APPENDIX F
Traffic Analysis Report

DRAFT

TRAFFIC ANALYSIS FOR A PROPOSED 29 HOME SINGLE-FAMILY RESIDENTIAL SUBDIVISION (TRACT NO. 44958) ON MOUNTAINGATE DRIVE IN THE SEPULVEDA PASS AREA OF THE CITY OF LOS ANGELES

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November 2000

EXECUTIVE SUMMARY

The project under consideration is a residential subdivision in the Sepulveda Pass area of Los Angeles. The project site is located near the western terminus of Mountaingate Drive, a residential street extending westward from Sepulveda Boulevard. As envisioned, the site would be developed with approximately 29 single-family homes. After the project has been completed, it could generate approximately 309 daily trips, with approximately 24 trips occurring during the AM peak hour and approximately 33 trips occurring during the PM peak hour.

This traffic study shows that project traffic volumes could result in a significant impact at one of the nearby intersections, Sepulveda Boulevard and Mountaingate Drive, during the AM peak hour, prior to mitigation.

The following improvement is recommended to mitigate the project's significant traffic impact:

- Sepulveda Boulevard and Mountaingate Drive -- Stripe the Mountaingate Drive approach to this intersection to provide an exclusive left-turn lane and an exclusive right-turn lane.

Installation of this improvement will reduce the project's traffic impacts to less than significant levels at all area intersections, and no further mitigation is warranted.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

The developer, Castle & Cook, Inc., plans to develop a 29-unit single-family residential subdivision in an already developed portion of the Santa Monica Mountains, west of Sepulveda Boulevard in the Sepulveda Pass area of the City of Los Angeles. The location of the project is shown on Figure 1, Site Vicinity Map. Because of the requirements of the City of Los Angeles, Crain & Associates has been retained to conduct a traffic study to assess the impact of the proposed development on the surrounding street system. This report presents the results of an analysis of existing conditions as well as projected traffic conditions after completion of the project. This analysis incorporates a detailed evaluation of existing and future traffic conditions at the following three study intersections.

- Sepulveda Boulevard and Skirball Center Drive
- Sepulveda Boulevard and Mountaingate Drive
- Sepulveda Boulevard and southbound San Diego Freeway on/off-ramps

These locations are within an area surrounding the project site and include the intersections expected to be most directly impacted by the proposed project's traffic generation. The study intersection locations are shown on Figure 2.

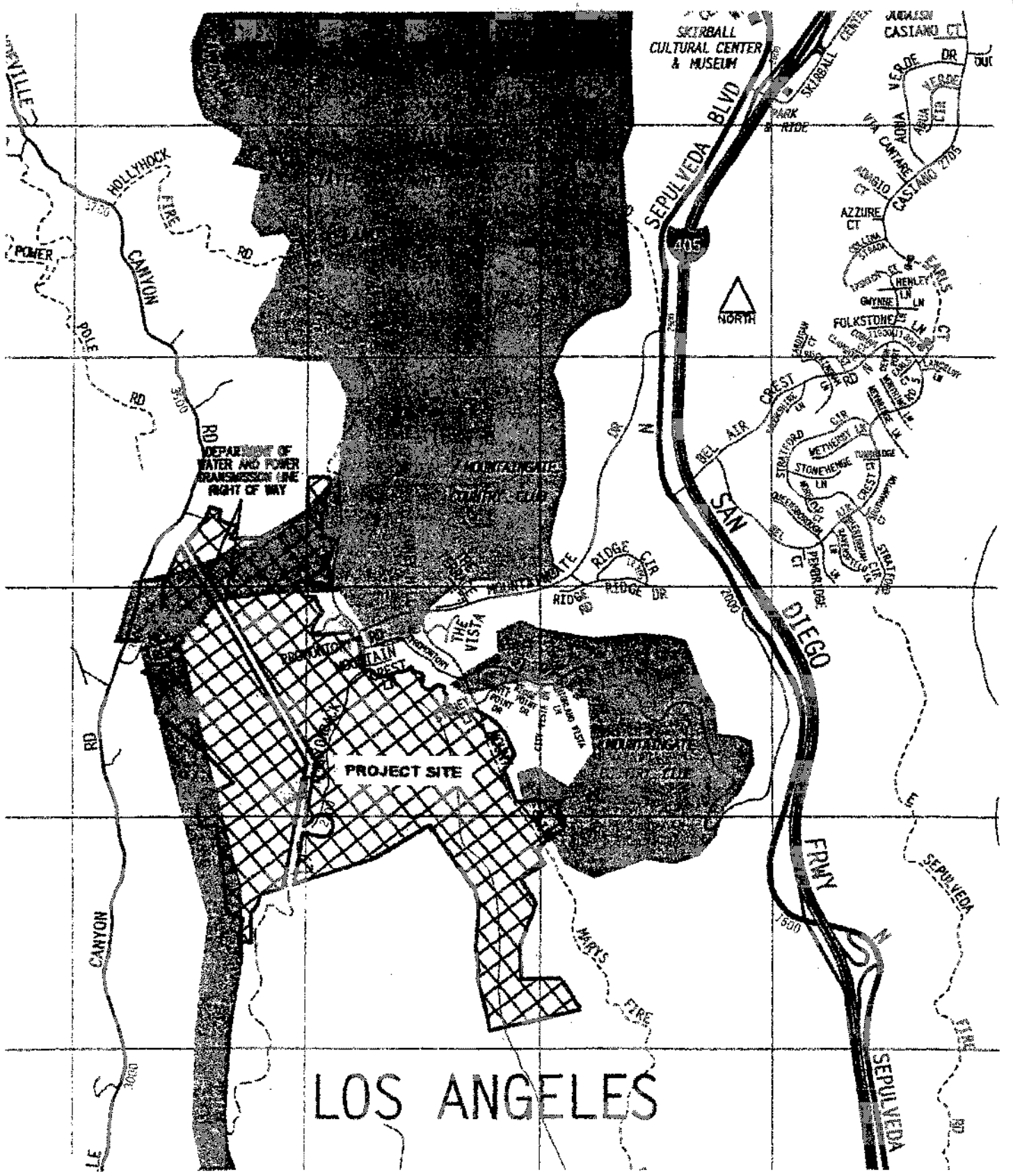

FIGURE 1

SITE VICINITY MAP

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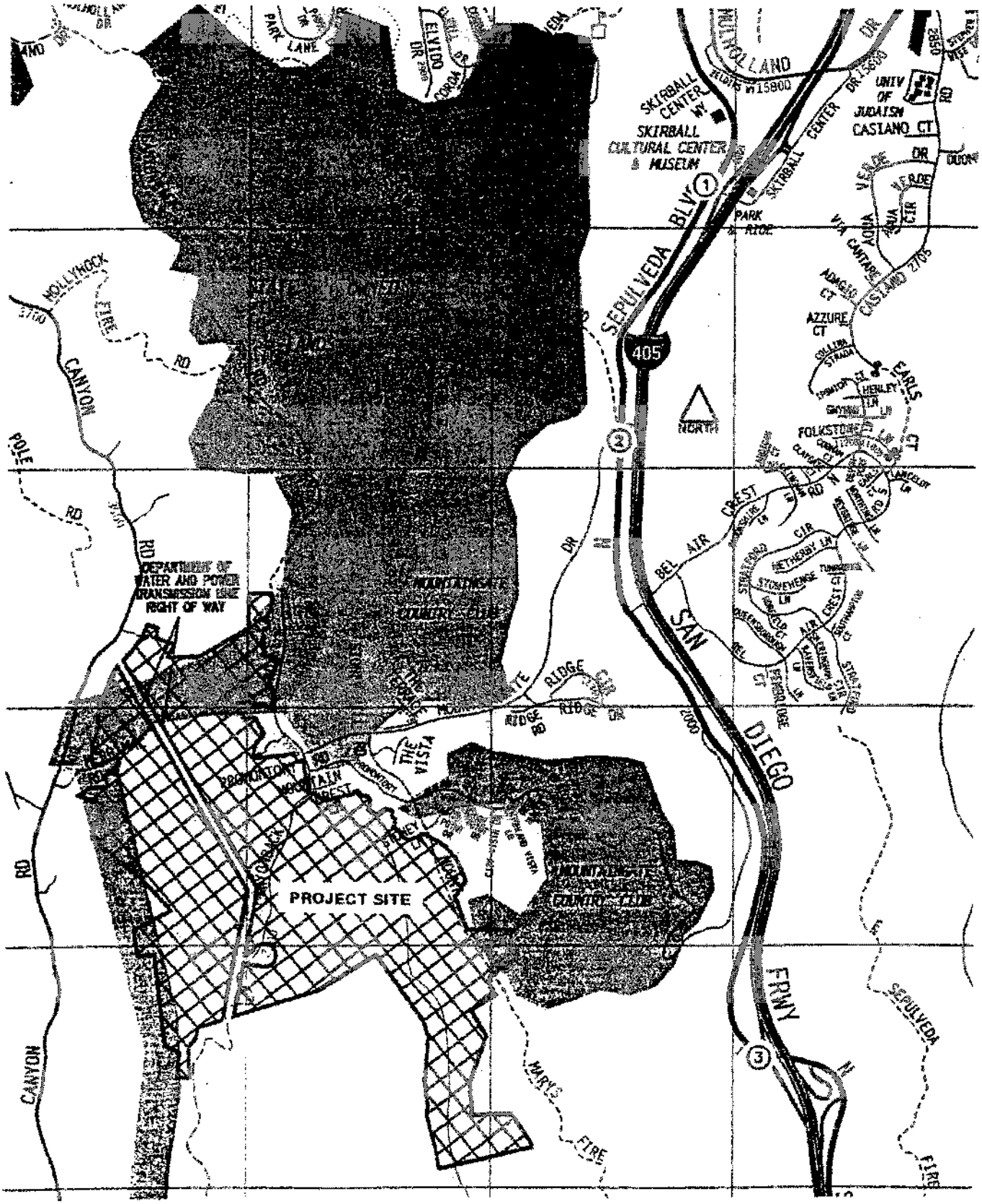

FIGURE 2

STUDY INTERSECTION LOCATIONS MAP

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PROJECT DESCRIPTION

The project under consideration is a proposal to develop an approximately 28.5-acre site (Tract No. 44958) with 29 single-family residential homes near the western terminus of Mountaingate Drive in an already partially developed area of the Sepulveda Pass area of the City of Los Angeles. The project site is located along the south side of Mountaingate Drive, west of Sepulveda Boulevard, as shown in Figure 3.

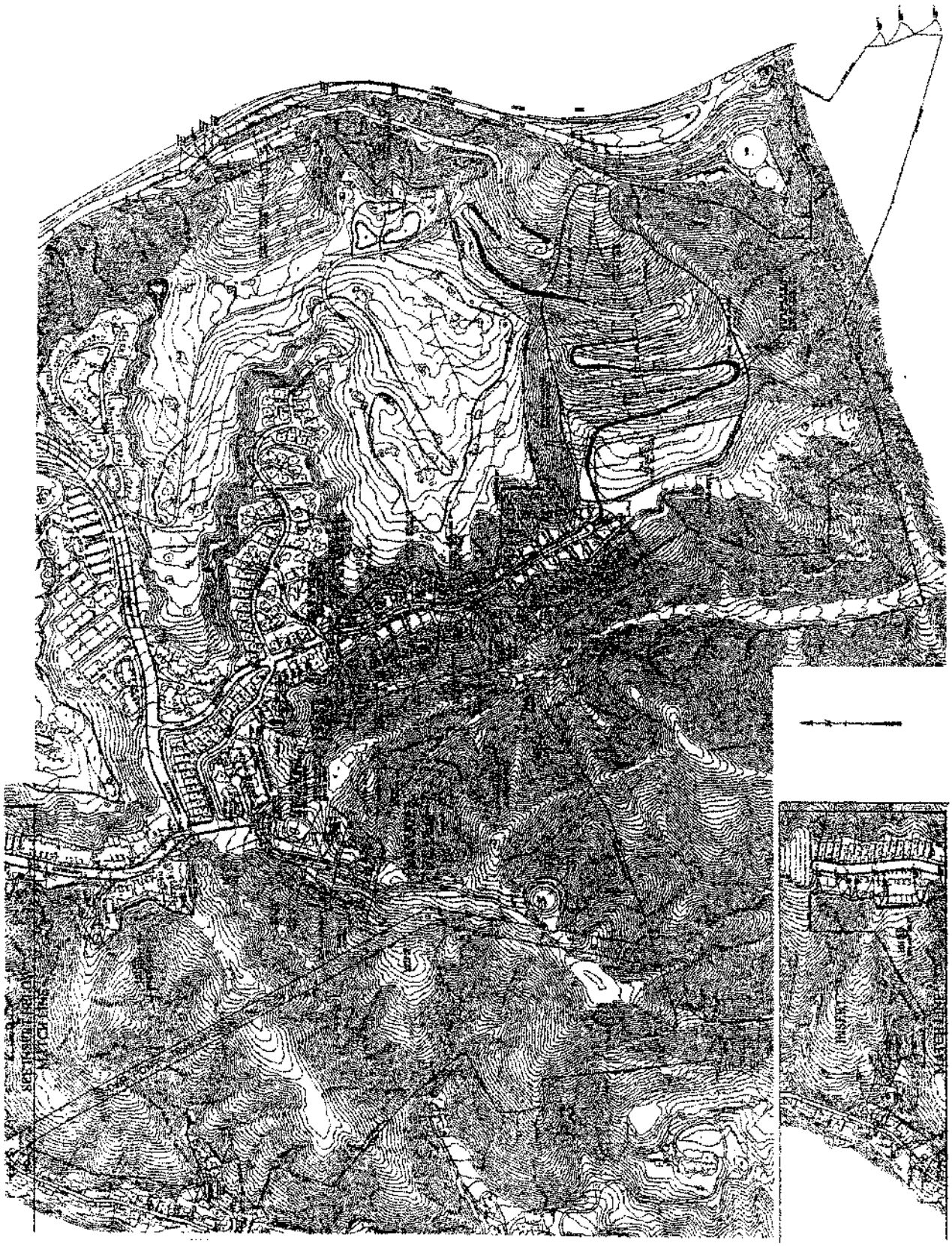

FIGURE 3

SITE PLAN

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ENVIRONMENTAL SETTING

The site of the proposed project is located in the Sepulveda Pass of the Santa Monica Mountains, along Mountaingate Drive west of Sepulveda Boulevard. The project site is approximately 15 miles northwest of Downtown Los Angeles and is situated between the communities of Encino to the north and Bel Air/Brentwood to the south. The site is served by the regional facilities of Sepulveda Boulevard and the San Diego Freeway. The San Diego Freeway (Interstate Route 405) has a complete set of ramps along Skirball Center Drive, approximately one and one-half miles northeast of the site, and another set of ramps approximately one mile south of the project site, north of Getty Center Drive.

The rugged terrain of the Santa Monica Mountains has inhibited nearby development. Much of the area surrounding the project site remains undeveloped, particularly to the west. Some of the canyons to the south have served as refuse/landfill areas, and have recently been capped for recreational land uses. Surrounding areas to the north and east have been and are continuing to be developed as hillside, single-family residential communities. The closest commercial areas that would serve the project site are those situated along Ventura Boulevard in the Encino and Van Nuys areas. The University of California, Los Angeles (UCLA) and Westwood Village are located approximately five miles to the south.

The San Diego Freeway is the most important traffic facility in the area. This freeway traverses north-south across the Santa Monica Mountains, serving San Fernando Valley to the north and West Los Angeles to the south. This freeway also provides access, via the regional freeway system, to all other areas of the Los Angeles region. This route is also an important link to the other parts of California. The San Diego Freeway, in this vicinity, is a nine- or ten-lane facility, depending on the segment, and

currently carries in excess of 280,000 vehicles per day (VPD). The southbound off- and on-ramps intersect Skirball Center Drive just east of Sepulveda Boulevard. Northbound off- and on-ramps intersect Skirball Center Drive approximately 500 feet south of Mulholland Drive. Bus stops and park-and-ride facilities have been developed adjacent to these freeway ramps.

Streets and Highways

Important highway facilities in the area near the proposed project are Sepulveda Boulevard, Mulholland Drive and Skirball Center Drive. Sepulveda Boulevard has been designated a major highway on the General Plan for the City of Los Angeles. Mulholland Drive, which traverses east-west along the crest of the Santa Monica Mountains, has been designated as a scenic parkway facility in the City's General Plan.

Sepulveda Boulevard at Skirball Center Drive is developed to a width of 52 feet, but much of Sepulveda Boulevard, south of the "Pass" tunnel, is 48 feet wide. This section of the highway is striped to provide a four-lane roadway with left-turn channelization (designated or permissive left-turn lanes) at most intersections. The tunnel section of Sepulveda Pass is 36 feet wide and provides three lanes. North of the tunnel, Sepulveda Boulevard gradually flares as it descends into the San Fernando Valley, and ultimately widens to a width of 76 feet at Ventura Boulevard.

Mulholland Drive is a two-lane roadway although some sections are wide enough to permit additional traffic lanes and/or turn-lane channelization. Typical cross-section widths are in the range of 24 to 32 feet. The Mulholland Drive overcrossing at the San Diego Freeway as well as adjacent sections are constructed to a width of 56 feet. Within the wider section, Mulholland Drive at Skirball Center Drive provides both right-turn (eastbound) and left-turn (westbound) channelization. Mulholland Drive provides the closest east-west non-freeway cross mountain link in the project area, connecting to

the Hollywood Freeway (U.S.-101) near Studio City. Additionally, it should be noted that the linkage of Hayvenhurst Avenue with Mulholland Drive, via several narrow, local residential streets including Calneva Drive, has become an important bypass route for area traffic wishing to avoid potential traffic congestion at the interchange of the Ventura and San Diego Freeways.

Skirball Center Drive also varies somewhat in width but functions primarily as a four-lane facility, although at the northbound San Diego Freeway ramps, one of these four lanes becomes a left-turn lane. The widest roadway section is along the overcrossing of the San Diego Freeway where Skirball Center Drive is 56 feet wide. Between the southbound ramps and Sepulveda Boulevard, Skirball Center Drive is 52 feet wide. Between the northbound ramps and Mulholland Drive, Skirball Center Drive narrows to a minimum width of approximately 44 feet. Presently Skirball Center Drive "tees" at both ends, into Sepulveda Boulevard on the south (entrance to the new Hebrew Union Cultural Center) and into Mulholland Drive to the north.

Mountaingate Drive, which will serve as the primary project site access, is designated a scenic secondary highway. This two-lane facility is 80 feet wide with a 16-foot median west of Sepulveda Boulevard. The eastbound approach of Mountaingate Drive at Sepulveda Boulevard provides a 32-foot wide, unstriped roadway.

All of the study intersections are traffic signal-controlled, and exhibit typical 2 or 3 signal phases.

Existing Traffic Volumes

Traffic volume count data were obtained from the Los Angeles Department of Transportation, supplemented by recent counts performed by Crain & Associates. Additionally, San Diego Freeway count data were obtained from the California

Department of Transportation (Caltrans). Existing (2000) traffic volumes during the AM and PM peak periods for the study intersections are summarized on the following pages and are shown on Figures 4(a) and 4(b). Traffic count data sheets for the three intersections are shown in the appendix of this report.

Sepulveda Boulevard is one of the most heavily traveled highways in the area. North of Mulholland Drive, Sepulveda Boulevard carries approximately 21,200 vehicles per day (VPD). South of Skirball Center Drive, Sepulveda Boulevard carries approximately 20,000 VPD. Directional peak hour traffic volumes along Sepulveda Boulevard near Skirball Center Drive are approximately 3,100 vehicles per hour (VPH) southbound during the morning and approximately 1,500 VPH northbound in the afternoon.

Mulholland Drive east of Skirball Center Drive carries approximately 13,300 VPD. Directional peak hour traffic volumes along Mulholland Drive, west of Skirball Center Drive are approximately 1,520 VPH eastbound during the AM peak hour and approximately 900 VPH westbound during the PM peak hour.

Skirball Center Drive south of Mulholland Drive carries a daily traffic volume approaching 16,000 VPD. Directional peak traffic volumes along Skirball Center Drive south of Mulholland Drive approach 1,220 VPH southbound in the morning, and 860 VPH northbound in the afternoon.

Mountaingate Drive west of Sepulveda Boulevard carries an estimated 1,700 VPD, with directional peak hour volumes approaching 150 VPH westbound during the morning peak hour and approximately 120 VPH eastbound during the evening peak hour.

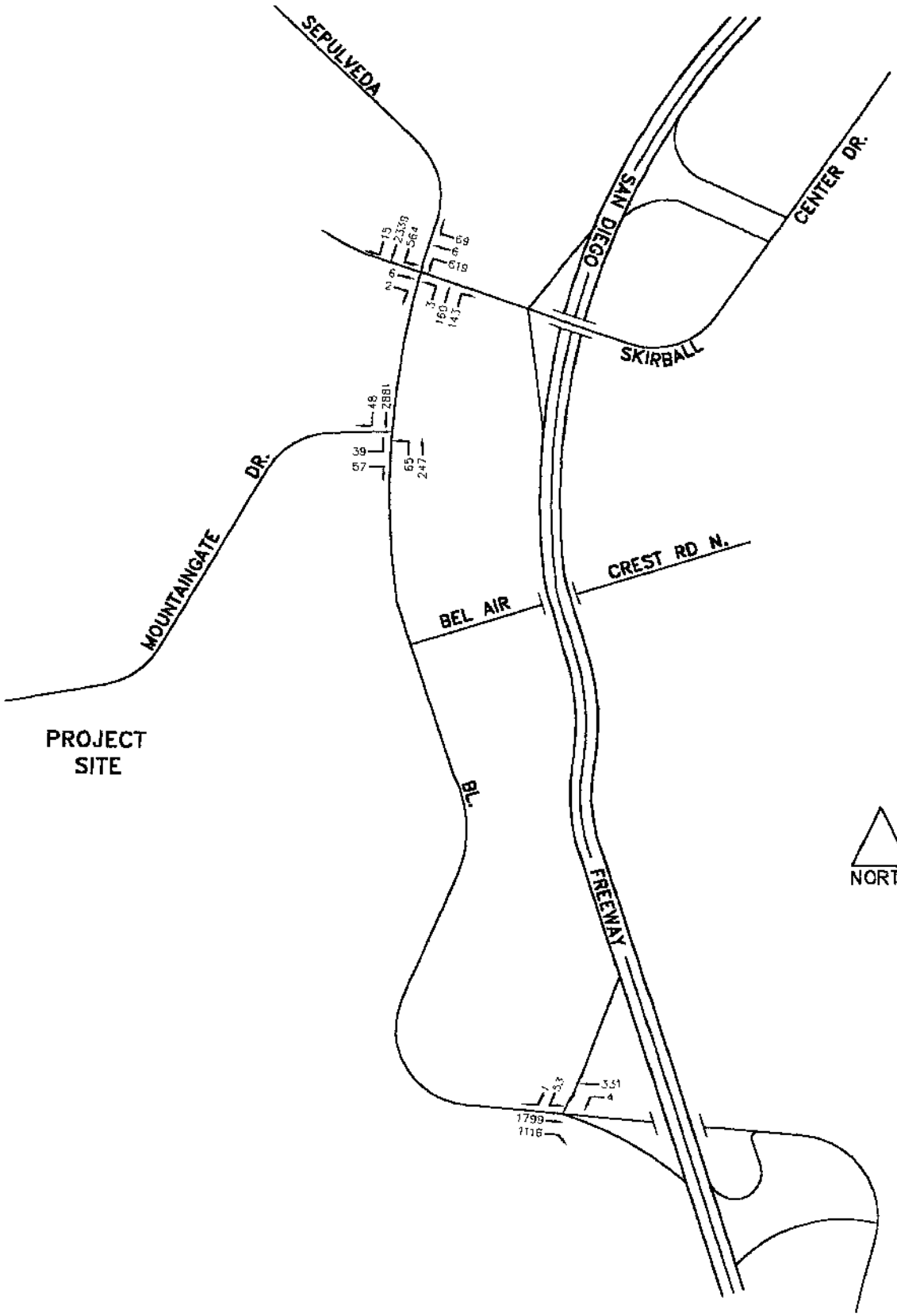

FIGURE 4(a)

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EXISTING (2000) TRAFFIC VOLUMES
AM PEAK HOUR

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Public Transit

The Los Angeles County Metropolitan Transportation Authority (MTA) has established an extensive grid system of bus routes throughout the San Fernando Valley, West Los Angeles and other areas of the Los Angeles region. While these routes typically provide little service in the hillside areas around Los Angeles, there is one bus line that provides service near the project vicinity. The following is a description of the route and service offered by this bus line:

Line 560 -- This bus line provides service between Lakeview Terrace, at the north end of the San Fernando Valley, and Los Angeles International Airport to the south. Primary route segments include Van Nuys Boulevard, the San Diego Freeway and Sepulveda Boulevard. Other areas served by this bus line include Pacoima, Panorama City, Van Nuys, Sherman Oaks, Westwood, UCLA, and Culver City. Although this route utilizes the San Diego Freeway in the vicinity of the project, bus stops have been installed near the freeway ramps at Skirball Center Drive, in conjunction with a park-and-ride facility. Daytime service along this route is provided by two buses per hour. Evening service is also provided by two buses per hour, and in the late evening, one bus per hour operates until 11:00 PM.

When transfer opportunities are considered, all areas within the Los Angeles region are accessible via MTA buses. Thus, it is possible that some of the trips generated by the proposed project could chose to utilize public transit. However, project trip generation documented in this study represents a "more than typical" case, since none of the future project trips were assigned to public transit.

Analysis of Existing Traffic Conditions

An analysis of current traffic conditions was conducted on the streets and highways serving the project area. Detailed traffic analyses of existing conditions were performed for the following three intersections:

- Sepulveda Boulevard and Skirball Center Drive
- Sepulveda Boulevard and Mountaingate Drive
- Sepulveda Boulevard and southbound San Diego Freeway on/off-ramps

The traffic analysis was performed through the use of established traffic engineering techniques. The new traffic counts conducted by Crain & Associates were utilized so as to reflect any recent changes in traffic demand patterns. Other data pertaining to intersection geometrics, parking-related curb restrictions and signal operations were obtained through field surveys of the study locations.

The methodology used in this study for the analysis and evaluation of traffic operations at each study intersection is based on procedures outlined in Circular Number 212 of the Transportation Research Board.[1] In the discussion of Critical Movement Analysis for signalized intersections, procedures have been developed for determining operating characteristics of an intersection in terms of the "Level of Service" provided for different levels of traffic volume and other variables, such as the number of signal phases. The term "Level of Service" describes the quality of traffic flow. Levels of Service A to C operate quite well. Level D typically is the level for which a metropolitan area street system is designed. Level E represents volumes at or near the capacity of the highway which might result in stoppages of momentary duration and fairly unstable flow. Level F

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[1] Interim Materials on Highway Capacity, Circular Number 212, Transportation Research Board, Washington, D.C., 1980.

occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages of long duration.

A determination of the Level of Service at an intersection, where traffic volumes are known or have been projected, can be obtained through a summation of the critical movement volumes at that intersection. Once the sum of critical movement volumes has been obtained, the values indicated in Table 1 can be used to determine the applicable Level of Service.

Table 1
Critical Movement Volume Ranges*
For Determining Levels of Service

Level of Service	Maximum Sum of Critical Volumes (VPH) Two Phase	Three Phase	Four or More Phases
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	----------Not Applicable----------		

* For planning applications only, i.e., not appropriate for operations and design applications.

"Capacity" represents the maximum total hourly vehicle volume movement in the critical lanes which has a reasonable expectation of passing through an intersection under prevailing roadway and traffic conditions. For planning purposes, capacity equates to the maximum value of Level of Service E, as indicated in Table 1. The Critical Movement Analysis (CMA) indices used in this study were calculated by dividing the sum of critical movement volumes by the appropriate capacity value for the type of

signal control present or proposed at the study intersections. Thus, the Level of Service corresponding to a range of CMA values is shown in Table 2.

Table 2
Level of Service
As a Function of CMA Values

Level of Service	Description of Operating Characteristics	Range of CMA Values
A	Uncongested operations; all vehicles clear in a single cycle.	< 0.60
B	Same as above.	>0.60 < 0.70
C	Light congestion; occasional backups on critical approaches.	>0.70 < 0.80
D	Congestion on critical approaches, but intersection functional. Vehicles required to wait through more than one cycle during short peaks. No long-standing lines formed.	>0.80 < 0.90
E	Severe congestion with some long-standing lines on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements.	>0.90 < 1.00
F	Forced flow with stoppages of long duration.	> 1.00

By applying this analysis procedure to the study intersections, the Critical Movement Analysis (CMA) value and the corresponding Levels of Service (LOS) for existing traffic conditions were calculated. Those values, for existing (2000) AM and PM peak hour conditions, are shown in Table 3.

Recent field observation of the study intersections found the calculated service levels to be reasonably accurate during most peak operational periods. However, the volumes along Sepulveda Boulevard do rise dramatically when slowing occurs on the San Diego Freeway. Some minor increases in traffic volumes associated with cross mountain

traffic also occur on Skirball Center Drive and Mulholland Drive during these same critical periods.

Table 3
Summary of Critical Movement Analysis
Existing (2000) Traffic Conditions

Intersection	Peak Hour	Existing CMA	Existing LOS
Sepulveda Boulevard & Skirball Center Drive	AM	1.072	F
	PM	0.862	D
Sepulveda Boulevard & Mountaingate Drive	AM	1.124	F
	PM	0.808	D
Sepulveda Boulevard & northbound San Diego Freeway On/Off-Ramps	AM	0.823	D
	PM	0.860	D

Review of the above values shows that morning peak hour conditions on the Sepulveda Corridor are operating at or above capacity. This is due primarily to San Diego Freeway traffic (southbound) using Sepulveda Boulevard as an alternative route. Afternoon peak hour conditions are better than morning peak hour conditions with all study intersections operating at a level of service "D" along the Sepulveda Corridor.

PROJECT TRAFFIC

The following section describes the methodology used to determine the trip generation, distribution and assignment of the proposed residential project.

Traffic Generation

Traffic-generating characteristics of single-family residence developments have been extensively surveyed under the auspices of the Institute of Transportation Engineers (ITE). These studies are documented in the current 6th edition of the ITE Trip Generation manual,[2] which was used as a basis for the project's trip generation. The basic trip rates are shown below in Table 4.

Table 4
Trip Generation Rates

Single-Family Residence (per dwelling unit)
Daily: T = 9.57(U)
AM Peak Hour: T = 0.75(U); I/B = 25%, O/B = 75%
PM Peak Hour: T = 1.01(U); I/B = 64%, O/B = 36%

T = trip ends; U = dwelling units; I/B = inbound; O/B = outbound

Although not included in the 6th Edition, the 5th Edition of Trip Generation [3] offers adjustments to the standard residential trip rates, to account for such factors as larger or smaller household size, multiple-vehicle ownership, more "service" trips, etcetera. Since the proposed residences are likely to be estate-style homes, it was assumed that the residents would exhibit a more upscale financial profile, which typically translates to smaller family sizes and higher per capita vehicle ownership. Therefore, the adjustments noted in the 5th Edition were deemed appropriate for use, and were incorporated into the

[2] Trip Generation, 5th Edition, Institute of Transportation Engineers, 1997.
[3] Trip Generation, 5th Edition, Institute of Transportation Engineers, 1991.

analysis. The ITE trip adjustments are given only for daily traffic; trip rate adjustments for other analysis periods were calculated on a proportionate basis to the daily trip adjustments.

ITE Daily Trip Generation Adjustment Factors
Residential Developments

	Single Family Homes
Base Daily Trip Rate	9.57
Adjustments	
Household Size (2 to 3)	-1.80
Vehicles Owned (more than 2)	+2.90
Adjusted Daily Trip Rate	10.67

The AM and PM peak hour trip rates were adjusted accordingly for each type of residential unit, using a ratio 10.67/9.57 (1.115), as recommended by ITE. The resulting trip rates were 0.84 per dwelling unit during the AM peak hour and 1.13 per dwelling unit for the PM peak hour. The inbound/outbound trip splits were assumed to remain the same as for the base rates. These adjustments indicate that residences of the type proposed could generate more traffic than an "average" household.

On the basis of the adjusted traffic generation rates, projections of the amount of new traffic to be generated by the proposed project were derived, as indicated in Table 5.

Table 5
Project Trip Generation

Land Uses	Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
29 Single-Family Homes	309	6	18	21	12
		\ /		\ /	
		24		33	

Trip Distribution

Determination of the geographic distribution of generated trips was the next step in the process. A primary factor affecting trip distribution is the relative distribution of employment, educational, and retail centers which would be used by the residents of the project. Another key factor is the availability of roadway access to and from the site. Using data from the Los Angeles Regional Transportation Study (LARTS) forecasts, the current Los Angeles County Congestion Management Plan (CMP) data, and observed vehicular turning movements, trip characteristics were analyzed and percentage trip distributions were developed. The percentage split of trips, by direction, is shown in Table 6.

Table 6
Directional Trip Distribution

Direction	Percentage of Trips
North	20%
East	30%
South	40%
West	10%
Total:	100%

Traffic Assignment

The assignment of project traffic to the street and highway systems was accomplished in two steps. Using the directional distribution percentages for the surface streets developed previously, the number of trips in each direction was calculated. The second step was to assign these trips to specific routes serving the project area. The results of the traffic assignment provide the necessary level of detail to conduct the traffic analysis. The results of the traffic assignments which estimate project AM and PM peak hour traffic on the nearby street system are shown in Figures 5(a) and 5(b), Project Traffic.

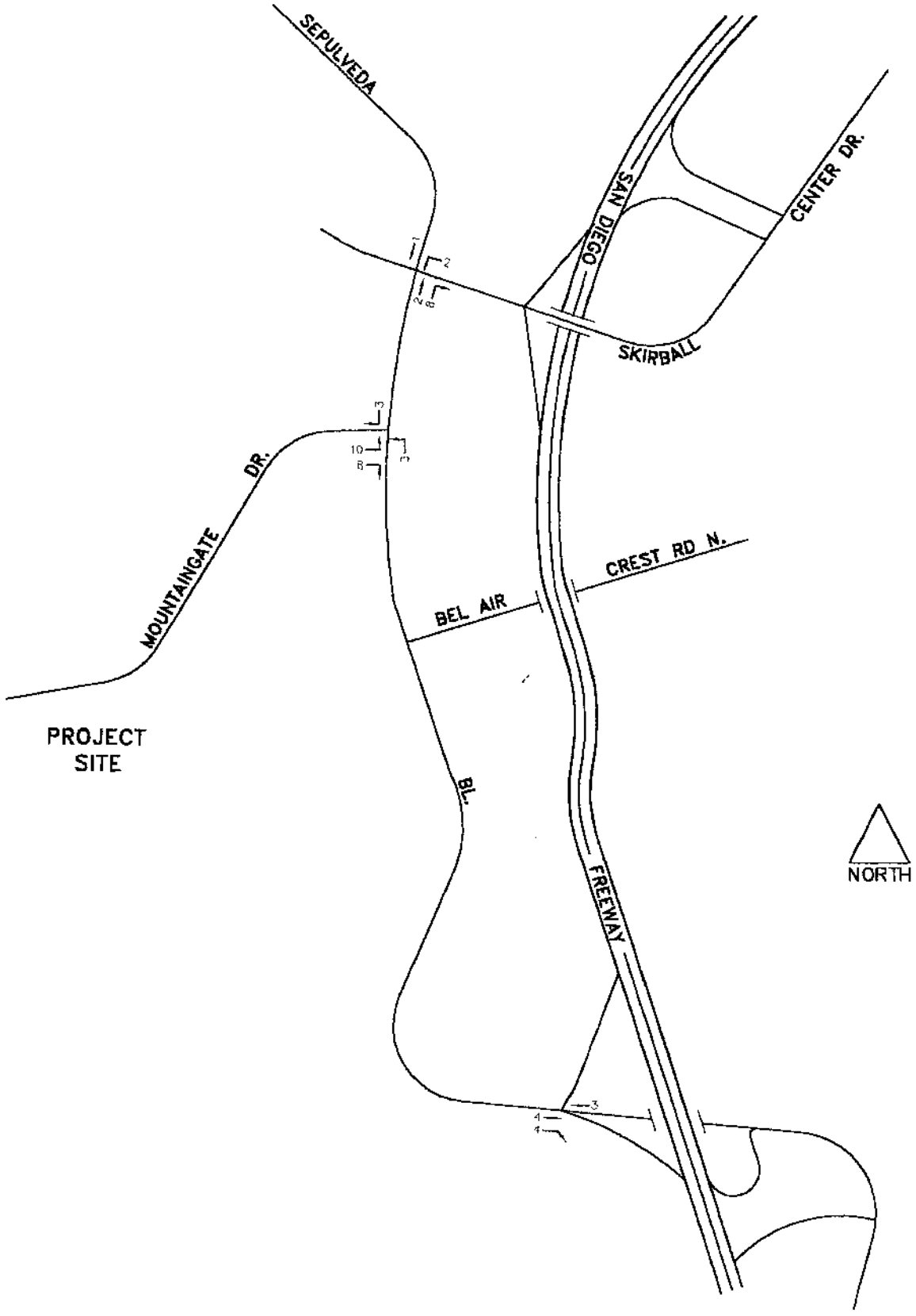

FIGURE 5(a)

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PROJECT TRAFFIC VOLUMES ONLY
AM PEAK HOUR

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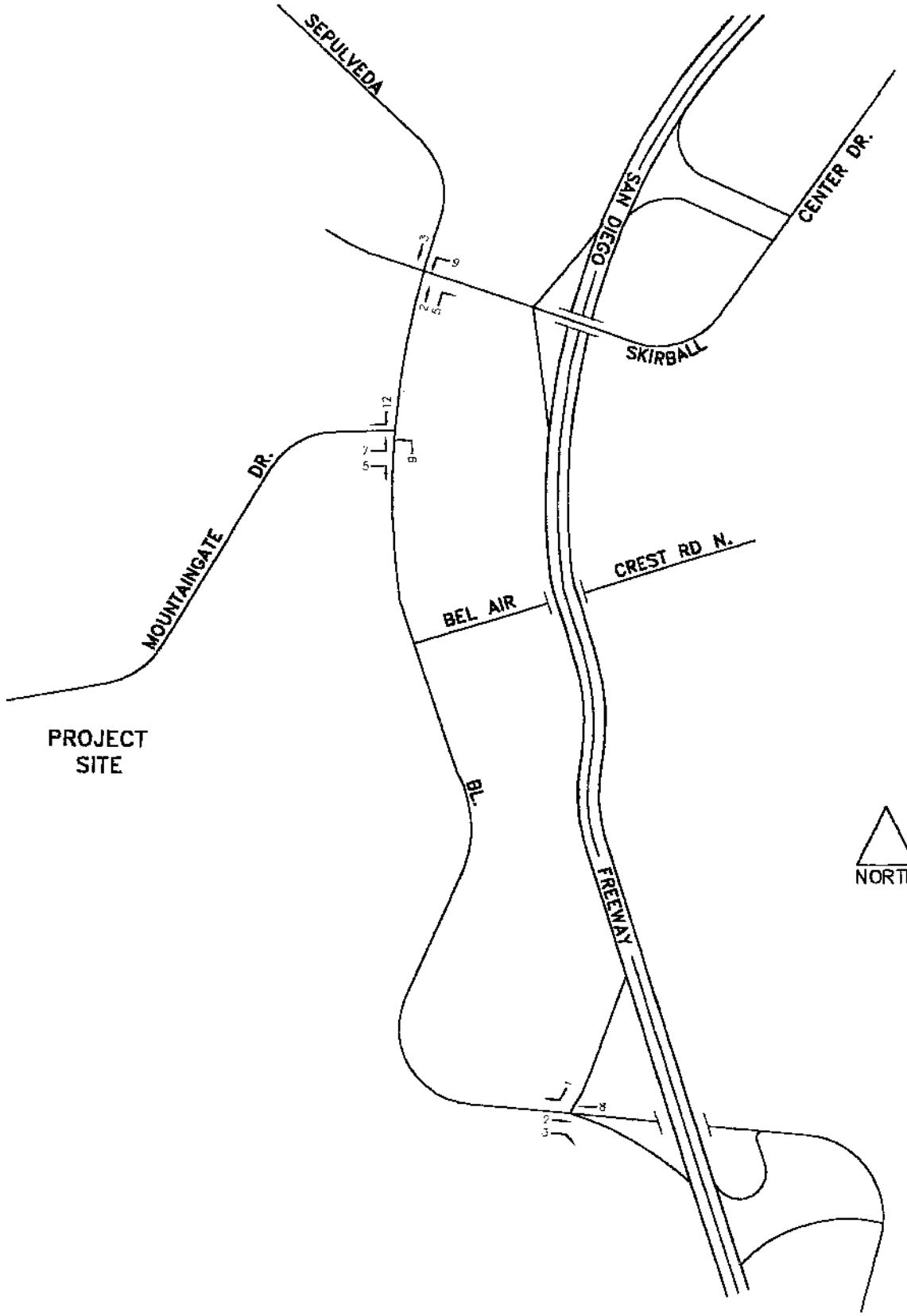

FIGURE 5(b)

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PROJECT TRAFFIC VOLUMES ONLY
PM PEAK HOUR

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Project Access

All primary access to the site will be provided via Mountaingate Drive from Sepulveda Boulevard. The development itself will be accessed from both Canyonback Road and Stoney Hill Road, which branch off from Mountaingate Drive. An internal project roadway ("B" Street) will connect the extension of Canyonback Road and Stoney Hill Road, and provide access to the interior portion of the project, as shown previously in Figure 3.

FUTURE TRAFFIC CONDITIONS

Other projects under development will add substantial amounts of traffic to the project area. For this reason, the analysis of future traffic conditions has been expanded to include potential traffic from yet undeveloped or unoccupied projects. Briefly, the methodology for estimating future traffic volumes was as follows: First, current traffic volumes were determined by traffic counts (as described in a preceding section). Next, a traffic growth factor of 2.0 percent compounded annually was applied to develop a 2005 "baseline" figure. Traffic expected to be generated from "related projects" was then added to the baseline traffic volumes to form the basis for a 2005 no-project condition. Finally, project traffic, calculated previously, was analyzed as an incremental addition to the 2005 no-project condition.

Traffic Growth

Based on an analysis of the trends in traffic growth in this portion of Los Angeles over the last several years, an annual traffic growth factor of 2.0 percent appeared reasonable. The growth factor was used to account for increases in traffic resulting from projects not yet proposed or outside of the study area. This growth factor, compounded annually, was applied to the 2000 traffic volumes to develop an estimate of 2005 baseline volumes.

Related Projects

In addition to the use of the 2.0 percent annual growth rate, listings of potential related projects located in the study area were obtained from the City of Los Angeles Department of Transportation, as well as the City's Planning Department. From a review of these lists, it was determined that traffic from only one project near the study site could produce additional traffic at the study intersections.

The single related project is located south and east of the Mountaingate project site, at the ongoing Bel Air Crest residential development. This project is continuing to develop estate-style homes similar to those of the proposed project, and trip generation rates are assumed to be the same as described previously for the Mountaingate project. Estimates of this related project's traffic are shown below in Table 7. It is estimated that there are approximately 35 homes remaining to be constructed and/or occupied within this development.

Table 7
Related Projects Trip Generation

			AM Peak Hour		PM Peak Hour	
Description	Location	Daily	I/B	O/B	I/B	O/B
35 Single-Family Homes	Bel Air Crest Rd. E/O Sepulveda Blvd.	373	7	22	26	14

To determine the 2005 "null" or no-project traffic condition, the related projects traffic was combined with the 2000 peak hour traffic increased by 2.0 percent per year. The resulting 2005 AM and PM peak hour traffic estimates are shown in Figures 6(a) and 6(b), respectively. These estimates form the basis for "benchmark" values for determining project traffic impacts on the street system. Actual future traffic conditions in the study area might be substantially less than depicted on Figure 6. The reasons for lower traffic volumes include: the probability that not all projects will be built; implementation of other projects' traffic reduction programs; trip-end linkage between future generators may lower trip lengths; and transit usage will increase in the future.

Highway System Improvements

The City is planning to implement traffic signal improvements, known collectively as the ATSAC (Automated Traffic Surveillance and Control) System, to the signals in the project vicinity, specifically along the Sepulveda Boulevard Corridor. This traffic signal

enhancement system monitors traffic demands at intersections, and automatically adjusts traffic signal timing, in real time, to more efficiently accommodate the predominant traffic flows in the areas in which it is installed. ATSAC installation is generally recognized to increase intersection capacities by approximately seven percent. The Sepulveda Pass ATSAC system is not yet installed. However, it is funded, and is expected to be operational by the time the proposed residential development is completed. In addition, a High Occupancy Vehicle (HOV) lane is currently under construction for southbound Interstate 405 in the study area. This lane is expected to be completed by Spring 2001.

No additional highway improvements in the project area were identified in the City of Los Angeles Five-Year Capital Improvements Program. Therefore, for purposes of analysis of the future traffic conditions, as discussed in the following section, no improvements to the existing roadway system in the study area beyond ATSAC installation were assumed. This analysis methodology allows the analysis to indicate where improvements should be made in order to provide sufficient roadway capacity to accommodate project traffic.

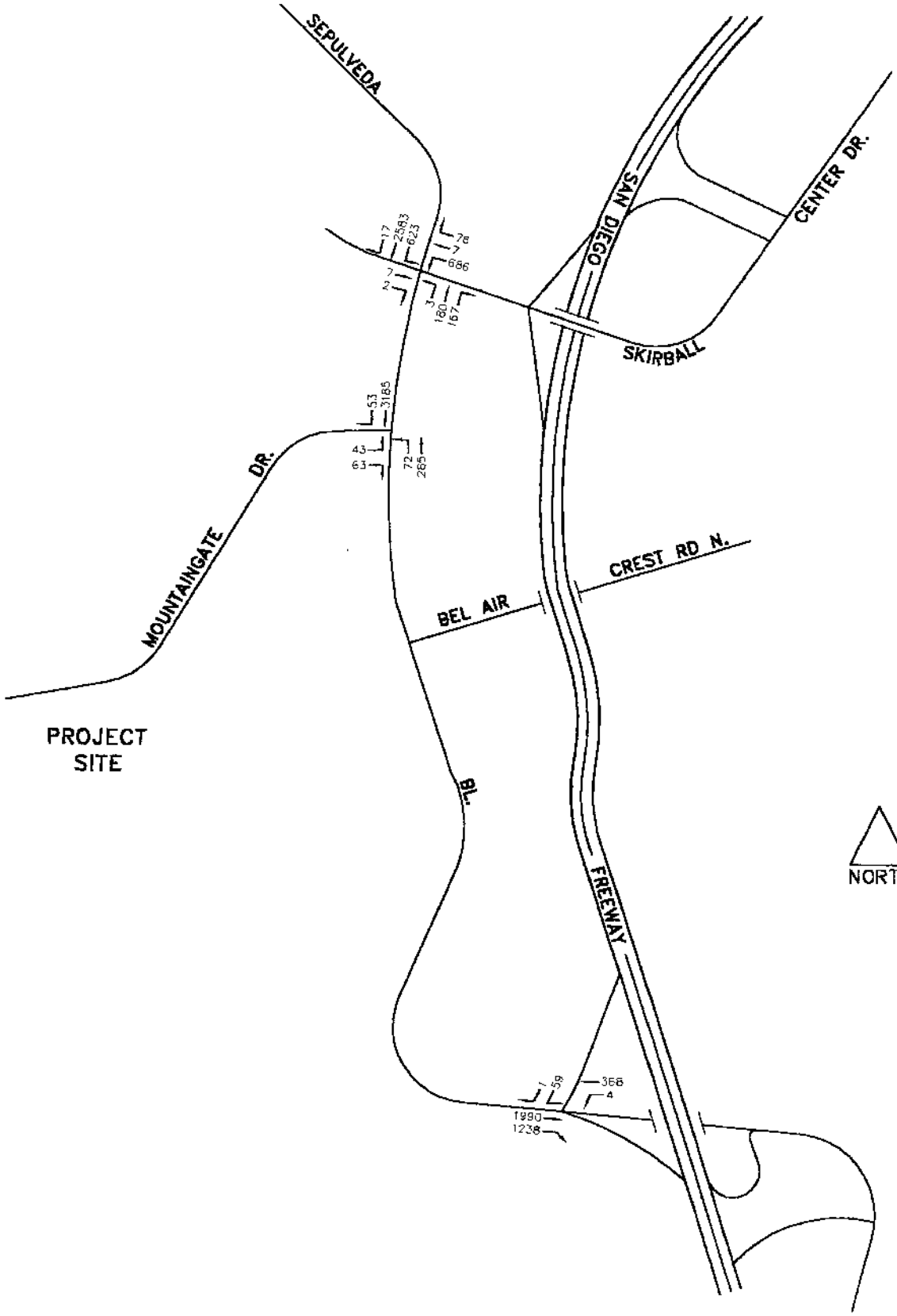

FIGURE 6(a)

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FUTURE (2005) TRAFFIC VOLUMES
WITHOUT PROJECT
AM PEAK HOUR

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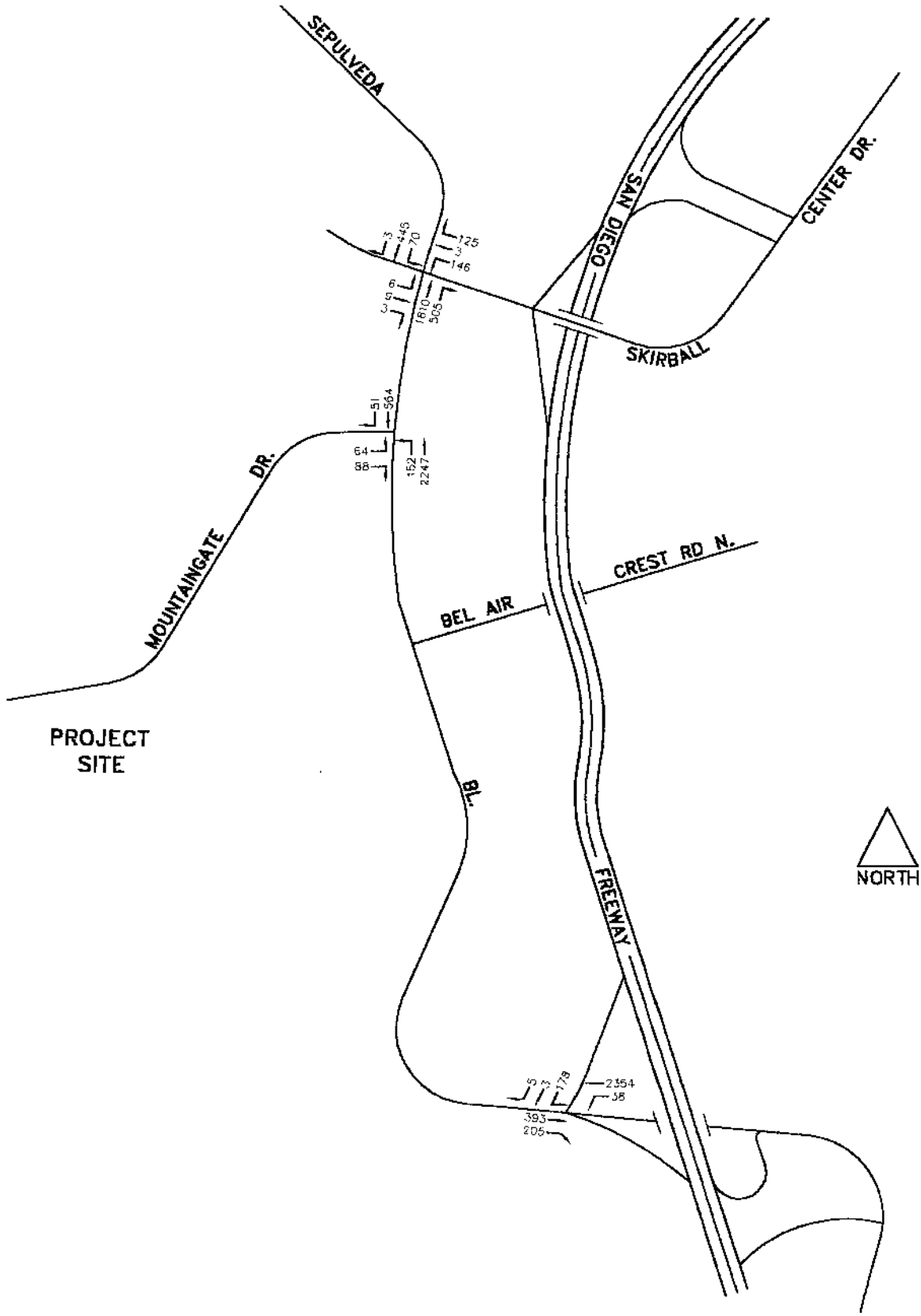

FIGURE 6(b)

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FUTURE (2005) TRAFFIC VOLUMES
WITHOUT PROJECT
PM PEAK HOUR

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Analysis of Future Traffic Conditions (With and Without Project)

The analysis of future conditions in the project area was performed using the same critical movement analysis procedures described previously in this report. No roadway improvements beyond existing conditions, with the exception of ATSAC traffic signal upgrades, were assumed.

Traffic volumes for the analysis were developed as follows:

- As described earlier in the report, future-year benchmark traffic volumes for the no-project condition were determined by combining estimated area traffic growth with new traffic generated by the single identified related project.
- Traffic volumes generated by the project were then combined with these benchmark volumes to form the basis for the "project" traffic analysis and to determine traffic impacts directly attributable to the proposed development.

The 2005 AM and PM peak hour traffic volumes including project traffic are shown in Figures 7(a) and 7(b), respectively. The results of the Critical Movement Analysis for future traffic conditions at the study intersections are summarized in Table 8. The table shows that "With Project" intersection traffic conditions will likely range between Level of Service E and Level of Service F at all three study intersections during both peak hours, although as stated previously, future travel demand might actually be less than that indicated in Table 8.

The City of Los Angeles defines a significant traffic impact based on a "stepped scale", with intersections at high volume-to-capacity ratios being more sensitive to additional traffic than those operating with available surplus capacity. A significant impact is identified as an increase in the CMA value of 0.010 or more, when the final ("With

Project") Level of Service is E or F; a CMA increase of 0.020 or more when the final Level of Service is LOS D, or an increase of 0.040 or more at LOS C. No significant impacts are deemed to occur at LOS A or B, as these operating conditions exhibit sufficient surplus capacities to accommodate large traffic increases with little effect on traffic delays. As shown in Table 8, the project is expected to have significant traffic impacts at one of the three study intersections, prior to mitigation.

Table 8
Summary of Critical Movement Analysis
Future (2005) Traffic Conditions - Without and With Project

Intersection	Peak Hour	Without Project CMA	Without Project LOS	With Project CMA	With Project LOS	Impact
Sepulveda Blvd. & Skirball Center Drive	AM	1.185	F	1.186	F	+0.001
	PM	0.956	E	0.958	E	+0.002
Sepulveda Blvd. & Mountaingate Dr.	AM	1.242	F	1.257	F	+0.015*
	PM	0.895	D	0.904	E	+0.009
Sepulveda Blvd. & I-405 Fwy. SB On/Off Ramps	AM	0.913	E	0.916	E	+0.003
	PM	0.953	E	0.956	E	+0.003

* Denotes significant impact, prior to mitigation.

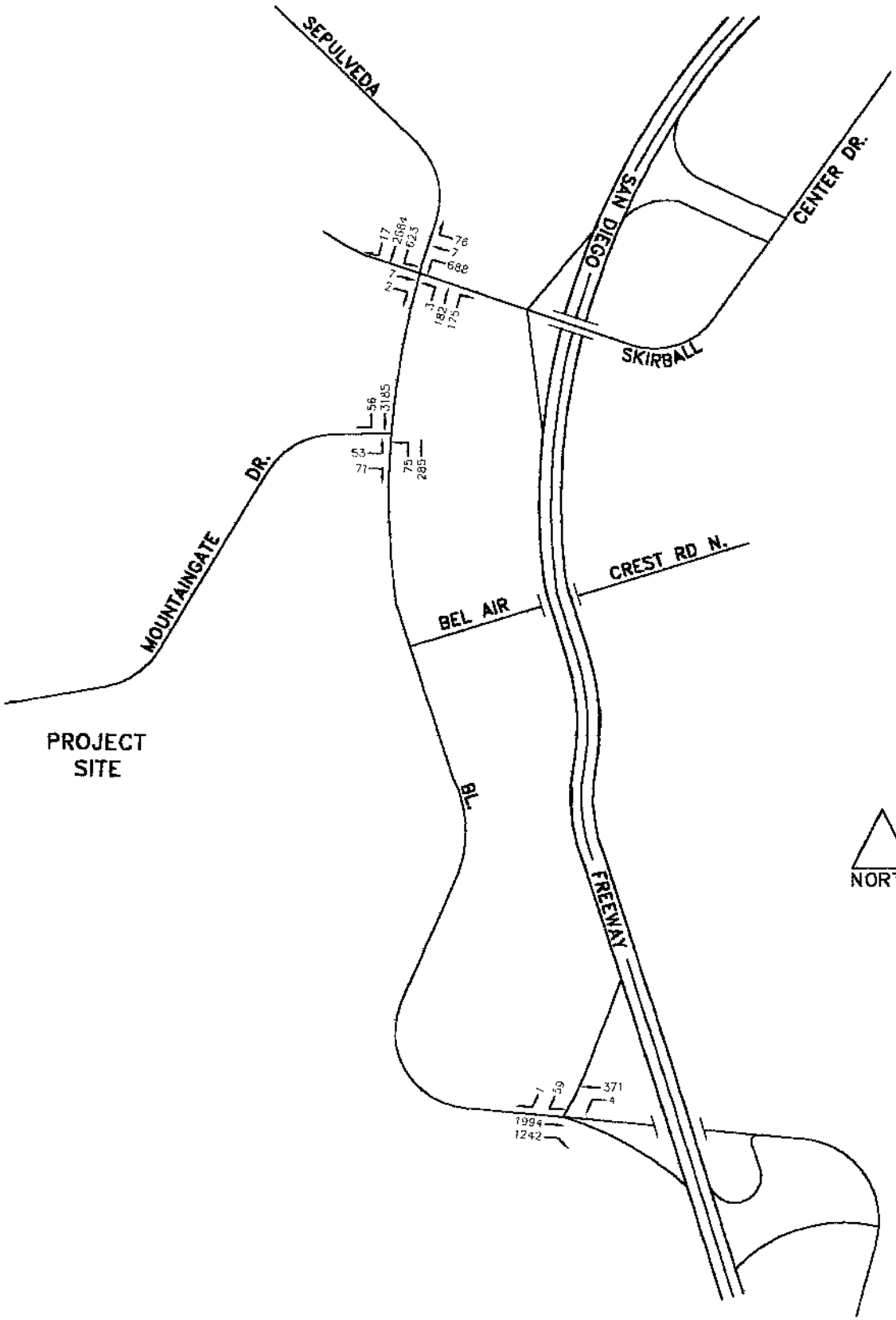

FIGURE 7(a)

11/29/00

Mtngate7\AM2005MP

FUTURE (2005) TRAFFIC VOLUMES
WITH PROJECT
AM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning - Traffic Engineering

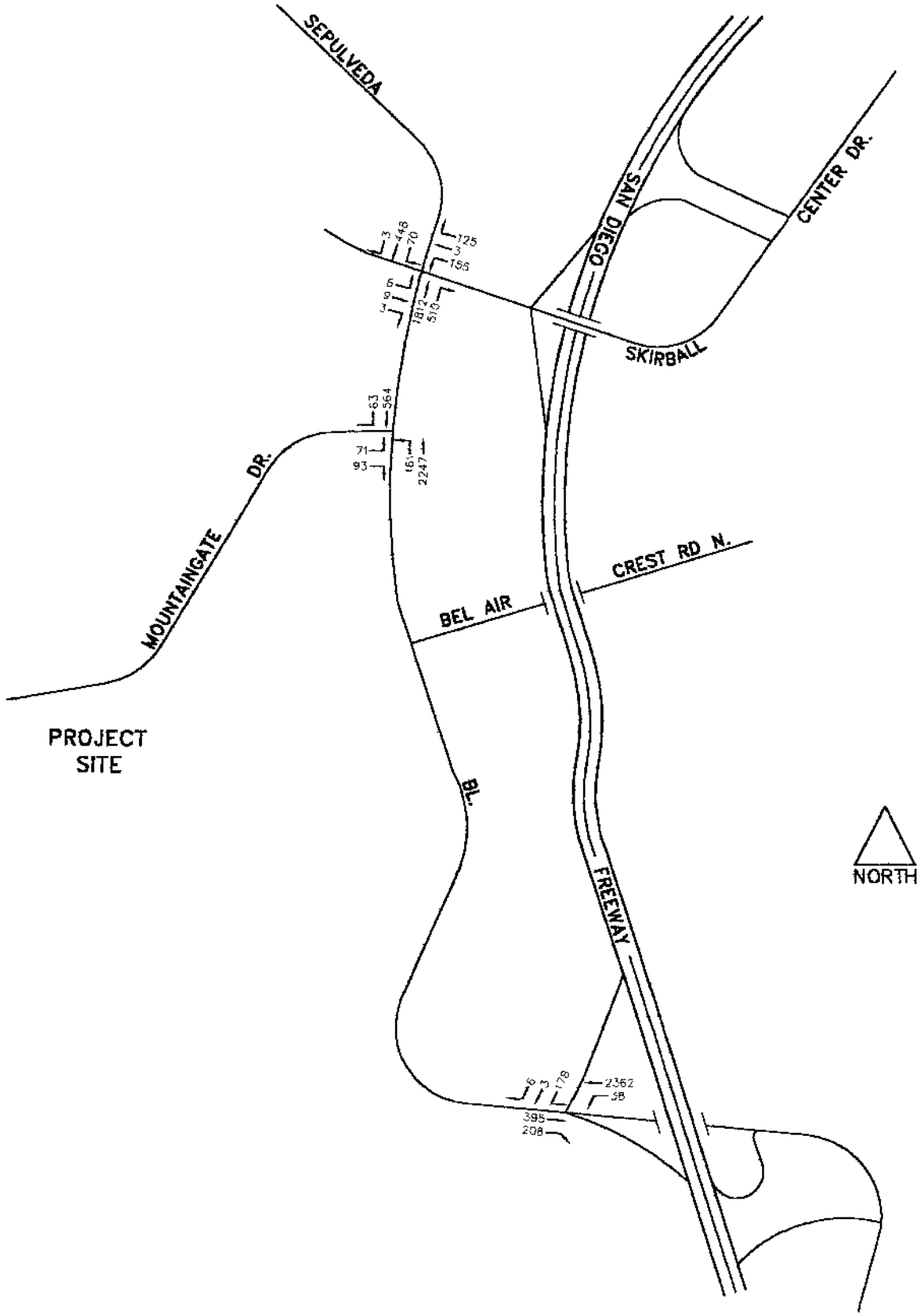

FIGURE 7(b)

11/29/00

Mtngate7\PM2005WP

FUTURE (2005) TRAFFIC VOLUMES
WITH PROJECT
PM PEAK HOUR

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning - Traffic Engineering

Impacts on the Regional Transportation System

In order to assess the potential impacts of project traffic on the regional freeway system, three freeway segments near the project site were examined. These segments are:

- San Diego Freeway north of Mulholland Drive
- San Diego Freeway between Mulholland Drive and Sepulveda Boulevard
- San Diego Freeway south of Sepulveda Boulevard

These locations are expected to be the most likely to be significantly impacted by project traffic, as they are located adjacent to the project site. Like most freeways in the Los Angeles area, these segments currently experience periodic congestion during the morning and afternoon commute periods.

Caltrans generally recognizes a significant impact on freeway operations as a two percent incremental increase in traffic, based on the available capacity. Therefore, the project must increase peak hour traffic on these 5-lane segments of the San Diego Freeway by 200 or more vehicles per hour in one direction (5 lanes x 2,000 vphpl x 2 percent) in order to create a significant impact. Table 9 shows that the largest AM and PM peak hour project-related increases occur on the northbound San Diego Freeway north of Mulholland Drive, with 6 vehicles per hour northbound in the morning, and on the southbound San Diego Freeway north of Mulholland Drive, with 8 vehicles per hour southbound in the evening. These volumes indicate that, not only will project traffic not create a significant traffic impact on the adjacent freeway, its impacts will be virtually undetectable. Project traffic will contribute nominally toward the increasing demands being placed on the regional transportation system, although measures necessary to

produce long-term solutions in relieving cumulative capacity constraints are beyond the scope of any single project.

Table 9
Project Freeway Volumes
on San Diego Freeway

San Diego Freeway Segment	Daily		AM Peak Hour		PM Peak Hour	
	N/B	S/B	N/B	S/B	N/B	S/B
North of Mulholland Dr.	62	62	6	2	4	8
Bet. Mulholland Dr. & Sepulveda Blvd.	8	8	1	0	0	1
South of Sepulveda Blvd.	39	39	2	4	5	3

MITIGATION MEASURES

In order to mitigate the previously described project impact, improvements are recommended for implementation at the one significantly impacted study intersection identified in the previous section. This improvement is:

- Sepulveda Boulevard and Mountaingate Drive -- Stripe the Mountaingate Drive approach to this intersection to provide an exclusive left-turn lane and an exclusive right-turn lane.

The above measure is recommended as a result of the project vehicular traffic impact analysis contained in this report. To determine the quantitative effect of this mitigation measure on the significantly impacted study intersection, an additional analysis was performed, assuming the proposed mitigation measure was "in place." The results of the "With Mitigation" analysis are presented in Table 10. As summarized in that table, the recommended mitigation measure will reduce the traffic impact of the proposed project to less than significant levels, and no further off-site mitigation is warranted.

Table 10
Summary of Critical Movement Analysis
Future (2005) Traffic Conditions - With Project Plus Mitigation

Intersection	Peak Period	Without Project		With Project			With Mitigation		
		CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact
Sepulveda Blvd. & Mountaingate Dr.	AM	1.242	F	1.257	F	+0.015*	1.207	F	-0.035
	PM	0.895	D	0.904	E	+0.009	0.839	D	-0.056

TRAFFIC COUNT DATA SHEETS

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South SEPULVEDA BOULEVARD

East/West MOUNTAINGATE ROAD

Day: AM 11/07/00 Date: TUES. Weather: CLEAR
PM 11/07/00 TUES.
Hours: 7-9 AM 4-6 PM

School Day: YES District: WEST LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	92	8:45	778	7:45	35	7:30	0	7:00
PM PK 15 MIN	561	4:45	154	5:15	50	4:15	0	4:00
AM PK HOUR	327	8:00	2,929	7:45	107	8:00	0	7:00
PM PK HOUR	2,166	4:45	544	4:45	142	5:00	0	4:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	53	192	0	245
8 - 9	83	244	0	327
4 - 5	93	1,879	0	1,972
5 - 6	154	2,000	0	2,154
TOTAL	383	4,315	0	4,698

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	2,830	56	2,886
8 - 9	0	2,843	45	2,888
4 - 5	0	396	33	429
5 - 6	0	495	44	539
TOTAL	0	6,564	178	6,742

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
3,131	N/A	N/A	N/A	N/A
3,215	N/A	N/A	N/A	N/A
2,401	N/A	N/A	N/A	N/A
2,693	N/A	N/A	N/A	N/A
11,440	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	41	0	51	92
8 - 9	47	0	60	107
4 - 5	56	0	75	131
5 - 6	59	0	83	142
TOTAL	203	0	269	472

WESTBOUND Approach

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

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
92	N/A	N/A	N/A	N/A
107	N/A	N/A	N/A	N/A
131	N/A	N/A	N/A	N/A
142	N/A	N/A	N/A	N/A
472	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South: 405 SB ON/OFF

East/West: SEPULVEDA BOULEVARD

Day: AM 11/08/00 Date: WEDS. Weather: CLEAR
PM 11/08/00 WEDS.
Hours: 7-9 AM 4-6 PM

School Day: YES District: WEST LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	7:00	19	7:15	766	8:30	87	8:15
PM PK 15 MIN	0	4:00	65	5:30	168	5:15	561	5:30
AM PK HOUR	0	7:00	60	8:00	2,936	7:15	335	7:45
PM PK HOUR	0	4:00	167	5:00	660	4:45	2,157	5:00

NORTHBOUND Approach

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

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	37	1	2	40
8 - 9	59	0	1	60
4 - 5	33	1	0	34
5 - 6	161	3	3	167
TOTAL	290	5	6	301

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
40	N/A	N/A	N/A	N/A
60	N/A	N/A	N/A	N/A
34	N/A	N/A	N/A	N/A
167	N/A	N/A	N/A	N/A
301	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	1,727	978	2,705
8 - 9	0	1,720	1,152	2,872
4 - 5	0	291	202	493
5 - 6	0	353	183	536
TOTAL	0	4,091	2,515	6,606

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	2	211	0	213
8 - 9	5	310	0	315
4 - 5	46	1,836	0	1,882
5 - 6	34	2,123	0	2,157
TOTAL	87	4,480	0	4,567

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
2,918	N/A	N/A	N/A	N/A
3,187	N/A	N/A	N/A	N/A
2,375	N/A	N/A	N/A	N/A
2,693	N/A	N/A	N/A	N/A
11,173	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South: SEPULVEDA BOULEVARD

East/West: SKIRBALL DRIVE

Day: AM 11/7/00 Date: TUES. Weather: CLEAR
PM 11/7/00 TUES.
Hours: 7-9 AM 4-6 PM

School Day: YES District: WEST LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	78	8:45	751	8:45	4	7:30	180	8:00
PM PK 15 MIN	557	4:45	134	4:45	6	4:45	81	5:15
AM PK HOUR	306	8:00	2,918	8:00	9	7:30	694	8:00
PM PK HOUR	2,090	4:45	465	4:45	21	4:15	252	5:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	2	85	148	235
8 - 9	3	160	143	306
4 - 5	0	1,490	441	1,931
5 - 6	1	1,615	435	2,051
TOTAL	6	3,350	1,167	4,523

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	443	2,278	4	2,725
8 - 9	564	2,339	15	2,918
4 - 5	63	307	0	370
5 - 6	69	380	4	453
TOTAL	1,139	5,304	23	6,466

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
2,960	N/A	N/A	N/A	N/A
3,224	N/A	N/A	N/A	N/A
2,301	N/A	N/A	N/A	N/A
2,504	N/A	N/A	N/A	N/A
10,989	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	1	4	2	7
8 - 9	0	6	2	8
4 - 5	4	13	2	19
5 - 6	4	4	3	11
TOTAL	9	27	9	45

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	519	7	52	578
8 - 9	619	6	69	694
4 - 5	126	4	111	241
5 - 6	123	3	126	252
TOTAL	1,387	20	358	1,765

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
585	N/A	N/A	N/A	N/A
702	N/A	N/A	N/A	N/A
260	N/A	N/A	N/A	N/A
263	N/A	N/A	N/A	N/A
1,810	N/A	N/A	N/A	N/A

CMA CALCULATION SHEETS

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 1, SEPULVEDA BOULEVARD AND SKIRBALL CENTER DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: AM PEAK HOUR
CASE: EXISTING (2000)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	619	6	69	0
EASTBOUND	0	6	2	0
NORTHBOUND	3	160	143	0
SOUTHBOUND	564	2339	15	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	2	0	0	1	0	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	340	N/A	N/A	75	N/A	N/A
EASTBOUND	0	N/A	N/A	8	N/A	N/A
NORTHBOUND	3	N/A	152	152	N/A	N/A
SOUTHBOUND	564	N/A	1177	1177	N/A	N/A

EAST-WEST CRITICAL VOLUMES 348
NORTH-SOUTH CRITICAL VOLUMES 1180

THE SUM OF CRITICAL VOLUMES 1528

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 1.072

LEVEL OF SERVICE ..... F

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11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 1, SEPULVEDA BOULEVARD AND SKIRBALL CENTER DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: AM PEAK HOUR
CASE: FUTURE (2005) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	686	7	76	0
EASTBOUND	0	7	2	0
NORTHBOUND	3	180	167	0
SOUTHBOUND	623	2583	17	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	2	0	0	1	0	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	377	N/A	N/A	83	N/A	N/A
EASTBOUND	0	N/A	N/A	9	N/A	N/A
NORTHBOUND	3	N/A	174	174	N/A	N/A
SOUTHBOUND	623	N/A	1300	1300	N/A	N/A

EAST-WEST CRITICAL VOLUMES 386
NORTH-SOUTH CRITICAL VOLUMES 1303

THE SUM OF CRITICAL VOLUMES 1689

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 1.185

LEVEL OF SERVICE ..... F

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CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 1, SEPULVEDA BOULEVARD AND SKIRBALL CENTER DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: AM PEAK HOUR
CASE: FUTURE (2005) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	688	7	76	0
EASTBOUND	0	7	2	0
NORTHBOUND	3	182	175	0
SOUTHBOUND	623	2584	17	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	2	0	0	1	0	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	378	N/A	N/A	83	N/A	N/A
EASTBOUND	0	N/A	N/A	9	N/A	N/A
NORTHBOUND	3	N/A	178	178	N/A	N/A
SOUTHBOUND	623	N/A	1300	1300	N/A	N/A

EAST-WEST CRITICAL VOLUMES	387
NORTH-SOUTH CRITICAL VOLUMES	1303
THE SUM OF CRITICAL VOLUMES	1690
NUMBER OF CRITICAL CLEARANCE INTERVALS	3
CMA VALUE	1.186
LEVEL OF SERVICE	F

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11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 1, SEPULVEDA BOULEVARD AND SKIRBALL CENTER DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: PM PEAK HOUR
CASE: EXISTING (2000)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	123	3	113	0
EASTBOUND	5	8	3	0
NORTHBOUND	0	1638	452	0
SOUTHBOUND	63	399	3	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	2	0	0	1	0	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	68	N/A	N/A	116	N/A	N/A
EASTBOUND	5	N/A	N/A	11	N/A	N/A
NORTHBOUND	0	N/A	1045	1045	N/A	N/A
SOUTHBOUND	63	N/A	201	201	N/A	N/A

EAST-WEST CRITICAL VOLUMES 121
NORTH-SOUTH CRITICAL VOLUMES 1108
THE SUM OF CRITICAL VOLUMES 1229

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 0.862

LEVEL OF SERVICE ..... D

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11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 1, SEPULVEDA BOULEVARD AND SKIRBALL CENTER DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: PM PEAK HOUR
CASE: FUTURE (2005) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED
WESTBOUND	146	3	125	0
EASTBOUND	6	9	3	0
NORTHBOUND	0	1810	505	0
SOUTHBOUND	70	445	3	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	2	0	0	1	0	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	80	N/A	N/A	128	N/A	N/A
EASTBOUND	6	N/A	N/A	12	N/A	N/A
NORTHBOUND	0	N/A	1158	1158	N/A	N/A
SOUTHBOUND	70	N/A	224	224	N/A	N/A

EAST-WEST CRITICAL VOLUMES	134
NORTH-SOUTH CRITICAL VOLUMES	1228
THE SUM OF CRITICAL VOLUMES	1362
NUMBER OF CRITICAL CLEARANCE INTERVALS	3
CMA VALUE	0.956
LEVEL OF SERVICE	E

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11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 1, SEPULVEDA BOULEVARD AND SKIRBALL CENTER DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: PM PEAK HOUR
CASE: FUTURE (2005) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	155	3	125	0
EASTBOUND	6	9	3	0
NORTHBOUND	0	1812	510	0
SOUTHBOUND	70	448	3	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	2	0	0	1	0	0	3
EASTBOUND	1	0	0	1	0	0	2
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	85	N/A	N/A	128	N/A	N/A
EASTBOUND	6	N/A	N/A	12	N/A	N/A
NORTHBOUND	0	N/A	1161	1161	N/A	N/A
SOUTHBOUND	70	N/A	226	226	N/A	N/A

EAST-WEST CRITICAL VOLUMES 134
NORTH-SOUTH CRITICAL VOLUMES 1231

THE SUM OF CRITICAL VOLUMES 1365

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 0.958

LEVEL OF SERVICE ..... E

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11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 2, SEPULVEDA BOULEVARD AND MOUNTAINGATE DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: AM PEAK HOUR
CASE: EXISTING (2000)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	0	0	0	0
EASTBOUND	39	0	57	0
NORTHBOUND	65	247	0	0
SOUTHBOUND	0	2881	0	48

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	0	0	0	1	1
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	96
NORTHBOUND	65	N/A	124	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	1440	N/A	0	N/A

EAST-WEST CRITICAL VOLUMES 96
NORTH-SOUTH CRITICAL VOLUMES 1505

THE SUM OF CRITICAL VOLUMES 1601

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 1.124

LEVEL OF SERVICE ..... F

K:\ICAP5\MTNGATE\TOTAL RL1
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 2, SEPULVEDA BOULEVARD AND MOUNTAINGATE DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: AM PEAK HOUR
CASE: FUTURE (2005) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	0	0	0	0
EASTBOUND	43	0	63	0
NORTHBOUND	72	285	0	0
SOUTHBOUND	0	3185	0	53

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	0	0	0	1	1
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	106
NORTHBOUND	72	N/A	142	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	1592	N/A	0	N/A

EAST-WEST CRITICAL VOLUMES 106
NORTH-SOUTH CRITICAL VOLUMES 1664
THE SUM OF CRITICAL VOLUMES 1770

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 1.242

LEVEL OF SERVICE ..... F

K:\ICAP5\MTNGATE\TOTAL RL2
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 2, SEPULVEDA BOULEVARD AND MOUNTAINGATE DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: AM PEAK HOUR
CASE: FUTURE (2005) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	53	0	71	0
NORTHBOUND	75	285	0	0
SOUTHBOUND	0	3185	0	56

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	0	0	0	1	1
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	124
NORTHBOUND	75	N/A	142	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	1592	N/A	0	N/A

EAST-WEST CRITICAL VOLUMES 124
NORTH-SOUTH CRITICAL VOLUMES 1667

THE SUM OF CRITICAL VOLUMES 1791

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 1.257

LEVEL OF SERVICE ..... F

K:\ICAP5\MTNGATE\TOTAL RL3
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 2, SEPULVEDA BOULEVARD AND MOUNTAINGATE DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: AM PEAK HOUR
CASE: FUTURE (2005) WITH PROJECT PLUS MITIGATION

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	0	0	0	0
EASTBOUND	53	0	33	38
NORTHBOUND	75	285	0	0
SOUTHBOUND	0	3185	30	26

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	1	0	0	0	1	0	2
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	53	N/A	N/A	N/A	33	N/A
NORTHBOUND	75	N/A	142	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	1592	N/A	30	N/A

EAST-WEST CRITICAL VOLUMES 53
NORTH-SOUTH CRITICAL VOLUMES 1667

THE SUM OF CRITICAL VOLUMES 1720

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 1.207

LEVEL OF SERVICE ..... F

K:\ICAP5\MTNGATE\TOTAL RL4
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 2, SEPULVEDA BOULEVARD AND MOUNTAINGATE DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: PM PEAK HOUR
CASE: EXISTING (2000)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	0	0	0	0
EASTBOUND	58	0	80	0
NORTHBOUND	138	2028	0	0
SOUTHBOUND	0	498	0	46

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	0	0	0	1	1
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	138
NORTHBOUND	138	N/A	1014	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	249	N/A	0	N/A

EAST-WEST CRITICAL VOLUMES 138
NORTH-SOUTH CRITICAL VOLUMES 1014
THE SUM OF CRITICAL VOLUMES 1152

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 0.808

LEVEL OF SERVICE ..... D

K:\ICAP5\MTNGATE\TOTAL RL5
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 2, SEPULVEDA BOULEVARD AND MOUNTAINGATE DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: PM PEAK HOUR
CASE: FUTURE (2005) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	64	0	88	0
NORTHBOUND	152	2247	0	0
SOUTHBOUND	0	564	0	51

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	0	0	0	1	1
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	152
NORTHBOUND	152	N/A	1124	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	282	N/A	0	N/A

EAST-WEST CRITICAL VOLUMES 152
NORTH-SOUTH CRITICAL VOLUMES 1124

THE SUM OF CRITICAL VOLUMES 1276

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 0.895

LEVEL OF SERVICE ..... D

K:\ICAP5\MTNGATE\TOTAL RL6
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 2, SEPULVEDA BOULEVARD AND MOUNTAINGATE DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: PM PEAK HOUR
CASE: FUTURE (2005) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	71	0	93	0
NORTHBOUND	161	2247	0	0
SOUTHBOUND	0	564	0	63

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	0	0	0	1	1
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	164
NORTHBOUND	161	N/A	1124	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	282	N/A	0	N/A

EAST-WEST CRITICAL VOLUMES 164
NORTH-SOUTH CRITICAL VOLUMES 1124

THE SUM OF CRITICAL VOLUMES 1288

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 0.904

LEVEL OF SERVICE ..... E

K:\ICAP5\MTNGATE\TOTAL RL7
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 2, SEPULVEDA BOULEVARD AND MOUNTAINGATE DRIVE
DATE: 11-29-2000 INITIALS: KML PERIOD: PM PEAK HOUR
CASE: FUTURE (2005) WITH PROJECT PLUS MITIGATION

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	71	0	0	93
NORTHBOUND	161	2247	0	0
SOUTHBOUND	0	564	27	36

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	1	0	0	0	1	0	2
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	71	N/A	N/A	N/A	0	N/A
NORTHBOUND	161	N/A	1124	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	282	N/A	27	N/A

EAST-WEST CRITICAL VOLUMES 71
NORTH-SOUTH CRITICAL VOLUMES 1124
THE SUM OF CRITICAL VOLUMES 1195

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 0.839

LEVEL OF SERVICE ..... D

K:\ICAP5\MTNGATE\TOTAL RL8
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 3, SEPULVEDA BOULEVARD AND SB I-405 ON/OFF-RAMPS
DATE: 11-29-2000 INITIALS: KML PERIOD: AM PEAK HOUR
CASE: EXISTING (2000)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	53	0	0	1
EASTBOUND	0	0	0	0
NORTHBOUND	4	331	0	0
SOUTHBOUND	0	1799	1116	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	0	1	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	53	N/A	N/A	0	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	4	N/A	166	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	900	N/A	1116	N/A

EAST-WEST CRITICAL VOLUMES 53
NORTH-SOUTH CRITICAL VOLUMES 1120
THE SUM OF CRITICAL VOLUMES 1173

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 0.823

LEVEL OF SERVICE ..... D

K:\ICAP5\MTNGATE\TOTAL RL1
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 3, SEPULVEDA BOULEVARD AND SB I-405 ON/OFF-RAMPS
DATE: 11-29-2000 INITIALS: KML PERIOD: AM PEAK HOUR
CASE: FUTURE (2005) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	59	0	0	1
EASTBOUND	0	0	0	0
NORTHBOUND	4	368	0	0
SOUTHBOUND	0	1990	1238	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	0	1	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	59	N/A	N/A	0	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	4	N/A	184	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	995	N/A	1238	N/A

EAST-WEST CRITICAL VOLUMES	59
NORTH-SOUTH CRITICAL VOLUMES	1242
THE SUM OF CRITICAL VOLUMES	1301
NUMBER OF CRITICAL CLEARANCE INTERVALS	3
CMA VALUE	0.913
LEVEL OF SERVICE	E

K:\ICAP5\MTNGATE\TOTAL RL2
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 3, SEPULVEDA BOULEVARD AND SB I-405 ON/OFF-RAMPS
DATE: 11-29-2000 INITIALS: KML PERIOD: AM PEAK HOUR
CASE: FUTURE (2005) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	59	0	0	1
EASTBOUND	0	0	0	0
NORTHBOUND	4	371	0	0
SOUTHBOUND	0	1994	1242	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	0	1	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	59	N/A	N/A	0	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	4	N/A	186	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	997	N/A	1242	N/A

EAST-WEST CRITICAL VOLUMES 59
NORTH-SOUTH CRITICAL VOLUMES 1246

THE SUM OF CRITICAL VOLUMES 1305

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 0.916

LEVEL OF SERVICE ..... E

K:\ICAP5\MTNGATE\TOTAL RL3
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 3, SEPULVEDA BOULEVARD AND SB I-405 ON/OFF-RAMPS
DATE: 11-29-2000 INITIALS: KML PERIOD: PM PEAK HOUR
CASE: EXISTING (2000)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	161	3	3	0
EASTBOUND	0	0	0	0
NORTHBOUND	34	2123	0	0
SOUTHBOUND	0	353	183	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	0	1	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	164	N/A	N/A	3	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	34	N/A	1062	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	176	N/A	183	N/A

EAST-WEST CRITICAL VOLUMES 164
NORTH-SOUTH CRITICAL VOLUMES 1062

THE SUM OF CRITICAL VOLUMES 1226

NUMBER OF CRITICAL CLEARANCE INTERVALS 3

CMA VALUE 0.860

LEVEL OF SERVICE ..... D

K:\ICAP5\MTNGATE\TOTAL RL5
11-29-2000, 2:49 PM

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: 3, SEPULVEDA BOULEVARD AND SB I-405 ON/OFF-RAMPS
DATE: 11-29-2000 INITIALS: KML PERIOD: PM PEAK HOUR
CASE: FUTURE (2005) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	178	3	5	0
EASTBOUND	0	0	0	0
NORTHBOUND	38	2354	0	0
SOUTHBOUND	0	393	205	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	0	1	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	2	0	1	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	181	N/A	N/A	5	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	38	N/A	1177	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	196	N/A	205	N/A

EAST-WEST CRITICAL VOLUMES	181
NORTH-SOUTH CRITICAL VOLUMES	1177
THE SUM OF CRITICAL VOLUMES	1358
NUMBER OF CRITICAL CLEARANCE INTERVALS	3
CMA VALUE	0.953
LEVEL OF SERVICE	E

K:\ICAP5\MTNGATE\TOTAL RL6
11-29-2000, 2:49 PM