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**LA QUINTA MOTORCOACH RESORT
(TR 35238)
TRAFFIC IMPACT ANALYSIS (REVISED)
CITY OF LA QUINTA, CALIFORNIA**

March 12, 2008 (Revised)
October 11, 2007
JN:04886-06-RPT
RS:TH:FS:lr

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LA QUINTA MOTORCOACH RESORT (TR 35238)
TRAFFIC IMPACT ANALYSIS (REVISED)
CITY OF LA QUINTA, CALIFORNIA

1.0 INTRODUCTION

1.1 Purpose of Report and Study Objectives

The purpose of this traffic impact analysis (TIA) report is to evaluate the proposed La Quinta Motorcoach Resort (TR35238) project from a traffic circulation standpoint. The project site is generally located between 58th Avenue and 59th Avenue, east of Monroe Street in unincorporated County of Riverside. A portion of the site, on the south end, is located within the City of La Quinta. Since the applicant is proposing to annex the project site into the City of La Quinta, the City of La Quinta will be the lead review agency for this project.

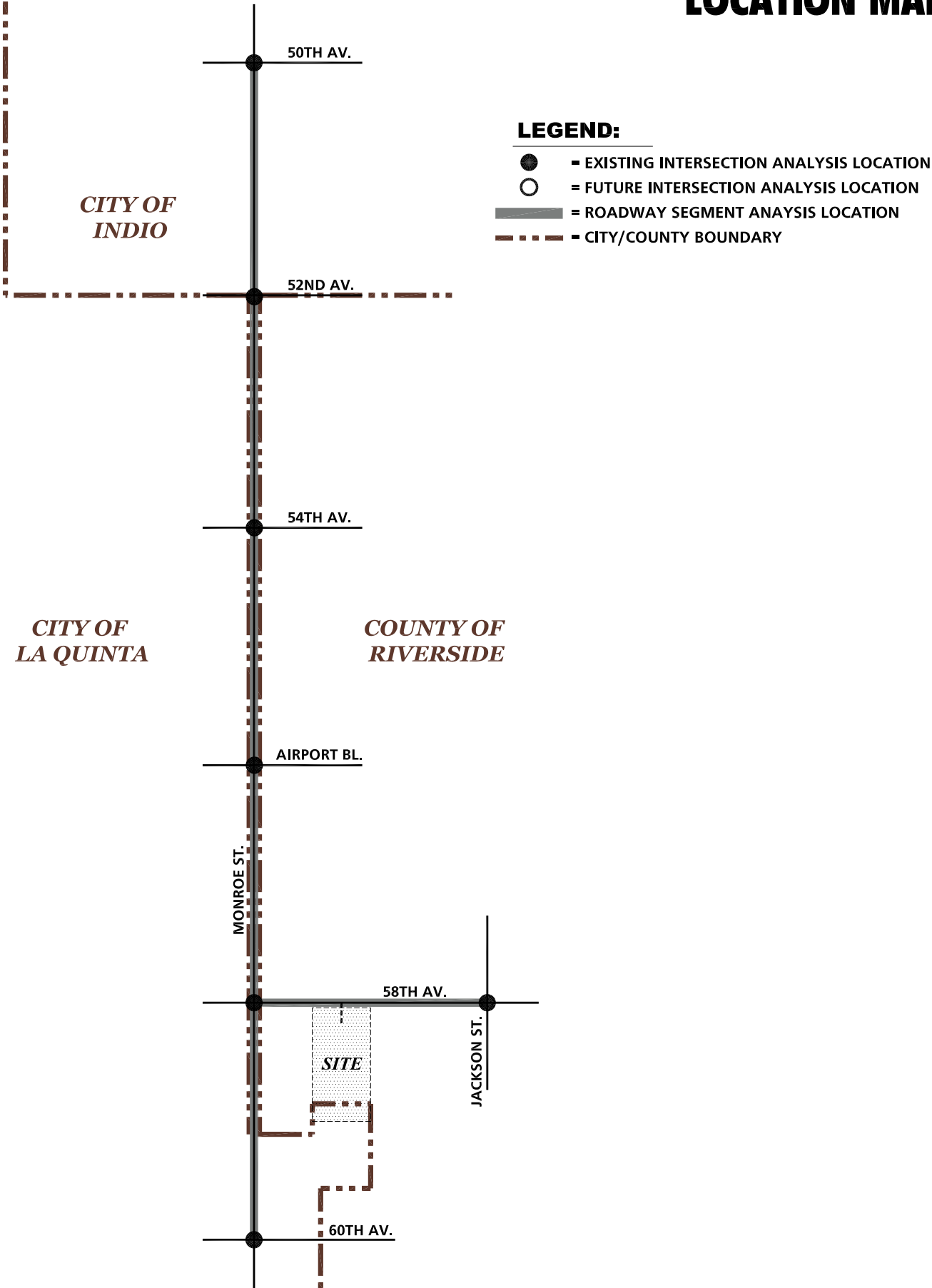
Study objectives include (1) documentation of existing traffic conditions in the vicinity of the site; (2) evaluation of Existing plus Ambient plus Project conditions; (3) evaluation of Existing plus Ambient plus Project plus Cumulative conditions and (5) determination of on-site and off-site improvements needed to achieve City of La Quinta level of service requirements. This analysis and report have been prepared in accordance with the City of La Quinta *Engineering Bulletin #206-13* and the County of Riverside *Traffic Impact Analysis Preparation Guide*, dated August 2005.

A traffic study and report were previously prepared for this project on October 11, 2007. The study and report have been updated, based on comments provided by the City on November 26, 2007 and November 30, 2007. The revisions include new empirically derived project trip generation rates, a modified trip distribution, two additional study intersections and an updated cumulative projects list. The City's comments and our response are included in Appendix 1.1.

1.2 Site Location and Study Area

The proposed project is generally located between 58th Avenue and 59th Avenue, east of Monroe Street in unincorporated County of Riverside. Exhibit 1-1 illustrates the site location and the traffic analysis study area.

EXHIBIT 1-1
LOCATION MAP



Based on the City of La Quinta Public Works/Engineering Department Engineering *Bulletin #06-13*, the study area must include all intersections and segments within 0.5 miles of the adjacent perimeter of the project for streets with daily traffic volumes between 101 and 5,000. Pursuant to the attached, updated, Traffic Study Scoping Packet (Appendix 1.2) and discussions with City of La Quinta Public Works/Engineering Department staff, the study area includes the existing and future intersections listed below.

Monroe Street (NS) at:

- 50th Avenue (EW)
- 52nd Avenue (EW)
- 54th Avenue (EW)
- Airport Boulevard (EW)
- 58th Avenue (EW)
- 60th Avenue (EW)

Project Driveway (NS) at:

- 58th Avenue (EW) – future intersection

Jackson Street (NS) at:

- 58th Avenue (EW)

It should be noted that all of the study area intersections are on the boundary of the City of La Quinta and unincorporated Riverside County except for the intersection of Monroe Street and 60th Avenue, which is entirely within the City of La Quinta, and the intersection of Jackson Street and 58th Avenue, which is entirely within Riverside County.

1.3 Project Development Description

1.3.1 Project Location

The proposed project, TR35238, consists of 382 motorcoach lots, a clubhouse and recreational areas. The resort will accommodate motorcoach vehicles and their residents for seasonal stays of up to six months in a year. The resort will include on-site amenities (available only to the resort residents), including an 18-hole golf course, two tennis courts, a snack bar, a swimming pool area, a small restaurant, and three satellite recreation areas.

1.3.2 Project Access

The proposed project will have one full-access point on 58th Avenue. Access to 59th Avenue will be gated and for emergency access only.

1.3.3 Existing Land Use and Zoning

The project site is currently zoned as Low Density Agriculture/Equestrian Residential. According to the City of La Quinta General Plan Land Use map, the adjacent parcels to the north and south are currently zoned as Low Density Agriculture/Equestrian Residential and the parcels to the west and south are zoned as Medium Density Residential.

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

- North – Vacant
- South – Vacant
- East – Single-Family Residential
- West – Vacant

1.3.4 Proposed Land Use and Zoning

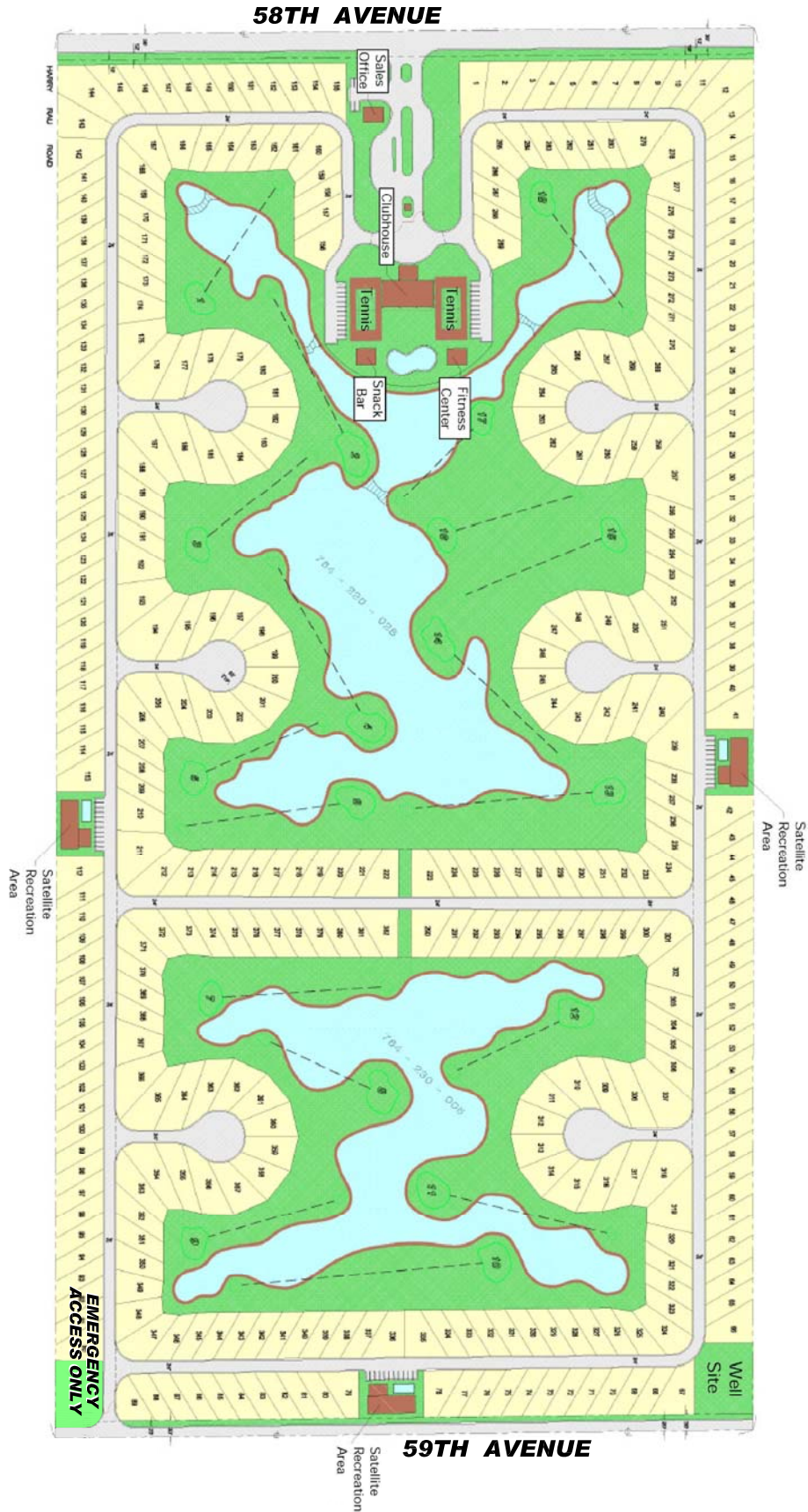
Proposed Zoning:	Tourist Commercial
Proposed Land Use:	Motorcoach Resort

1.3.5 Site Plan

Exhibit 1-2 illustrates the site plan used for this traffic analysis. This site plan is subject to refinement and revision, based on planning, engineering, and environmental considerations.

1.3.6 Project Buildout Year

The proposed project, TR35238, is anticipated to be built out and fully occupied in 2009.



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2.0 AREA CONDITIONS

2.1 Study Area

Pursuant to the Traffic Study Scoping Packet (Appendix 1.1), the study area includes the existing intersections listed below, and shown on previous Exhibit 1-2.

Monroe Street (NS) at:

- 50th Avenue (EW)
- 52nd Avenue (EW)
- 54th Avenue (EW)
- Airport Boulevard (EW)
- 58th Avenue (EW)
- 60th Avenue (EW)

Jackson Street (NS) at:

- 58th Avenue (EW)

It should be noted that all of the study area intersections are on the boundary of the City of La Quinta and unincorporated Riverside County, except for the intersection of Monroe Street and 60th Avenue, which is wholly within the City of La Quinta, and the intersection of Jackson Street and 58th Avenue, which is wholly within Riverside County.

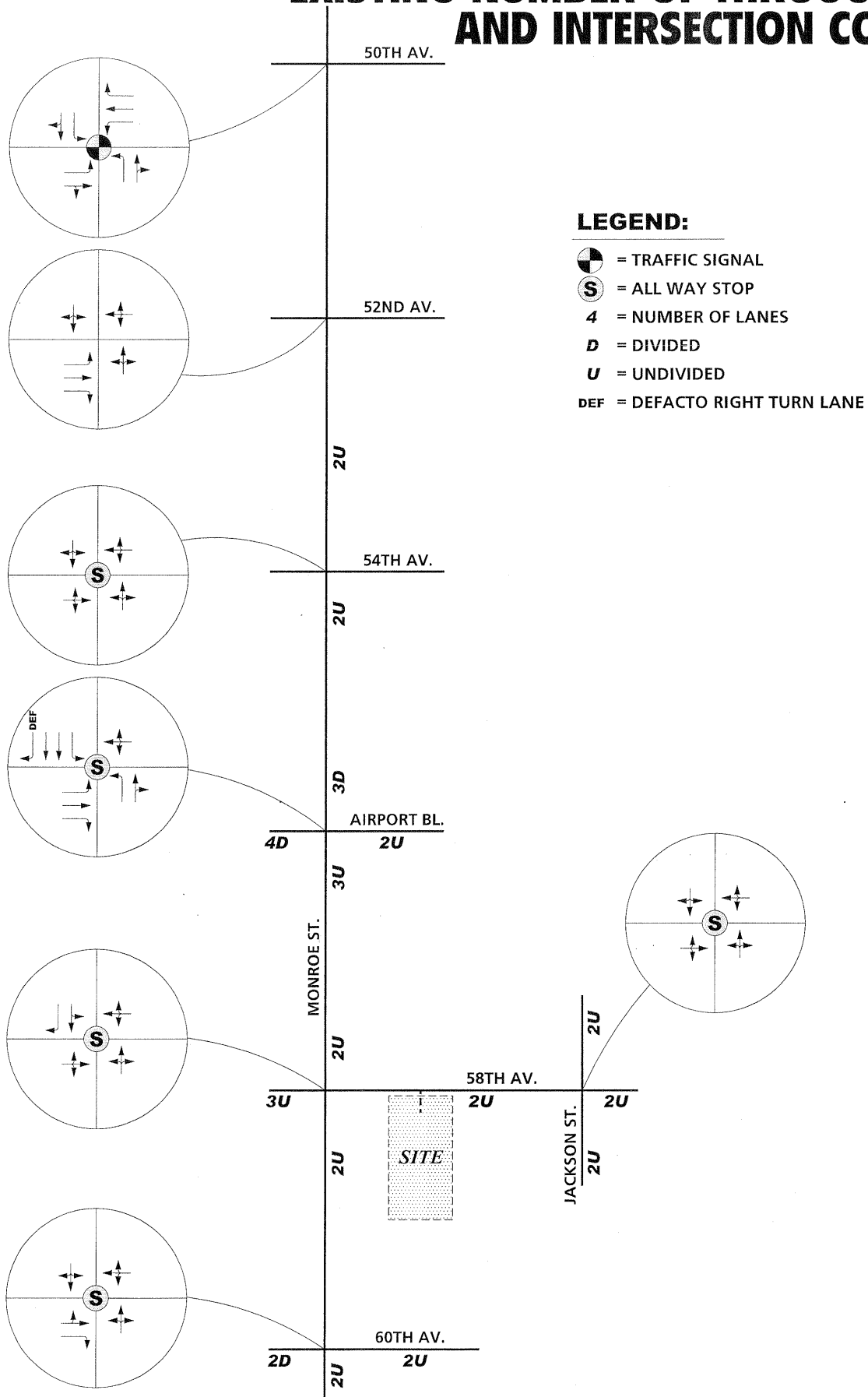
2.2 Existing Traffic Controls and Intersection Geometrics

Exhibit 2-1 identifies the existing roadway conditions for study area roadways. The number of traffic lanes for the existing roadways and the existing intersection controls are also identified. All roads in the study area are currently two-lane undivided roadways, except for a segment of Monroe Street near Airport Boulevard that has two southbound lanes and one northbound lane.

2.3 Existing Traffic Volumes

The traffic counts were conducted in July 2007. As required in the *Engineering Bulletin #60-13*, the count data were adjusted with a seasonal factor of 40%. Adjusted 2007 intersection AM and

EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



PM peak hour turning movement volumes are shown on Exhibits 2-2 and 2-3, respectively. Traffic count data sheets are included in Appendix 2.1 of this report.

Exhibit 2-4 depicts the existing average daily traffic (ADT) volumes in the study area. Existing ADT volumes are based on 24-hour daily counts or have been factored from peak hour counts using the following formula for each intersection leg:

$$\text{PM Peak Hour (Approach Volume + Exit Volume)} \times 11 = \text{Leg Volume.}$$

The daily-to-peak hour ratio of 11 has been derived based on the relationship between the daily counts and the peak hour intersection turning movement counts.

2.4 Existing Conditions Traffic Signal Warrants

A detailed description of the traffic signal warrant analysis methodologies is presented in subsequent Section 4.4. Based on the existing traffic data, the intersection of Monroe Street at 52nd Avenue currently meets traffic signal warrants. The traffic signal warrant analysis worksheets for existing 2007 conditions are included in Appendix 2.2 of this report.

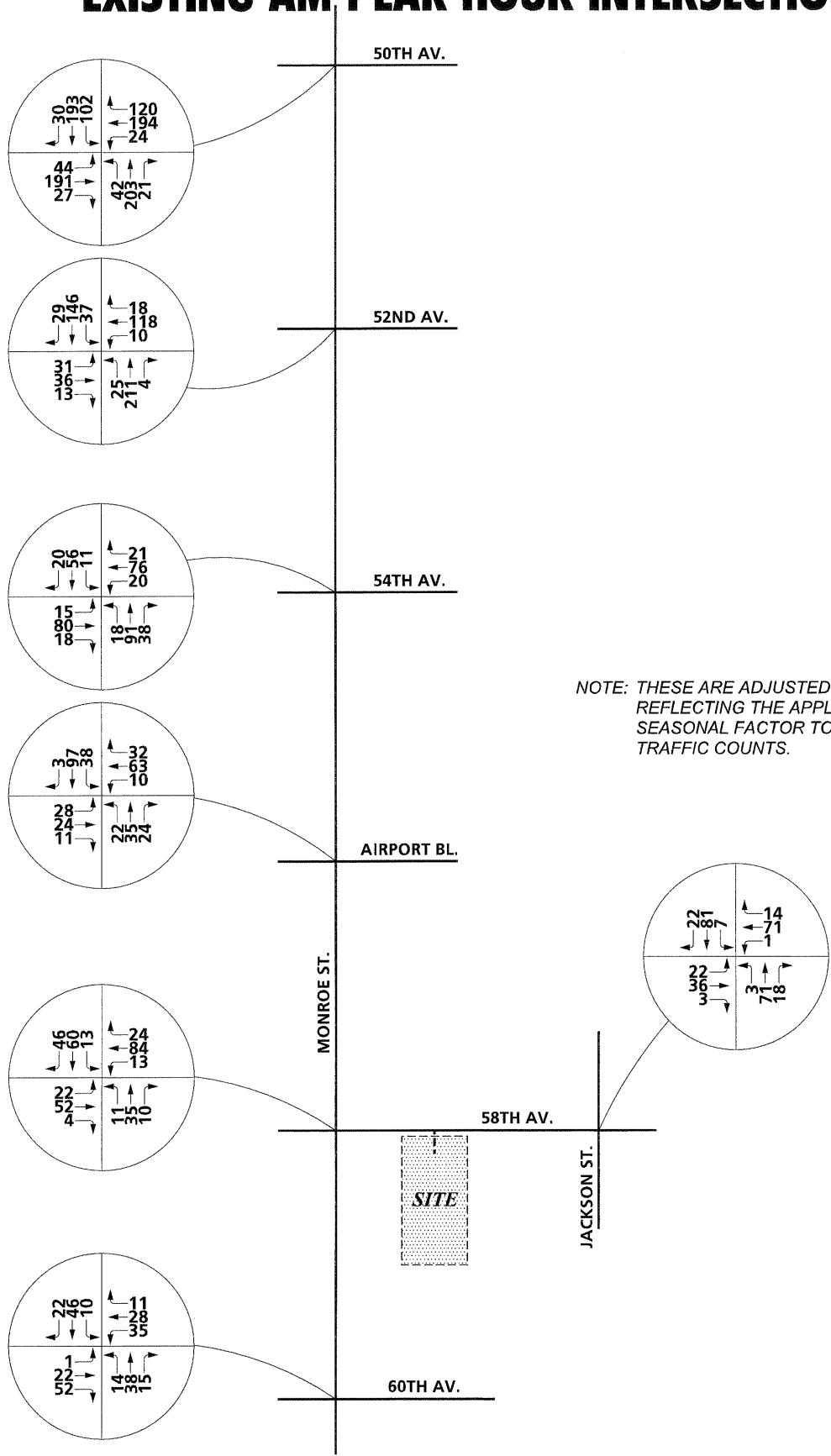
2.5 Existing 2007 Conditions Intersection Operations Analysis

Existing 2007 peak hour traffic operations have been evaluated for the study area intersections. A detailed description of the methodology for the intersection operations analysis is included in Section 4.3 of this report. The analysis is based on the *2000 Highway Capacity Manual* (HCM), Transportation Research Board *Special Report 209*. The results of an HCM analysis are expressed in terms of “Level of Service” (LOS), ranging from LOS “A” which is free flowing traffic, to LOS “F”, which is stop-and-go traffic.

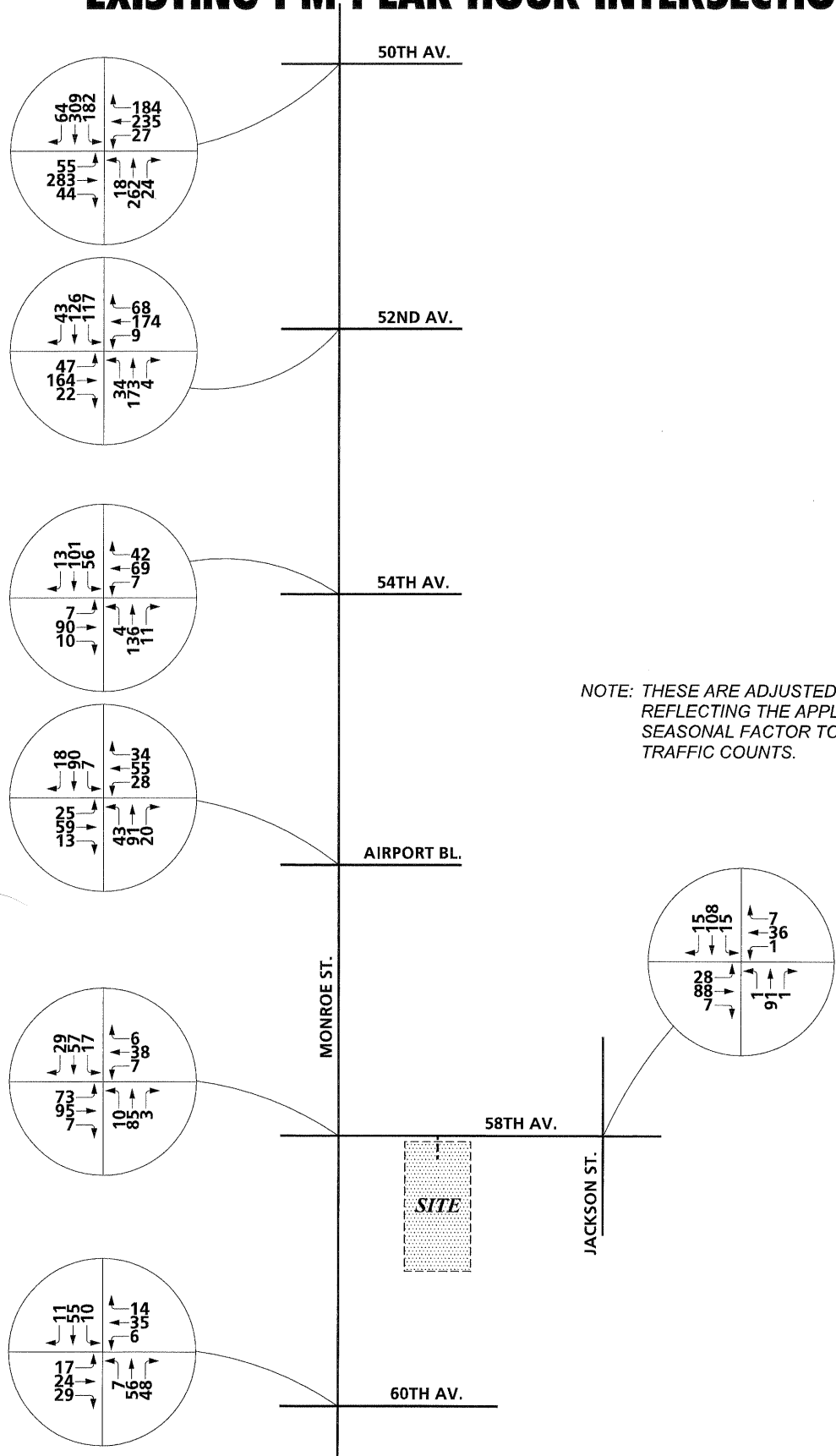
Generally, the County of Riverside considers LOS “D”, “E” and “F” to be unacceptable, except for the special conditions discussed in subsequent Section 4.2. The City of La Quinta has established a City-wide target of LOS “D”. For intersections on the boundary, the City’s target of LOS “D” has been followed.

The results of this analysis are summarized in Table 2-1, along with the existing intersection geometrics and traffic control devices at each analysis location. For existing 2007 traffic

EXISTING AM PEAK HOUR INTERSECTION VOLUMES



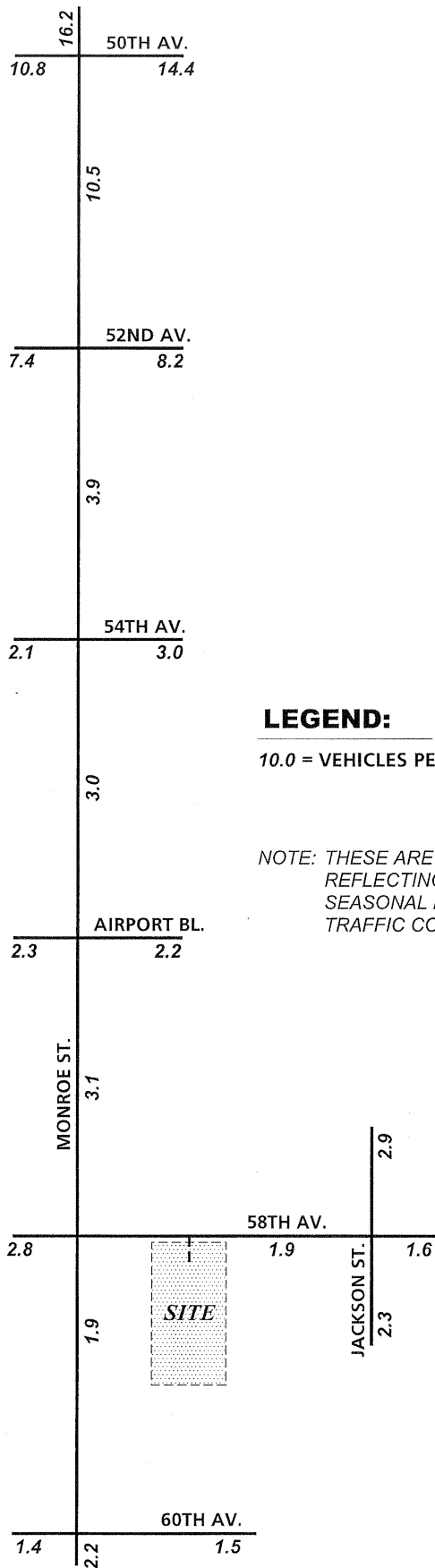
EXISTING PM PEAK HOUR INTERSECTION VOLUMES



NOTE: THESE ARE ADJUSTED TRAFFIC VOLUMES REFLECTING THE APPLICATION OF A 40% SEASONAL FACTOR TO THE EXISTING TRAFFIC COUNTS.



EXISTING AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

NOTE: THESE ARE ADJUSTED TRAFFIC VOLUMES REFLECTING THE APPLICATION OF A 40% SEASONAL FACTOR TO THE EXISTING TRAFFIC COUNTS.



TABLE 2-1

EXISTING CONDITIONS
INTERSECTION OPERATIONS ANALYSIS SUMMARY

INTERSECTION	TRAFFIC CONTROL ⁴	INTERSECTION APPROACH LANES ¹												DELAY ² (SECS.)		V/C Ratio ³ (Vol/Cap)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND								
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM
Monroe St. (NS) at:																			
• 50th Ave. (EW)	TS	1	1	0	1	1	0	1	1	0	1	1	1	18.5	24.0	0.540	0.706	B	C
• 52nd Ave. (EW)	AWS	0	1	0	0	1	0	1	1	1	0	1	0	12.4	24.7	0.524	0.829	B	C
• 54th Ave. (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.4	8.8	0.204	0.245	A	A
• Airport Blvd. (EW)	AWS	1	1	0	1	2	1	1	1	1	0	1	0	8.4	8.8	0.158	0.185	A	A
• 58th Ave. (EW)	AWS	0	1	0	0.5	0.5	1	0	1	0	0	1	0	8.3	9.1	0.198	0.312	A	A
• 60th Ave. (EW)	AWS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	7.7	7.7	0.107	0.143	A	A
Jackson St. (NS)																			
• 58th Ave. (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.0	8.6	0.153	0.228	A	A

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

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

² Delay and level of service calculated using the following analysis software: Traffix, Version 7.9.0415 (2007). 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 worst individual movement (or movements sharing a single lane) are shown.

³ V/C Ratio = Volume-to-Capacity Ratio

⁴ TS = Traffic Signal; AWS = All Way Stop

conditions, all study area intersections are currently operating at acceptable levels of service during the peak hours. Existing 2007 conditions intersection operations analysis worksheets are included in Appendix 2.3 of this report.

2.6 General Plan Circulation Element

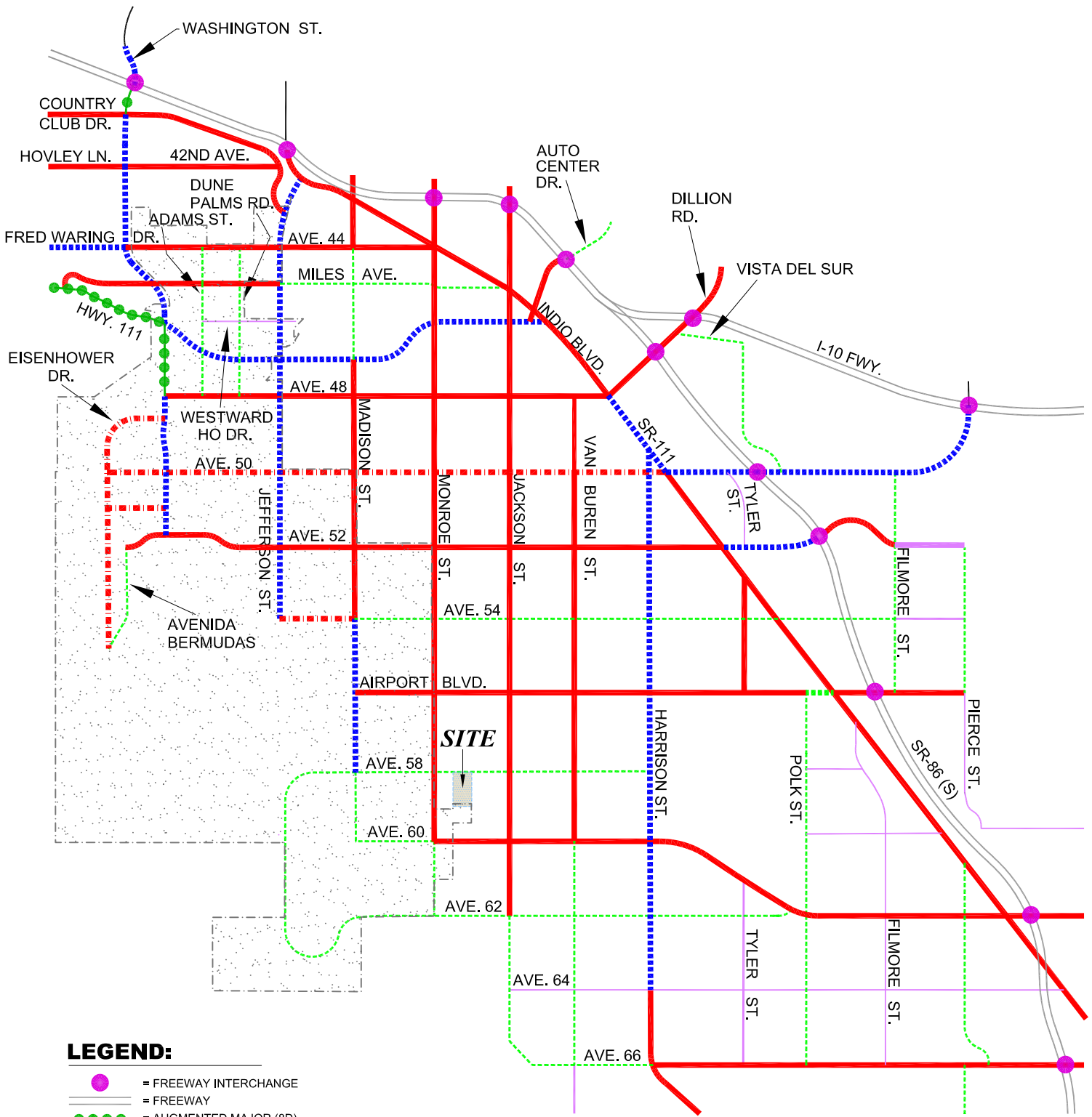
Exhibit 2-5 shows the City of La Quinta General Plan Circulation Element and Exhibit 2-6 illustrates the City of La Quinta arterial street cross-sections. Exhibit 2-7 shows the Riverside County General Plan Circulation Element and Exhibit 2-8 illustrates the Riverside County arterial street cross-sections.

Monroe Street, Jackson Street, Airport Boulevard and 60th Avenue east of Monroe Street are classified as Primary Roadways - A (110-foot right-of-way). 54th Avenue, 58th Avenue, and 60th Avenue west of Monroe Street are classified as Secondary Roadways (88-foot right-of-way).

2.7 Transit Service

The study area is currently not served by any public transit.

CITY OF LA QUINTA GENERAL PLAN CIRCULATION ELEMENT

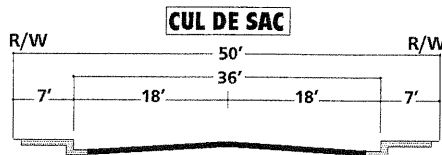
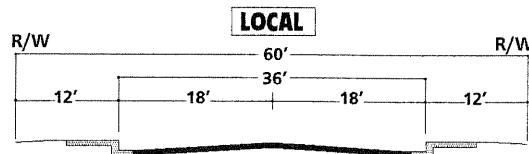
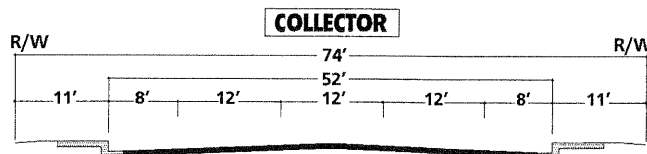
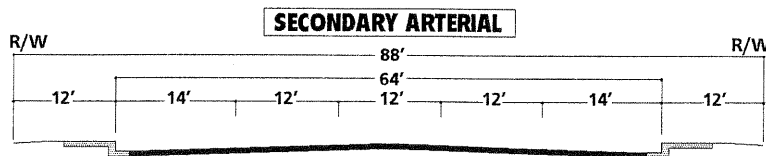
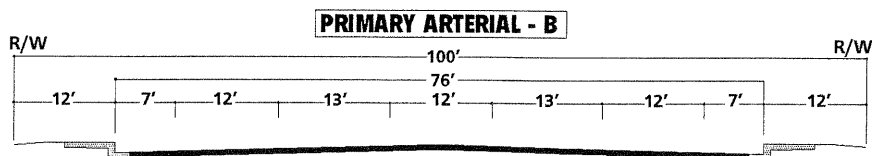
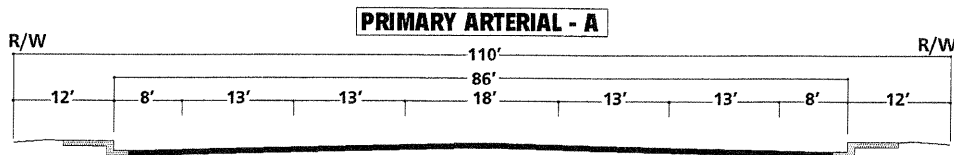
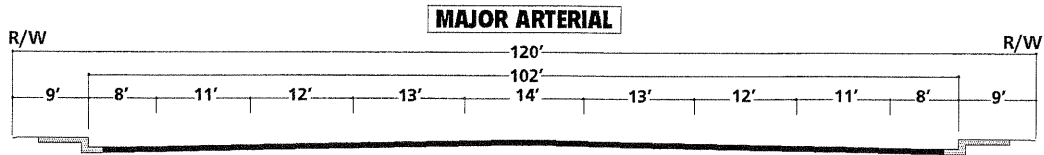
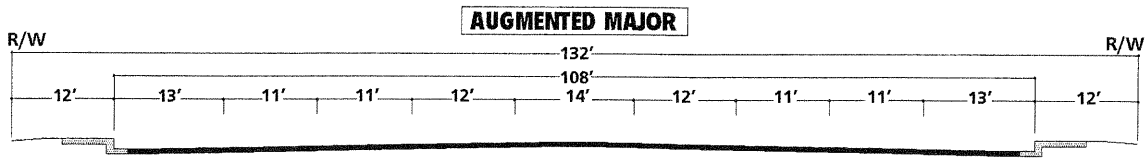


LEGEND:

- = FREEWAY INTERCHANGE
- = FREEWAY
- = AUGMENTED MAJOR (8D)
- = MAJOR ROADWAY (6D)
- = PRIMARY ROADWAY - A (4D)
- = PRIMARY ROADWAY - B (4D)
- = SECONDARY ROADWAY (4U)
- = COLLECTOR ROADWAY (2U)
- = LA QUINTA CITY BOUNDARY

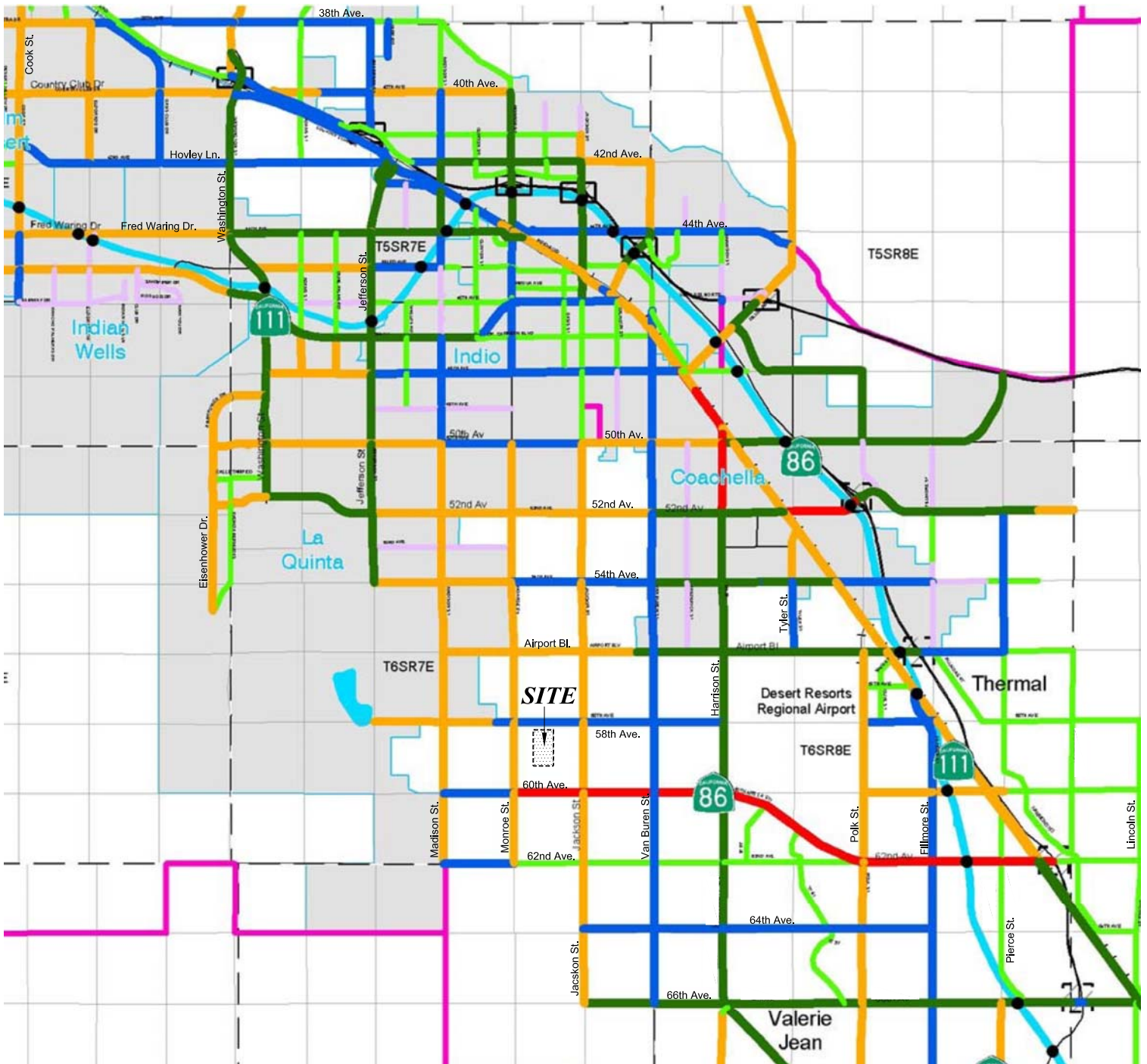


CITY OF LA QUINTA GENERAL PLAN ROADWAY CROSS-SECTIONS



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EXHIBIT 2-7 RIVERSIDE COUNTY GENERAL PLAN CIRCULATION ELEMENT

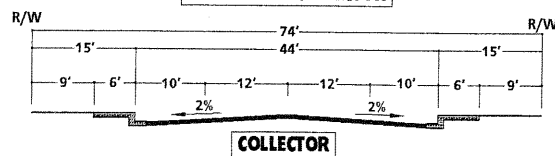
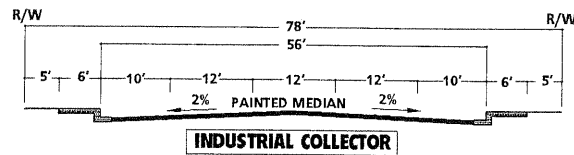
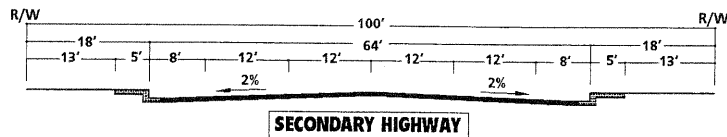
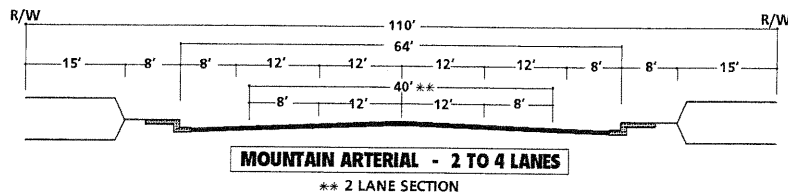
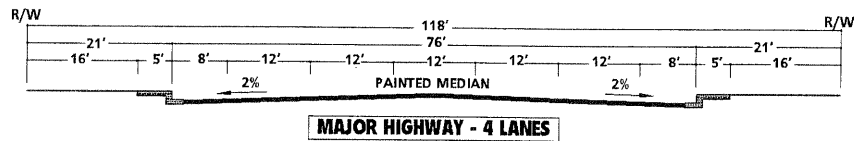
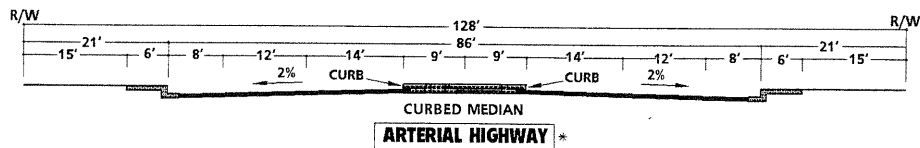
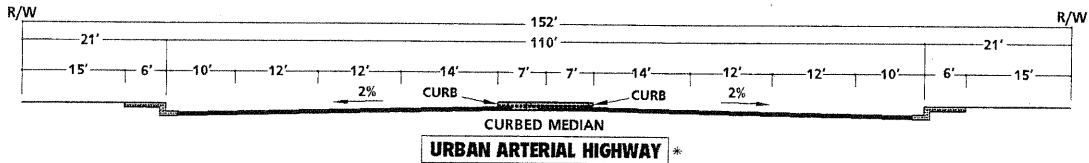
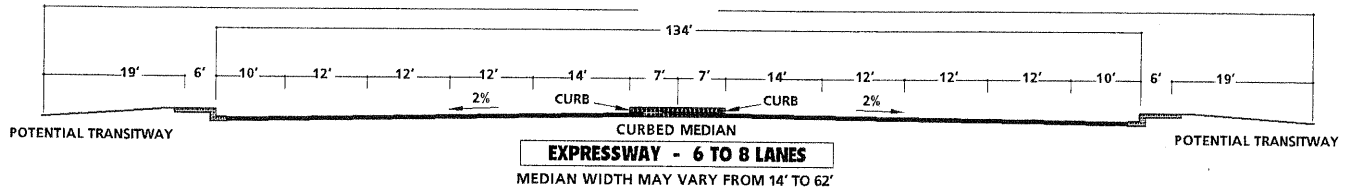


- | | | |
|------------------------------|---|--------------------|
| Expressway (184' ROW) | Bridges | Area Plan Boundary |
| Urban Arterial (152' ROW) | Moreno Valley to San Bernardino Corridor Alternatives | Township |
| Arterial (128' ROW) | Hemet to Corona/Lake Elsinore Corridor Alternatives | Section |
| Major (118' ROW) | SR-79 Re-alignment Alternatives | Water |
| Secondary (100' ROW) | Proposed Interchange | City |
| Collector (74' ROW) | Existing Interchange | |
| Mountain Arterial (110' ROW) | | |
| Freeway | | |
| Railroad | | |



SOURCE: RIVERSIDE COUNTY INTEGRATED PROJECT (RCIP)
(OCTOBER 7, 2003)

RIVERSIDE COUNTY GENERAL PLAN ROADWAY CROSS-SECTIONS



SOURCE: COUNTY OF RIVERSIDE

(07.dwg)

* IMPROVEMENTS MAY BE RECONFIGURED TO ACCOMMODATE EXCLUSIVE TRANSIT LANES OR ALTERNATIVE LANE ARRANGEMENTS. ADDITIONAL RIGHT OF WAY MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE ULTIMATE IMPROVEMENTS FOR STATE HIGHWAYS SHALL CONFORM TO CALTRANS DESIGN STANDARDS.

3.0 PROJECTED FUTURE TRAFFIC

Projected future traffic has been estimated for near-term (2009) conditions. For near-term conditions, projected future traffic is represented by the sum of existing (2007) traffic, ambient growth, project traffic, and other cumulative developments in the study area that have been approved or are being processed concurrently. This section discusses how projected future traffic from these various sources has been determined.

3.1 Project Traffic

3.1.1 Project Trip Generation

Trip generation represents the amount of traffic which is attracted to and produced by a development. The trip generation for the project is based upon the specific land uses which have been planned for this development. For the purposes of this analysis, the following land use assumption has been evaluated for the project site:

- 382 motorcoach lots

Trip generation rates for the proposed project are shown in Table 3-1. The trip generation methodology used for this study is based on driveway axle counts collected at two similar motorcoach resorts in the City of Indio during high season on January 10, 2008 and again on January 16, 2008. The driveway counts were collected at the 419-lot Outdoor Resorts Indio, located at 80-394 48th Avenue, and at the 400-lot Motorcoach Country Club Resort, located at 80-501 48th Avenue. To account for traffic operational impacts due to bus length, the driveway counts were converted into Passenger Car Equivalent (PCE) using a factor of 1.5 for buses. Since the motorcoaches are not necessarily as large as commercial buses, the PCE-based trip generation rates are conservative. Appendix 3.1 presents the results of the vehicle axle counts.

The resulting trip generation rates were calculated as an average of the verified counts (converted to PCE). The proposed project trip generation has been estimated based on the average PCE-adjusted rates observed. Table 3-1 presents the observed trip

TABLE 3-1

PROJECT TRIP GENERATION RATES¹

LAND USE	UNITS	AM PEAK HOUR			PM PEAK HOUR			DAILY
		IN	OUT	TOTAL	IN	OUT	TOTAL	
MOTORCOACH LOTS	LOT	0.16	0.19	0.35	0.19	0.17	0.36	3.63

¹ Based on driveway counts collected at similar motorcoach resorts in January 2008.

generation rates and the resulting daily and peak hour trip generation for the proposed project are shown in Table 3-2. The proposed project is expected to generate 133 AM peak hour trips, 136 PM peak hour trips and 1,388 daily trips when fully occupied.

3.1.2 Project 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, 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. Trip distribution for this study has been based upon those highway facilities which are either in place or will be constructed in conjunction with other future developments by the analysis year.

The project trip distribution has been modified from the original analysis in response to City comments. Accordingly, fewer trips have been assigned to 58th Avenue east of Jackson Street (from 15% to 5%). Those trips have been added to Monroe Street north of 54th Avenue (from 45% to 55%), to 52nd Avenue west of Monroe Street (from 0% to 10%), and to 50th Avenue west of Monroe Street (from 0% to 10%). It should be noted that the modification of the trip distribution has resulted in the following two additional study intersections:

- Monroe Street (NS) and 52nd Avenue (EW)
- Monroe Street (NS) and 50th Avenue (EW)

The revised trip distribution patterns for the proposed project, are shown on Exhibit 3-1. The proposed project will have one full access driveway on 58th Avenue, with an emergency-only gated driveway on 59th Avenue.

3.1.3 Modal Split

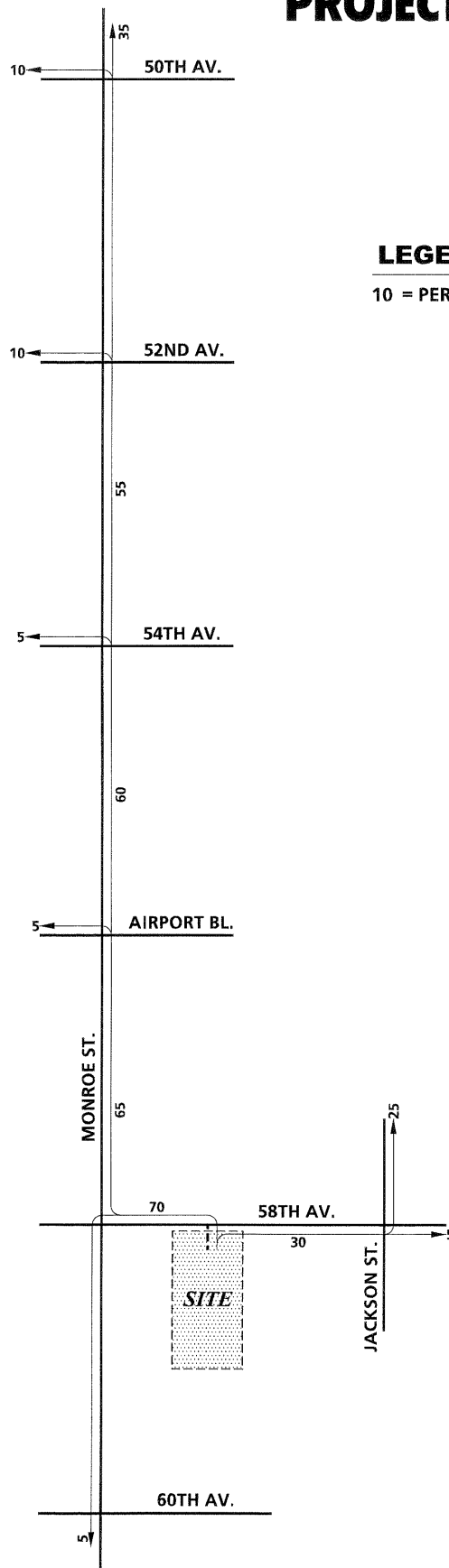
The traffic-reducing potential of public transit has not been considered in this report. Essentially the traffic projections are "conservative" in that public transit might be able to reduce the traffic volumes.

TABLE 3-2

PROJECT TRIP GENERATION

LAND USE	QUANTITY/ UNIT	AM PEAK HOUR			PM PEAK HOUR			DAILY
		IN	OUT	TOTAL	IN	OUT	TOTAL	
MOTORCOACH LOTS	382 LOTS	61	72	133	72	64	136	1,388

PROJECT TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT



3.1.4 Project 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, and the arterial highway and local street systems which would be in place by project buildout in 2009.

Based on the identified project traffic generation and distribution, project-only AM and PM peak hour intersection traffic volumes are shown on Exhibits 3-2 and 3-3, respectively. The project-only average daily traffic (ADT) volumes are presented in Exhibit 3-4.

3.2 Other Future Traffic

This section discusses traffic increases due to ambient growth as well as the traffic generated by other known development projects in the study area that have been approved or are being processed concurrently with the proposed project.

3.2.1 Ambient Growth

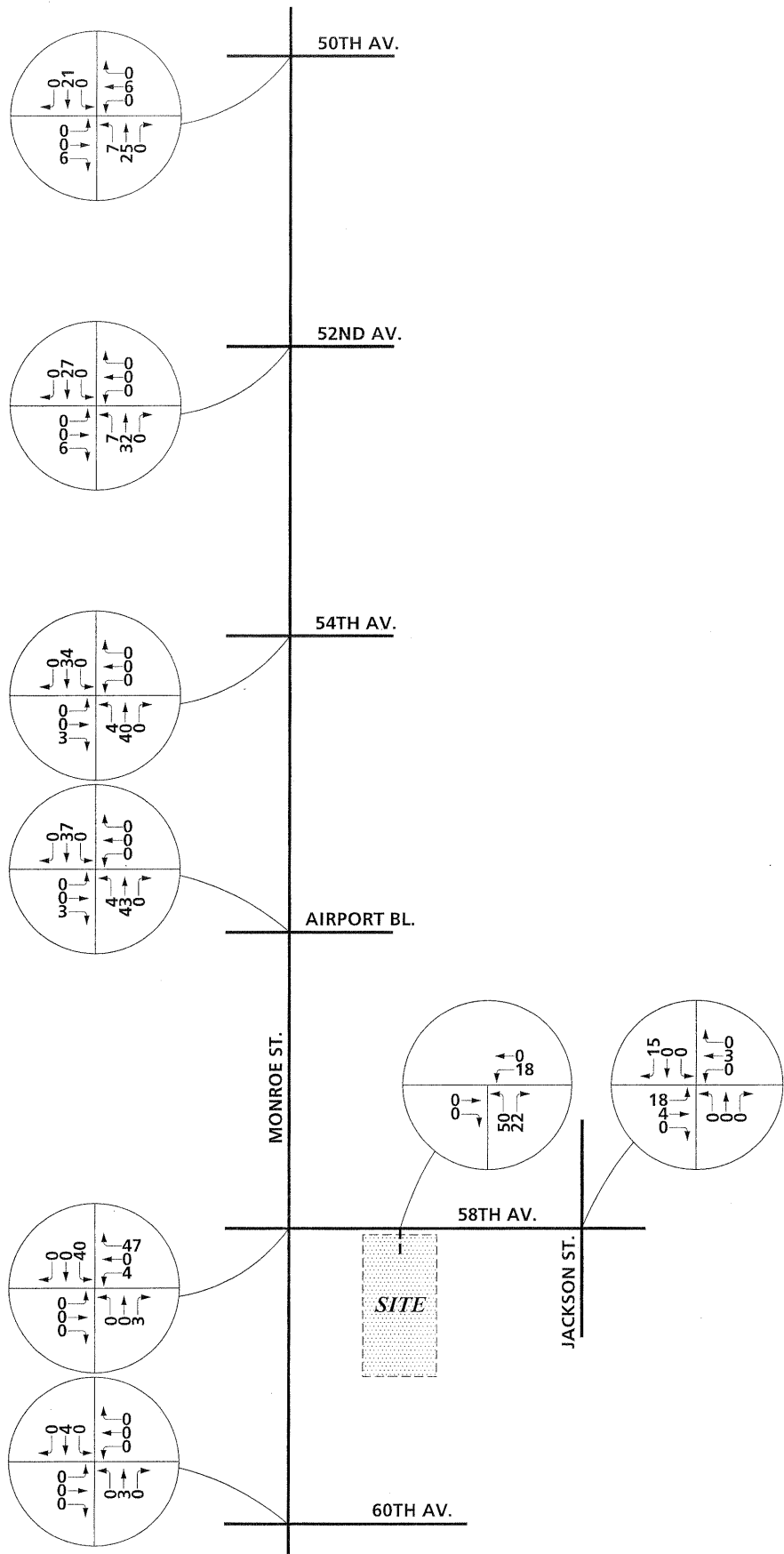
To account for ambient growth on area roadways, future traffic volumes have been calculated based on the eight (8) percent annual growth rate noted in *Engineering Bulletin #06-13*, and applied to existing 2007 traffic volumes. To approximate 2009 traffic conditions, a total growth rate of 16.64 percent has been applied to the seasonally adjusted 2007 traffic volumes.

Ambient growth volumes have been added to peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the project and other developments.

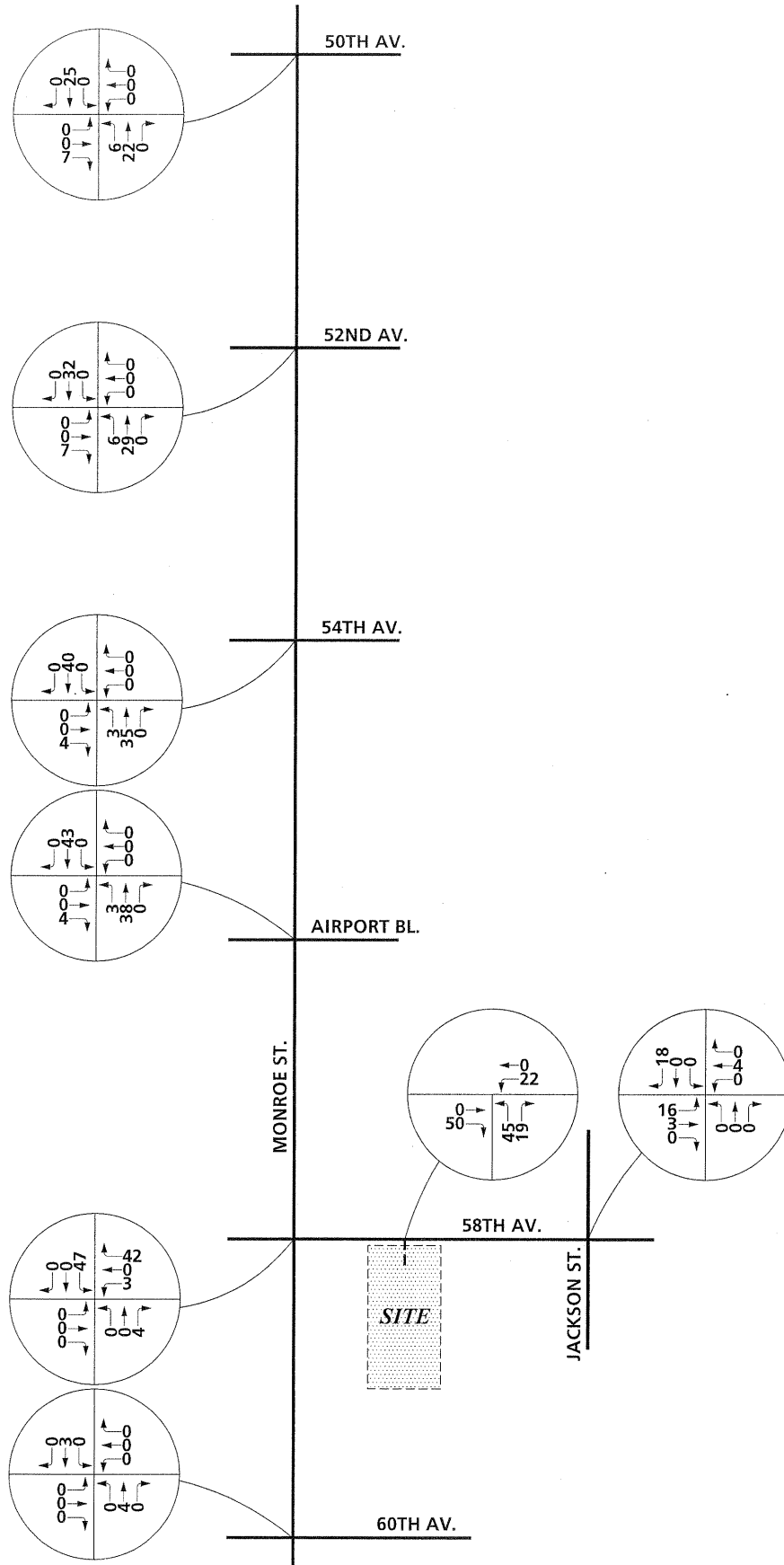
3.2.2 Cumulative Development

The City requires a scenario that includes cumulative traffic, which consists of traffic from other known developments in the study area that have been approved or being processed concurrently. The list of cumulative developments has been provided by City of La Quinta staff.

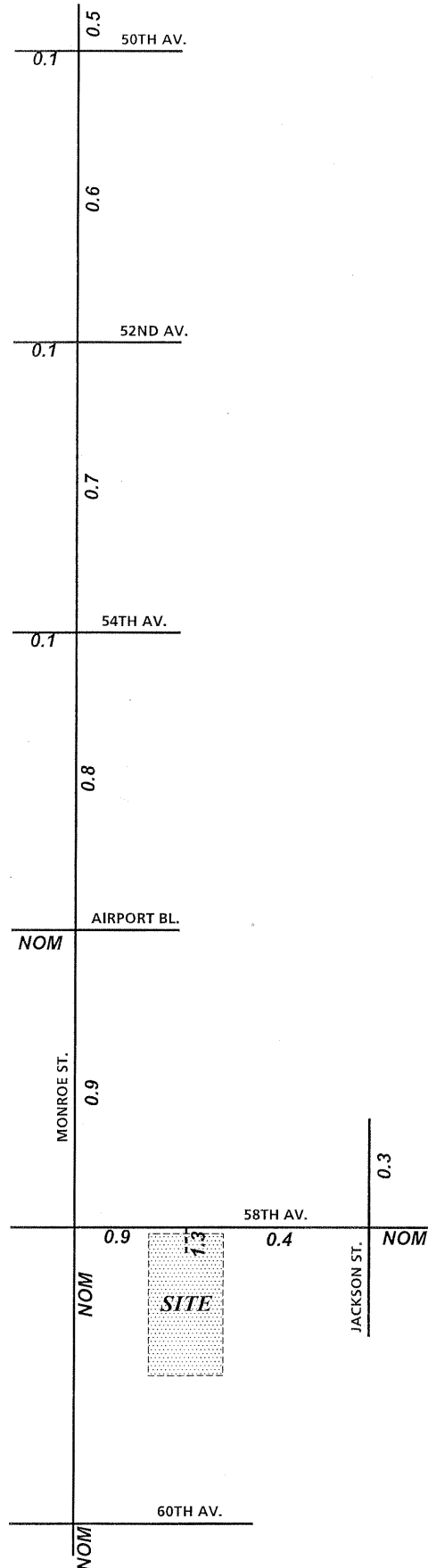
PROJECT AM PEAK HOUR INTERSECTION VOLUMES



PROJECT PM PEAK HOUR INTERSECTION VOLUMES



PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY



Exhibit 3-5 illustrates the cumulative development locations, and Table 3-3 presents their land uses and trip generation. The cumulative development trip generation rates are included in previous Table 3-1.

The trip distribution patterns for the cumulative development traffic are included in Appendix 3.2 of this report.

Based on the identified trip distribution patterns for the cumulative development on arterial highways throughout the study area, cumulative development AM and PM peak hour intersection turning movement volumes are shown on Exhibits 3-6 and 3-7, respectively. Cumulative development average daily traffic (ADT) volumes are presented on Exhibit 3-8.

3.3 Total Future Traffic

This analysis assesses the following future traffic conditions:

- Existing plus Ambient plus Project (EAP) conditions
- Existing plus Ambient plus Project plus Cumulative (EAP) conditions

EAP conditions AM and PM peak hour intersection turning movement volumes are shown on Exhibits 3-9 and 3-10, respectively. Average daily traffic (ADT) volumes for EAP conditions are presented in Exhibit 3-11.

EAPC conditions AM and PM peak hour intersection turning movement volumes are shown on Exhibits 3-12 and 3-13, respectively. Average daily traffic (ADT) volumes for EAPC conditions are presented in Exhibit 3-14.

CUMULATIVE DEVELOPMENT LOCATION MAP

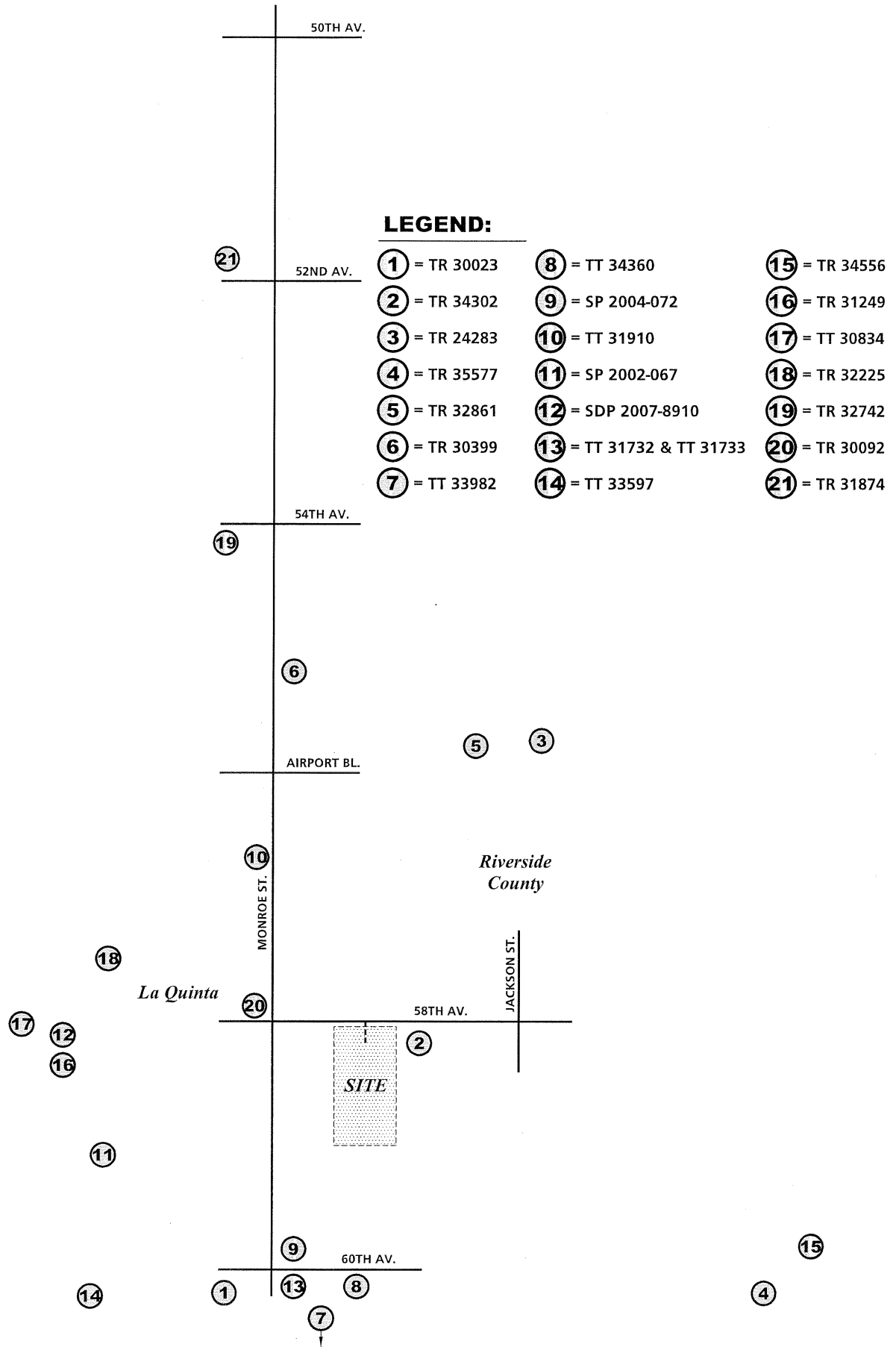


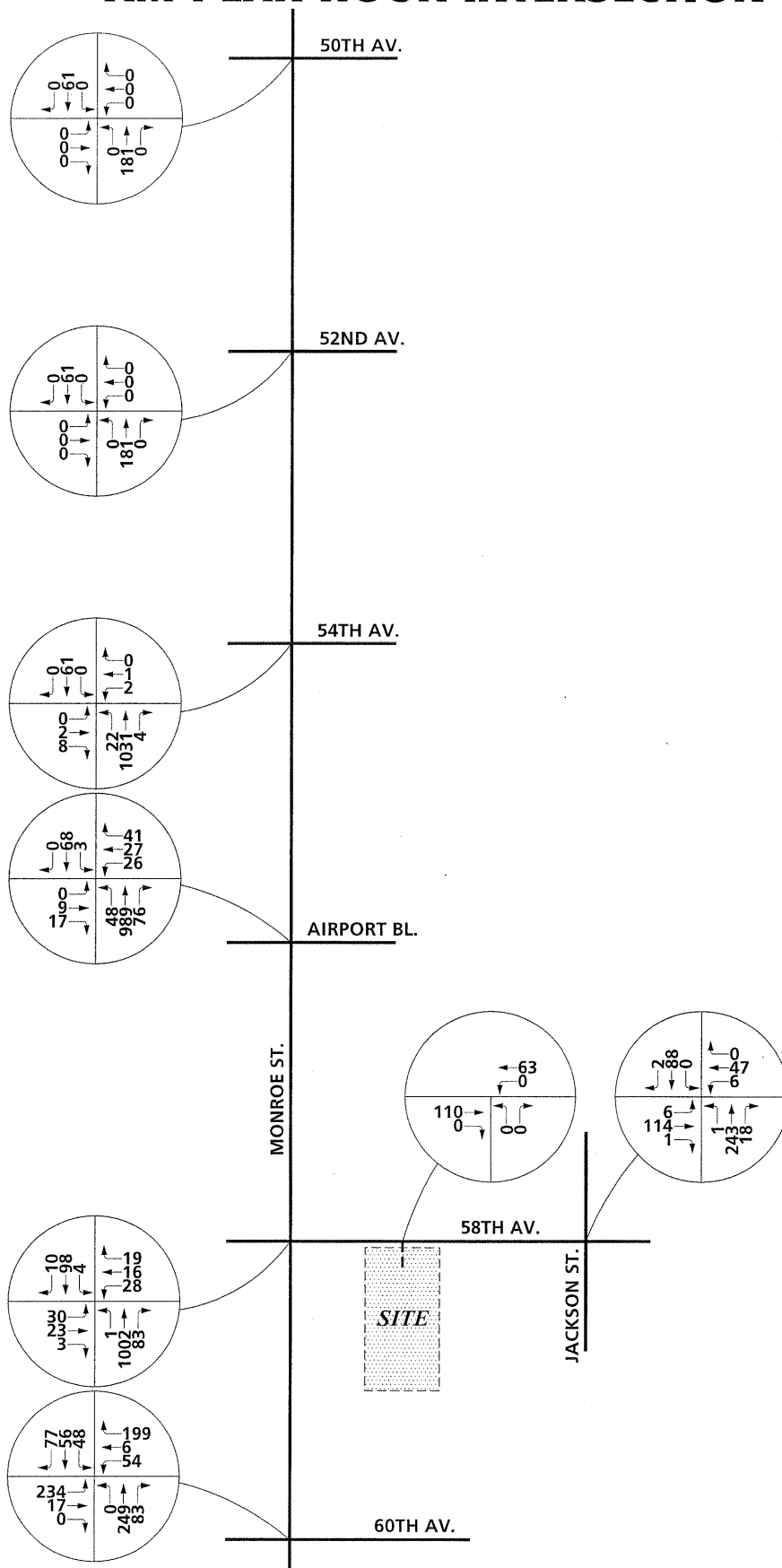
TABLE 3-3

CUMULATIVE DEVELOPMENT LAND USE AND TRIP GENERATION

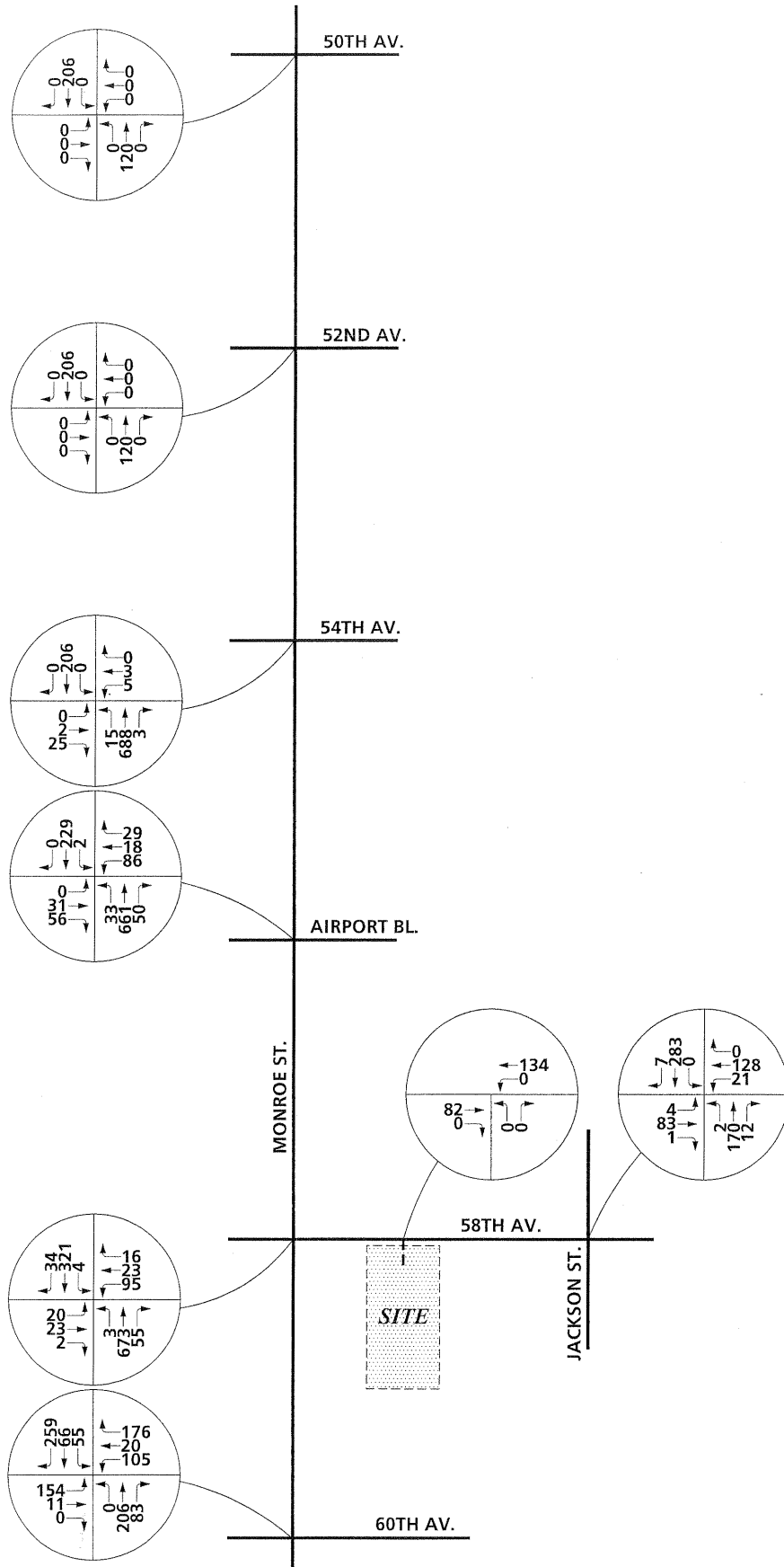
PROJECT					PEAK HOUR						DAILY
					AM			PM			
NAME	LAND USE	QUANTITY ¹			IN	OUT	TOTAL	IN	OUT	TOTAL	
1	TR30032 (50%)	Single Family Residential	610	DU	116	342	458	390	226	616	5,838
2	TR34302	Single Family Residential	51	DU	10	29	39	33	19	52	488
3	TR24283	Single Family Residential	45	DU	9	25	34	29	17	46	431
4	TR35577	Single Family Residential	119	DU	23	67	90	76	44	120	1,139
5	TR32861	Single Family Residential	158	DU	30	88	118	101	58	159	1,512
6	TR30399	Single Family Residential	77	DU	15	43	58	49	28	77	737
7	TT33982	Single Family Residential	474	DU	90	265	355	303	175	478	4,536
8	TT34360	Single Family Residential	239	DU	45	134	179	153	88	241	2,287
9	SP2004-072	Single Family Residential	392	DU	74	220	294	251	145	396	3,751
		Commercial	10	AC	6	4	10	18	20	38	429
		Total			80	224	304	269	165	434	4,180
10	TT31910	Single Family Residential	130	DU	25	73	98	83	48	131	1,244
11	SP2002-067	Single Family Residential	1400	DU	266	784	1,050	896	518	1,414	13,398
12	SDP2007-890	Neighborhood Center	105	TSF	104	66	170	50	122	172	2,402
13	TT31732 and TT31733	Single Family Residential	326	DU	62	183	245	209	121	330	3,120
14	TT33597	Single Family Residential	57	DU	11	32	43	36	21	57	545
15	TT 34556	Single Family Residential	301	DU	57	169	226	193	111	304	2,881
16	TTM 31249	Single Family Residential	85	DU	16	48	64	54	31	85	813
17	TTM 30834	Single Family Residential	76	DU	14	43	57	49	28	77	727
18	TTM 32225	Single Family Residential	29	DU	6	16	22	19	11	30	278
19	TTM 32742	Single Family Residential	40	DU	8	22	30	26	15	41	383
20	TTM 30092	Single Family Residential	97	DU	18	54	72	62	36	98	928
21	TTM 31874	Single Family Residential	19	DU	4	11	15	12	7	19	182
TOTAL					1,009	2,718	3,727	3,092	1,889	4,981	48,049

¹ DU = Dwelling Units; TSF = Thousand Square Feet; AC = Acres

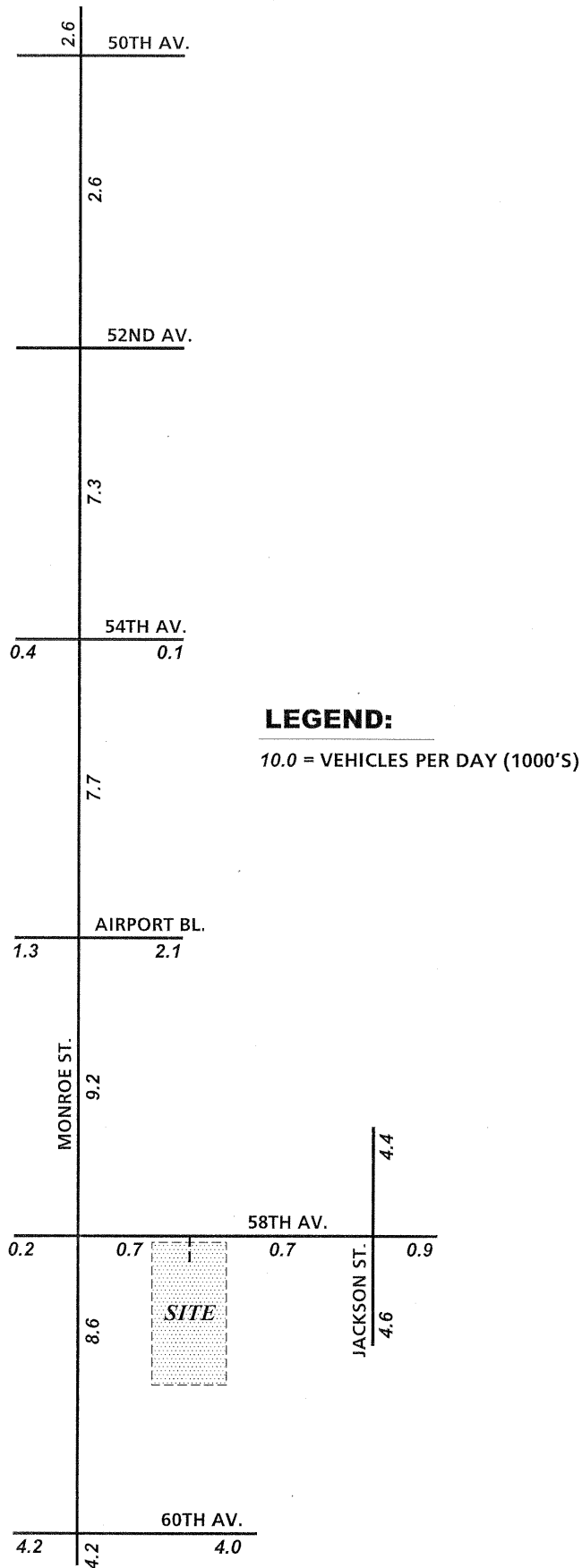
CUMULATIVE DEVELOPMENT AM PEAK HOUR INTERSECTION VOLUMES



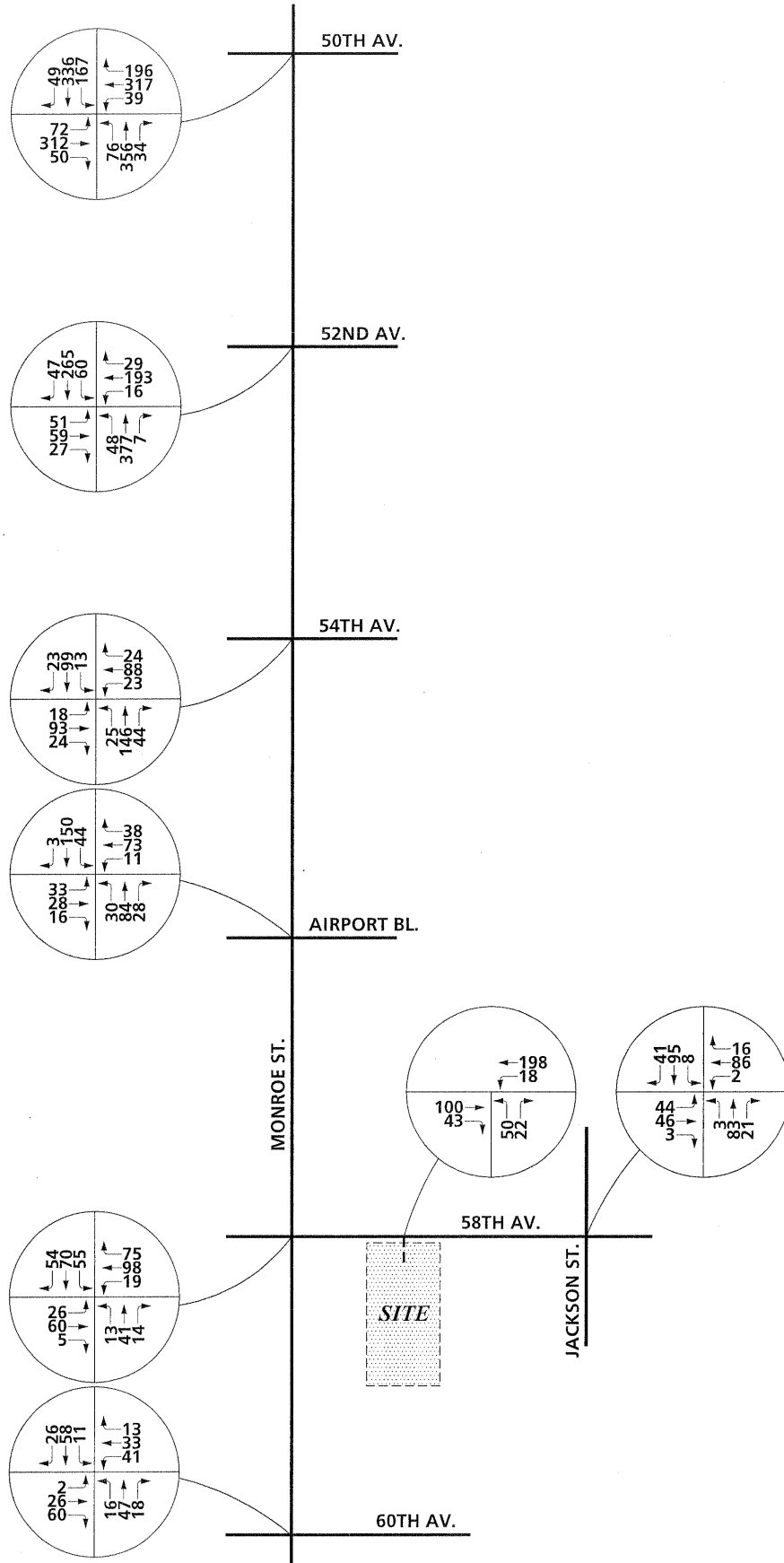
CUMULATIVE DEVELOPMENT PM PEAK HOUR INTERSECTION VOLUMES



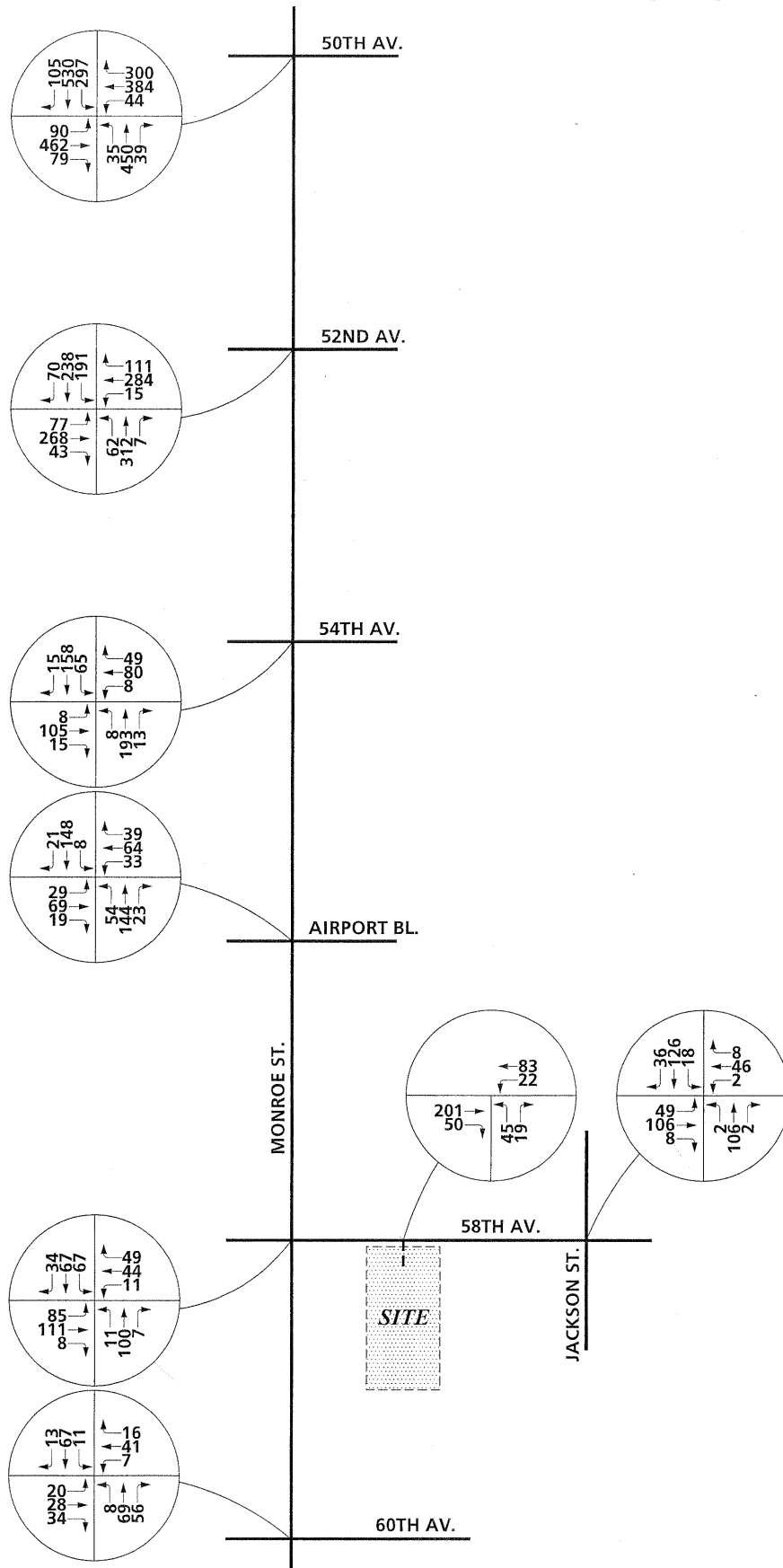
CUMULATIVE DEVELOPMENT AVERAGE DAILY TRAFFIC (ADT)



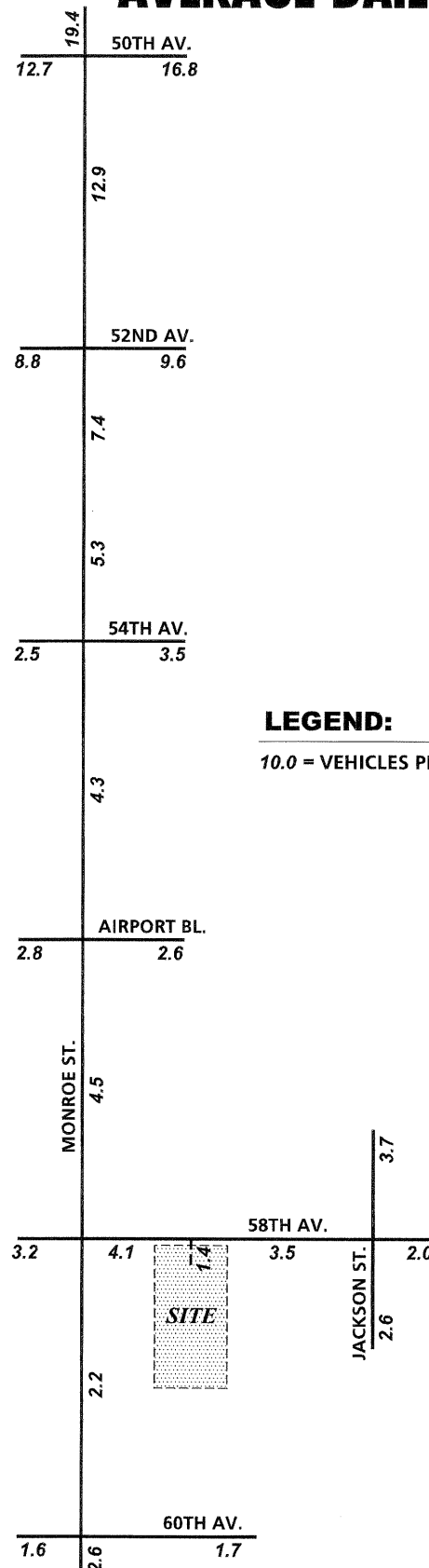
EXISTING PLUS AMBIENT PLUS PROJECT AM PEAK HOUR INTERSECTION VOLUMES



EXISTING PLUS AMBIENT PLUS PROJECT PM PEAK HOUR INTERSECTION VOLUMES



EXISTING PLUS AMBIENT PLUS PROJECT AVERAGE DAILY TRAFFIC (ADT)

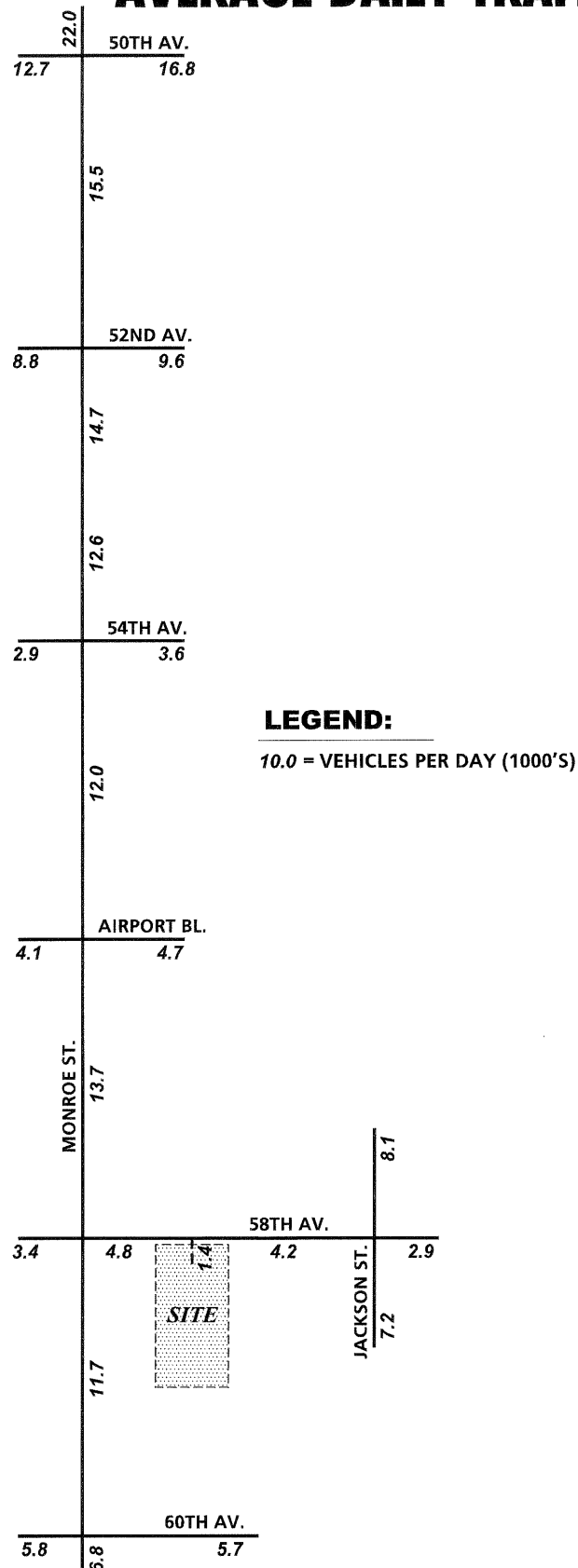


LEGEND:

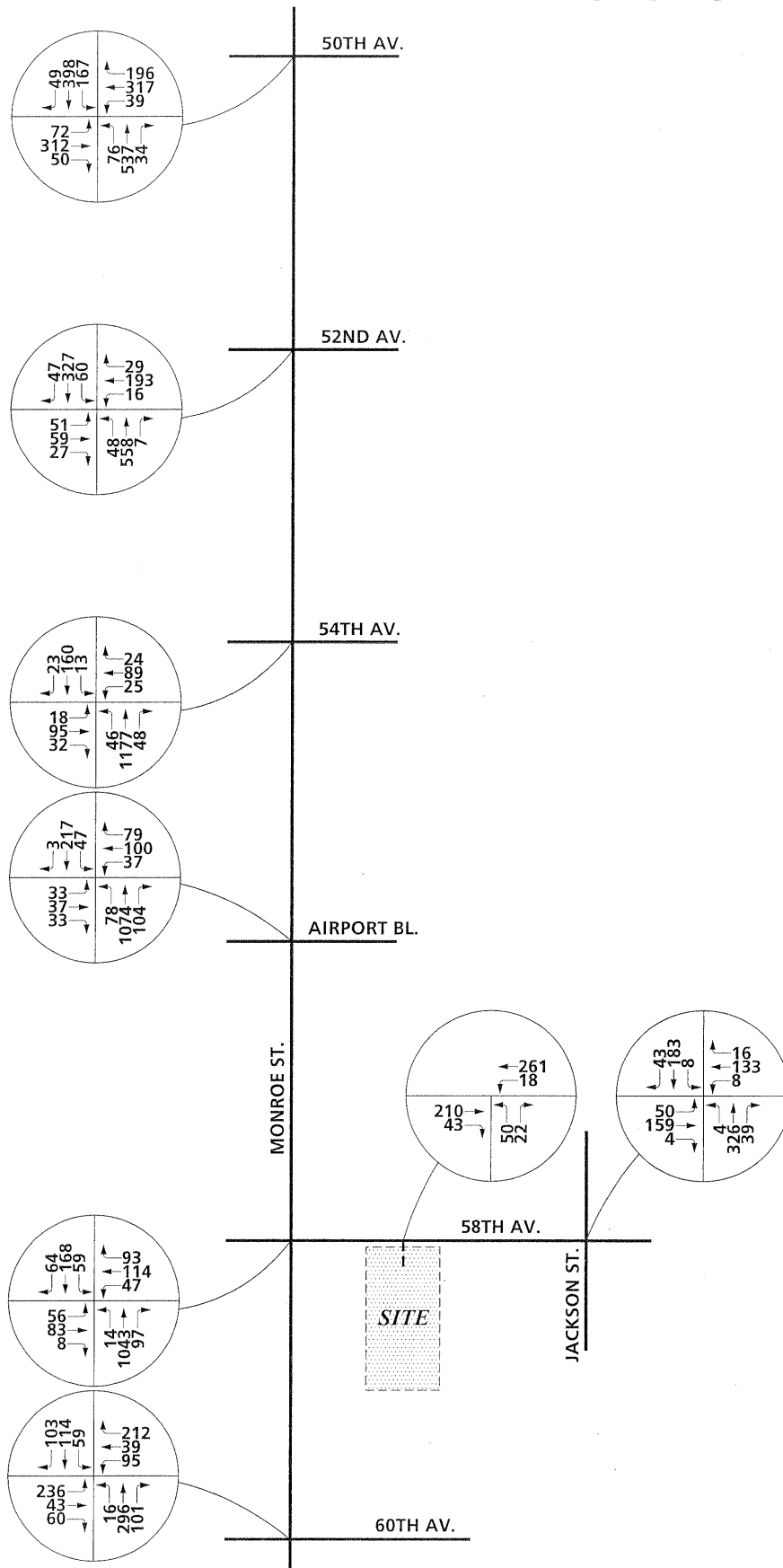
10.0 = VEHICLES PER DAY (1000'S)



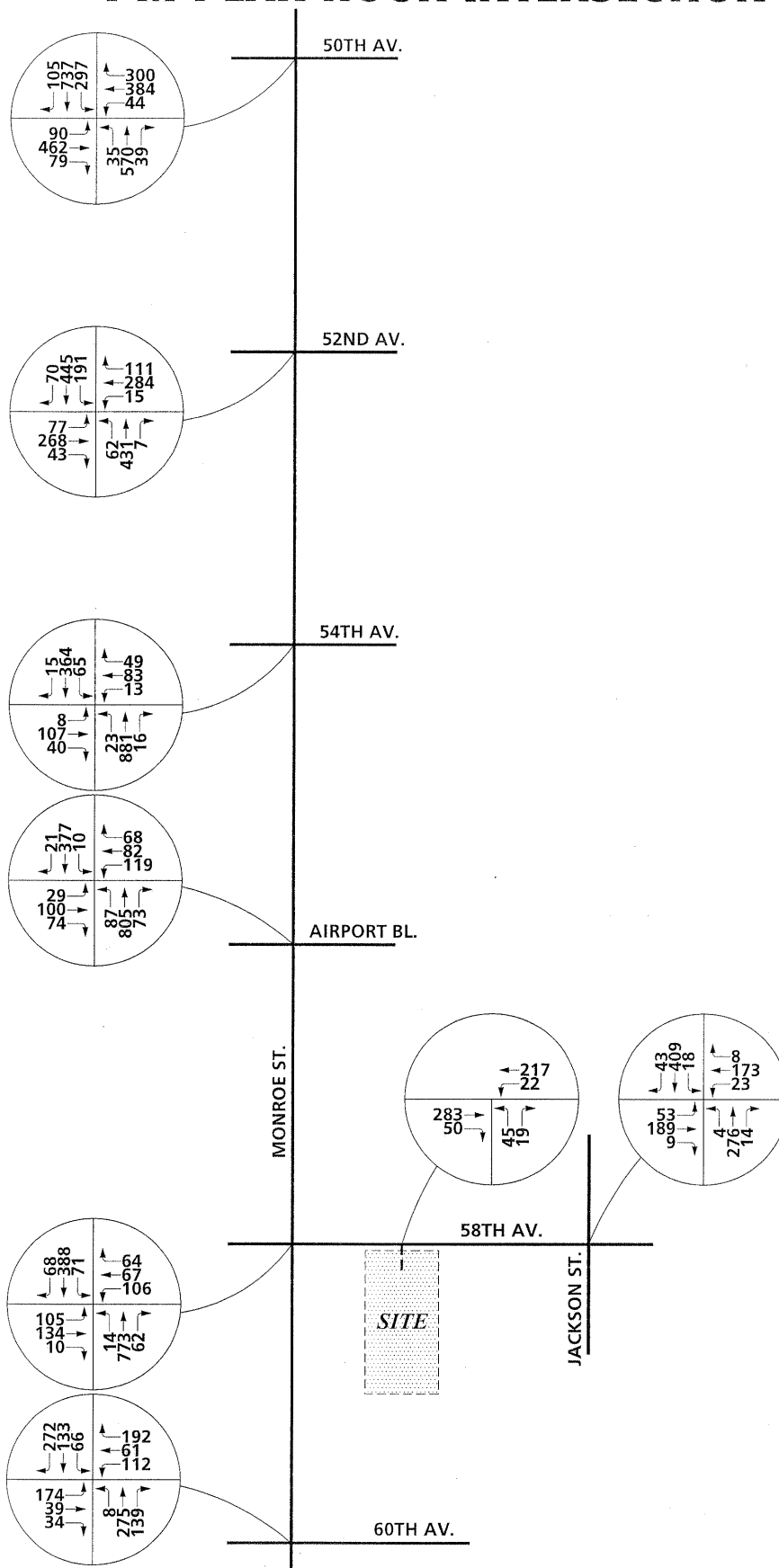
EXISTING PLUS AMBIENT PLUS PROJECT PLUS CUMULATIVE AVERAGE DAILY TRAFFIC (ADT)



EXISTING PLUS AMBIENT PLUS PROJECT PLUS CUMULATIVE AM PEAK HOUR INTERSECTION VOLUMES



EXISTING PLUS AMBIENT PLUS PROJECT PLUS CUMULATIVE PM PEAK HOUR INTERSECTION VOLUMES



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4.0 TRAFFIC ANALYSIS METHODOLOGIES

Traffic operations are quantified through the determination of “Level of Service” (LOS). Level of Service is a qualitative measure of traffic operating conditions, whereby a letter grade “A” through “F” is assigned to an infrastructure facility (roadway segment, intersection, or freeway facility) representing progressively worsening traffic conditions. This section presents the LOS definition, LOS criteria, and the methodologies for the Intersection Operations Analysis and the Warrant Analysis Traffic Signal.

4.1 Level of Service Definition

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

- LOS "A": Completely free-flow conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations are constrained only by the geometric features of the highway and by driver preferences. Maneuverability within the traffic stream is good. Minor disruptions to flow are easily absorbed without a change in travel speed.
- LOS "B": Free flow conditions, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS “A”, but drivers have slightly less freedom to maneuver. Minor disruptions are still easily absorbed, although local deterioration in LOS will be more obvious.
- LOS "C": The influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles. Minor disruptions can cause serious local deterioration in service, and queues will form behind any significant traffic disruption.
- LOS "D": The ability to maneuver is severely restricted due to traffic congestion. Travel speed is reduced by the increasing volume. Only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.
- LOS "E": Operations at or near capacity, an unstable level. Vehicles are operating with the minimum spacing for maintaining uniform flow. Disruptions cannot be dissipated readily, often causing queues to form and service to deteriorate to LOS “F”.

- LOS "F": Forced or breakdown flow. It occurs either when vehicles arrive at a rate greater than the rate at which they are discharged or when the forecast demand exceeds the computed capacity of a planned facility. Although operations at these points – and on sections immediately downstream – appear to be at capacity, queues form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.

4.2 Level of Service Criteria

The City of La Quinta has established, as a City-wide target, a Level of Service "D" standard. The County has established, as a County-wide target, a Level of Service (LOS) "C" to be maintained on all County-maintained roads and conventional State Highways. As an exception, LOS "D" may be allowed in Community Development areas, at intersections of any combination of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways, or conventional State Highways. LOS "E" may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities. For intersections on a City/County boundary, the City's standards are typically used.

Based on these policies, all of the study area intersections have a minimum standard of LOS "D", except for the intersection of Jackson Street and 58th Avenue, which is LOS "C" since it is wholly within Riverside County. Monroe Street at 50th Avenue is wholly within the City of Indio, which also has established a Level of Service "D" standard. The project driveway is considered LOS "D" since it is to be annexed into the City.

4.3 Intersection Operations Analysis Methodology

The current technical guide for the evaluation of traffic operations for the City of La Quinta is the 2000 Highway Capacity Manual (HCM) (Transportation Research Board Special Report 209). The HCM defines Level of 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 Level of Service (LOS) 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 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.

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

The study area intersections that are stop sign controlled with stop control on the minor street only have been analyzed using the HCM's unsignalized intersection methodology. For these intersections, the calculation of level of service is dependent on the frequency and size of gaps occurring in the traffic flow of the main street. Using data collected describing the intersection configuration and traffic volumes at the study area locations, the level of service has been calculated. The level of service criteria for this type of intersection analysis is based on average total delay per vehicle for the worst minor street movement(s).

For all way stop (AWS) controlled intersections, the ability of vehicles to enter the intersection is not controlled by the occurrence of gaps in the flow of the main street. The AWS 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 total delay per vehicle for the overall intersection.

The levels of service for the HCM delay methodology, for signalized and unsignalized intersections, are defined as follows:

Level of Service	Average Total Delay Per Vehicle (Seconds)	
	Signalized	Unsignalized
A	0 to 10.00	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 intersection operations analysis for signalized intersections has been performed using optimized signal timing. This analysis has included an assumed lost time of four seconds per phase in accordance with HCM recommended default values. Initial saturation flow rates of 1,900 vehicles per hour of green (vphg) have been assumed for all capacity analysis. In addition, peak hour factors and minimum green times have been applied to the existing counts based on the County's traffic study guidelines. The minimum green times for each movement is 7 seconds since this is an area of low pedestrian activity.

The intersection operations analyses are based on calculations using the TRAFFIX computer software. TRAFFIX is an intersection operations analysis computer software program developed by Dowling Associates. TRAFFIX has the capability of producing future traffic forecast and calculating intersection level of service at signalized and un-signalized intersections using various methods. TRAFFIX assumes that the intersections operate as isolated locations with random vehicular arrival rates.

For the intersection operations analysis, the study area includes the intersections shown previously on Exhibit 1-2. The existing conditions intersection operations analysis is presented in previous Section 2.5. The future conditions intersection operations analysis is presented in subsequent Section 5.2 of this report.

4.4 Traffic Signal Warrant Analysis Methodology

To determine whether "significance" should be associated with un-signalized intersection operations, a supplemental traffic signal warrant analysis has been prepared. The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the need for installation of a traffic signal at an otherwise un-signalized intersection. This study uses the signal warrant criteria presented in the 2006 edition of the California's *Manual on Uniform Traffic Control Devices (California MUTCD)* for all study area intersections.

The signal warrant criteria for existing conditions are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The California *MUTCD* indicates that the installation of a traffic signal should be considered if

one or more of the signal warrants are met. Specifically, the study utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions. Since Warrant 3 provides specialized warrant criteria for intersections with rural characteristics (e.g. located in communities with populations of less than 10,000 persons or with adjacent major streets operating at or above 40 miles per hour), study intersections qualifying for this specialized criteria have been clearly identified on the traffic signal warrant sheet. For the purposes of this study, the speed limit was the basis of determining whether Urban or Rural warrants were used for a given intersection.

For future traffic conditions, unsignalized intersections and new intersections are assessed regarding the need for new traffic signals based on future average daily traffic (ADT) volumes, using the planning level ADT-based signal warrant analysis worksheets.

The existing conditions traffic signal warrant analysis is presented in previous Section 2.4, and the future conditions traffic signal warrant analysis is presented in subsequent Section 5.1.

4.5 Significant Project Impact Criteria

Per the City of La Quinta *Engineering Bulletin #06-13*, a project's transportation impact on an intersection shall be deemed "significant" in accordance with the following criteria:

Intersection Level of Service	Increase in V/C Equal To or Greater Than
A	0.25
B	0.2
C	0.15
	Increase in Trips Equal To or Greater Than
D	25 trips*
E	10 trips*
F	5 trips*

* To critical movements

For the purposes of this analysis, a significant impact occurs at an intersection if the project increases the volume-to-capacity (V/C) ratio or adds peak hour trips to impacted intersections that meet or exceed the thresholds for changes in Level of Service (LOS), as shown in the table above.

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5.0 FUTURE CONDITIONS TRAFFIC ANALYSIS

This study assesses the traffic circulation of the proposed project for existing and future traffic conditions, based on the following analyses:

- Traffic Signal Warrant Analysis
- Intersection Operations Analysis

5.1 Future Conditions Traffic Signal Warrant Analysis

A traffic signal warrant analysis has been conducted for each of the following future conditions, based on average daily traffic (ADT) volumes:

- Existing plus Ambient plus Project (EAP) conditions
- Existing plus Ambient plus Project plus Cumulative (EAPC) conditions

A detailed discussion of the methodologies behind the traffic signal warrant analysis is presented in previous Section 4.4 of this report.

5.1.1 Traffic Signal Warrant Analysis, Existing plus Ambient plus Project Conditions

Based on EAP conditions, the intersection of Monroe Street at 52nd Avenue is projected to meet traffic signal warrants.

Traffic signal warrant analysis worksheets for EAP conditions are included in Appendix 5.1 of this report.

5.1.2 Traffic Signal Warrant Analysis, Existing plus Ambient plus Project plus Cumulative Conditions

Based on EAPC conditions, traffic signals are projected to be warranted at the following locations:

Monroe Avenue (NS) at:

- 52nd Avenue (EW)
- 54th Avenue (EW)
- Airport Boulevard (EW)
- 58th Avenue (EW)
- 60th Avenue (EW)

Jackson Street (NS) at:

- 58th Avenue (EW)

Traffic signal warrant analysis worksheets for EAPC conditions are included in Appendix 5.2 of this report.

5.2 Future Conditions Intersection Operations Analysis

The intersection operations analysis for the following future conditions has been evaluated, based on the Highway Capacity Manual (HCM) method:

- Existing plus Ambient plus Project (EAP) conditions
- Existing plus Ambient plus Project plus Cumulative [EAPC] conditions

The discussion regarding the intersection operations analysis methodologies is presented in previous Section 4.3 of this report.

5.2.1 Intersection Operations Analysis, Existing plus Ambient plus Project Conditions

Table 5-1 summarizes the intersection operations analysis results at the study area intersections for EAP conditions, based on the respective existing geometrics at the intersections. AM and PM peak hour intersection turning movement volumes for EAP conditions are shown on Exhibits 3-9 and 3-10, respectively.

As shown in Table 5-1, for EAP conditions, all intersections are anticipated to operate at acceptable levels of service during the peak hours with existing geometrics, during the peak hours except for the intersection of Monroe Street at 52nd Avenue.

TABLE 5-1

EXISTING PLUS AMBIENT PLUS PROJECT CONDITIONS
INTERSECTION OPERATIONS ANALYSIS SUMMARY

INTERSECTION	TRAFFIC CONTROL ⁴	INTERSECTION APPROACH LANES ¹												DELAY ² (SECS.)		V/C Ratio ³ (Volume/Cap.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND								
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM
Monroe St. (NS) at: • 50th Ave. (EW)	TS	1	1	0	1	1	0	1	1	0	1	1	1	20.3	34.0	0.652	0.810	B	C
• 52nd Ave. (EW) -w/o Improvements	AWS	0	1	0	0	1	0	1	1	1	0	1	0	17.7	79.7	0.728	1.213	C	F
-w/Improvements	<u>TS</u>	0	1	0	<u>1</u>	1	0	1	1	1	0	1	0	10.3	12.4	0.438	0.534	B	B
• 54th Ave. (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	9.3	10.0	0.317	0.362	A	A
• Airport Blvd. (EW)	AWS	1	1	0	1	2	1	1	1	1	0	1	0	9.0	9.6	0.200	0.272	A	A
• 58th Ave. (EW)	AWS	0	1	0	0.5	0.5	1	0	1	0	0	1	0	9.4	10.4	0.330	0.402	A	B
• 60th Ave. (EW)	AWS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	7.9	8.0	0.133	0.176	A	A
Project Access (NS) • 58th Ave. (EW)	CCS	0	1	0	0	0	0	0	1	0	1	1	0	10.6	10.8	-	-	B	B
Jackson St. (NS) • 58th Ave. (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.4	9.4	0.206	0.308	A	A

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

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

² Delay and level of service calculated using the following analysis software: Traffix, Version 7.9.0415 (2007). 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 worst individual movement (or movements sharing a single lane) are shown.

³ V/C Ratio = Volume-to-Capacity Ratio = Critical Vol./Cap. value on LOS worksheets; the V/C Ratio is not applicable to unsignalized intersections

⁴ AWS = All Way Stop CCS = Cross Street Stop

The intersection of Monroe Street at 52nd Avenue is projected to operate at acceptable levels of service with the improvements shown in Table 5-1.

EAP conditions intersection operations analysis worksheets are included in Appendix 5.3 of this report.

5.2.2 Intersection Operations Analysis, Existing plus Ambient plus Project plus Cumulative Conditions

Table 5-2 summarizes the intersection operations analysis results for the study area intersections for EAPC conditions based on the existing intersection geometrics. AM and PM peak hour intersection turning movement volumes for EAPC conditions are shown on Exhibits 3-12 and 3-13, respectively.

For Existing plus Ambient plus Project plus Cumulative traffic conditions, the following study area intersections are projected to operate at unacceptable levels of service during the peak hours, without improvements:

Monroe Avenue (NS) at:

- 50th Avenue (EW)
- 52nd Avenue (EW)
- 54th Avenue (EW)
- Airport Boulevard (EW)
- 58th Avenue (EW)
- 60th Avenue (EW)

Jackson Street (NS) at:

- 58th Avenue (EW)

As shown in Table 5-2, for EAPC conditions, all intersections are anticipated to operate at acceptable levels of service, during the peak hours.

EAPC conditions intersection operations analysis worksheets are included in Appendix 5.4 of this report.

TABLE 5-2

EXISTING PLUS AMBIENT PLUS PROJECT PLUS CUMULATIVE CONDITIONS
INTERSECTION OPERATIONS ANALYSIS SUMMARY

INTERSECTION	TRAFFIC CONTROL ⁴	INTERSECTION APPROACH LANES ¹												DELAY ² (SECS.)		V/C Ratio ³ (Volume/Cap.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND			AM	PM	AM	PM	AM	PM
		L	T	R	L	T	R	L	T	R	L	T	R						
Monroe St. (NS) at:																			
• 50th Ave. (EW)																			
-w/o Improvements	TS	1	1	0	1	1	0	1	1	0	1	1	1	116.9	273.3	1.215	1.685	F	F
-w/Improvements	TS	1	<u>2</u>	0	<u>2</u>	<u>2</u>	0	1	1	0	1	1	1	21.6	40.4	0.772	0.974	C	D
• 52nd Ave. (EW)																			
-w/o Improvements	AWS	0	1	0	0	1	0	1	1	1	0	1	0	46.7	188.8	1.063	1.750	E	F
-w/Improvements	<u>TS</u>	0	1	0	<u>1</u>	<u>1</u>	0	1	1	0	0	1	0	10.3	12.4	0.438	0.534	B	B
• 54th Ave. (EW)																			
-w/o Improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	333.7	169.4	1.971	1.588	F	F
-w/Improvements	<u>TS</u>	0	1	0	0	1	0	0	1	0	0	1	0	12.0	6.6	0.827	0.616	B	A
• Airport Blvd. (EW)																			
-w/o Improvements	AWS	1	1	0	1	2	1	1	1	1	0	1	0	330.5	195.1	2.088	1.814	F	F
-w/Improvements	<u>TS</u>	1	1	0	1	2	1	1	1	1	<u>1</u>	1	0	14.2	8.6	0.866	0.679	B	A
• 58th Ave. (EW)																			
-w/o Improvements	AWS	0	1	0	0.5	0.5	1	0	1	0	0	1	0	499.1	386.4	2.704	2.515	F	F
-w/Improvements	<u>TS</u>	<u>0.5</u>	<u>1</u>	<u>0.5</u>	<u>1</u>	<u>2</u>	0	<u>1</u>	1	0	<u>1</u>	1	0	9.9	10.0	0.703	0.680	A	A
• 60th Ave. (EW)																			
-w/o Improvements	AWS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	42.9	75.8	0.985	1.142	E	F
-w/Improvements	<u>TS</u>	0	1	0	<u>1</u>	<u>1</u>	0	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	0	12.9	13.4	0.600	0.717	B	B
Project Access (NS)																			
• 58th Ave. (EW)	CCS	0	1	0	0	0	0	0	0	1	1	0	0	12.2	12.6			B	B
Jackson St. (NS)																			
• 58th Ave. (EW)																			
-w/o Improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	14.6	61.5	0.663	1.162	B	F
-w/Improvements	<u>TS</u>	0	1	0	0	1	0	0	1	0	0	1	0	11.1	12.4	0.420	0.589	B	B

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

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phase: 1 = Current Phase Improvement

² Delay and level of service calculated using the following analysis software: Traffix, Version 7.9.0415 (2007). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

³ V/C Ratio = Volume-to-Capacity Ratio = Critical Vol./Cap. value on LOS worksheets; the V/C Ratio is not applicable to unsignalized intersections

⁴ AWS = All Way Stop; CCS = Cross Street Stop; TS = Traffic Signal

5.3 Significant Project Impact Assessment

The project's transportation impact on the study area intersections has been assessed based on the criteria established by the City of La Quinta. A detailed discussion regarding the significant impact criteria is included in previous Section 4.5 of this report. The volume-to-capacity (V/C) ratios for the analysis scenarios, as well as project-related increases in the V/C ratios are summarized in Table 5-3.

As shown in Table 5-3, the proposed project is anticipated to contribute a significant impact to the following intersection:

Monroe Street (NS) at:

- 52nd Avenue

5.4 Project Fair Share Evaluation

The methodology used to determine the appropriate fair share contribution involves the proportional amount of project traffic at the study intersection with respect to the total added traffic volumes. The total added volumes are derived from the difference between the total Existing plus Ambient plus Cumulative plus Project traffic volumes minus the total existing traffic volumes during the peak hours.

Table 5-4 includes the summary of the project percent of new traffic for the study area intersections. As indicated in Table 5-4, the project is expected to contribute between 0.6% and 15.2% percent of the new traffic. For the intersection of Monroe Street at 52nd Avenue, to which the project is anticipated to contribute a significant impact, the project's fair share is as follows:

- AM Peak Hour = 15.2%
- PM Peak Hour = 11.8%

TABLE 5-3

INTERSECTION SIGNIFICANT PROJECT IMPACT SUMMARY

Project Impact Analysis (2007)	EXISTING WITHOUT PROJECT				EXISTING PLUS AMBIENT PLUS PROJECT				CHANGE in V/C Ratio		Significant Project Impact? ¹
	AM		PM		AM		PM		AM	PM	
	V/C ²	LOS	V/C	LOS	V/C	LOS	V/C	LOS			
INTERSECTION											
Monroe St. (NS) at:											
• 50th Ave. (EW)	0.540	B	0.706	C	0.652	B	0.810	C	0.112	0.104	NO
• 52nd Ave. (EW)	0.524	B	0.829	C	0.728	C	1.213	F	0.204	0.384	YES
• 54th Ave. (EW)	0.204	A	0.245	A	0.317	A	0.362	A	0.113	0.117	NO
• Airport Blvd. (EW)	0.158	A	0.185	A	0.200	A	0.272	A	0.042	0.087	NO
• 58th Ave. (EW)	0.198	A	0.312	A	0.330	A	0.402	B	0.132	0.090	NO
• 60th Ave. (EW)	0.107	A	0.143	A	0.133	A	0.176	A	0.026	0.033	NO
Jackson St. (NS) at:											
• 58th Ave. (EW)	0.153	A	0.228	A	0.206	A	0.308	A	0.053	0.080	NO

¹ Per City of La Quinta Engineering Bulletin 06-13, project impact is deemed "significant" and requires mitigation with the following increases in V/C Ratio (if TUMF is paid, increases in V/C Ratio less than 0.02 do not require mitigation):

<u>Existing LOS</u>	<u>Increase in V/C equal to or greater than</u>
A	0.25
B	0.20
C	0.15
	<u>Increase in Trips equal to or greater than</u>
D	25 trips
E	10 trips
F	5 trips

² V/C = HCM Volume-per-Capacity Ratio = Critical Vol./Cap value on LOS worksheets.

TABLE 5-4

INTERSECTION PROJECT FAIR SHARE SUMMARY

INTERSECTION	PEAK HOUR	EXISTING TRAFFIC	EXISTING PLUS AMBIENT PLUS CUMULATIVE PLUS PROJECT	PROJECT TRAFFIC	TOTAL NEW TRAFFIC	PROJECT PERCENT OF NEW TRAFFIC
Monroe St. (NS) at: • 50th Ave. (EW)	AM	1,667	2,247	59	580	10.2%
	PM	2,362	3,142	60	780	7.7%
Monroe St. (NS) at: • 52nd Ave. (EW)	AM	949	1,422	72	473	15.2%
	PM	1,373	2,002	74	629	11.8%
Monroe St. (NS) at: • 54th Ave. (EW)	AM	463	1,752	81	1,289	6.3%
	PM	545	1,664	82	1,119	7.3%
Monroe St. (NS) at: • Airport Blvd. (EW)	AM	386	1,842	87	1,456	6.0%
	PM	482	1,844	88	1,362	6.5%
Monroe St. (NS) at: • 58th Ave. (EW)	AM	374	1,846	94	1,472	6.4%
	PM	427	1,862	96	1,435	6.7%
Monroe St. (NS) at: • 60th Ave. (EW)	AM	295	1,375	7	1,080	0.6%
	PM	311	1,505	7	1,194	0.6%
Jackson St. (NS) • 58th Ave. (EW)	AM	351	975	40	624	6.4%
	PM	244	1,218	41	974	4.2%

6.0 FINDINGS AND CONCLUSIONS

6.1 Project Access

The project is proposing to have full access to 58th Avenue. Full access could be maintained on an interim basis until 58th Avenue is constructed to its full section width and a median installed.

6.2 Traffic Impacts

The proposed development is projected to generate a total of approximately 1,388 trip-ends per day with 133 vehicles per hour during the AM peak hour and 136 vehicles per hour during the PM peak hour.

For Existing plus Ambient plus Project traffic conditions, a traffic signal is projected to be warranted at the following intersection:

Monroe Avenue (NS) at:

- 52nd Street

For Existing plus Ambient plus Project plus Cumulative traffic conditions, traffic signals are projected to be warranted at the following study area intersections:

Monroe Avenue (NS) at:

- 52nd Avenue (EW)
- 54th Avenue (EW)
- Airport Boulevard (EW)
- 58th Avenue (EW)
- 60th Avenue (EW)

Jackson Street (NS) at:

- 58th Avenue (EW)

6.3 Need for Off-Site Improvements to Achieve Required Levels of Service

For Existing plus Ambient plus Project conditions, the study area intersections are projected to operate at acceptable levels of service during the peak hours, with the installation of a traffic signal at the intersection of Monroe Street at 52nd Avenue and the recommended southbound left turn lane listed in Table 5-1.

For Existing plus Ambient plus Project plus Cumulative conditions, the study area intersections are projected to operate at acceptable levels of service during the peak hours, with the installation of traffic signals and the recommended turn lane improvements listed on Table 5-2.

6.4 Significant Project Impact Assessment

The project's transportation impact on the study area intersections has been assessed based on the criteria established by the City of La Quinta (see Section 4.5 of this report). The proposed project is anticipated to contribute a significant impact to the following intersection:

Monroe Avenue (NS) at:

- 52nd Street

6.5 Project Fair Share Evaluation

Previous Table 5-4 summarizes the project's percentage of new traffic for the study area intersections. As indicated in Table 5-4, the project is expected to contribute between 0.6 and 15.2 percent of the new traffic.

6.6 On-Site Circulation Recommendations

The proposed development will have one direct full access driveway on 58th Avenue. Site-specific circulation and access recommendations are depicted on Exhibit 6-A and are described below:

- Construct 58th Avenue from the westerly project boundary to the easterly project boundary at its ultimate half-section width as a Secondary Roadway in conjunction with development.

ON-SITE CIRCULATION RECOMMENDATIONS

PROVIDE FULL ACCESS TO THE PROJECT DRIVEWAY, AS AN INTERIM CONDITION.

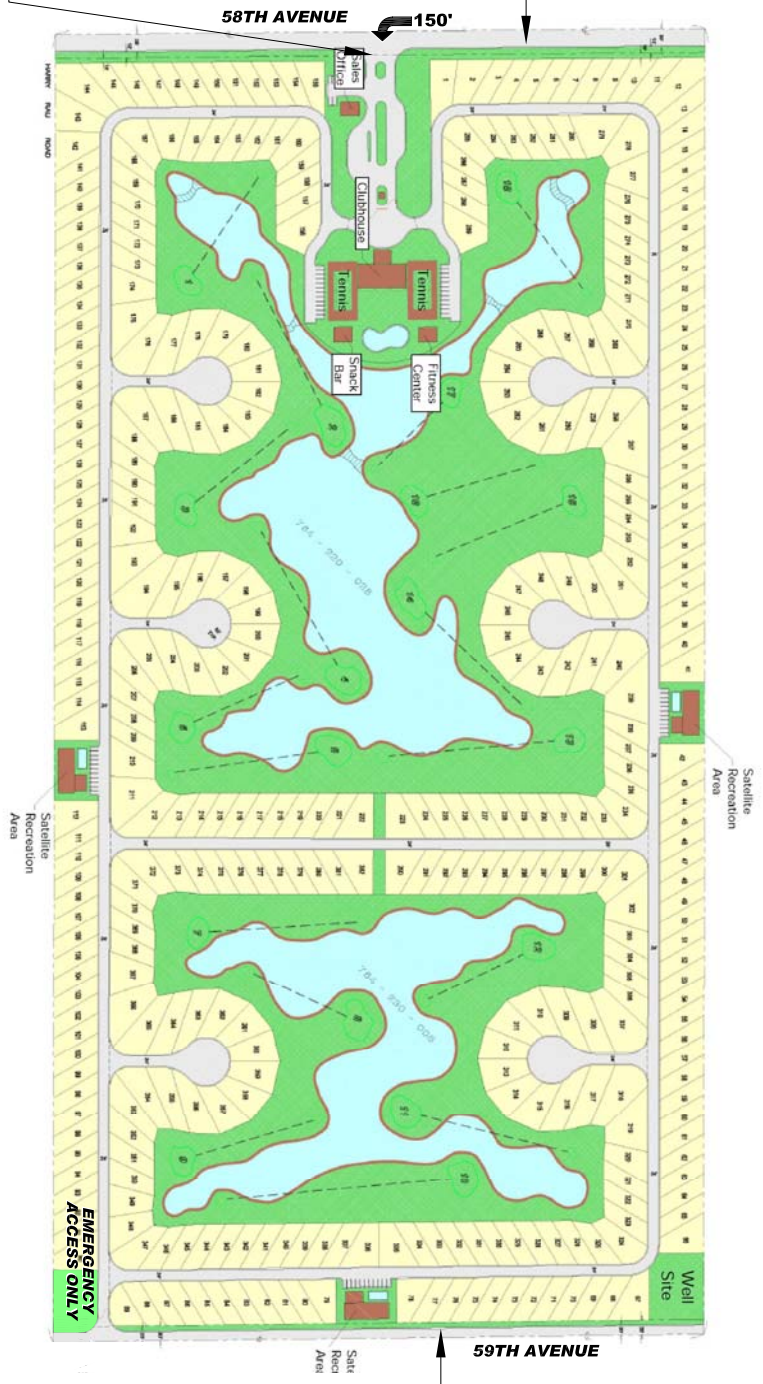
CONSTRUCT 58TH AVENUE FROM THE WESTERLY PROJECT BOUNDARY TO THE EASTERLY PROJECT BOUNDARY AT ITS ULTIMATE HALF-SECTION WIDTH AS A SECONDARY ROADWAY IN CONJUNCTION WITH DEVELOPMENT.

SIGHT DISTANCE AT THE PROJECT ENTRANCE SHOULD BE REVIEWED WITH RESPECT TO STANDARD CALTRANS/CITY OF LA QUINTA SIGHT DISTANCE STANDARDS AT THE TIME OF PREPARATION OF FINAL GRADING, LANDSCAPE AND STREET IMPROVEMENT PLANS.

TRAFFIC SIGNING AND STRIPING SHOULD BE IMPLEMENTED IN CONJUNCTION WITH DETAILED CONSTRUCTION PLANS FOR THE PROJECT SITE.

LEGEND:

↩ 150' = INSTALL LEFT TURN LANE (INTERIM CONDITION)



CONSTRUCT 59TH AVENUE FROM THE WESTERLY PROJECT BOUNDARY TO THE EASTERLY PROJECT BOUNDARY AT ITS ULTIMATE HALF-SECTION WIDTH AS A LOCAL STREET, OR AS DIRECTED BY THE CITY.



- Construction 59th Avenue from the westerly project boundary to the easterly project boundary at its ultimate half-section width as a Local street, or as directed by the City.
- Provide full access to the project driveway on 58th Avenue, as an interim condition.
- Provide a minimum 150-foot eastbound left turn pocket on 58th Avenue at the project driveway, as an interim condition.

Sight distance at the project entrance should be reviewed with respect to standard City of La Quinta sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

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

The project should contribute towards a citywide roadway and traffic signal improvement program through payment of infrastructure development fees to the City of La Quinta. These fees, if required, would be paid at the building permit stage of development.