) **Zone** , **mE/** **mN**

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTMs, etc. as app

Assessor's Parcel Number: 5422-016-034. .

* **P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

St. Teresa of Avila School, two stories in height with a flat roof, banded parapet and walls and foundation of re-enforced concrete, is set on a site sloping toward Glendale Boulevard. The main entrance is located on the Fargo Street elevation and originally featured molded quoin surrounds that have been covered by an application of smooth stucco plaster. The main door is recessed in an entryway block which is projected forward and extended above the height of the building where a concrete image of a Bible surmounted by a heavy wood cross is centered. The entrance is accessed by a set of concrete stairs with an open-rail metal staircase. Fenestration on the front elevation flanks the doorway and consists of large double-hung steel multi-pane sash above smaller operable hoppers. These windows vary in size on the west side of the recessed entryway. On the east side, the site gradient allows for a row of 5 similar windows above a set of corresponding square windows which appear to light basement level rooms. Landscaping consists of foundation planting, trees and a grass roadway verge.

* **P3b. Resource Attributes:** (List attributes and codes) HP15 Educational building

* **P4. Resources Present:** ☑ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing

P5b. Description of Photo: (View, date, etc.)

March 21, 2007; looking northeast from Fargo Street

* **P6. Date Constructed/Age and Sources:** ☐ Prehistoric ☑ Historic ☐ Both

1950Archdiocesan Records

* **P7. Owner and Address:**

Archdiocese Educational Welfare Corp.
3424 Wilshire Blvd.
Los Angeles, CA 90010-2202
P--Private

* **P8. Recorded by:** (Name, affiliation, address)

John English
Jones & Stokes
811 W 7th ST, Suite 800
Los Angeles, CA 90017

* **P9. Date Recorded:** April 15, 2007

* **P10. Survey Type:** (Describe)

Intensive Survey Level
Section 106 Compliance
Project Review

* **P11. Report Citation:** (Cite survey report/other sources or "none") State Route 2 Freeway Terminus Improvement project Historic Records: Parish Office, Los Angeles Archdiocese HRER, May 2007, for Caltrans District 7.

* **Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☑ Continuation Sheet ☑ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other: (List)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HR #

BUILDING, STRUCTURE, AND OBJECT RECORD

* NRHP Status Code 6Z

* **Resource Name or #:** St. Teresa of Avila School

B1. Historic Name: St Teresa of Avila School

B2. Common Name St Teresa of Avila School

B3. Original Use: School B4. Present Use: Same

* **B5. Architectural Style:** Modernist

* **B6. Construction History:** (Construction date, alterations, and date of alterations.)

No building permits were found for there building, however, records indicate that the school was constructed in 1949, with re-enforced concrete floors and a steel roof structure.

* **B7. Moved?** ☑ No ☐ Yes ☐ Unknown Date: Original Location:

* **B8. Related Features:**

B9a. Architect: Kauzor Brothers b. Builder:

* **B10. Significance:** Theme Religious Institutions Area Edendale

Period of Significance 1923-1950 Property Type Religious property Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Los Angeles Archdiocese established the Parish of St. Teresa of Avila in 1921, at the intersection of Fargo Street and what is now Glendale Boulevard. A temporary wood frame church structure was immediately constructed on the north side of Fargo Street, to serve as the new parish. In 1929, a new (current) church was constructed across Fargo Street to the south, and in 1949, a new school and convent were constructed on the north side of Fargo Street, where the old church originally stood. Ground was broken for the new sc hool for Saint Teresa Parish on March 4, 1949, with Pastor P.J. Beary, officiating at the ceremony. The new school building replaced the old wood frame building built in 1921 as the original church for the parish, and later served as the parish hall after construction of the new St. Teresa Church building was completed in 1929. The school building was designed by Kauzor Brothers architects, and Kemp Brothers were the contractors. When completed, the new school building had six classrooms, and could accommodate 300 students, with provision for future expansion. A well-appointed parish hall located in the basement, was also used as an auditorium, and included a cafeteria and lunchroom for pupils. (Contd.))

B11. Additional Resource Attributes: (List attributes and codes):

* **B12. References:**

Records of the Los Angeles Archdiocese

B13. Remarks: Map Reference #6

* **B14. Evaluator:** Portia Lee

Date of Evaluation: March 3, 2007

(This space reserved for official comments.)

(Sketch map with north arrow required)

B10. Significance (contd.)

St. Teresa of Avila School

Kauzor Brothers Architects, a partnership of John E. Kauzor and Anthony A. Kauzor, were responsible for many buildings for the Los Angeles Archdiocese, including churches, schools, and other buildings for parishes in the area. It appears that the two brothers first worked in Los Angeles in 1935, after practicing architecture for a number of years in Pittsburg Pennsylvania. They are the listed architects for buildings at St. Finbar's Parish in Burbank, 1940, John E. Kauzor died in December of 1951. Anthony Kauzor continued to practice after the death of his brother, and in 1959 designed the church, rectory and parish hall at Our Mother of Good Counsel Church, at 2070 North Vermont Avenue, Los Angeles.

Although St. Teresa of Avila school building is associated in historical terms with the growth of St. Teresa of Avila parish during the post-World War II era, the building does not exhibit the noteworthy Mission Revival architectural style of the church on the site. (Emmett G. Martin, Architect; 1929). It is only of nominal significance in the history of the development of the Archdiocese of Los Angeles during the second half of the twentieth century. Therefore, the school does not qualify as a significant architectural or historical resource, and does not appear to meet the criteria for National Register or California Register listing under any of the criteria.

Sources

The Tidings, New School for St Teresa Parish March 4, 1949.

The Tidings, St Teresa's School, Convent to be Blessed, December 15, 1950.

Nelson, Mike, The Tidings, "Spirited" St Teresa marks 75th Anniversary, December 13, 1996, pg. 5.

Los Angeles Times, "Church adopts Mission Style", April 28, 1940, pg. E3

Los Angeles Times, John E. Kauzor, Obituary 2, December 18, 1951, pg. 11

Los Angeles Times, "Plans for New Church Told", September 27, 1959, pg. F16

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HR #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

* **Resource Name or #:** St. Teresa of Avila Convent

P1. Other Identifier: Map Reference #7

* **P2. Location:** ☑ Not for Publication ☐ Unrestricted **a. County** Los Angeles

b. USGS 7.5' Quad ____ **Date** ____ **T** ____; **R** ____; ____ **1/4 of** ____ **1/4 of Sec** ____; ____ **B.M.**

c. Address 2213 Fargo Street **City** Los Angeles **Zip** 90039

d. UTM: (Give more than one for large and/or linear feature) **Zone** ____, ____ **mE/** ____ **mN**

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTMs, etc. as app

Assessor's Parcel Number: 5422-016-030. Tract No. 15411.

* **P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

St. Teresa of Avila Convent, two stories in height, has a low-hipped roof of Spanish clay tile with a shallow overhang and exterior cladding of stucco plaster over wood frame construction. A horizontal string course divides the primary façade facing Fargo Street. Fenestration around the building consists of multi-paned steel casement windows. The projecting main entrance, which is centrally located in the primary façade, is supported by square piers with plain capitals. The architrave carries a small cross. The entry is accessed by a shallow flight of concrete steps leading to a recessed entry porch. The wood entry door is flanked by fanlights. Landscaping consists of domestic planting and several specimen trees.

* **P3b. Resource Attributes:** (List attributes and codes) HP16 Religious building

* **P4. Resources Present:** ☑ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing

P5b. Description of Photo: (View, date, etc.)

* **P6. Date Constructed/Age and Sources:** ☐ Prehistoric ☑ Historic ☐ Both

* **P7. Owner and Address:**
Archdiocese Educational Welfare Corp.
3424 Wilshire Blvd.
Los Angeles, CA 90010-2202

* **P8. Recorded by:** (Name, affiliation, address)
John English
Jones & Stokes
811 W 7th ST, Suite 800
Los Angeles, CA 90017

* **P9. Date Recorded:**

* **P10. Survey Type:** (Describe)
Intensive Level
Section 106 Compliance
Project Review

* **P11. Report Citation:** (Cite survey report/other sources or "none") State Route 2 Freeway Terminus Improvement Project Records of the Los Angeles Archdiocese HRER May 2007 for Caltrans District 7

* **Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☑ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other: (List)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HR #

BUILDING, STRUCTURE, AND OBJECT RECORD

* **NRHP Status Code** 6Z

* **Resource Name or #:** St. Teresa of Avila Convent

B1. Historic Name: Saint Teresa of Avila Convent

B2. Common Name: Saint Teresa of Avila Convent

B3. Original Use: Convent   B4. Present Use: Convent

* **B5. Architectural Style:** Mediterranean Revival

* **B6. Construction History:** (Construction date, alterations, and date of alterations.)

No building permits were found for the Convent. Archdiocese records indicate that construction started in 1949 and the convent was occupied in 1950.

* **B7. Moved?** ☑ No ☐ Yes ☐ Unknown Date: Original Location:

* **B8. Related Features:**

B9a. Architect: Kazor Brothers   b. Builder: Archdiocese of Los Angeles

* **B10. Significance:** Theme Religious building   Area Los Angeles, California

Period of Significance 1950   Property Type Church   Applicable Criteria CRHR

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Los Angeles Archdiocese established the Parish of St. Teresa of Avila in 1921, at the intersection of Fargo Street and what is now Glendale Boulevard. A temporary wood frame church structure was immediately constructed on the north side of Fargo Street, to serve as the new parish. In 1929, the current church was constructed across Fargo Street to the south, and in 1949-1950, a new school and convent were constructed on the north side of Fargo Street The school was staffed by the Sisters of Providence of St. Mary-of-the-Woods. The two story convent building originally provided accommodations for nine sisters. Kazor Brothers Architects, a partnership of John E. Kauzor and Anthony A. Kauzor, were responsible for many buildings for the Los Angeles Archdiocese, including churches, schools, and other buildings for parishes in the area. It appears that the two brothers first worked in Los Angeles in 1935, after practicing architecture for a number of years in Pittsburg Pennsylvania. John E. Kauzor died in December of 1951. Anthony Kauzor continued to practice after the death of his brother, and in 1959 designed the church, rectory and parish hall at Our Mother of Good Counsel Church, at 2070 North Vermont Avenue, Los Angeles. Although St. Teresa of Avila convent is associated in historical terms with the growth of St. Teresa of Avila parish during the post-World War II era, the building does not exhibit the noteworthy Mission Revival architectural style of the church on the site. It is only of nominal significance in the history of the development of the Archdiocese of Los Angeles during the second half of the twentieth century. Therefore, the convent does not qualify as a significant architectural or historical resource, and does not appear to meet the criteria for listing in the National Register of Historic Places or the California Register of Historical Resources under any of the criteria.

B11. Additional Resource Attributes: (List attributes and codes):

* **B12. References:**

Archives of the Los Angeles Archdiocese

"St. Teresa's Convent To Be Blessed." The Tidings, December 15, 1950

B13. Remarks: Map Reference #7

* **B14. Evaluator:** John English/Jones & Stokes

Date of Evaluation: August 17, 2007

(This space reserved for official comments.)

(Sketch map with north arrow required)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HR #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

*** Resource Name or #:** Edendale Branch Library Map Reference #8

P1. Other Identifier: Western Ukrainian Evangelical Baptist Church

*** P2. Location:** ☑ Not for Publication ☐ Unrestricted **a. County** Los Angeles

b. USGS 7.5' Quad ____ **Date** ____ **T** ____; **R** ____; ____ **1/4 of** ____ **1/4 of Sec** ____; ____ **B.M.**

c. Address 2030 Glendale Blvd **City** Los Angeles **Zip** 90039

d. UTM: (Give more than one for large and/or linear feature) **Zone** ____, ____ **mE/** ____ **mN**

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTMs, etc. as app

Assessor's Parcel Number: 5422-016-032. EDENDALE TRACT. Building Permit LA24557/5-31-23; Alteration Permits 4/1/0/1944 and 7-10-1964: Los Angeles Public Library. Certificate of Occupancy 4/16/65 issued to Western Ukrainian Evangelical Baptist Church

*** P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

The Edendale Library/Western Ukrainian Baptist Church was built in 1923 as the Edendale Branch Library. It is a one-story, L-shaped stucco-clad structure with a composition cross-gable roof and boxed eaves set on a steep slope above a short concrete retaining wall. A pedimented entry porch, placed at the gable junction, is accessed by two steep flights of steps with a short level platform between them. The second flight of steps approaching the church carries a wall banister. At the top step, a quarter turn leads to the wood entry door which features an incised cross. The front-facing gable end of the building carries a name plate and vent below the gable peak. Three symmetrically placed aluminum windows pierce the adjoining south-facing wall. On the side gable end, a slender brick end chimney carries an S- brace. The rear elevation has a stucco entry porch with a wood paneled door and louvered window. Fenestration consists of three small aluminum sliders.

*** P3b. Resource Attributes:** (List attributes and codes) HP16 Religious building

*** P4. Resources Present:** ☑ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing

P5b. Description of Photo: (View, date, etc.)
3/21/2006; looking northeast from Fargo Street

*** P6. Date Constructed/Age and Sources:** ☐ Prehistoric ☑ Historic ☐ Both

1923, Factual, Building Permit

*** P7. Owner and Address:**
W. Ukrainian Evangelical Baptist Convention
236 W. Gleason Street
Monterey Park, CA 91754-7108
P--Private

*** P8. Recorded by:** (Name, affiliation, address)
Portia Lee
Jones & Stokes
811 W 7th ST, Suite 800
Los Angeles, CA 90017

*** P9. Date Recorded:** March 12, 2007

*** P10. Survey Type:** (Describe)
Intensive Survey Level
Section 106 Compliance
P-- Project Review

*** P11. Report Citation:** (Cite survey report/other sources or "none") State Route 2 Freeway Terminus Improvement Project Historical Resources Evaluation Report, May 2007. Prepared for Caltrans District 7.

*** Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☑ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other: (List)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #

HR #

BUILDING, STRUCTURE, AND OBJECT RECORD

* NRHP Status Code 6Z

* **Resource Name or #:** Edendale Branch Library Map Reference #8

B1. Historic Name: Edendale Library

B2. Common Name First Ukrainian Evangelical Baptist Church

B3. Original Use: Library B4. Present Use: Church

* **B5. Architectural Style:** Colonial Revival Cottage

* **B6. Construction History:** (Construction date, alterations, and date of alterations.)

Original library permit#LA24557 1923; Alteration permit 07071:4/10/ 1944. Change of Occupancy: # 71281:7/15/64

* **B7. Moved?** ☑ No ☐ Yes ☐ Unknown Date: Original Location:

* **B8. Related Features:**

Landscaping; fencing

B9a. Architect: C.E. Noerenberg b. Builder: Marvin and Marvin

* **B10. Significance:** Theme Institutions Area Architecture

Period of Significance 1923 Property Type Church Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Built in 1923 and designed by prominent Los Angeles architect C.E Noerenberg, The Edendale Library Building was constructed in Colonial Revival style had clapboard siding, a large arched window on the front-facing gable end and shuttered casements on the adjoining south wall and chimney wall. The original entry porch was supported by wood columns with modified Doric caps. The Edendale Branch Library began as a station under the supervision of the principal of the Clifford Street School, and was located in a small room of the school. In 1915 it was recognized as a branch of the Los Angeles Public Library system in order to serve the rapidly growing Edendale neighborhood and in 1923 moved to the new purpose-built building at 2030 Glendale Boulevard. Population growth after World War II mandated a larger building and by permit in 1964 the use changed to religious building. In 1974 the exterior walls of the building were stuccoed. Windows around the building also have been altered from the original design. The fireplace was designed for the Children's Room of the library. The Edendale Library was established in 1913 in a small room of the Clifford Street Elementary School, then moved to rental quarters on Alessandro Street until the Glendale Boulevard building was constructed. A branch history written for the Los Angeles Public Library archives reports that the structure became an important part of the neighborhood, holding art exhibits and special events such as a lecture by architect Richard Neutra and other artists and writers who lived and worked in Edendale and neighboring Silverlake. Although the basic form of the library is still recognizable, the substantial alterations to the porch windows and exterior cladding have compromised its integrity of design, materials and workmanship such that it would not meet any of the National Register criteria for eligibility,

B11. Additional Resource Attributes: (List attributes and codes):

* **B12. References:**

Edendale Library Branch History in the collection of the Riordan Los Angles Public Library

B13. Remarks: Map Reference #8

* **B14. Evaluator:** Portia Lee/Jones & Stokes

Date of Evaluation: November 18, 2006

(This space reserved for official comments.)

(Sketch map with north arrow required)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HR #
Trinomial
NRHP Status Code 6Z Vernacular rural cottage

Other Listings
Review Code Reviewer Date

Page 1 **of** 2

* **Resource Name or #:** 2038 1/2 Glendale Boulevard

P1. Other Identifier: Map Reference # 9

* **P2. Location:** ☑ **Not for Publication** ☐ **Unrestricted** **a. County** Los Angeles

b. USGS 7.5' Quad ____ **Date** ____ **T**__; **R**__; __ **1/4 of** __ **1/4 of Sec** __; ____ **B.M.**

c. Address 2038 1/2 Glendale Boulevard **City** Los Angeles **Zip** 90039

d. UTM: (Give more than one for large and/or linear feature) **Zone** 11 , 383931 **mE/** 3773144 **mN**

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTMs, etc. as app

Assessor's Parcel Number: 5422-016-018.

* **P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

2038 1/2 Glendale Blvd. is an L-plan single family residence with clapboard siding, medium-pitch cross gabled roof, clapboard siding and wood trim. The structure features rectangular multipane fixed vinyl framed windows and operable windows. Window sash is set into wood plank window framing, and fascia boards are also part of the design. A shed-roofed bump out is present at the east (side) elevation. The Craftsman style structure was likely built as a guest house, and has several features indicative of the style: clapboard siding, fascia boards, overhanging eaves, and a flat-roofed covered entry porch at the north elevation. The structure is set on a lot with the grade sloping downward at its southern side, making the southern half the residence steeper. The structure is paralleled by adjacent low-curbed planters containing various bush and tree specimens.

* **P3b. Resource Attributes:** (List attributes and codes) HP2 Single family property

* **P4. Resources Present:** ☑ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing

P5b. Description of Photo: (View, date, etc.)
looking northwest

* **P6. Date Constructed/Age and Sources:** ☐ Prehistoric ☑ Historic ☐ Both

1913Zimas

* **P7. Owner and Address:**
Alan Bennett
2038 Glendale Blvd.
Los Angeles, CA 90039-3607
P--Private

* **P8. Recorded by:** (Name, affiliation, address)
Daniel D. Paul
Jones & Stokes
811 W 7th ST, Suite 800
Los Angeles, CA 90017

* **P9. Date Recorded:** 18 Aug. 2006

* **P10. Survey Type:** (Describe)
Intensive Survey Level
Section 106 Compliance
P-Project Review

* **P11. Report Citation:** (Cite survey report/other sources or "none") State Route 2 Freeway Terminus Improvement Project City Planning Dept. ZIMAS profile viewed 18 Aug. 2006. HRER, May 2007, for Caltrans District 7.

* **Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☑ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other: (List)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #

HR #

BUILDING, STRUCTURE, AND OBJECT RECORD

* **NRHP Status Code** 6ZVernacular rural cottage

* **Resource Name or #:** 2038 1/2 Glendale Boulevard

B1. Historic Name:

B2. Common Name 2038 1/2 Glendale Boulevard

B3. Original Use: Ancillary farm cottage B4. Present Use: SF Residential

* **B5. Architectural Style:** Craftsman

* **B6. Construction History:** (Construction date, alterations, and date of alterations.)

No construction history was available for this property address

* **B7. Moved?** ☑ No ☐ Yes ☐ Unknown Date: Original Location:

* **B8. Related Features:**

Landscaping; specimen trees

B9a. Architect: Unknown b. Builder: Unknown

* **B10. Significance:** Theme Residential Building Area Edendale (Los Angeles)

Period of Significance 1908-1957 Property Type Residence Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This craftsman-style bungalow appears to have been remodeled from an early farm cottage. No evidence has been found to indicate that it was associated with important person or events as required by National Register of Historic Places Criteria A and B. With remodeling over the years the structure has lost substantial integrity and does not meet the requirements of Criterion C, Architecture, of the National Register. There are no known associations with important historic events or persons to warrant consideration for eligibility under National Register Criteria A or B.

B11. Additional Resource Attributes: (List attributes and codes):

* **B12. References:**

Assessors Records, City of Los Angeles; TRW/Experian property records

(Sketch map with north arrow required)

B13. Remarks: Map Reference # 9

* **B14. Evaluator:** Daniel Paul

Date of Evaluation: November 18, 2006

(This space reserved for official comments.)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HR #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code ____ Reviewer ____ Date ____

* **Resource Name or #:** 2219 Baxter Street Residence

P1. Other Identifier: Map Reference # 10

* **P2. Location:** ☑ **Not for Publication** ☐ **Unrestricted** **a. County** Los Angeles

b. USGS 7.5' Quad ____ **Date** ____ **T** ____; **R** ____; ____ **1/4 of** ____ **1/4 of Sec** ____; ____ **B.M.**

c. Address 2219 W Baxter St **City** Los Angeles **Zip** 90039

d. UTM: (Give more than one for large and/or linear feature) **Zone** 11, 383965 **mE/** 3773173 **mN**

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTMs, etc. as app

* **P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

2219 W. Baxter Street is a square-plan, 1 1/2- story, medium-pitched side-gabled Craftsman-influenced early-20th-century vernacular residence with wood clapboard siding and trim and an asphalt shingle side-gable roof. The combination of features associating the structure to the Craftsman design system include clapboard siding, apron skirting, corner boards, rough-hewn tapered square wood posts supporting a front porch, wide overhanging eaves with exposed rafter tails, shed dormers, and extended fascia boards. The shed dormers are clapboard clad and like the roof they feature overhanging eaves and exposed rafter tails. An inset stairwell located at the front elevation leads to the elevated porch. A recent metal stair rail is part of the entry program. Recent T-111 wood panel cladding is present upon the stairwell rise and as apron skirting adjacent and behind the stairwell. The stairway features wood edge framing, likely recent, at the edge of each riser and tread. A wood, single panel front door is inset into a wood-plank doorframe at an off center entry inside the porch at the easterly end of the south facing front elevation. At the front elevation below the elevated porch is a recent wood trellis. Recent aluminum sliding windows are present, as is an arched gable window in the east facing side gable. Dormer windows are framed in thick wood plank, and other window frames are of wood and appear to be recent. A connected, covered patio is situated at the rear of the structure. The residence is recessed on its lot which slopes downward from the front elevation. The front yard features a small rectangular grass lawn, bird of paradise and other domestic planting, and specimen trees.

* **P3b. Resource Attributes:** (List attributes and codes) HP2 Single family property

* **P4. Resources Present:** ☑ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing

P5b. Description of Photo: (View, date, etc.)
front elevation, looking north

* **P6. Date Constructed/Age and Sources:** ☐ Prehistoric ☑ Historic ☐ Both
1906 (Factual)

* **P7. Owner and Address:**
Maria Ochoa
3276 1/2 Descanso Dr
Los Angeles, CA 90026

* **P8. Recorded by:** (Name, affiliation, address)
Daniel D. Paul
Jones & Stokes
811 W 7th ST, Suite 800
Los Angeles, CA 90017

* **P9. Date Recorded:** 18 November 2006

* **P10. Survey Type:** (Describe)
Intensive Level
Section 106 Compliance
Project Review

* **P11. Report Citation:** (Cite survey report/other sources or "none") State Route 2 Freeway Terminus Improvement Project Historical Resources Evaluation Report, May 2007. Prepared for Caltrans District 7.

* **Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☑ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other: (List)

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #
HR #

BUILDING, STRUCTURE, AND OBJECT RECORD

* NRHP Status Code 6Z

* Resource Name or #: 2219 Baxter Street Residence

B1. Historic Name:

B2. Common Name 2219 Baxter Street, Los Angeles, California

B3. Original Use: SF Residential   B4. Present Use: SF Residential

* B5. Architectural Style: Early Twentieth Century Vernacular Cottage

* B6. Construction History: (Construction date, alterations, and date of alterations.)
City building permits yr: 1906:#4605, 1913:#8348, 1928;
1953#61780.
Alterations: Aluminum sliding windows; window frame replacement. New metal star rail. Stairway modification and replacement

* B7. Moved? ☐ No ☐ Yes ☑ Unknown Date: Original Location:

* B8. Related Features:
Landscaping

B9a. Architect: Unknown   b. Builder: Unknown

* B10. Significance: Theme Residential Building   Area Edendale
Period of Significance 1906   Property Type Residence   Applicable Criteria N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This residence, originally built in 1906, is a modest example of Craftsman-influenced early vernacular building. No evidence has been found associating the residence under National Register criteria A or B with persons or events important in the history of the city, state or nation. While the structure retains some design integrity, it cannot qualify under Criterion C, architecture since alterations have compromised its design integrity.

B11. Additional Resource Attributes: (List attributes and codes):

* B12. References:
Los Angeles Department of Building and Safety

B13. Remarks: Map Reference # 10

* B14. Evaluator: Daniel D. Paul/ Jones & Stokes
Date of Evaluation: November 18, 2006

(This space reserved for official comments.)

(Sketch map with north arrow required)

Archaeological Survey Report

ARCHAEOLOGICAL SURVEY REPORT
3rd Draft Submittal

Finding of No Archaeological Resources Present

for the

State Route 2 Freeway Terminus Improvement Project
City of Los Angeles, County of Los Angeles, California

District 07-LA-2-KP 21.8/24.1 (PM 13.5/15.0)
EA 205500

Prepared For: ______________________________ Date: ___________

Gary Iverson
California Department of Transportation District 7
Heritage Resource Coordinator, Cultural Resources Services
100 S. Main Street, MS 16A
Los Angeles, California 90012

Prepared By: C. M. Wood Date: 12/16/08

Catharine M. Wood, RPA
Jones & Stokes
811 West 7th Street, Suite 800
Los Angeles, CA 90017

USGS 7.5' Los Angeles, CA (1966, photorevised 1981); Hollywood, CA (1966, photorevised 1981);

Resources:
Keywords: Location—Los Angeles County, SR-2 Glendale Freeway, Echo Park, Silver Lake

June 2008

TABLE OF CONTENTS

EXHIBITS

SUMMARY OF FINDINGS

This Archaeological Survey Report (ASR) was prepared for the Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the California Department of Transportation (Caltrans) and the Los Angeles Department of Transportation (LADOT). The project proposes to modify the southern terminus of State Route 2 (SR-2), also known as the Glendale Freeway, located in the City of Los Angeles, Los Angeles County, California (Exhibit 1). The proposed project construction limits are located approximately between Clifford Street to the south and Oak Glen Place to the north; however, the overall project study area is generally located between Aaron Street to the south and Interstate 5 (I-5) to the north (Exhibit 2).

A Phase I cultural resources reconnaissance conducted on the October 11, 2006 located no archaeological sites in the project APE. Due to extensive historic period development, the potential for undiscovered archaeological resources is considered low. No archaeological resources will be impacted by the proposed project.

It is Caltrans' policy to avoid cultural resources whenever possible. If buried cultural materials are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the project changes to include areas not previously surveyed.

Introduction

The Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the California Department of Transportation (Caltrans) and the Los Angeles Department of Transportation (LADOT), proposes to modify the southern terminus of State Route 2 (SR-2), also known as the Glendale Freeway, located in the City of Los Angeles, Los Angeles County, California (Exhibit 1). The proposed project construction limits are located approximately between Clifford Street to the south and Oak Glen Place to the north; however, the overall project study area is generally located between Aaron Street to the south and Interstate 5 (I-5) to the north (Exhibit 2). The purpose of the project is to develop a balanced transportation system serving local and regional transportation needs while reducing congestion and improving transportation mobility at the SR-2 freeway terminus. The objectives are to improve traffic flow at the freeway terminus, design the freeway terminus to be compatible with existing residential and commercial uses, provide pedestrian enhancements at the SR-2 freeway terminus, and create the opportunity for potential additional open space in the vicinity of the SR-2 terminus. The proposed project traverses a populated urban rural area of commercial properties along Glendale Boulevard and residential neighborhoods west and east of Glendale Boulevard and on adjacent hillside areas above SR-2 as it approaches I-5.

The Glendale SR-2 Freeway was originally planned and constructed in 1959 to connect with the Hollywood Freeway (SR-101) through the neighborhoods of Echo Park and Silver Lake. In 1962, as a result of local community opposition, the full build-out plan was rescinded and construction was terminated at the present SR-2 freeway terminus near Glendale Boulevard and Duane Street.

The project would be subject to both California Environmental Quality Act (CEQA) and federal National Environmental Policy Act (NEPA) regulations. Caltrans would be the lead agency under CEQA, and FHWA would be the lead agency under NEPA.

Highway Project Location and Description

The proposed project construction limits are located approximately between Clifford Street to the south and Oak Glen Place to the north; however, the overall project study area is generally located between Aaron Street to the south and Interstate 5 (I-5) to the north (Exhibit 2). The purpose of the project is to develop a balanced transportation system serving local and regional transportation needs while reducing congestion and improving transportation mobility at the SR-2 freeway terminus. The objectives are to improve traffic flow at the freeway terminus, design the freeway terminus to be compatible with existing residential and commercial uses, provide pedestrian enhancements at the SR-2 freeway terminus, and create the opportunity for potential additional open space in the vicinity of the SR-2 terminus. The proposed project traverses a populated urban rural area of commercial properties along Glendale Boulevard and residential neighborhoods west and east of Glendale Boulevard and on adjacent hillside areas above SR-2 as it approaches I-5.

There are six proposed alternatives for the SR-2 Freeway Terminus Improvement Project, including the No-Build Alternative. The proposed project site is generally located between Clifford Street to the south and Oak Glen Place to the north. The six proposed alternatives (Exhibit 4) are summarized as follows:

- **No-Build Alternative (Baseline Alternative):** This alternative requires no new ~~construction.~~
- **Alternative A (Widen Existing Ramps):** This alternative would widen the existing ~~southbound exit ramp from two to three lan~~es and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp and bridge (two lanes). This alternative does not have the potential for new open space.
- **Alternative B (Realign Ramps East – Remove Flyover and Part of Bridge):** This ~~alternative would shift the entrance and exit ramps to the east. It would reduce the num~~ber of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would also remove the southbound flyover ramp and a portion of the bridge over Glendale Boulevard. The remaining portion of the bridge over Glendale Boulevard would be retained for community reuse and greening. This alternative offers the potential for new open space for recreational opportunities.
- **Alternative C (Realign Ramps West – Remove Flyover and Bridge):** This alternative ~~would shift entrance and exit ramps to the west. It would reduce the numb~~er of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and bridge over Glendale Boulevard. This alternative provides a landscaped median and a parkway treatment. This alternative offers the potential for new open space but not recreational opportunities.

- **Alternative D (Realign Ramps East – Retain Flyover and Bridge):** This alternative ~~would shift the exit ramps to the east and modify the existing flyover str~~ucture and bridge, converting it to community open space and a recreational area. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged. This alternative offers the potential for new open space.
- **Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining ~~Wall):~~** ~~This alternative would shift the exit ramps to the east and modify the existing flyover structu~~re and bridge, converting it to community open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. The existing retaining wall along Allesandro Street would be relocated to the east to maintain Caltrans streets and highway standards. This alternative offers the potential for new open space.

Sources Consulted

Record Search

A cultural resources literature and record search was conducted for the SR-2 Glendale Freeway Terminus Project and for a radius of ¼-mile surrounding by the South Central Coastal Information Center on May 18, 2006. This record search included a review of all recorded archaeological sites within a ¼-mile radius of the project area as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest (PHI), the California Historical Landmarks (CHL), the California Register of Historical Places (CR), the National Register of Historic Places (NR), the California State Historic Resources Inventory (HRI), and the City of Los Angeles Historic-Cultural Monuments listings were reviewed as well.

The record search revealed that the majority of the project area had been previously surveyed in 2000 (Caltrans District 7, *Negative Archaeological Survey Report: 07-LA-2 KP22.5/36.7-170-21370k).* One cultural resource, 19-173327, St. Theresa of Avila Church, has been identified within the southwestern portion of the project area. Archaeological Resource Management Corporation conducted a record search for the St. Theresa Church of Avila Fargo and Archaeological Consulting Services conducted a historical resources investigation of the St. Theresa of Avila Church in 2003.

Three previous cultural resource studies have been conducted within a ¼-mile of the project area and eight cultural resource studies have been conducted within a ½-mile of the project area. No archaeological sites have been identified within a ¼-mile radius of the project area and no archaeological isolates have been identified within a ¼-mile radius of the project area. Numerous historic structures have been listed on various registers adjacent to the project area: The California Historical Landmarks lists one property within a ½-mile radius of the project area.

> **Navy and Marine Corps Reserve Center CHL #972 Primary #19-173143**
> Designed as the largest enclosed structure without walls in the world by noted California architects Robert Clements and Associates, this Art Deco building, constructed between 1938 and

1941 by the WPA, is the largest and second-oldest Navy Reserve Center in the United States. It has served as the induction, separation, and training center for more than 100,000 sailors since World War II as well as the filming site for countless motion pictures and television shows. Located at 1700 Stadium Way, Los Angeles.

The California Register of Historical Places lists three properties within a ½-mile radius of the project area. These are properties determined to have a National Register of Historic Places Status of 1 or 2, a California Historical Landmark numbering 770 and higher, or a Point of Historical Interest listed after 1/1/1998.

Garbutt House
1809 Apex Avenue, Los Angeles, CA
NR-87001174
Primary #19-166820

Nuetra Office Building
2379 Glendale Boulevard, Los Angeles, CA
NR-01000075
Primary #19-187000

Silver Lake Recreation Center
1850 Silver Lake Boulevard, Los Angeles, CA
Primary #19-175302

The National Register of Historic Places lists two properties within a ½-mile radius of the project area.

Garbutt House
1809 Apex Avenue, Los Angeles, CA
NR-87001174
Primary #19-166820

Nuetra Office Building
2379 Glendale Boulevard, Los Angeles, CA
NR-01000075
Primary #19-187000

The City of Los Angeles Historic-Cultural Monuments lists four properties within a ¼ to a ½-mile radius of the project area.

No. 256 Mack Sennett Studios

Built by Mack Sennett in 1912, this structure was one of the first motion picture studio complexes in Los Angeles. The buildings date from the days when Sennett was recognized as the major producer of comedies in the motion picture business. Located at 1712 Glendale Boulevard. Declared: 11/5/82.

No. 322 Fletcher Drive Bridge Over the Los Angeles River Completed in 1928, this bridge is a reinforced concrete structure in Classical style representative of the type of bridge construction in the 1920's. It was designed by the Bureau of Engineering of the City of Los Angeles. Located on Fletcher Drive between Larga Avenue and Crystal Street. Declared: 7/21/87.
19-173432

No. 422 Silver Lake & Ivanhoe Reservoirs

Silver Lake was built in 1906. The capacity of the two reservoirs is 767 million gallons, which, in 1906, could supply the City for 20 days. Located between West Silver Lake Drive and Silver Lake Boulevard. Declared: 3/31/89

No. 569 Van De Kamp's Holland Dutch Bakery

Designed by architect J. Edwin Hopkins and constructed in 1930. This structure is the only example of a Dutch Renaissance Revival industrial plant in Los Angeles and was a part of the most successful effort in the City's history to establish a corporate image through thematic architecture. Located at 3020 San Fernando Road. Declared: 5/12/92

The California Historic Resources Inventory lists eighty-three properties that have been evaluated for historical significance within a ¼ to a ½-mile radius of the project area.

Historic-era 15-minute USGS topographic maps for Pasadena (1896 and 1900), Santa Monica (1902 and 1921), and Los Angeles (1928) were also reviewed for the project. The Pasadena 1896 15-minute USGS topographic map depicts the City of Los Angeles as a sprawling, patchwork development. Rancho San Rafael is located to the east of the project area within the San Rafael Hills with the more centrally developed City of Pasadena within the Rancho San Pasqual to the northeast of Los Angeles. Verdugo Canyon is depicted trending in a north-southwesterly direction and the Los Angeles River, north of the project area, is illustrated as meandering in a west-southeasterly direction and Elysian Park is illustrated south of the river. The communities of Glendale, Verdugo, and Eagle Rock Valley are depicted to the north and east of the project area. Along the northwest-southeast Southern Pacific Railroad line, the communities of Gaston, Three Mile House, and Bennington are depicted.

The Pasadena 1900 15-minute USGS topographic map depicts no significant changes from the 1896 edition.

The Santa Monica 1902 15-minute USGS topographic map depicts the City of Los Angeles to the south and Rancho Los Felis to the northwest of the project area within the Santa Monica Mountains. The Los Angeles River is illustrated as meandering in a west-southeasterly direction north of the project area, with the Southern Pacific Railroad line following along in the same direction. The communities of Burbank, Redcastle, West Glendale and Tropico are depicted along the rail line. Verdugo Wash is to the north and there is a canal depicted on the west side of the river, north of the communities of Edgemont and Ivanhoe within Los Felis Rancho. The Los Angeles Terminal Railroad Line is depicted in a north-south direction, north of the project area.

The Santa Monica 1921 15-minute USGS topographic map depicts the expansion of the City of Los Angeles and the addition of the Pacific Electric Lines. Griffith Park is depicted within the Los Felis Rancho and Echo Park is located south of the project area. Verdugo Wash has been channelized and Silver Lake Reservoir is illustrated within a developing community. The Los Angeles River is still depicted as meandering in west-southeasterly direction.

The Los Angeles 1928 15-minute USGS topographic map depicts a developed City of Los Angeles with Glendale Boulevard and a Pacific Electric Line running parallel to each other in a north-south direction with small streets and structures in between. The community of Edendale is located south of Silver Lake Reservoir, and Echo Park is in the southeast corner of the intersection of Glendale Boulevard and Sunset Boulevard. The communities of Mixville and Elysian Heights are depicted on the east side of Glendale Boulevard and there is development within Elysian Park of roads and structures. The Los Angeles River has been channelized.

Native American Consultation

A letter dated May 15, 2006, including a USGS topographic map depicting the project area, was sent to the Native American Heritage Commission (NAHC) requesting a review of the Sacred Lands file. The NAHC responded on June 7, 2006 and indicated that there were no sacred lands in the project area. The NAHC also provided a list of 12 local Native American groups and individuals.

The NAHC response letter and contact list was sent to Caltrans District 7 on June 7, 2006 to initiate the consultation process. Caltrans District 7 sent letters regarding the project to Native American groups and individuals from the Department office.

Background

Environment

The project area is situated in the City of Los Angeles at approximately 380 to 520 feet above mean sea level (amsl) within the former Rancho Los Felis. The project area is depicted on the USGS 7.5-minute Hollywood and Los Angeles Quadrangles in unsectioned portions of Township 1 South, Range 13 West.

Geology in the hills on the western side of the junction of the Glendale Freeway (SR-2) and the Golden State Freeway (I-5) northeastward, consist of surficial deposits of younger Quaternary Alluvium derived as fluvial deposits from the Los Angeles River that courses through this portion of the project area. These younger Quaternary alluvial sediments also occur at the surface in the lower reaches of the valley in the project area from about where the Glendale Freeway (SR-2) currently terminates southward. The hills surrounding the Glendale Freeway (SR-2) west of the Golden State Freeway (I-5) in the project area have bedrock composed of the upper part of the marine Late Miocene Monterey Formation (also known as either the Puente Formation or the Modelo Formation in this area). The Los Angeles River is the only body of water in the vicinity of the project that qualifies as a water of the U.S. It is located approximately 2 miles north of the project site.

Ethnography

The project area lies within the territory of the Gabrieleno Native American people (Bean and Smith 1978). The Gabrieleno are characterized as one of the most complex societies in native southern California, second perhaps only to the Chumash, their coastal neighbors to the northwest. This complexity derives from their overall economic, ritual, and social organization (Bean and Smith 1978:538; Kroeber 1925:621).

The Gabrieleno, a Uto-Aztecan (Shoshonean) group, may have entered the Los Angeles Basin as recently as 1500 B.P. In early protohistoric times, the Gabrieleno occupied a large territory including the entire Los Angeles Basin. This region encompassed the coast from Malibu to Aliso Creek, parts of the Santa Monica Mountains, the San Fernando Valley, the San Gabriel Valley, the San Bernardino Valley, the northern parts of the Santa Ana Mountains, and much of the middle to the lower Santa Ana River. They also occupied the islands of Santa Catalina, San Clemente, and San Nicolas. Within this large territory were more than 50 residential communities with populations ranging from 50 to 150 individuals. The Gabrieleno had access to a broad and diverse resource base. This wealth of resources, coupled with an effective subsistence technology, well developed trade network, and ritual system, resulted in a society that was among one of the most materially wealthy and culturally sophisticated cultural groups in California at the time of contact. Machado (Harbor) Lake, a permanent fresh water source, was attractive for habitation, and it is thought that the Gabrieleno village of *Saungna* was located near (Colby and Geiger 1984).

Prehistory

The prehistoric occupation of southern California is divided chronologically into four temporal phases or horizons (Moratto 1984). Horizon I, or the Early Man Horizon, began at the first appearance of people in the region approximately 12,000 years ago, and continued until about 5000 B.C. Although little is known about these people, it is assumed that they were semi-nomadic and subsisted primarily on game.

Horizon II, also known as the Millingstone Horizon or Encinitas Tradition, began around 5000 B.C. and continued until about 1500 B.C. The Millingstone Horizon is characterized by widespread use of milling stones (manos and metates), core tools, and few projectile points or bone and shell artifacts. This horizon appears to represent a diversification of subsistence activities and a more sedentary settlement pattern. Archaeological evidence suggests that hunting became less important and that reliance on collecting shellfish and vegetal resources increased (Moratto 1984).

Horizon III, the Intermediate Horizon or Campbell Tradition began around 1500 B.C. and continued until about A.D. 600-800. Horizon III is defined by a shift from the use of milling stones to increased use of mortar and pestle, indicating a greater reliance on acorns as a food source. Projectile points become more abundant and, together with faunal remains, indicate increased use of both land and sea mammals (Moratto 1984).

Horizon IV, the Late Horizon, which began around A.D. 600-800 and terminated with the arrival of Europeans, is characterized by dense populations; diversified hunting and gathering subsistence strategies, including intensive fishing and sea mammal hunting; extensive trade networks; use of the bow and arrow; and a general cultural elaboration (Moratto 1984).

History

Spanish occupation of California began in 1769, at San Diego. Mission San Gabriel was established in the Los Angeles Basin in 1771, about 35 miles north of the project area, and the Los Angeles Pueblo was established as a civilian settlement on 4 September 1781.

Under Spanish rule, merchant vessels were prohibited from trading directly at any California port other than Monterey. However, in 1805, an American ship traveled into San Pedro bay and found a ready market for European-manufactured and Oriental goods. Unofficial trade continued with cattle hides and sea otter pelts transported into the bay.

The project area is located within the former Los Feliz Rancho. Jose Vincente Feliz may have been given the 6,600-acre rancho as early as 1795 for his services to the crown.

El Rancho Nuestra Senora de Refugio de Los Feliz (Our Lady of Refuge of the Feliz Family) was a little over three miles from the pueblo plaza. The main road, heading north toward the Cahuenga Pass crossed the southwest section of Feliz's property. This was the primary trail linking northern and southern California. The northern portion of the rancho was mostly mountainous terrain, while the southern section was low foothills and flat meadows. The soil was fertile and the water supply was rich with sources, including mountain springs and the Los Angeles River (Kielbasa 1997). Records indicate that Jose Vincente Feliz was still in possession of Rancho Los Feliz as late as 1816.
Mexico rebelled against Spain in 1810, and by 1821, Mexico, including California, achieved independence. Rancho Los Feliz had a succession of owners after the Feliz family. James Lick, a businessman from San Francisco, was deeded Rancho Los Feliz sometime during the 1800s (Kielbasa 1997). After Lick's death, Colonel Griffith Jenkins Griffith acquired 4,071 acres of the rancho in 1882. The Lick estate still owned the southwest portion of the rancho that was developed into the Lick Tract that later became a part of Hollywood (Kielbasa 1997). Since the Los Angeles River coursed through the rancho property, in 1884 Griffith sold water rights to the Los Angeles River to the City of Los Angeles for $50,000. Up until that time, the city had had free use of the river (Kielbasa 1997). In 1896, Griffith donated 3,015 acres of Rancho Los Feliz to the City of Los Angeles to be used as a park. The deed to the land was accepted in 1898 and Griffith Park became one of the largest municipal parks in the country at the time (Kielbasa 1997).

Town sites called Edendale, Ivanhoe, and Laughlin Park in the southern and western sections of the rancho were developed at this time. These towns eventually annexed to the City of Los Angeles, becoming the Silver Lake and Los Feliz Districts (Kielbasa 1997).

Edendale was a small settlement populated in the first half of the 20th Century, which is now contained within the Echo Park neighborhood north of Sunset Boulevard, surrounding Echo Park Lake. Both areas are located in the Glendale Corridor, a residential and commercial area northwest of downtown Los Angeles. The original Edendale tract was acquired, surveyed, platted, and named in late 1902 by Moses Wicks, a native of Mississippi who emigrated to California and practiced law in Anaheim. After moving to Los Angeles in the late 1880s, he became a prominent real estate speculator, opening up many new areas in the farmland and chaparral surrounding downtown Los Angeles (Newmark, 476).

The Edendale tract formed the northern boundary of the 28 square mile original city of Los Angeles, extending from Effie Street on the South to Baxter Street on the North between Alvarado and Fanning Streets on the East and West (LA County Assessors Map, Book 2, Numbers 81 and 82). Like many other Los Angeles tracts developed during this era, Edendale developed as a classic "streetcar suburb" carved out of an area of hilly farmland within easy reach of downtown. Wicks' plan for Edendale was designed to take advantage of the arrival of the Glendale line of the Los Angeles and Glendale Railway, whose electric streetcars began running through the tract along Lake Shore Avenue (later Alessandro Avenue, now Glendale Boulevard) in mid-1904 (LA Times, 6/30/1903, 7/28/12; Fogelson, 39-42).

By late 1903 and early 1904 Wicks was selling lots in the new tract, offering "easy terms" on "large lots" with "building restrictions such as can be legally enforced." He asked between $100 and $200 for the 50x150 foot lots, and predicted that with Edendale and surrounding developments “the hill portion of Los Angeles will have its awakening.” Sales were brisk; in the month of April, 1904 alone he sold 90 Edendale lots. “Evidently,” remarked the *Los Angeles Times*, “this beautiful close-in part of the city is coming into its own, and the moderate prices at which lots can still be bought here are sure to attract many.” By 1906 the *Times* was observing that the rapid growth of population in the northwestern hill districts like Edendale and neighboring Elysian Park had been one of the chief factors spurring the city’s overall population explosion since 1900. (LA Times,11/28/03; 2/8/04; 7/9/04; 4/10/04; 5/1/04; 4/14/06).

Over the years, Edendale lost its identity as a separate neighborhood. Although the name is retained in the official names of the local post office and branch library, its larger neighbors, Echo Park and Silver Lake, have absorbed the historic settlement. The area, whose commercial and residential buildings lost value during the 1960s and 70s, has benefited from the gentrification that the larger Echo Park-Silver Lake area has experienced since the 1980s.

In the late 1950s and early 60s, The California Department of Transportation (Caltrans) proposed an extension of the Glendale Freeway south into the neighborhood from the Golden State Freeway. The Glendale Freeway, originally intended to go across the neighborhood to the Hollywood Freeway and then west as the Beverly Hills Freeway, was truncated as widespread community opposition forced Caltrans to abandon its plans. An elevated bridge, designed for the point where the proposed freeway would cross Glendale Boulevard, was redesigned to function as an off- ramp from the Golden State Freeway (SR5) south and the Glendale Freeway (SR-2) west to Glendale Boulevard. [LA Times, 1/14/1962; 1/28/1963; http://cahighways.org/001-008.html.]

Field Methods

An archaeological survey of the Project APE was conducted by Mark C. Robinson, and Catharine M. Wood, Jones & Stokes archaeologists, on October 11, 2006. Mr. Robinson has an MS. degree in Anthropology from the University of Oregon, and 14 years of experience in California archaeology. Ms. Wood has an M.A. degree in Anthropology from California State University, Fullerton and six years of experience in California archaeology.

The SR-2 Freeway Terminus Improvement Project APE was inspected for cultural resources primarily by driving. It was observed that the project area has been significantly altered by development of the railroad, residential and commercial development and the freeway. Only two limited areas were examined on foot, and both proved to be disturbed by previous earthmoving. The project APE consists of a built environment, in places cut into bedrock, and is largely covered with pavement and disturbed land surfaces.

No cultural resources were observed.

Study Findings and Conclusions

No prehistoric or historical archaeological resources were observed within the project APE during the survey for the SR-2 Freeway Terminus Improvement Project. Because of the disturbed nature of the project area, the project Area has a very low potential to encompass buried cultural resources.

No further archaeological work is necessary unless project plans change to include unsurveyed areas, or if buried cultural resources are found.

If buried cultural resources are encountered during construction, work in that area must halt until a qualified archaeologist can evaluate the nature and significance of the find. If human remains are unearthed during construction, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98. In either instance, Caltrans District 7, Environmental Division, Cultural Studies Branch will be immediately notified (Environmental Handbook, Vol. 2, Chapter I).

References Cited

Bean, L. J., and C. R. Smith

1978 Gabrielino. In *Handbook of North American Indians, Vol. 8, California,* R. F. Heizer (ed.), pp. 538–549. Smithsonian Institution, Washington, DC.

California Highways. Available: <http://cahighways.org/001-008.html>.

Colby, Susan and David Geiger

1984 *An Archaeological Resource Survey and Impact Assessment of the Harbor Lake Restoration Project Area, Los Angeles County, California.*

Fogelson, 39–42.

Kielbasa, John

1997 *Historic Adobes of Los Angeles County.* Dorrance Publishing Co., Inc., Pittsburgh, Pennsylvania.

Kroeber, Alfred

1925 Handbook of the Indians of California. Bulletin 78, *American Bureau of Ethnology*. Reprinted in 1976, Dover Publications, Inc., New York.

Los Angeles Times. 6/30/1903, 7/28/12, 1/14/1962, 1/28/1963, 11/28/03, 2/8/04, 7/9/04, 4/10/04, 5/1/04, 4/14/06

Moratto, Michael J.

1984 *California Archaeology*. Academic Press, Orlando, Florida.

Newmark, 476.

Exhibits 1, 2, 3, 4, and 5

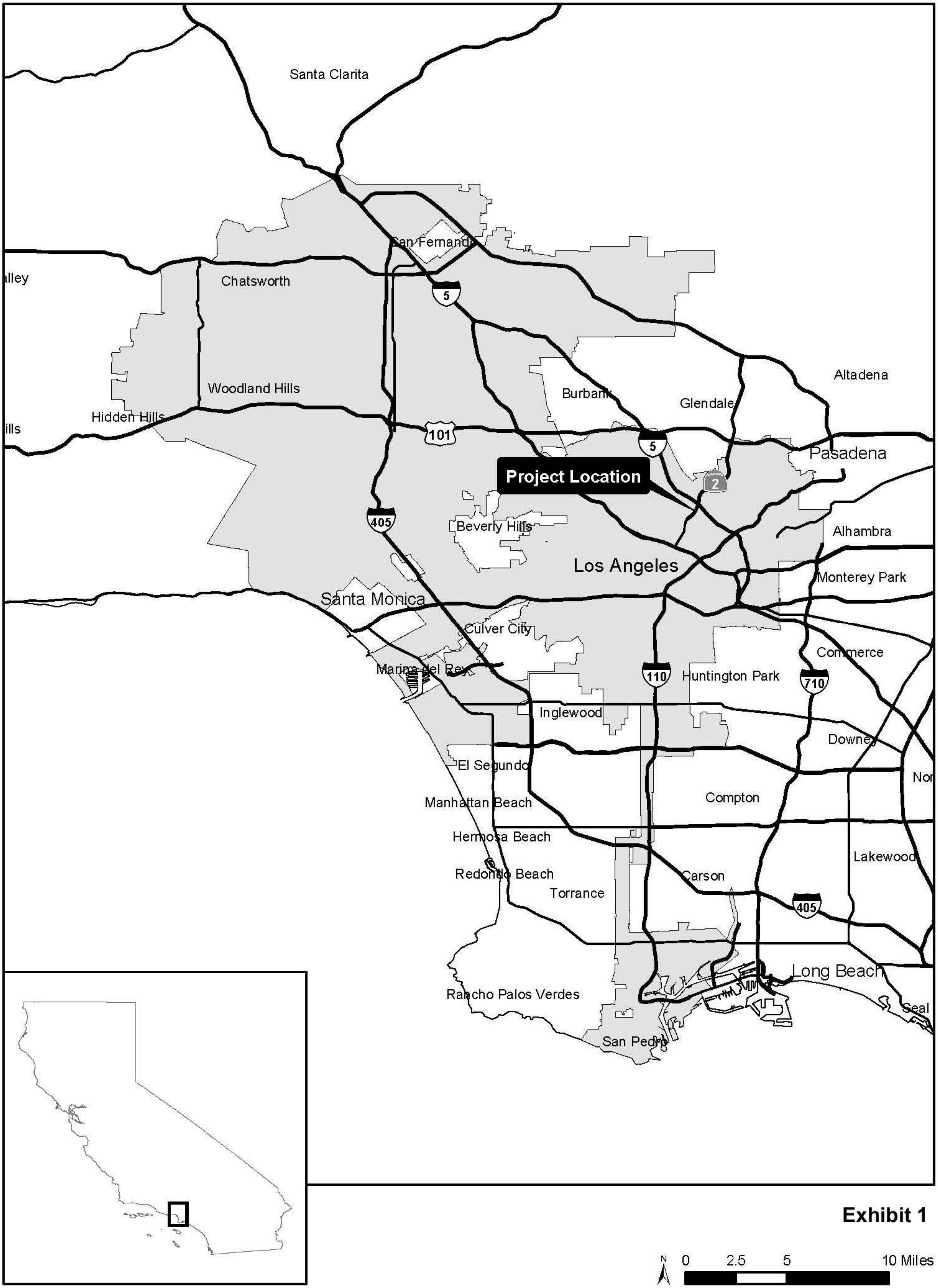

Santa Clarita
San Fernando
Chatsworth
5
Woodland Hills
Hidden Hills
Burbank
Glendale
Altadena
101
5
Pasadena
Project Location
2
405
Beverly Hills
Alhambra
Los Angeles
Monterey Park
Santa Monica
Culver City
Commerce
Marina del Rey
110
Huntington Park
710
Inglewood
Downey
El Segundo
Compton
Manhattan Beach
Hermosa Beach
Lakewood
Redondo Beach
Carson
Torrance
405
Long Beach
Rancho Palos Verdes
San Pedro
N
0
2.5
5
10 Miles

Exhibit 1

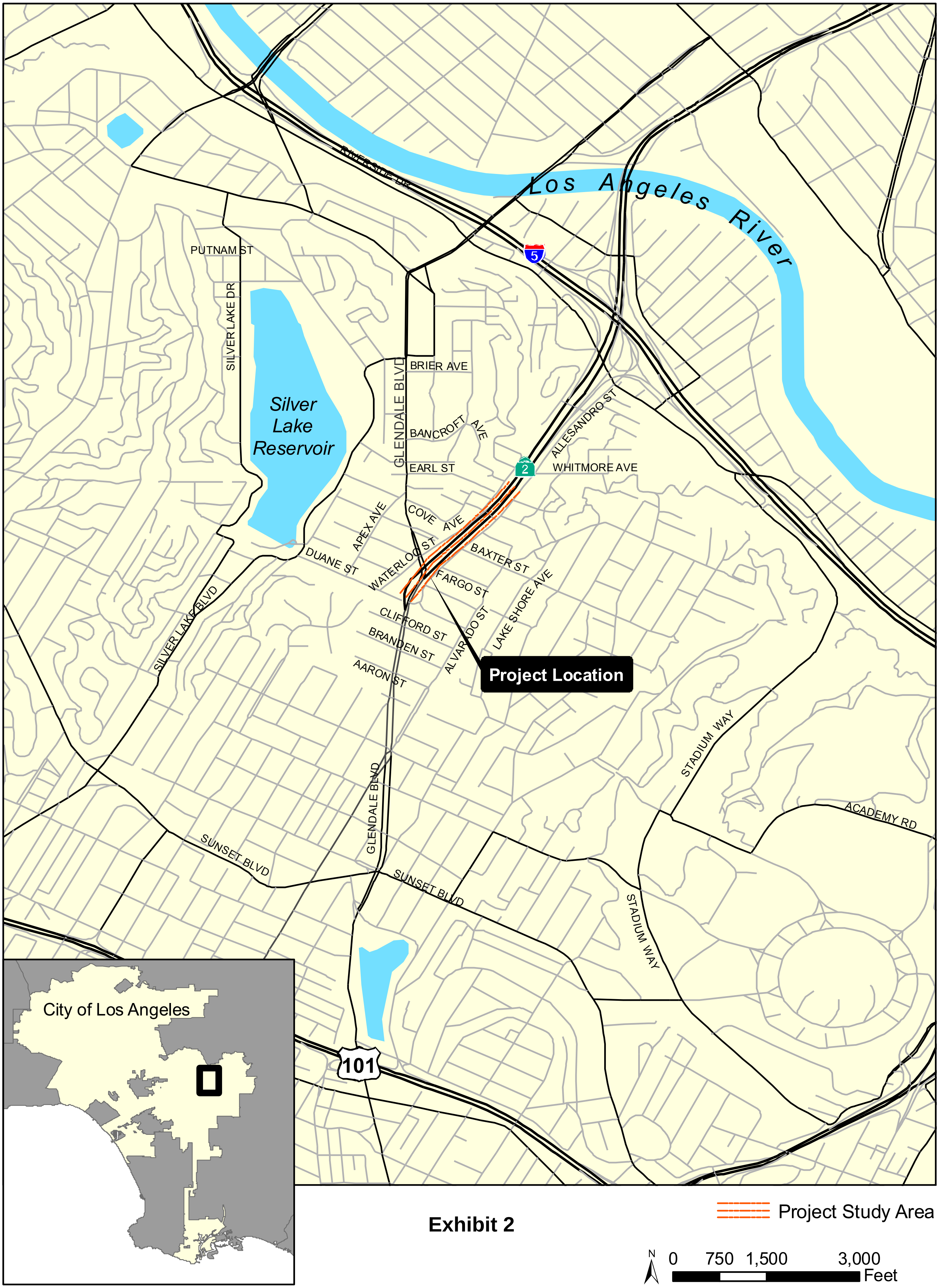


Exhibit 2

Project Study Area

N

0 750 1,500 3,000 Feet

SOURCE: TeleAtlas (2006); USGS UrbanArea - 0.25 m (2004)

0 250 500 1,000 Feet

Exhibit 3
Survey Coverage Map

K:\GIS\PROJECTS\SR-2\06011_06\MAPDOC\SURVEY_AREA.MXD CM (04-25-07)

No-Build Alternative (Baseline Alternative)

Source: Melendrez, 2006.

Exhibit 4

Alternative A (Widen Existing Ramps)

Source: Melendrez, 2006.

Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge)

Source: Melendrez, 2006.

Alternative C (Realign Ramps West – Remove Flyover and Bridge)

Source: Melendrez, 2006.

Alternative D (Realign Ramps East – Retain Flyover and Bridge)

Source: Melendrez, 2006.

Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining Wall)

Source: Melendrez, 2006.

LETTERS FROM HISTORICAL SOCIETIES, NATIVE AMERICAN GROUPS, LOCAL GOVERNMENTS, ETC.

Exhibit 5

Richard Starzak

From: Lewicki, Pauline [plewicki@cra.lacity.org]

Sent: Friday, September 22, 2006 9:20 AM

To: Richard Starzak

Cc: John English

Subject: Cal Trans project SR2 southern terminus

Dear Rick and John,

I looked at the letter and maps that were mailed to me. CRA has no information on any properties within the boundaries of the APE. The closest Redevelopment Project area is Chinatown. The western boundary of the Chinatown R. P. is Beaudry Avenue.

Sincerely,

Pauline Lewicki
Principal Environmental Planner
CRA
213-977-1952
plewicki@cra.lacity.org

Echo Park Historical Society

P.O. Box 216022
Los Angeles, CA 90026
323-860-8874
www.HistoricEchoPark.org

October 10, 2006

Mr. Richard Starzak, Principal Architectural Historian
Jones & Stokes
811 West 7th Street Suite 800
Los Angeles, CA 90017

Dear Mr. Starzak:

Thank you for contacting the Echo Park Historical Society regarding your research into sites of historical significance within the State Route 2 Freeway Terminus Improvement Project area.

The information below was gathered from a variety of online and printed sources. We encourage you to contact some of the resources listed below and share any new findings with the society. We request a copy of your report for inclusion in our archives.

Much of the area you are studying was known formerly as Edendale, a small cluster of businesses, homes and farms that straddled roughly what is now Glendale Boulevard (formerly Allesandro Street) at the turn of the 20th Century.

Though mostly forgotten, Edendale pre-dates Hollywood as the Southern California's first movie capital with the establishment of a handful of silent film studios by 1915. Notably, Chicago-based Selig Polyscope Co. opened its West Coast office and studio in 1909 at 1845 Allesandro. This is widely recognized as the first, permanent movie studio in Los Angeles. That location, which is referenced in film history web sites, is located in the project area. (Near Property No. 2 on the DAPE map you provided.)

One of Selig Polyscope's most notable actors, cowboy film star Tom Mix, made some of his first films at the Edendale lot, which featured an elaborate, Mission-style façade and entrance. (Mix himself went on to build a Western-themed studio lot a few blocks north near what is now the intersection of Glendale Boulevard and Rowena)

The pioneering Selig Polyscope company later established a much larger studio in Lincoln Heights. However, the Selig Polyscope property in Edendale was leased to a string of other film companies and movie makers into the 1920s, including William Fox and Garson Studios. We are not aware that any of the buildings currently on or near the property were used when Selig Polyscope was in operation.

South of the Selig Polyscope lot, the Norbig Film Company leased space to many fledgling film makers, including Hal Roach and Charlie Chaplin. Norbig was located at 1745 Allesandro, according to film history web sites.

The Pathé West Coast Film Company, an arm of a French movie firm, is also believed to have had offices at 1807 Allesandro (at Branden St.).

Located immediately south of the project area is the site of what was Edendale's most widely known studio, Mack Sennett-Keystone at 1719-1712 Allesandro (the studio straddled both sides of what is now Glendale Blvd). This location was designated a City of Los Angeles Cultural Historic Monument (No. 256).

(Ironically, a monument honoring Mack Sennet was built in the 1950s but located on the site of the Selig Polyscope studio).

Your research into these pioneering movie industry studios comes as we approach the 100th anniversary of the founding of the Selig Polyscope studio in Edendale. We hope your work can shed further light into this significant property.

We look forward to being of further assistance.

Sincerely,

Kevin Kuzma, President
Echo Park Historical Society

Recommended Sources:

Marc Wanamaker, Director of Bison Archives
Phone: 323-461-2714

Jerry Schneider of Movie Making Locations website
(http://employees.oxy.edu/jerry/index.html)
jerry@oxy.edu

Wikipedia sources:

Biography of Colonel William Selig from the Academy of Motion Pictures Arts and Sciences / Margaret Herrick Library (Source: http://www.oscars.org/mhl/sc/selig_162.html)

History of Selig Zoo and Movie Studio (Soiurce: http://www.angelfire.com/ca4/lincolnpark/historyselig.html).

Hollywood Heritage on Francis Boggs and the establishment of the first studios in LA. (Source: http://www.hollywoodheritage.org/newsarchive/summer99/boggs.html)

The KeyStone: Tales of Early Hollywood by Coy Watson, Jr. (published by Santa Monica Press)

-----Original Message-----
From: w techentin [mailto:techproj@pacbell.net]
Sent: Wednesday, October 11, 2006 1:29 PM
To: John English; Richard Starzak
Subject: Response to Letter of 18 Aug

Dear Richard and John-

We received your letter regarding the environemntal assessment of the State Route 2 Freeway Terminus. As a not for profit, the Los Angeles Forum for Architecture and Urban Design meets monthly and it sometimes takes a little while to table issues. It must be said that no specific site reconaissance was made in reference to this request. All opinions have been based on the familiarity of the site bey our Board members.
Our response is as follows:

At a recent Board meeting, we discussed the concerns with those buildings numbered and no one was aware of any particular architectural signifigance with any of them. There was concern for the church as an important building for both the history of the region and the community.
Many people in the community seem to have ties to it. Architecturaly it was not considered significant. While many felt that Glendale Blvd. in fact needed an overhaul and traffic was often problematic, people were concerned that the portion under consideration, being residential in nature, would be adversly affected with any commercial development causing it to become more like Glendale Blvd immediately south of the subject site. Everyone stressed the need to maintain the residential quality of the area through the imposition of park space, community centers, low density residential, or similar program that reinforces the residetial in scale and condition of the neighborhood.

This assessment was determined through the many years of experience, collectively, of the LA Forum Board members who have lived an practiced in the area and their understanding of the community that lives there.

Please let us know if you have any further questions or if you would like us to visit the site,

Sincerely,

warren techentin, president
Los Angeles Forum for Architecture and Urban Design.
323. 855. 0891

Jones & Stokes

15 May 2006

Rob Wood
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Dear Mr. Wood:

This letter requests a search of the Sacred Lands files for the SR 2 Freeway Terminus Project. The Project area is indicated on the enclosed copies of the Los Angeles and Hollywood 7.5 minute USGS topographic maps, and page 594 of the 1999 Thomas Guide. The Project area is located in Los Angeles County, and in unsectioned portions of Township 1S, Range 13W.

Please also provide me with a list of Native American individuals and organizations who may have additional information about sacred sites or Native American traditional cultural properties in or near the Project area.

If you have questions or need further information, please call me at 213-627-5376. Thank you.

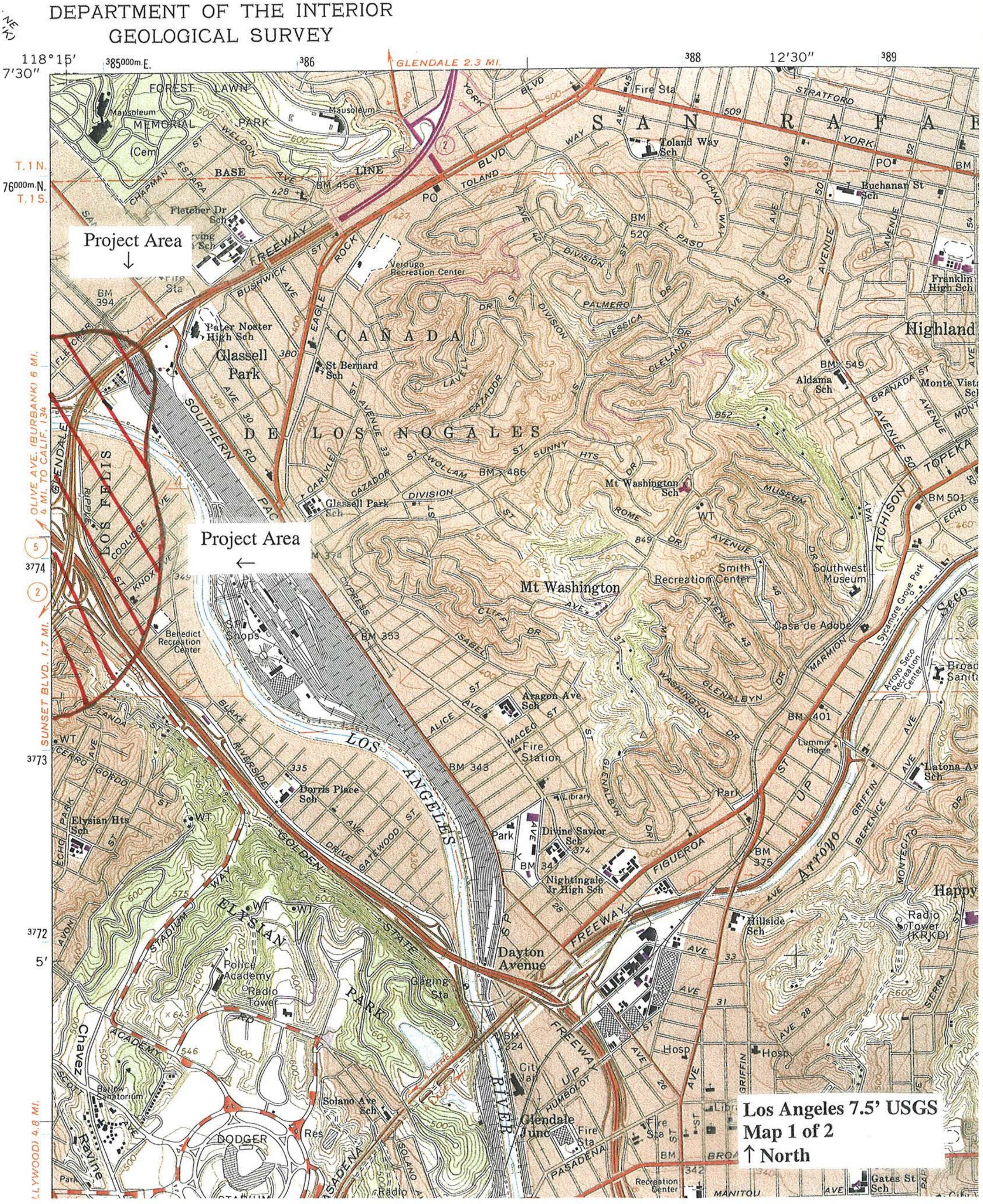
Best regards,

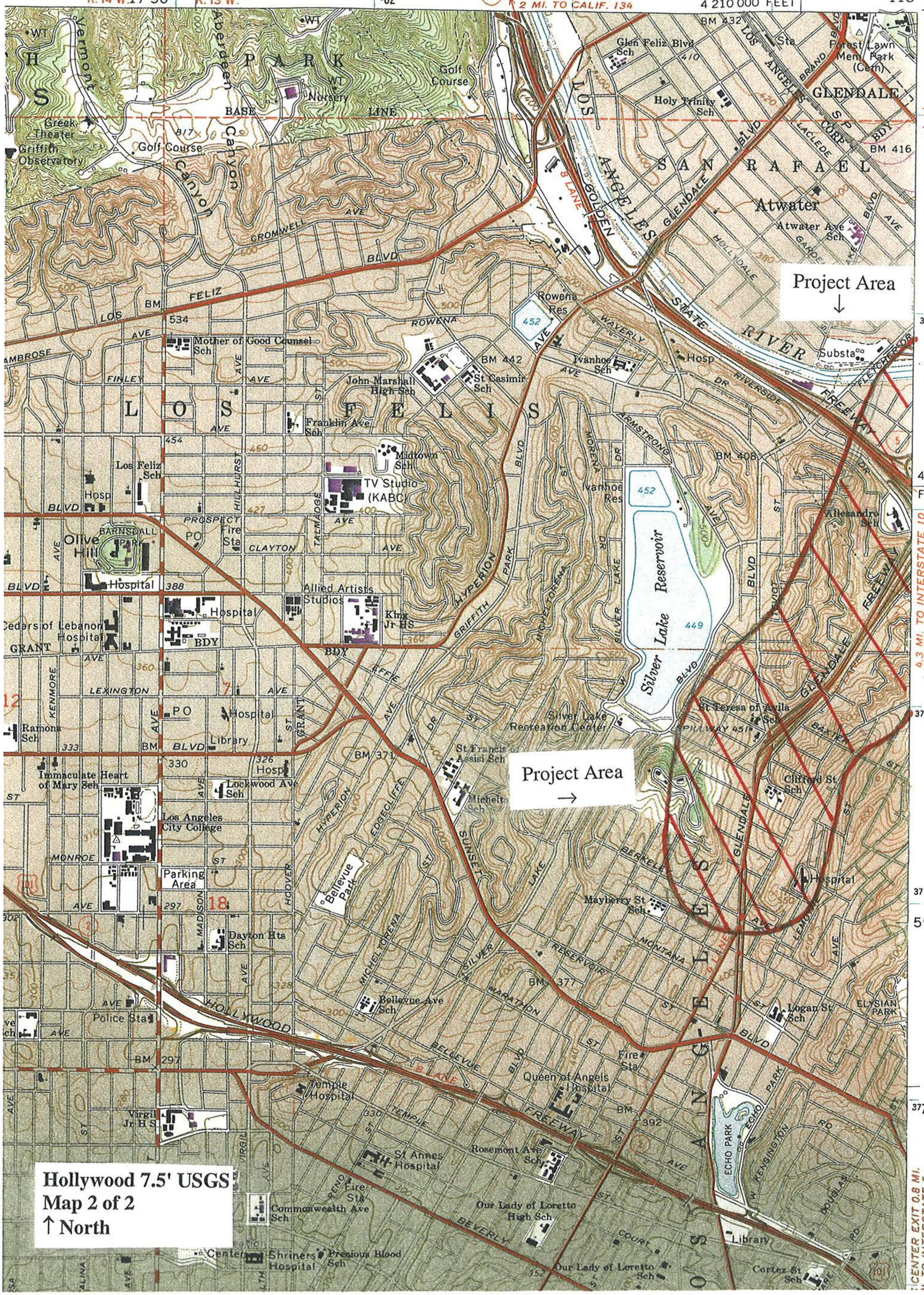
C. M. Wood

Catharine M. Wood, RPA
Archaeologist

811 West 7th Street, Suite 800 · Los Angeles, CA 90017 · tel. 213.627.5376 · fax 213.627.6853
www.jonesandstokes.com

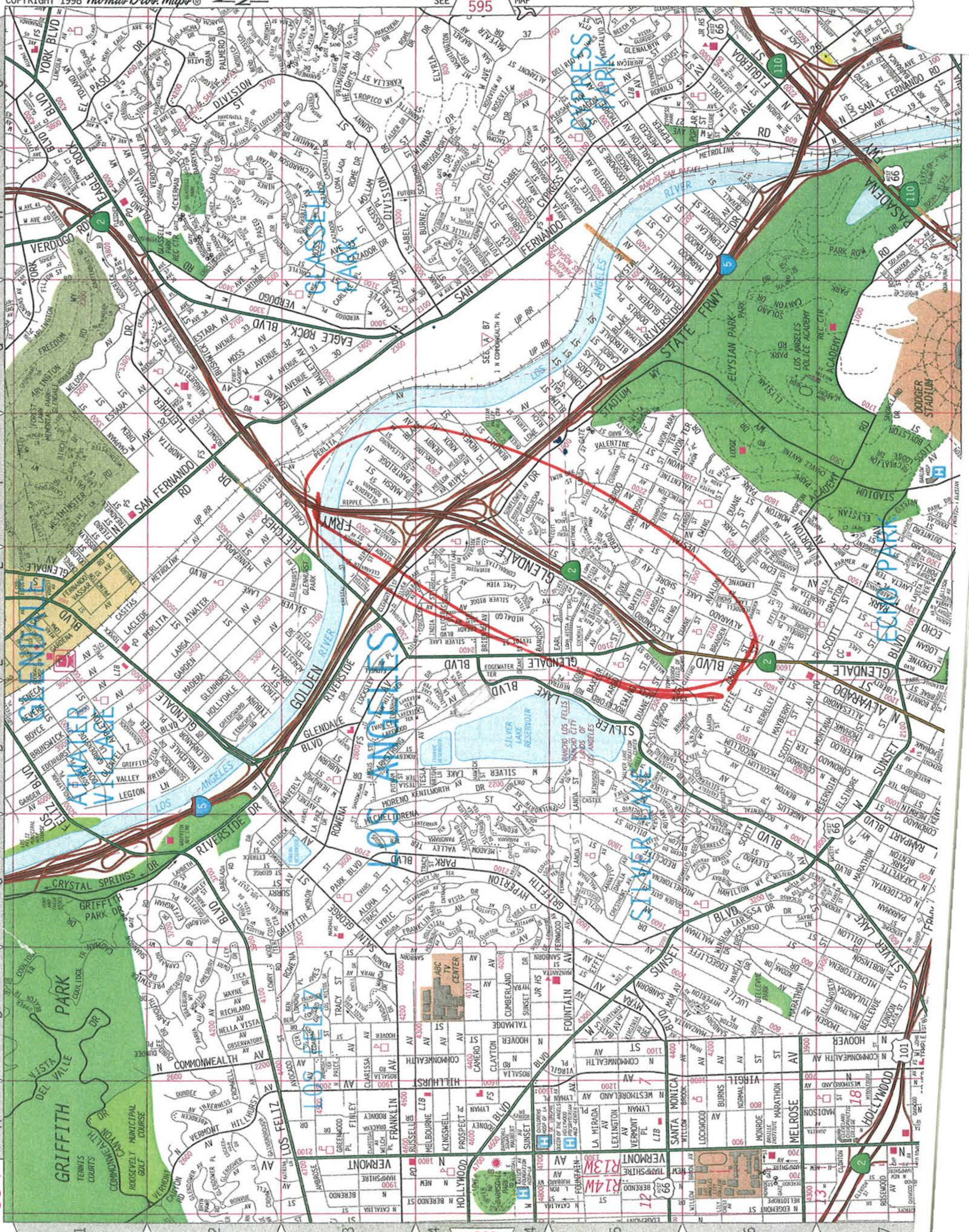
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY





Project Area
↓
Project Area
→
Hollywood 7.5' USGS
Map 2 of 2
↑ North
GRIFFITH PARK
Greek Theater
Griffith Observatory
Golf Course
Nursery
BASE LINE
T.1 N.
T.1 S.
GLENDALE
SAN RAFAEL
Atwater
Atwater Ave Sch
Holy Trinity Sch
Glen Feliz Blvd Sch
Forest Lawn Mem Park (Cem)
LOS ANGELES
LOS FELIZ
Rowena Res
John Marshall High Sch
St Casimir Sch
Ivanhoe Sch
Ivanhoe Res
Franklin Ave Sch
Midtown Sch
TV Studio (KABC)
Los Feliz Sch
Mother of Good Counsel Sch
Olive Hill
BARNSDALL PARK
Hospital
Cedars of Lebanon Hospital
Allied Artists Studios
King Jr HS
Silver Lake Reservoir
Silver Lake Recreation Center
St Teresa of Avila Sch
Clifford St Sch
Alessandro Sch
St Francis Assisi Sch
Micheltorena Sch
Mayberry St Sch
Logan St Sch
ELYSIAN PARK
Ramona Sch
Immaculate Heart of Mary Sch
Los Angeles City College
Parking Area
Library
Bellevue Park
Dayton Hts Sch
Bellevue Ave Sch
Police Sta
Temple Hospital
Virgil Jr H S
St Annes Hospital
Rosemont Ave Sch
Queen of Angels Hospital
ECHO PARK
Commonwealth Ave Sch
Our Lady of Loretto High Sch
Our Lady of Loretto Sch
Shriners Hospital
Precious Blood Sch
Cortez St Sch
HOLLYWOOD FREEWAY
GOLDEN STATE FREEWAY
LOS ANGELES RIVER
4.3 MI. TO INTERSTATE 10
SANTA ANA 36 MI.
4 150 000 FEET
34°07'30"

COPYRIGHT 1998 Thomas Bros. Maps ®



STATE OF CALIFORNIA Arnold Schwarzenegger Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390
Web Site www.nahc.ca.gov

June 7, 2006

Catherine M. Wood
Jones & Stokes
811 West 7th Street, Suite 800
Los Angeles, CA 90017

Sent by Fax: 213-627-6853
Number of Pages: 3

RE: Proposed SR 2 Freeway Terminus Project, Los Angeles County

Dear Ms. Wood:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4040.

Sincerely,

Rob Wood

Rob Wood
Environmental Specialist III

Native American Contacts
Los Angeles County
June 6, 2006

Cahuilla Band of Indians
Anthony Madrigal, Jr., Interim-Chairperson
P.O. Box 391760 Cahuilla
Anza , CA 92539
tribalcouncil@cahuilla.net
(951) 763-5549
(909) 763-2808 Fax

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Adminstrator
4712 Admiralty Way, Suite 172 Gabrielino Tongva
Marina Del Rey , CA 90292
310-570-6567

Samuel H. Dunlap
P.O. Box 1391 Gabrielino
Temecula , CA 92593 Cahuilla
(909) 262-9351 (Cell) Luiseno
samdunlap@earthlink.net

Gabrieleno/Tongva Tribal Council
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th Street, Rm. 403
Los Angeles , CA 90020
(213) 351-5324
(213) 386-3995 FAX

Coastal Gabrieleno Diegueno
Jim Velasques
5776 42nd Street Gabrielino
Riverside , CA 92509 Kumeyaay
(909) 784-6660

Ti'At Society
Cindi Alvitre
6602 Zelzah Avenue Gabrielino
Reseda , CA 91335
calvitre@yahoo.com
(714) 504-2468 Cell

Gabrielino/Tongva Councl / Gabrielino Tongva Nation
Sam Dunlap, Tribal Secretary
501 Santa Monica Blvd., Suite 500 Gabrielino Tongva
Santa Monica , CA 90401-2415
(310) 587-2203
(310) 587-2281 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural for the proposed
* State Route 2 Terminus Project, City and County of Los Angeles.

Native American Contacts
Los Angeles County
June 6, 2006

Gabrielino Band of Mission Indians of CA
Ms. Susan Frank
PO Box 3021 Gabrielino
Beaumont , CA 92223
(951) 845-3606 Phone/Fax

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Tribal Chair/Cultural Resources
5450 Slauson, Ave, Suite 151 PMB Gabrielino Tongva
Culver City , CA 90230
gtongva@earthlink.net
562-761-6417 - voice
562-920-9449 - fax

Gabrielino Tongva Indians of California Tribal Council
Mercedes Dorame, Tribal Administrator
20990 Las Flores Mesa Drive Gabrielino Tongva
Malibu , CA 90265
Pluto05@hotmail.com

Cahuilla Band of Indians
Maurice Chacon, Cultural Resources
P.O. Box 391760 Cahuilla
Anza , CA 92539
cbandodian@aol.com
(951) 763-5549
(951) 763-2808 Fax

This list is current only as of the date of this document.

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This list is only applicable for contacting local Native Americans with regard to cultural for the proposed
* State Route 2 Terminus Project, City and County of Los Angeles.

State of California | Business, Transportation, and Housing Agency

MEMORANDUM

To: File

Date: October 30, 2006

File: 07-Local Assistance
Los Angeles Metropolitan Transportation
Authority – State Route 2 Terminus.
EA 205500

From: Gary Iverson, District 7 Native American Coordinator/Liaison

Subject: Section 106 Compliance – Native American Consultation

No Federally recognized "tribe" exists within project study area. However, an effort was undertaken to ensure compliance with Section 106 of the National Historic Preservation Act of 1966 in regards to consultation with "other parties likely to have knowledge of or concerns with historic properties in the area". Below are the steps conducted to ensure this compliance:

- Prior to June 7, 2006 a request was made to the Native American Heritage Commission (NAHC) for a search to be conducted of the Sacred Lands Inventory, and for a list of interested Native American individuals/organizations for the project area.
- On June 7, 2006 the NAHC returned a response (see attached letter) that indicated that no sites were identified to exist in the project area on the Sacred Lands Inventory. A list of interested Native American individuals/organizations was included in the June 7, 2006 response from the NAHC.
- On June 16, 2006 a letter and accompanying map was sent to a list of interested individuals/organizations (see attached letter, map, and list of individuals/organizations). This letter requested a response within 30 days.
- On June 14, 2006 phone contact was made with Ron Andrade. Mr. Andrade indicated that no sites or areas of concern existed in the project area, including Traditional Cultural Properties. Mr. Andrade stated that no Native American Monitor would be required.
- On October 26, 2006 phone contact was made with Mr. Anthony Morales. Mr. Morales indicated that no sites or area of concern in the project area, including Traditional Cultural Properties. Mr. Morales indicated that no Native American Monitor would be required.
- On October 30, 2006 phone contact was made with Cindi Alvitre. Ms. Alvitre expressed concerns that the village of Yagna has the potential to exist in the area, and requested that an archaeological effort be conducted in the area.

The conclusion of this Native American interested individual/organization consultation was that no sites or areas of concern were identified within the identified project area. The recommendation for a Native American Monitor will be based on the information in this memorandum and the results of the Archaeological Survey Report being prepared for this project. If there are any questions or comments regarding the above, please do not hesitate to contact me at (213) 897-3818 or gary_iverson@dot.ca.gov.

GARY IVERSON
Caltrans, District 7, Native American Coordinator/Liaison

COMMUNITY IMPACT ASSESSMENT TECHNICAL STUDY

for the

SR-2 Freeway Terminus Improvement Project

EA 205500

2nd Draft

June 2008

Prepared for:

Los Angeles County Metropolitan Transportation Authority
California Department of Transportation
Federal Highway Administration

Prepared by:

Jones and Stokes Associates
811 West 7th Street, Ste. 800
Los Angeles, CA 90017

Contents

Acronyms

2000 Census	2000 U.S. Census of Population and Housing
ADA	Americans with Disabilities Act
Caltrans	California Department of Transportation
CIA	Community Impact Assessment
Community Plan Area	Silver Lake-Echo Park-Elysian Valley Community Plan Area
FHWA	Federal Highway Administration
HHS	U.S. Department of Health and Human Services
I-5	Interstate 5
LAPD	Los Angeles Police Department
LAUSD	Los Angeles Unified School District
Metro	Metropolitan Transportation Authority
PM	post mile
proposed project	SR-2 Freeway Terminus Improvement Project
SCAG	Southern California Association of Governments
SR-2	State Route 2
St. Teresa	Saint Teresa of Avila School
USC	United States Code

Figures

Tables

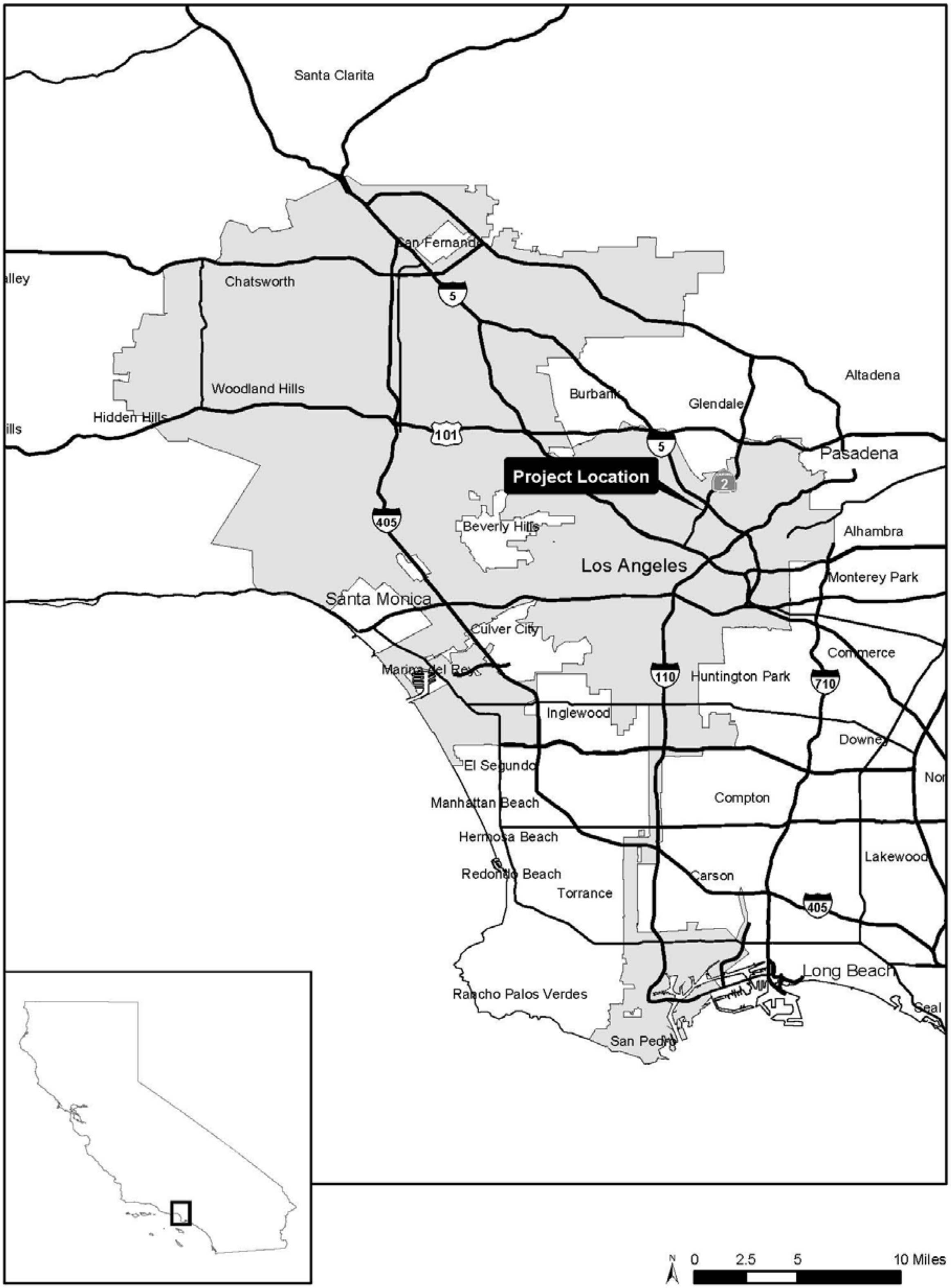
Executive Summary

The Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the California Department of Transportation (Caltrans) and the Los Angeles Department of Transportation (LADOT), proposes to modify the southern terminus of the Glendale Freeway, also known as State Route 2 (SR-2). SR-2 transitions from a freeway facility to a conventional highway (major arterial) at the terminus. The project site is located in the City and County of Los Angeles (see Figures 1 and 2). The purpose of the project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses.

The proposed Project involves improvements to an existing transportation facility and would be contained largely within the existing right-of-way. No adverse impacts to the community have been identified as unavoidable after implementation of mitigation. Construction activities under the alternatives would result in temporary, localized, site-specific disruptions to the local community primarily due to the construction-related traffic changes from trucks and equipment in the area; partial and/or complete street and lane closures, with some requiring detours; increased noise and vibration; light and glare; and changes in air emissions. However, since these activities would be necessary only for the duration of construction and would not substantially interfere with the use of the affected parcels, they are not expected to have an adverse effect on other nearby properties in the study area.

As part of the avoidance and the minimization measures, Caltrans would actively and effectively engage all segments of the affected community. A community outreach and public involvement program to inform the community about project construction activities would be in place. A construction management program would be implemented to maintain access to and from the project area community through signage, detours, flagmen, etc. The emergency services and local schools would be consulted for alternative response routes and safe pedestrian and vehicular routes for students during the construction.

Figure 1. Regional Vicinity Map



Source: Jones & Stokes, 2007.

Figure 2. Project Location Map

Source: Jones & Stokes, 2007.

Introduction

This Community Impact Assessment (CIA) describes the relationship between the proposed SR-2 Freeway Terminus Improvement Project (proposed project) and the community surrounding the project area. The CIA is intended to serve as a supporting technical report for the environment documentation for the proposed project. The CIA has been prepared in accordance with *Caltrans Environmental Handbook Volume 4 – Community Impact Assessment* (1997).

Project Description/Alternatives

The proposed project is located on State Route 2 (SR-2) in the City of Los Angeles between Branden Street (post mile [PM] 13.5) and Interstate 5 (I-5) (PM 15.0) (see Figure 1). The project proposes to modify the southern terminus of SR-2 near the intersection of Duane and Allesandro Streets in the Echo Park District of the City of Los Angeles. This segment of the SR-2 extends approximately 1.5 miles and is bordered by residential developments and community parks. The area is urbanized and situated between Silver Lake Reservoir and Tommy Lasorda Field of Dreams to the west, Elysian Park and housing developments to the southeast, and the Los Angeles River and I-5 to the north. The Los Angeles River is located approximately 2 miles north of the project site (see Figure 2).

The purpose of the project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses.

The following alternatives are evaluated in this study:

- **No-Build Alternative (Baseline Alternative)**
  This alternative requires no new construction or capital cost (Figure 3).
- **Alternative A (Widen Existing Ramps – Maintain Bridge)**
  This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp (two lanes). This alternative does not have any potential for new open space (Figure 4).
- **Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge)**
  This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the on-ramp lanes. It would remove the southbound flyover ramp and part of the bridge. This alternative offers the potential for new open space (Figure 5).

Figure 3. No-Build Alternative (Baseline Alternative)

Source: Melendrez, 2006.

Figure 4. Alternative A (Widen Existing Ramps)

Source: Melendrez, 2006.

Figure 5. Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge)

Source: Melendrez, 2006.

- **Alternative C (Realign Ramps East – Remove Bridge)**
  This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the on-ramp lanes. It would remove the southbound flyover ramp and bridge. This alternative provides a landscaped median and parkway treatment. This alternative offers the potential for new open space (Figure 6).
- **Alternative D (Realign Ramps East – Maintain Bridge)**
  This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged (Figure 7).
- **Alternative E (Realign Ramps East, Retain Bridge and Flyover, Relocate Retaining Wall)**
  This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. This alternative provides a landscaped median and parkway treatment further north of the terminus area. The existing retaining wall along Allesandro Street would be relocated to the east to maintain Caltrans's streets and highway standards (Figure 8).

Purpose and Need

Project Need

The City of Los Angeles is experiencing continued growth. The land use surrounding the project area is heavily urbanized. This segment of the SR-2 directly borders the densely populated communities of Echo Park and Silver Lake, thus provides ingress and egress to these communities. Further, the SR-2 provides a vital link for regional commuters to the city and provides the access to nearby businesses on Glendale Boulevard. Due to the existing configuration of the SR-2 terminus at Glendale Boulevard, the traffic flow during peak hours is severely impeded. Additionally, during off-peak periods, the southbound direct connector traffic often merges onto southbound Glendale Boulevard at a high rate of speed. Further, pedestrians and bicycles are not well accommodated by existing facilities in the vicinity of the freeway terminus.

Figure 6. Alternative C (Realign Ramps East – Remove Flyover and Bridge)

Source: Melendrez, 2006.

Figure 7. Alternative D (Realign Ramps East – Retain Flyover and Bridge)

Source: Melendrez, 2006.

Figure 8. Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining Wall)

Source: Melendrez, 2006.

Project Purpose

The purpose of the project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus. Additional, concurrent objectives of the project include creating the opportunity for additional open space in the vicinity of the SR-2 terminus and developing a freeway terminus design that is compatible with existing residential and commercial uses.

Community Profile

The following sections describe the existing land use and planning, population and housing, and community facilities and services in the proposed project area.

Land Use and Planning

A population and housing study area has been defined to include those block groups from the 2000 U.S. Census of Population and Housing (2000 Census) located adjacent to the proposed project. The study area is intended to encompass an area where the potential impacts, if any, of construction and operation of the proposed project alternatives would be reasonably foreseeable (see Figure 9, Population and Housing Study Area).

Existing Land Use

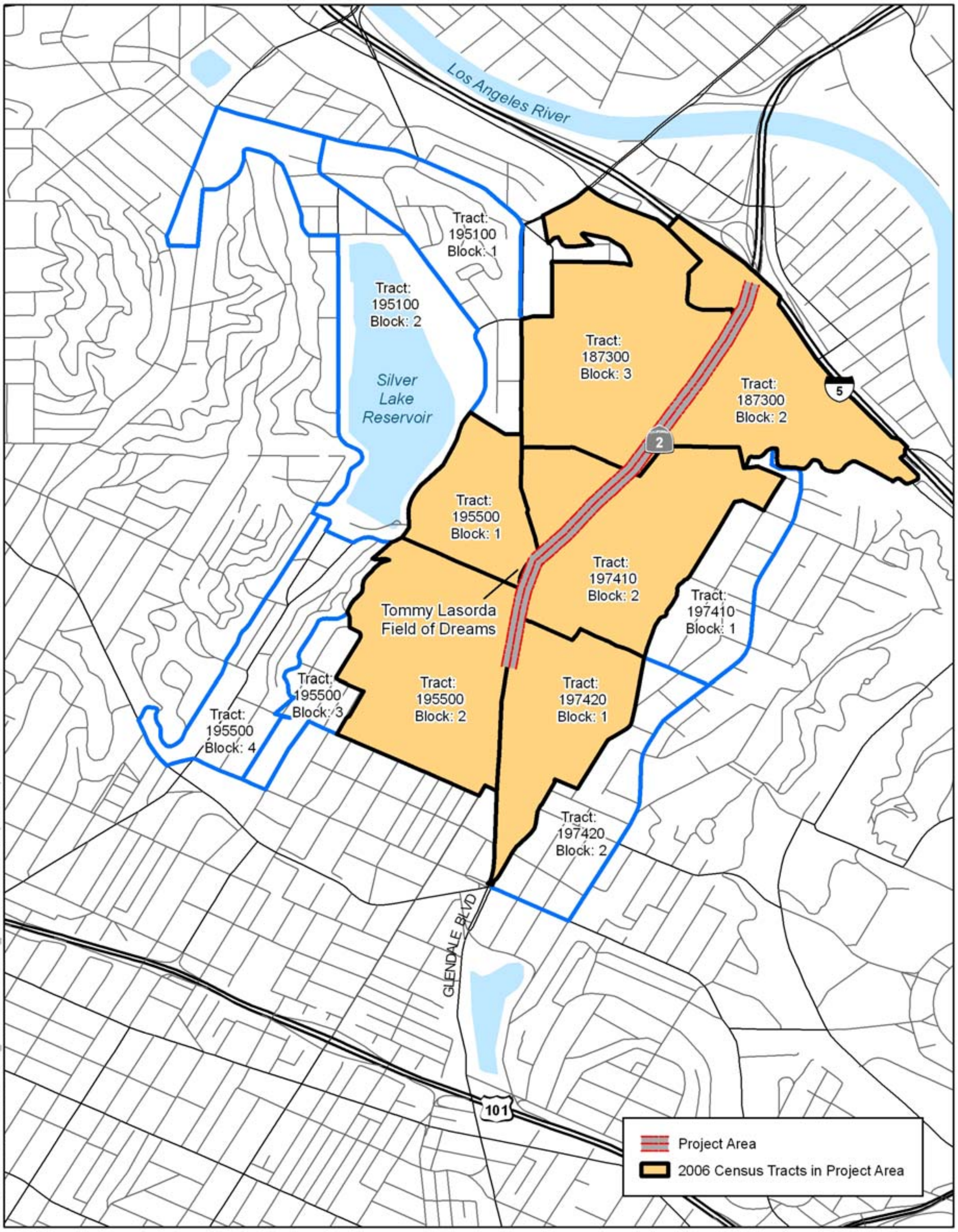
The study area is highly developed with predominantly residential uses (see Figure 10, Existing Land Use). Adjacent land uses on either side of the right-of-way consist of multiple-family and low-density residences, apartment complexes, commercial buildings, industry, a park, and public facilities. State Route 2 (SR-2), also referred to as the Glendale Freeway, is zoned as a freeway and runs generally from north to south, ending at Glendale Boulevard. Glendale Boulevard is zoned as a Major Highway Class II.

Plans and Policies

City of Los Angeles General Plan

The General Plan Framework Element for the City of Los Angeles is a strategy for long-term growth that sets a citywide context to guide the subsequent amendments of the City's community plans, zoning ordinances, and other pertinent programs. The Element responds to State and Federal mandates to plan for the City of Los Angeles' future. The Framework element supersedes Concept Los Angeles and the citywide elements of the City of Los Angeles General Plan. In many respects, the Framework Element is an evolution of the Centers Concept, adopted in 1974, that provides fundamental guidance regarding the City's future. The proposed project area falls within the Silver Lake-Echo Park-Elysian Valley Community Plan. The Silver Lake-Echo Park-Elysian Valley

Figure 9. Population and Housing Study Area



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SOURCE: GDT (2006)

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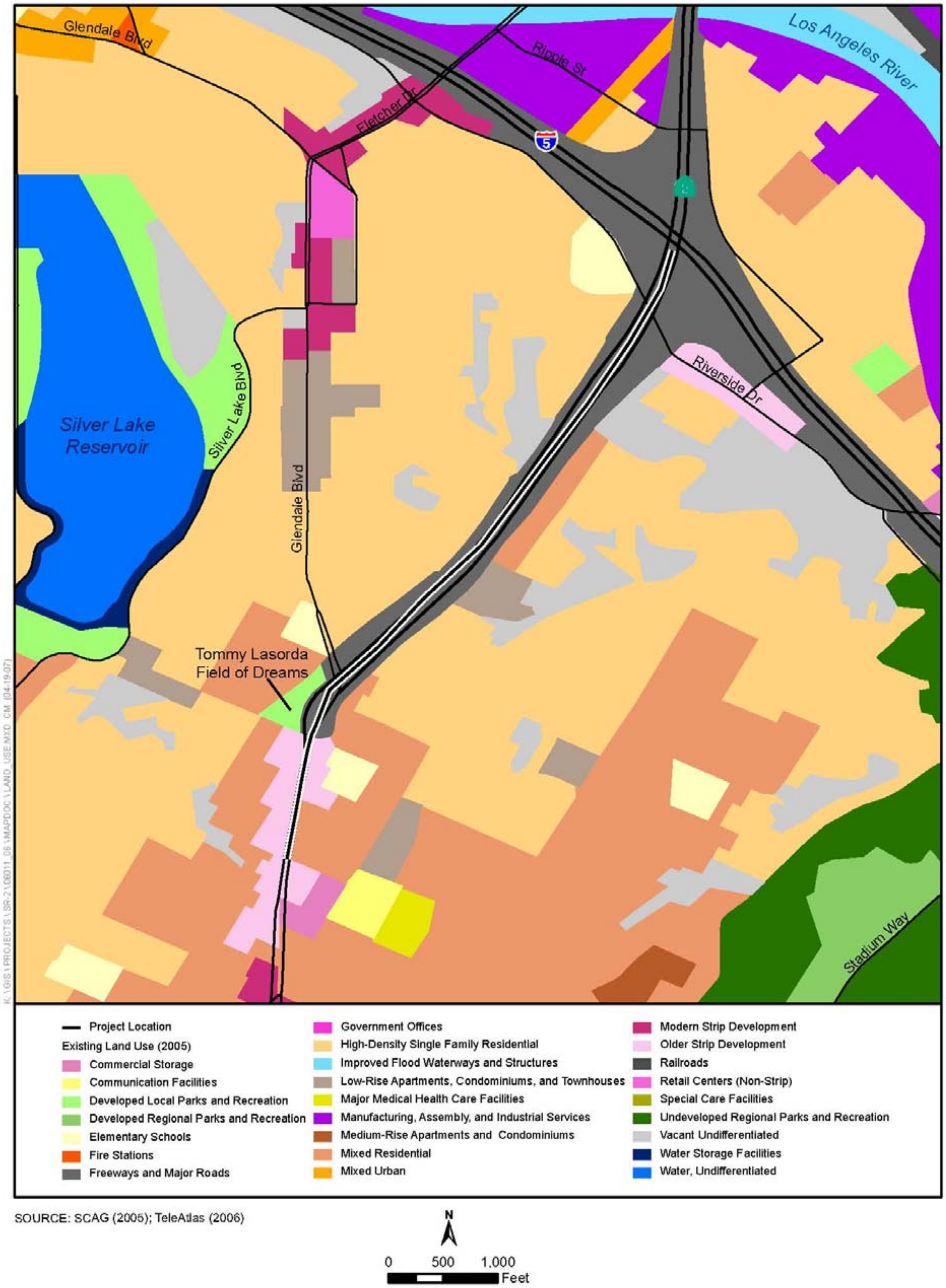
0 1,000 2,000 Feet

Figure 10. Existing Land Use



Community Plan is one of the 35-community plan land use elements, which combined, comprise the Land Use element of the City of Los Angeles General Plan. A detailed discussion of the Silver Lake-Echo Park-Elysian Valley Community Plan is discussed below.

Silver Lake-Echo Park-Elysian Valley Community Plan

The Silver Lake-Echo Park-Elysian Valley Community Plan Area (Community Plan Area), located north of downtown Los Angeles, is part of the 35 community plans that make up the land use component of the City of Los Angeles General Plan. The Community Plan Area is separated from downtown by Chinatown and encompasses 4,579 acres (7 square miles). It is surrounded by the Hollywood and Wilshire Community Plan to the west, Westlake Community Plan Area to the southwest, Central City North Community Plan Area to the south, and the Northeast Community Plan Area the north and east. The Silver Lake-Echo Park-Elysian Valley Community Plan Area encompasses 2% of the city's landmass. Ultimately 42% of the land located within the Community Plan Area is designated for residential use. One distinguishing feature of this area is its fairly dense hillside neighborhoods, which are often characterized by steep slopes and narrow streets. Glendale Boulevard runs north and south, splitting the plan area in half.[1]

To preserve its unique character and identify the distinct neighborhoods within this plan area, the community has identified several land use and planning issues and opportunities. The land use and planning issues and opportunities fall within the following subheadings: residential, commercial, industrial, transportation, recreation and parks, and neighborhood character. In addition to community issues and opportunities, California state law (Government Code Section 65300) requires that each city prepare and adopt a comprehensive, long-term general plan for its development. The plan must include seven mandatory elements: land use, circulation, housing, conservation, open space, noise, and safety. In addition to the seven mandatory elements, the city's general plan also includes a service system element, a cultural element, and a major public facilities areas element.

The role of the community plan is to help guide decisions regarding land use, building design and character, open space, housing, conservation and development, the provision of supporting infrastructure and public and human services, protection of environmental resources, and protection of residents from natural and man-made hazards.[2] The community plan helps ensure that sufficient land is designed for housing, commercial use, employment opportunities, education, recreation, and cultural, social, and aesthetic uses to provide for the needs of the residents of the plan area. The plan identifies significant environmental resources and provides guidelines for their maintenance. It also seeks to enhance community identity and recognize unique neighborhoods within the plan area.

The plan is organized and formatted to facilitate periodic updates. With each update, the plan is altered to adapt to the changing community and contribute to the economic, social, physical health, safety, welfare, and convenience of the residents of the community. The state recommends that the entire plan be

[1] Chapter I, Silver Lake-Echo Park-Elysian Valley Community Plan (I-1).
[2] Chapter II, Silver Lake-Echo Park-Elysian Valley Community Plan (II-2).

reviewed every 5 years to reflect new conditions, local attitudes, and technological advances.

Several planning goals, objectives, policies, and programs have been organized by land use category, which are divided into residential, commercial, and industrial land use to assist in enhancing quality of life and preserving neighborhood character. The goals and objectives are as follows.

Population and Housing

A population and housing study area has been defined to include the census tracts located adjacent to the proposed project (2000 Census). The study area is intended to encompass an area where the potential population and housing impacts, if any, of construction and operation of the proposed project would be reasonably foreseeable (see Figure 9, Population and Housing Study Area. In addition to the demographic data provided for the project study area, demographic data are provided for the County of Los Angeles and City of Los Angeles.

Regional Demographics

Existing Regional Population and Housing

The total population in the County of Los Angeles, as reported in the 2000 census, was 9,519,338. Of that total population, the largest ethnic group was Hispanic/Latino, at 44.6%, while white non-Hispanics was the next largest group, at 31.1%. The remaining 24.3%, in order by descending proportions, were Asian, black, multi-racial, Native American, Native Hawaiian/Pacific Islander, and other.

The City of Los Angeles had a population of 3,694,820 in 2000, with the largest ethnic group being persons of Hispanic/Latino origin, 46.5%. Non-Hispanic white persons made up the next largest group, at 29.7% of the total population. The remaining 23.8%, in order by descending proportions, were black, Asian, multi-racial, Native American, Native Hawaiian/Pacific Islander, and other. (see Table 1, Existing Regional and Local Population Characteristics – Race/Ethnicity [2000]).

Of those residing within the County of Los Angeles, 29.5% of the population was under 18 years of age in 2000, while 5.51% were 65 years of age and over. The City of Los Angeles had a similar distribution for persons under 18 years of age and 65 years of age and over, at 28% and 5.45%, respectively (see Table 2, Existing Regional and Local Population Characteristics – Age [2000]).

According to the 2000 census, the total number of housing units in the County of Los Angeles was 3,270,909. Of the total housing units, 95.8% were occupied, and 4.2% were vacant. Of total occupied housing units, 47.9% were owner occupied, and 52.1% were rented.

The City of Los Angeles had a total of 1,337,706 housing units in 2000. Of that total, 95.3% of the housing units were occupied, and 4.7% were vacant. Owner-occupied housing units made up 38.6% of the total, and 61.4% were renter occupied (see Table 3, Existing Regional and Local Housing Characteristics – Occupancy [2000]).

Projected Regional Population and Housing

According to the Southern California Association of Governments (SCAG) 2004 Regional Transportation Plan (adopted April 2004), the population of the County of Los Angeles in 2030 is projected to be 12,221,799, an increase of about 28%. According to the same projections, population of City of Los Angeles in 2030 will increase by a 17% to 4,309,625 in 2030.

The number of households in the County of Los Angeles is projected to be 4,120,270 in 2030, or about 31% greater than in 2000. The number of households in 2030 for the City of Los Angeles is projected to be 1,637,475, an increase of about 28%.

Study Area Demographics

Existing Local Population and Housing

The total population of the census tracts of the project study area was 15,719 in 2000. Of the total population in the study area, persons of Hispanic/Latino origin accounted for 48.3%, while non-Hispanic white persons totaled 30%. The proportion of persons of Hispanic/Latino origin was slightly larger than that of the City of Los Angeles (46.5%) and County of Los Angeles (44.6%) (see Table 1, Existing Regional and Local Population Characteristics – Race/Ethnicity [2000]).

The study area population under 18 years of age was 21% of the total, while approximately 9.0% were 65 years of age and older. According to the 2000 census, the study area had a lower percentage of people under 18 years of age (21%) compared to the County of Los Angeles (28%) and the City of Los Angeles (26.6%). The percentage of population 65 and over in the study area (9.0%) was comparable to the County of Los Angeles (9.7%) and the City of Los Angeles (9.7%) (see Table 2, Existing Regional and Local Population Characteristics – Age [2000]).

According to the 2000 census, the total number of housing units in the study area was 6,644. Of that total, 94.1% were occupied, and 5.9% were vacant. Of the total occupied housing, 38.5% were owner occupied, and 61.5% were rented. The percentage of owner-occupied housing units in the study area was lower than the County of Los Angeles (47.9%) but comparable to the City of Los Angeles (38.6%). The study area had similar percentage of renter-occupied housing units compared to the City of Los Angeles (61.4%) but higher than the County of Los Angeles (52.1%) (see Table 3, Existing Regional and Local Housing Characteristics – Occupancy [2000], and Table 4, Existing Regional and Local Housing Characteristics – Tenure [2000]).

Table 1. Existing Regional and Local Population Characteristics—Race/Ethnicity [2000]

Area	Total	White	%	Black	%	Native American	%	Asian	%	Native Hawaiian/ Pacific Islander	%	Other race	%	Two or more races	%	Hispanic or Latino	%
County of Los Angeles	9,519,338	2,959,614	31.1%	901,472	9.5%	25,609	0.3%	1,124,569	11.8%	23,265	0.2%	19,935	0.2%	222,661	2.3%	4,242,213	44.6%
City of Los Angeles	3,694,820	1,099,188	29.7%	401,986	10.9%	8,897	0.2%	364,850	9.9%	4,484	0.1%	9,065	0.2%	87,277	2.4%	1,719,073	46.5%
Study Area	**15,719**	**4,721**	**30.0%**	**426**	**2.7%**	**54**	**0.3%**	**2,474**	**15.7%**	**15**	**0.1%**	**36**	**0.2%**	**393**	**2.5%**	**7,600**	**48.3%**
Census Tract 1873	3,390	1,363	40.2%	156	4.6%	20	0.6%	553	16.3%	6	0.2%	11	0.3%	110	3.2%	1,171	34.5%
Block Group 2	411	98	23.8%	7	1.7%	0	0.0%	48	11.7%	0	0.0%	0	0.0%	8	1.9%	250	60.8%
Block Group 3	1,775	872	49.1%	65	3.7%	14	0.8%	234	13.2%	2	0.1%	7	0.4%	54	3.0%	527	29.7%
Census Tract 1955	5,228	1,794	34.3%	123	2.4%	17	0.3%	1,058	20.2%	6	0.1%	7	0.1%	139	2.7%	2,084	39.9%
Block Group 1	776	370	47.7%	18	2.3%	1	0.1%	158	20.4%	1	0.1%	0	0.0%	16	2.1%	212	27.3%
Block Group 2	2,324	433	18.6%	46	2.0%	11	0.5%	620	26.7%	4	0.2%	1	0.0%	57	2.5%	1152	49.6%
Census Tract 1974.10	2,936	1,014	34.5%	78	2.7%	11	0.4%	315	10.7%	1	0.0%	6	0.2%	74	2.5%	1,437	48.9%
Block Group 2	1,748	679	38.8%	56	3.2%	6	0.3%	178	10.2%	0	0.0%	3	0.2%	40	2.3%	786	45.0%
Census Tract 1974.20	4,165	550	13.2%	69	1.7%	6	0.1%	548	13.2%	2	0.0%	12	0.3%	70	1.7%	2,908	69.8%
Block Group 1	1,898	268	14.1%	50	2.6%	0	0.0%	212	11.2%	2	0.1%	4	0.2%	22	1.2%	1340	70.6%

Source: Tables P3 and P4, Summary File 1, U.S. Census 2001

Table 2. Existing Regional and Local Population Characteristics—Age (2000)

Area	Total Population	Age			
		Under 18	%	65 and over	%
County of Los Angeles	9,519,338	2,667,976	28.03%	926,673	9.7%
City of Los Angeles	3,694,820	981,311	26.6%	357,129	9. 7%
Study Area	**15,719**	**3,306**	**21.0%**	**1,419**	**9.0%**
Census Tract 1873	3,390	535	15.8%	312	9.2%
Block Group 2	411	104	25.3%	16	3.9%
Block Group 3	1,775	245	13.8%	73	4.1%
Census Tract 1955	5,228	951	18.29%	529	10.1%
Block Group 1	776	117	15.1%	87	11.2%
Block Group 2	2,324	543	23.4%	97	4.2%
Census Tract 1974.10	2,936	644	21.9%	235	8.0%
Block Group 2	1,748	354	20.3%	145	8.3%
Census Tract 1974.20	4,165	1176	28.2%	343	8.2%
Block Group 1	1,898	513	27.0%	54	2.8%

Source: Table P12, Summary File 1, U.S. Census 2001

Table 3. Existing Regional and Local Housing Characteristics—Occupancy (2000)

Area	Total Units	Occupied Units	%	Vacant Units	%	Persons Per Household
County of Los Angeles	3,270,909	3,133,774	95.8%	137,135	4.2%	2.98
City of Los Angeles	1,337,706	1,275,412	95.3%	62,294	4.7%	2.83
Study Area	**6,644**	**6,255**	**94.1%**	**389**	**5.9%**	**2.51**
Census Tract 1873	1,611	1,515	94.0%	96	6.0%	2.20
Block Group 2	152	145	95.4%	7	4.6%	2.83
Block Group 3	920	851	92.5%	69	7.5%	2.09
Census Tract 1955	2,380	2,253	94.7%	127	5.3%	2.32
Block Group 1	388	367	94.6%	21	5.4%	2.1
Block Group 2	858	817	95.2%	41	4.8%	2.84
Census Tract 1974.10	1,281	1,191	92.97%	90	7.0%	2.47
Block Group 2	791	739	93.4%	52	6.6%	2.37
Census Tract 1974.20	1,372	1,296	94.5%	76	5.5%	3.11
Block Group 1	609	575	94.4%	34	5.6%	3.15

Source: Tables P17 and H3, Summary File 1, U.S. Census 2001

Table 4. Existing Regional and Local Housing Characteristics—Tenure (2000)

Area	Total Units	Occupied Units	Owner Occupied Units	%	Renter Occupied Units	%
County of Los Angeles	3,270,909	3,133,774	1,499,744	47.9%	1,634,030	52.1%
City of Los Angeles	1,337,706	1,275,412	491,882	38.6%	783,530	61.4%
Study Area	**6,644**	**6,255**	**2,408**	**38.5%**	**3,847**	**61.5%**
Census Tract 1873	1,611	1,515	615	40.6%	900	59.4%
Block Group 2	152	145	60	41.4%	85	58.6%
Block Group 3	920	851	424	49.8%	427	50.2%
Census Tract 1955	2,380	2,253	894	39.68%	1,359	60.32%
Block Group 1	388	367	126	34.33%	241	65.67%
Block Group 2	858	817	336	41.1%	481	58.9%
Census Tract 1974.10	1,281	1,191	562	47.19%	629	52.81%
Block Group 2	791	739	373	50.47%	366	49.53%
Census Tract 1974.20	1,372	1,296	337	26.0%	959	74.0%
Block Group 1	609	575	172	29.9%	403	70.1%

Source: Table H4, Summary File 1, U.S. Census 2001.

Projected Local Population and Housing

Demographic data from the SCAG 2004 RTP indicates that the study area population is projected to be 18,262 in 2030, an increase of about 16.2 percent from 2000. The number of households in 2030 for the study area is projected to be 7,829, an increase of about 25.2 percent

Income and Poverty Status

To determine the income and poverty characteristics for the study area, data were obtained from the 2000 Census at the census tract level. This data indicated that per capita incomes in the three of the four tracts making up the study area ($32,598 in Census Tract 1873, $26,278 in Census Tract 1955 and $22,004 in Census Tract 1974.10) were higher than those in either the County of Los Angeles ($20,683) or the City of Los Angeles ($20,671). Some of the Block Groups (Census Tract 1873 Block Group 3 and Census Tract 1955 Block Group 1) adjacent to the project have a substantially higher per capita income that the City and the County. The fourth tract, i.e. Census Tract 1974.20 had a lower per capita income than the County or City at $10,537. Although Block Group 1 of Census Tract 1974.20 that is adjacent to the project area has a slightly higher per capita income at $11,461.

Data on the numbers of persons below the poverty threshold in the study area are similarly indicative of a disadvantaged population. Three of the four census tracts making up the study area had lower percentages of persons below the poverty threshold (13.4% in Census Tract 1873, 14.6% in Census Tract 1955, and 17.7% in Census Tract 1974.10) than the percentage reported for either the County of Los Angeles (17.9%) or the City of Los Angeles (22.1%). Census tract 1974.20 had higher percentage of population below poverty level (20.6%) than the County. Although Block Group 1 of census Tract 1974.20 that is adjacent to the project has lower population below poverty level at 15.9 percent. (*Note: The 1999 poverty threshold used for the 2000 U.S. data, as defined by the U.S. Census Bureau, was $8,501 for an individual and $17,029 for a family of four.*)

The U.S. Department of Health and Human Services (HHS) poverty guidelines have not been used for this assessment because those guidelines are a simplified version of the poverty threshold data issued by the U.S. Census Bureau and are intended to be used only for administrative purposes (e.g., determining financial eligibility for certain federal programs). The HHS poverty statistics web site (http://aspe.hhs.gov/poverty/faq.shtml) indicates that the proper and preferred source of statistical data for calculating numbers of persons in poverty is the U.S. Census Bureau poverty threshold data (see Table 5, Existing Regional and Local Population Characteristics – Income/Poverty [2000]).

Table 5. Existing Regional and Local Population Characteristics—Income/Poverty (2000)

Area	Population for Whom Poverty Status Is Determined	Below Poverty Threshold	%	Per Capita Income ($)
County of Los Angeles	9,349,771	1,674,599	17.9%	20,683
City of Los Angeles	3,622,606	801,050	22.1%	20,671
Study Area	**15,567**	**2,564**	**16.5%**	**22,672**
Census Tract 1873	3,386	452	13.4%	32,598
Block Group 2	395	41	10.4%	19,175
Block Group 3	1823	259	14.2%	39,735
Census Tract 1955	5,215	762	14.6%	26,278
Block Group 1	681	40	5.9%	44,737
Block Group 2	2458	456	18.6%	19,886
Census Tract 1974.10	2,953	522	17.7%	22,004
Block Group 2	1,830	229	12.5%	22,570
Census Tract 1974.20	4,013	828	20.6%	10,537
Block Group 1	1,809	288	15.9%	11,461

Source: Tables P82 and P87, Summary File 3, U.S. Census 2001

Neighborhood and Community Characteristics

As noted earlier, the predominant land use within the project area is residential. The area is a mix of single- and multi-family residential units. St. Teresa's Church and School are located in the immediate vicinity of the SR-2 terminus. The nearest commercial areas are along Glendale Boulevard. The neighborhoods were established in the late 1800s and at the turn of the last century and, at their inception, associated with the studios in the areas. Due to proximity to downtown and good freeway access, the neighborhood is now popular with young professionals. During the field surveys, no businesses or industrial areas were observed in the vicinity of the project area.

Attitudes towards the project

A series of public scoping meetings for the proposed project were held as follows:

- Tuesday, April 11, 2006, from 6:00 to 8:00 p.m. at the St. Teresa of Avila Church located at 2215 Fargo Street, Los Angeles, CA 90039;
- Wednesday, April 19, 2006, from 2:00 to 4:00 p.m. in the Windsor Room of Metro located at One Gateway Plaza, Los Angeles, CA 90012; and
- Thursday, April 20, 2006, from 6:00 to 8:00 p.m. in Williams Hall of Barlow Hospital located at 2000 Stadium Way, Los Angeles, CA 90026

In addition, the following community meetings were conducted:

- A design workshop was held Wednesday, June 28, 2006, from 6:30 to 8:30 p.m. at Mayberry Elementary located at 2414 Mayberry Street, Los Angeles, CA 90026.
- A focus group meeting was held on Monday, October 23, 2006, from 5:30 to 8:00 p.m. at Mayberry Elementary located at 2414 Mayberry Street, Los Angeles, CA 90026.
- A focus group meeting was held on Wednesday, December 13, 2006, from 6:30 to 8:00 p.m. at Mayberry Elementary located at 2414 Mayberry Street, Los Angeles, CA 90026.

The general consensus at the meetings was to improve the terminus to ease traffic issues. However, there was no consensus amongst the public regarding the alternatives of the project or for improving the traffic situation in the area.

Community Facilities and Services

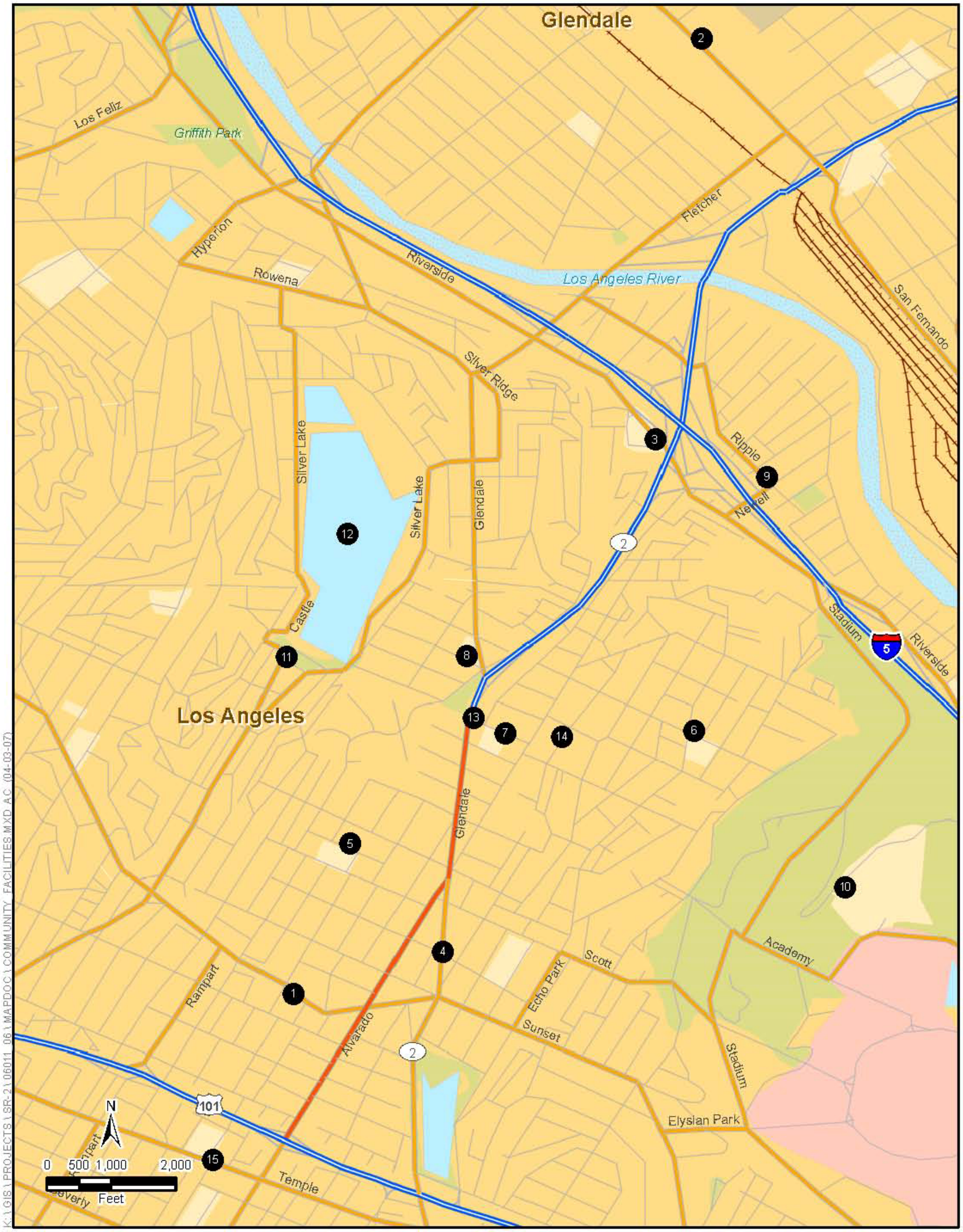
Community facilities that serve the project area and are within 1 mile of the project area are listed in Table 6 and depicted in Figure 11.

Table 6. Study Area Community Facilities and Services

Type	Name	Address	Distance from Project (mi)	Map ID
Fire/EMS	Los Angeles Fire Department, Station #20 (Primary Responder)	2144 West Sunset Boulevard	0.95	1
Police/Sheriff	Los Angeles Police Department, Northeast Division (Primary Responder)	3353 San Fernando Road	2.12	2
Schools	Allesandro Elementary	2210 Riverside Drive	0.93	3
	Logan Street School	1711 Montana Street	0.80	4
	Mayberry Street Elementary	2418 Mayberry Street	0.60	5
	Elysian Heights School	1562 Baxter Street	0.55	6
	Clifford Elementary	2150 Duane Street	0.10	7
	Saint Teresa of Avila School (private)	2215 Fargo Street	0.08	8
Parks and Recreation Centers	Elysian Valley Recreational Center Park	1811 Ripple Street	0.96	9
	Elysian Park	1880 Academy Drive	0.73	10
	Silver Lake Reservoir	1850 West Silver Lake Drive	0.55	12
	Silver Lake Recreation Center	1850 West Silver Lake Drive	0.44	11
	Tommy Lasorda Field of Dreams	Corner of Duane Street and SR-2	Adjacent	13
Community Centers	Echo Park-Silver Lake People's Child Care Center	1953 Lake Shore Avenue	0.23	14
Library	Echo Park Branch Library	1410 West Temple Street	1.63	15

Source: Jones & Stokes (2007).

Figure 11. Location of Community Facilities and Services



SOURCE: ESRI Street Map (2006)

Business, Employment, and Economic Conditions

Businesses and Employment

The closest commercial retail areas are located along Glendale Boulevard. The local commercial establishments include automobile-related businesses, such as auto repair shops and parts retailers, and other service-oriented businesses, such as hair salons, shoe repair shops, and video rental stores. Other establishments, such as ethnic food markets and discount stores, also exist.

The 2000 Census found that 661,272 persons were employed in the civilian labor force in Los Angeles County, with 4.9% of the total population unemployed. In the City of Los Angeles, there were 62,289 persons employed in the civilian labor force, with 6.3% of the total population unemployed. In both the city and county, the majority of jobs were classified as management, professional, sales, or office occupations.

According to data compiled by the U.S. Census Bureau in the 2002 Economic Census, most business establishments in Los Angeles County were categorized as wholesale and retail trade, real estate, professional services, health care, food services and accommodations, and other service industries (see Table 7). Business establishments in the City of Los Angeles were similarly distributed (see Table 8).

Table 7. County of Los Angeles Economic Statistics

Business Type	Number of Businesses	Sales or Receipts (x $1,000)	Annual Payroll (x $1,000)	Number of Employees
Wholesale Trade	2,083	21,191,081	1,135,951	31,605
Retail Trade	4,439	15,969,020	1,555,857	66,929
Information	385	N/A	368,571	8,777
Real Estate, Rental and Leasing	1,240	1,089,434	203,114	7,224
Professional, Scientific, and Technical Services	1,991	1,366,756	473,587	13,194
Administrative and Support and Waste Management and Remediation Services	1,415	1,857,171	853,037	38,468
Educational Service	223	140,493	48,353	2,075
Health Care and Social Assistance	2,993	5,654,081	2,123,797	61,474
Arts, Entertainment, and Recreation	276	658,323	126,572	8,537
Accommodation and Food Service	2,528	1,841,198	506,888	43,578
Other Services (except public administration)	2,181	1,235,150	410,592	17,352

Source: U.S. Census Bureau, 2002 Economic Census (2002).

Table 8. City of Los Angeles Economic Statistics

Business Type	Number of Businesses	Sales or Receipts (x $1,000)	Annual Payroll (x $1,000)	Number of Employees
Wholesale Trade	175	N/A	N/A	N/A
Retail Trade	589	2,483,481	226,468	8,996
Information	48	N/A	42,410	1,028
Real Estate, Rental and Leasing	137	97,879	17,658	654
Professional, Scientific, and Technical Services	271	264,255	95,731	2,158
Administrative and Support and Waste Management and Remediation Services	144	204,590	97,358	4,680
Educational Service	30	17,629	6,530	250
Health Care and Social Assistance	446	844,521	297,440	9,089
Arts, Entertainment, and Recreation	31	33,903	9,223	778
Accommodation and Food Service	316	258,114	72,877	6,249
Other Services (except public administration)	255	129,142	43,265	2,143

Source: U.S. Census Bureau, 2002 Economic Census (2002).

Taxes

The California Board of Equalization report for the second quarter of 2006 indicates that total taxable sales for Los Angeles County was $34,359,141, an increase of 5% from the previous year. For the City of Los Angeles, total taxable sales was $9,935,659 for the second quarter of 2006. The proposed project alternative will not acquire any businesses or residential properties, therefore, no loss of sales tax or property tax would occur as a result of the proposed tax alternatives.

Potential Impacts

The following discussion is intended to describe the potential impacts on the community that could result from construction and operation of the proposed project.

Land Use and Planning Impacts

The potential land use and planning impacts that have been evaluated are related to (1) the compatibility of the project with existing land use, (2) the consistency of the project with local plans and policies, and (3) the type and number of property acquisitions required for the project.

Impact Criteria: A proposed project alternative would result in an adverse effect if

- the alternative would be incompatible with the existing pattern of land use and development in the study area;
- the alternative would be inconsistent with the adopted land use plans, policies, or regulations of the applicable local and regional jurisdictions; or
- the alternative would require property acquisitions and displacements so substantial as to disrupt the pattern and/or rate of land use and development.

Compatibility with Existing Land Use

The proposed project alternatives would be generally consistent with the surrounding land uses. The project involves improvements to an existing transportation facility. Since the alternatives propose roadway, ramp, and bridge configurations of generally similar characteristics, the project would remain consistent with the land uses in the surrounding area. The need for reconfiguration and capacity enhancements at the location is a result of existing traffic and land use patterns. The proposed project alternatives are designed to correct existing deficiencies in the roadway configuration, aid traffic flow by reducing congestion, and prevent cut-through traffic on local residential streets.

Consistency with Plans and Policies

The community plan specifically identifies the "*need to find long-term, workable solutions to congestion on Glendale Boulevard and the Glendale Freeway terminus*" as a transportation issue. Since the project alternatives are intended to address that issue by providing a safe and efficient configuration for the freeway terminus, it would be considered consistent with local plans and policies. The project would provide safe and efficient movement of traffic and meet an important community objective.

Acquisitions and Displacements

No acquisitions or displacements would occur under any project alternative.

Temporary Construction Easements

Project construction would be contained largely within the existing right-of-way. Temporary construction easements may be required to accommodate construction activities for the project. Although definitive information on the construction easements is not available at this time, it is likely that temporary construction easements may be required along Waterloo Street (to access bridge/space on south side of Glendale Boulevard next to the Tommy LaSorda Field of Dreams), and along Allesandro Street north of Glendale Boulevard if the existing retaining wall requires relocation. However, since these easements would be necessary only for the duration of construction and would not substantially interfere with the use of the affected parcels, they are not expected to have an adverse effect on other nearby properties or the overall pattern and rate of land use and development in the study area.

Population and Housing Impacts

The potential population and housing impacts that have been evaluated are related to (1) temporary construction effects, (2) community access and circulation, (3) changes in demographic characteristics, and (4) community cohesion.

Impact Criteria: A proposed project alternative would result in an adverse effect if

- the alternative would have indirect construction effects on the surrounding community that would be substantially greater in magnitude and/or longer in duration than is typical of similar construction projects and similar communities;
- the alternative would permanently impair access to and from the surrounding community through the placement of barriers or other impediments to the local circulation pattern;
- the alternative would create a barrier or other physical change in the environment so substantial as to permanently divide, disperse, or otherwise severely disrupt a cohesive community; or
- the alternative would require residential property acquisitions and displacements so substantial as to disrupt the pattern and/or rate of existing and planned population and housing growth.

Temporary Construction Effects

Construction activities would result in temporary, localized, site-specific disruptions to population and housing in the proposed project area due primarily to construction-related traffic changes from trucks and equipment in the area; partial and/or complete street and lane closures, with some requiring detours; increased noise and vibration; light and glare; and changes in air emissions. Since the project construction activities would be temporary in duration and not likely to have effects substantially different from the same types of nuisance-like effects associated with typical construction activities throughout southern California, no adverse effect is expected to result. Additional information is provided below regarding the effects of construction activities on access and circulation.

Access/Circulation

Other than the short-term access disruptions related to project construction, which are described below, no permanent barriers to neighborhood access are expected to result from the alternatives. Existing access points and circulation routes to and from the residential neighborhoods in the project area would all remain open once the project is completed. To the extent that this alternative would provide a safer terminus, local traffic circulation and safety could be expected to improve, with some ancillary beneficial effects on access to the residential neighborhoods and local commercial centers.

Community Cohesion

Certain characteristics of the residential neighborhoods and commercial centers located near the proposed project site are indicative of an established, cohesive community, including their apparent longevity, physical and spatial attributes, and demographic profile. The average home in this area are more than 50 years old, which suggests that some aspects of cohesiveness and neighborhood character have developed over time among long-term residents. In addition, the residential areas are relatively dense, thereby contributing to a sense of community through spatial proximity. To the extent that demographic and physical characteristics have enabled a shared sense of stability to develop, some degree of community cohesion likely exists in this neighborhood. The demographic data for the area in which the project is located do not show substantial proportions of minority and low-income persons.

The assessment of whether, and to what extent, the proposed project would adversely affect the cohesiveness of the adjacent community depends largely on whether an alternative would be likely to physically divide the community. Because the alternatives would remain mostly within existing rights-of-way adjacent to, but not through, the nearby residential portions of the community, no physical division would be created. It is anticipated that the community surrounding the proposed project, therefore, would remain intact.

Changes in Demographic Characteristics/Growth

Because the project alternatives would require no property acquisitions or displacements, there would be no effects on the pattern and/or rate of existing and planned population and housing growth in the project area. Furthermore, no new or expanded infrastructure, housing, or other similar permanent physical changes to the environment would be necessary as an indirect consequence of these alternatives.

Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, signed on February 11, 1994, directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse human health or environmental effects of federal projects and programs on minority and low-income populations to the greatest extent practicable and permitted by law. The term minority includes persons who identify themselves as black/African American, Asian, Native Hawaiian/Pacific Islander, Native American/Native Alaskan, or of Hispanic/Latino origin. The term low-income includes persons whose household income is at or below the HHS poverty guidelines. A different threshold (e.g., the U.S. Census Bureau poverty threshold) may be utilized as long as it is not selectively implemented but, rather, inclusive of all persons at or below the HHS poverty guidelines.

The discussion of environmental justice that follows has been prepared in accordance with the applicable guidance for addressing environmental justice, including U.S. Department of Transportation Order 5610.2 (April 15, 1997); Federal Highway Administration (FHWA) Order 6640.23 (December 2, 1998); the FHWA Western Resource Center Interim Guidance (March 2, 1999); the FHWA, California Division, Environmental Justice Environmental Documents Checklist, and the California Department of Transportation (Caltrans) Desk Guide – Environmental Justice in Transportation Planning and Investments (January 2003). Consistent with this guidance, the environmental justice analysis describes (1) the existing study area population and the presence of minority and low-income population groups in the study area; (2) potential adverse effects and measures to avoid or minimize those effects for all study area population groups, including minority and low-income population groups; (3) potential disproportionately high and adverse effects on minority and low-income population groups; and (4) community outreach and public involvement efforts.

Study Area Population Characteristics

As noted above, the population of the project study area is not characterized by substantial proportions of minority or low-income persons (i.e., 48.3% minority, 13.4% below federal poverty threshold and per capita incomes 15% to 17% higher than the city or county for three of the four census tracts). Other indicators of a disadvantaged community also do not appear in the data (e.g., substantially more renter-occupied housing and greater housing density as measured by persons per household compared to the city and county). In addition, given the relatively smaller number of low-income persons reported in the census block groups adjacent to the project area compared to the census tracts adjacent to the project area, it is fair to state that the population that would be most affected by the project is not disadvantaged. Although, the community does not appear to be disadvantaged, an environmental justice analysis is performed to ensure that any minority and low-income population groups within the community are not disproportionately affected adversely.

Adverse Effects to General Population

Technical studies have been conducted in order to determine whether the proposed project alternatives would have any adverse effects on segments of the general population, including minority and low-income population groups. The technical studies addressing visual and aesthetic impacts, noise and vibration, biological resources, hazardous materials, and cultural resources indicate that some potential adverse effects are expected as a result of the proposed alternatives. The impacts identified in these technical reports and the measures to avoid or reduce them under each of the alternatives (where applicable) can be summarized as follows.

Visual

- The improvements proposed are to the roadway alignment and as such would have no effect on key views identified for the project area.
- Minor, temporary potential visual impacts may result from limited removal of vegetation in the construction zone and other construction activities.
- The project would be designed in accordance with Caltrans' Highway Design Manual and the 2007 Project Development Manual and local design context.

Noise and Vibration

- Noise impacts would occur due to increased traffic in the area as a result of the proposed improvements.
- Noise barriers are proposed at several locations to reduce impacts to sensitive receptors.

Biological Resources

- Construction activities could result in loss of trees and vegetation.
- Impacts to birds will be avoided by having a licensed biologist conduct pre-construction surveys as well as identify and implement other measures that would avoid or minimize any adverse effects to the bird species that could result from construction of any of the alternatives.
- The proposed project is expected to disturb the ground and may remove both nonnative vegetation and small amounts of native vegetation. To ensure the project does not promote the introduction or spread of invasive species.
- All construction equipment will be cleaned of any mud or other debris that may contain invasive plants prior to arriving at the site and before leaving the site during the course of construction.
- All targeted vegetative material will be immediately removed from the project area. This includes small cuttings, leaves, branches, leaves, seeds, and vegetative litter.
- Trucks with loads carrying vegetation shall be covered, and vegetation materials removed from the site shall be disposed of in accordance with applicable laws and regulations.
- All of the ground disturbed and remaining as open space post-construction will be hydroseeded with a seed mix restricted to local natives to promote recolonization of native vegetation and thus reducing the risk of providing optimal conditions for invasive species to colonize the area. Any landscaping within the study area will use native species.
- All trees removed will be replaced in accordance with applicable city regulations and guidelines.

Hazardous Materials

- Prior to construction, a thorough review of current environmental records and a site-specific inspection should be performed to verify environmental status of the site.
- During excavation and ground disturbance for project construction, the contactor shall observe the exposed soil for visual evidence of contamination. If visual contamination indicators are observed during construction, the contractor shall stop work until the material is properly characterized and appropriate measures are taken to protect human health and the environment. The contractor shall comply with all local, State, and federal requirements for sampling and testing, and subsequent removal, transport, and disposal of hazardous materials. Additionally, in the event that evidence of contaminated is observed, the contractor shall document the exact location of the contamination and shall immediately notify the Caltrans and/or MTA, as appropriate, describing proposed actions.
- The presence of aerially deposited lead contaminated soil must be confirmed before or during the design phase of the project to develop proper plans to reuse the impacted soil within the project limits. The aerial lead site investigation study and report must conform to the requirements of Caltrans and DTSC.
- Conduct a survey of buildings, structures, and pavement areas to be removed or demolished to assess the presence and extent of asbestos, lead, and chromium containing materials. Based on these findings appropriate measures for handling, removal, and disposal of these materials can be developed. Regulatory agencies for the State of California and County of Los Angeles should be contacted to plan handling, treatment, and/or disposal options.

Cultural Resources

- It is Caltrans' policy to avoid cultural resources whenever possible. If buried cultural materials are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the project changes to include areas not previously surveyed.

Water Quality

- Construction activities could expose disturbed and loosened soils to erosion from rainfall, runoff, and wind. These activities may lead to increased sedimentation of waters bodies downstream.
- Chemicals or compounds used during construction can seep into water bodies. Also, accidental spills of construction chemicals can enter bodies of water through storm drainage systems.
- The city and/or its contractors would adhere to BMPs and prepare Site-Specific Mitigation Plan as part of compliance with conditions of the NPDES General Construction Permit and Los Angeles County NPDES municipal stormwater permit to minimize water quality impacts during construction.

Traffic/Access

- Construction activities may result in detours and access disruptions.
- A traffic management plan (TMP) would be prepared to ensure efficient movement of local and regional traffic during construction.
- Once constructed, the project would better manage the flow of traffic at the terminus and enhance pedestrian and vehicular mobility and safety in the vicinity of SR2 terminus.

Cumulative Effects

In addition to the direct effects of the proposed project, the effect of cumulative or multiple adverse exposures to environmental impacts from other past, present, and reasonably foreseeable projects in the area should be considered as well. Apart from the proposed project, 33 related projects under the consideration of Los Angeles City Planning were identified were identified within a 2-mile radius of the project. These projects, in addition with the proposed project could result in cumulative impacts. Construction schedules for some of the related projects may overlap with the proposed project. This could result in an intensification of construction-period impacts. The traffic generated from the related development projects could result in further increase of travel times in the area. However, it expected that these projects also would be required to implement mitigation measures to reduce impacts to the extent feasible. Therefore, the proposed project would not have a cumulative adverse effect upon the study population.

Disproportionately High and Adverse Effects on Minority and Low-Income Populations

Given the mitigation measures that have been recommended in the technical studies, the impact avoidance and minimization efforts that have occurred during the project planning and development process, and the potential benefits that would accrue to the community, environmental justice considerations would require an assessment of whether the effects of the project on minority and low-income groups could be considered disproportionately high and adverse. An assessment of the effects of the project on minority and low-income groups has been provided below.

Efficacy of Mitigation Efforts – Unavoidable Adverse Effects

Of the adverse effects identified thus far in the technical studies and other ongoing analyses, all would be satisfactorily mitigated avoided or substantially minimized.

Project Benefits

Implementation of the proposed project would unquestionably have offsetting benefits that would accrue to the community. Residents, businesses, and visitors would be afforded a safer SR-2 terminus. A critical link in the local and regional circulation system would be restored, with the potential to stimulate social and economic redevelopment projects proposed for the community.

Potential Disproportionately High and Adverse Effects

The determination of whether or not the effects of the proposed project are disproportionately high and adverse depends on whether (1) the effects of the project are predominately borne by a minority or low-income population or (2) the effects of the project are appreciably more severe or greater in magnitude on minority or low-income populations compared to the effects on nonminority or non-low-income populations (see FHWA Western Resource Center Interim Guidance – Addressing Environmental Justice in the Environmental Assessment/Environmental Impact Statement [1999]).

The effects of the project would occur within an area having a relatively small population that is both minority and low-income; these effects cannot reasonably be considered disproportionately high and adverse under the circumstances. The four census tracts in the project study area are composed of relatively small numbers of minority and low-income populations. The whole community is likely to be affected by the construction activities and not a particular minority group or economic class. SR-2 is an important part of both the local and regional circulation system. Consequently, local motorists and pedestrians from the immediate project area, as well as those traveling to and from the project area from elsewhere, would all be inconvenienced by traffic delays and other disruptions during the project construction period.

The potential adverse effects resulting from the proposed project would not be appreciably more severe or greater in magnitude on minority or low-income populations than they would be on the population as a whole. As noted above, all the potential adverse effects identified in the technical studies could be satisfactorily avoided or minimized through the implementation of mitigation measures. Because there has been no evidence to suggest that the efficacy of these measures would differ with respect to different population groups, the net result would be the same for all population groups for these resource areas. No adverse effects have been identified as unavoidable after implementation of mitigation

As is detailed more fully below, Caltrans has instituted public involvement and community outreach efforts to ensure that issues of concern or controversy to minority and low-income populations are identified and addressed where practicable as part of the project planning and development process and the environmental process.

Community Outreach and Public Involvement

Efforts will continue to be made to ensure meaningful opportunities for public participation during the project planning and development process. This may include, but not necessarily be limited to, additional community meetings, informational mailings, a project web site, and news releases to local media. The community outreach and public involvement programs for the project will seek to actively and effectively engage the affected community and include mechanisms to reduce cultural, language, and economic barriers to participation.

The proposed project should also comply with applicable federal requirements promulgated in accordance with Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency (August 11, 2000), which requires that federal programs and activities be accessible to persons with limited English language proficiency.

The proposed project will be developed in accordance with Title VI of the Civil Rights Act of 1964, which provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. In addition, the project will be developed in conformity with related statutes and regulations mandating that no person in the State of California shall, on grounds of race, color, sex, age, national origin, or disabling condition, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity administered by or on the behalf of Caltrans.

Environmental Justice Determination

Given the results of technical studies concluded thus far, and taking into consideration the following: (1) the similarity of impacts to minority and low-income populations compared to the general population, (2) the generally equivalent efficacy of proposed mitigation measures and project enhancements, and (3) the off-setting benefits of the transportation facility, a disproportionately high and adverse effect on minority and/or low-income population groups would not result from Alternatives A, B, C, D or E.

Community Facilities and Services Impacts

The potential community facilities and services impacts that have been evaluated are related to (1) temporary construction effects, (2) access to facilities and services, (3) acquisitions and displacements, and (4) induced demand for new or expanded facilities and services.

Impact Criteria: A proposed project alternatives would result in an adverse effect if:

- the alternative would have indirect construction effects on community facilities and services that would be substantially greater in magnitude and/or longer in duration than is typical of similar construction projects in similar communities,
- the alternative would permanently impair access to and from community services and facilities through the placement of barriers or other impediments to the local circulation pattern,
- the alternative would require the acquisition and displacement of a community facility or service that could not be satisfactorily relocated or replaced, or

- the alternative would induce a demand for new or expanded community facilities and services beyond already planned levels.

Temporary Construction Effects

Construction activities would result in temporary, localized, site-specific disruptions to the local community facilities and services in the proposed project area due primarily to construction-related traffic changes from trucks and equipment in the area; partial and/or complete street and lane closures, with some requiring detours; increased noise and vibration; light and glare; and changes in air emissions. Since the project construction activities would be temporary in duration and not likely to have effects substantially different from the same types of nuisance-like effects associated with typical construction activities in southern California, no adverse effect is expected to result. Additional information is provided below regarding the effects of construction activities on access and circulation.

Access/Circulation

The alternatives would result in short-term access disruptions during the construction period.

Emergency Services

Police Protection

During construction of the proposed project, it is likely that SR-2 and Glendale Boulevard in the vicinity of the interchange would be closed for limited amounts of time.

The temporary closure of these roads in the vicinity of the interchange could potentially affect the Los Angeles Police Department (LAPD), Northeast Division which is the primary responder to the area. At present, the LAPD Northeast Division, which is located approximately 2-mile north of the project area, utilizes these streets to access its service area. The average response time is currently 9.7 minutes.[3] According to Lt. Baeza of the LAPD, road closures to Glendale Boulevard and/or SR-2 could affect the response time of the LAPD within the area. If SR-2 or Glendale Boulevard were to be closed during an event at Dodger Stadium, traffic would be diverted to local streets and could potentially cause further delays to LAPD servicing the area.

A Traffic Management Plan will be prepared for the project to detail detour routes and other measures to manage traffic during construction (please see the Traffic and Transportation section of the EA for this project). Prior to construction, and for the duration of the closure of the interchange, detour routes would be coordinated with the Los Angeles Police Department. Given that all project-related traffic disruptions would be temporary, lasting only for the period

[3] Jones and Stokes communication with Captain Eric T. Davis, Patrol Commanding Officer from the Los Angeles Police Department, Northeast Division. via letter on April 23, 2007.

of construction, and that alternate routes are available, impacts to police services would not be adverse.

Fire Protection

During construction of the proposed project, it is likely that SR-2 and Glendale Boulevard in the vicinity of the interchange would be closed for limited amounts of time. Closure of these streets could possibly affect fire and paramedic emergency access and response times.

The temporary closure of some roads in the vicinity of the interchange could potentially affect City of Los Angeles Fire Department Station 20. At present, Station 20 fire engines and emergency vehicles located approximately 1-mile southwest of the project area utilize these roads. The average response time is currently 1 to 4 minutes.[4] According to Captain Fluxa of the LAFD as long as one lane of traffic is open during construction minimal impacts to the response time in the area are expected. If a total closure of Glendale Boulevard would occur major delays could potentially occur. Due to the topography of the area and hilly roads in the vicinity of the project area, the fire department trucks would be unable to travel on the neighborhood streets. The alternative routes to gain access to north of the project area would potentially include Silver Lake Boulevard to the west and Echo Park Boulevard to the east of the project area.[5]

A Traffic Management Plan will be prepared for the project to detail detour routes and other measures to manage traffic during construction (please see the Traffic and Transportation section of the EA for this project). Prior to construction, and for the duration of the closure of the interchange, detour routes would be coordinated with the Los Angeles Fire Department. Given that all project-related traffic disruptions would be temporary, lasting only for the period of construction, and that alternate routes are available, impacts to fire services would not be adverse.

Schools

Los Angeles Unified School District (LAUSD) staff has reported that, under normal conditions, approximately 88 LAUSD bus routes traverse within the vicinity of the SR-2 terminus. The buses travel on these designated routes throughout the day and serve approximately 74 schools within the city of Los Angeles and in the San Fernando Valley.[6] The majority of these bus trips are before and after regular school hours, but some occur during midday times and a few trips occur for after school activities. LAUSD staff has stated that, with the proposed closure of SR-2 or Glendale Boulevard, it is anticipated that some re-routing would occur during construction of the proposed project, resulting in effects on travel times. However, the re-routing would occur in conjunction with the project staff and local school personnel.

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[4] Jones and Stokes personal communication with Captian Fluxa from the Los Angeles Fire Department, Station 20. via telephone on April 11, 2007.

[5] Ibid.

[6] Jones and Stokes personal communication with Natalie Blasco of Planning Department, LAUSD via telephone on April 12, 2007.

According to LAUSD Glendale Boulevard and Allesando Street are both designated walk routes for Clifford Street Elementary School. Therefore, any construction within the project area could potential affect student walk routes in the area. Glendale Boulevard will continue to be used as a designated walk route in the future.

Project staff will consult with local school personnel in order to maintain safe access to schools in the project vicinity during construction of the proposed project. These efforts will comply with all applicable requirements of the Americans with Disability Act (ADA). Once construction is complete, school access is expected to be at least as good as at present.

Saint Teresa of Avila School

Saint Teresa of Avila School (St. Teresa) located on the on the northwest corner of Glendale Boulevard and Fargo Street is located adjacent to the proposed project area. Although no temporary or permanent easements would be required, project construction activity could potentially delay the students, faculty, and staffs commute to and from school during both the morning and afternoon hours. According to Ms. Fernandez the principal of St. Teresa, during construction the students, faculty, staff, and members of the community will be subject to a considerable amount of noise and air quality pollution issues.[7] Ms. Fernandez feels that the time it will take to construct or improve the any one of the alternatives will create major delays to the traffic in the area thus negatively affecting all aspects pertaining to the school as well as the parish (Saint Teresa of Avila Church). Once the construction has been completed Ms. Fernandez feels more traffic will be entering Glendale Boulevard from SR-2 thus continually creating an unsafe and unhealthy environment.

The only access route to the school is from Glendale Boulevard. If Glendale Boulevard is closed for any period of time, students, faculty and staff will be delayed going to and leaving school as well as creating an unhealthy environment for sensitive members of the community.[8]

Implementation of a traffic management plan that informs the community about the project construction activities and maintains access to and from the project area during construction is expected to satisfactorily avoid or minimize potentially adverse effects on access to and from the school, parish and local residences within the vicinity of the project. Conformance to the Caltrans construction requirements and fugitive dust control measures would avoid or minimize the air quality impacts to the school, parish and local residences within the vicinity of the project. While scheduling hours of construction according to the City municipal Codes and creation of noise barriers is expected to satisfactorily avoid or minimize potentially adverse effects of noise.

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[7] Jones and Stokes personal communication with Ms. Fernandez, Principal of the St. Teresa School via telephone on May 1, 2007.
[8] Ibid.

Acquisitions and Displacements

No community facilities or services would be acquired and displaced as a result of any of the alternatives.

Demand for New or Expanded Facilities and Services

Although one alternative would result in widened ramps and additional capacity, it would not directly or indirectly induce growth beyond that which is anticipated in the applicable regional and local plans. The additional capacity is required to meet the existing demand and reduce congestion conditions at the project location. No new or expanded community facilities or services would be required.

Business, Employment, and Economic Impacts

The potential business, employment, and economic impacts that have been evaluated are related to (1) disruption and displacement of businesses and employment and (2) loss of tax revenue.

Impact Criteria: A proposed project alternative would result in an adverse effect if

- the alternative would entail construction-related disruptions to businesses and employment that would be substantially greater in magnitude and/or longer in duration than is typical of similar construction projects in similar communities,
- the alternative would require the acquisition and displacement of businesses and employment that could not be satisfactorily relocated or replaced, or
- the alternative would result in a substantial loss of tax revenue.

Temporary Construction Effects

Construction activities would result in temporary, localized, site-specific disruptions to the local businesses in the proposed project area due primarily to construction-related traffic changes from trucks and equipment in the area; partial and/or complete street and lane closures, with some requiring detours; increased noise and vibration; light and glare; and changes in air emissions. Since the project construction activities would be temporary in duration and not likely to have effects substantially different from the same types of nuisance-like effects associated with typical construction activities in southern California, no adverse effect is expected to result.

The effects of construction activities on business access and circulation would be similar to those discussed above for the local population and housing and local community facilities and services sections. Implementation of a traffic management plan that informs the community about project construction activities and maintains access to and from the project area during construction is expected to satisfactorily avoid or minimize potentially adverse effects on access to and from local businesses and employment.

Acquisitions and Displacements

No businesses would be acquired and displaced as a result of the project alternatives.

Tax Revenue

Since no businesses would be acquired and displaced as a result of the project alternatives, there would be no effect on tax revenues.

Property Value

The alternatives would not result in any changes in the land use pattern of the area or adversely affect the accessibility to residential areas, businesses and community facilities. The project would be carried out in existing right of way and would not affect community cohesion by physically dividing a community. No residential property or business acquisitions or displacements would occur a s a part of the project. The build alternatives would not result in any new structural elements that would produce substantial new shadows, lighting or obstruct any existing views. Hence, the project would no have any adverse effects on factors affecting the desirability of a property. Thus, the there would be no adverse impacts on property values in the area.

Avoidance, Minimization, and/or Mitigation Measures

The following measures would avoid or minimize certain community impacts described in the preceding sections.

Neighborhood Impacts

Population and Housing – Temporary Construction Impacts:

- Develop and implement a community outreach and public involvement program to inform the community about project construction activities.
- Develop and implement a construction management program that maintains access to and from the project area community through signage, detours, flagmen, etc.

Community Facilities and Services – Temporary Construction Impacts:

- Implement a construction management program that maintains access to and from the project area and community through signage, detours, flagmen, etc.
- Coordinate with emergency services providers to ensure that alternative response routes to and from the project area community are in place during construction of the proposed project.
- Consult with local school officials to identify safe pedestrian and vehicular routes for students traveling to and from schools in the project area community during construction of the proposed project.

Land Use – Acquisition/Displacement:

- In accordance with the federal Uniform Relocation Assistance and Property Acquisition Act of 1970, as amended (42 United States Code [USC] Sections 4601–4655), provide compensation to eligible recipients for partial property acquisitions.

Population and Housing – Environmental Justice:

- Actively and effectively engage all segments of the affected community with mechanisms to reduce cultural, language, and economic barriers to participation.

Regional Economic Impacts

No substantial adverse impacts would occur and no mitigation measures are required. Also, see the measures identified above and below.

Impacts on Local Businesses

Businesses and Employment – Temporary Construction Impacts:

- Develop and implement a community outreach and public involvement program to inform the community about project construction activities.
- Develop and implement a construction management program that maintains access to and from the project area community through signage, detours, flagmen, etc.

Secondary Impacts

Please see the measures above.

Conclusions

As demonstrated above, the proposed project would have no adverse impacts to the community. This determination is based on the following:

Land Use and Planning Impacts:
Project would be implemented in existing right of way. Temporary construction easements would be necessary only for the duration of construction and would not substantially interfere with the use of the affected parcels. There would be no acquisitions or displacements under any project alternative. There would not be any unavoidable adverse impacts to land use and planning.

Population and Housing Impacts:
The alternatives would require only the existing right of way and would not affect the community cohesion or demographics and characteristics of the area. No acquisitions or displacements and adverse effects on minority and low-income population would occur. Temporary construction effects would be temporary on the access and circulation. The local traffic circulation, safety and access would improve as a result of the traffic improvements in the project. Actively and effectively engaging all segments of the affected community and effective community outreach and public involvement program would ensure that there are no adverse impacts.

Community Facilities and Services:
Construction activities would result in temporary, localized, site-specific disruptions to the local community facilities and services in the proposed project area due primarily to construction-related traffic changes. However, measures like a construction management program to maintains access to and from the project area community, coordination with emergency services providers and local schools for alternative response routes and safe pedestrian and vehicular routes for students would minimize the adverse impacts.

Business, Employment, and Economic Impacts:

No business would be acquired or displaced under the alternatives. Hence, there would be no adverse impacts on business, employment, tax revenues and property values of the area. Construction activities would result in temporary, localized, site-specific disruptions to the local businesses in the proposed project area in terms of access and circulation. However, implementing a construction management program to maintain access and community outreach and public involvement program to inform the community about project construction activities would minimize the impacts.

APPENDIX A

List of Preparers

Bert Dudley—Environmental Specialist 2, Jones & Stokes Associates

M.S., Environmental Management, University of San Francisco; B.A., Environmental Studies, University of Colorado, Boulder.

Mr. Dudley has two years of experience as an environmental planner with a broad background in hazardous materials, environmental compliance, and wetlands. Bert assists with the preparation of documents for compliance with CEQA and NEPA, coordinates project work, and conducts research for project managers.

Shilpa Trisal, AICP—Environmental Specialist 3, Jones & Stokes Associates

M.A., Community Planning, University of Cincinnati; and B.A., Planning, School of Planning and Architecture, New Delhi, India.

Ms. Trisal has 5 years of experience in the environmental planning field, focusing on framework plan/master plan formulation, visual analysis, and socio-demographic research and writing.

Amy Corathers – Senior Environmental Planner, Jones & Stokes Associates

M.P.A., Public Administration, Arizona State University; B.S. Aeronautical Management Technology, Arizona State University.

Ms. Corathers has 12 years of experience in the planning field with diverse expertise in CEQA/NEPA environmental compliance, transportation planning and engineering, airport planning, and public works programming.

APPENDIX B

Persons and Agencies Consulted

Blasco, Natalie. Los Angeles Unified School District, Planning Department. April 12, 2007—telephone conversation.

Davis, Eric T. Patrol commanding officer. Los Angeles Police Department, Northeast Division. April 21, 2007—letter response to Jones & Stokes questionnaire.

Davis, Eric T. Patrol commanding officer. Los Angeles Police Department, Northeast Division. April 23, 2007—letter to Jones & Stokes.

Fernandez-Caso, Christina. Principal. St. Teresa of Avila School. May 1, 2007— telephone conversation.

Fluxa, Claudio A. Captain. Los Angeles Fire Department, Station 20. April 11, 2007—telephone conversation.

APPENDIX C

References

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State Route 2
Freeway Terminus Improvement Project

Air Quality Report

City of Los Angeles, Los Angeles County

District 07-LA-2-KP 21.8/24.1 (PM 13.5/15.0)
EA 205500

February 2009

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

State Route 2
Freeway Terminus Improvement Project
Air Quality Report

EXECUTIVE SUMMARY

The Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the California Department of Transportation (Caltrans) and the Los Angeles Department of Transportation (LADOT) proposes to reconstruct the southern terminus of the Glendale Freeway, also known as State Route 2 (SR-2). SR-2 transitions from a freeway facility to a conventional highway (major arterial) at the terminus. The project site is located in the City of Los Angeles, in Los Angeles County. The project location is shown in Figures 1 and 2 on the pages that follow. Cross-section drawings that detail existing and proposed improvements are provided in Appendix A.

The proposed project is included in the Southern California Association of Governments (SCAG) 2008 Regional Transportation Plan (RTP), project identification number (ID No.) LA990351. The project is also included in the SCAG 2008 Regional Transportation Improvement Program (RTIP) as project ID No. LA990351. The 2008 RTP and 2008 RTIP were both found to be conforming by the Federal Highway Administration (FHWA) on June 5, 2008 and November 17, 2008, respectively. As such, it can be concluded that the project's operational emissions (which include the ozone [O_3] precursor emissions reactive organic gases [ROG] and oxides of nitrogen [NOx]) meet the transportation conformity requirements imposed by the U.S. Environmental Protection Agency (EPA) and the South Coast Air Quality Management District (SCAQMD). Therefore, the project must undergo a project-level rather than a regional conformity-level air quality analysis.

The project site is located in a densely urbanized area of the City of Los Angeles, which is an area with relatively poor air quality that is due, in part; to regional meteorological conditions. The pollutants of most concern are O_3 and inhalable particulates ($PM_{2.5}$ and PM_{10}). Potential air quality impacts from project construction and operation were evaluated. During construction, the project would be subject to SCAQMD Rule 403 (Fugitive Dust), which requires that best available fugitive dust control measures be incorporated into construction practices. Construction impacts were found to be less than significant, with implementation of mitigation measures. In addition, exhaust emissions from diesel-powered construction equipment were found to pose a less than significant health risk.

Figure 1. Regional Location Map

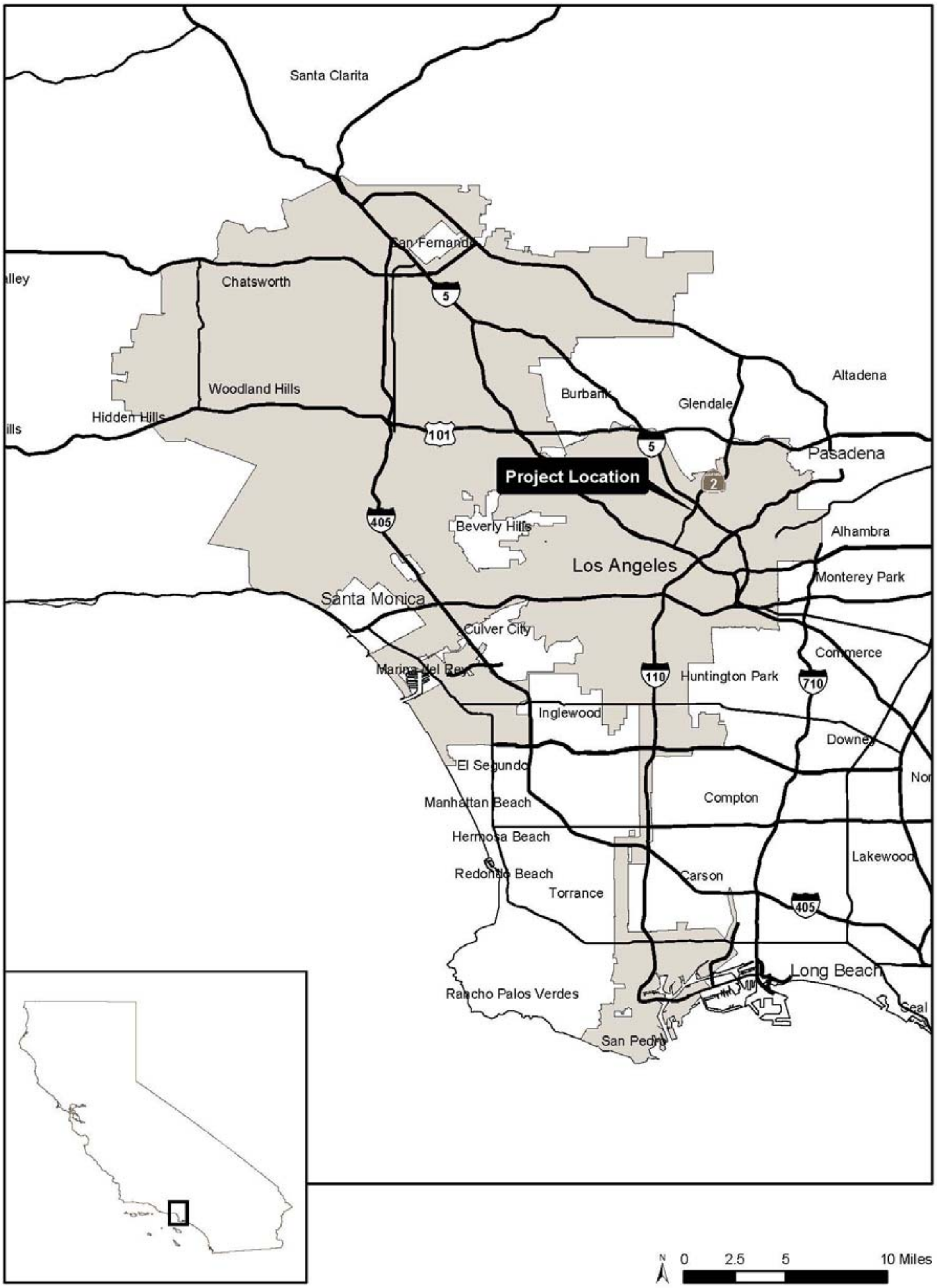
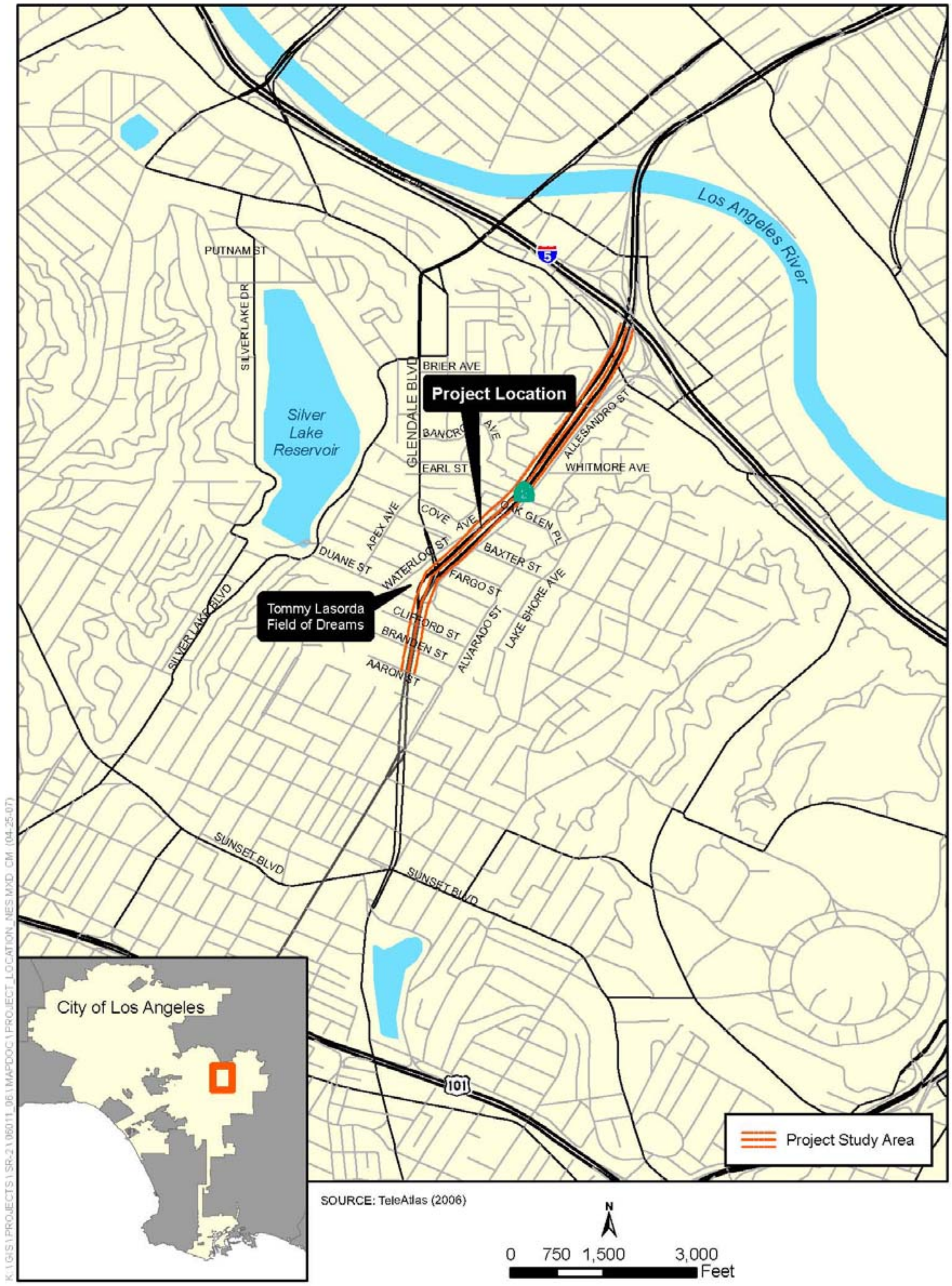


Figure 2. Project Vicinity Map



With respect to long-term project operations, the Caltrans' carbon monoxide (CO) protocol screening procedure demonstrated that the project would not cause or contribute to violations of the state or federal CO ambient air quality standards (AAQS). The qualitative $PM_{2.5}$ and PM_{10} hot-spot analysis conducted using the March 2006 EPA guidance (*Transportation Conformity Guidance for Qualitative Hot-spot Analysis in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas*) demonstrated that the project would not be considered a project of air quality concern with respect to localized $PM_{2.5}$/PM_{10} concentrations. In addition, project-related mobile-source air toxics (MSAT) emissions were found to pose a less-than- substantial health risk in the analysis conducted using the February 2006 FHWA/EPA guidance (*Interim Guidance on Air Toxic Analysis in NEPA Documents)*. And finally, the issue of climate change and greenhouse gas (GHG) emissions was evaluated consistent with the *Climate Action Program at Caltrans* policy.

Overall, the proposed project was found to have no adverse impacts under the National Environmental Policy Act (NEPA) and a less than significant impact under the California Environmental Quality Act (CEQA). This air quality evaluation is the basis for the determination that the proposed project would not result in adverse air quality impacts.

1.0 DESCRIPTION OF THE PROPOSED PROJECT

This report evaluates the potential air quality impacts associated with proposed construction and operation of the SR-2 Freeway Terminus Improvement Project in the County of Los Angeles, City of Los Angeles.

1.1 Introduction

It is proposed to modify the southern terminus of SR-2 in the County of Los Angeles, City of Los Angeles. SR-2 was originally planned to connect the City of Glendale at Interstate 5 (I-5) to the Hollywood Freeway (US-101). In 1962, Caltrans rescinded plans for the SR-2 continuation to US-101 and construction was ended at the present terminus at Glendale Boulevard. In general, the build improvements range from widening the existing entrance and exit ramps to realigning the entrance and exit ramps to the east with options removing the southbound flyover ramp, part of the bridge, the whole bridge, and relocating the retaining wall. This segment of SR-2 provides ingress and egress to the communities of Echo Park and Silver Lake; is a major thoroughfare for the surrounding area; and, is a vital link for commuters traveling to downtown Los Angeles.

1.2 Purpose and Need

The City of Los Angeles is experiencing continued growth. This segment of SR-2 provides ingress and egress to the densely populated communities of Echo Park and Silver Lake and is a major thoroughfare for the surrounding area. This segment of SR-2 also provides a vital link for commuters traveling from communities in the northern and eastern parts of the Los Angeles Basin to downtown Los Angeles.

The current SR-2 terminus configuration has several limitations associated with its layout. The southbound exit ramp and southbound direct connector interrupt Glendale Boulevard traffic flows in two locations, at Waterloo/Fargo Street and then again near Allesandro Street. Because the northbound lanes consist of a northbound Glendale Boulevard, a northbound freeway entrance ramp and a center "choice" lane; weaving maneuvers are required between Allesandro Street and the terminus. Pedestrians and bicycles are not well accommodated by existing facilities in the vicinity of the freeway terminus.

Traffic flow during peak hours in the project area is severely impeded due to the existing configuration of the SR-2 terminus, and during off-peak periods, the southbound direct connector traffic often merges onto southbound Glendale Boulevard at a high rate of speed.

The purpose of the project was developed by the Department, Metro, and LADOT, with the cooperation of members of the community. The purposes, or objectives, of the project are to:

1. Better manage traffic flow at the terminus;
2. Enhance vehicular and pedestrian accessibility and safety in the vicinity of the SR-2 terminus;
3. Create the opportunity for additional space in the vicinity of the SR-2 terminus; and
4. Develop a freeway terminus design that is compatible with existing residential and commercial uses in the immediate vicinity.

The proposed improvements that have been identified to address the project purpose and need have independent utility and logical termini.

1.3 Existing Conditions

The project is located on SR-2 between I-5 and Glendale Boulevard in the City of Los Angeles in Los Angeles County. This segment of the SR-2 extends approximately 1.5 miles in length and is bordered by residential developments and community parks. The area is urbanized and is situated between the Silver Lake Reservoir and Tommy Lasorda Field of Dreams to the west, Elysian Park and housing developments to the southeast and Los Angeles River and Interstate 5 to the north. The proposed project construction limits are located approximately between Clifford Street to the south and Oak Glen Place to the north; however, the overall study area for the project includes the right-of-way between Aaron Street to the south and I-5 to the north. The eight-lane freeway was completed to a point on the south side of Glendale Boulevard, ending at the southern edge of the Glendale Boulevard undercrossing. A half diamond interchange with a direct connector was constructed with ramps connecting the freeway terminus to Glendale Boulevard. This condition remains presently.

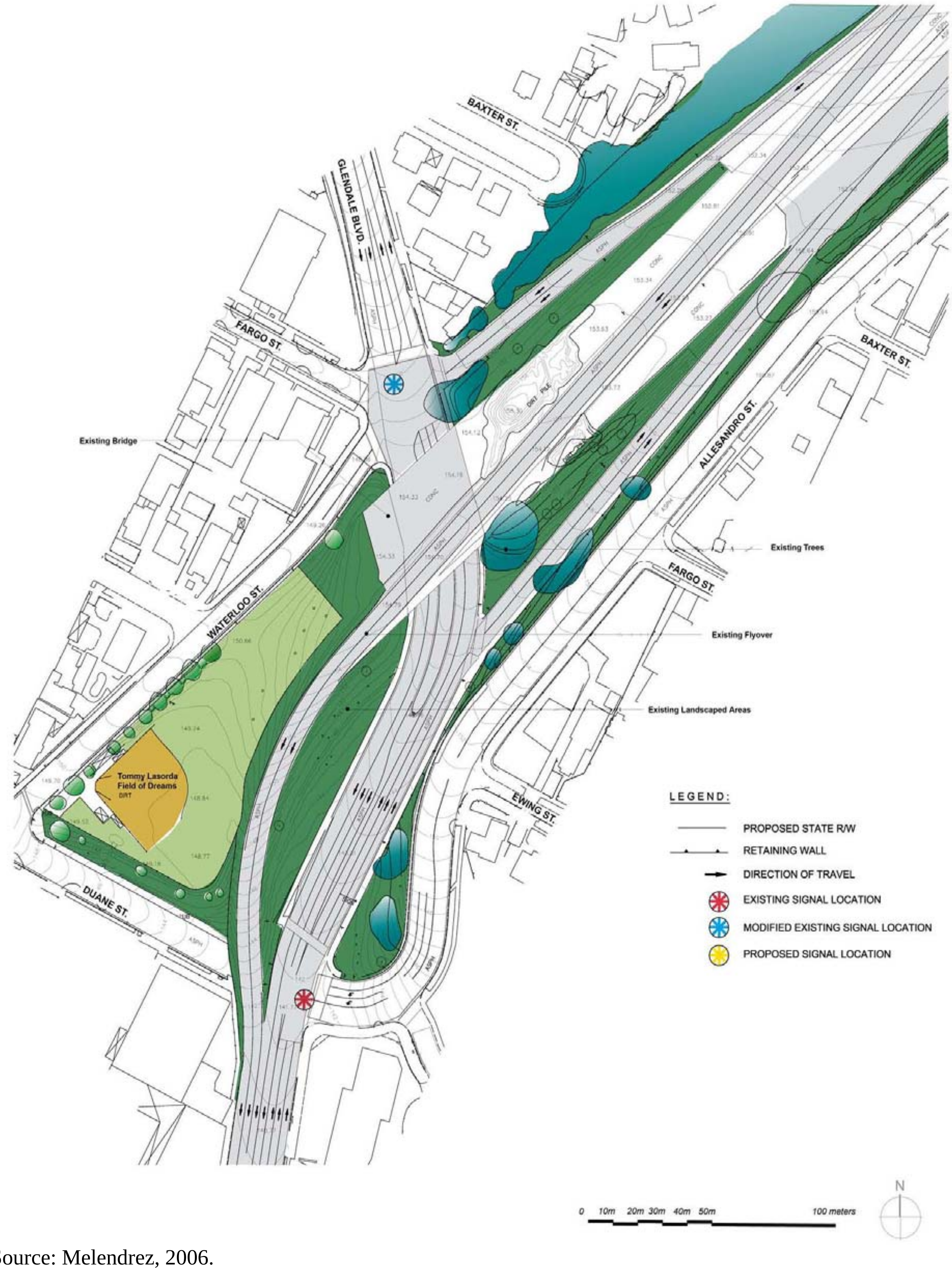
1.4 Alternatives

There are six proposed alternatives for the SR-2 Freeway Terminus Improvement Project, including the No-Build Alternative. The proposed project site is generally located between Clifford Street to the south and Oak Glen Place to the north. The six proposed alternatives are summarized as follows:

No-Build Alternative (Baseline Alternative)

The No-Build Alternative is used to compare the relative impacts and benefits of the proposed project improvements. Under this alternative, no improvements, modifications, or changes would be made to the SR-2 freeway terminus. This alternative requires no new construction or capital cost (Figure 3). Without the proposed improvements, traffic volumes at the terminus will continue to grow and the existing levels of service will continue to degrade to unacceptable levels prior to 2025. Traffic queues will become longer and vehicle delays will increase substantially. Pedestrian and bicycle circulation would remain ineffective and circuitous at the SR-2 terminus. Additionally, additional open space would not be available.

Figure 3. No Build Alternative (Baseline Alternative)



Source: Melendrez, 2006.

Build Alternatives

There are five Build Alternatives (A through E) under consideration. A description of each is provided below.

Alternative A (Widen Existing Ramps, Maintaining Bridge)

This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp (two lanes). This alternative does not have any potential for new open space (Figure 4).

Alternative B (Realign Ramp East, Removing Bridge)

This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and part of the bridge. This alternative offers the potential for new open space (Figure 5).

Alternative C (Realign Ramps East, Removing Bridge)

This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. It would remove the southbound flyover ramp and bridge. This alternative offers the potential for new open space (Figure 6).

Alternative D (Realign Ramps East, Maintaining Bridge)

This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged (Figure 7).

Alternative E (Realign Ramps East - Retain Flyover and Bridge - Relocate Retaining Wall)

This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. The existing retaining wall along Allesandro Street would be relocated to the east (Figure 8).

Figure 4. Alternative A (Widen Existing Ramps)

Source: Melendrez, 2006.

Figure 5. Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge)

Source: Melendrez, 2006.

Figure 6. Alternative C (Realign Ramps East – Remove Flyover and Bridge)

Source: Melendrez, 2006.

Figure 7. Alternative D (Realign Ramps East – Retain Flyover and Bridge)

Source: Melendrez, 2006.

Figure 8. Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining Wall)

Source: Melendrez, 2006.

2.0 AFFECTED ENVIRONMENT

2.1 Regulatory Setting

The project site is located in the South Coast Air Basin (Basin). The SCAQMD has jurisdiction over air quality issues throughout the Basin. It administers air quality regulations developed at the federal, state, and local levels. Federal, state, and local air quality regulations applicable to the proposed project are described below.

Federal Requirements
The federal Clean Air Act (CAA), enacted in 1970 and amended twice thereafter (including the 1990 amendments), establishes the framework for modern air pollution control. The act directs the EPA to establish ambient air standards for six pollutants: ozone, CO, lead, nitrogen dioxide, particulate matter, and sulfur dioxide. The standards are divided into primary and secondary standards; the former are set to protect human health within an adequate margin of safety and the latter to protect environmental values, such as plant and animal life.

The federal CAA requires states to submit a state implementation plan (SIP) for areas designated as nonattainment for federal air quality standards. The SIP, which is reviewed and approved by EPA, must demonstrate how the federal standards will be achieved. Failing to submit a plan or secure approval could lead to denial of federal funding and permits. In cases where the SIP is submitted by the state but fails to demonstrate achievement of the standards, EPA is directed to prepare a federal implementation plan.

Transportation Conformity
The concept of transportation conformity was introduced in the 1977 federal CAA, which includes a provision to ensure that transportation investments conform to the SIP for meeting the national ambient air quality standards (NAAQS). Conformity requirements were made substantially more rigorous in the federal CAA amendments of 1990, and the transportation conformity regulation that details implementation of the conformity requirements was first issued in November 1993, though the requirements have been amended many times. The most recent complete set of amendments to the Transportation Conformity Rule is found at 40 Code of Federal Regulations (CFR) parts 51 and 93 (August 15, 1997). On July 1, 2004, EPA published a set of the Transportation Conformity Rule Amendments, amending the August 1997 regulations, in Federal Register (FR) Volume 69 No. 26. The July 2004 amendments provide regulations for the new 8-hour ozone and $PM_{2.5}$ NAAQS. On March 10, 2006, EPA published an amendment to 40 CFR part 93 in FR Volume 71 No. 47, which established the criteria for determining which transportation projects must be analyzed for local particulate emission impacts in $PM_{2.5}$ and PM_{10} nonattainment and maintenance areas, creating new requirements for $PM_{2.5}$ and revising those for PM_{10}.

Mobile Source Air Toxics
The federal CAA identified 188 pollutants as being air toxics, which are also known as hazardous air pollutants (HAP). From this list, EPA identified a group of 21 as MSATs in its final rule, *Control of Emissions of Hazardous Air Pollutants from Mobile Sources* (66 FR 17235) in March 2001. From this list of 21 MSATs, EPA identified six priority MSATs: benzene, formaldehyde, acetaldehyde, diesel particulate matter/diesel exhaust organic gases, acrolein, and 1,3-butadiene. To address emissions of MSATs, EPA has issued a number of regulations that will dramatically decrease MSATs through cleaner fuels and cleaner engines.

The area of air toxics analysis is a new and emerging issue and is a continuing area of research. Although much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques available for assessing project-specific health impacts from MSATs are limited. Given the emerging state of the science and of project-level analysis techniques, there are no established criteria for determining when MSAT emissions should be considered a significant issue in the NEPA context. FHWA is currently preparing guidance as to how mobile-source health risks should factor into project-level decision making under NEPA. In addition, EPA has not established regulatory concentration targets for the six relevant MSAT pollutants appropriate for use in the project development process. In light of the recent development regarding MSATs, FHWA has issued interim guidance for the assessment of MSATs in NEPA documents.

State Requirements

Responsibility for achieving California's air quality standards (CAAQS), which are more health protective than federal standards, is placed on the California Air Resources Board (ARB) and local air pollution control districts. State standards are to be achieved through district-level air quality management plans that are incorporated into the SIP.

The California CAA requires local and regional air pollution control districts that are not attaining one or more of the CAAQS for ozone, CO, sulfur dioxide, or nitrogen dioxide to expeditiously adopt plans specifically designed to attain these standards. Each plan must be designed to achieve an annual 5% reduction in district-wide emissions of each nonattainment pollutant or its precursors.

Recently enacted amendments to the California CAA impose additional requirements that are designed to ensure an improvement in air quality within the next 5 years. More specifically, local districts with moderate air pollution that did not achieve "transitional nonattainment" status by December 31, 1997, must implement the more stringent measures applicable to districts with serious air pollution.

Local and Regional Requirements

The air quality management agencies of direct importance to the Basin portion of Los Angeles County include EPA, ARB, and the SCAQMD. EPA has established federal AAQS for which ARB and the SCAQMD have primary implementation responsibility. ARB and the SCAQMD are also responsible for ensuring that state ambient air quality standards are met. SCAG develops the Regional Transportation Program (RTP) in consultation with local air management districts. The RTP includes projects that strive to meet the goals and objectives of the NAAQS. The RTP is also in accord with EPA's Transportation Conformity Rule as it pertains to air quality standards in Los Angeles County.

With respect to the proposed project, it is included in the SCAG 2008 RTP (ID No. LA990351) and the SCAG 2008 RTIP (ID No. LA990351), which were found to be conforming by FHWA on June 5, 2008 and November 17, 2008, respectively. As such, it can be concluded that the project's operational emissions (which include the ozone precursors ROG and [NO_X]) meet the transportation conformity requirements imposed by the EPA and SCAQMD. Therefore, the project must undergo a project-level rather than a regional conformity-level air quality analysis.

Federal and State Ambient Air Quality Standards

Existing air quality conditions in the project area can be characterized in terms of the AAQS that the State of California and the federal government have established for several different pollutants. For some pollutants, separate standards have been set for different measurement periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). Table 1 shows the state and federal standards for a variety of pollutants.

Table 1. California and National Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS[a]	NAAQS[b]
Ozone (O_3)	1 hour	0.09 ppm[c]	--
	8 hour	0.070 ppm	0.075 ppm
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm
	8 hour	9.0 ppm	9 ppm
Nitrogen Dioxide (NO_2)	1 hour	0.18 ppm	NA
	Annual	0.030 ppm	0.053 ppm
Sulfur Dioxide (SO_2)	1 hour	0.25 ppm	--
	24 hour	0.04 ppm	0.14 ppm
	Annual	--	0.030 ppm
Inhalable Particulate Matter (PM_{10})	24 hour	50 µg/m^3[c]	150 µg/m^3
	Annual	20 µg/m^3	--
Fine Particulate Matter ($PM_{2.5}$)	24 hour	--	35 µg/m^3
	Annual	12 µg/m^3	15.0 µg/m^3
Sulfates	24 hour	25 µg/m^3	--
Lead (Pb)	30 day	1.5 µg/m^3	--
	Calendar quarter	--	1.5 µg/m^3
	Rolling 3-month average	0.15 µg/m^3	--
Hydrogen Sulfide	1 hour	0.03 ppm	--
Vinyl Chloride	24 hour	0.01 ppm	--

Notes:

[a] The California ambient air quality standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ are values not to be exceeded. All other California standards shown are values not to be equaled or exceeded.

[b] The national ambient air quality standards, other than O_3 and those based on annual averages, are not to be exceeded more than once a year. The O_3 standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

[c] ppm = parts per million by volume; µg/m^3 = micrograms per cubic meter.

Source: California Air Resources Board, November 17, 2008.

2.2 Physical Setting

Ambient air quality is affected by climatological conditions, topography, and the types and amounts of pollutants emitted. The following discussion describes relevant characteristics of the air basin and offers an overview of conditions affecting pollutant ambient air concentrations in the Basin.

Topography and Climate

The distinctive climate of the Basin is determined by its terrain, which includes a coastal plain with connecting broad valleys and low hills, and by its geographic location, bounded by the Pacific Ocean to the southwest and high mountains around the rest of its perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds (warm west winds blowing from east of Los Angeles).

Many of the same factors that make living in southern California so desirable also contribute to the worst smog problem in the nation. Gentle ocean breezes carry pollutants into the inland valleys where they are trapped by the surrounding mountains. Thermal inversions act like a lid over the Basin. Bright sunshine and warm temperatures cause some pollutants to react with each other, forming even more pollution.

The climate monitoring station located closest to the project is located within the City of Los Angeles, which is the same jurisdiction as the project site. At the Los Angeles Civic Center climate monitoring station (station number 045115), the average minimum and maximum December temperatures are 49 degrees and 68 degrees Fahrenheit, respectively, while in August the average minimum and maximum temperatures increase to 64 degrees and 83 degrees Fahrenheit, respectively. Los Angeles averages 3.44 inches of precipitation in February, the peak month. On an annual basis, Los Angeles averages 14.89 inches of rain, with virtually no rain during the months of May, June, July, August, September and October.

Existing Air Quality Conditions

The proposed project is located in central Los Angeles County (SCAQMD Source Receptor Area 1), which is served by the Los Angeles-North Main Street ambient air monitoring station (station number 70087) located at 1630 North Main Street in Los Angeles. The monitoring station is approximately (2.3 miles) southeast of the project site, and monitors O_3, CO, NO_2, SO_2, PM_{10} and $PM_{2.5.}$ Recent monitoring data from the Los Angeles-North Main station is provided in Table 2.

Table 2. Ambient Air Quality Monitoring Data Collected from the Los Angeles-North Main Street (ARB Station No.70087) Monitoring Station

Pollutant Standards	2005	2006	2007
Ozone (O_3) (Los Angeles-North Main Street)			
Maximum 1-hour concentration (ppm)	0.121	0.108	0.115
Maximum 8-hour concentration (ppm)	0.098	0.079	0.102
Number of Days Standard Exceeded			
CAAQS 1-hour (>0.09 ppm)	2	8	3
NAAQS 8-hour (>0.08 ppm)	1	0	2
Carbon Monoxide (CO) (Los Angeles-North Main Street)			
Maximum 8-hour concentration (ppm)	3.05	2.68	2.15
Number of Days Standard Exceeded			
NAAQS 8-hour (>9.0 ppm)	0	0	0
CAAQS 8-hour (>9.0 ppm)	0	0	0
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1-hour (>20 ppm)	0	0	0
Nitrogen Dioxide (NO_2) (Los Angeles-North Main Street)			
Maximum1-hour concentration (ppm)	0.126	0.111	0.104
State annual average concentration (>0.030 ppm)	0.027	0.029	0.030
Number of Days Standard Exceeded			
CAAQS 1-hour (>0.18 ppm)	0	0	0

Pollutant Standards	2005	2006	2007
Sulfur Dioxide (SO_2) (Los Angeles – North Main Street)			
Maximum 24-hour concentration (ppm)	0.010	0.006	0.005
National annual average concentration (>0.030 ppm)	0.002	0.002	0.001
Number of Days Standard Exceeded			
CAAQS 24-hour (>0.04 ppm)	0	0	0
NAAQS 24-hour (>0.14 ppm)	0	0	0
Inhalable Particulate Matter (PM10) (Los Angeles-North Main Street)			
National maximum 24-hour concentration ($\mu g/m^3$)	70.0	59.0	78.0
National second-highest 24-hour concentration ($\mu g/m^3$)	68.0	55.0	77.0
State maximum 24-hour concentration ($\mu g/m^3$)	69.0	58.0	77.0
State second-highest 24-hour concentration ($\mu g/m^3$)	68.0	55.0	46.0
National annual average concentration (>50 $\mu g/m^3$) [b]	29.6	30.1	33.3
State[c] annual average concentration (>20 $\mu g/m^3$)	29.2	30.1	NA
Number of Days Standard Exceeded			
CAAQS 24-hour (>50 $\mu g/m^3$)	3	3	1
NAAQS 24-hour (>150 $\mu g/m^3$)	0	0	0
Fine Particulate Matter ($PM_{2.5}$) (Los Angeles-North Main St.)			
National maximum 24-hour concentration ($\mu g/m^3$)	73.7	56.2	51.2
National second-highest 24-hour concentration ($\mu g/m^3$)	67.5	45.7	47.0
National third-highest 24-hour concentration ($\mu g/m^3$)	73.7	56.2	51.2
National fourth-highest 24-hour concentration ($\mu g/m^3$)	67.5	45.7	47.0
National annual average concentration (>15 $\mu g/m^3$) [b]	17.8	15.6	NA
State[c] annual average concentration (>12 $\mu g/m^3$)	17.8	16.0	NA
Number of Days Standard Exceeded			
NAAQS 24-hour (>35 $\mu g/m^3$)[d]	2	0	0

Notes:

CAAQS = California Ambient Air Quality Standards; NAAQS = National Ambient Air Quality Standards; NA = Insufficient data available to determine the value.

[a] Measurements usually collected every 6 days.

[b] National annual average based on arithmetic mean.

[c] State annual average based on geometric mean.

[d] Based on an estimate of how many days concentrations would have been greater than the standard.

Sources: California Air Resources Board, compiled by ICF Jones & Stokes, June 2008.

As shown in Table 2, during the 3-year reporting period, the 1-hour O_3 concentrations periodically exceed the state standard (i.e., 13 violations during the previous three years). The federal 8-hour O_3 concentrations were exceeded three times during the same period. CO, NO_2 and SO_2 concentrations have remained below state and federal standards during the three-year reporting period. PM_{10} concentrations have exceeded the state standard seven times during the three-year reporting period, but have not exceeded the federal standard. $PM_{2.5}$ concentrations have exceeded federal standards two times during the three-year reporting period.

If a pollutant concentration is lower than the state or federal standard, the area is classified as being in attainment for that pollutant. If a pollutant violates the standard, the area is considered a nonattainment area. If data are insufficient to determine whether a pollutant is violating the standard, the area is designated unclassified. The State of California has designated the Basin as nonattainment for ozone, $PM_{2.5}$and PM_{10}. As presented in Table 3 below, the federal EPA has designated the Basin as nonattainment for ozone (Severe-17 classification for the 8-hour standard); CO (Serious nonattainment); PM_{10} (Serious nonattainment); and, $PM_{2.5}$ (nonattainment).

Table 3. Attainment Status for the South Coast Air Basin

	Status	
Pollutants	**Federal**	**State**
Ozone (O_3)	1-hour: ---	1-hour: Nonattainment
	8-hour: Nonattainment, Severe-17	8-hour: ---
Carbon Monoxide (CO)	Attainment/Maintenance	Attainment
Nitrogen Dioxide (NO_2)	Attainment/Maintenance	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Particulates (PM_{10})	Serious Nonattainment	Nonattainment
Fine Particulates ($PM_{2.5}$)	Nonattainment	Nonattainment
Lead (Pb)	Attainment	Attainment

Climate Change

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to GHG emissions reduction and climate change research and policy have increased dramatically in recent years. In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions; these regulations will apply to automobiles and light trucks beginning with the 2009 model year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020, and 3) 80% below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that ARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. According to the Intergovernmental Panel on Climate Change's (IPCC) report, Climate Change 2007: The Physical Science Basis: Summary for Policymakers (February 2007), there is no doubt that the climate system is warming. Global average air and ocean temperatures as well as global average sea level are rising. Of the last 12 years, 11 years have ranked as among the warmest on record since 1850. While some of the increase is explained by natural occurrences, the 2007 report asserts that the increase in temperature is very likely (> 90%) due to human activity, most notables the burning of fossil fuels.

For California, similar effects are described in the California Climate Change Center report, Our Changing Climate: Assessing the Risks to California (July 2006). Based on projections using state of the art climate modeling, the temperatures in California are expected to rise between 3° F and 10.5° F (1.7° C and 5.8 ° C) by the end of the century dependent on how much California is able to reduce its GHG emissions. The report states that these temperature increases will negatively impact public health, water supply, agriculture, plant and animal species, and the coastline.

2.3 Description of Relevant Air Pollutants

Ozone

Ozone is a respiratory irritant that increases susceptibility to respiratory infections. It is also an oxidant that can cause substantial damage to vegetation and other materials.

Ozone, which is a regional pollutant, is not emitted directly into the air but is formed by a photochemical reaction in the atmosphere. Ozone precursors, which include ROG and NOx, react in the atmosphere in the presence of sunlight to form ozone. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. In addition, photochemical reactions take time to occur, so high ozone levels often occur downwind of the emission source.

The EPA revoked the federal 1-hour ozone standard on June 15, 2005; however, the new federal 8-hour ozone standard was promulgated effective from that same date. A state standard for ozone has been established for the 1-hour and 8-hour averaging times. The state 1-hour and 8-hour ozone standards are 0.09 parts per million (ppm) and 0.070 ppm, respectively, not to be exceeded. The federal 8-hour ozone standard is 0.08 ppm and is not to be exceeded more than three times in any 3-year period.

On April 15, 2004, EPA released its list of 8-hour ozone nonattainment areas, together with the deadline for each nonattainment area to attain the standard. Areas with the highest 8-hour concentrations and the greatest number of days exceeding the new standard were given the longest time to reach attainment. The Basin is classified as Nonattainment Severe-17.

Inhalable Particulate Matter

Particulates can damage human health and retard plant growth. Health concerns associated with suspended particulate matter focus on those particles small enough to reach the lungs when inhaled. Particulates also reduce visibility and corrode materials.

Particulate emissions are generated by a wide variety of sources, including industrial emissions, dust suspended by vehicle traffic and construction equipment, and secondary aerosols formed by reactions in the atmosphere.

The federal and state AAQS for particulate matter apply to two classes of particulates: $PM_{2.5}$ and PM_{10}. The federal $PM_{2.5}$ standards are 15 micrograms per cubic meter ($\mu g/m^3$) for the annual average and 35 $\mu g/m^3$ for the 24-hour average. On June 20, 2002, the ARB adopted a new annual $PM_{2.5}$ standard of 12 $\mu g/m^3$. The federal PM_{10} standards are 150 $\mu g/m^3$ as a 24-hour average and 50 $\mu g/m^3$ as an annual arithmetic mean. The state PM_{10} standards are 50 $\mu g/m^3$ as a 24-hour average and 20 $\mu g/m^3$ as an annual geometric mean. EPA released its final nonattainment area designations for $PM_{2.5}$ on January 5, 2005 (70 FR 943), in which the SCAB was classified nonattainment. The first federal conformity determination for $PM_{2.5}$ (for the 2004 SCAG RTP) was issued on March 30, 2006.

Carbon Monoxide

CO is a public health concern because it combines readily with hemoglobin and reduces the amount of oxygen transported in the bloodstream. CO can cause health problems such as fatigue, headache, confusion, dizziness, and even death.

Motor vehicles are the dominant source of CO emissions in most areas. High CO levels develop primarily during winter when a period of light winds combine with the formation of ground-level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures.

State and federal CO standards have been set for 1-hour and 8-hour averaging times. The state 1-hour standard is 20 ppm by volume, whereas the federal 1-hour standard is 35 ppm. Both state and federal standards for the 8-hour averaging period are 9 ppm.

Nitrogen Dioxide

Nitrogen oxides are a family of highly reactive gases that are primary precursors to the formation of ground-level ozone, reacting in the atmosphere to form acid rain. NOx is emitted from the use of solvents and combustion processes in which fuel is burned at high temperatures, principally from motor vehicle exhaust and stationary sources such as electric utilities and industrial boilers. A brownish gas, nitrogen dioxide is a strong oxidizing agent that reacts in the air to form corrosive nitric acid, as well as toxic organic nitrates.

NOx can irritate the lungs, cause lung damage, and lower resistance to respiratory infections such as influenza. The effects of short-term exposure are still unclear, but continued or frequent exposure to concentrations that are typically much higher than those normally found in the ambient air may cause increased incidence of acute respiratory illness in children. Health effects associated with NOx are an increase in the incidence of chronic bronchitis and lung irritation. Chronic exposure to nitrogen dioxide (NO_2) may lead to eye and mucus membrane aggravation along with pulmonary dysfunction. NOx can cause fading of textile dyes and additives, deterioration of cotton and nylon, and corrosion of metals due to production of particulate nitrates. Airborne NOx can also impair visibility. NOx is a major component of acid deposition in California. NOx may affect both terrestrial and aquatic ecosystems. NOx in the air is a potentially significant contributor to a number of environmental effects such as acid rain and eutrophication in coastal waters. Eutrophication occurs when a body of water suffers an increase in nutrients that reduce the amount of oxygen in the water, producing an environment that is destructive to fish and other animal life.

Sulfur Oxides

Sulfur oxide gases (SOx) are a family of colorless, pungent gases, which include sulfur dioxide (SO_2), and are formed primarily by combustion of sulfur-containing fossil fuels (mainly coal and oil), metal smelting, and other industrial processes. Sulfur oxides can react to form sulfates, which significantly reduce visibility. SOx is a precursor to particulate matter formation, which is in nonattainment in the project area.

The major health concerns associated with exposure to high concentrations of SOx include effects related to breathing, respiratory illness, alterations in pulmonary defenses, and aggravation of existing cardiovascular disease. Major subgroups of the population that are most sensitive to SOx include individuals with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema), as well as children and the elderly. Emissions of SOx also can damage the foliage of trees and agricultural crops. Together, SOx, and NOx are the major precursors to acid rain, which is associated with the acidification of lakes and streams and accelerated corrosion of buildings and monuments.

Lead
Lead is a metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. Lead was used several decades ago to increase the octane rating in automotive fuel. Since gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels and the use of leaded fuel has been mostly phased out, the ambient concentrations of lead have dropped dramatically.

Short-term exposure to high levels of lead can cause vomiting, diarrhea, convulsions, coma, or even death. However, even small amounts of lead can be harmful, especially to infants, young children, and pregnant women. Symptoms of long-term exposure to lower lead levels may be less noticeable but are still serious. Anemia is common, and damage to the nervous system may cause impaired mental function. Other symptoms are appetite loss, abdominal pain, constipation, fatigue, sleeplessness, irritability, and headache. Continued excessive exposure, as in an industrial setting, can affect the kidneys.

Lead exposure is most serious for young children because they absorb lead more easily than adults and are more susceptible to its harmful effects. Even low-level exposure may harm the intellectual development, behavior, size, and hearing of infants. During pregnancy, especially in the last trimester, lead can cross the placenta and affect the fetus. Female workers exposed to high levels of lead have more miscarriages and stillbirths.

Toxic Air Contaminants
Although AAQS exist for criteria pollutants, no ambient standards exist for toxic air contaminants (TACs). Many pollutants are identified as TACs because of their potential to increase the risk of developing cancer or because of their acute or chronic health risks. For TACs that are known or suspected carcinogens, the ARB has consistently found that there are no levels or thresholds below which exposure is risk-free. Individual TACs vary greatly in the risk each presents. At a given level of exposure, one TAC may pose a hazard that is many times greater than another. For certain TACs, a unit risk factor can be developed to evaluate cancer risk. For acute and chronic health risks, a similar factor, called a Hazard Index, is used to evaluate risk.

In the early 1980s, the ARB established a statewide comprehensive air toxics program to reduce exposure to air toxics. The Toxic Air Contaminant Identification and Control Act (Assembly Bill [AB] 1807) created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) supplements the AB 1807 program by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

The California Air Resources Board (ARB) classified particulate emissions from diesel-fueled engines as a TAC in August 1998. In California, it is estimated that diesel particulate matter (DPM) comprises 70% of the total potential cancer risk from all identified TAC pollutants. Based on year 2000 emissions in California, DPM contributes each year to 2,000 premature deaths and thousands of hospital admissions, asthma attacks and other respiratory symptoms, and lost workdays. According to the *California Almanac of Emissions and Air Quality* data, State-wide emissions of DPM are increasing. State-wide emissions of DPM were 42,326 tons in year 2006 compared to 24,808 tons in year 2006.

The ARB released the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* in October 2008. The projected emission benefits associated with the full implementation of this plan, including proposed federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010 and 85 percent by 2020, compared to year 2000 levels. A summary of the state's plan to reduce DPM emissions, and the health risks associated with DPM emissions, is provided in Appendix B.

Naturally Occurring Asbestos
Naturally Occurring Asbestos (NOA) is present in approximately 44 of California's 58 counties. Asbestos is often found in serpentine rock and ultramafic rock near fault zones. Asbestos is a human health hazard when airborne. Asbestos fibers can be inhaled into lungs, causing inflammation and respiratory ailment and cancers. *A General Location Guide for Ultramafic Rock in California* (Department of Conservation 2000) indicates that there is no naturally occurring asbestos located near or on the project site.

3.0 ENVIRONMENTAL CONSEQUENCES

3.1 Assessment Methodology

The proposed project would generate construction-related and operational emissions. The methodology used to evaluate construction and operational effects is described below.

Construction-Period Impact Assessment Methodology
Under NEPA, construction impacts to air quality are considered temporary and there is no requirement to quantify emissions or ascertain a significance conclusion related to construction-period emissions. This is not the case under CEQA. Therefore, to satisfy CEQA requirements, construction-period emissions are quantified and compared to regional and localized significance criteria recommended by the SCAQMD in its *CEQA Air Quality Handbook* (as updated per the SCAQMD website), *Localized Significance Threshold Methodology for CEQA Evaluations*, and *Particulate Matter (PM) 2.5 Significance Thresholds and Calculation Methodology* guidance documents.

Construction is a source of fugitive dust and combustion exhaust emissions that can have substantial temporary impacts on local air quality (i.e., exceed state air quality standards for PM_{10}). Such emissions would result from earthmoving and use of heavy equipment, as well as land clearing, ground excavation, cut-and-fill operations, and the construction of roadways. Dust emissions can vary substantially from day to day, depending on the level of activity, the specific operations, and the prevailing weather. A major portion of dust emissions for the proposed project would likely be caused by construction traffic on temporary construction roads.

Mass daily emissions during construction were compiled using the Road Construction Emissions Model (RCEM), Version 5.2, developed by the Sacramento Metropolitan Air Quality Management District (SMAQMD). The RCEM was developed by the SMAQMD in consultation with knowledgeable staff members at Caltrans, ARB and EPA. The model was developed to assess the emissions from linear construction projects, and is approved for use within the Basin to evaluate projects under CEQA by the SCAQMD.

Operational-Period Impact Assessment Methodology
The primary operational emissions associated with the project are CO, particulates ($PM_{2.5}$ and PM_{10}) and ozone precursors emitted as vehicle exhaust. The effects of CO emissions were evaluated through an analysis that involved using the CO Protocol (Garza et al. 1997). The effects of $PM_{2.5,}$ PM_{10}, and ozone precursors were evaluated through the conformity process described below.

<u>Carbon Monoxide Modeling Protocol—Screening Procedure</u>
Caltrans, in coordination with the University of California, Davis, Institute of Transportation Studies, has developed a transportation project-level CO Protocol (Garza et al. 1997). This CO Protocol details a qualitative step-by-step screening procedure to determine if project-related CO concentrations have a

potential to generate new air quality violations, worsen existing violations, or delay attainment of NAAQS for CO. If the screening procedure reveals that such a potential may exist, then the CO Protocol details a quantitative method to ascertain project-related CO impacts.

$PM_{2.5}$ and PM_{10} Evaluation Protocol—Screening Procedure

During March 2006, EPA issued a guidance document titled *Transportation Conformity Guidance for Qualitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas.* This guidance details a qualitative step-by-step screening procedure to determine if project-related particulate emissions have a potential to generate new air quality violations, worsen existing violations, or delay attainment of NAAQS for $PM_{2.5}$ or PM_{10}.

Mobile Source Air Toxics – Screening Procedure

The FHWA has issued interim guidance on how MSATs should be addressed in NEPA documents for highway project and has developed a tiered approach for analyzing MSATs in NEPA documents. Depending on the specific project circumstances, FHWA has identified three levels of analysis;

1) no analysis for exempt project or project with no potential for meaningful MSAT effects,

2) qualitative analysis for projects with low-potential MSAT effects, or

3) quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

With respect to the proposed project, the projected annual average daily traffic (AADT) volumes at horizon year 2033 of 92,883 would be well below the 140,000 AADT criterion established by FHWA for projects considered to have higher potential for MSAT effects.[1] As such, the proposed project is considered a project with low-potential MSAT effects (i.e., level 2).

Climate Change/Greenhouse Gas Emissions

Caltrans is committed to evaluating the degree to which proposed transportation infrastructure improvements will affect climate change consistent with the Department's own *Climate Action Program at Caltrans* policy.

3.2 Project Avoidance and Minimization Measures

3.2.1 Construction-Period Effects

3.2.1.1 Criteria Pollutant Emissions during Construction

The project proposes to reconstruct the southern terminus of SR-2, as detailed above under Section 1.4 Alternatives. The Caltrans policy to reduce construction-period emissions by the greatest extent feasible is to require implementation of effective and comprehensive control measures, as identified below:

Exhaust Emissions

The project would conform to Caltrans construction requirements, as specified in the Caltrans' Standard Specifications, Section 7-1.01F (Air Pollution Control): "The Contractor shall comply with all air pollution control ordinances and statutes which apply to any work performed pursuant to the contract, including any air pollution control rules, regulations, ordinances and statutes, specified in Section 11017 of the Government Code."

[1] Year 2033 traffic volumes forecasted by growing the year 2006 traffic volume of 71,000 by an annual growth factor of 1 percent.

Fugitive $PM_{2.5}/PM_{10}$ Emissions
SCAQMD Rule 403 (Fugitive Dust) requires that fugitive dust control measures be applied to all construction projects in the Basin, unless said project is specifically exempted by the rule. Construction projects that are classified as "large operations" (i.e., 20 hectares [50 acres] or larger) are required to submit a fully executed Large Operation Notification Form (Form 403 N) to the Executive Office of the SCAQMD within 7 days of qualifying as a large operation and to maintain daily records to document the specific control actions taken. The control measures incorporated in the Rule are available in a Rule 403 Implementation Handbook. The proposed project, although not a large operation under the Rule's definition, would be required to implement mitigation measures for each source of PM_{10} emissions, as specified in the Rule, and included as Appendix B.

The implementation of exhaust and fugitive dust emission control measures identified above would avoid and/or minimize any impacts to air quality.

3.2.1.2 Diesel Particulate-Related Health Risk during Construction
SCAQMD does not consider diesel-related cancer risks from construction equipment to be an issue due to the short-term nature of construction activities. Construction activities associated with the proposed project would be sporadic, transitory, and short term in nature (less than 1 year). The assessment of cancer risk is typically based on a 70-year exposure period. Because exposure to diesel exhaust would be well below the 70-year exposure period, construction of the proposed project is not anticipated to result in an elevated cancer risk to exposed persons due to the short-term nature of construction. Consequently, the estimation of diesel risks associated with construction activities would have no effect on humans.

3.2.1.3 Exposure Risk to Naturally Occurring Asbestos (NOA) during Construction
Though not required for a project-level air quality analysis, it is routine and an established local practice in the Department's District 7 region to include a discussion pertaining to NOA. This discussion is limited to NOA consistent with the methodology detailed in the memorandum Addressing Naturally Occurring Asbestos in CEQA Documents (Governor's Office of Planning and Research, August 2007). Discussions relating to all other types of asbestos are deferred to the Department's hazardous waste or other environmental reports.

The purpose of the discussion is to ascertain the potential impact of NOA entrainment during construction. The two most common sources of NQA in California are serpentinite and ultramafic rock. Serpentinite and/or ultramafic rock are known to be present in 44 of California's 58 counties. While Los Angeles County is included amongst the 44 counties known to have serpentinite and/or ultramafic rock, such rock formations are limites to Catalina Island. As such, there is no potential for impacts related to NOA during project construction.

3.2.2 Operations-Period Effects

3.2.2.1 Regional Conformity Assessment
The federal Clean Air Act Amendments of 1990 require that projects conform to the SIP and that direct and indirect emissions resulting from federal actions or funding do not produce new air quality violations or worsen existing violations. The federal CCA specifically instructs the EPA to develop guidelines for identifying when vehicle-related projects can increase local concentrations of CO and PM_{10} by altering traffic patterns. Conformity requirements apply only to emissions after completion of a project; they do not apply to construction impacts.

The federal EPA issued two sets of conformity procedure rules in November 1993. Transportation conformity procedures generally apply to highway and transit development and require that transportation plans, programs, and projects that are funded or approved under Title 23 United States Code (USC) or the

Federal Transit Act conform to state or federal air quality plans. General conformity procedures apply to all other types of development. Transportation conformity procedures require more detailed analysis for transportation projects than those required for nontransportation projects receiving federal funds or approval. The SCAQMD adopted the EPA's conformity rules as its own in its Regulation XIX.

In addition to 1) demonstrating that a proposed project has been identified in an approved RTIP and incorporated in an EPA-approved SIP or 2) demonstrating that a proposed project is exempt from conformity requirements, agencies constructing transportation projects must demonstrate that they do not exacerbate an existing violation of an NAAQS or create a new exceedance.

With respect to the first criterion, the proposed project is included in the SCAG 2008 RTP (ID No. LA990351) and the SCAG 2008 RTIP (ID No. LA990351), which were both found to be conforming by FHWA on June 5, 2008, and November 17, 2008, respectively. As such, it can be concluded that the project's operational emissions (which include the ozone precursors ROG and [NO_X]) meet the transportation conformity requirements imposed by the EPA and SCAQMD.

Although the proposed project is a conforming project for regional emissions, it requires both a CO and $PM_{2.5}$/PM_{10} hot-spot analysis to determine any localized emissions effects. The potential for adverse local impacts for both pollutants is assessed below.

3.2.2.2 Localized CO Hot-Spot Evaluation

The project was evaluated using the CO analysis protocol, which was described earlier. The CO protocol includes two flowcharts that illustrate when a detailed CO analysis needs to be prepared. The first flowchart, provided in Appendix B, is used to ascertain if any analysis for new projects is needed. The questions (shown in the first flowchart) relevant to the project, and the answers to those questions, are as follows:

3.1.1: Is the project exempt from all emissions analyses?

Response: No, the project does not qualify for an exemption. As shown in Table 1 of the CO protocol (provided in Appendix B), the proposed project does not fall into a project category that is exempt from all emissions analysis (proceed to 3.1.2).

3.1.2: Is the project exempt from regional emissions analyses?

Response: No, the project is not exempt from a regional emissions analysis. As shown in Table 2 of the CO protocol (provided in Appendix B), the proposed project does not meet the criteria of any of the project categories identified as exempt from regional emissions analysis (proceed to 3.1.3).

3.1.3: Is the project locally defined as regionally significant?

Response: Yes, the City and County define the project as regionally significant (proceed to 3.1.4).

3.1.4: Is the project in a federal attainment area?

Response: No, the project is located in the SCAB, which is designated as federal nonattainment areas for ozone and particulate matters (PM_{10} and $PM_{2.5}$). As such, the proposed project is subject to a regional conformity determination (proceed to 3.1.5).

3.1.5: Is there a currently conforming RTP and TIP?

Response: Yes, the Southern California Association of Governments (SCAG) 2008 Regional Transportation Plan (RTP) 2008 Regional Transportation Improvement Program (RTP) were both found to be conforming by the Federal Highway Administration (FHWA) on June 5, 2008, and November 17, 2008, respectively (proceed to 3.1.6).

3.1.6: Is the project included in the regional emissions analysis supporting the currently conforming RTP and TIP?

Response: Yes, The proposed project is included in both the SCAG 2008 RTP and 2008 TIP as project ID No. LA990351 (proceed to 3.1.7).

3.1.7: Has the project design concept and/or scope changed significantly from that in the regional analysis?

Response: No, neither the project design concept nor scope has changed significantly from that in the regional analysis (proceed to 3.1.9).

3.1.9: The conclusion from this series of questions and answers is that the project needs to be examined for its local air impacts (proceed to Section 4, Figure 3 of CO protocol.

On the basis of the answers to the first flowchart, a second flowchart is used to determine the level of local CO impact analysis required for the project.

The questions applicable to the project in the second flowchart (also provided in Appendix B) and the answers to those questions are as follows.

Level 1: Is the project in a CO nonattainment area?

Response: No, as shown previously in Table 3, the South Coast Air Basin is classified as an attainment/maintenance area for the federal CO standards. A summary of the most recent 3 years of monitored CO data is presented in Table 2. The table is based on monitoring data collected at the Los Angeles-North Main Street ambient air monitoring station (ARB Station No. 70087).

Level 1 - Was the area redesignated as "attainment" after the 1990 Clean Air Act?

Response: Yes, the South Coast Air Basin was reclassified to attainment/maintenance from serious nonattainment, effective June 11, 2007 when a CO Maintenance Plan was approved.

Level 1 - Has "continued attainment" been verified with the local Air District, if appropriate?

Response: Yes. Based on ambient air monitoring data collected by the South Coast Air Quality Management District, the South Coast Air Basin has continually met the federal ambient air quality standards for CO since 2002. However, the re-designation is so recent that an annual review of monitoring data by the California Air Resources Board (ARB) has not yet occurred (Proceed to Level 7).

Level 7: Does project worsen air quality?

Response: Yes, According to Section 4.7.1 of the CO Protocol, the following criteria provide a basis for determining if a project has potential to worsen localized air quality:

- *The project significantly increases the percentage of vehicles operating in the cold start mode. Increasing the number of vehicles in cold start mode by as little as 2% should be considered potentially significant.*

  Given the nature of the project, which is to improve an existing freeway terminus, the project would have no effect on the percentage of vehicles operating in the cold start mode.

- *The project significantly increases traffic volumes. Increases in traffic volumes in excess of 5% should be considered potentially significant. Increasing the traffic volume by less than 5% may still be potentially significant if there is also a reduction in average speeds.*

  The proposed project does not add capacity, and as such, would not significantly increase traffic volumes.

- *The project worsens traffic flow. For uninterrupted roadway segments, a reduction in average speeds (within a range of 3 to 50 miles per hour) should be regarded as worsening traffic flow. For intersection segments, a reduction in average speed or an increase in average delay should be considered a worsening of traffic flow.*

Based on the traffic study prepared for the proposed project (Fehr & Peers/Kaku Associates, September 2008), proposed project improvements would result in no changes in intersection delay for 18 of the 21 study intersections. Table 7 from the project traffic report, which is provided in the appendix to this report, details future LOS conditions at all study-area intersection locations. Table 8A from the project traffic report, also provided in the appendix to this report, focuses on the 3 study intersections that would experience a change in operating conditions in comparison to No Build; and details the following:

- Node 1 (Glendale Bl/SR-2 Off-ramp-Fargo St-Waterloo St) would experience improved operating conditions during both the AM and PM peak demand periods.
- Node 2 (Glendale Bl/Allesandro St) would experience improved operating conditions during both the AM and PM peak demand periods.
- Node 3 (Glendale Bl/Aaron St) – During the AM peak demand period, Alternative A would experience the same delay as under the No Build condition, but Alternatives B through E would experience improved operating conditions. During the PM peak demand period, Alternative A would experience improved operating conditions, while Alternatives B through E would experience degraded operating conditions in comparison to No Build.
- Node 21 (Glendale Bl/SR-2 On-ramp and/or Off-ramps) – Alternative A would experience operating conditions that are similar to No Build condition during both the AM and PM peak demand periods; thus, Alternatives B through E would experience degraded conditions in comparison to No Build.

Since all intersection locations would not experience improved operating conditions under all proposed project alternatives when compared to No Build, the proposed project has the potential to worsen air quality.

Level 7: Is the project suspected of resulting in higher CO concentrations than those existing within the region at the time of attainment demonstration?

Response: Yes, According to Section 4.7.2 of the CO Protocol, project sponsors are encouraged to use the following criteria to determine the potential for the project to result in higher CO concentrations than those existing within the region at the time of attainment demonstration:

a. The receptors at the location under study are at the same distance or farther from the traveled roadway than the receptors at the location where attainment as been demonstrated.

A receptor distance of 3 meters from the traveled roadway was used in the CO attainment demonstration prepared for the 2003 AQMP. With respect to the proposed project, all sensitive receptors are located more than 3 meters from the traveled roadway.

b. *The roadway geometry of the two locations is not significantly different. An example of a significant difference would be a larger number of lanes at the location under study compared to the location where attainment has been demonstrated*.

In the CO attainment demonstration prepared for the 2003 AQMP, 4 approach lanes in all directions were used to model the intersections at Wilshire/Veteran and La Cienega/Century; while 3 approach lanes in all directions were used to model the intersections at Sunset/Highland and Long Beach/Imperial. With respect to the proposed project, there would be 3 or less approach lanes under each proposed build alternative.

It is worth noting that in the CO attainment demonstration, all modeled intersections were 4-leg intersections, which differs from the proposed project Build Alternative A, which would be 5-leg. The intersection configurations proposed under Build Alternatives B through E would all be 4-leg.

In comparing the total number of intersection approach lanes; however, the attainment demonstration intersections had 12 to 16 approach lanes each, compared to just 7 to 10 approach lanes for proposed project build alternatives.

c. *Expected worse-case meteorology at the location under study is the same or better than the worst-case meteorology at the location where attainment has been demonstrated. Relevant meteorological variables include: wind speed, wind direction, temperature and stability class.*

In the CO attainment demonstration prepared for the 2003 AQMP, a wind speed of 1 meter per second, stability class D, and worst-case wind angle were used as modeling assumptions. These assumptions are considered worst-case; and as such, the expected worst-case meteorology at the location under study would be the same or better. In addition, there is no meaningful difference in temperature between the attainment demonstration intersection locations and the proposed project intersection location.

d. *Traffic lane volumes at the location under study are the same or lower than those at the location where attainment has been demonstrated*.

A comparison of the traffic volumes per lane used for modeling in the attainment plan demonstration and volumes per lane projected to occur at study intersection locations is provided Table 4 and Table 5, respectively.

Table 5. Peak-Hour Approach Lane Volumes Used in the 2003 AQMP Attainment Demonstration

Location	Eastbound (AM/PM)	Westbound (AM/PM)	Southbound AM/PM)	Northbound (AM/PM)
Wilshire & Veteran (4 lanes all directions)	1,238/517	458/829	180/350	140/233
Sunset & Highland (3 lanes all directions)	472/588	447/513	768/611	517/746
La Cienega & Century (4 lanes all directions)	635/561	473/682	346/507	205/419
Long Beach & Imperial (3 lanes all directions)	406/673	587/467	160/315	252/383

Source: SCAQMD, 2003 Air Quality Management Plan.

Table 6. Proposed Project Peak Hour Approach Lane Volumes

Alternative/Roadway Intersection	Eastbound (AM/PM)	Westbound (AM/PM)	Southbound (AM/PM)	Northbound (AM/PM)
Future (Year 2033) Alternative A				
Glendale Bl & SR-2 SB Off-Ramp/Fargo St/Waterloo St.[a] Lanes: 2 EB, 3 WB, 2 SB, 3 NB	43/62	463/99	569/315	131/194
Glendale Bl & SR-2 NB On-Ramp Lanes: 0 EB, 0 WB, 2 SB, 4 NB	--	--	1,117/343	566/1008
Future (Year 2033) Alternative B				
Glendale Bl & SR-2 SB Off-Ramp/Fargo St/Waterloo St.[a] Lanes: 2 EB, 0 WB, 2 SB, 3 NB	43/62	--	569/315	200/268
Glendale Bl/SR-2 SB Off-Ramp & Allesandro St Lanes: 0 EB, 3 WB, 4 SB, 3 NB	--	115/103	1,029/665	727/1,327
Glendale Bl & SR-2 NB On-Ramp Lanes: 0 EB, 0 WB, 6 SB, 4 NB	--	--	704/469	566/1,008
Future (Year 2033) Alternatives C, D, and E				
Glendale Bl & SR-2 SB Off-Ramp/Fargo St/Waterloo St.[a] Lanes: 2 EB, 0 WB, 2 SB, 3 NB	43/62	--	569/315	200/268
Glendale Bl/SR-2 SB Off-Ramp & Allesandro St Lanes: 0 EB, 3 WB, 4 SB, 3 NB	--	115/103	1,029/665	727/1,327
Glendale Bl & SR-2 NB On-Ramp Lanes: 0 EB, 0 WB, 7 SB, 4 NB	--	--	603/402	566/1,008

Notes:
[a] Eastbound traffic calculated by adding volumes for Fargo St. and Waterloo St.

Source: Traffic Study for the State Route 2 Glendale Freeway Terminus Improvement Project (September 2008).

As shown above in Table 5 and Table 6, future year 2033 approach lane traffic volumes during the PM peak-hour for northbound traffic under Build Alternatives B through E at the intersection of Glendale Boulevard/SR-2 Southbound Off-Ramp and Allesandro Street would be higher than those at all intersection locations where attainment has been demonstrated. The PM peak-hour lane volumes of 1,327 would exceed the highest attainment demonstration lane volumes of 1,238 by 89 vehicles (7.2%).

e. *Percentage of vehicles operating in cold start mode at the location under study is the same or lower than the percentage at the location where attainment has been demonstrated.*

Both the attainment-area demonstration intersection locations (Table 5 above) and project-area intersection locations (Table 6 above) are all located along urban arterial roadways within the South Coast Air Basin. As such, vehicles operating in the cold start mode are expected to be similar at all intersection locations.

f. *Percentage of heavy duty gas trucks at the location under study is the same or lower than the percentage at the location where attainment has been demonstrated*.

Both the attainment-area demonstration intersection locations (Table 5 above) and project-area intersection locations (Table 6 above) are all located along urban arterial roadways (that contain a similar mix of urban land uses) within the South Coast Air Basin. As such, the percentage of heavy duty gas trucks comprising the vehicular fleet mix is expected to be similar at all intersection locations.

g. *For projects involving intersections, average delay and queue length for each approach is the same or smaller for the intersection under study compared to those found in the intersection where attainment has been demonstrated*.

As shown above in Table 5 and Table 6, future year 2033 approach lane traffic volumes during the PM peak-hour for northbound traffic under Build Alternatives B through E at the intersection of Glendale Boulevard/SR-2 Southbound Off-Ramp and Allesandro Street would be higher than those at all intersection locations where attainment has been demonstrated. As such, there is a possibility that average delay and queue length for said approach lanes may be longer for the intersection under study when compared to those found in the intersections where attainment has been demonstrated.

h. *Background concentration at the location under study is the same or lower than the background concentration at the location where attainment has been demonstrated*.

As shown earlier in Table 2, background CO concentrations in the project area have ranged from 2.15 ppm to 3.05 ppm during the past few years for the 8-hour averaging period. This compares to an 8-hour average maximum background concentration of 7.8 ppm (year 2005) used for the 2003 AQMP attainment demonstration.

On the basis of the CO Protocol screening criteria under Section 4.7.2 of said protocol, the intersection of Glendale Boulevard/SR-2 Southbound Off-Ramp and Allesandro Street under Build Alternatives B through E has potential to cause project-area CO concentrations to exceed those existing within the region at the time of attainment demonstration, and as such, must move forward along the Protocol flowchart. All other intersection locations can be screened out at this juncture, and do not require further analysis. The CO Protocol analysis that follows applies to PM peak-hour traffic volumes at the intersection of Glendale Boulevard/SR-2 Southbound Off-Ramp and Allesandro Street under Build Alternatives B through E only.

Level 7: Does project involve a signalized intersection at LOS E or F?

Response: Yes, as detailed in Table 7 of the project's Traffic Impact Study, subject intersection would operate at LOS F during the PM peak-hour.

Based on the answers to the Level 7 questions above, the Protocol flowchart calls for a "Level 4" screening analysis; however, Caltrans District 7 has abandoned the Level 4 screening approach , and recommends that a "Level 5" analysis (i.e., dispersion modeling) be performed.

Localized CO concentrations were predicted using the CALINE4 line-source dispersion model with EMFAC 2007 emissions factors. All dispersion modeling input assumptions are consistent with CO Protocol recommendations, with four receptor locations were placed at 3 meters from each corner location. CO concentrations were predicted for both the 1-hour and 8-hour averaging periods at opening year 2013 and horizon year 2033. Worst-case ambient background CO concentrations of 5.08 parts per million and 3.05 parts per million for the 1-hour and 8-hour averaging periods, respectively, were used in the analysis.[2] The intersection worst-case predicted 1-hour and 8-hour CO concentrations are provided below in Table 7. As shown therein, the project would not have a significant impact upon 1-hour or 8-hour local CO concentrations due to mobile source emissions.

Table 7. Estimate of Worst-case Opening Year 2013 and Horizon Year 2033 PM Peak-hour Localized Carbon Monoxide Concentrations

Intersection	Analysis Year	Maximum 1-Hour CO Concentration in ppm	Exceed 1-hour Standard of 20 ppm?	Maximum 8-Hour CO Concentration in ppm	Exceed 8-hour Standard of 9.0 ppm?
Glendale Bl/SR-2 SB Off-Ramp and Allesandro St	2013	8.3	No	5.8	No
	2033	5.7	No	4.0	No

Notes:

CALINE4 dispersion model output sheets and Emfac2007 emission factors are provided in the Air Quality Appendix.

ppm = parts per million

Source: ICF Jones & Stokes, February 2009.

[2] Background CO concentrations based on highest measured concentrations measured at the Los Angeles North Main station during the previous three year period.

Because project implementation would not result in CO concentrations that exceed the 1-hour or 8-hour ambient air quality standard, on the basis of CO Protocol analysis methodology, no further analysis is needed. Potential impacts would not be adverse under NEPA and would be less than significant under CEQA.

3.2.2.3 Localized $PM_{2.5}$ and PM_{10} Hot-Spot Evaluation

While most projects create particulate emissions during construction, construction activities lasting five years or less are considered temporary impacts under the EPA transportation conformity rule and are exempt. It is expected that this project would be completed in less than two years. As such, hot-spot review is therefore limited to operational impacts.

The EPA has not specified a quantitative method for analyzing localized $PM_{2.5}$ or PM_{10} concentrations from operational traffic but released a qualitative guidance document titled *Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas* in March 2006. A qualitative $PM_{2.5}$ and PM_{10} conformity review based on this most-recent EPA guidance is provided below.

EPA specifies in 40 CFR 93.123(b)(1) that only "projects of air quality concern" are required to undergo a $PM_{2.5}$ and PM_{10} hot-spot analysis. EPA defines projects of air quality concern as certain highway and transit projects that involve significant levels of diesel traffic or any other project that is identified by the $PM_{2.5}$ SIP as a localized air quality concern. A discussion of the proposed project compared to projects of air quality concern, as defined by 40 CFR 93.123(b)(1), is provided below:

1. **New or expanded highway projects that have a significant number of or significant increase in diesel vehicles**. The project proposes to reconstruct the southern terminus of SR-2, as detailed above under Section 1.4 Alternatives. None of the project alternatives would add any capacity to the main-line segment of SR-2 within the project limits (i.e., PM 12.5/15.0). Based on Caltrans traffic counts, diesel-fueled vehicles currently comprise approximately 3.7 percent of the traffic volumes along the project area limits of SR-2.[3] In future years, diesel-fueled vehicles, as a percentage of overall traffic volumes along said freeway main-line segment is expected to remain constant at 3.7 percent through horizon year 2033. As such, no increase in diesel-fueled vehicle traffic volumes along the project area limits of SR-2 is anticipated to occur as a result of the proposed project.

2. **Projects affecting intersections that are at level –of –service (LOS) D, E, or F with a significant number of diesel vehicles or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project**. The project traffic report identified 20 intersections likely to be substantially affected by the proposed project. Of these 20 intersections, 18 intersections would experience no change in LOS as a result of project development, and two intersections would experience an improvement in LOS. In addition, the project would have no effect on diesel vehicle traffic volumes along the project limits of SR-2, or along any other roadway segment.

3. **New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location**. The proposed project has no bus or rail terminal component, nor would it alter travel patterns to/from any existing bus or rail terminal.

[3] Caltrans Traffic Data Branch website. Available: http://traffic-counts.dot.ca.gov/. Accessed: June 2, 2008.

4. **<u>Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location</u>**. The proposed project would not expand any bus terminal, rail terminal, or related transfer point that would increase the number of diesel vehicles congregating at any single location.

5. **<u>Projects in or affecting locations, areas, or categories of sites that are identified in the $PM_{2.5}$- or PM_{10}-applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation</u>**. The project site is not in or affecting an area or location identified in any PM_{10} or $PM_{2.5}$ implementation plan. The immediate project area is not considered to be a site of violation or possible violation.

The discussion provided above indicates that the proposed project would not be considered a Project of Air Quality Concern, as defined by 40 CFR 93.123(b)(1). Therefore, $PM_{2.5}$ and PM_{10} hot-spot evaluations are not required. It is unlikely that the proposed project would generate new air quality violations, worsen existing violations, or delay attainment of national AAQS for $PM_{2.5}$ and PM_{10}. The SCAG Transportation Conformity Working Group concurred with this determination in December 2008. A copy of this finding, as well as the *PM Conformity Hot-Spot Analysis Project Summary Form for Interagency Consultation* completed for the project, is provided in the appendix to this air quality report. Clean Air Act, 40 CFR Part 93.116, requirements are met without any explicit hot-spot analysis; and as such, the proposed project can be screened from further analysis.

<u>Supplemental Analysis of Re-entrained Fugitive Dust</u>
Fugitive dust emissions from vehicle travel on paved roads (i.e., re-entrained dust) can be calculated using the emission factor equation provided in the Fifth Edition of EPA's AP-42 emissions factor compilation document.[4] The specific equation can be found in Section 13.2.1 of the AP-42 document. The emissions factor equation requires the input of several site-specific variables such as particle size multiplier, roadway silt loading factor, average vehicle weight, and rainfall correlation factor. The variables used in the analysis for the proposed project were obtained based on research conducted by Midwest Research Institute while they were performing California silt loading measurements.[5]

Based on the EPA's AP-42 emission factor equation, re-entrained roadway emissions of PM_{10} and $PM_{2.5}$ along the project limits of SR-2 (PM 13.5 to PM 15.0) would be 0.04 tons per year and 0.01 tons per year, respectively, for both the Build and No-Build project alternatives. Emissions would be the same under both Build alternatives, as well as under the No-Build alternative, because AADT (and related VMT) would be the same under all project alternatives. The emissions calculation worksheet is provided in Appendix B.

Because project implementation would not result in higher emissions, and related concentrations, of re-entrained fugitive dust than under the No-Build Alternative, no further analysis is needed.

3.2.3 Evaluation of Health Effects Related to Mobile Source Air Toxics

With respect to the proposed project, the projected annual average daily traffic (AADT) volumes at opening year 2013 and horizon year 2033 of 76,122 and 92,883, respectively, would be well below the 140,000 to 150,000 AADT criterion established by FHWA for projects considered to have higher potential for MSAT effects.[6] Furthermore, project improvements would not add any capacity nor re-route

[4] U.S. Environmental Protection Agency. Compilation of Air Pollutant Emission Factors, AP 42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, Section 13.2.1 Paved Roads, December 2003.
[5] Muleski, Greg. Improvement of Specific Emission Factors (BACM Project No. 1), Final Report. Midwest Research Institute. March 29, 1996.
[6] Year 2013 and 2033 traffic volumes forecasted by growing the year 2006 traffic volume of 71,000 by an annual growth factor of 1 percent.

existing traffic volumes out of the existing project limits right-of-way. Project improvements would have no meaningful impacts on traffic volumes or vehicle mix. The percentage of AADT volumes comprised of heavy-truck traffic is anticipated to remain constant at 3.7%, from existing conditions through horizon year 2033. As such, the proposed project is considered a project with low-no potential for meaningful MSAT effects.

The purpose of this project is to better manage traffic flow at the terminus and enhance vehicular and pedestrian mobility and safety in the vicinity of the SR-2 terminus by a combination (dependant on build alternative) of widening and/or minor shifting of existing ramps; and installation of new traffic signals. This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. As such, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently, this effort is exempt from analysis for MSATs.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSATs to decline significantly over the next 20 years. Even after accounting for a 64 percent increase in VMT, FHWA predicts MSATs will decline in the range of 57 percent to 87 percent, from 2000 to 2020, based on regulations now in effect, even with a projected 64 percent increase in VMT. This will both reduce the background level of MSATs as well as the possibility of even minor MSAT emissions from this project.

3.2.4 Climate Change/Greenhouse Gas Emissions

According to a recent white paper by the Association of Environmental Professionals, “an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases.”

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California’s GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the *Climate Action Program at Caltrans* (December 2006).[7]

One of the main strategies to reduce GHG emissions is to make California’s transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour (mph) [0-40 kilometers per hour (kph)]) and speeds over 55 mph (86 kph). Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in GHG emissions. The objective of the proposed project is to reduce congestion and improve operational efficiency at the existing SR-2 terminus and surrounding areas. The project traffic report identified 20 intersections likely to be substantially affected by the proposed project. Of these 20 intersections, 18 intersections would experience no change in LOS as a result of project development, and two intersections would experience an improvement in LOS. As such, the proposed project would marginally improve operational efficiency of the transportation network in the immediate project vicinity.

[7] While CO comprises majority of transportation-source GHG emissions, other GHGs include methane (CH_3), nitrous oxide (N_2O), and hydrofluorocarbons.

Two of the most effective means to reduce GHG emissions from transportation are outside of the direct control of the Caltrans. The most direct approach to improving the energy efficiency of the transportation sector is to increase vehicle fuel economy in new cars, light, and heavy-duty trucks. Caltrans does not control the fuel economy standards; rather, EPA and ARB have that control. Caltrans does, however, continue to be actively involved on the Governor's Climate Action Team as ARB works to implement AB1493 and AB32. The second approach is to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, transit-oriented development, and high density housing along transit corridors. As part of the *Climate Action Program at Caltrans*, Caltrans will work closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority.

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, will continue to address GHG emission reductions through the following strategies in the Climate Action Program:

- Improve Transportation Energy Efficiency

  Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools, and information that advance cleaner transportation and reduce climate change emissions.

- Smart Land Use and Intelligent Transportation Systems (ITS)

  Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods, and services. Governor Schwarzenegger is finalizing a comprehensive 10-year strategic growth plan with the intent of developing ways to promote, through state investments, incentives, and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity, and a quality environment. Smart land use, demand management, ITS, and value pricing are critical elements in this plan for improving mobility and transportation efficiency. Specific strategies include; promoting jobs/housing/proximity and transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing; implementing intelligent transportation systems, traveler information/traffic control, incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated multimodal/intermodal transportation planning.

4.0 CONCLUSIONS

As demonstrated above, the proposed project would have no negative impacts to localized or regional air quality. This determination is based on the following:

- during project construction, the implementation of combustion exhaust and fugitive dust emission control measures would avoid and/or minimize any impacts to air quality;
- the proposed project is included in the SCAG 2008 RTP (Project Number LA990351), which was found to be conforming by FHWA. The project is also included in the SCAG adopted 2008 RTIP (Project Number LA990351), which SCAG has determined to conform to the SIP for air quality. As such, it can be concluded that the project's operational emissions (which include the O_3 precursors ROG and [NO_X]) would meet the transportation conformity requirements imposed by the EPA and SCAQMD. The project would not exceed the motor vehicle emissions budget for the region;

- the Caltrans' CO protocol screening procedure demonstrated that the project would not have a material effect on localized CO concentrations;
- the proposed project is not considered a project of air quality concern, as defined by 40 CFR 93.123(b)(1), and as such, a qualitative $PM_{2.5}/PM_{10}$ hot-spot evaluation is not required. It is unlikely that the proposed project would generate new air quality violations, worsen existing violations, or delay attainment of NAAQS for $PM_{2.5}$ or PM_{10},
- the proposed project was found to have low potential for significant MSAT emissions (using FHWA guidance) and is not linked with any special MSAT concern; and finally,
- the proposed project would not result in an increase in GHG emissions.

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6.0 PREPARERS

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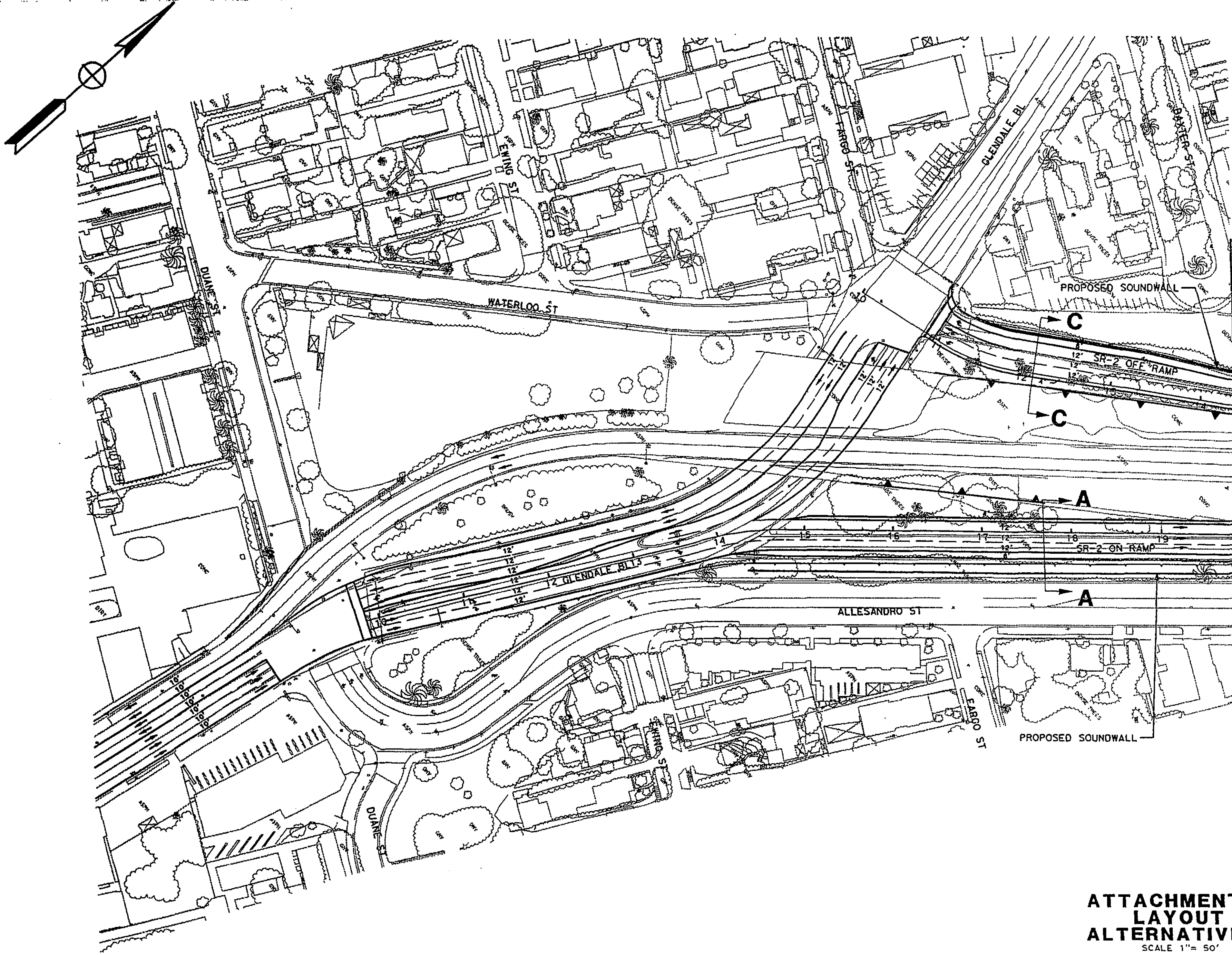
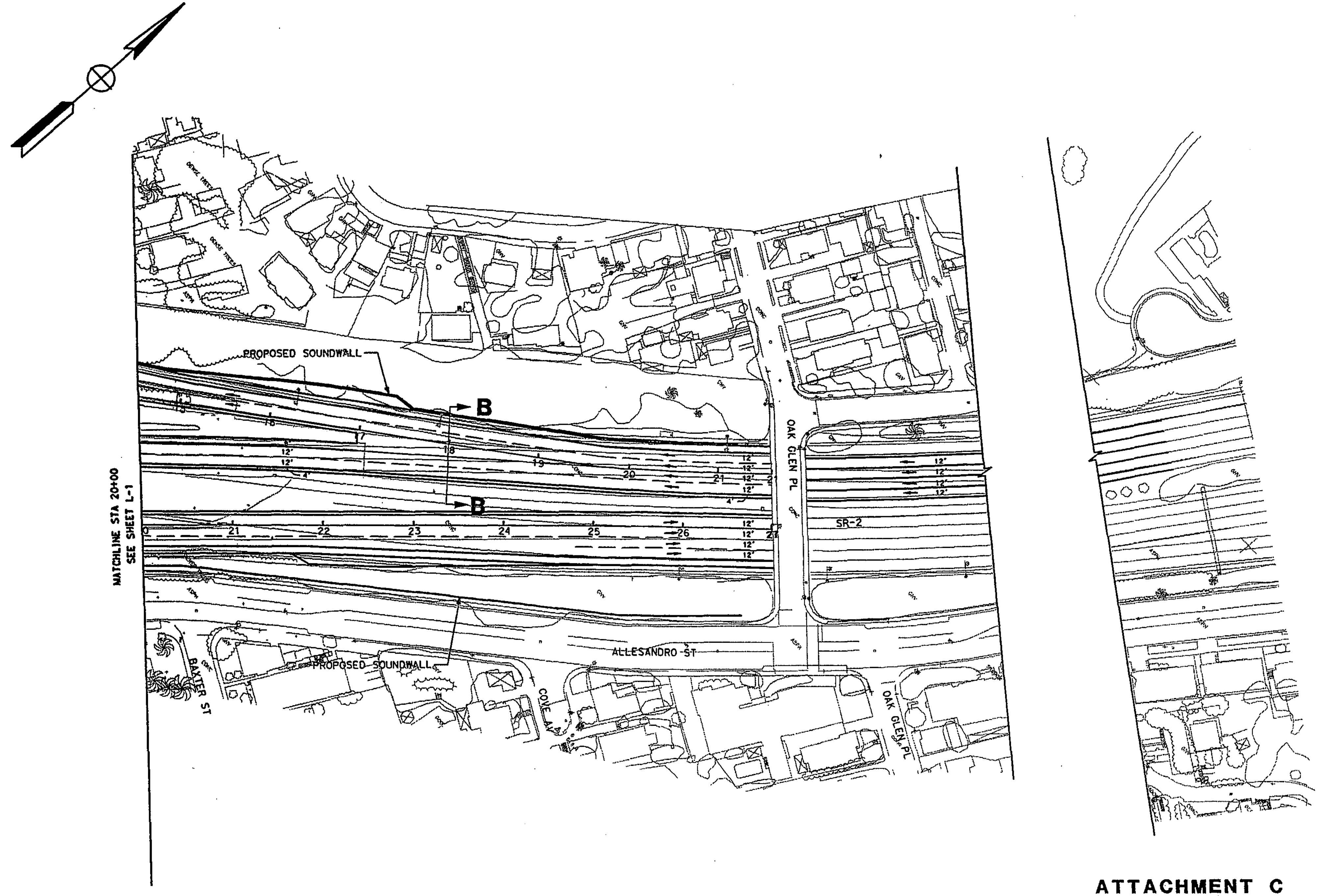
Appendix A

Cross-Section Drawings that Detail Proposed Improvements



ATTACHMENT C
LAYOUT
ALTERNATIVE A
SCALE 1"= 50'

L-1



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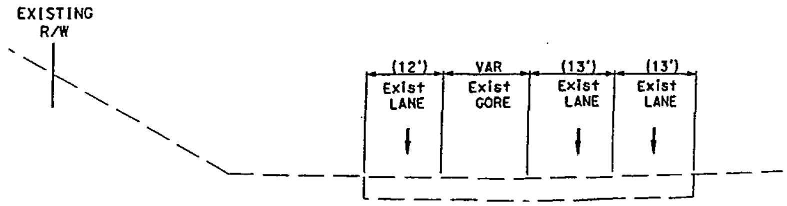
L-2



SECTION B-B (EXIST)

SOUTHBOUND EXIT RAMP
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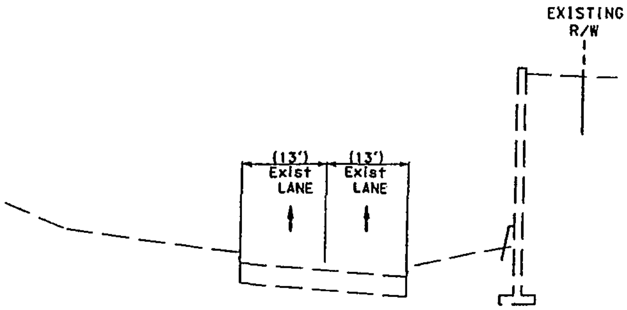

SECTION A-A (EXIST)

NORTHBOUND ENTRANCE RAMP
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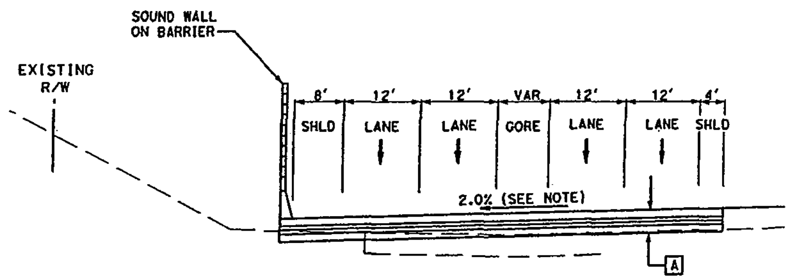

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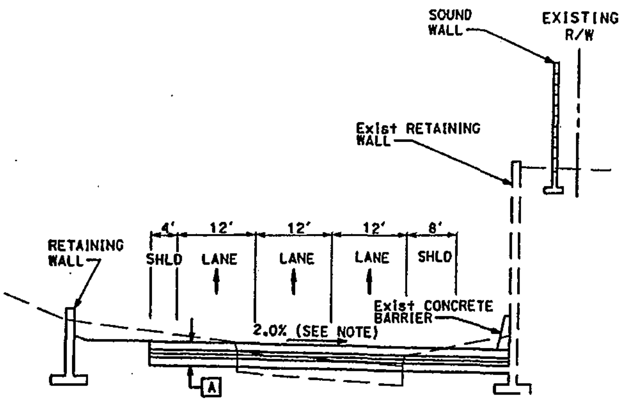

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NORTHBOUND ENTRANCE RAMP
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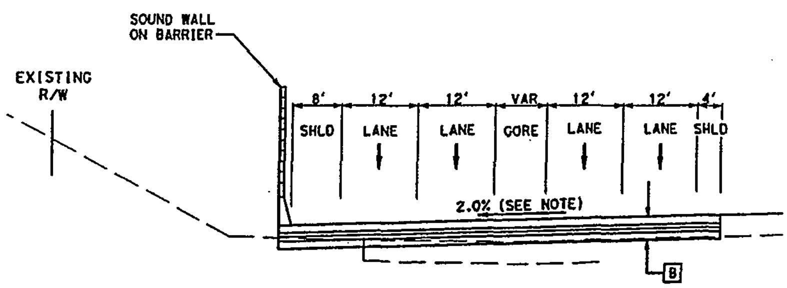

SECTION C-C (PROPOSED)

SOUTHBOUND EXIT RAMP TERMINAL SECTION
NO SCALE

A 0.60' AC-TYPE B
0.60' LCB
1.35' CL3 AB

B 0.85' JPCP
0.40' LCB
0.60' CL3 AB

ATTACHMENT C
TYPICAL CROSS SECTION
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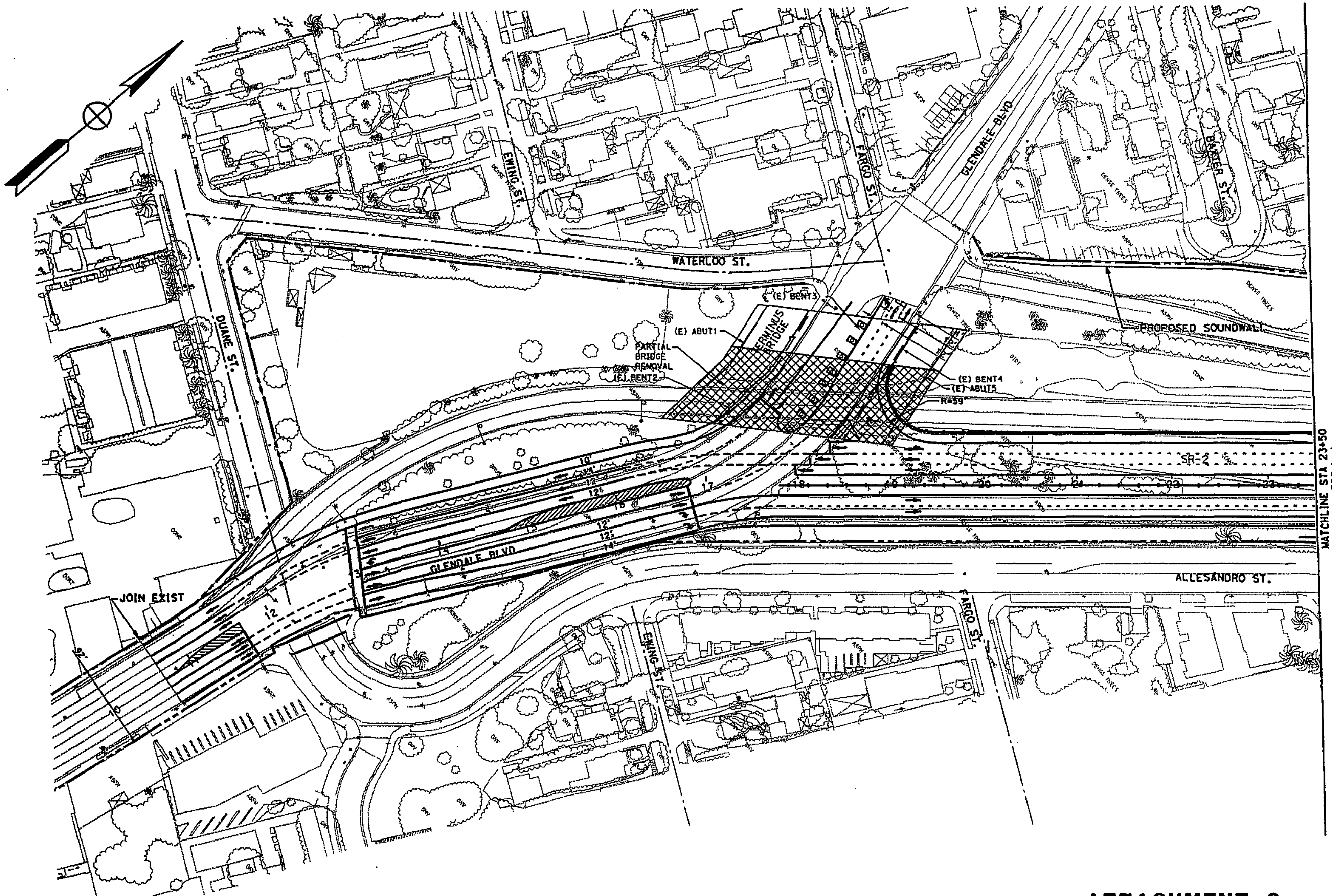

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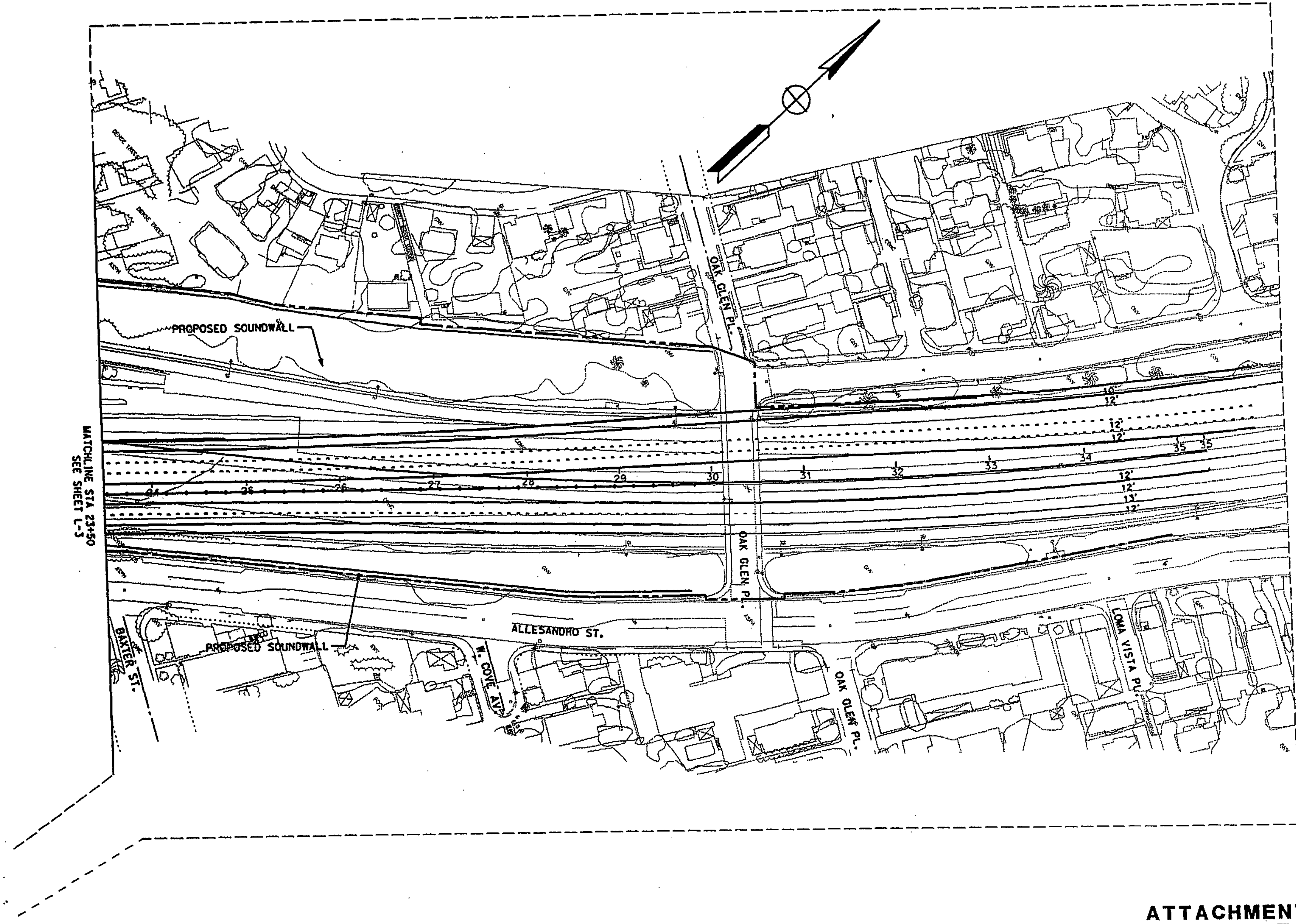

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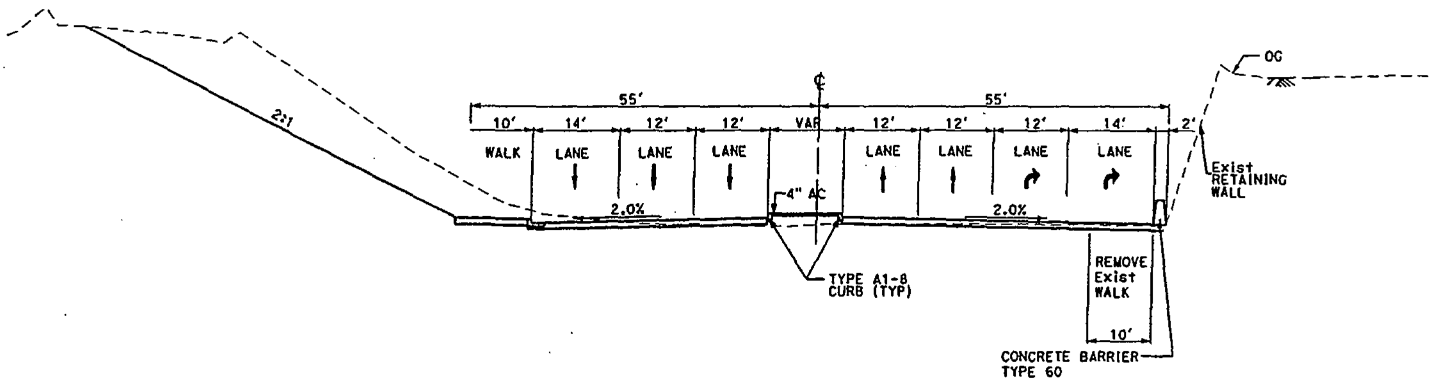
L-4



SECTION B-B (PROPOSED)

GLENDALE BOULEVARD

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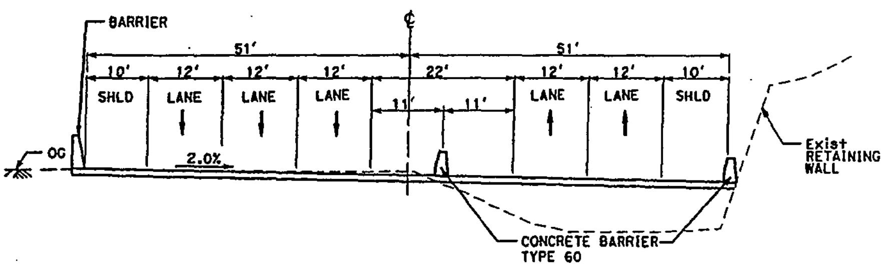

SECTION A-A (PROPOSED)

SR-2 TERMINUS

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ATTACHMENT C
TYPICAL CROSS SECTION
ALTERNATIVE B

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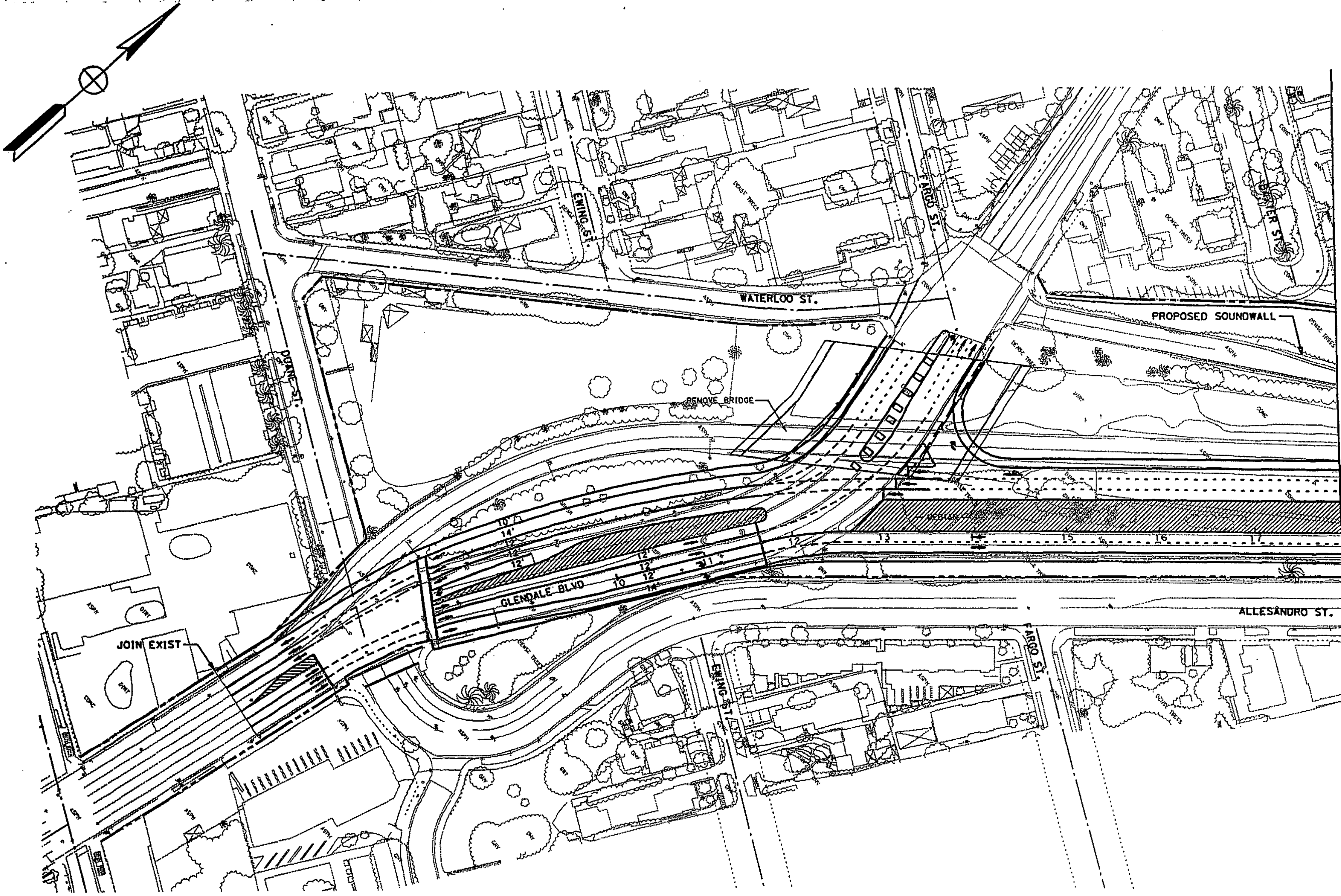

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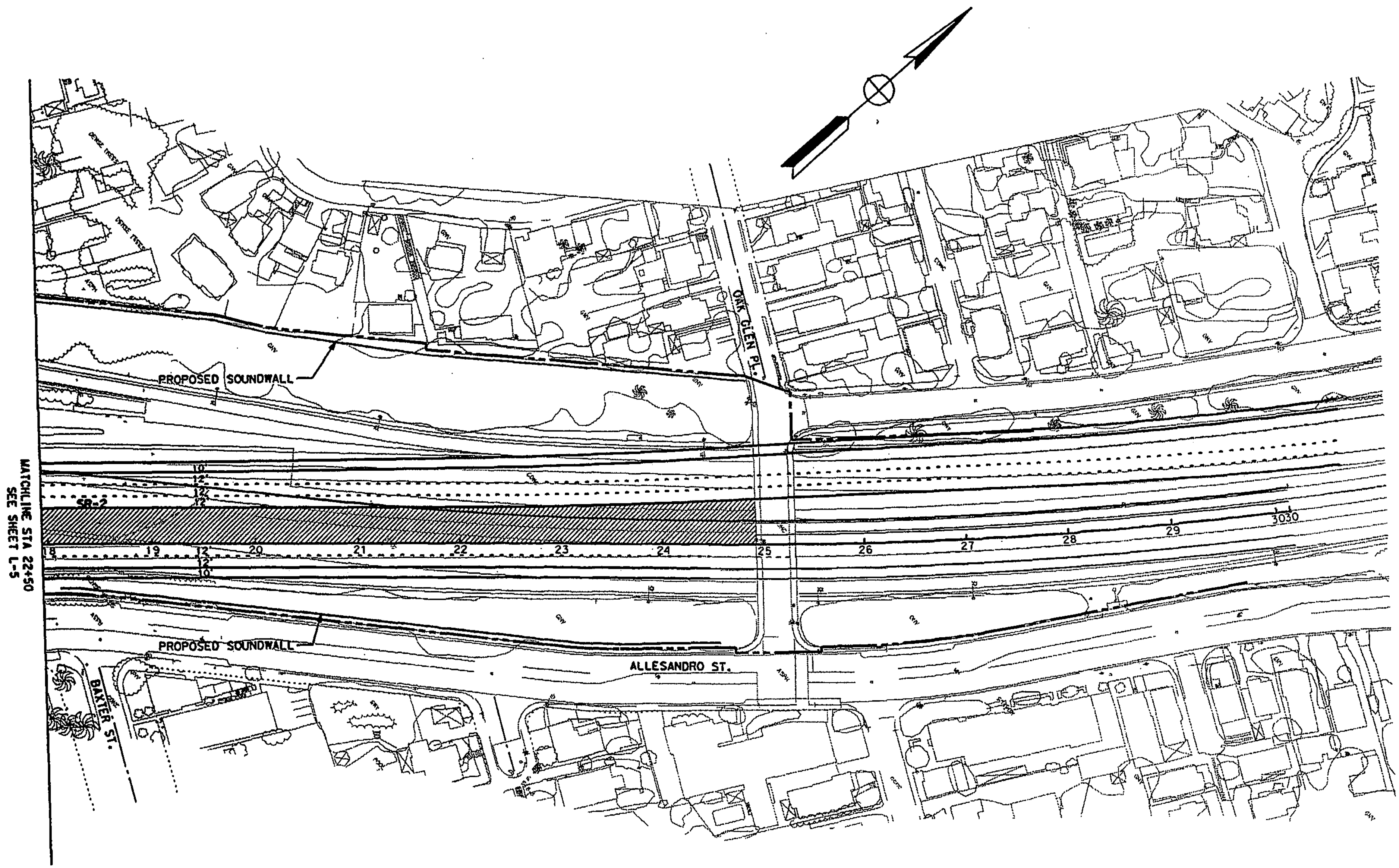
L-5



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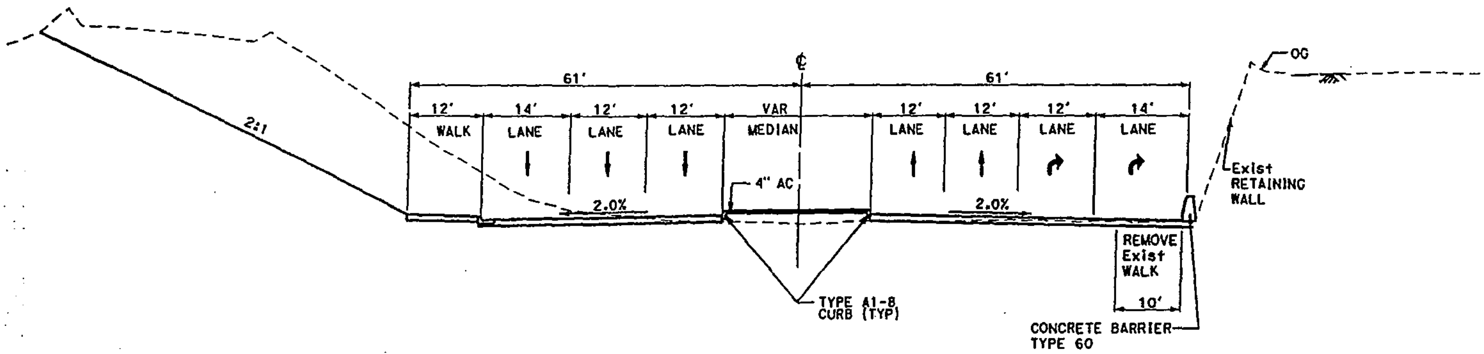

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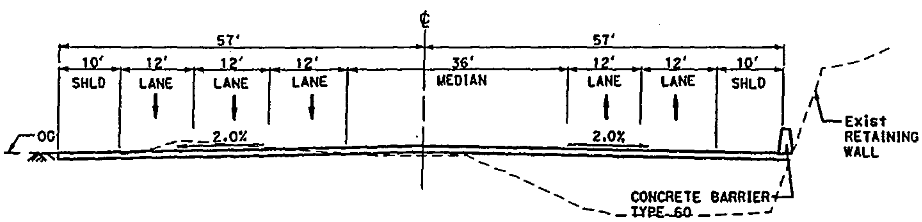

SECTION A-A (PROPOSED)

SR-2 TERMINUS
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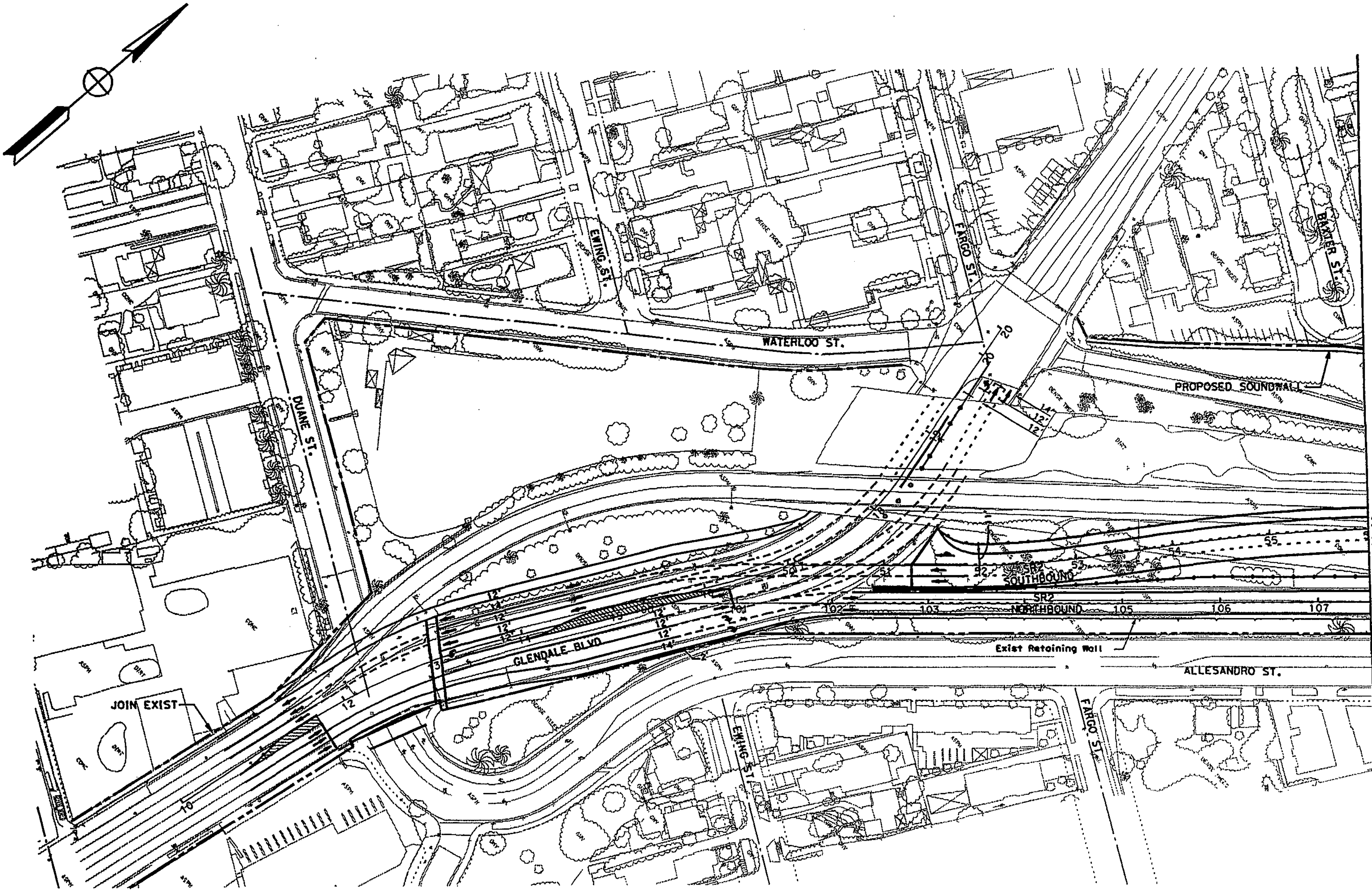
ATTACHMENT C
TYPICAL CROSS SECTION
ALTERNATIVE C
NO SCALE



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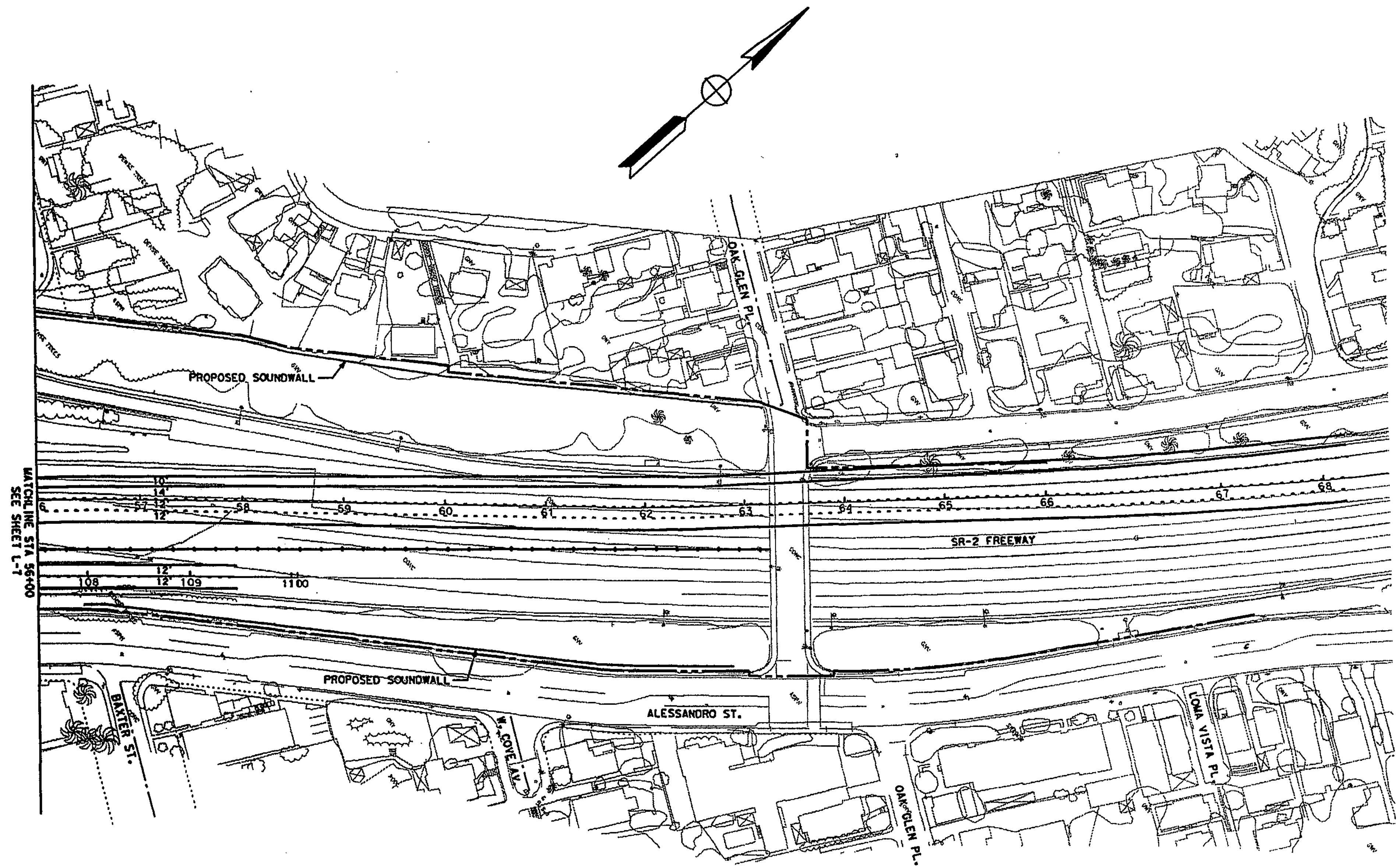

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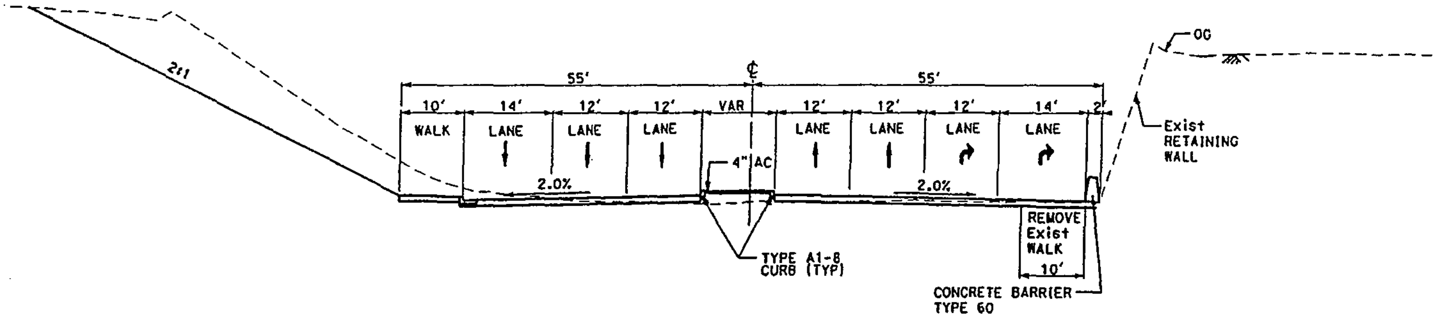
L-8



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GLENDALE BOULEVARD
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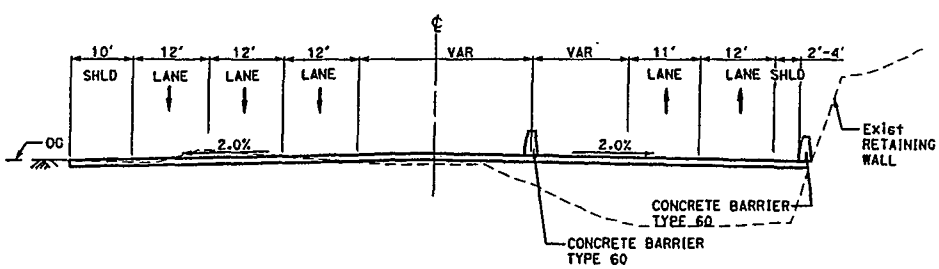

SECTION A-A (PROPOSED)

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ATTACHMENT C
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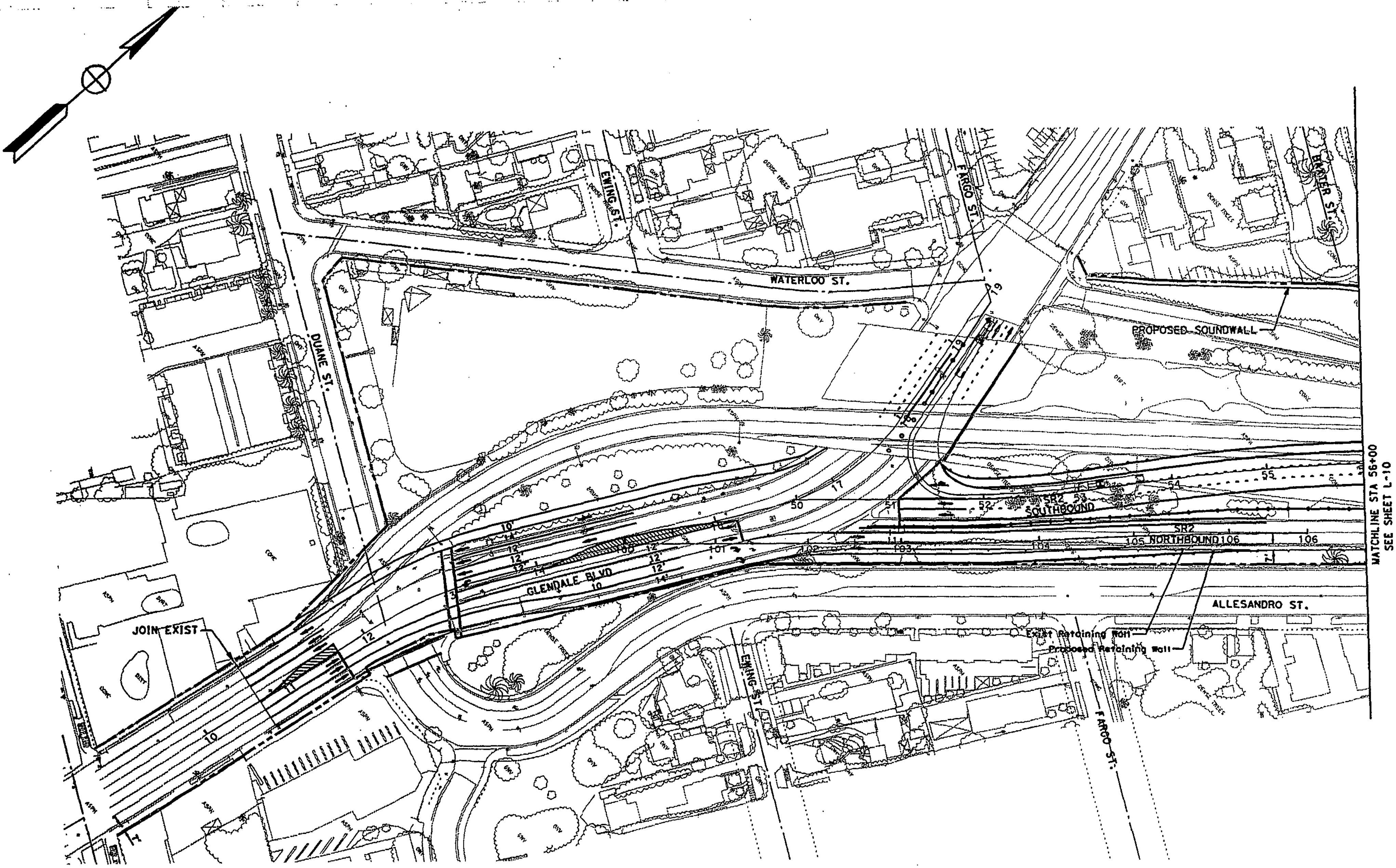

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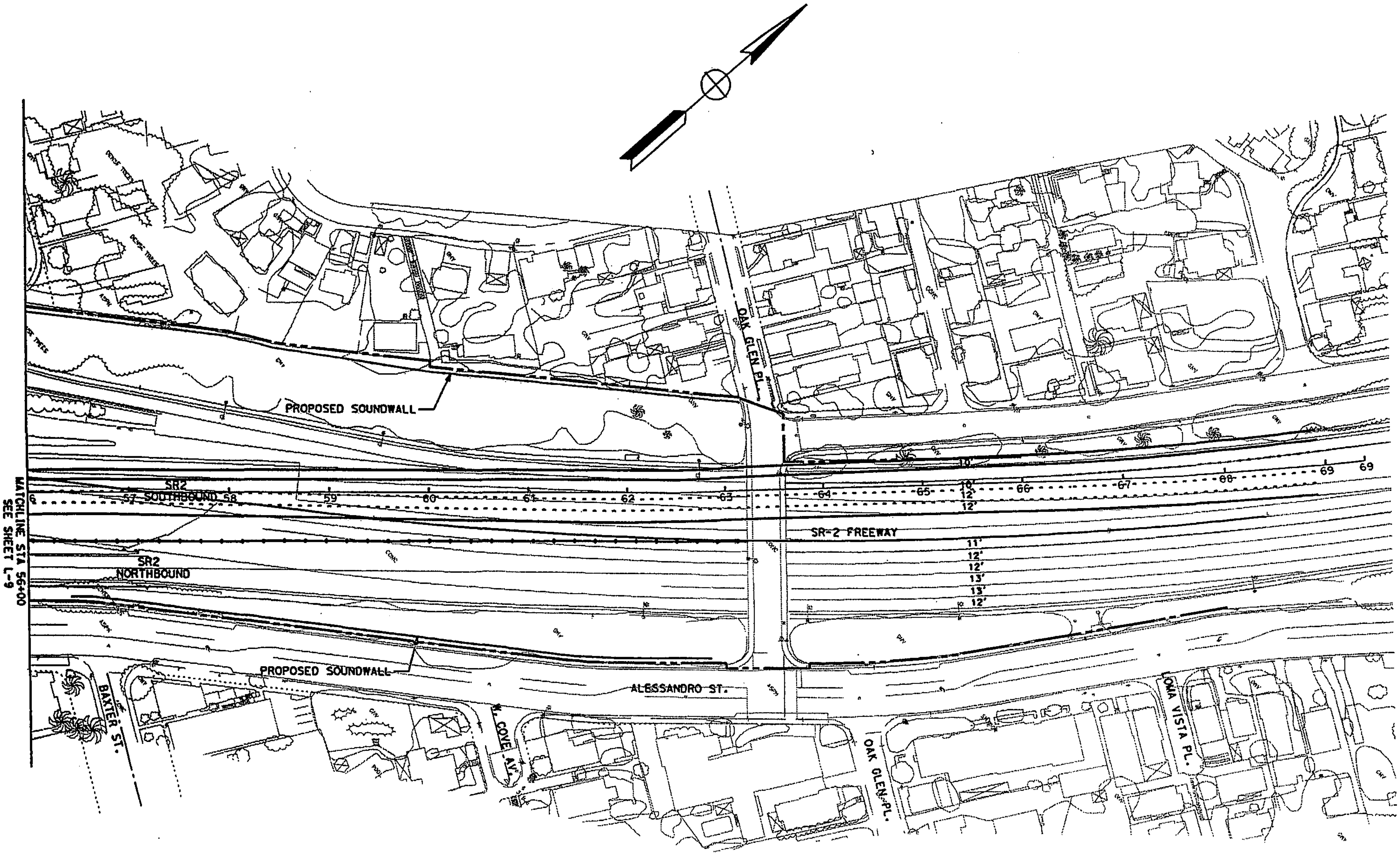

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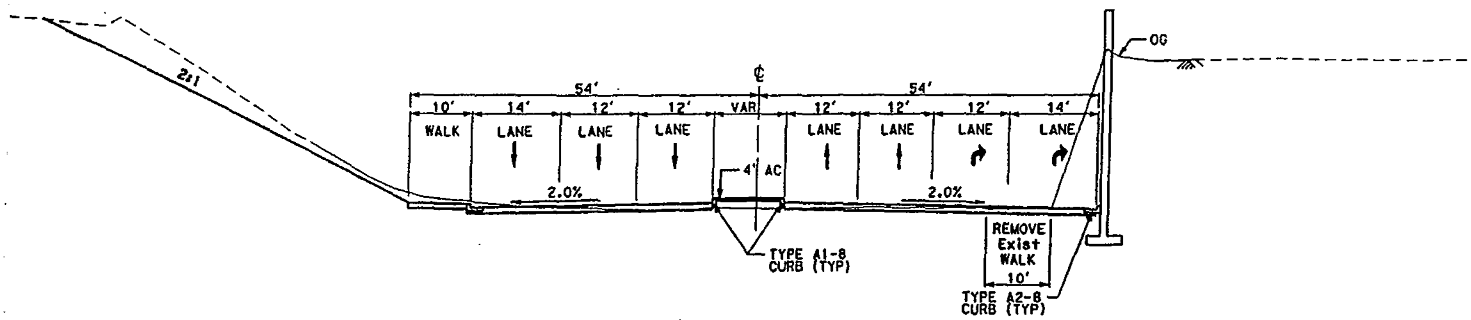
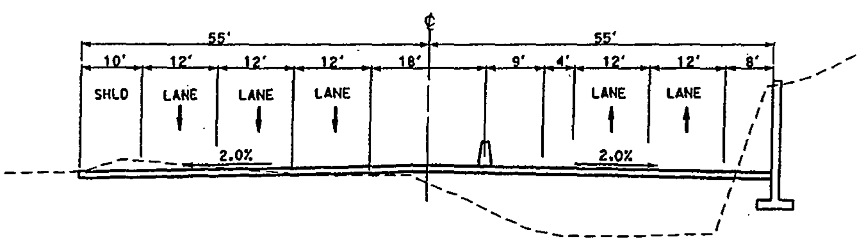


SECTION B-B (PROPOSED)

GLENDALE BOULEVARD
NO SCALE



SECTION A-A (PROPOSED)

SR-2 TERMINUS
NO SCALE

ATTACHMENT C
TYPICAL CROSS SECTION
ALTERNATIVE E
NO SCALE

Appendix B

Local Climate and Ambient Air Monitoring Data

Welcome to California

Air Resources Board

iADAM

Highest 4 Daily Maximum Hourly Ozone Measurements

Los Angeles-North Main Street

FAQs

Year:	2004		2005		2006	
	Date	Measurement	Date	Measurement	Date	Measurement
First High:	Aug 29	0.110	May 22	0.121	Jul 22	0.108
Second High:	Sep 7	0.107	Aug 28	0.114	Jul 23	0.108
Third High:	Sep 1	0.105	May 14	0.094	Jun 3	0.103
Fourth High:	Sep 6	0.104	May 15	0.088	Jul 24	0.100
# Days Above Nat'l Standard:		0		0		0
# Days Above State Standard:		7		2		8
Year Coverage:		94		97		98

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All concentrations are expressed in parts per million.
State exceedances are shown in **yellow** . National exceedances are shown in **orange** .
National exceedances are also state exceedances.
An exceedance is not necessarily a violation.
Year Coverage indicates how complete monitoring was during the time of the year when concentrations are highest. 0 means there was no coverage; 100 means there was complete coverage.
* There was insufficient (or no) data available to determine the value.

Switch: 8-Hour Ozone | PM10 | PM2.5 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide

Go to: Data Statistics Home Page | Top 4 Summaries Start Page

Highest 4 Daily Maximum 8-Hour Ozone Averages

Los Angeles-North Main Street

FAQs

Year:	2004		2005		2006	
	Date	Measurement	Date	Measurement	Date	Measurement
First High:	Sep 6	0.091	May 22	0.098	Jul 15	0.079
Second High:	Aug 29	0.079	Aug 28	0.084	Jul 22	0.077
Third High:	Jun 5	0.078	May 14	0.074	Sep 3	0.076
Fourth High:	Sep 11	0.078	May 15	0.070	Jun 3	0.075
# Days Above Nat'l Standard:		1		1		0
Year Coverage:		94		97		98

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All averages are expressed in parts per million.
National exceedances are shown in **orange** . An exceedance is not necessarily a violation.
Year Coverage indicates how complete monitoring was during the time of the year when concentrations are highest. 0 means there was no coverage; 100 means there was complete coverage.
* There was insufficient (or no) data available to determine the value.

Switch: Hourly Ozone | PM10 | PM2.5 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide

Go to: Data Statistics Home Page | Top 4 Summaries Start Page

Highest 4 Daily Maximum 8-Hour Carbon Monoxide Averages

Los Angeles-North Main Street

FAQs

Year:	2004		2005		2006	
	Date	Measurement	Date	Measurement	Date	Measurement
National:						
First High:	Dec 16	3.18	Dec 24	3.05	Jan 13	2.68
Second High:	Jan 9	3.14	Nov 24	2.69	Feb 9	2.45
Third High:	Oct 8	3.03	Jan 23	2.64	Jan 12	2.35
Fourth High:	Jan 7	2.91	Nov 23	2.53	Dec 6	2.26
California:						
First High:	Dec 15	3.18	Dec 23	3.05	Jan 12	2.68
Second High:	Jan 8	3.14	Nov 24	2.69	Feb 8	2.45
Third High:	Oct 8	3.03	Jan 22	2.64	Jan 11	2.35
Fourth High:	Jan 1	3.01	Nov 22	2.53	Dec 5	2.26
# Days Above Nat'l Standard:		0		0		0
# Days Above State Standard:		0		0		0
Year Coverage:		85		97		95

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All averages are expressed in parts per million.
State exceedances are shown in **yellow** . National exceedances are shown in **orange** .
An exceedance is not necessarily a violation.
Year Coverage indicates how complete monitoring was during the time of the year when concentrations are highest. 0 means there was no coverage; 100 means there was complete coverage.
* There was insufficient (or no) data available to determine the value.

Switch: Hourly Ozone | 8-Hour Ozone | PM10 | PM2.5 | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide

Go to: Data Statistics Home Page | Top 4 Summaries Start Page

Welcome to California

Air Resources Board

iADAM

Highest 4 Daily Maximum Hourly Nitrogen Dioxide Measurements

Los Angeles-North Main Street

FAQs

Year:	2004		2005		2006	
	Date	Measurement	Date	Measurement	Date	Measurement
First High:	Oct 8	0.157	Nov 14	0.126	Nov 17	0.111
Second High:	Oct 26	0.137	Jul 20	0.110	Feb 3	0.096
Third High:	Oct 7	0.119	Jan 22	0.099	Sep 28	0.096
Fourth High:	Sep 1	0.112	Mar 10	0.093	Jun 28	0.092
# Days Above State Standard:		0		0		0
Annual Average:		0.034		0.027		0.029
Year Coverage:		91		98		97

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All concentrations are expressed in parts per million.
State exceedances are shown in **yellow** . National exceedances are shown in **orange** .
An exceedance is not necessarily a violation.
Year Coverage indicates how complete monitoring was during the time of the year when concentrations are highest. 0 means there was no coverage; 100 means there was complete coverage.
* There was insufficient (or no) data available to determine the value.

Switch: Hourly Ozone | 8-Hour Ozone | PM10 | PM2.5 | Carbon Monoxide | Sulfur Dioxide | Hydrogen Sulfide

Go to: Data Statistics Home Page | Top 4 Summaries Start Page

Highest 4 Daily Maximum 24-Hour Sulfur Dioxide Averages

Los Angeles-North Main Street

FAQs

Year:	2004		2005		2006	
	Date	Measurement	Date	Measurement	Date	Measurement
First High:	Dec 3	0.015	Jan 13	0.010	Nov 8	0.006
Second High:	Dec 8	0.008	Jan 18	0.009	Jul 5	0.006
Third High:	Dec 5	0.008	Jan 17	0.009	Jul 4	0.006
Fourth High:	Nov 3	0.006	Jan 4	0.008	Jul 2	0.005
# Days Above Nat'l Standard:		0		0		0
# Days Above State Standard:		0		0		0
Annual Average:		0.002		0.002		0.002
Year Coverage:		87		93		99

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All averages are expressed in parts per million.
State exceedances are shown in **yellow** . National exceedances are shown in **orange** .
National exceedances are also state exceedances.
An exceedance is not necessarily a violation.
Year Coverage indicates how complete monitoring was during the time of the year when concentrations are highest. 0 means there was no coverage; 100 means there was complete coverage.
* There was insufficient (or no) data available to determine the value.

Switch: Hourly Ozone | 8-Hour Ozone | PM10 | PM2.5 | Carbon Monoxide | Nitrogen Dioxide | Hydrogen Sulfide

Go to: Data Statistics Home Page | Top 4 Summaries Start Page

Highest 4 Daily PM10 Measurements

Los Angeles-North Main Street

FAQs

Year:	2004		2005		2006	
	Date	Measurement	Date	Measurement	Date	Measurement
National:						
First High:	Oct 6	72.0	Mar 11	70.0	Feb 4	59.0
Second High:	Mar 16	64.0	Jan 22	68.0	Feb 10	48.0
Third High:	Mar 10	58.0	Nov 6	68.0	Jan 11	43.0
Fourth High:	Mar 22	54.0	Nov 24	51.0	Jan 29	43.0
California:						
First High:	Oct 6	72.0	Mar 11	69.0		*
Second High:	Mar 16	63.0	Jan 22	68.0		*
Third High:	Mar 10	58.0	Nov 6	67.0		*
Fourth High:	Mar 22	54.0	Sep 19	50.0		*
Measured:						
# Days Above Nat'l Standard:		0		0		0
# Days Above State Standard:		5		3		*
Estimated:						
3-Yr Avg # Days Above Nat'l Std:		*		0.0		*
# Days Above Nat'l Standard:		0.0		0.0		*
# Days Above State Standard:		30.4		17.8		*
National 3-Year Average:		*		32		*
National Annual Average:		32.7		29.6		27.7
State 3-Yr Maximum Average:		34		34		*
State Annual Average:		32.5		29.2		*
Year Coverage:		100		100		22

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All concentrations are expressed in micrograms per cubic meter.
State exceedances are shown in **yellow** . National exceedances are shown in **orange** .
An exceedance is not necessarily a violation.
State and national statistics may differ for the following reasons:
State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods.
State and national statistics may therefore be based on different samplers.
State statistics for 1998 and later are based on *local* conditions (except for sites in the South Coast Air Basin, where State statistics for 2002 and later are based on *local* conditions).
National statistics are based on *standard* conditions.
State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.
Measurements are usually collected every six days. Measured days counts the days that a measurement was greater than the level of the standard; Estimated days mathematically estimates how many days concentrations would have been greater than the level of the standard had each day been monitored.
3-Year statistics represent the listed year and the 2 years before the listed year.
Year Coverage indicates how complete monitoring was during the time of the year when concentrations are highest. 0 means there was no coverage; 100 means there was complete coverage.
* There was insufficient (or no) data available to determine the value.

Switch: Hourly Ozone | 8-Hour Ozone | PM2.5 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide

Go to: Data Statistics Home Page | Top 4 Summaries Start Page

Highest 4 Daily PM2.5 Measurements

Los Angeles-North Main Street

FAQs

Year:	2004		2005		2006	
	Date	Measurement	Date	Measurement	Date	Measurement
National:						
First High:	Mar 15	75.0	Mar 10	73.7	Feb 4	56.2
Second High:	Mar 18	66.3	Mar 11	67.5	Feb 10	39.0
Third High:	Mar 19	62.7	Oct 21	58.2	Jan 29	35.5
Fourth High:	Oct 6	54.6	Nov 6	54.7	Jan 11	22.3
California:						
First High:	Mar 15	75.0	Mar 10	73.7	Feb 4	56.2
Second High:	Mar 18	66.3	Mar 11	67.5	Feb 10	39.0
Third High:	Mar 19	62.7	Oct 21	58.2	Jan 29	35.5
Fourth High:	Oct 6	54.6	Nov 6	54.7	Jan 11	22.3
# Days Above Nat'l Standard:		2		2		0
3-Year Average 98th Percentile:		*		*		*
1-Year 98th Percentile:		66.3		54.4		*
National 3-Year Average:		21		19		*
National Annual Average:		19.7		17.8		*
State 3-Yr Maximum Average:		*		18		18
State Annual Average:		*		17.8		*

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All concentrations are expressed in micrograms per cubic meter.
State exceedances are shown in **yellow** . National exceedances are shown in **orange** .
An exceedance is not necessarily a violation.
State and national statistics may differ for the following reasons:
State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods.
State and national statistics may therefore be based on different samplers.
State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.
3-Year statistics represent the listed year and the 2 years before the listed year.
* There was insufficient (or no) data available to determine the value.

Switch: Hourly Ozone | 8-Hour Ozone | PM10 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide

Go to: Data Statistics Home Page | Top 4 Summaries Start Page

Los Angeles-North Main Street Site Information

This page updated November 1, 2005

AIRS Number	ARB Number	Site Start Date	Reporting Agency and Agency Code
060371103	70087	3/1/78	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
1630 North Main Street, Los Angeles CA 90012	Los Angeles	South Coast	34º 3' 59"	118º 13' 36"	87

Pollutants Monitored (click on parameter link for real-time data)
CO, SO_2, NO_2, O_3, Total NMHC, PM_{10}, BAM_{PM10}, $BAM_{PM2.5}$, $PM_{2.5}$, TSP, Toxics, Cr^{6+}, Relative Humidity, Wind Direction, Horizontal Wind Speed, Solar Radiation

Site Photos	Photo Sequences	Site Surveys
--Select Photos--	--Select Position And Direction--	--Select Survey--

Other ARB Database Information	Real-Time Met Data	Aerial Photos and Topo Maps Of Site
--Select Database--	--Select Data Server--	--Select External Map--

LOS ANGELES CIVIC CENTE, CALIFORNIA (045115)

Period of Record Monthly Climate Summary

Period of Record : 1/ 1/1914 to 12/31/2006

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	66.4	67.4	68.8	71.1	73.1	77.1	82.5	83.2	81.8	77.5	72.9	67.6	74.1
Average Min. Temperature (F)	48.4	49.7	51.2	53.5	56.6	59.8	63.2	64.0	62.7	58.8	53.4	49.3	55.9
Average Total Precipitation (in.)	3.18	3.44	2.45	1.05	0.26	0.06	0.01	0.06	0.27	0.44	1.29	2.36	14.89
Average Total SnowFall (in.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0

Percent of possible observations for period of record.
Max. Temp.: 99.5% Min. Temp.: 99.5% Precipitation: 99.5% Snowfall: 41.6% Snow Depth: 41.6%
Check Station Metadata or Metadata graphics for more detail about data completeness.

Western Regional Climate Center, wrcc@dri.edu

SCAQMD Rule 403 Fugitive Dust Control Measures

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Backfilling	01-1 Stabilize backfill material when not actively handling; and 01-2 Stabilize backfill material during handling; and 01-3 Stabilize soil at completion of activity.	✓ Mix backfill soil with water prior to moving ✓ Dedicate water truck or high capacity hose to backfilling equipment ✓ Empty loader bucket slowly so that no dust plumes are generated ✓ Minimize drop height from loader bucket
Clearing and grubbing	02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and 02-2 Stabilize soil during clearing and grubbing activities; and 02-3 Stabilize soil immediately after clearing and grubbing activities.	✓ Maintain live perennial vegetation where possible ✓ Apply water in sufficient quantity to prevent generation of dust plumes
Clearing forms	03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	✓ Use of high pressure air to clear forms may cause exceedance of Rule requirements
Crushing	04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	✓ Follow permit conditions for crushing equipment ✓ Pre-water material prior to loading into crusher ✓ Monitor crusher emissions opacity ✓ Apply water to crushed material to prevent dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Cut and fill	05-1 Pre-water soils prior to cut and fill activities; and 05-2 Stabilize soil during and after cut and fill activities.	✓ For large sites, pre-water with sprinklers or water trucks and allow time for penetration ✓ Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts
Demolition – mechanical/manual	06-1 Stabilize wind erodible surfaces to reduce dust; and 06-2 Stabilize surface soil where support equipment and vehicles will operate; and 06-3 Stabilize loose soil and demolition debris; and 06-4 Comply with AQMD Rule 1403.	✓ Apply water in sufficient quantities to prevent the generation of visible dust plumes
Disturbed soil	07-1 Stabilize disturbed soil throughout the construction site; and 07-2 Stabilize disturbed soil between structures	✓ Limit vehicular traffic and disturbances on soils where possible ✓ If interior block walls are planned, install as early as possible ✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
Earth-moving activities	08-1 Pre-apply water to depth of proposed cuts; and 08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and 08-3 Stabilize soils once earth-moving activities are complete.	✓ Grade each project phase separately, timed to coincide with construction phase ✓ Upwind fencing can prevent material movement on site ✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Importing/exporting of bulk materials	09-1 Stabilize material while loading to reduce fugitive dust emissions; and 09-2 Maintain at least six inches of freeboard on haul vehicles; and 09-3 Stabilize material while transporting to reduce fugitive dust emissions; and 09-4 Stabilize material while unloading to reduce fugitive dust emissions; and 09-5 Comply with Vehicle Code Section 23114.	✓ Use tarps or other suitable enclosures on haul trucks ✓ Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage ✓ Comply with track-out prevention/mitigation requirements ✓ Provide water while loading and unloading to reduce visible dust plumes
Landscaping	10-1 Stabilize soils, materials, slopes	✓ Apply water to materials to stabilize ✓ Maintain materials in a crusted condition ✓ Maintain effective cover over materials ✓ Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes ✓ Hydroseed prior to rain season
Road shoulder maintenance	11-1 Apply water to unpaved shoulders prior to clearing; and 11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	✓ Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs ✓ Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	**Control Measure**	**Guidance**
Screening	12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening.	✓ Dedicate water truck or high capacity hose to screening operation ✓ Drop material through the screen slowly and minimize drop height ✓ Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point
Staging areas	13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	✓ Limit size of staging area ✓ Limit vehicle speeds to 15 miles per hour ✓ Limit number and size of staging area entrances/exists
Stockpiles/ Bulk Material Handling	14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	✓ Add or remove material from the downwind portion of the storage pile ✓ Maintain storage piles to avoid steep sides or faces

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Traffic areas for construction activities	15-1 Stabilize all off-road traffic and parking areas; and 15-2 Stabilize all haul routes; and 15-3 Direct construction traffic over established haul routes.	✓ Apply gravel/paving to all haul routes as soon as possible to all future roadway areas ✓ Barriers can be used to ensure vehicles are only used on established parking areas/haul routes
Trenching	16-1 Stabilize surface soils where trencher or excavator and support equipment will operate; and 16-2 Stabilize soils at the completion of trenching activities.	✓ Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches soak soils via the pre-trench and resuming trenching ✓ Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment
Truck loading	17-1 Pre-water material prior to loading; and 17-2 Ensure that freeboard exceeds six inches (CVC 23114)	✓ Empty loader bucket such that no visible dust plumes are created ✓ Ensure that the loader bucket is close to the truck to minimize drop height while loading
Turf Overseeding	18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and 18-2 Cover haul vehicles prior to exiting the site.	✓ Haul waste material immediately off-site

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Unpaved roads/parking lots	19-1 Stabilize soils to meet the applicable performance standards; and 19-2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	✓ Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements
Vacant land	20-1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

Table 2
DUST CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Earth-moving (except construction cutting and filling areas, and mining operations)	(1a)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR
	(1a-1)	For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas:	(1b)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Earth-moving: Construction cut areas and mining operations:	(1c)	Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b)	Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c)	Apply chemical stabilizers within five working days of grading completion; OR
	(2d)	Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	(3a)	Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR
	(3b)	Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR
	(3c)	Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR
	(3d)	Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY		**CONTROL ACTIONS**
Unpaved Roads	(4a)	Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR
	(4b)	Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR
	(4c)	Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	(5a)	Apply chemical stabilizers; OR
	(5b)	Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR
	(5c)	Install temporary coverings; OR
	(5d)	Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.
All Categories	(6a)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used.

TABLE 3
CONTINGENCY CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY		CONTROL MEASURES
Earth-moving	(1A)	Cease all active operations; OR
	(2A)	Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	(0B)	On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR
	(1B)	Apply chemical stabilizers prior to wind event; OR
	(2B)	Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR
	(3B)	Take the actions specified in Table 2, Item (3c); OR
	(4B)	Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	(1C)	Apply chemical stabilizers prior to wind event; OR
	(2C)	Apply water twice per hour during active operation; OR
	(3C)	Stop all vehicular traffic.
Open storage piles	(1D)	Apply water twice per hour; OR
	(2D)	Install temporary coverings.
Paved road track-out	(1E)	Cover all haul vehicles; OR
	(2E)	Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	(1F)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

Table 4
(Conservation Management Practices for Confined Animal Facilities)

SOURCE CATEGORY	CONSERVATION MANAGEMENT PRACTICES
Manure Handling **(Only applicable to Commercial Poultry Ranches)**	(1a) Cover manure prior to removing material off-site; AND (1b) Spread the manure before 11:00 AM and when wind conditions are less than 25 miles per hour; AND (1c) Utilize coning and drying manure management by removing manure at laying hen houses at least twice per year and maintain a base of no less than 6 inches of dry manure after clean out; or in lieu of complying with conservation management practice (1c), comply with conservation management practice (1d). (1d) Utilize frequent manure removal by removing the manure from laying hen houses at least every seven days and immediately thin bed dry the material.
Feedstock Handling	(2a) Utilize a sock or boot on the feed truck auger when filling feed storage bins.
Disturbed Surfaces	(3a) Maintain at least 70 percent vegetative cover on vacant portions of the facility; OR (3b) Utilize conservation tillage practices to manage the amount, orientation and distribution of crop and other plant residues on the soil surface year-round, while growing crops (if applicable) in narrow slots or tilled strips; OR (3c) Apply dust suppressants in sufficient concentrations and frequencies to maintain a stabilized surface.
Unpaved Roads	(4a) Restrict access to private unpaved roads either through signage or physical access restrictions and control vehicular speeds to no more than 15 miles per hour through worker notifications, signage, or any other necessary means; OR (4b) Cover frequently traveled unpaved roads with low silt content material (i.e., asphalt, concrete, recycled road base, or gravel to a minimum depth of four inches); OR (4c) Treat unpaved roads with water, mulch, chemical dust suppressants or other cover to maintain a stabilized surface.
Equipment Parking Areas	(5a) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (5b) Apply material with low silt content (i.e., asphalt, concrete, recycled road base, or gravel to a depth of four inches).

Caltrans CO Protocol Excerpts (Table 1, Table 2, and CO Analysis Flow Charts)

Table 1 (continued). Projects Exempt from all Emissions Analyses

Other (cont.)
Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action
Noise attenuation
Emergency or hardship advance land acquisitions [23 CFR 712.204(d)]
Acquisition of scenic easements
Plantings, landscaping, etc.
Sign removal
Directional and informational signs
Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)
Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational or capacity changes

Source: 40 CFR Part 93, Table 2

Resources Board (CARB), Caltrans, EPA, and the FHWA (in the case of a highway project) or the FTA (in the case of a transit project) concur that a project has potential adverse local and/or regional emissions impacts for any reason [40 CFR § 93.126].

2.15 Project Exempt from Regional Emissions Analyses

Certain projects are ordinarily exempt from all regional emissions analyses according to Table 3 of 40 CFR § 93.127, reproduced in Table 2 of the Protocol. However, the exempt status may be revoked if the MPO, in consultation with the local air district, the California Air Resources Board (CARB), Caltrans, EPA, and the FHWA (in the case of a highway project) or the FTA (in the case of a transit project) concur that a project has potential regional emissions impacts for any reason [40 CFR § 93.127].

Table 2. Projects Exempt from Regional Emissions Analysis

Intersection channelization projects
Intersection signalization projects at individual intersections
Interchange reconfiguration projects
Changes in vertical and horizontal alignment
Truck size and weight inspection stations
Bus terminals and transfer points

Source: 40 CFR Part 93, Table 3

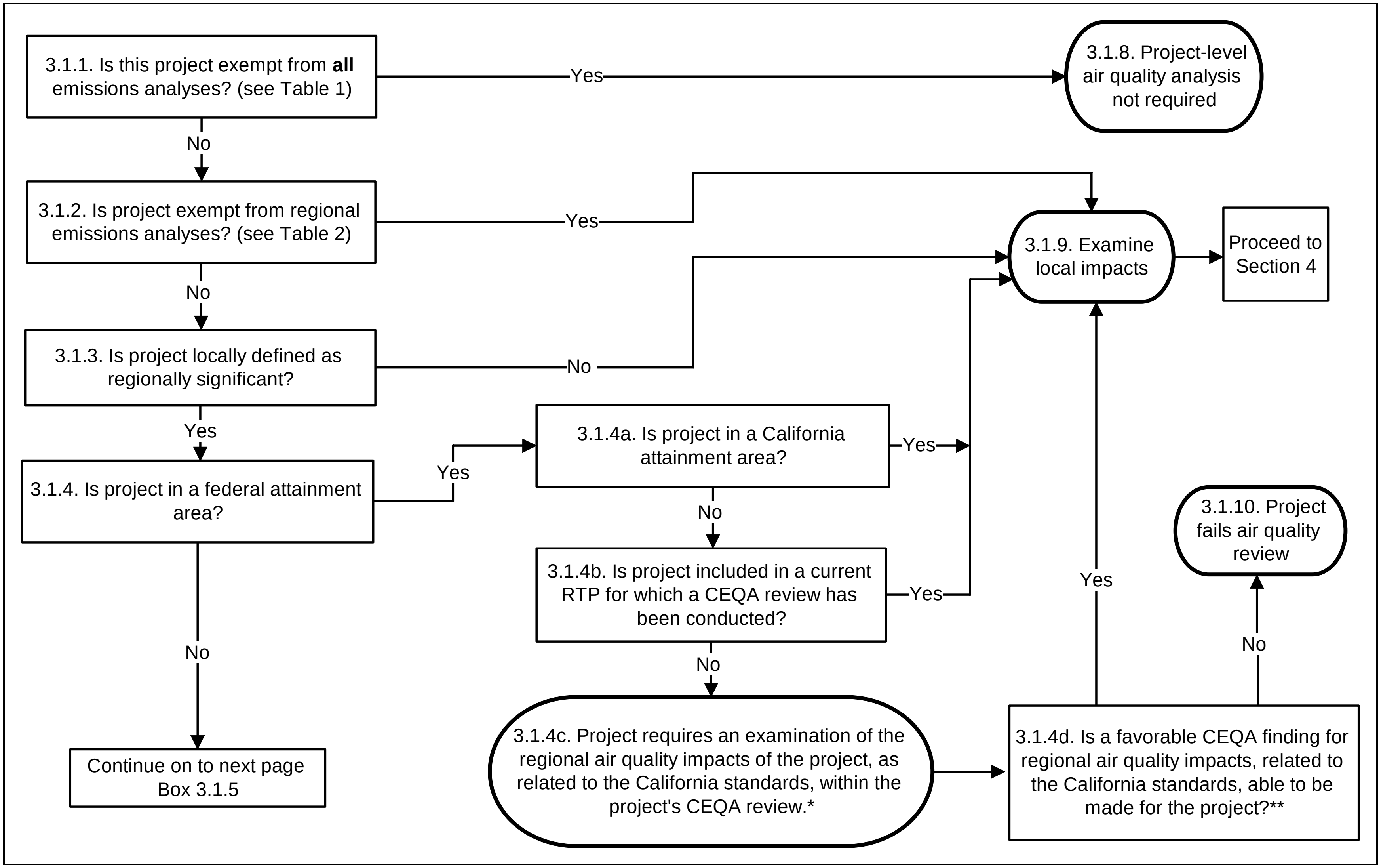


Figure 1. Requirements for New Projects

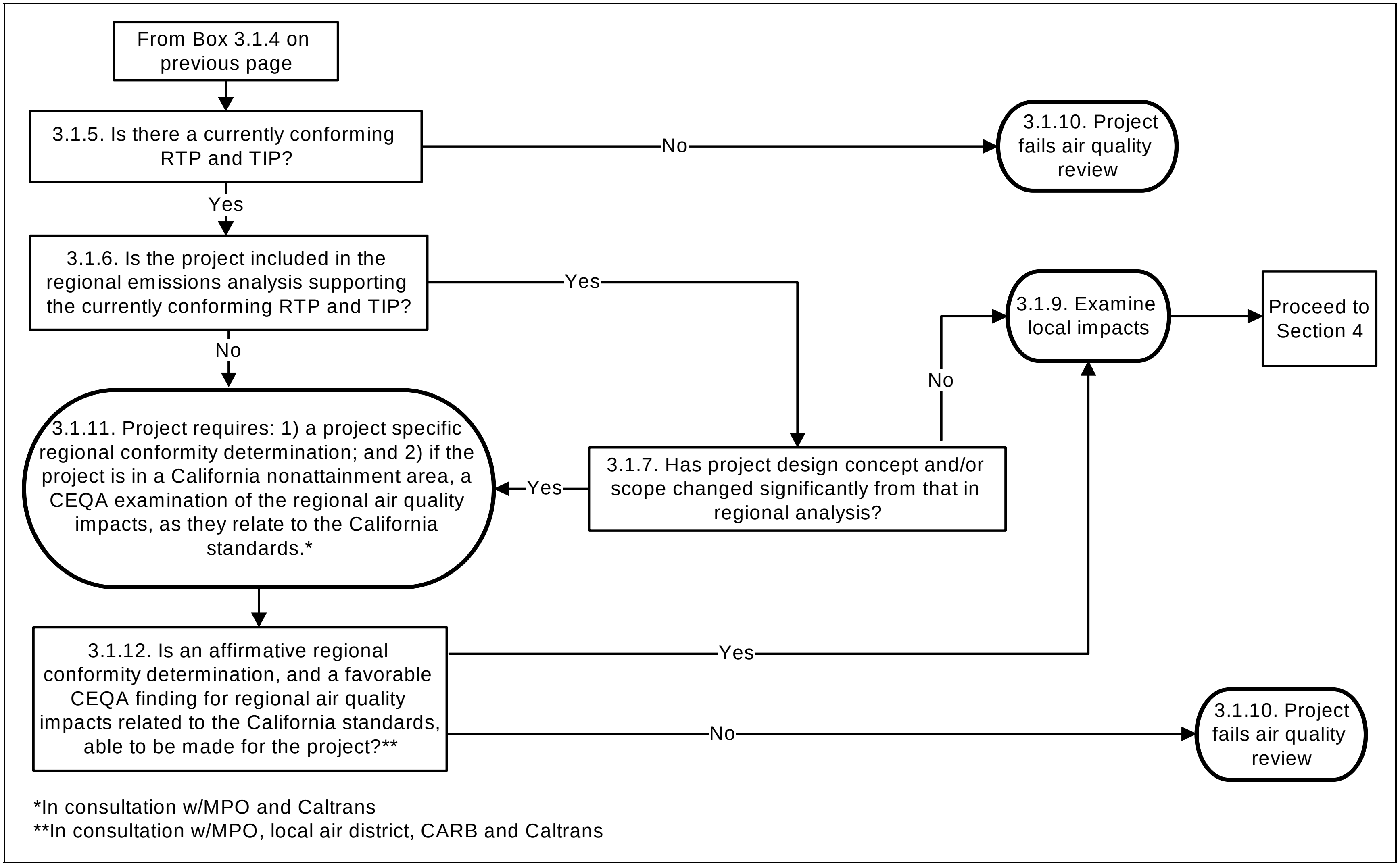


Figure 1 (cont.). Requirements for New Projects

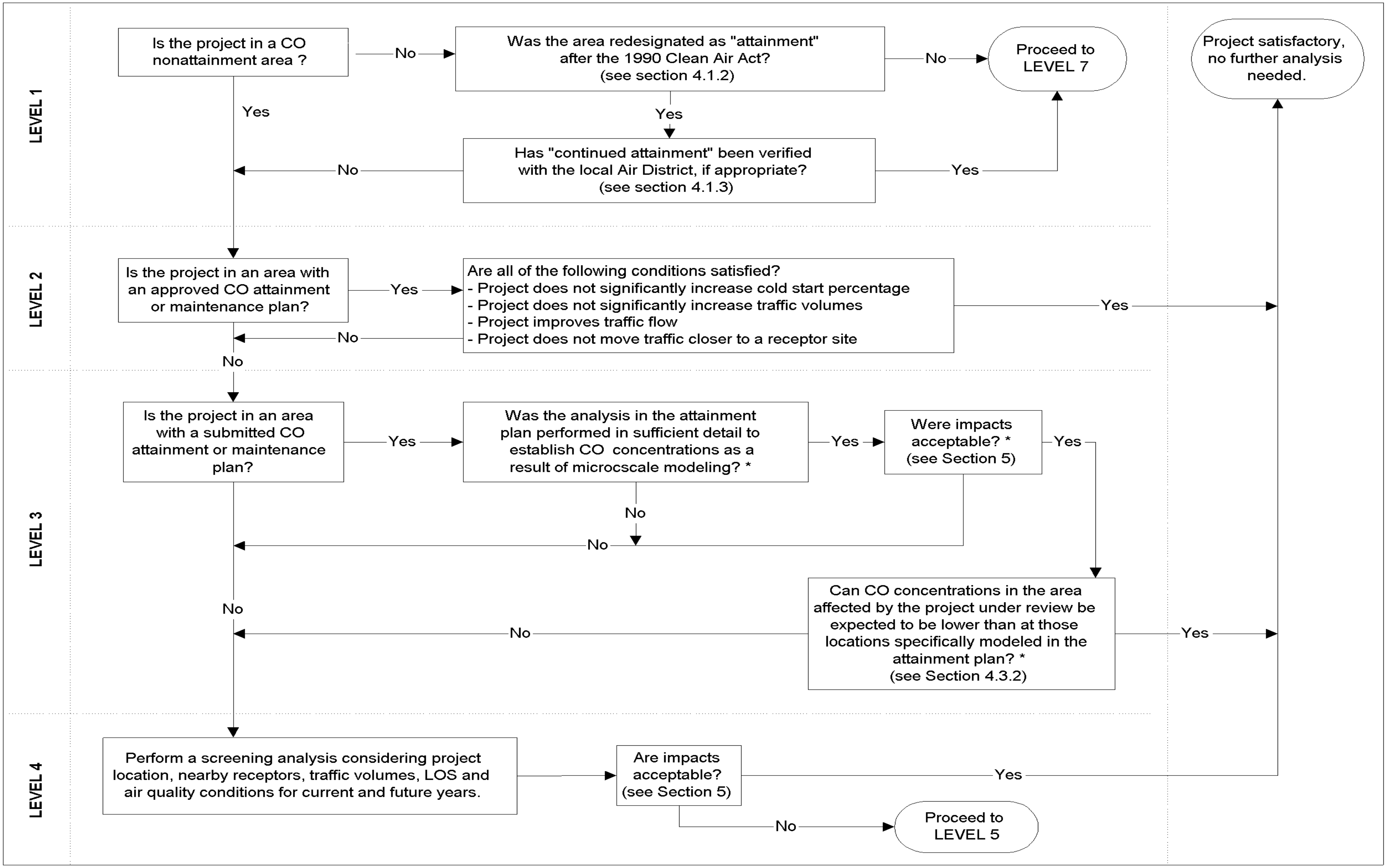
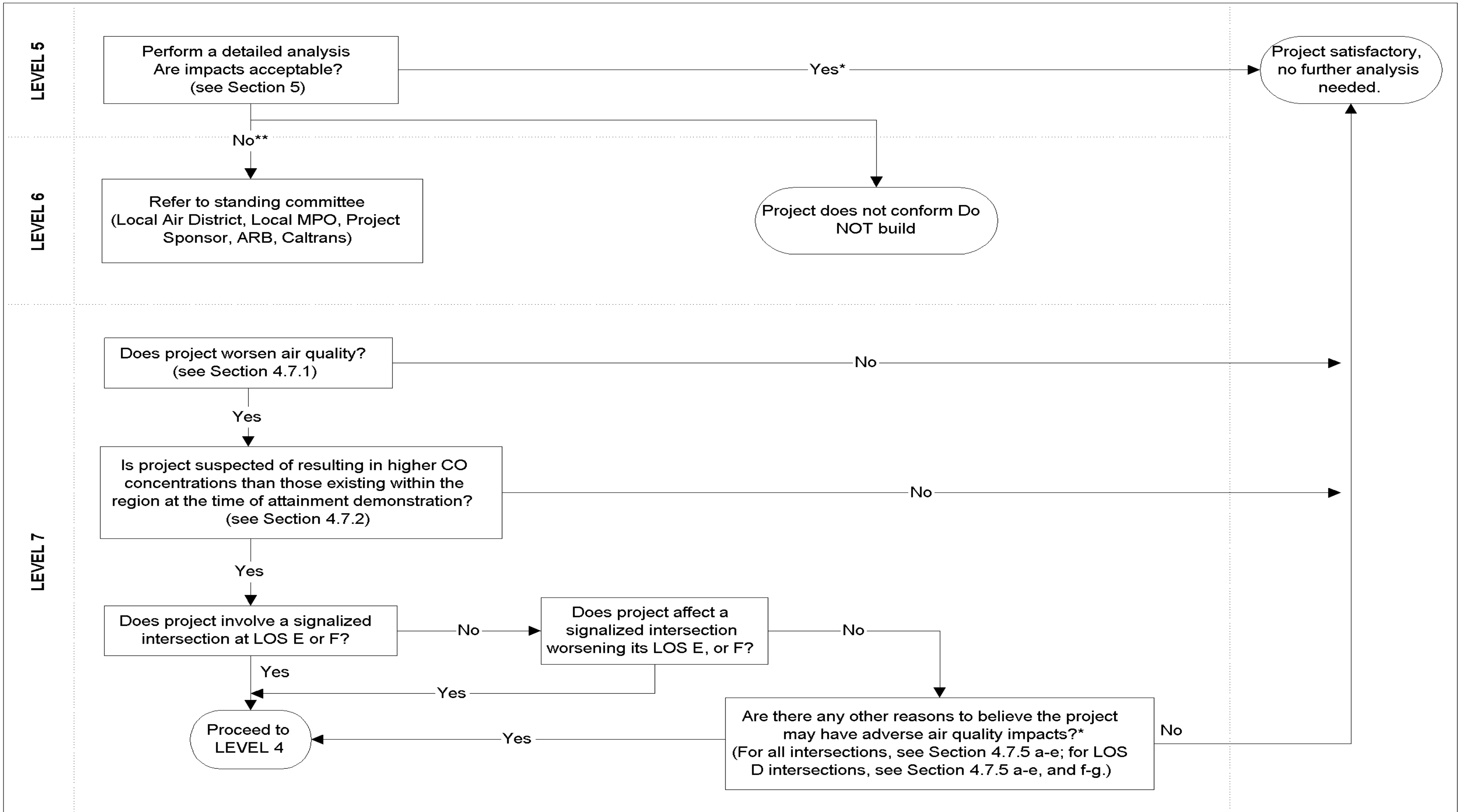


Figure 3. Local CO Analysis



*Consultation with MPO and Local Air District required in addition to normal NEPA/CEQA requirements

**Consultation with MPO, Local Air District, CARB and Caltrans (District & Headquarters) required in addition to normal NEPA/CEQA requirements

Figure 3 (cont.). Local CO Analysis

Prototype Language for Compliance with 40 CFR 1502.22

APPENDIX C-Prototype Language for Compliance with 40 CFR 1502.22

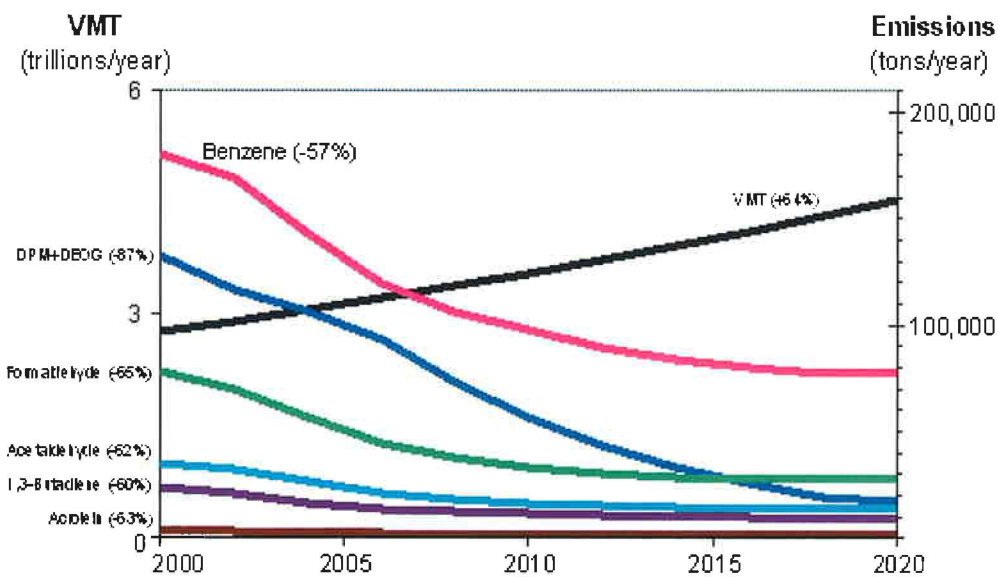
Mobile Source Air Toxics

In addition to the criteria air pollutants for which there are National Ambient Air Quality Standards (NAAQS), EPA also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners) and stationary sources (e.g., factories or refineries).

Mobile Source Air Toxics (MSATs) are a subset of the 188 air toxics defined by the Clean Air Act. The MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

The EPA is the lead Federal Agency for administering the Clean Air Act and has certain responsibilities regarding the health effects of MSATs. The EPA issued a Final Rule on Controlling Emissions of Hazardous Air Pollutants from Mobile Sources. 66 FR 17229 (March 29, 2001). This rule was issued under the authority in Section 202 of the Clean Air Act. In its rule, EPA examined the impacts of existing and newly promulgated mobile source control programs, including its reformulated gasoline (RFG) program, its national low emission vehicle (NLEV) standards, its Tier 2 motor vehicle emissions standards and gasoline sulfur control requirements, and its proposed heavy duty engine and vehicle standards and on-highway diesel fuel sulfur control requirements. Between 2000 and 2020, FHWA projects that even with a 64 percent increase in VMT, these programs will reduce on-highway emissions of benzene, formaldehyde, 1,3-butadiene, and acetaldehyde by 57 percent to 65 percent, and will reduce on-highway diesel PM emissions by 87 percent, as shown in the following graph:

U.S. Annual Vehicle Miles Traveled (VMT) vs. Mobile Source Air Toxics Emissions, 2000-2020



Notes: For on-road mobile sources. Emissions factors were generated using MOBILE6.2. MTBE proportion of market for oxygenates is held constant, at 50%. Gasoline RVP and oxygenate content are held constant. VMT: Highway Statistics 2000, Table VM-2 for 2000, analysis assumes annual growth rate of 2.5%. "DPM + DEOG" is based on MOBILE6.2-generated factors for elemental carbon, organic carbon and SO4 from diesel-powered vehicles, with the particle size cutoff set at 10.0 microns.

As a result, EPA concluded that no further motor vehicle emissions standards or fuel standards were necessary to further control MSATs. The agency is preparing another rule under authority of CAA Section 202(l) that will address these issues and could make adjustments to the full 21 and the primary six MSATs.

Unavailable Information for Project Specific MSAT Impact Analysis

This [EA or EIS] includes a basic analysis of the likely MSAT emission impacts of this project. However, available technical tools do not enable us to predict the project-specific health impacts of the emission changes associated with the alternatives in this [EA or EIS]. Due to these limitations, the following discussion is included in accordance with CEQ regulations (40 CFR 1502.22(b)) regarding incomplete or unavailable information:

Information that is Unavailable or Incomplete. Evaluating the environmental and health impacts from MSATs on a proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of this project.

- **Emissions:** The EPA tools to estimate MSAT emissions from motor vehicles are not sensitive to key variables determining emissions of MSATs in the context of highway projects. While MOBILE 6.2 is used to predict emissions at a regional level, it has limited applicability at the project level. MOBILE 6.2 is a trip-based model--emission factors are projected based on a typical trip of 7.5 miles, and on average speeds for this typical trip. This means that MOBILE 6.2 does not have the ability to predict emission factors for a specific vehicle operating condition at a specific location at a specific time. Because of this limitation, MOBILE 6.2 can only approximate the operating speeds and levels of congestion likely to be present on the largest-scale projects, and cannot adequately capture emissions effects of smaller projects. For particulate matter, the model results are not sensitive to average trip speed, although the other MSAT emission rates do change with changes in trip speed. Also, the emissions rates used in MOBILE 6.2 for both particulate matter and MSATs are based on a limited number of tests of mostly older-technology vehicles. Lastly, in its discussions of PM under the conformity rule, EPA has identified problems with MOBILE6.2 as an obstacle to quantitative analysis.

  These deficiencies compromise the capability of MOBILE 6.2 to estimate MSAT emissions. MOBILE6.2 is an adequate tool for projecting emissions trends, and performing relative analyses between alternatives for very large projects, but it is not sensitive enough to capture the effects of travel changes tied to smaller projects or to predict emissions near specific roadside locations.

- **Dispersion.** The tools to predict how MSATs disperse are also limited. The EPA's current regulatory models, CALINE3 and CAL3QHC, were developed and validated more than a decade ago for the purpose of predicting episodic concentrations of carbon monoxide to determine compliance with the NAAQS. The performance of dispersion models is more accurate for predicting maximum concentrations that can occur at some time at some location within a geographic area. This limitation makes it difficult to predict accurate exposure patterns at specific times at specific highway project locations across an urban area to assess potential health risk. The NCHRP is conducting research on best practices in applying models and other technical methods in the analysis of MSATs. This work also will focus on identifying appropriate methods of documenting and communicating MSAT impacts in the NEPA process and to the general public. Along with these general limitations of dispersion models, FHWA is also faced with a lack of monitoring data in most areas for use in establishing project-specific MSAT background concentrations.

- **Exposure Levels and Health Effects.** Finally, even if emission levels and concentrations of MSATs could be accurately predicted, shortcomings in current techniques for exposure assessment and risk analysis preclude us from reaching meaningful conclusions about project-specific health impacts. Exposure assessments are difficult because it is difficult to accurately calculate annual concentrations of MSATs near roadways, and to determine the portion of a year that people are actually exposed to those concentrations at a specific location. These difficulties are magnified for 70-year cancer assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over a 70-year period. There are also considerable uncertainties associated with the existing estimates of toxicity of the various MSATs, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population. Because of these shortcomings, any calculated difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with calculating the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against other project impacts that are better suited for quantitative analysis.

Summary of Existing Credible Scientific Evidence Relevant to Evaluating the Impacts of MSATs. Research into the health impacts of MSATs is ongoing. For different emission types, there are a variety of studies that show that some either are statistically associated with adverse health outcomes through epidemiological studies (frequently based on emissions levels found in occupational settings) or that animals demonstrate adverse health outcomes when exposed to large doses.

Exposure to toxics has been a focus of a number of EPA efforts. Most notably, the agency conducted the National Air Toxics Assessment (NATA) in 1996 to evaluate modeled estimates of human exposure applicable to the county level. While not intended for use as a measure of or benchmark for local exposure, the modeled estimates in the NATA database best illustrate the levels of various toxics when aggregated to a national or State level.

The EPA is in the process of assessing the risks of various kinds of exposures to these pollutants. The EPA Integrated Risk Information System (IRIS) is a database of human health effects that may result from exposure to various substances found in the environment. The IRIS database is located at http://www.epa.gov/iris. The following toxicity information for the six prioritized MSATs was taken from the IRIS database *Weight of Evidence Characterization* summaries. This information is taken verbatim from EPA's IRIS database and represents the Agency's most current evaluations of the potential hazards and toxicology of these chemicals or mixtures.

- **Benzene** is characterized as a known human carcinogen.
- The potential carcinogenicity of **acrolein** cannot be determined because the existing data are inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure.
- **Formaldehyde** is a probable human carcinogen, based on limited evidence in humans, and sufficient evidence in animals.
- **1,3-butadiene** is characterized as carcinogenic to humans by inhalation.
- **Acetaldehyde** is a probable human carcinogen based on increased incidence of nasal tumors in male and female rats and laryngeal tumors in male and female hamsters after inhalation exposure.
- **Diesel exhaust** (DE) is likely to be carcinogenic to humans by inhalation from environmental exposures. Diesel exhaust as reviewed in this document is the combination of diesel particulate matter and diesel exhaust organic gases.
- **Diesel exhaust** also represents chronic respiratory effects, possibly the primary noncancer hazard from MSATs. Prolonged exposures may impair pulmonary function and could produce symptoms, such as cough, phlegm, and chronic bronchitis. Exposure relationships have not been developed from these studies.

There have been other studies that address MSAT health impacts in proximity to roadways. The Health Effects Institute, a non-profit organization funded by EPA, FHWA, and industry, has undertaken a major series of studies to research near-roadway MSAT hot spots, the health implications of the entire mix of mobile source pollutants, and other topics. The final summary of the series is not expected for several years.

Some recent studies have reported that proximity to roadways is related to adverse health outcomes -- particularly respiratory problems[1]. Much of this research is not specific to MSATs, instead surveying the full spectrum of both criteria and other pollutants. The FHWA cannot evaluate the validity of these studies, but more importantly, they do not provide information that would be useful to alleviate the uncertainties listed above and enable us to perform a more comprehensive evaluation of the health impacts specific to this project.

Relevance of Unavailable or Incomplete Information to Evaluating Reasonably Foreseeable Significant Adverse Impacts on the Environment, and Evaluation of impacts based upon theoretical approaches or research methods generally accepted in the scientific community. Because of the uncertainties outlined above, a quantitative assessment of the effects of air toxic emissions impacts on human health cannot be made at the project level. While available tools do allow us to reasonably predict relative emissions changes between alternatives for larger projects, the amount of MSAT emissions from each of the project alternatives and MSAT concentrations or exposures created by each of the project alternatives cannot be predicted with enough accuracy to be useful in estimating health impacts. (As noted above, the current emissions model is not capable of serving as a meaningful emissions analysis tool for smaller projects.) Therefore, the relevance of the unavailable or incomplete information is that it is not possible to make a determination of whether any of the alternatives would have "significant adverse impacts on the human environment."

In this document, FHWA has provided a quantitative analysis of MSAT emissions relative to the various alternatives, (or a qualitative assessment, as applicable) and has acknowledged that (some, all, or identify by alternative) the project alternatives may result in increased exposure to MSAT emissions in certain locations, although the concentrations and duration of exposures are uncertain, and because of this uncertainty, the health effects from these emissions cannot be estimated.

[The Office of Environment, Planning and Realty can provide additional supporting documents for review and inclusion in the administrative record.]

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[1] South Coast Air Quality Management District, Multiple Air Toxic Exposure Study-II (2000); Highway Health Hazards, The Sierra Club (2004) summarizing 24 Studies on the relationship between health and air quality); NEPA's Uncertainty in the Federal Legal Scheme Controlling Air Pollution from Motor Vehicles, Environmental Law Institute, 35 ELR 10273 (2005) with health studies cited therein.

AP-42, Section 13.2.1 (Re-entrained Dust Emissions Factor Copulation Documentation)

13.2.1 Paved Roads

13.2.1.1 General

Particulate emissions occur whenever vehicles travel over a paved surface such as a road or parking lot. Particulate emissions from paved roads are due to direct emissions from vehicles in the form of exhaust, brake wear and tire wear emissions and resuspension of loose material on the road surface. In general terms, resuspended particulate emissions from paved roads originate from, and result in the depletion of, the loose material present on the surface (i.e., the surface loading). In turn, that surface loading is continuously replenished by other sources. At industrial sites, surface loading is replenished by spillage of material and trackout from unpaved roads and staging areas. Figure 13.2.1-1 illustrates several transfer processes occurring on public streets.

Various field studies have found that public streets and highways, as well as roadways at industrial facilities, can be major sources of the atmospheric particulate matter within an area.[1-9] Of particular interest in many parts of the United States are the increased levels of emissions from public paved roads when the equilibrium between deposition and removal processes is upset. This situation can occur for various reasons, including application of granular materials for snow and ice control, mud/dirt carryout from construction activities in the area, and deposition from wind and/or water erosion of surrounding unstabilized areas. In the absence of continuous addition of fresh material (through localized trackout or application of antiskid material), paved road surface loading should reach an equilibrium value in which the amount of material resuspended matches the amount replenished. The equilibrium surface loading value depends upon numerous factors. It is believed that the most important factors are: mean speed of vehicles traveling the road; the average daily traffic (ADT); the number of lanes and ADT per lane; the fraction of heavy vehicles (buses and trucks); and the presence/absence of curbs, storm sewers and parking lanes.[10]

The particulate emission factors presented in the previous version of this section of AP-42, dated October 2002, implicitly included the emissions from vehicles in the form of exhaust, brake wear, and tire wear as well as resuspended road surface material. EPA included these sources in the emission factor equation for paved roads since the field testing data used to develop the equation included both the direct emissions from vehicles and emissions from resuspension of road dust.

This version of the paved road emission factor equation only estimates particulate emissions from resuspended road surface material [28]. The particulate emissions from vehicle exhaust, brake wear, and tire wear are now estimated separately using EPA's MOBILE6.2 [27]. This approach eliminates the possibility of double counting emissions. Double counting results when employing the previous version of the emission factor equation in this section and MOBILE6.2 to estimate particulate emissions from vehicle traffic on paved roads. It also incorporates the decrease in exhaust emissions that has occurred since the paved road emission factor equation was developed. The previous version of the paved road emission factor equation includes estimates of emissions from exhaust, brake wear, and tire wear based on emission rates for vehicles in the 1980 calendar year fleet. The amount of PM released from vehicle exhaust has decreased since 1980 due to lower new vehicle emission standards and changes in fuel characteristics.

13.2.1.2 Emissions And Correction Parameters

Dust emissions from paved roads have been found to vary with what is termed the "silt loading" present on the road surface as well as the average weight of vehicles traveling the road. The term silt loading (sL) refers to the mass of silt-size material (equal to or less than 75 micrometers [μm] in physical diameter) per unit area of the travel surface. The total road surface dust loading consists of loose material that can be collected by broom sweeping and vacuuming of the traveled portion of the paved road. The silt fraction is determined by measuring the proportion of the loose dry surface dust that passes through a 200-mesh screen, using the ASTM-C-136 method. Silt loading is the product of the silt fraction and the total loading, and is abbreviated "sL". Additional details on the sampling and analysis of such material are provided in AP-42 Appendices C.1 and C.2.

The surface sL provides a reasonable means of characterizing seasonal variability in a paved road emission inventory. In many areas of the country, road surface loadings [11-21] are heaviest during the late winter and early spring months when the residual loading from snow/ice controls is greatest. As noted earlier, once replenishment of fresh material is eliminated, the road surface loading can be expected to reach an equilibrium value, which is substantially lower than the late winter/early spring values.

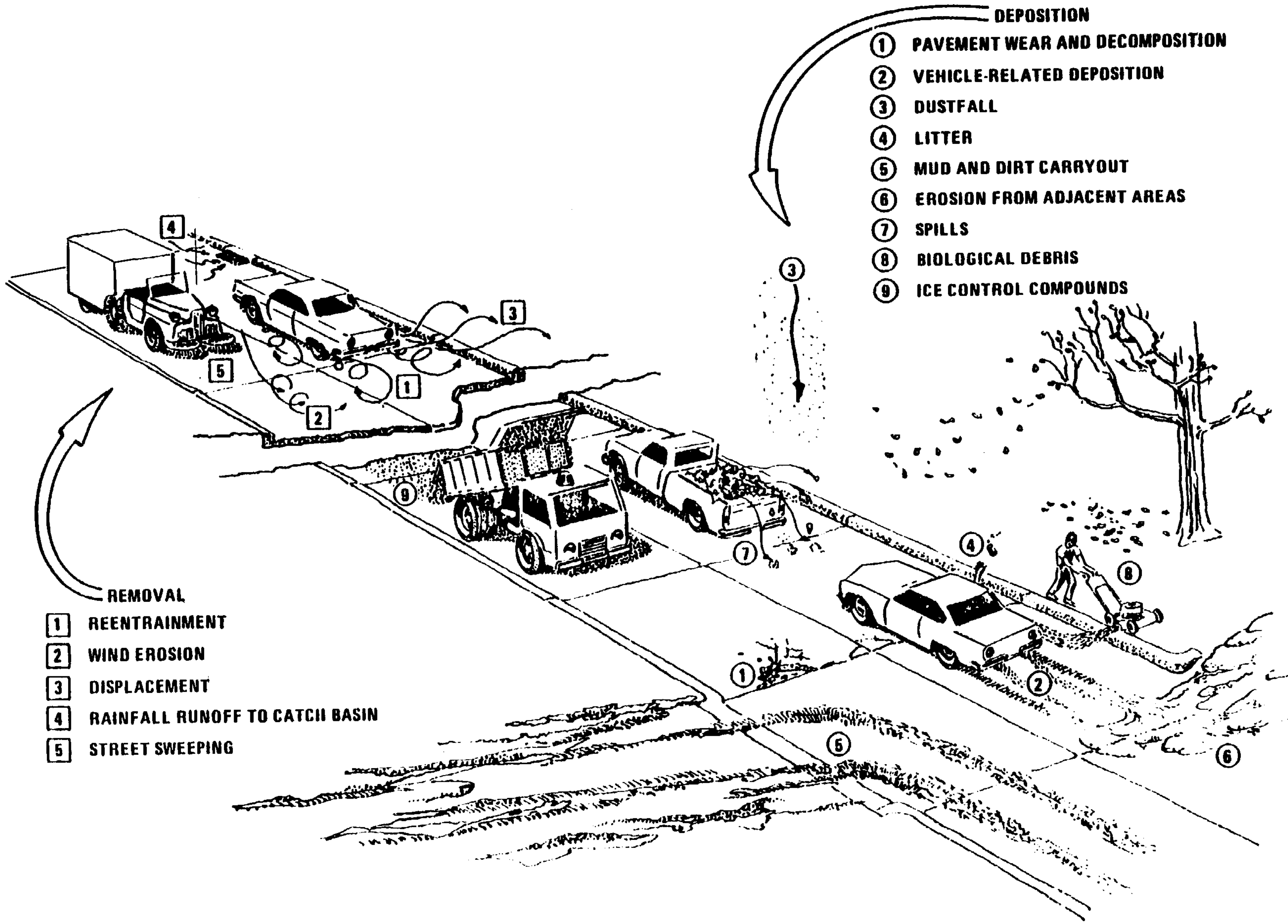

Figure 13.2.1-1. Deposition and removal processes.

13.2.1.3 Predictive Emission Factor Equations [10]

The quantity of particulate emissions from resuspension of loose material on the road surface due to vehicle travel on a dry paved road may be estimated using the following empirical expression:

$$E = k\left(\frac{sL}{2}\right)^{0.65} \times \left(\frac{W}{3}\right)^{1.5} - C \qquad (1)$$

where:
- E = particulate emission factor (having units matching the units of k),
- k = particle size multiplier for particle size range and units of interest (see below),
- sL = road surface silt loading (grams per square meter) (g/m^2),
- W = average weight (tons) of the vehicles traveling the road, and
- C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear.

It is important to note that Equation 1 calls for the average weight of all vehicles traveling the road. For example, if 99 percent of traffic on the road are 2 ton cars/trucks while the remaining 1 percent consists of 20 ton trucks, then the mean weight "W" is 2.2 tons. More specifically, Equation 1 is *not* intended to be used to calculate a separate emission factor for each vehicle weight class. Instead, only one emission factor should be calculated to represent the "fleet" average weight of all vehicles traveling the road.

The particle size multiplier (*k*) above varies with aerodynamic size range as shown in Table 13.2.1-1. To determine particulate emissions for a specific particle size range, use the appropriate value of k shown in Table 13.2.1-1.

The emission factors for the exhaust, brake wear and tire wear of a 1980's vehicle fleet (*C*) was obtained from EPA’s MOBILE6.2 model [28]. The emission factor also varies with aerodynamic size range as shown in Table 13.2.1-2.

Table 13.2-1.1. PARTICLE SIZE MULTIPLIERS FOR PAVED ROAD EQUATION

Size range[a]	Particle Size Multiplier k[b]		
	g/VKT	g/VMT	lb/VMT
PM-2.5[c]	0.66	1.1	0.0024
PM-10	4.6	7.3	0.016
PM-15	5.5	9.0	0.020
PM-30[d]	24	38	0.082

[a] Refers to airborne particulate matter (PM-x) with an aerodynamic diameter equal to or less than x micrometers.

[b] Units shown are grams per vehicle kilometer traveled (g/VKT), grams per vehicle mile traveled (g/VMT), and pounds per vehicle mile traveled (lb/VMT). The multiplier k includes unit conversions to produce emission factors in the units shown for the indicated size range from the mixed units required in Equation 1.

[c] The revised k-factors were based on the ratio of $PM_{2.5}$:PM_{10} in Table 1 of Reference 22 and are found in Table 2 of Reference 22. However, this ratio may not be used directly to estimate $PM_{2.5}$ from PM_{10} emissions. Equation (1) must be be computed separately for each size fraction because the relationship between $PM_{2.5}$ and PM_{10} emissions is not a simple ratio (i.e., the constant “C” in Equation (1) is not multiplied by the k-factor).

[d] PM-30 is sometimes termed "suspendable particulate" (SP) and is often used as a surrogate for TSP.

Table 13.2.1-2. EMISSION FACTOR FOR 1980'S VEHICLE FLEET EXHAUST, BRAKE WEAR AND TIRE WEAR

Particle Size Range[a]	*C*, Emission Factor for Exhaust, Brake Wear and Tire Wear[b]		
	g/VMT	g/VKT	lb/VMT
$PM_{2.5}$	0.1617	0.1005	0.00036
PM_{10}	0.2119	0.1317	0.00047
PM_{15}	0.2119	0.1317	0.00047
PM_{30}[c]	0.2119	0.1317	0.00047

[a] Refers to airborne particulate matter (PM-x) with an aerodynamic diameter equal to or less than x micrometers.
[b] Units shown are grams per vehicle kilometer traveled (g/VKT), grams per vehicle mile traveled (g/VMT), and pounds per vehicle mile traveled (lb/VMT).
[c] PM-30 is sometimes termed "suspendable particulate" (SP) and is often used as a surrogate for TSP.

Equation 1 is based on a regression analysis of numerous emission tests, including 65 tests for PM-10.[10] Sources tested include public paved roads, as well as controlled and uncontrolled industrial paved roads. All sources tested were of freely flowing vehicles traveling at constant speed on relatively level roads. No tests of "stop-and-go" traffic or vehicles under load were available for inclusion in the data base. The equations retain the quality rating of A (B for PM-2.5), if applied within the range of source conditions that were tested in developing the equation as follows:

Silt loading:	0.03 - 400 g/m^2 0.04 - 570 grains/square foot (ft^2)
Mean vehicle weight:	1.8 - 38 megagrams (Mg) 2.0 - 42 tons
Mean vehicle speed:	16 - 88 kilometers per hour (kph) 10 - 55 miles per hour (mph)

Note: There may be situations where low silt loading and/or low average weight will yield calculated negative emissions from equation 1. If this occurs, the emissions calculated from equation 1 should be set to zero.

Users are cautioned that application of equation 1 outside of the range of variables and operating conditions specified above, e.g., application to roadways or road networks with speeds below 10 mph and with stop-and-go traffic, will result in emission estimates with a higher level of uncertainty. In these situations, users are encouraged to consider alternative methods that are equally or more plausible in light of local emissions data and/or ambient concentration or compositional data.

To retain the quality rating for the emission factor equation when it is applied to a specific paved road, it is necessary that reliable correction parameter values for the specific road in question be determined. With the exception of limited access roadways, which are difficult to sample, the collection and use of site-specific silt loading (sL) data for public paved road emission inventories are strongly recommended. The field and laboratory procedures for determining surface material silt content and surface dust loading are summarized in Appendices C.1 and C.2. In the event that site-specific values cannot be obtained, an appropriate value for a paved public road may be selected from the values in Table 13.2.1-3, but the quality rating of the equation should be reduced by 2 levels. Also, recall that Equation 1 refers to emissions due to freely flowing (not stop-and-go) traffic at constant speed on level roads.

Equation 1 may be extrapolated to average uncontrolled conditions (but including natural mitigation) under the simplifying assumption that annual (or other long-term) average emissions are inversely proportional to the frequency of measurable (> 0.254 mm [0.01 inch]) precipitation by application of a precipitation correction term. The precipitation correction term can be applied on a daily or an hourly basis [26].

For the daily basis, Equation 1 becomes:

$$E_{ext} = \left[k \left(\frac{sL}{2} \right)^{0.65} \left(\frac{W}{3} \right)^{1.5} - C \right] \left(1 - \frac{P}{4N} \right) \qquad (2)$$

where *k*, *sL*, *W*, *and C* are as defined in Equation 1 and

E_{ext} = annual or other long-term average emission factor in the same units as *k*,
P = number of "wet" days with at least 0.254 mm (0.01 in) of precipitation during the averaging period, and
N = number of days in the averaging period (e.g., 365 for annual, 91 for seasonal, 30 for monthly).

Note that the assumption leading to Equation 2 is based on analogy with the approach used to develop long-term average unpaved road emission factors in Section 13.2.2. However, Equation 2 above incorporates an additional factor of "4" in the denominator to account for the fact that paved roads dry more quickly than unpaved roads and that the precipitation may not occur over the complete 24-hour day.

For the hourly basis, equation 1 becomes:

$$E_{ext} = \left[k \left(\frac{sL}{2} \right)^{0.65} \left(\frac{W}{3} \right)^{1.5} - C \right] \left(1 - \frac{1.2P}{N} \right) \qquad (3)$$

where k, sL, and W, and *C* are as defined in Equation 1 and

E_{ext} = annual or other long-term average emission factor in the same units as *k*,
P = number of hours with at least 0.254 mm (0.01 in) of precipitation during the averaging period, and
N = number of hours in the averaging period (e.g., 8760 for annual, 2124 for season 720 for monthly).

Note: In the hourly moisture correction term (1-1.2P/N) for equation 3, the 1.2 multiplier is applied to account for the residual mitigative effect of moisture. For most applications, this equation will produce satisfactory results. However, if the time interval for which the equation is applied is short, e.g., for one hour or one day, the application of this multiplier makes it possible for the moisture correction term to become negative. This will result in calculated negative emissions which is not realistic. Users should expand the time interval to include sufficient “dry” hours such that negative emissions are not calculated. For the special case where this equation is used to calculate emissions on an hour by hour basis, such as would be done in some emissions modeling situations, the moisture correction term should be modified so that the moisture correction “credit” is applied to the first hours following cessation of precipitation. In this special case, it is suggested that this 20% “credit” be applied on a basis of one hour credit for each hour of precipitation up to a maximum of 12 hours.

Note that the assumption leading to Equation 3 is based on analogy with the approach used to develop long-term average unpaved road emission factors in Section 13.2.2.

Figure 13.2.1-2 presents the geographical distribution of "wet" days on an annual basis for the United States. Maps showing this information on a monthly basis are available in the *Climatic Atlas of the United States*[23] . Alternative sources include other Department of Commerce publications (such as local climatological data summaries). The National Climatic Data Center (NCDC) offers several products that provide hourly precipitation data. In particular, NCDC offers *Solar and Meteorological Surface Observation Network 1961-1990* (SAMSON) CD-ROM, which contains 30 years worth of hourly meteorological data for first-order National Weather Service locations. Whatever meteorological data are used, the source of that data and the averaging period should be clearly specified.

It is emphasized that the simple assumption underlying Equations 2 and 3 has not been verified in any rigorous manner. For that reason, the quality ratings for Equations 2 and 3 should be downgraded one letter from the rating that would be applied to Equation 1.

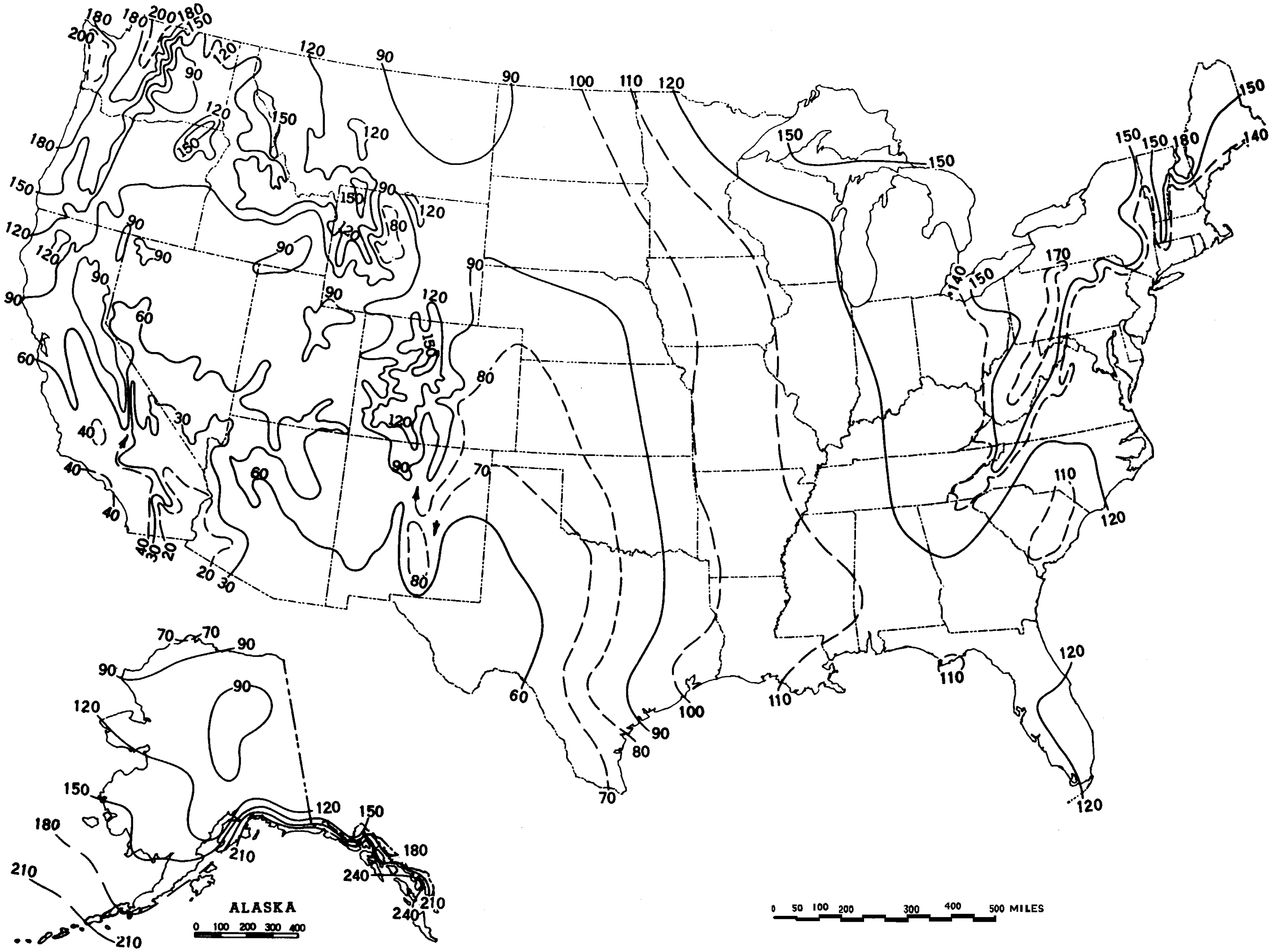

Figure 13.2.1-2. Mean number of days with 0.01 inch or more of precipitation in the United States.

Table 13.2.1-3 presents recommended default silt loadings for normal baseline conditions and for wintertime baseline conditions in areas that experience frozen precipitation with periodic application of antiskid material[24]. The winter baseline is represented as a multiple of the non-winter baseline, depending on the ADT value for the road in question. As shown, a multiplier of 4 is applied for low volume roads (< 500 ADT) to obtain a wintertime baseline silt loading of 4 X 0.6 = 2.4 g/m^2.

Table 13.2.1-3. Ubiquitous Silt Loading Default Values with Hot Spot Contributions from Anti-Skid Abrasives (g/m^2)

ADT Category	< 500	500-5,000	5,000-10,000	> 10,000
Ubiquitous Baseline g/m^2	0.6	0.2	0.06	0.03 0.015 limited access
Ubiquitous Winter Baseline Multiplier during months with frozen precipitation	X4	X3	X2	X1
Initial peak additive contribution from application of antiskid abrasive (g/m^2)	2	2	2	2
Days to return to baseline conditions (assume linear decay)	7	3	1	0.5

It is suggested that an additional (but temporary) silt loading contribution of 2 g/m^2 occurs with each application of antiskid abrasive for snow/ice control. This was determined based on a typical application rate of 500 lb per lane mile and an initial silt content of 1 % silt content. Ordinary rock salt and other chemical deicers add little to the silt loading, because most of the chemical dissolves during the snow/ice melting process.

To adjust the baseline silt loadings for mud/dirt trackout, the number of trackout points is required. It is recommended that in calculating PM-10 emissions, six additional miles of road be added for each active trackout point from an active construction site, to the paved road mileage of the specified category within the county. In calculating PM-2.5 emissions, it is recommended that three additional miles of road be added for each trackout point from an active construction site.

It is suggested the number of trackout points for activities other than road and building construction areas be related to land use. For example, in rural farming areas, each mile of paved road would have a specified number of trackout points at intersections with unpaved roads. This value could be estimated from the unpaved road density (mi/sq. mi.).

The use of a default value from Table 13.2.1-3 should be expected to yield only an order-of-magnitude estimate of the emission factor. Public paved road silt loadings are dependent upon: traffic characteristics (speed, ADT, and fraction of heavy vehicles); road characteristics (curbs, number of lanes, parking lanes); local land use (agriculture, new residential construction) and regional/seasonal factors (snow/ice controls, wind blown dust). As a result, the collection and use of site-specific silt loading data is highly recommended. In the event that default silt loading values are used, the quality ratings for the equation should be downgraded 2 levels.

Limited access roadways pose severe logistical difficulties in terms of surface sampling, and few silt loading data are available for such roads. Nevertheless, the available data do not suggest great variation in silt loading for limited access roadways from one part of the country to another. For annual conditions, a default value of 0.015 g/m^2 is recommended for limited access roadways.[9,22] Even fewer of the available data correspond to worst-case situations, and elevated loadings are observed to be quickly depleted because of high traffic speeds and high ADT rates. A default value of 0.2 g/m^2 is recommended for short periods of time following application of snow/ice controls to limited access roads.[22]

The limited data on silt loading values for industrial roads have shown as much variability as public roads. Because of the variations of traffic conditions and the use of preventive mitigative controls, the data probably do not reflect the full extent of the potential variation in silt loading on industrial roads. However, the collection of site specific silt loading data from industrial roads is easier and safer than for public roads. Therefore, the collection and use of site-specific silt loading data is preferred and is highly recommended. In the event that site-specific values cannot be obtained, an appropriate value for an industrial road may be selected from the mean values given in Table 13.2.1-4, but the quality rating of the equation should be reduced by 2 levels.

Table 13.2.1-4 (Metric And English Units). TYPICAL SILT CONTENT AND LOADING VALUES FOR PAVED ROADS AT INDUSTRIAL FACILITIES [a]

Industry	No. Of Sites	No. Of Samples	Silt Content (%)		No. Of Travel Lanes	Total Loading x 10^{-3}			Silt Loading (g/m^2)	
			Range	Mean		Range	Mean	Units[b]	Range	Mean
Copper smelting	1	3	15.4-21.7	19.0	2	12.9-19.5 45.8-69.2	15.9 55.4	kg/km lb/mi	188-400	292
Iron and steel production	9	48	1.1-35.7	12.5	2	0.006-4.77 0.020-16.9	0.495 1.75	kg/km lb/mi	0.09-79	9.7
Asphalt batching	1	3	2.6-4.6	3.3	1	12.1-18.0 43.0-64.0	14.9 52.8	kg/km lb/mi	76-193	120
Concrete batching	1	3	5.2-6.0	5.5	2	1.4-1.8 5.0-6.4	1.7 5.9	kg/km lb/mi	11-12	12
Sand and gravel processing	1	3	6.4-7.9	7.1	1	2.8-5.5 9.9-19.4	3.8 13.3	kg/km lb/mi	53-95	70
Municipal solid waste landfill	2	7	—	—	2	—	—	—	1.1-32.0	7.4
Quarry	1	6	—	—	2	—	—	—	2.4-14	8.2

[a] References 1-2,5-6,11-13. Values represent samples collected from *industrial* roads. Public road silt loading values are presented in Table-13.2.1-2. Dashes indicate information not available.

[b] Multiply entries by 1000 to obtain stated units; kilograms per kilometer (kg/km) and pounds per mile (lb/mi).

13.2.1.4 Controls[6,25]

Because of the importance of the silt loading, control techniques for paved roads attempt either to prevent material from being deposited onto the surface (preventive controls) or to remove from the travel lanes any material that has been deposited (mitigative controls). Covering of loads in trucks, and the paving of access areas to unpaved lots or construction sites, are examples of preventive measures. Examples of mitigative controls include vacuum sweeping, water flushing, and broom sweeping and flushing. Actual control efficiencies for any of these techniques can be highly variable. Locally measured silt loadings before and after the application of controls is the preferred method to evaluate controls. It is particularly important to note that street sweeping of gutters and curb areas may actually increase the silt loading on the traveled portion of the road. Redistribution of loose material onto the travel lanes will actually produce a short-term increase in the emissions.

In general, preventive controls are usually more cost effective than mitigative controls. The cost-effectiveness of mitigative controls falls off dramatically as the size of an area to be treated increases. The cost-effectiveness of mitigative measures is also unfavorable if only a short period of time is required for the road to return to equilibrium silt loading condition. That is to say, the number and length of public roads within most areas of interest preclude any widespread and routine use of mitigative controls. On the other hand, because of the more limited scope of roads at an industrial site, mitigative measures may be used quite successfully (especially in situations where truck spillage occurs). Note, however, that public agencies could make effective use of mitigative controls to remove sand/salt from roads after the winter ends.

Because available controls will affect the silt loading, controlled emission factors may be obtained by substituting controlled silt loading values into the equation. (Emission factors from controlled industrial roads were used in the development of the equation.) The collection of surface loading samples from treated, as well as baseline (untreated), roads provides a means to track effectiveness of the controls over time.

13.2.1.5 Changes since Fifth Edition

The following changes were made since the publication of the Fifth Edition of AP-42:

1) The particle size multiplier was reduced by approximately 55% as a result of emission testing specifically to evaluate the PM-2.5 component of the emissions.

2) Default silt loading values were included in Table 13.2.1-2 replacing the Tables and Figures containing silt loading statistical information.

3) Editorial changes within the text were made indicating the possible causes of variations in the silt loading between roads within and among different locations. The uncertainty of using the default silt loading value was discussed.

4) Section 13.2.1.1 was revised to clarify the role of dust loading in resuspension. Additional minor text changes were made.

5) Equations 2 and 3, Figure 13.2.1-2, and text were added to incorporate natural mitigation into annual or other long-term average emission factors.

6) The emission factor equation was adjusted to remove the component of particulate emissions from exhaust, brake wear, and tire wear. The parameter *C* in the new equation varies with aerodynamic size range of the particulate matter. Table 13.2.1-2 was added to present the new coefficients.

7) The default silt loading values in Table 13.2.1-3 were revised to incorporate the results from a recent analysis of silt loading data.

8) The PM-2.5 particle size multiplier was reduced by 40% as the result of wind tunnel studies of a variety of dust emitting surface materials.

9) References were rearranged and renumbered.

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27. EPA, 2002b. MOBILE6 User Guide, United States Environmental Protection Agency, Office of Transportation and Air Quality. EPA420-R-02-028, October 2002.

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PM10 and PM2.5 Re-entrained Dust Calculation Worksheet

Re-entrained Fugitive Dust Analysis

Pollutant	Variables					Emissions Factor
	k	sL	W	P	N	E
PM_{10}	0.016	0.02	2.4	40	365	0.0005581
$PM_{2.5}$	0.0024	0.02	2.4	40	365	0.0000837

E = particulate emission factor (lbs of particulate matter/VMT)
k = particle size multiplier (lb/VMT)
sL = roadway silt loading (g/m2)
W = average weight of vehicles on the road (tons)
P = number of wet days with at least 0.254mm of precipitation
N = number of days in the averaging period

Build Alternative	Year 2033 VMT	Tons/Year Emissions	
		PM_{10}	$PM_{2.5}$
No-Build	139,325	0.04	0.01
Build Alts. A-E	139,325	0.04	0.01

VMT = Project Alignment Length (1.5 miles) X AADT (92,883)

ARB Fact Sheet - California's Process to Reduce Health Risks Posed by Toxic Air Contaminant Emissions from Diesel-fueled Engines

California's Process to Reduce Health Risks Posed by Toxic Air Contaminant Emissions from Diesel-fueled Engines

The Air Resources Board (ARB) establishes control measures to protect the public's health from exposure to toxic air contaminants (TACs), those air pollutants that may cause or contribute to an increase in death or serious illness.

The Process

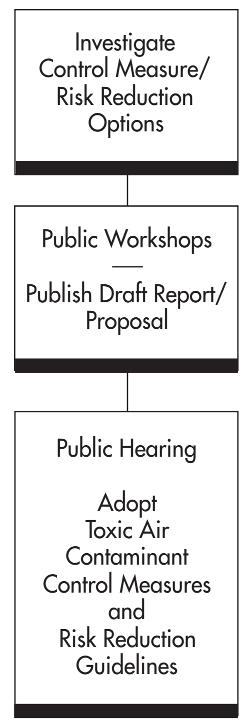
Once a substance has been identified as a TAC, actions to reduce risk are instituted. This is referred to as risk management.

During this phase, the ARB, in consultation with the local air districts, affected industries, and the public, determines if any further regulatory actions are needed to protect the public from exposures to an identified TAC. The first step is to prepare a report on the need and appropriate degree of control (the "needs assessment") for the TAC. This report is required by law and must include the following information:

- present and potential future emissions and associated risks;
- physical and chemical characteristics of the TAC in ambient air;
- number and categories of emission sources;
- available control technologies;
- costs for reducing emissions;
- alternative sources of emission reductions;
- the potential adverse health, safety, or environmental impacts associated with the implementation of a control measure; and
- consideration of all past and current measures that affect exposure.

Based on this report, if cost effective measures are identified that will reduce public exposure, then specific control measures are developed in a full and open public process.

Risk Management Process



In the case of TAC emissions from diesel-fueled engines (particulate matter or organic gases), staff in conducting this needs assessment will not be considering a ban on the use of diesel fuel or diesel engines. Rather, staff will focus on technological opportunities, beyond those already in place, to reduce further public exposures to TAC emissions from diesel-fueled engines.

Advisory Committee

To ensure full opportunity for public consultation and participation in the needs assessment process, ARB staff invited interested industries, associations, environmental groups, other governmental agencies such as the U.S. Environmental Protection Agency, local air districts, and other interested parties to serve on an advisory committee to address TACs from diesel-fueled engines (**Advisory Committee**).

The Advisory Committee serves as a forum for on-going communication, cooperation, and coordination in the identification of additional opportunities to reduce further TAC emissions from diesel-fueled engines.

Existing Control Measures

The Board has already adopted many regulations that reduce particulate matter, nitrogen oxides (NOx), and sulfur oxides (SOx) emissions from diesel-fueled engines. These include:

- a requirement for low sulfur/low aromatic diesel fuel that reduces particulate matter, NOx, and SOx emissions (October 1993);
- emission standards that restrict the amount of particulate matter emitted by new diesel cars, trucks, urban buses, and heavy-duty trucks (phased-in from 1982 through 1996);
- emission standards for NOx emissions from diesel cars, trucks, and urban buses (phased in from 1984 through 2004);
- the roadside testing of heavy-duty on-road vehicles for excessive particulate matter emissions (1991) and a requirement for fleet inspection and maintenance of heavy-duty vehicles (summer 1998); and
- emission standards that restrict the amount of particulate matter and NOx that can be emitted from many 1995 and newer diesel utility engines.

Planned Control Measures

- requirement to use low sulfur/low aromatic diesel fuel in locomotives.
- $25 million incentive program (the Moyer Program) to reduce TAC emissions from heavy-duty diesel-fueled engines by providing grants for the incremental cost of lower-emission engines.

Possible Future Control Measures

If, after considering existing and planned programs, cost effective additional measures are identified to reduce further public exposure to TAC emissions from diesel-fueled engines, such measures will be developed in a public process that allows for full participation by all interested parties. Additional strategies that may be considered during the needs assessment include:

- reducing emissions from new diesel-fueled engines;
  - NOx and PM standards for on-road diesel-fueled engines
  - PM standards for cars and light-duty trucks
  - PM standards for off-road diesel-fueled engines
  - further diesel fuel reformulation
- maintaining low emissions in-use;
  - educational programs for truck owners and operators, service technicians, and engine mechanics
  - additional in-use compliance programs to include testing and recall of heavy-duty trucks
- and incentive programs such as accelerated turnover of in-use equipment and greater use of alternative fuel technologies.
  - early introduction of cleaner engines through economic incentives
  - alternative fuel engine introduction, such as liquefied or compressed natural gas-powered heavy-duty engines

Again, a ban on diesel fuel or diesel engines would not be considered.

For more information on TAC emissions from diesel-fueled engines, call the ARB Public Information Office at (916) 322-2990 or check ARB's web site at http://www.arb.ca.gov.

PM Conformity Determination

- **TCWG Determination Webpage Printout**
- **Completed PM Hot Spot Interagency Review Form**

TCWG Project-Level PM Hot Spot Analysis Project Lists

Review of PM Hot Spot Interagency Review Forms

December 2008	Determination
LA990351 - SR2 Terminus	Not a POAQC - Hot Spot analysis not required.

RTIP ID# *(required)*: LA990351

TCWG Consideration Date: December 2008

Project Description *(clearly describe project)*

The Los Angeles County Metropolitan Transportation Authority (Metro) in cooperation with the California Department of Transportation (Department) and City of Los Angeles Department of Transportation (LADOT) propose to modify the southern Terminus of State Route 2 (SR-2) from Branden Street (PM 13.5) to Oak Glen Place (PM 15.0) in the City and County of Los Angeles. A regional location map and project vicinity map are provided in Figure 1 and Figure 2, respectively. Five build alternatives have been proposed, which are described below:

- Alternative A (Widen Existing Ramps, Maintaining Bridge) – This alternative would widen the existing southbound exit ramp from two to three lanes and widen the existing northbound entrance ramp from two to three lanes. It would also maintain the southbound flyover ramp (two lanes). This alternative does not have any potential for new open space (Figure 3).
- Alternative B (Realign Ramp East, Removing Bridge) – This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain two on-ramp lanes. It would also remove the southbound flyover ramp and part of the bridge. This alternative offers the potential for new open space (Figure 4).
- Alternative C (Realign Ramps East, Removing Bridge) – This alternative would shift the entrance and exit ramps to the east. It would reduce the number of freeway off-ramp lanes from four to three and maintain two on-ramp lanes. It would remove the southbound flyover ramp and bridge. This alternative offers the potential for new open space (Figure 5).
- Alternative D (Realign Ramps East, Maintaining Bridge) – This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. The existing retaining wall and associated landscaping along Allesandro Street would remain unchanged (Figure 6).
- Alternative E (Realign Ramps East, Retain Bridge and Flyover, Relocate Retaining Wall) – This alternative would shift the exit ramps to the east and modify the existing flyover structure and bridge, converting it to open space. It would also reduce the number of freeway off-ramp lanes from four to three and maintain the two on-ramp lanes. The existing retaining wall along Allesandro Street would be relocated to the east (Figure 7).

Type of *Project* *(use Table 1 on instruction sheet)*: Change to existing state highway

County	**Narrative Location/Route & Postmiles:**
Los Angeles	Project is located on SR-2 between Branden Street (PM 13.5) and Oak Glen Place (PM 15.0) within the City of Los Angeles. See Figure 1 (Regional Location Map) and Figure 2 (Project Vicinity Map) attached. Caltrans Projects – EA# 20550

Lead Agency: California Department of Transportation (Caltrans)

Contact Person	**Phone#**	**Fax#**	**Email**
Andrew Yoon	213-897-6117		andrew.yoon@dot.ca.gov

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 X** **PM10 X**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

	Categorical Exclusion (NEPA)	X	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**

Scheduled Date of Federal Action:

NEPA Delegation – Project Type *(check appropriate box)*

Exempt	**Section 6004 – Categorical Exemption**	X	**Section 6005 – Non-Categorical Exemption**

Current Programming Dates *(as appropriate)*

	PE/Environmental	ENG	ROW	CON
Start	March 2006	September 2009	October 2009	January 2012
End	July 2009	April 2011	June 2011	April 2013

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

The City of Los Angeles is experiencing continued growth. This segment of SR-2 provides ingress and egress to the densely populated communities of Echo Park and Silver Lake and is a major thoroughfare for the surrounding area. This segment of SR-2 also provides a vital link for commuters traveling from communities in the northern and eastern parts of the Los Angeles Basin to downtown Los Angeles.

The current SR-2 terminus configuration has several limitations associated with its layout. The southbound exit ramp and southbound direct connector interrupt Glendale Boulevard traffic flows in two locations, at Waterloo/Fargo Street and then again near Allesandro Street. Because the northbound lanes consist of a northbound Glendale Boulevard, a northbound freeway entrance ramp and a center “choice” lane; weaving maneuvers are required between Allesandro Street and the terminus. Pedestrians and bicycles are not well accommodated by existing facilities in the vicinity of the freeway terminus.

Traffic flow during peak hours in the project area is severely impeded due to the existing configuration of the SR-2 terminus, and during off-peak periods, the southbound direct connector traffic often merges onto southbound Glendale Boulevard at a high rate of speed.

The purpose of the project was developed by the Department, Metro, and LADOT, with the cooperation of members of the community. The purposes, or objectives, of the project are to:

1. Better manage traffic flow at the terminus;
2. Enhance vehicular and pedestrian accessibility and safety in the vicinity of the SR-2 terminus;
3. Create the opportunity for additional space in the vicinity of the SR-2 terminus; and
4. Develop a freeway terminus design that is compatible with existing residential and commercial uses in the immediate vicinity.

The proposed improvements that have been identified to address the project purpose and need have independent utility and logical termini.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The study area is highly developed with predominantly residential uses (see Figure 8, Existing Land Use). Adjacent land uses on either side of the right-of-way consist of multiple-family and low-density residences, apartment complexes, commercial buildings, a park, and public facilities.

The area is primarily a mix of single- and multi-family residential units. St. Teresa’s Church and School are located in the immediate vicinity of the SR-2 terminus. The nearest commercial areas are along Glendale Boulevard. No businesses or industrial areas are present in the immediate vicinity of the proposed project improvements.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Opening Year 2013 Traffic Volumes [a]		
	No Build	Build
SR-2 Segment PM13.592/14.213		
AM Peak-hour LOS (E/W)	A/A	A/A
PM Peak-hour LOS (E/W)	C/A	C/A
AADT	76,122	76,112
Truck Percentage of AADT	3.7%	3.7%
Truck AADT	2,816	2,816
SR-2 Segment PM14.213/15.143		
AM Peak-hour LOS (E/W)	A/A	A/A
PM Peak-hour LOS (E/W)	B/A	B/A
AADT	64,328	64,328
Truck Percentage of AADT	3.7%	3.7%
Truck AADT	2,380	2,380

[a] Year 2013 traffic volumes forecasted by growing the year 2006 traffic volumes by an annual growth factor of 1 percent. No-build and Build traffic volumes are the same because the proposed project would not add capacity to the SR-2 project limits.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Horizon Year 2033 Traffic Volumes [b]		
	No Build	Build
SR-2 Segment PM13.592/14.213		
AM Peak-hour LOS (E/W)	B/A	B/A
PM Peak-hour LOS (E/W)	E/A	E/A
AADT	92,883	92,883
Truck Percentage of AADT	3.7%	3.7%
Truck AADT	3,437	3,437
SR-2 Segment PM14.213/15.143		
AM Peak-hour LOS (E/W)	A/A	A/A
PM Peak-hour LOS (E/W)	C/A	C/A
AADT	78,493	78,493
Truck Percentage of AADT	3.7%	3.7%
Truck AADT	2,904	2,904

[b] Year 2033 traffic volumes forecasted by growing the year 2006 traffic volumes by an annual growth factor of 1 percent. No-build and Build traffic volumes are the same because the proposed project would not add capacity to the SR-2 project limits.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Year 2013 Traffic Volumes

Roadway Segment	No Build			Alternative A			Alternatives B – E		
	AADT	Truck %	Truck AADT	AADT	Truck %	Truck AADT	AADT	Truck %	Truck AADT
NB On-ramp	21,693	3.7%	803	21,693	3.7%	803	21,693	3.7%	803
SB Off-ramp	21,918	3.7%	811	21,918	3.7%	811	21,918	3.7%	811
Glendale Bl NB	24,365	3.7%	901	24,365	3.7%	901	25,670	3.7%	950
Glendale Bl SB	25,694	3.7%	951	25,694	3.7%	951	26,955	3.7%	997

Note: AADT traffic numbers derived making the following adjustments to the horizon year peak-hour intersection volumes provided in the project traffic study (Fehr & Peers/Kaku Associates, September 2008):

1. Annual growth factor of 1% compounded over 17 years (18.43% total) was subtracted from year 2030/33 traffic volumes.
2. Adjusted peak-hour AM and PM volumes were added together and multiplied by 5 to ascertain an estimate of AADT traffic volumes.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Year 2033 Traffic Volumes

Roadway Segment	No Build			Alternative A			Alternatives B – E		
	AADT	Truck %	Truck AADT	AADT	Truck %	Truck AADT	AADT	Truck %	Truck AADT
NB On-ramp	26,595	3.7%	984	26,595	3.7%	984	26,595	3.7%	984
SB Off-ramp	26,870	3.7%	994	26,870	3.7%	994	26,870	3.7%	994
Glendale Bl NB	29,870	3.7%	1,105	29,870	3.7%	1,105	31,470	3.7%	1,164
Glendale Bl SB	31,500	3.7%	1,166	31,500	3.7%	1,166	33,045	3.7%	1,223

Note: AADT traffic numbers derived adding the peak-hour AM and PM together and multiplying by 5 to ascertain an estimate of AADT traffic volumes.

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

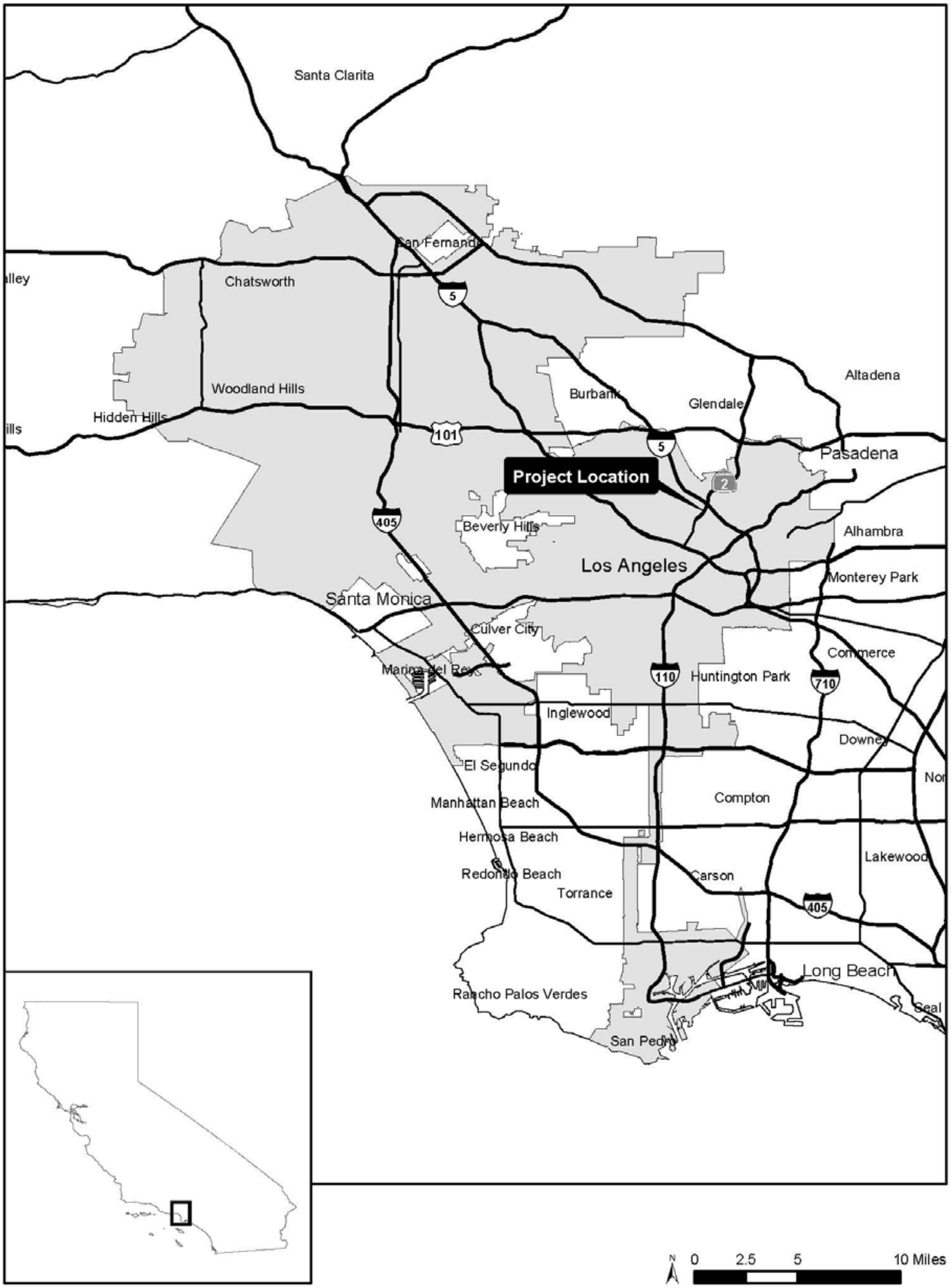
The proposed project is a freeway terminus modification intended better manage traffic flow and enhance pedestrian mobility and safety. The goal is not to increase capacity. No meaningful traffic redistribution effects are anticipated.

Comments/Explanation/Details *(attach additional sheets as necessary)*

The EPA's March 2006 guidance document *Transportation Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas* references a two step criteria to identify "a significant volume of diesel truck traffic." The first criterion is facilities with greater than 125,000 AADT volumes. If the first criterion is met, the second criterion is that 8 percent or more of said traffic volumes (i.e., 10,000 vehicles or more) are diesel truck traffic volumes. With respect to traffic volumes along the project limits of SR-2, both opening year (2013) and horizon year (2033) AADT volumes are forecast to be below the above-mentioned screening-level threshold criteria of 125,000 total AADT traffic volumes. As such, the project does not have potential to result in a substantial number of diesel vehicles within the project area (i.e., the project limits of SR-2).

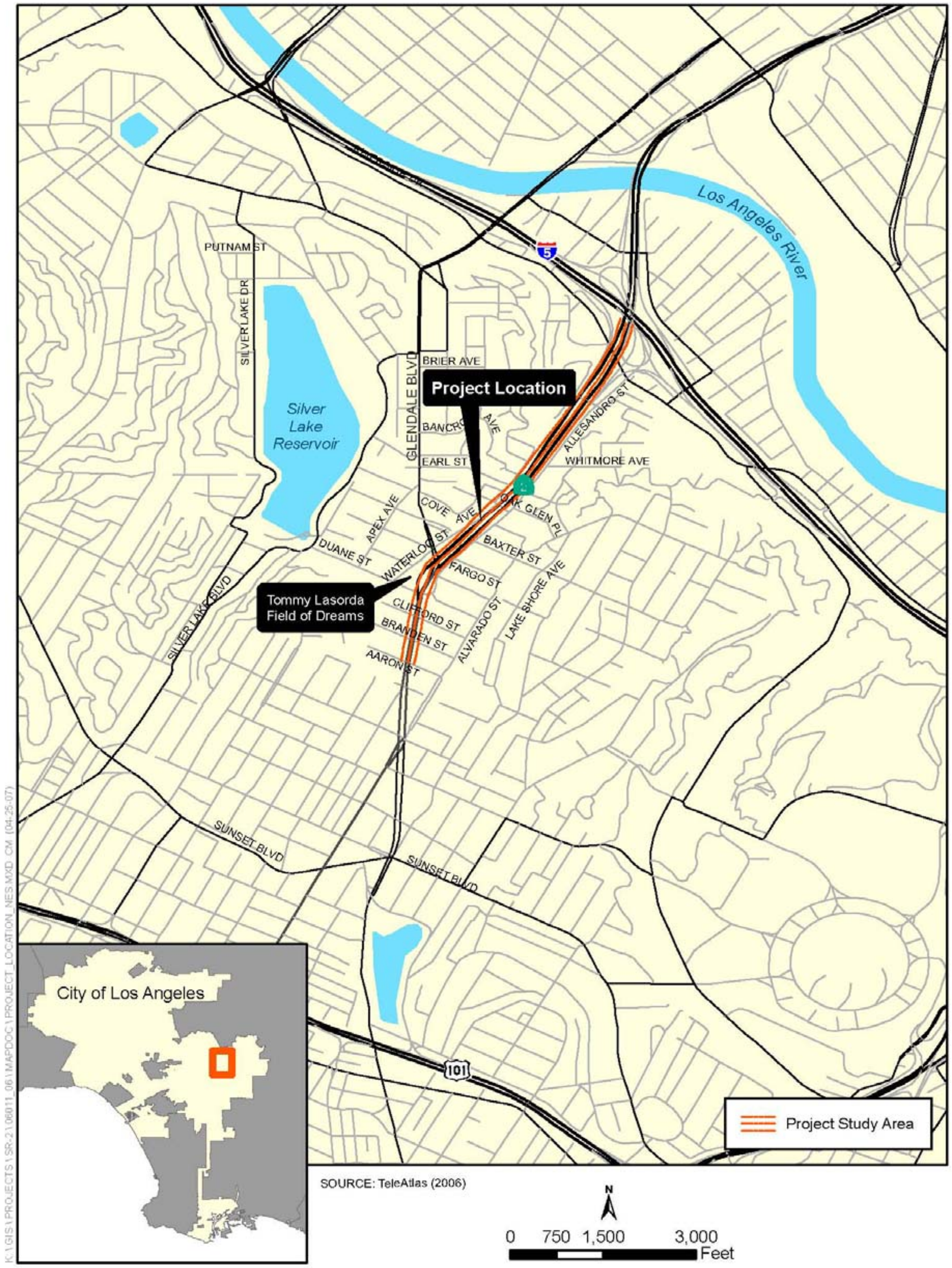
According to the Transportation Conformity Guidance for Qualitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas (page 25), this project is not a project of air quality concern under 40 CFR 93.123(b)(1)(I) and (ii).

Figure 1. Regional Vicinity Map



Source: Jones & Stokes, 2007.

Figure 2. Project Vicinity Map



Source: Jones & Stokes, 2007.

Figure 3. No Build Alternative (Baseline Alternative)

Source: Melendrez, 2006.

Figure 4. Alternative A (Widen Existing Ramps)

Source: Melendrez, 2006.

Figure 5. Alternative B (Realign Ramp East – Remove Flyover and Part of Bridge)

Source: Melendrez, 2006.

Figure 6. Alternative C (Realign Ramps East – Remove Flyover and Bridge)

Source: Melendrez, 2006.

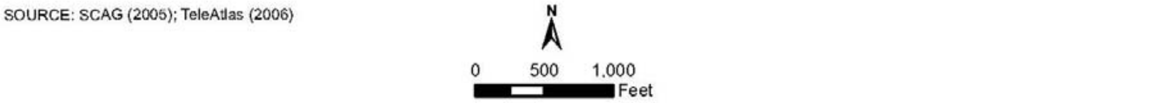
Figure 7. Alternative D (Realign Ramps East – Retain Flyover and Bridge)

Source: Melendrez, 2006.

Figure 8. Alternative E (Realign Ramps East – Retain Flyover and Bridge – Relocate Retaining Wall)

Source: Melendrez, 2006.

Figure 9. Existing Land Use



SOURCE: SCAG (2005); TeleAtlas (2006)