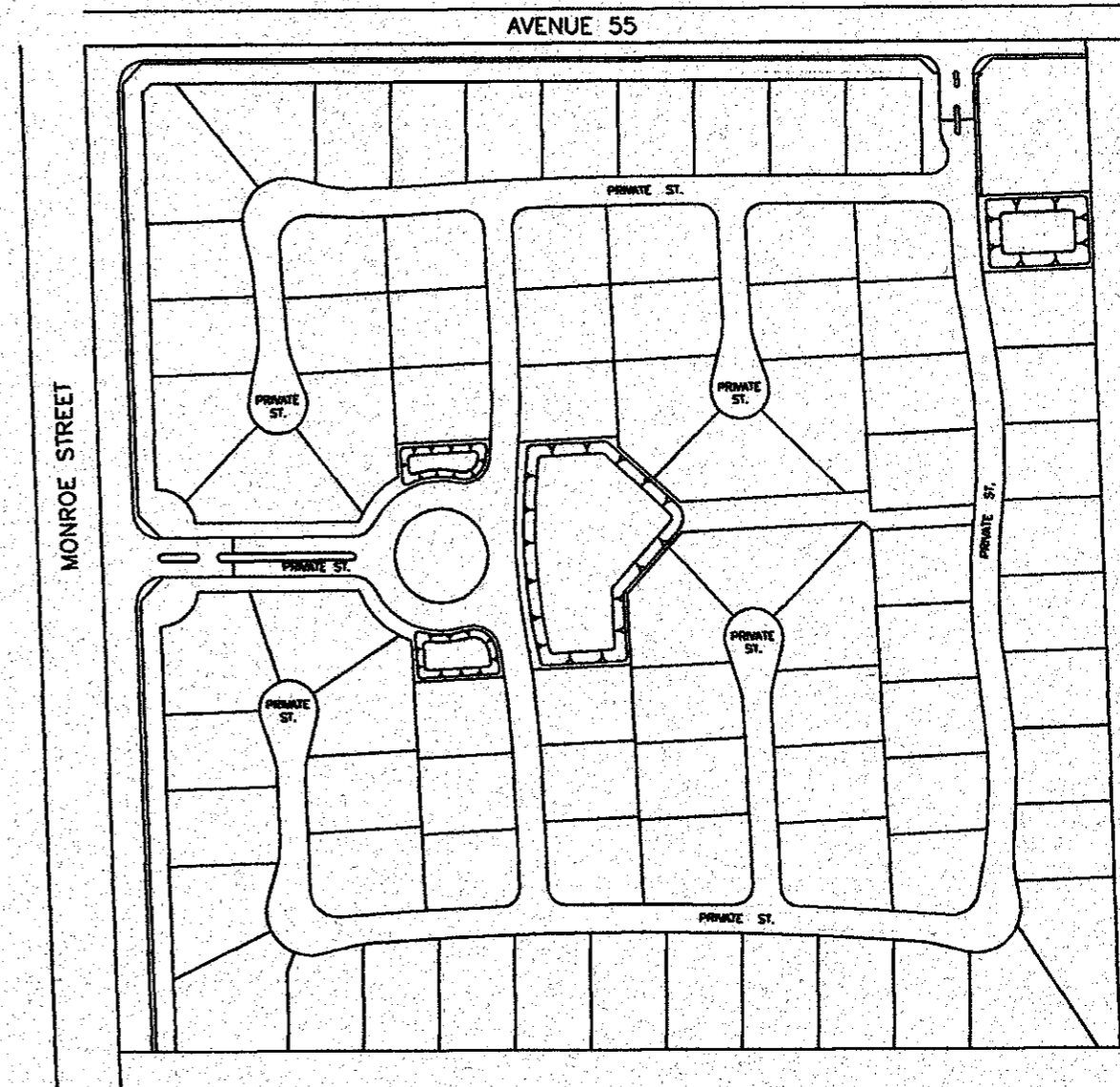


TENTATIVE TRACT MAP 30399 TRAFFIC IMPACT ANALYSIS Riverside County, California



July 16, 2002

Ms. Dee McKown
COACHELLA VALLEY ENGINEERS
77-890 Wolf Road, Suite 102
Palm Desert, CA 92211

Subject: Tentative Tract Map 30399 Traffic Impact Analysis

Dear Ms. McKown:

RK ENGINEERING GROUP, INC. is pleased to submit the Tentative Tract Map 30399 traffic impact analysis. This report provides a summary of the findings, analysis procedures and evaluation of the proposed project with respect to on-site and off-site traffic impacts pursuant to County of Riverside requirements.

Based upon this review, the project can be accommodated within the planned circulation system, if the recommended improvements are implemented. The study recommendations are included in the "Findings" section of this report.

If you have any questions regarding this study, please do not hesitate to call at (949) 474-0809.

Sincerely,

RK ENGINEERING GROUP, INC.



Frank Yeh
Transportation Planner

FY:RK:wg/1080

JN:1298-02-01

Attachments



Dr. A. S. Narasimha Murthy, T. E.
Senior Associate

**TENTATIVE TRACT MAP 30399
TRAFFIC IMPACT ANALYSIS
COUNTY OF RIVERSIDE**

Prepared for:

**COACHELLA VALLEY ENGINEERS
77-890 Wolf Road, Suite 102
Palm Desert, CA 92211**

Prepared by:

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**Frank Yeh
Dr. A. S. Narasimha Murthy, T. E.**

July 16, 2002

**JN:1298-02-01
FY:RK:wg/1080**

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TENTATIVE TRACT MAP 30399
TRAFFIC IMPACT ANALYSIS
COUNTY OF RIVERSIDE

I. INTRODUCTION AND SUMMARY

A. Purpose of Report and Study Objectives

The purpose of this traffic study is to evaluate the development of the Tentative Tract Map 30399 from a traffic circulation standpoint. The proposed development is located within the County of Riverside, adjacent to the City of La Quinta.

Study objectives include (1) documentation of existing traffic conditions in the vicinity of the site; (2) evaluation of traffic conditions for the Opening Year of the proposed project; and (3) determination of on-site and off-site improvements and system management actions needed to achieve County of Riverside level of service requirements.

B. Executive Summary

1. Site Location and Study Area

The project is located east of Monroe Street, and south of Avenue 55 in the County of Riverside. Exhibit 1-A illustrates the site location and traffic analysis study area.

The study area includes the following intersections:

Monroe Street (NS) at:

- Avenue 52 (EW)
- Avenue 54 (EW)
- Airport Boulevard (EW)

EXHIBIT 1-A
LOCATION MAP



Jefferson Street (NS) at:

- Avenue 54 (EW)

Jackson Street (NS) at:

- Airport Boulevard (EW)

2. Development Description

- a. Riverside County Case Number: TTM 30399
- b. Proposed Land Use: Single family detached residential

The proposed project will have access to Monroe Street and Avenue 55.

3. Principal Findings

- a. Required Level of Service: "C"
- b. For existing conditions, no traffic signals are warranted at the study intersections.
- c. For Opening Year without project conditions, no traffic signals are warranted.
- d. Level of Service With Proposed Development: For Opening Year with project traffic conditions, the study area intersections are projected to operate at Level of Service "C" or better during the peak hours.

4. Conclusions

The proposed development is projected to generate a net total of 785 trip-ends per day with 62 vehicles per hour during the AM peak hour and 83 vehicles per hour during the PM peak hour.

5. Recommendations

Participate in the phased construction of off-site traffic signals through payment of established fees.

Traffic signing/striping should be implemented in conjunction with detailed construction plans for the project site.

Sight distance at each project access roadway should be reviewed with respect to standard Caltrans/County of Riverside sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

II. PROPOSED DEVELOPMENT

A. Location

The project is located east of Monroe Street, and south of Avenue 55 in the County of Riverside.

B. Land Use and Intensity

The project site is proposed to be developed with 82 dwelling units of single-family detached residential housing.

C. Site Plan

Exhibit 2-A illustrates the site plan.

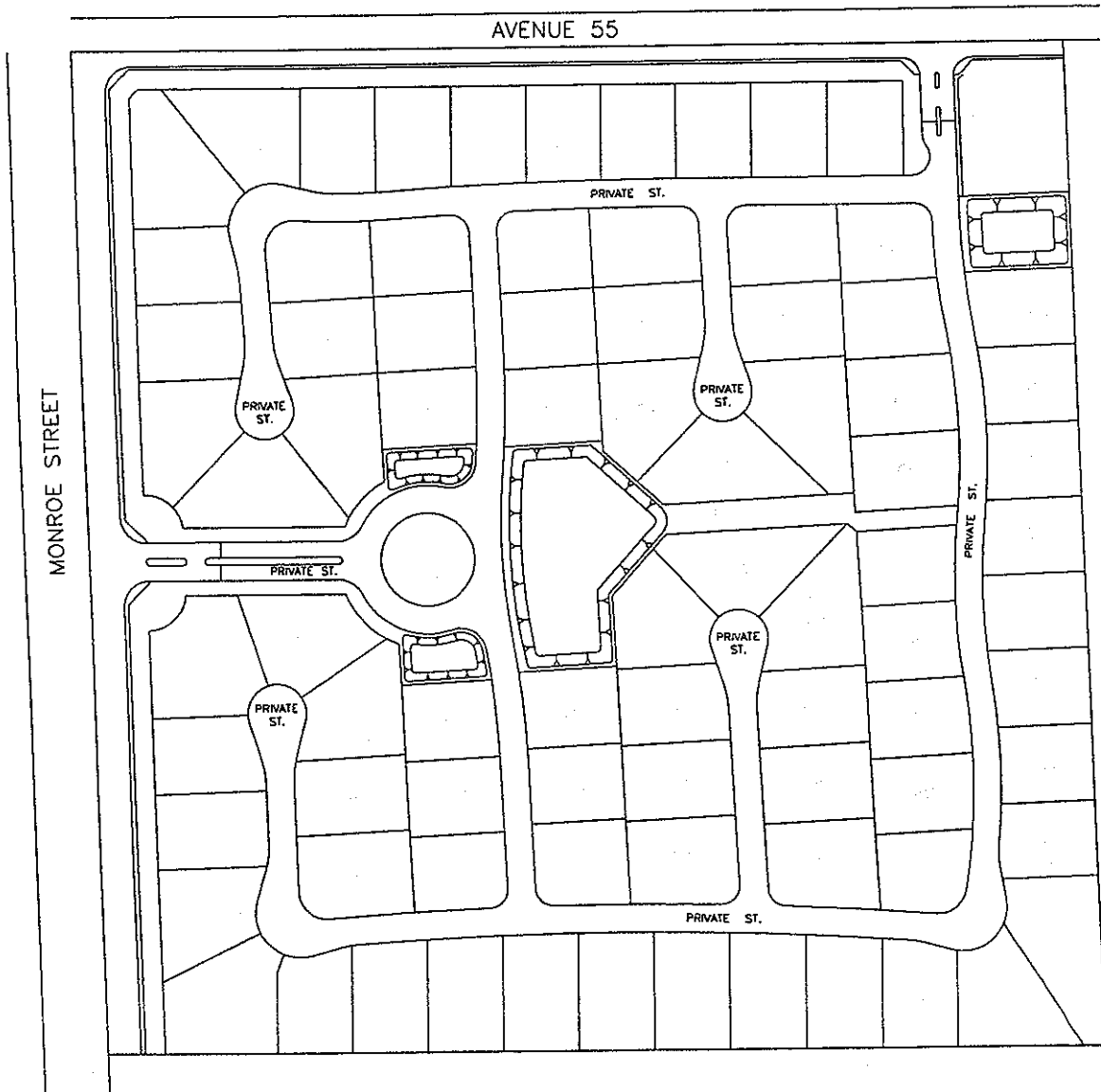
D. Zoning and Land Use Category

Existing Zoning: R-1 TTM 30399

E. Phasing and Timing

It is anticipated that the project would be built by end of 2003.

EXHIBIT 2-A
SITE PLAN



III. AREA CONDITIONS

A. Study Area

1. Area of Significant Traffic Impact

The study area includes the following intersections:

Monroe Street (NS) at:

- Avenue 52 (EW)
- Avenue 54 (EW)
- Airport Boulevard (EW)

Jefferson Street (NS) at:

- Avenue 54 (EW)

Jackson Street (NS) at:

- Airport Boulevard (EW)

B. Study Area Land Use

1. Existing Land Uses

The site is currently vacant and does not generate any traffic. Adjacent uses include the following:

North – Residential

South – Commercial/Residential/School

East – Residential

West – Golf Course

2. Existing Zoning

Adjacent parcels are currently zoned for the following:

- North – Residential
- South – Commercial/Residential
- East – Residential
- West – Open Space

C. Site Accessibility

1. Area Roadway System

Exhibit 3-A identifies the existing roadway conditions for study area roadways. The number of traffic lanes on the roadways and the intersection controls are identified.

The Riverside County General Plan Circulation Element and the arterial street cross sections are included in Appendix "A".

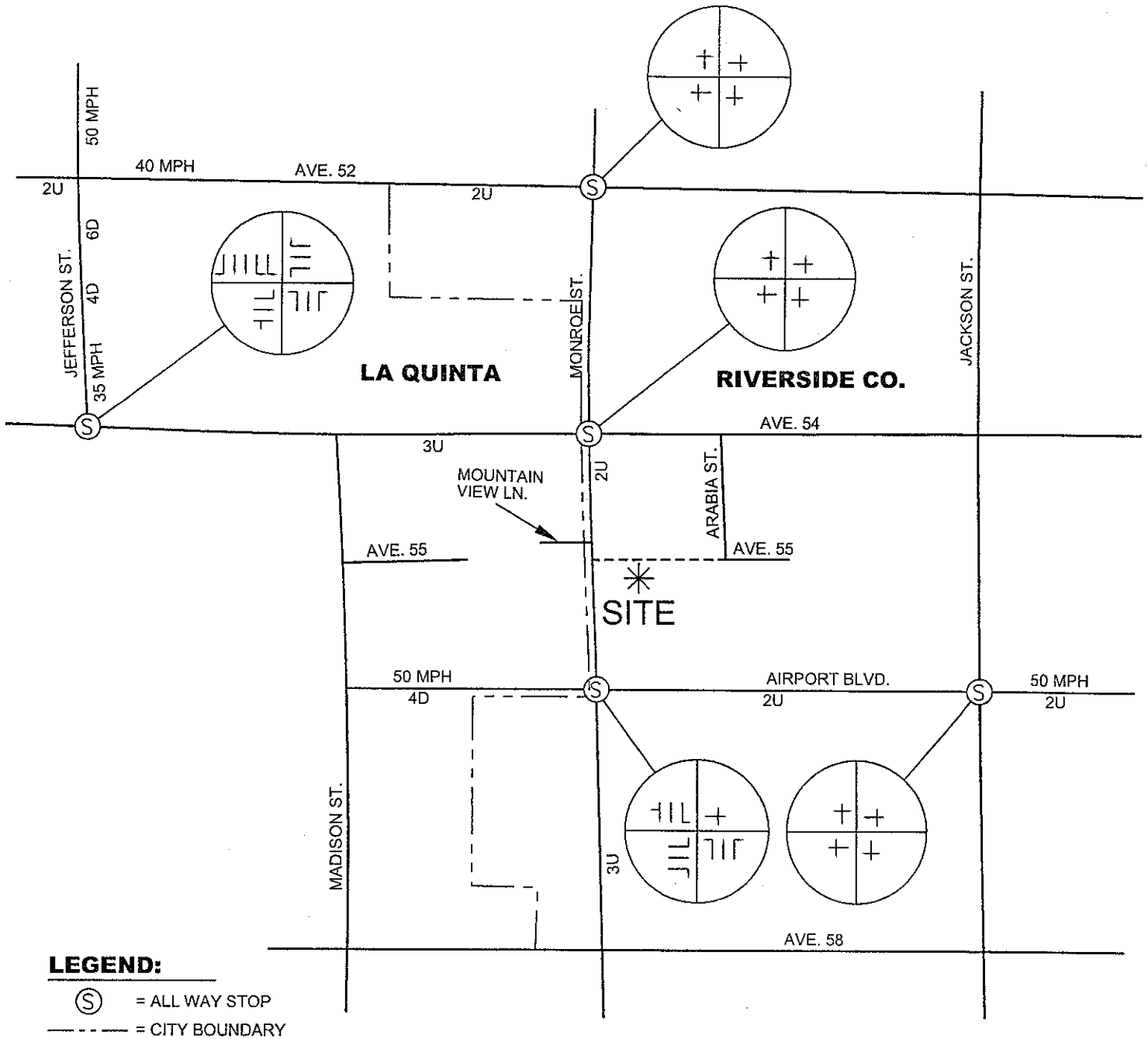
2. Traffic Volumes and Conditions

Existing average daily traffic (ADT) on arterial highways throughout the study area are shown on Exhibit 3-B. Existing ADT's are factored up from peak hour counts collected for RK ENGINEERING GROUP, INC. using the following formula for each intersection leg:

$$\text{PM Peak Hour (Approach Volume + Exit Volume)} * 12 = \text{Leg Volume}$$

The current technical guide to the evaluation of traffic operations is the 2000 Highway Capacity Manual (HCM 2000). The HCM defines level of

EXISTING NUMBER OF LANES AND INTERSECTION CONTROLS

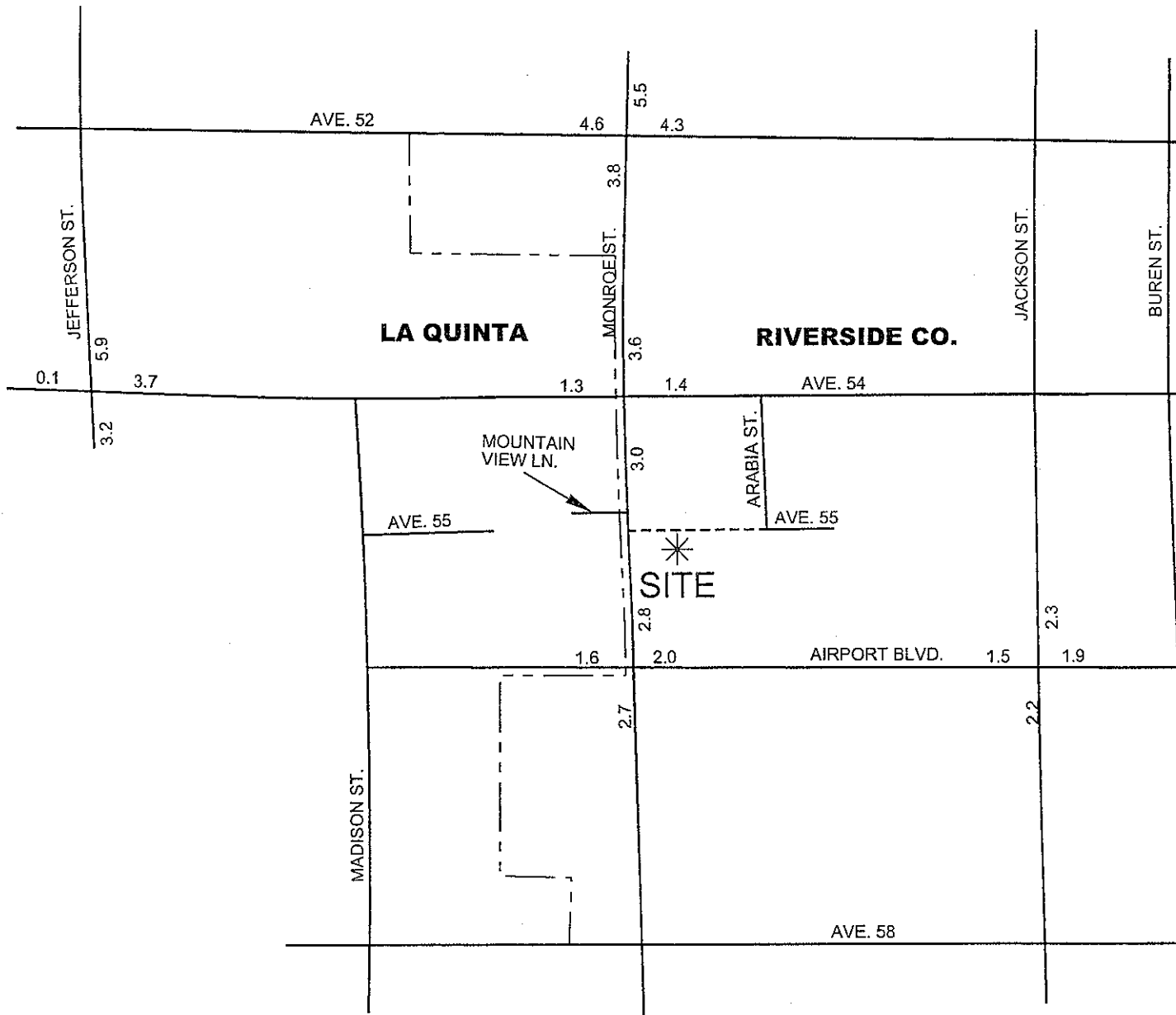


LEGEND:

- (S) = ALL WAY STOP
- = CITY BOUNDARY



EXHIBIT 3-B
EXISTING AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

4.3 = ADT (1000'S)



service as a qualitative measure which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

The criteria used to evaluate LOS (Level of Service) conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted.

The definitions of level of service for uninterrupted flow (flow unrestrained by the existence of traffic control devices) are:

- LOS "A" represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.
- LOS "B" is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.
- LOS "C" is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.
- LOS "D" represents high-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.
- LOS "E" represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.

- LOS "F" is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount, which can traverse the point. Queues form behind such locations.

The definitions of level of service for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control.

The level of service is typically dependent on the quality of traffic flow at the intersections along a roadway. The HCM methodology expresses the level of service at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control. The levels of service determined in this study are determined using the HCM methodology.

For signalized intersections, average control delay per vehicle is used to determine level of service. Levels of service at signalized study intersections have been evaluated using the HCM intersection analysis program.

For all way stop controlled (AWSC) intersections, the ability of vehicles to enter the intersection is not controlled by the occurrence of gaps in the flow of the main street. All way stop-controlled intersections have been evaluated using the HCM methodology for this type of multi-way stop controlled intersection configuration. The level of service criteria for this type of intersection analysis is also based on average control delay per vehicle.

Study area intersections, which are stop sign controlled with stop control on the minor street, have only been analyzed using the unsignalized

intersection methodology of the HCM. For these intersections, the calculation of level of service is dependent on the occurrence of gaps occurring in the traffic flow of the main street. Using data collected describing the intersection configuration and traffic volumes at these locations, the level of service has been calculated. The Level of Service is determined based on worst individual movement or movements sharing a single lane. The relationship between level of service and delay is different than for signalized intersections.

The level of services are defined for the various analysis methodologies as follows:

LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)	
	SIGNALIZED	UNSIGNALIZED
A	0.0 to 10.00	0.0 to 10.00
B	10.01 to 20.00	10.01 to 15.00
C	20.01 to 35.00	15.01 to 25.00
D	35.01 to 55.00	25.01 to 35.00
E	55.01 to 80.00	35.01 to 50.00
F	80.01 and up	50.01 and up

The LOS analysis for signalized intersections has been performed using optimized signal timing. This analysis has included an assumed lost time of three seconds per phase in accordance with HCM recommended default values. Signal timing optimization has considered pedestrian safety and signal coordination requirements. Appropriate time for pedestrian crossings have also been considered in the signalized intersection analysis. Saturation flow rates of 1,900 vehicles per hour of green (vphg) have been assumed for all capacity analysis.

Existing intersection level of service calculations are shown in Table 3-1 and are based upon manual AM and PM peak hour turning movement counts collected for RK ENGINEERING GROUP, INC. and are illustrated on Exhibits 3-C and 3-D. Traffic count worksheets are included in Appendix "B".

For existing traffic conditions, the study area intersections are currently operating at Level of Service "C" or better during the peak hours. Existing HCM calculation worksheets are provided in Appendix "C".

3. Transit Service

Public transit service is provided by the SunLine Transit Agency, and is shown on Exhibit 3-E. As the exhibit shows, the study area is not currently served by public transit.

4. Existing Relevant Transportation System Management Programs

A trip reduction ordinance has been adopted by the County of Riverside.

TABLE 3-1

INTERSECTION ANALYSIS FOR EXISTING CONDITIONS

INTERSECTION	TRAFFIC CONTROL ³	INTERSECTION APPROACH LANES ¹												DELAY ² (SECS.)		LEVEL OF SERVICE		
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND			AM	PM	AM	PM	
		L	T	R	L	T	R	L	T	R	L	T	R					
Monroe St (NS) at:																		
• Ave. 52 (EW)	AWS	0	1	1	0	1	1	0	1	0	0	1	0	10.3	10.2	B	B	
• Ave. 54 (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.0	8.1	A	A	
• Airport Blvd (EW)	AWS	1	1	1	1	2	0	1	1	1	0	1	0	8.4	8.3	A	A	
Jefferson St (NS)																		
• Ave. 54 (NS)	AWS	1	1	1	2	2	1	1	2	0	1	1	1	9.3	8.8	A	A	
Jackson St (NS)																		
• Airport Blvd (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.4	7.8	A	A	

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap

² Analysis Software: Traffix, Version 7.5.1115 (2001). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ TS = Traffic Signal
CSS = Cross Street Stop

EXHIBIT 3-C EXISTING AM PEAK HOUR VOLUMES

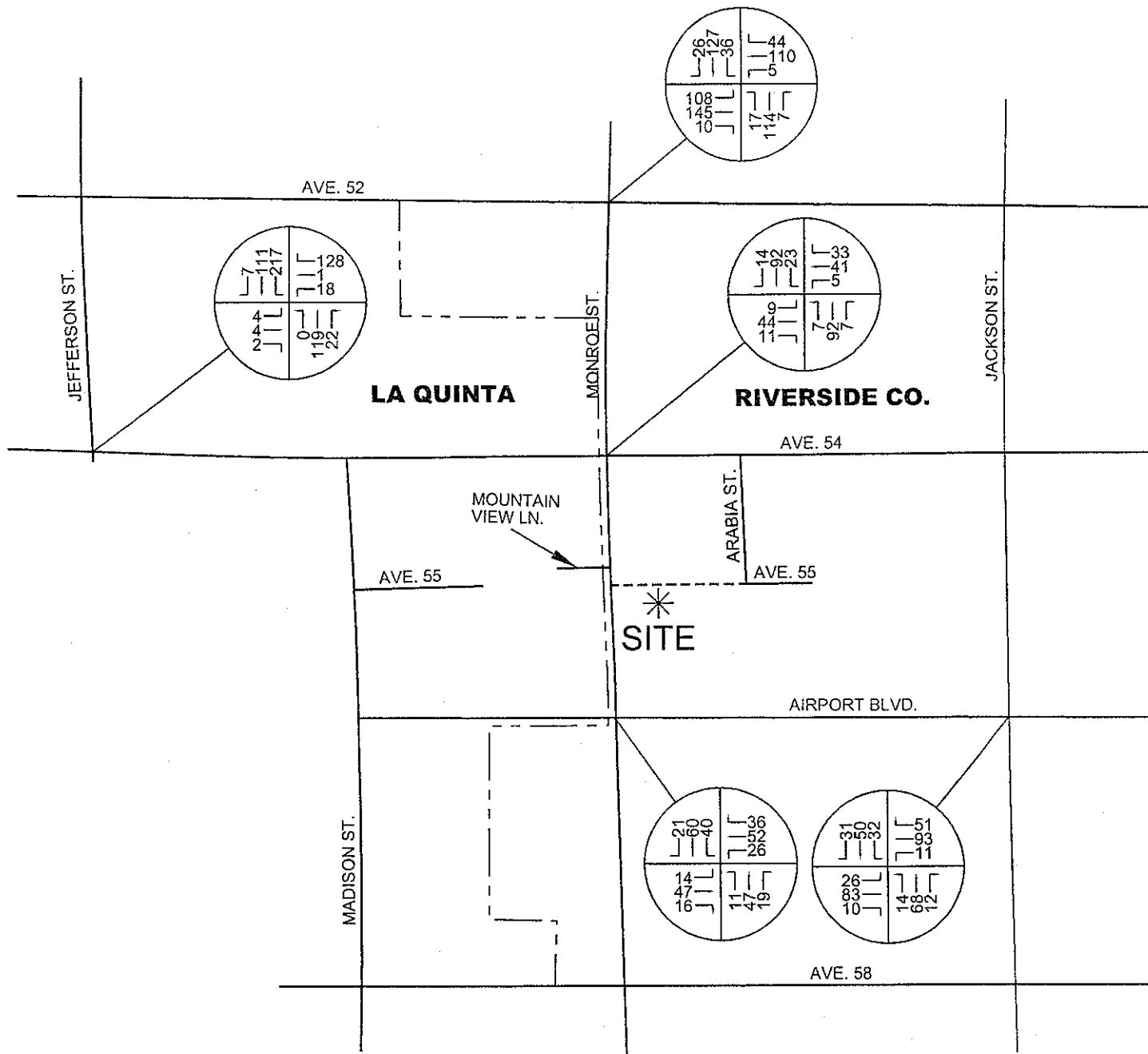


EXHIBIT 3-D EXISTING PM PEAK HOUR VOLUMES

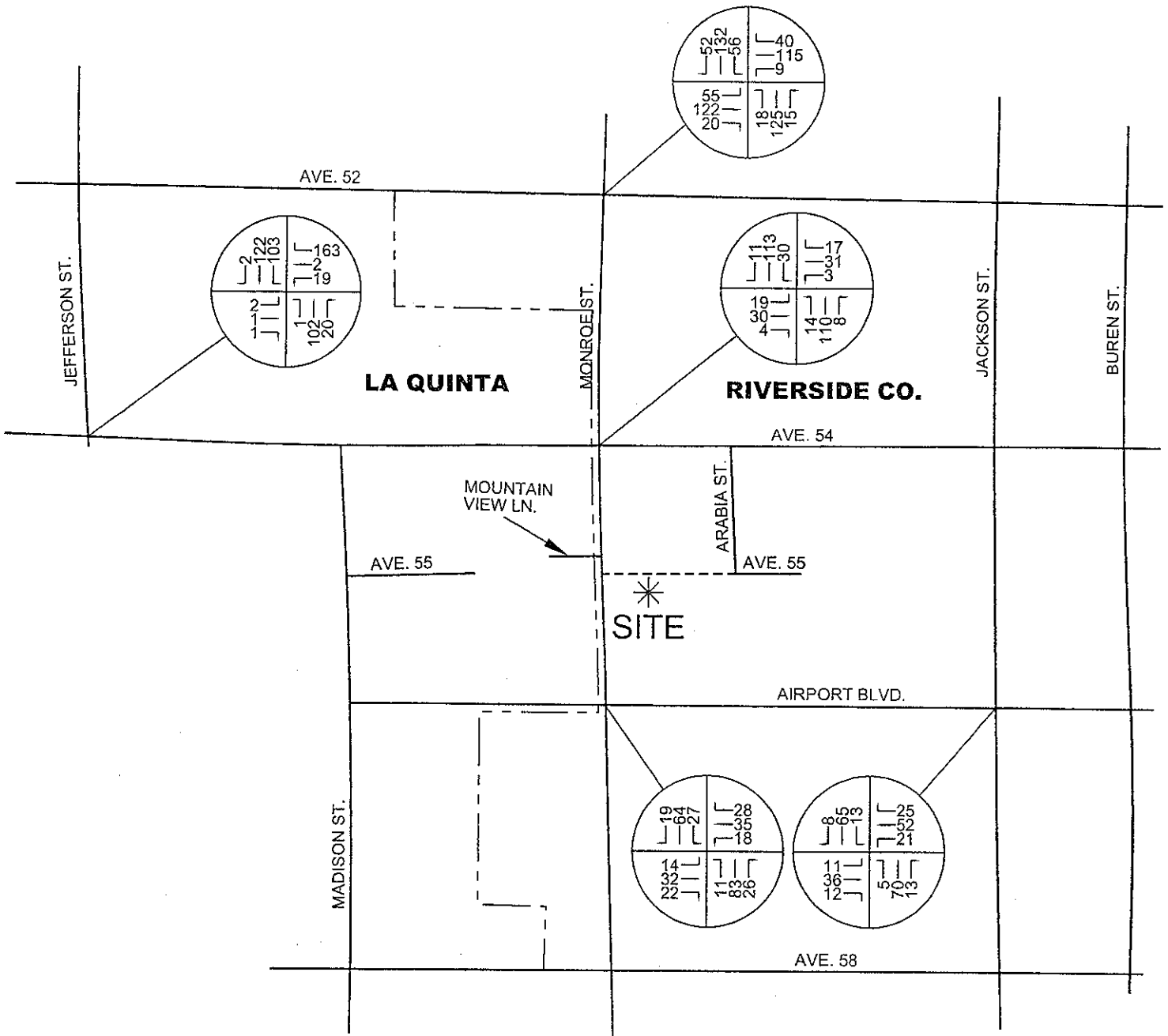
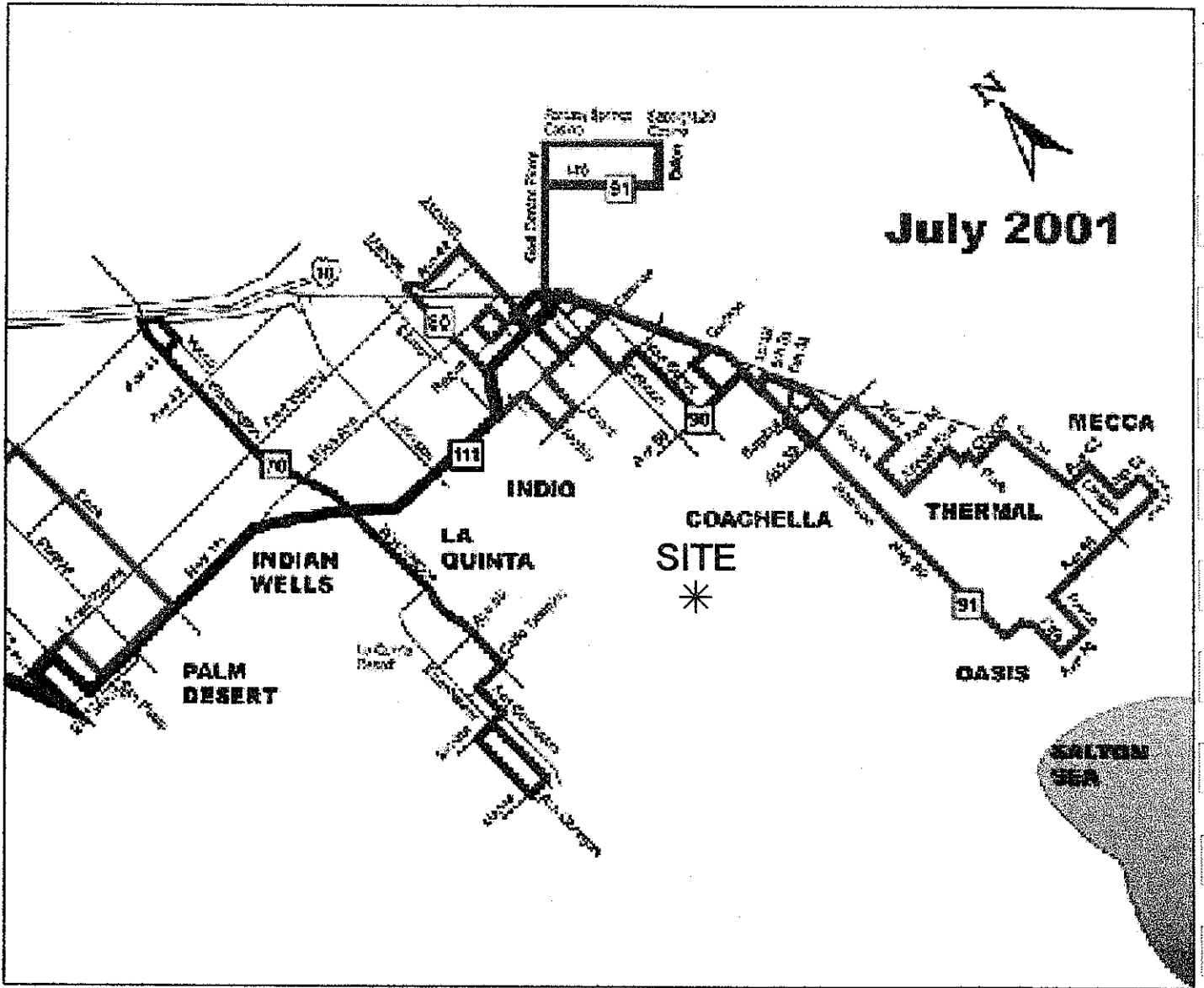


EXHIBIT 3-E
PUBLIC TRANSIT SERVICE



SOURCE: SUNLINE TRANSIT

IV. PROJECTED TRAFFIC

A. Site Traffic

1. Trip Generation

Trip generation represents the amount of traffic, which is attracted and produced by a development. The traffic generation for the project is based upon the specific land use proposed for the development. The project site consists of 82 dwelling units of single-family detached housing.

Trip generation rates for the proposed development are shown in Table 4-1. The trip generation rates are based upon data collected by the Institute of Transportation Engineers (ITE).

Both daily and peak hour trip generation for the proposed development are shown in Table 4-2. The proposed development is projected to generate a net total of 785 trip-ends per day with 62 vehicles per hour during the AM peak hour and 83 vehicles per hour during the PM peak hour.

2. Trip Distribution

Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is heavily influenced by the geographical location of the site, the location of employment, commercial and recreational opportunities and the proximity to the regional freeway system. The directional orientation of traffic was determined by evaluating existing and proposed land uses and highways within the community and existing traffic volumes.

TABLE 4-1

PROJECT TRIP GENERATION RATES¹

ITE CODE	LAND USE	UNITS ²	AM		PM		DAILY
			IN	OUT	IN	OUT	
210	Single-Family Residential	TSF	0.19	0.56	0.65	0.36	9.57

¹ Source: Institute of Transportation Engineers (ITE), Trip Generation, Sixth Edition, 1997.

² TSF = Thousand Square Feet

TABLE 4-2

PROJECT TRIP GENERATION

LAND USE	QUANTITY	UNITS ¹	AM		PM		DAILY
			IN	OUT	IN	OUT	
Single-Family Residential	82	DU	16	46	53	30	785

¹ DU = Dwelling Units

Trip distribution for this study has been based upon Opening Year conditions, based upon those highway facilities, which will be in place with the proposed development. The trip distribution pattern for the project is graphically depicted on Exhibits 4-A.

3. Modal Split

The traffic reducing potential of public transit has not been considered in this report. Essentially the traffic projections are "conservative" in that public transit might be able to reduce the traffic volumes.

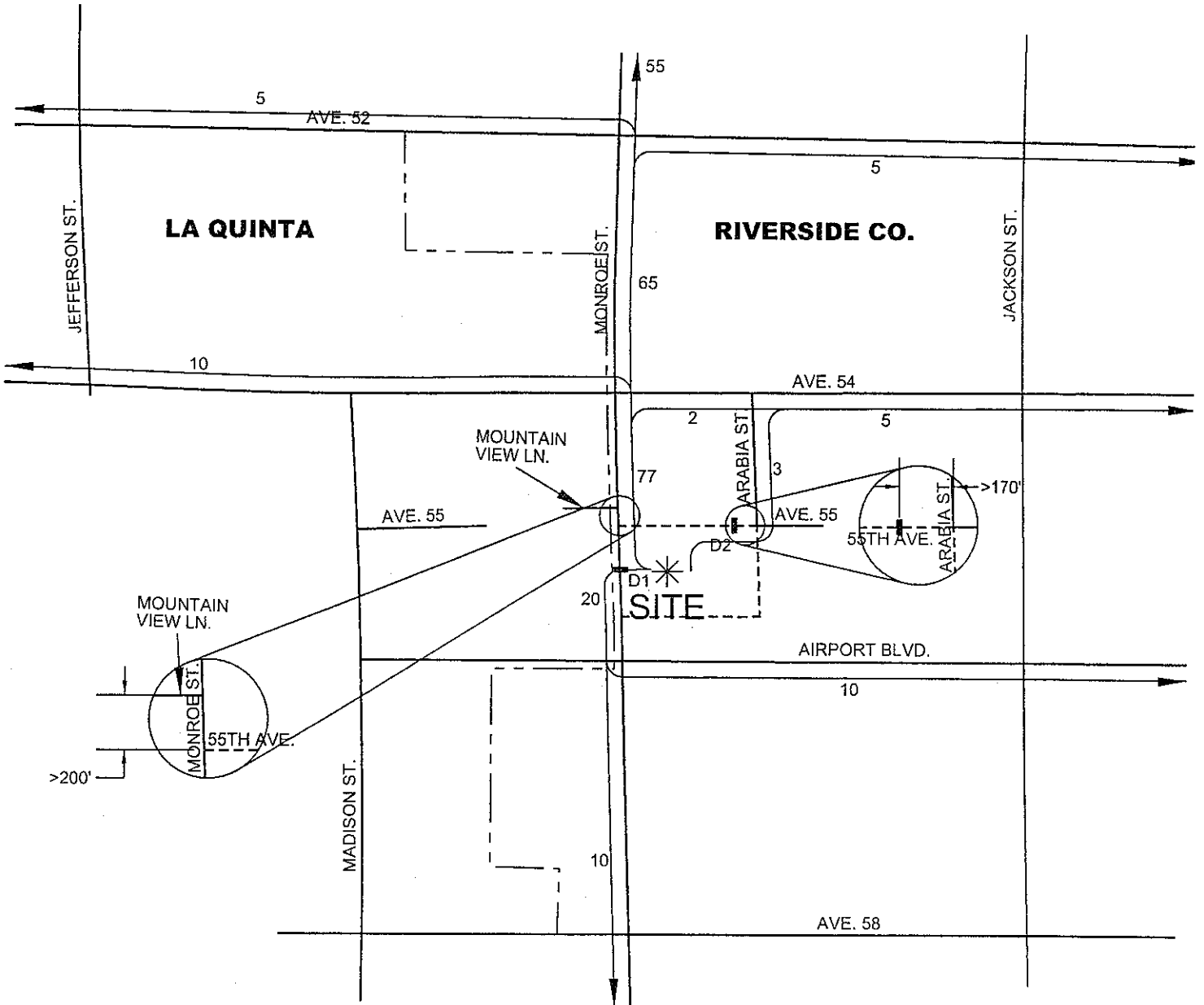
4. Trip Assignment

The assignment of traffic from the site to the adjoining roadway system has been based upon the site's trip generation, trip distribution, proposed arterial highway and local street systems, which would be in place by the opening year. Based on the identified project traffic generation and distribution, the proposed project related ADT volumes are shown on Exhibit 4-B. The proposed project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-C and 4-D, respectively.

B. Approved Projects Traffic

Traffic from approved projects in the area is included with opening year analysis.

EXHIBIT 4-A
PROJECT TRIP DISTRIBUTION



LEGEND:

20 = PERCENT OF TRAFFIC TO/FROM PROJECT
 D = DRIVEWAY ACCESS

1298-02-01-EX_4-A

TENTATIVE TRACT MAP 30399, Riverside County, California



EXHIBIT 4-C
PROJECT AM PEAK HOUR VOLUMES

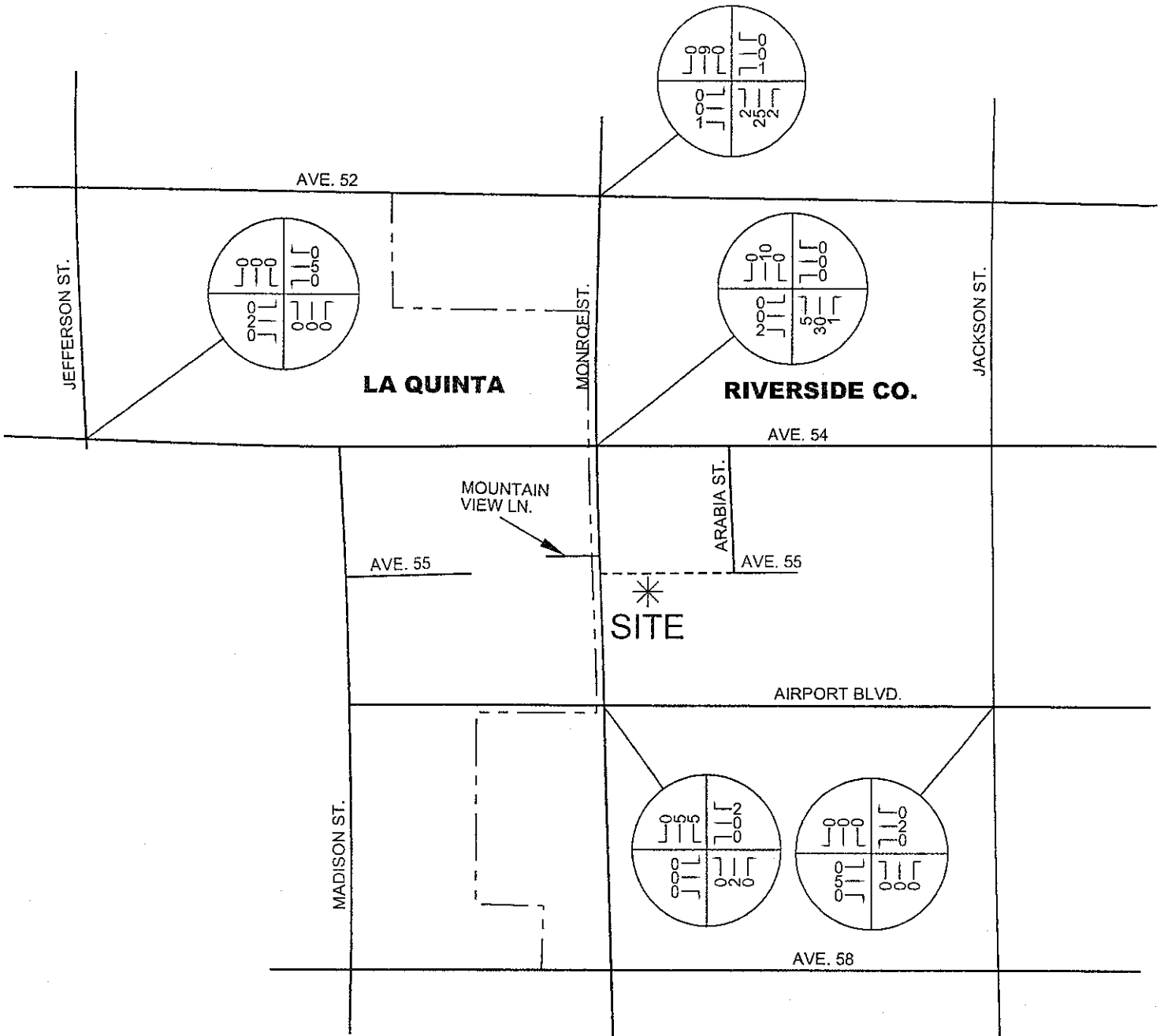
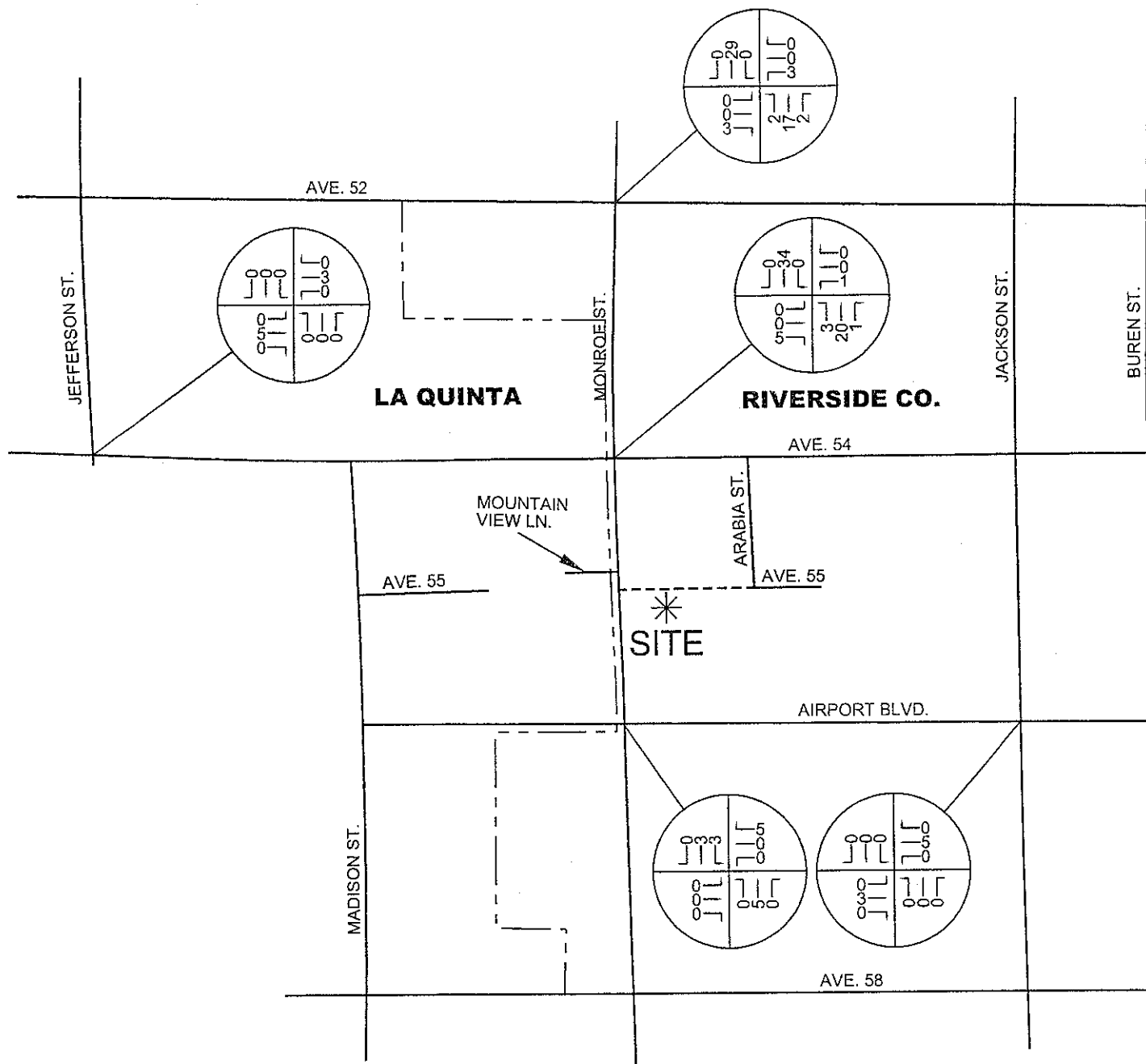


EXHIBIT 4-D PROJECT PM PEAK HOUR VOLUMES



V. OPENING YEAR TRAFFIC ANALYSIS

A. Overall Analysis Methodology

Traffic volumes in the Opening Year (2003) are projected to grow by 5%, to account for general growth and approved projects in the area. This growth factor was provided by the County of Riverside Transportation Department.

B. Site Access

The proposed project will have access to Monroe Street and Avenue 55.

C. Level of Service Analysis

1. Level of Service at Opening Year Without Project

Opening Year intersection levels of service without the proposed project are shown in Table 5-1. HCM calculation worksheets are provided in Appendix "D". Opening Year without project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-A and 5-B, respectively, and average daily traffic is shown on Exhibit 5-C.

For Opening Year without project traffic conditions, the study area intersections are projected to operate at Level of Service "C" or better during the peak hours (see Table 5-1).

2. Level of Service at Opening Year With Project

Opening Year intersection levels of service with the proposed project are shown in Table 5-2. HCM calculation worksheets are provided in Appendix "E". Opening Year with project AM and PM peak hour intersection turning

TABLE 5-1

INTERSECTION ANALYSIS FOR OPENING YEAR (2003) WITHOUT PROJECT

INTERSECTION	TRAFFIC CONTROL ³	INTERSECTION APPROACH LANES ¹												DELAY ² (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND			AM	PM	AM	PM
		L	T	R	L	T	R	L	T	R	L	T	R				
Monroe St (NS) at:																	
• Ave. 52 (EW)	AWS	0	1	1	0	1	1	0	1	0	0	1	0	10.7	10.6	B	B
• Ave. 54 (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.1	8.2	A	A
• Airport Blvd (EW)	AWS	1	1	1	1	2	0	1	1	1	0	1	0	8.5	8.4	A	A
Jefferson St (NS)																	
• Ave. 54 (NS)	AWS	1	1	1	2	2	1	1	2	0	1	1	1	9.5	8.9	A	A
Jackson St (NS)																	
• Airport Blvd (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.5	7.9	A	A

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap; 1 = Improvement

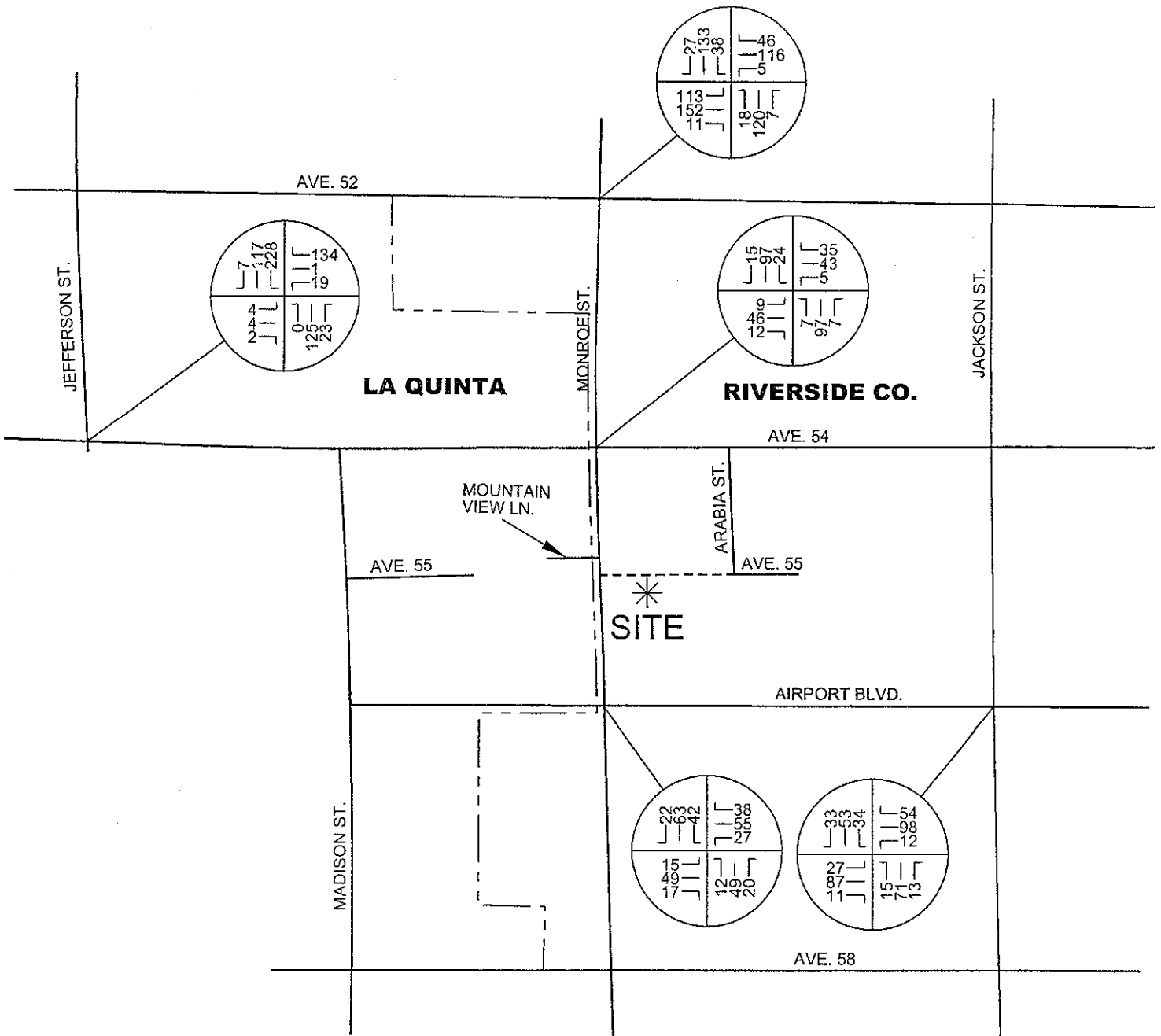
² Analysis Software: Traffix, Version 7.5.1115 (2001). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ TS = Traffic Signal
CSS = Cross Street Stop

⁴ -- = Delay High, Intersection Unstable, Level of Service "F".

EXHIBIT 5-A

OPENING YEAR WITHOUT PROJECT AM PEAK HOUR VOLUMES



OPENING YEAR WITHOUT PROJECT PM PEAK HOUR VOLUMES

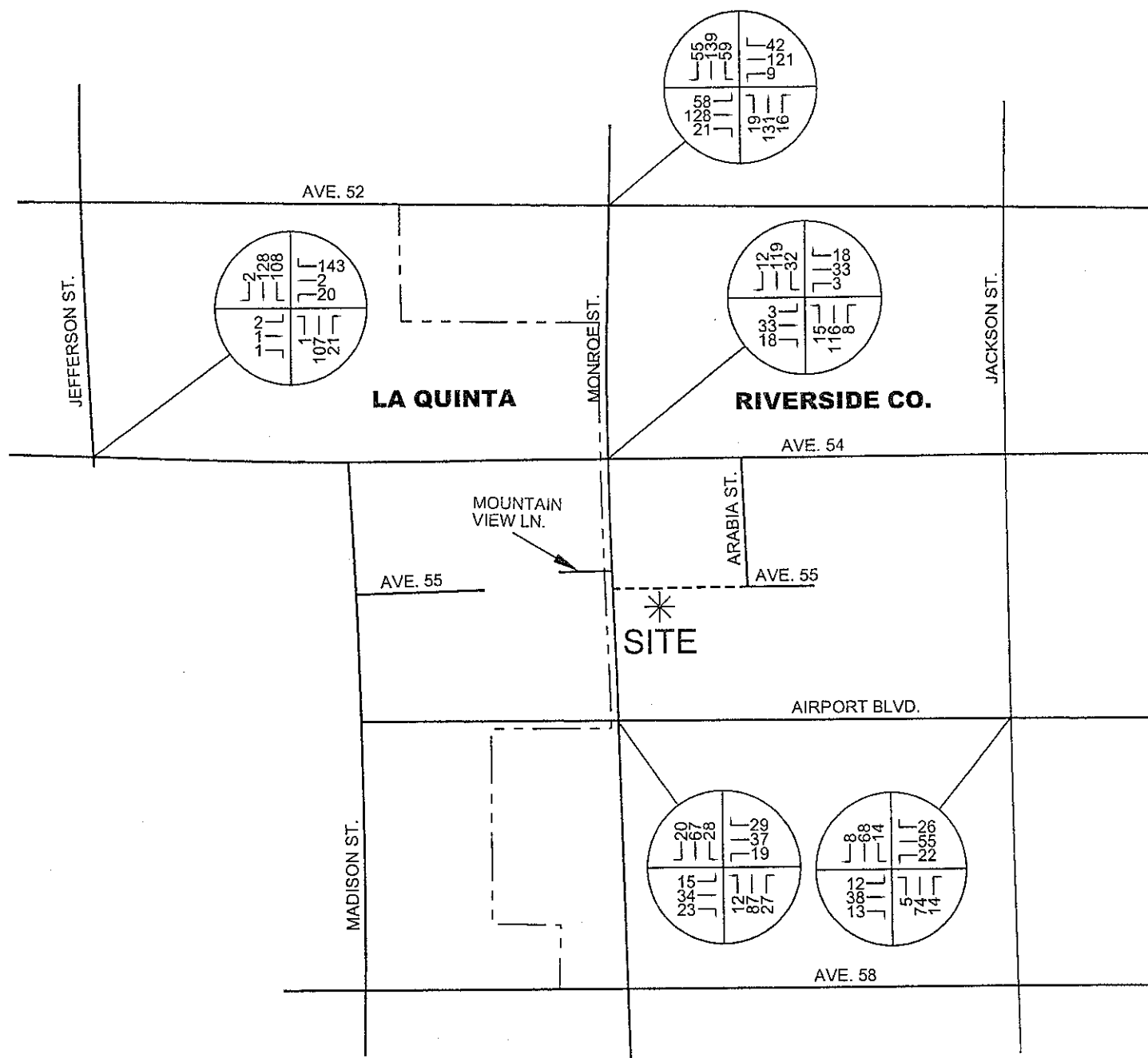
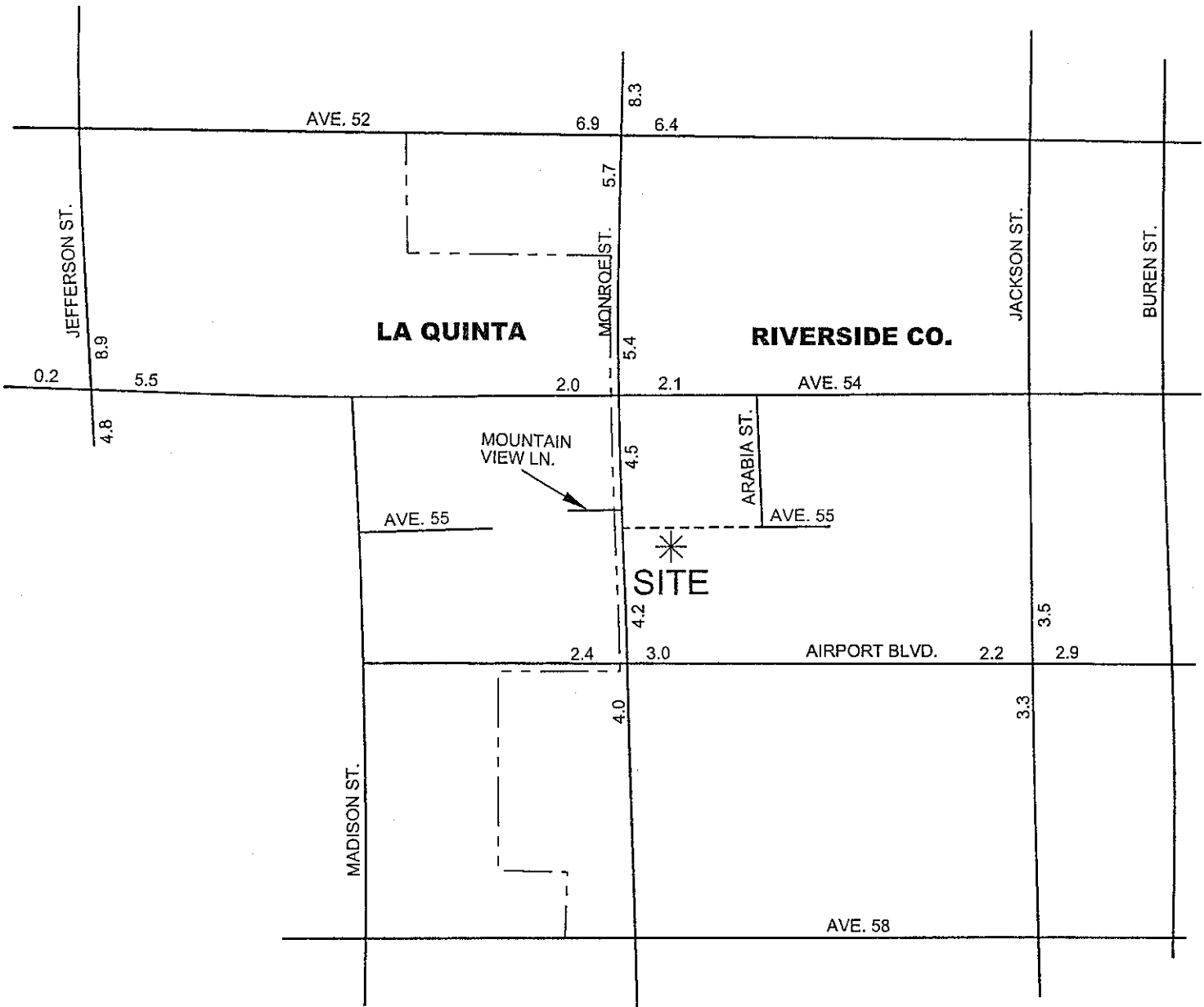


EXHIBIT 5-C
**OPENING YEAR WITHOUT PROJECT
 AVERAGE DAILY TRAFFIC (ADT)**



LEGEND:

4.2 = ADT (1000'S)



TABLE 5-2

INTERSECTION ANALYSIS FOR OPENING YEAR (2003) WITH PROJECT

INTERSECTION	TRAFFIC CONTROL ³	INTERSECTION APPROACH LANES ¹												DELAY ² (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND			AM	PM	AM	PM
		L	T	R	L	T	R	L	T	R	L	T	R				
Monroe St (NS) at:																	
• Ave. 52 (EW)	AWS	0	1	1	0	1	1	0	1	0	0	1	0	11.0	11.2	B	B
• Ave. 54 (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.3	8.5	A	A
• Airport Blvd (EW)	AWS	1	1	1	1	2	0	1	1	1	0	1	0	8.6	8.4	A	A
Jefferson St (NS)																	
• Ave. 54 (NS)	AWS	1	1	1	2	2	1	1	2	0	1	1	1	9.5	8.9	A	A
Jackson St (NS)																	
• Airport Blvd (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.5	7.9	A	A

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap; 1 = Improvement

² Analysis Software: Traffix, Version 7.5.1115 (2001). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ TS = Traffic Signal
CSS = Cross Street Stop

⁴ -- = Delay High, Intersection Unstable, Level of Service "F".

movement volumes are shown on Exhibits 5-D and 5-E, respectively, and average daily traffic is shown on Exhibit 5-F.

For Opening Year with project traffic conditions, the study area intersections are projected to operate at Level of Service "C" or better during the peak hours, with improvements (see Table 5-2).

3. Opening Year Intersection Improvements

No opening year intersection improvements are necessary.

EXHIBIT 5-D

OPENING YEAR WITH PROJECT AM PEAK HOUR VOLUMES

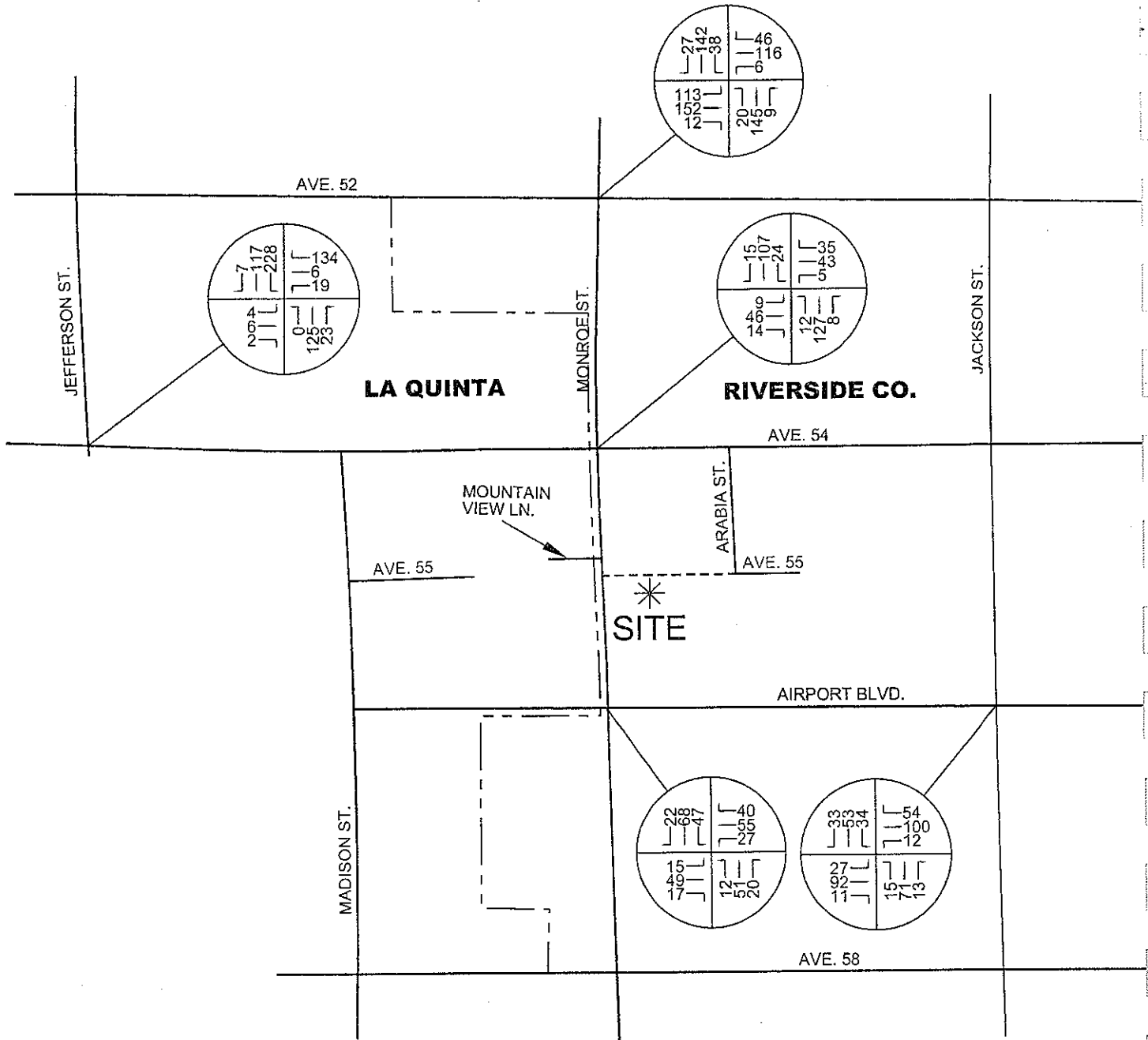


EXHIBIT 5-E

OPENING YEAR WITH PROJECT PM PEAK HOUR VOLUMES

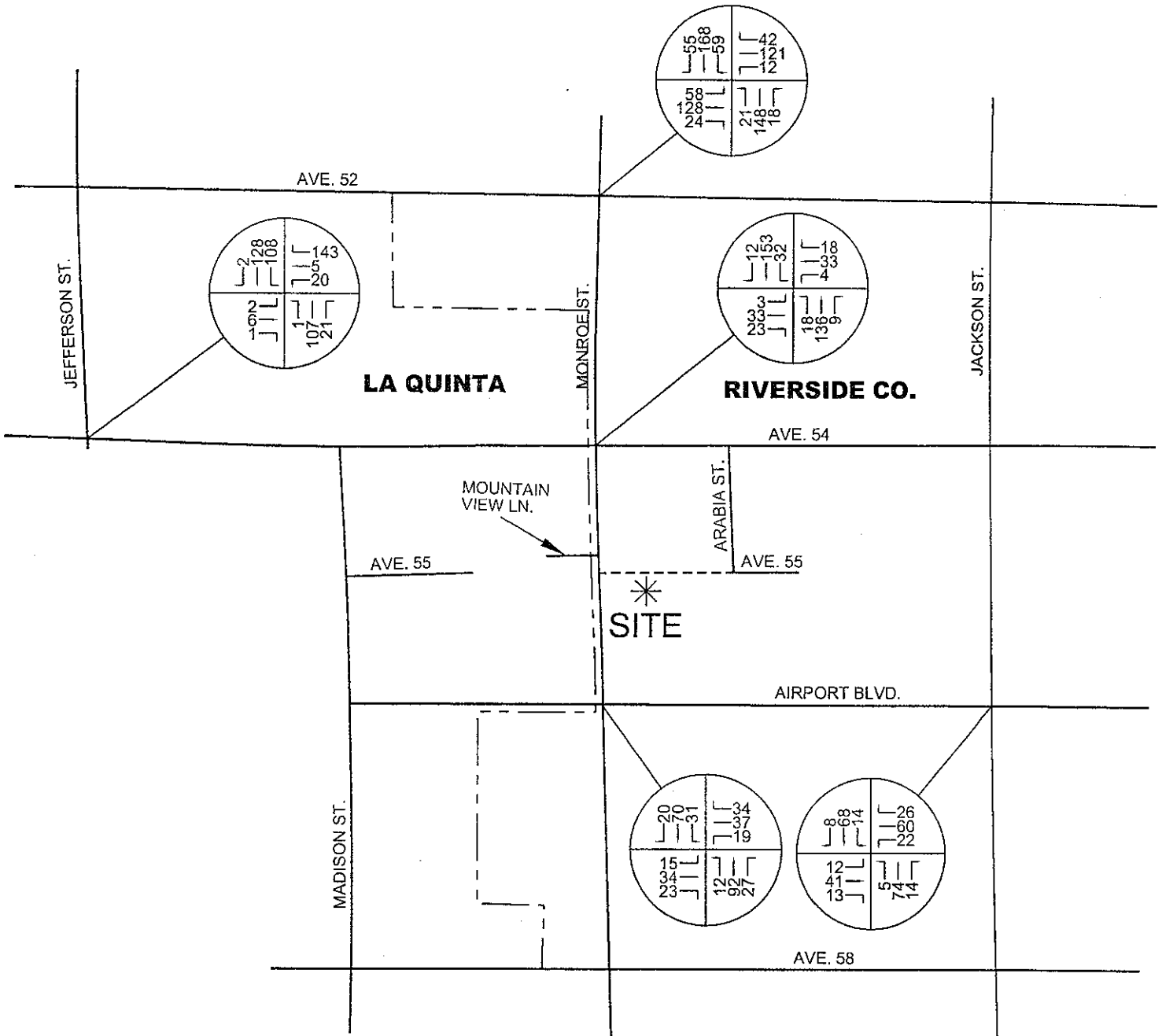
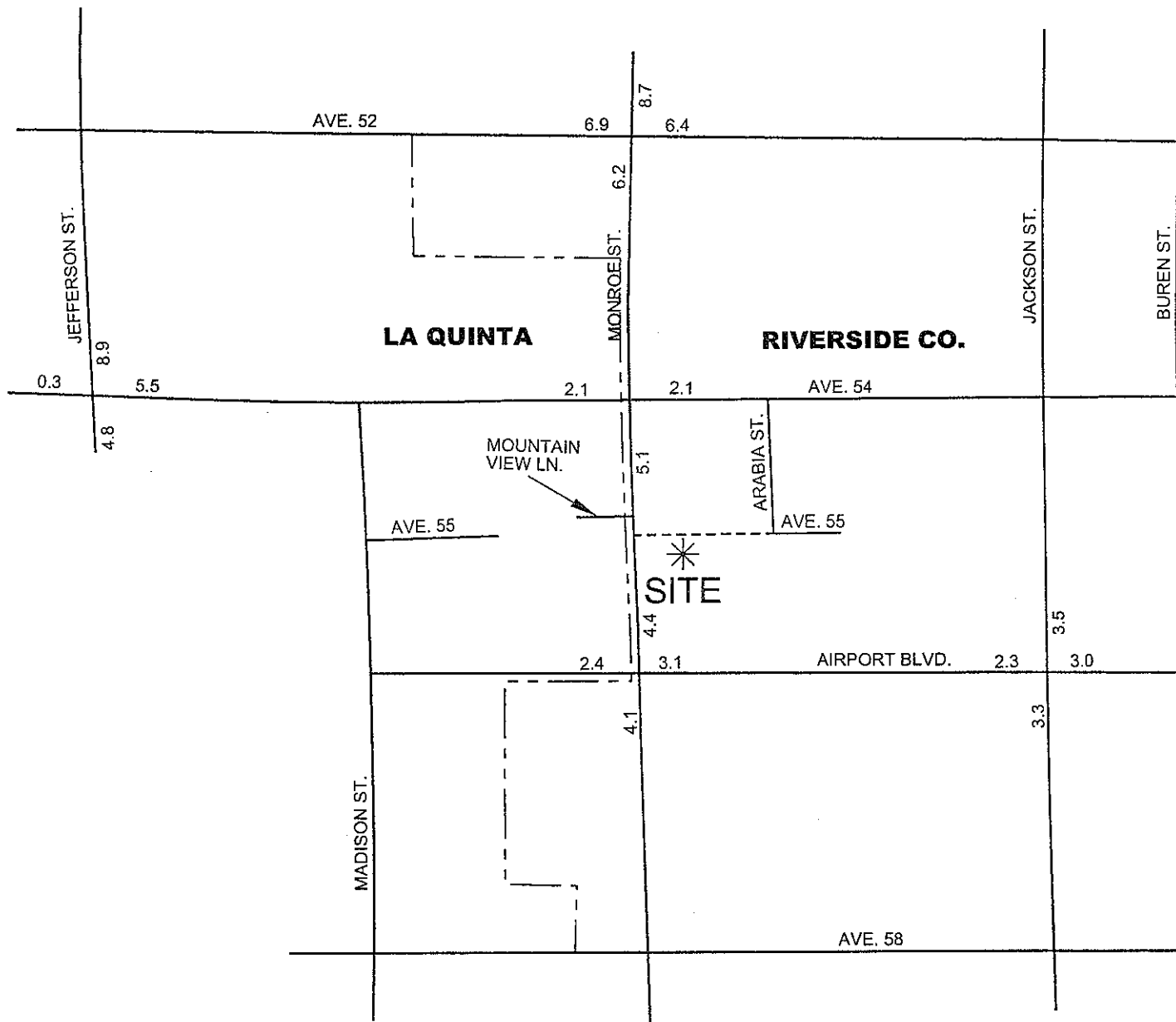


EXHIBIT 5-F
**OPENING YEAR WITH PROJECT
 AVERAGE DAILY TRAFFIC (ADT)**



LEGEND:
 4.4 = ADT (1000'S)



VI. FINDINGS AND CONCLUSIONS

A. Site Accessibility

The proposed project will have access to Monroe Street and Avenue 55.

B. Traffic Impacts

For existing traffic conditions, no traffic signals are warranted at the study area intersections.

The proposed development is projected to generate approximately 785 trip-ends per day with 62 vehicles per hour during the AM peak hour and 83 vehicles per hour during the PM peak hour.

For Opening Year without project traffic conditions, no traffic signals are warranted at the area intersections.

C. Need for Improvements Off-Site to Achieve Required Level of Service

For Opening Year traffic conditions, no improvements are needed at the study area intersections.

D. Compliance With General Plan Circulation Policies

POLICY:

New industrial, commercial and residential development should be designed and developed to promote alternative forms of travel through the use of bikeways, park-n-ride facilities, bus stops and other alternative travel facilities.

COMMENTS ON HOW THIS PROJECT MEETS THE GENERAL PLAN POLICY:

The project has not been designed to meet this policy. Its location is neither served by public transit nor Riverside County bikeway facilities. Thus it does not meet this policy.

POLICY:

Through traffic movements shall be limited to general plan roads and shall avoid streets through residential neighborhoods. Provisions shall be made for highways capable of carrying high volumes of through traffic between major trip generators.

COMMENTS ON HOW THIS PROJECT MEETS THE GENERAL PLAN POLICY:

Through traffic shall use adjacent highways (including Monroe Street and Avenue 55) for through traffic.

POLICY:

Curves and grades shall be designed to permit safe movement of vehicular traffic at the road's design speed.

COMMENTS ON HOW THIS PROJECT MEETS THE GENERAL PLAN POLICY:

Cross-sections and ultimate alignments will be designed to meet Riverside County Transportation Department requirements.

POLICY:

Whenever access must be taken directly off of a general planned highway for abutting parcels, common access shall be provided at the property line. Parcels on opposite sides of a highway shall have access points located directly opposite each other, whenever possible, to allow for future street intersections and increased safety.

COMMENTS ON HOW THIS PROJECT MEETS THE GENERAL PLAN POLICY:

Stop sign controls would be adequate to provide traffic movement and safe intersections to adjacent routes serving through traffic.

POLICY:

Sight distances shall be adequate to provide for safe vehicular movement at a road's design speed. Setbacks allowing for clear, unobstructed sight distance shall be provided at all intersections.

COMMENTS ON HOW THIS PROJECT MEETS THE GENERAL PLAN POLICY:

Sight distance should be reviewed in conjunction with the preparation of grading, landscaping and street improvement plans.

POLICY:

Roadways shall be located outside identified floodplains whenever possible.

COMMENTS ON HOW THIS PROJECT MEETS THE GENERAL PLAN POLICY:

This issue is not applicable to this project site.

POLICY:

All streets and highways located within identified blow sand areas shall be protected from blow sand hazards.

COMMENTS ON HOW THIS PROJECT MEETS THE GENERAL PLAN POLICY:

This issue is not applicable to this project site.

POLICY:

Developments which are identified as major trip attractors (i.e., commercial and employment centers) shall incorporate the potential for public transit service in their design.

COMMENTS ON HOW THIS PROJECT MEETS THE GENERAL PLAN POLICY:

This project site has not been identified as a major trip attraction.

POLICY:

Bikeways should link major activity centers such as residential areas, employment centers, commercial facilities, recreation areas and education facilities.

COMMENTS ON HOW THIS PROJECT MEETS THE GENERAL PLAN POLICY:

The project is not linked to Riverside County General Plan bikeway facilities, and does not meet this policy.

POLICY:

Bikeways shall be located in aesthetically pleasing surroundings such as through parks, adjacent to scenic highways, and near watercourses, whenever possible.

COMMENTS ON HOW THIS PROJECT MEETS THE GENERAL PLAN POLICY:

This policy does not apply to the project applicant.

POLICY:

Bikeways shall be developed in compliance with the land use standards established in the Riverside County Bicycle and Facilities Plan.

COMMENTS ON HOW THIS PROJECT MEETS THE GENERAL PLAN POLICY:

This policy does not apply to the project applicant.

VII. RECOMMENDATIONS

A. Site Access

The proposed project will have access to Monroe Street and Avenue 55.

B. Roadway Improvements

No roadway improvements are necessary. Traffic signing/striping should be implemented in conjunction with detailed construction plans for the project site.

Sight distance at each project access roadway should be reviewed with respect to standard Caltrans/County of Riverside sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

C. Transportation System Management Actions

1. Off-Site

Request Riverside Transit Agency to provide service to the project area.

Request County of Riverside to provide bike lanes adjacent to the project.

2. On-Site

Design the project following *Riverside County Transportation Demand Management Design Guidelines* to reduce automobile trips and make the community pedestrian and transit friendly.

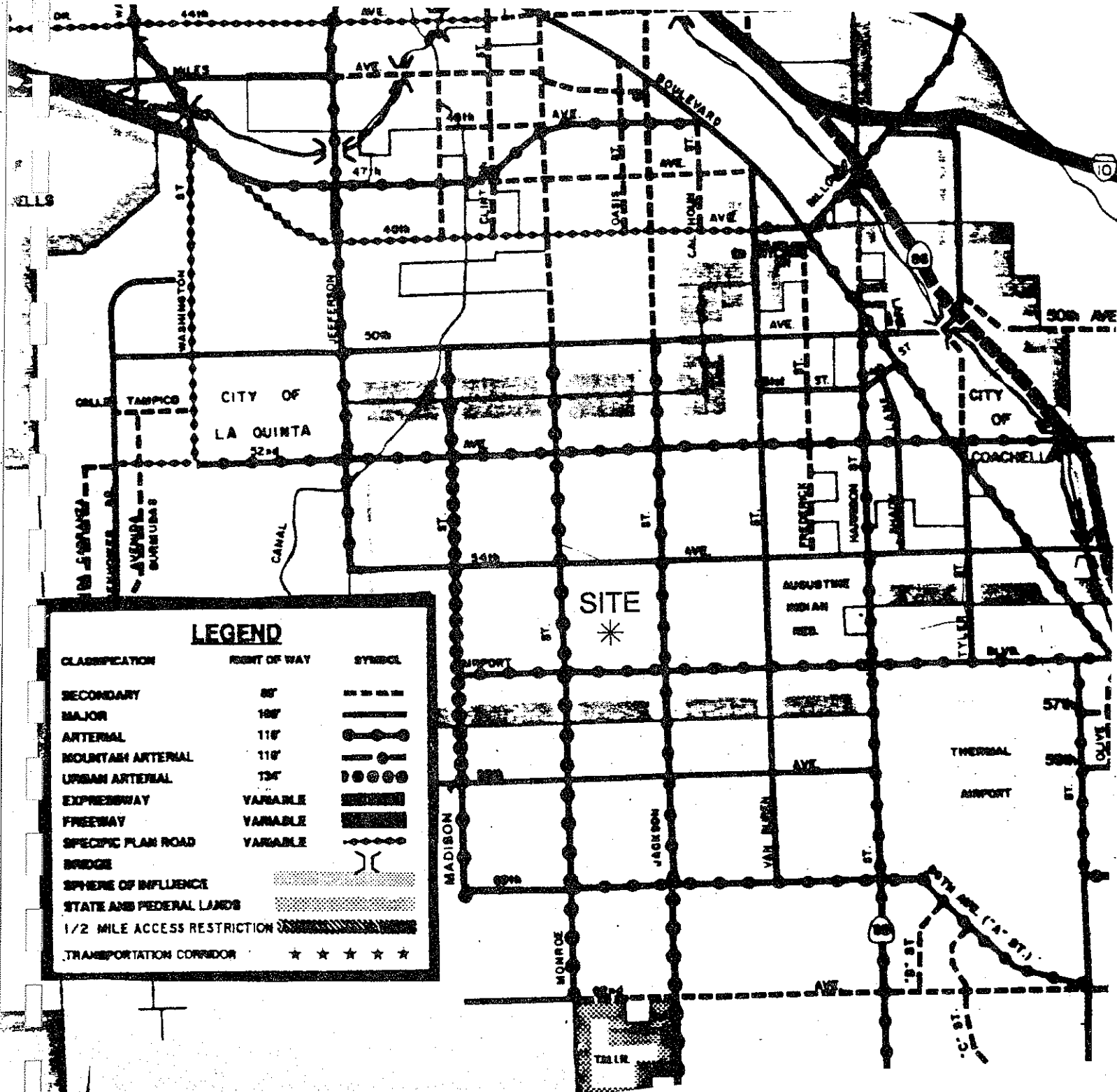
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APPENDIX A

RIVERSIDE COUNTY GENERAL PLAN CIRCULATION ELEMENT



RIVERSIDE COUNTY GENERAL PLAN CIRCULATION ELEMENT

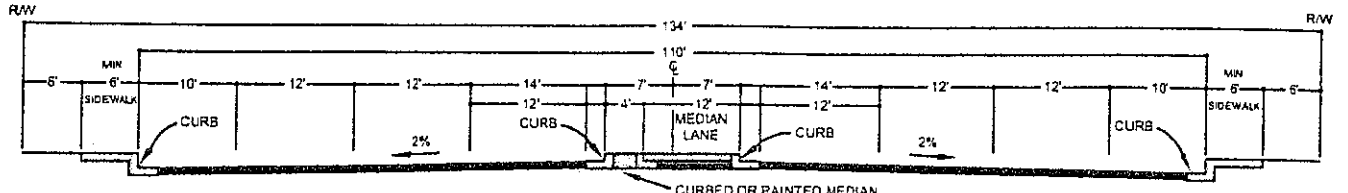


CLASSIFICATION	RIGHT OF WAY	SYMBOL
SECONDARY	80'	--- ---
MAJOR	100'	--- ---
ARTERIAL	110'	--- ---
MOUNTAIN ARTERIAL	110'	--- ---
UPPER ARTERIAL	130'	--- ---
EXPRESSWAY	VARIABLE	--- ---
FREIGHTWAY	VARIABLE	--- ---
SPECIFIC PLAN ROAD	VARIABLE	--- ---
BRIDGE		--- ---
SPHERE OF INFLUENCE		--- ---
STATE AND FEDERAL LANDS		--- ---
1/2 MILE ACCESS RESTRICTION		--- ---
TRANSPORTATION CORRIDOR		★ ★ ★ ★ ★

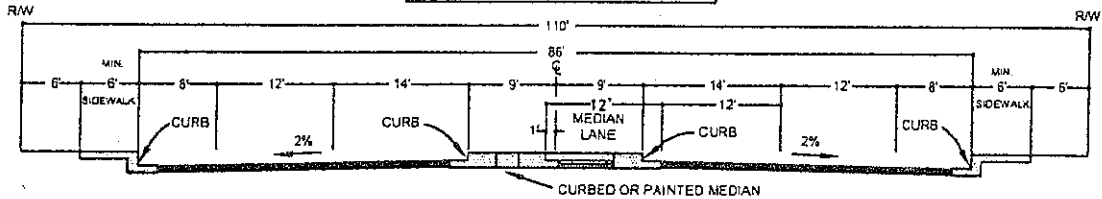
N
SOURCE: RIVERSIDE COUNTY GENERAL PLAN



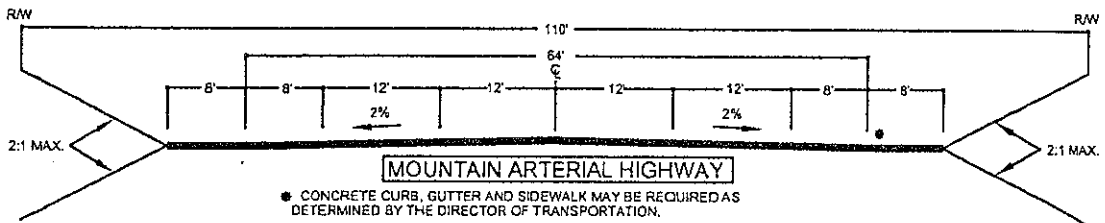
RIVERSIDE COUNTY GENERAL PLAN ROADWAY CROSS SECTIONS



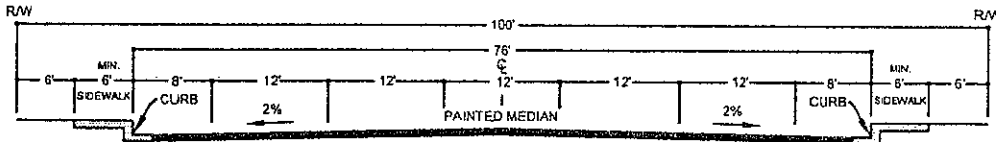
URBAN ARTERIAL HIGHWAY



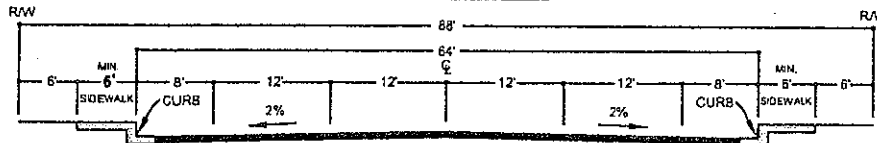
ARTERIAL HIGHWAY



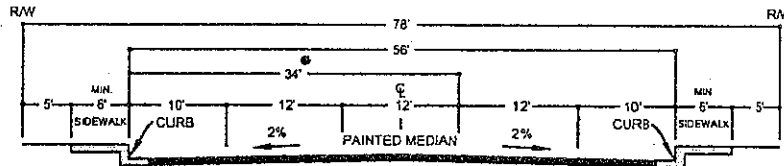
MOUNTAIN ARTERIAL HIGHWAY



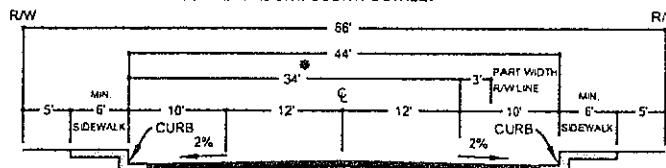
MAJOR HIGHWAY



SECONDARY HIGHWAY



INDUSTRIAL COLLECTOR



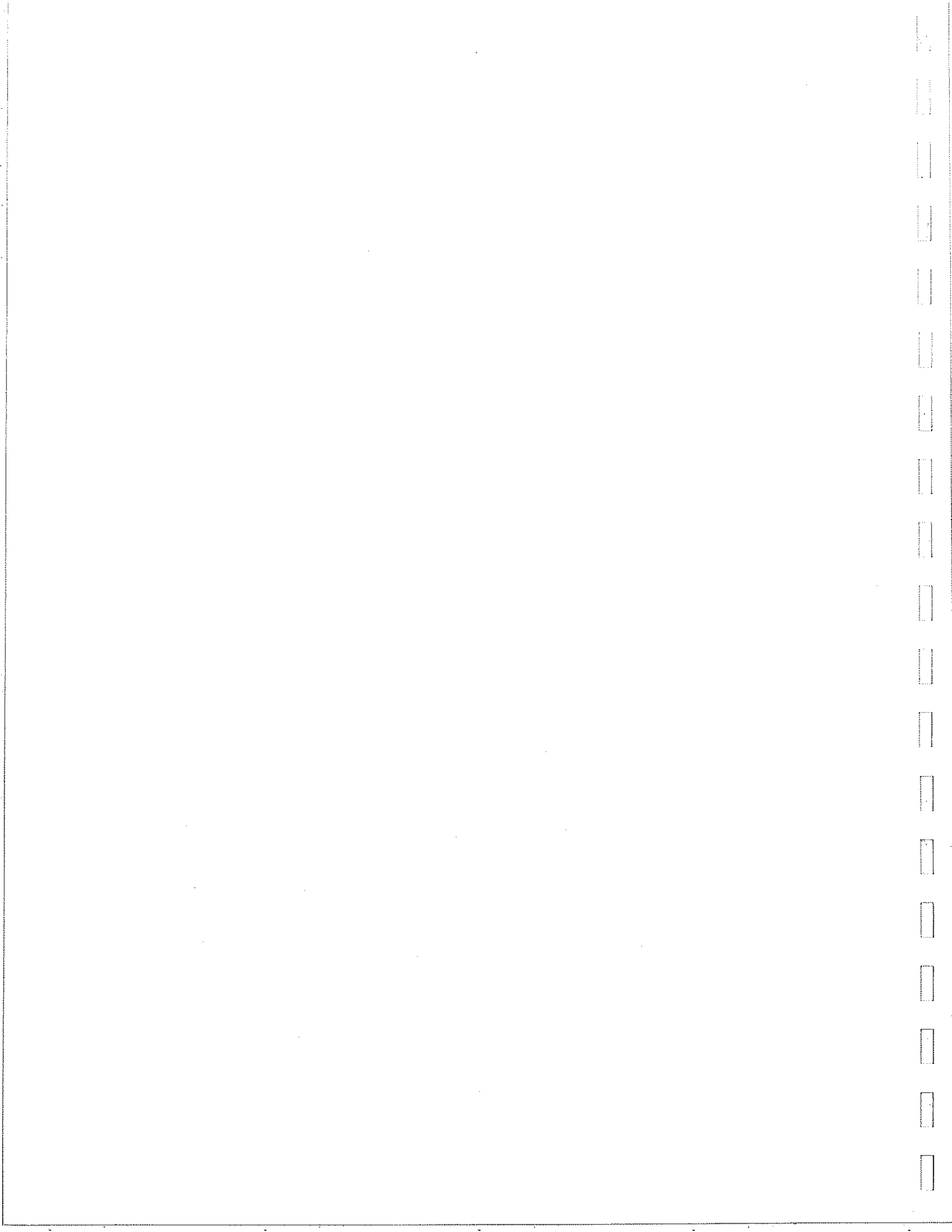
COLLECTOR



SOURCE: RIVERSIDE COUNTY GENERAL PLAN

APPENDIX B

TRAFFIC COUNT WORKSHEETS



SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: MONROE ST.

DATE: 06/18/02

CITY: LA QUINTA

E-W STREET: 52nd ST.

DAY: TUESDAY

PROJECT# 0821003A

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM	0	1	0	0	1	0	0	1	0	0	1	0	
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	1	19	0	8	29	2	19	21	1	0	21	9	130
7:15 AM	4	27	1	10	40	5	25	35	1	0	29	11	188
7:30 AM	6	33	2	13	36	8	33	49	3	1	33	14	231
7:45 AM	3	25	1	8	27	6	28	32	4	1	26	7	168
8:00 AM	4	29	3	5	24	7	22	29	2	3	22	12	162
8:15 AM	2	26	1	7	21	4	19	25	1	1	27	9	143
8:30 AM	3	24	2	4	23	4	17	22	1	2	19	13	134
8:45 AM	6	31	2	6	25	8	11	17	2	1	25	10	144
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	29	214	12	61	225	44	174	230	15	9	202	85	1300
AM Peak Hr Begins at				715	AM								
PEAK													
VOLUMES =	17	114	7	36	127	26	108	145	10	5	110	44	749
ADDITIONS:	4-WAY STOP												

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: MONROE ST.

DATE: 06/18/02

CITY: LA QUINTA

E-W STREET: 52nd ST.

DAY: TUESDAY

PROJECT# 0821003P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	6	29	4	15	35	14	13	29	4	2	26	11	188
4:15 PM	4	33	3	11	31	11	11	26	6	3	30	9	178
4:30 PM	3	27	3	13	29	12	12	32	7	3	32	8	181
4:45 PM	5	36	5	17	37	15	19	35	3	1	27	12	212
5:00 PM	4	30	4	9	33	13	15	30	6	2	29	10	185
5:15 PM	2	25	2	14	25	16	14	24	4	2	24	7	159
5:30 PM	2	23	3	1	28	18	9	29	7	0	17	9	146
5:45 PM	5	20	2	12	20	22	9	31	5	1	25	10	162
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	31	223	26	92	238	121	102	236	42	14	210	76	1411
PM Peak Hr Begins at				400	PM								
PEAK													
VOLUMES =	18	125	15	56	132	52	55	122	20	9	115	40	759
ADDITIONS:	4-WAY STOP												

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: MONROE ST.

DATE: 06/18/02

CITY: LA QUINTA

E-W STREET: 54th AVE.

DAY: TUESDAY

PROJECT# 0821002A

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM	0	1	0	0	1	0	0	1	0	0	1	0	
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	1	23	0	2	21	2	4	7	1	0	7	4	72
7:15 AM	0	21	1	6	39	5	3	11	2	0	9	6	103
7:30 AM	2	28	1	4	31	3	1	9	2	2	13	11	107
7:45 AM	3	19	2	7	12	2	2	14	4	1	11	9	86
8:00 AM	2	24	3	6	10	4	3	10	3	2	8	7	82
8:15 AM	2	20	2	4	18	3	4	7	1	0	10	5	76
8:30 AM	0	18	3	5	15	2	2	8	0	1	9	8	71
8:45 AM	1	16	1	3	13	2	3	7	2	0	6	3	57
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	11	169	13	37	159	23	22	73	15	6	73	53	654
AM Peak Hr Begins at				715	AM								
PEAK													
VOLUMES =	7	92	7	23	92	14	9	44	11	5	41	33	378
ADDITIONS:	4-WAY STOP												

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: MONROE ST.

DATE: 06/18/02

CITY: LA QUINTA

E-W STREET: 54th AVE.

DAY: TUESDAY

PROJECT# 0821002P

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	3	33	2	9	26	2	4	5	1	0	8	2	95
4:15 PM	2	25	1	7	24	5	3	8	2	1	6	4	88
4:30 PM	4	22	3	6	29	3	5	6	1	0	10	5	94
4:45 PM	5	30	2	8	34	1	7	11	0	2	7	6	113
5:00 PM	1	19	1	10	25	4	5	9	1	1	5	5	86
5:15 PM	0	15	1	6	17	2	6	7	1	1	6	7	69
5:30 PM	2	18	1	4	20	1	4	8	0	0	4	5	67
5:45 PM	1	17	0	5	22	1	3	5	1	1	4	4	64
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	18	179	11	55	197	19	37	59	7	6	50	38	676

PM Peak Hr Begins at 400 PM

PEAK
VOLUMES = 14 110 8 30 113 11 19 30 4 3 31 17 390

ADDITIONS: 4-WAY STOP

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: MONROE ST. DATE: 06/18/02 CITY: LA QUINTA
E-W STREET: AIRPORT BLVD. DAY: TUESDAY PROJECT# 0821001A

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	1	0	1	0.5	0.5	1	1	1	1	1	0	

6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	2	14	3	9	14	5	1	9	2	6	9	8	82
7:15 AM	1	15	5	15	23	6	4	13	4	8	18	11	123
7:30 AM	3	11	4	10	17	4	3	11	3	5	11	9	91
7:45 AM	5	8	6	7	9	6	2	9	2	7	13	10	84
8:00 AM	2	13	4	8	11	5	5	14	7	6	10	6	91
8:15 AM	1	12	8	6	10	7	4	8	3	8	12	7	86
8:30 AM	1	11	5	5	13	3	5	6	4	9	9	6	77
8:45 AM	2	16	6	6	12	6	0	9	3	4	8	6	78
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	17	100	41	66	109	42	24	79	28	53	90	63	712

AM Peak Hr Begins at 715 AM

PEAK													
VOLUMES =	11	47	19	40	60	21	14	47	16	26	52	36	389

ADDITIONS: 4-WAY STOP

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: MONROE ST.

DATE: 06/18/02

CITY: LA QUINTA

E-W STREET: AIRPORT BLVD.

DAY: TUESDAY

PROJECT# 0821001P

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	1	0	1	0.5	0.5	1	1	1	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	4	27	4	4	16	3	4	6	3	3	7	6	87
4:15 PM	2	15	6	5	13	5	2	9	5	5	11	5	83
4:30 PM	3	22	7	7	15	4	5	10	8	4	9	10	104
4:45 PM	2	19	9	11	20	7	3	7	6	6	8	7	105
5:00 PM	1	16	3	6	14	6	2	3	3	4	4	5	67
5:15 PM	2	20	1	4	11	4	1	4	4	3	5	4	63
5:30 PM	0	17	2	3	12	1	1	5	2	2	7	4	56
5:45 PM	1	14	0	5	8	2	2	4	3	3	4	5	51
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	15	150	32	45	109	32	20	48	34	30	55	46	616
PM Peak Hr Begins at				400	PM								
PEAK													
VOLUMES =	11	83	26	27	64	19	14	32	22	18	35	28	379
ADDITIONS:	4-WAY STOP												

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: JACKSON ST. DATE: 06/18/02 CITY: LA QUINTA
E-W STREET: AIRPORT BLVD. DAY: TUESDAY PROJECT# 0821005A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	

6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	2	11	3	6	9	6	5	13	2	3	21	15	96
7:15 AM	1	16	7	9	12	8	4	22	3	3	37	17	139
7:30 AM	5	22	1	11	13	9	6	18	2	5	19	14	125
7:45 AM	5	18	2	3	10	9	5	17	3	1	18	11	102
8:00 AM	3	12	2	9	15	5	11	26	2	2	19	9	115
8:15 AM	1	11	2	4	12	3	7	19	2	1	15	6	83
8:30 AM	1	16	5	4	12	6	8	13	1	4	13	5	88
8:45 AM	1	17	3	7	9	3	2	11	1	2	10	1	67
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	19	123	25	53	92	49	48	139	16	21	152	78	815

AM Peak Hr Begins at 7:15 AM

PEAK													
VOLUMES =	14	68	12	32	50	31	26	83	10	11	93	51	481

ADDITIONS: 4-WAY STOP

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: JACKSON ST.

DATE: 06/18/02

CITY: LA QUINTA

E-W STREET: AIRPORT BLVD.

DAY: TUESDAY

PROJECT# 0821005P

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	1	14	3	6	17	2	3	8	4	11	13	12	94
4:15 PM	1	20	3	4	19	3	1	9	2	3	12	3	80
4:30 PM	1	20	3	2	16	1	2	9	4	5	17	4	84
4:45 PM	2	16	4	1	13	2	5	10	2	2	10	6	73
5:00 PM	3	12	1	3	14	1	1	8	2	2	15	8	70
5:15 PM	1	12	1	1	17	2	3	14	2	2	12	5	72
5:30 PM	1	16	4	2	16	4	4	13	1	1	12	4	78
5:45 PM	1	10	3	2	10	3	4	11	2	3	10	5	64
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	11	120	22	21	122	18	23	82	19	29	101	47	615
PM Peak Hr Begins at				400	PM								
PEAK													
VOLUMES =	5	70	13	13	65	8	11	36	12	21	52	25	331
ADDITIONS:	4-WAY STOP												

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: JACKSON ST.

DATE: 06/18/02

CITY: LA QUINTA

E-W STREET: 54th ST.

DAY: TUESDAY

PROJECT# 0821004A

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
6:00 AM	0	1	0	0	1	0	0	1	0	0	1	0	
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	4	30	0	4	26	3	0	8	2	1	6	2	86
7:15 AM	6	42	2	1	20	1	2	14	3	2	11	3	107
7:30 AM	12	43	2	7	17	5	4	9	2	0	9	2	112
7:45 AM	5	34	4	2	13	4	1	15	6	2	10	2	98
8:00 AM	6	33	0	0	20	1	1	8	7	3	13	3	95
8:15 AM	4	27	0	0	14	2	0	6	5	4	8	3	73
8:30 AM	2	38	3	4	12	1	1	10	3	0	15	2	91
8:45 AM	3	29	1	4	11	0	3	4	2	1	7	4	69
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	42	276	12	22	133	17	12	74	30	13	79	21	731
AM Peak Hr Begins at				7:15	AM								
PEAK VOLUMES =	29	152	8	10	70	11	8	46	18	7	43	10	412
ADDITIONS:	4-WAY STOP												

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: JACKSON ST.

DATE: 06/18/02

CITY: LA QUINTA

E-W STREET: 54th ST.

DAY: TUESDAY

PROJECT# 0821004P

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	1	38	1	5	24	2	0	10	4	1	9	2	97
4:15 PM	2	29	5	2	30	0	1	7	6	2	7	3	94
4:30 PM	0	34	2	3	25	1	4	7	5	2	13	1	97
4:45 PM	6	37	2	1	18	1	3	5	11	1	6	4	95
5:00 PM	1	25	4	1	34	1	0	9	11	3	8	2	99
5:15 PM	4	20	2	0	25	2	0	4	7	0	5	3	72
5:30 PM	4	18	2	0	21	1	0	7	10	1	7	2	73
5:45 PM	1	30	2	1	27	2	1	5	6	1	4	1	81
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	19	231	20	13	204	10	9	54	60	11	59	18	708
PM Peak Hr Begins at				415	PM								
PEAK													
VOLUMES =	9	125	13	7	107	3	8	28	33	8	34	10	385
ADDITIONS:	4-WAY STOP												

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: JEFFERSON ST.

DATE: 06/26/02

CITY: LA QUINTA

E-W STREET: AVE. 54

DAY: WEDNESDAY

PROJECT# 0858001A

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	2	2	1	1	2	0	1	1	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	16	3	59	18	0	0	2	0	11	1	29	139
7:15 AM	0	23	9	63	24	3	2	0	0	3	0	31	158
7:30 AM	0	39	4	61	20	1	1	0	0	4	1	43	174
7:45 AM	0	26	7	55	32	1	0	0	1	5	0	28	155
8:00 AM	0	31	2	38	35	2	1	4	1	6	0	26	146
8:15 AM	0	35	6	35	26	2	0	0	1	5	1	24	135
8:30 AM	1	29	5	33	22	1	2	0	1	8	1	42	145
8:45 AM	0	25	5	29	20	2	1	1	1	6	0	39	129
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	1	224	41	373	197	12	7	7	5	48	4	262	1181
AM Peak Hr Begins at				715	AM								
PEAK													
VOLUMES =	0	119	22	217	111	7	4	4	2	18	1	128	633
ADDITIONS:	4-WAY STOP												

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: JEFFERSON ST.

DATE: 06/26/02

CITY: LA QUINTA

E-W STREET: AVE. 54

DAY: WEDNESDAY

PROJECT# 0858001P

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	2	2	1	1	2	0	1	1	1	

1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	22	3	36	31	1	0	0	0	7	0	47	147
4:15 PM	1	26	6	17	38	1	0	1	0	3	0	41	134
4:30 PM	0	25	5	19	26	0	1	0	0	4	1	39	120
4:45 PM	0	29	6	31	27	0	1	0	1	5	1	36	137
5:00 PM	0	20	2	18	19	2	0	1	1	4	0	38	105
5:15 PM	0	32	4	40	22	0	0	0	0	3	1	33	135
5:30 PM	1	28	3	29	25	1	2	1	0	8	0	22	120
5:45 PM	0	21	3	22	23	0	0	0	0	9	0	24	102
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	2	203	32	212	211	5	4	3	2	43	3	280	1000

PM Peak Hr Begins at 400 PM

PEAK													
VOLUMES =	1	102	20	103	122	2	2	1	1	19	2	163	538

ADDITIONS: 4-WAY STOP

APPENDIX C

EXISTING CONDITIONS INTERSECTION ANALYSIS



TIM 30399 Traffic Impact Study
Riverside County, California
Existing Traffic Conditions

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Monroe St & Ave. 52

Cycle (sec): 100 Critical Vol./Cap. (X): 0.409
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.3
Optimal Cycle: 0 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 18 Jun 2002 << AM. Table with 12 columns for volume counts and adjustment factors like Growth Adj, Initial Bse, User Adj, etc.

Saturation Flow Module: Table with 12 columns for adjustment factors and saturation flow values.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics like Vol/Sat, Crit Moves, Delay/Veh, etc.

 TTM 30399 Traffic Impact Study
 Riverside County, California
 Existing Traffic Conditions

Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Base Volume Alternative)

 Intersection #1 Monroe St & Ave. 52

Cycle (sec): 100 Critical Vol./Cap. (X): 0.372
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.2
 Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0

Volume Module: >> Count Date: 18 Jun 2002 << PM

Base Vol:	18	125	15	56	132	52	55	122	20	9	115	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	125	15	56	132	52	55	122	20	9	115	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	19	132	16	59	139	55	58	128	21	9	121	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	132	16	59	139	55	58	128	21	9	121	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	19	132	16	59	139	55	58	128	21	9	121	42

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.11	0.80	0.09	0.23	0.55	0.22	0.28	0.62	0.10	0.05	0.71	0.24
Final Sat.:	74	512	61	158	373	147	182	403	66	36	458	159

Capacity Analysis Module:

Vol/Sat:	0.26	0.26	0.26	0.37	0.37	0.37	0.32	0.32	0.32	0.26	0.26	0.26
Crit Moves:	****			****			****			****		
Delay/Veh:	9.8	9.8	9.8	10.7	10.7	10.7	10.4	10.4	10.4	9.8	9.8	9.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.8	9.8	9.8	10.7	10.7	10.7	10.4	10.4	10.4	9.8	9.8	9.8
LOS by Move:	A	A	A	B	B	B	B	B	B	A	A	A
ApproachDel:	9.8			10.7			10.4			9.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.8			10.7			10.4			9.8		
LOS by Appr:	A			B			B			A		

TIM 30399 Traffic Impact Study
Riverside County, California
Existing Traffic Conditions

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Jefferson & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.208
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.3
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 26 Jun 2002 << AM. Table with 12 columns for volume counts and 12 rows for various adjustment factors like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 12 columns for saturation flow and 3 rows for Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis and 10 rows for Vol/Sat, Crit Moves, Delay/Veh, etc.

TTM 30399 Traffic Impact Study
Riverside County, California
Existing Traffic Conditions

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Jefferson & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.203
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.8
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green (0 0 0), and Lanes (1 0 1 0 1).

Volume Module: >> Count Date: 26 Jun 2002 << PM
Table with 13 columns of traffic volume data including Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol.

Saturation Flow Module:
Table with 13 columns of saturation flow data including Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:
Table with 13 columns of capacity analysis data including Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, and LOS by Appr.

TIM 30399 Traffic Impact Study
Riverside County, California
Existing Traffic Conditions

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Monroe St & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.168
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.0
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 18 Jun 2002 << AM. Table with 13 columns for volume counts and 13 rows for various adjustment factors like Base Vol, Growth Adj, PHF Adj, etc.

Saturation Flow Module: Table with 13 columns for saturation flow values and 3 rows for Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis values and 10 rows for Vol/Sat, Crit Moves, Delay/Veh, etc.

TMM 30399 Traffic Impact Study
Riverside County, California
Existing Traffic Conditions

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Monroe St & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.197
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 18 Jun 2002 << PM
Table with 13 columns for volume and adjustment factors (Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol).

Saturation Flow Module:
Table with 13 columns for adjustment factors (Adjustment, Lanes, Final Sat).

Capacity Analysis Module:
Table with 13 columns for capacity and delay metrics (Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr).

TMM 30399 Traffic Impact Study
Riverside County, California
Existing Traffic Conditions

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Monroe St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.171
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 18 Jun 2002 << AM. Table with 13 columns for volume counts and 12 rows for various adjustment factors like Growth Adj, User Adj, PHF Adj, etc.

Saturation Flow Module: Table with 13 columns for saturation flow and 3 rows for Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis and 11 rows for Vol/Sat, Crit Moves, Delay/Veh, etc.

TIM 30399 Traffic Impact Study
Riverside County, California
Existing Traffic Conditions

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Monroe St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.130
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.3
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green (0 0 0), and Lanes (1 0 1 0 1).

Volume Module: >> Count Date: 18 Jun 2002 << PM
Table with 12 columns of traffic volume data including Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol.

Saturation Flow Module:
Table with 12 columns of saturation flow data including Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:
Table with 12 columns of capacity analysis data including Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, and LOS by Appr.

TTM 30399 Traffic Impact Study
Riverside County, California
Existing Traffic Conditions

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Jackson St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.207
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: >> Count Date: 18 Jun 2002 << PM
Base Vol: 14 68 12 32 50 31 26 83 10 11 93 51
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 14 68 12 32 50 31 26 83 10 11 93 51
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume: 15 72 13 34 53 33 27 87 11 12 98 54
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 15 72 13 34 53 33 27 87 11 12 98 54
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 15 72 13 34 53 33 27 87 11 12 98 54

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.15 0.72 0.13 0.28 0.45 0.27 0.22 0.70 0.08 0.07 0.60 0.33
Final Sat.: 109 531 94 212 331 205 164 524 63 56 474 260

Capacity Analysis Module:
Vol/Sat: 0.13 0.13 0.13 0.16 0.16 0.16 0.17 0.17 0.17 0.21 0.21 0.21
Crit Moves: ****
Delay/Veh: 8.3 8.3 8.3 8.3 8.3 8.3 8.4 8.4 8.4 8.4 8.4 8.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 8.3 8.3 8.3 8.3 8.3 8.3 8.4 8.4 8.4 8.4 8.4 8.4
LOS by Move: A A A A A A A A A A A A
ApproachDel: 8.3 8.3 8.3 8.3 8.3 8.3 8.4 8.4 8.4 8.4 8.4 8.4
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
ApprAdjDel: 8.3 8.3 8.3 8.3 8.3 8.3 8.4 8.4 8.4 8.4 8.4 8.4
LOS by Appr: A A A A A A A A A A A A

TIM 30399 Traffic Impact Study
Riverside County, California
Existing Traffic Conditions

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Jackson St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.127
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.8
Optimal Cycle: 0 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0

Volume Module: >> Count Date: 18 Jun 2002 << PM
Base Vol: 5 70 13 13 65 8 11 36 12 21 52 25
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 5 70 13 13 65 8 11 36 12 21 52 25
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume: 5 74 14 14 68 8 12 38 13 22 55 26
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 5 74 14 14 68 8 12 38 13 22 55 26
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 5 74 14 14 68 8 12 38 13 22 55 26

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.06 0.79 0.15 0.15 0.76 0.09 0.19 0.61 0.20 0.21 0.53 0.26
Final Sat.: 46 646 120 121 606 75 149 488 163 175 432 208

Capacity Analysis Module:
Vol/Sat: 0.11 0.11 0.11 0.11 0.11 0.11 0.08 0.08 0.08 0.13 0.13 0.13
Crit Moves: **** **** **** ****
Delay/Veh: 7.8 7.8 7.8 7.9 7.9 7.9 7.7 7.7 7.7 7.8 7.8 7.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 7.8 7.8 7.8 7.9 7.9 7.9 7.7 7.7 7.7 7.8 7.8 7.8
LOS by Move: A A A A A A A A A A A A
ApproachDel: 7.8 7.9 7.7 7.8
Delay Adj: 1.00 1.00
ApprAdjDel: 7.8 7.9 7.7 7.8
LOS by Appr: A A A A

APPENDIX D

**OPENING YEAR WITHOUT PROJECT CONDITIONS
INTERSECTION ANALYSIS**



TMM 30399 Traffic Impact Study
Riverside County, California
Opening Year Traffic Conditions

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 Monroe St & Ave. 52

Cycle (sec): 100 Critical Vol./Cap. (X): 0.436
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.7
Optimal Cycle: 0 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 18 Jun 2002 << AM. Grid of traffic volume data with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol.

Saturation Flow Module. Grid of adjustment factors for Lanes and Final Sat.

Capacity Analysis Module. Grid of performance metrics including Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, and LOS by Appr.

 TTM 30399 Traffic Impact Study
 Riverside County, California
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Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

 Intersection #1 Monroe St & Ave. 52

Cycle (sec): 100 Critical Vol./Cap. (X): 0.398
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.6
 Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0

Volume Module: >> Count Date: 18 Jun 2002 << PM

Base Vol:	18	125	15	56	132	52	55	122	20	9	115	40
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	19	131	16	59	139	55	58	128	21	9	121	42
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	131	16	59	139	55	58	128	21	9	121	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	20	138	17	62	146	57	61	135	22	10	127	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	138	17	62	146	57	61	135	22	10	127	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	138	17	62	146	57	61	135	22	10	127	44

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.11	0.80	0.09	0.23	0.55	0.22	0.28	0.62	0.10	0.05	0.71	0.24
Final Sat.:	72	502	60	156	367	145	178	395	65	35	449	156

Capacity Analysis Module:

Vol/Sat:	0.28	0.28	0.28	0.40	0.40	0.40	0.34	0.34	0.34	0.28	0.28	0.28
Crit Moves:	****			****			****			****		
Delay/Veh:	10.1	10.1	10.1	11.1	11.1	11.1	10.7	10.7	10.7	10.0	10.0	10.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.1	10.1	10.1	11.1	11.1	11.1	10.7	10.7	10.7	10.0	10.0	10.0
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:	10.1			11.1			10.7			10.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.1			11.1			10.7			10.0		
LOS by Appr:	B			B			B			B		

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Riverside County, California
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Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Jefferson & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.221
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.5
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 26 Jun 2002 << AM. Table with 13 columns for volume counts and 13 rows for various adjustment factors like Growth Adj, Initial Bse, etc.

Saturation Flow Module. Table with 13 columns for flow values and 3 rows for Adjustment, Lanes, and Final Sat.

Capacity Analysis Module. Table with 13 columns for capacity metrics and 10 rows for Vol/Sat, Crit Moves, Delay/Veh, etc.

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 Riverside County, California
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Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

 Intersection #2 Jefferson & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.215
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.9
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	1	0	1	1	0	1

Volume Module: >> Count Date: 26 Jun 2002 << PM

Base Vol:	1	102	20	103	122	2	2	1	1	19	2	136
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	1	107	21	108	128	2	2	1	1	20	2	143
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	107	21	108	128	2	2	1	1	20	2	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	1	113	22	114	135	2	2	1	1	21	2	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	113	22	114	135	2	2	1	1	21	2	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	113	22	114	135	2	2	1	1	21	2	150

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	572	625	707	1200	1311	749	524	566	635	564	611	698

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.03	0.09	0.10	0.00	0.00	0.00	0.00	0.04	0.00	0.22
Crit Moves:	****			****			****			****		
Delay/Veh:	8.7	9.4	7.7	9.1	8.6	7.3	9.1	8.6	7.9	9.0	8.3	8.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.7	9.4	7.7	9.1	8.6	7.3	9.1	8.6	7.9	9.0	8.3	8.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	9.1			8.8			8.7			8.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.1			8.8			8.7			8.8		
LOS by Appr:	A			A			A			A		

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Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.178

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.1

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0

Volume Module: >> Count Date: 18 Jun 2002 << AM

Base Vol:	7	92	7	23	92	14	9	44	11	5	41	33
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	7	97	7	24	97	15	9	46	12	5	43	35
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	97	7	24	97	15	9	46	12	5	43	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	8	102	8	25	102	15	10	49	12	6	45	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	102	8	25	102	15	10	49	12	6	45	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	102	8	25	102	15	10	49	12	6	45	36

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.06	0.87	0.07	0.18	0.71	0.11	0.14	0.69	0.17	0.06	0.52	0.42
Final Sat.:	52	690	52	143	572	87	107	523	131	50	411	331

Capacity Analysis Module:

Vol/Sat:	0.15	0.15	0.15	0.18	0.18	0.18	0.09	0.09	0.09	0.11	0.11	0.11
Crit Moves:	****			****			****			****		
Delay/Veh:	8.1	8.1	8.1	8.2	8.2	8.2	7.9	7.9	7.9	7.8	7.8	7.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.1	8.1	8.1	8.2	8.2	8.2	7.9	7.9	7.9	7.8	7.8	7.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	8.1			8.2			7.9			7.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.1			8.2			7.9			7.8		
LOS by Appr:	A			A			A			A		

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.208
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.2
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green (0 0 0), and Lanes (0 0 1 0 0).

Volume Module: >> Count Date: 18 Jun 2002 << PM
Base Vol: 14 110 8 30 113 11 3 31 17 3 31 17
Growth Adj: 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05
Initial Bse: 15 116 8 32 119 12 3 33 18 3 33 18
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 15 116 8 32 119 12 3 33 18 3 33 18
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume: 15 122 9 33 125 12 3 34 19 3 34 19
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 15 122 9 33 125 12 3 34 19 3 34 19
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 15 122 9 33 125 12 3 34 19 3 34 19

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.11 0.83 0.06 0.19 0.74 0.07 0.06 0.61 0.33 0.06 0.61 0.33
Final Sat.: 86 677 49 159 599 58 45 461 253 45 461 253

Capacity Analysis Module:
Vol/Sat: 0.18 0.18 0.18 0.21 0.21 0.21 0.07 0.07 0.07 0.07 0.07 0.07
Crit Moves: **** **** **** ****
Delay/Veh: 8.2 8.2 8.2 8.4 8.4 8.4 7.8 7.8 7.8 7.8 7.8 7.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 8.2 8.2 8.2 8.4 8.4 8.4 7.8 7.8 7.8 7.8 7.8 7.8
LOS by Move: A A A A A A A A A A A A
ApproachDel: 8.2 8.4 7.8 7.8
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 8.2 8.4 7.8 7.8
LOS by Appr: A A A A

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Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Monroe St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.181
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.5
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	1	0	1	0	0	1

Volume Module: >> Count Date: 18 Jun 2002 << AM

Base Vol:	11	47	19	40	60	21	14	47	16	26	52	36
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	12	49	20	42	63	22	15	49	17	27	55	38
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	49	20	42	63	22	15	49	17	27	55	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	12	52	21	44	66	23	15	52	18	29	57	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	52	21	44	66	23	15	52	18	29	57	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	52	21	44	66	23	15	52	18	29	57	40

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.48	0.52	1.00	1.00	1.00	0.23	0.46	0.31
Final Sat.:	587	640	731	601	995	364	612	669	768	158	317	219

Capacity Analysis Module:

Vol/Sat:	0.02	0.08	0.03	0.07	0.07	0.06	0.03	0.08	0.02	0.18	0.18	0.18
Crit Moves:	****			****			****			****		
Delay/Veh:	8.7	8.5	7.5	8.9	8.2	7.9	8.5	8.3	7.3	9.1	9.1	9.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.7	8.5	7.5	8.9	8.2	7.9	8.5	8.3	7.3	9.1	9.1	9.1
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	8.3			8.4			8.1			9.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.3			8.4			8.1			9.1		
LOS by Appr:	A			A			A			A		

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Monroe St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.138
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: 0 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 1 1 0 1 0 1 0 0 0

Volume Module: >> Count Date: 18 Jun 2002 << PM
Base Vol: 11 83 26 27 64 19 14 32 22 18 35 28
Growth Adj: 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05
Initial Bse: 12 87 27 28 67 20 15 34 23 19 37 29
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 12 87 27 28 67 20 15 34 23 19 37 29
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume: 12 92 29 30 71 21 15 35 24 20 39 31
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 12 92 29 30 71 21 15 35 24 20 39 31
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 12 92 29 30 71 21 15 35 24 20 39 31

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.54 0.46 1.00 1.00 1.00 0.22 0.43 0.35
Final Sat.: 609 665 764 606 1044 322 605 660 757 152 295 236

Capacity Analysis Module:
Vol/Sat: 0.02 0.14 0.04 0.05 0.07 0.07 0.03 0.05 0.03 0.13 0.13 0.13
Crit Moves: **** **** ****
Delay/Veh: 8.5 8.7 7.4 8.7 8.2 7.9 8.6 8.2 7.4 8.8 8.8 8.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 8.5 8.7 7.4 8.7 8.2 7.9 8.6 8.2 7.4 8.8 8.8 8.8
LOS by Move: A A A A A A A A A A A A
ApproachDel: 8.4 8.3 8.0 8.8
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 8.4 8.3 8.0 8.8
LOS by Appr: A A A A

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Level Of Service Computation Report
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.219
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.5
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0

Volume Module: >> Count Date: 18 Jun 2002 << PM

Base Vol:	14	68	12	32	50	31	26	83	10	11	93	51
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	15	71	13	34	53	33	27	87	11	12	98	54
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	71	13	34	53	33	27	87	11	12	98	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	15	75	13	35	55	34	29	92	11	12	103	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	75	13	35	55	34	29	92	11	12	103	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	75	13	35	55	34	29	92	11	12	103	56

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	0.72	0.13	0.28	0.45	0.27	0.22	0.70	0.08	0.07	0.60	0.33
Final Sat.:	108	524	93	209	327	203	163	519	63	56	469	257

Capacity Analysis Module:

Vol/Sat:	0.14	0.14	0.14	0.17	0.17	0.17	0.18	0.18	0.18	0.22	0.22	0.22
Crit Moves:	****			****			****			****		
Delay/Veh:	8.4	8.4	8.4	8.5	8.5	8.5	8.5	8.5	8.5	8.6	8.6	8.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.4	8.4	8.4	8.5	8.5	8.5	8.5	8.5	8.5	8.6	8.6	8.6
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	8.4			8.5			8.5			8.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.4			8.5			8.5			8.6		
LOS by Appr:	A			A			A			A		

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.134
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 18 Jun 2002 << PM

Table with 13 columns representing different traffic metrics and 13 rows of data including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Vol.

Saturation Flow Module:

Table with 13 columns and 3 rows of data for Saturation Flow Module including Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table with 13 columns and 10 rows of data for Capacity Analysis Module including Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, and LOS by Appr.

APPENDIX E

**OPENING YEAR WITH PROJECT CONDITIONS
INTERSECTION ANALYSIS**



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Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 Monroe St & Ave. 52

Cycle (sec): 100 Critical Vol./Cap. (X): 0.450
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.0
Optimal Cycle: 0 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 18 Jun 2002 << AM. Table with 12 columns for volume counts and 12 rows for various adjustment factors like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 12 columns for flow values and 3 rows for Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity metrics and 10 rows for Vol/Sat, Crit Moves, Delay/Veh, etc.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 Monroe St & Ave. 52

Cycle (sec): 100 Critical Vol./Cap. (X): 0.451
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.2
Optimal Cycle: 0 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green (0 0 0), and Lanes (0 0 1 0 0).

Volume Module: >> Count Date: 18 Jun 2002 << PM. Table with 12 columns for volume and adjustment factors (Base Vol, Growth Adj, Initial Bse, etc.).

Saturation Flow Module: Table with 12 columns for adjustment factors and saturation values (Adjustment, Lanes, Final Sat.).

Capacity Analysis Module: Table with 12 columns for capacity and delay metrics (Vol/Sat, Crit Moves, Delay/Veh, etc.).

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2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Jefferson & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.222
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.5
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 26 Jun 2002 << AM. Table with 13 columns for volume counts and 13 rows for various adjustment factors like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 13 columns for saturation flow values and 3 rows for Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for capacity analysis metrics and 13 rows for Vol/Sat, Crit Moves, Delay/Veh, etc.

TTM 30399 Traffic Impact Study
Riverside County, California
Opening Year Traffic Conditions

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Jefferson & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.216
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.9
Optimal Cycle: 0 Level Of Service: A

Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Control, Rights, Min. Green, and Lanes.

Volume Module: >> Count Date: 26 Jun 2002 << PM. Table with 12 columns for volume and adjustment factors.

Saturation Flow Module: Table with 12 columns for adjustment and saturation flow values.

Capacity Analysis Module: Table with 12 columns for delay, LOS, and other performance metrics.

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2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.197
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.3
Optimal Cycle: 0 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0

Volume Module: >> Count Date: 18 Jun 2002 << AM
Base Vol: 7 92 7 23 92 14 9 44 11 5 41 33
Growth Adj: 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05
Initial Bse: 7 97 7 24 97 15 9 46 12 5 43 35
Added Vol: 5 30 1 0 10 0 0 0 2 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 12 127 8 24 107 15 9 46 14 5 43 35
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume: 13 133 9 25 112 15 10 49 14 6 45 36
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 13 133 9 25 112 15 10 49 14 6 45 36
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 13 133 9 25 112 15 10 49 14 6 45 36

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.08 0.86 0.06 0.17 0.73 0.10 0.14 0.67 0.19 0.06 0.52 0.42
Final Sat.: 66 678 45 131 579 80 101 493 145 48 397 320

Capacity Analysis Module:
Vol/Sat: 0.20 0.20 0.20 0.19 0.19 0.19 0.10 0.10 0.10 0.11 0.11 0.11
Crit Moves: **** **** **** ****
Delay/Veh: 8.4 8.4 8.4 8.4 8.4 8.4 8.0 8.0 8.0 7.9 7.9 7.9
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 8.4 8.4 8.4 8.4 8.4 8.4 8.0 8.0 8.0 7.9 7.9 7.9
LOS by Move: A A A A A A A A A A A A
ApproachDel: 8.4 8.4 8.0 7.9
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 8.4 8.4 8.0 7.9
LOS by Appr: A A A A

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St & Ave. 54

Cycle (sec): 100 Critical Vol./Cap. (X): 0.256
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.5
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 18 Jun 2002 << PM. Table with 13 columns for volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for adjustment factors and saturation values.

Capacity Analysis Module: Table with 13 columns for capacity analysis metrics like Vol/Sat, Crit Moves, Delay/Veh, etc.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Monroe St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.186
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 18 Jun 2002 << AM. Table with 13 columns of volume data and 13 rows of adjustment factors (Base Vol, Growth Adj, etc.).

Saturation Flow Module. Table with 13 columns of saturation flow data and 3 rows (Adjustment, Lanes, Final Sat.).

Capacity Analysis Module. Table with 13 columns of capacity analysis data and 10 rows (Vol/Sat, Crit Moves, Delay/Veh, etc.).

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2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Monroe St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.147
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: 0 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 1 1 0 1 1 0 1 0 1 0 0 0

Volume Module: >> Count Date: 18 Jun 2002 << PM
Base Vol: 11 83 26 27 64 19 14 32 22 18 35 28
Growth Adj: 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05
Initial Bse: 12 87 27 28 67 20 15 34 23 19 37 29
Added Vol: 0 5 0 3 3 0 0 0 0 0 0 5
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 12 92 27 31 70 20 15 34 23 19 37 34
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume: 12 97 29 33 74 21 15 35 24 20 39 36
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 12 97 29 33 74 21 15 35 24 20 39 36
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 12 97 29 33 74 21 15 35 24 20 39 36

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.56 0.44 1.00 1.00 1.00 0.21 0.41 0.38
Final Sat.: 606 662 759 602 1046 309 600 655 749 143 278 260

Capacity Analysis Module:
Vol/Sat: 0.02 0.15 0.04 0.05 0.07 0.07 0.03 0.05 0.03 0.14 0.14 0.14
Crit Moves: **** **** **** ****
Delay/Veh: 8.6 8.8 7.4 8.8 8.2 8.0 8.6 8.2 7.4 8.8 8.8 8.8
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 8.6 8.8 7.4 8.8 8.2 8.0 8.6 8.2 7.4 8.8 8.8 8.8
LOS by Move: A A A A A A A A A A A A
ApproachDel: 8.5 8.3 8.0 8.8
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 8.5 8.3 8.0 8.8
LOS by Appr: A A A A

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2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.222
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.5
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green, and Lanes.

Volume Module: >> Count Date: 18 Jun 2002 << PM. Table with 13 columns for volume counts and various adjustment factors like Growth Adj, PCE Adj, etc.

Saturation Flow Module. Table with 13 columns for adjustment factors and saturation flow values.

Capacity Analysis Module. Table with 13 columns for delay, LOS, and approach delay values.

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Opening Year Traffic Conditions

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St & Airport Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.141
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 0 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Stop Sign), Rights (Include), Min. Green (0), and Lanes (0 0 1 0 0).

Volume Module: >> Count Date: 18 Jun 2002 << PM. Table with 12 columns for volume counts and 12 rows for various adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for saturation flow values and 3 rows for Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics and 10 rows for Vol/Sat, Crit Moves, Delay/Veh, etc.