Appendix M.1

Traffic Impact Analysis
Urban Crossroads, 2021

Travertine SPA
Draft EIR
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Technical Appendices

October 2023

Travertine Specific Plan

TRAFFIC IMPACT ANALYSIS

CITY OF LA QUINTA

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
Av	Avenue
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CIP	Capital Improvement Program
CMP	Congestion Management Program
CVAG	Coachella Valley Association of Governments
DIF	Development Impact Fee
Dr	Drive
E+P	Existing Plus Project
EAPC	Existing plus Ambient Growth plus Project plus Cumulative
FAR	Floor to Area Ratio
FHWA	Federal Highway Administration
HCM	Highway Capacity Manual
Hwy	Highway
ITE	Institute of Transportation Engineers
LOS	Level of Service
MUTCD	Manual on Uniform Traffic Control Devices
PHF	Peak Hour Factor
Project	Travertine Specific Plan
RCTC	Riverside County Transportation Commission
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
SCS	Sustainable Communities Strategy
sf	Square Feet
St	Street
TIA	Traffic Impact Analysis
TUMF	Transportation Uniform Mitigation Fee
V/C	Volume-to-Capacity
VPH	Vehicles per Hour

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1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

This report presents the results of the traffic impact analysis (TIA) for the proposed Travertine Specific Plan ("Project") located in the City of La Quinta. The Project is generally located south of the hypothetical westerly extension of Avenue 60 and west of the hypothetical southerly extension of Madison Street as shown on Exhibit 1-1.

The purpose of this TIA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project, and recommend improvements to achieve acceptable circulation system operational conditions. As directed by City of La Quinta staff, this TIA has been prepared in accordance with the City of La Quinta's Traffic Study Guidelines (Engineering Bulletin #06-13, dated July 23, 2015) and Engineering Bulletin #10-01 (dated August 9, 2010). To ensure that this TIA satisfies the City of La Quinta's traffic study requirements, Urban Crossroads, Inc. prepared a traffic study scoping package for review by City staff prior to the preparation of this report. The Agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology. The Agreement approved by the City is included in Appendix 1.1.

1.2 DESCRIPTION OF PROPOSED PROJECT

The proposed mixed use Project consists of approximately 758 single family detached residential homes, 442 duplex residential units, a 100-room resort hotel, and other resort/golf facilities located in Planning Area 11 (PA 11). PA 11 consists of 46.2 acres and includes the following land uses:

- Golf Practice (4-Holes) & Driving Range: 23.9 Acres (up to 1,000 sf of clubhouse area)
- Golf Academy: 4.7 Acres (up to 5,500 sf of indoor floor area)
- Banquet Facility & Restaurant: 4.6 Acres (up to 10,000 sf of indoor floor area)
- Slopes: 13.0 Acres (passive outdoor use)

The Travertine Project is proposed to be served by two access points: 1) the southerly extension of South Jefferson as a Modified Secondary, south of Avenue 58, and 2) the westerly extension of Avenue 62 as a Modified Secondary, west of Monroe Street. An emergency vehicle access (EVA) is provided via Madison Street, from the northerly boundary of the Project's Planning Area 18 to Avenue 60.

In accordance with the City of La Quinta's Engineering Bulletin #06-13, trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, 2017.

The proposed Project is anticipated to generate a net total of approximately 11,321 trip-ends per day on a typical weekday with 812 vehicles per hour (VPH) during the weekday AM peak hour and 1,057 VPH during the weekday PM peak hour.

EXHIBIT 1-1: PROJECT PHASING PLAN

PHASE 1-A Constuction/Sales

PA	Land Use	Acres	Density Range	Target Density	Target Units	Villas
10	Low Density Residential	25.6	1.5-4.5 du/ac	2.9	75	
11	Resort / Golf	46.2				
12	Low Density Residential	52.2	1.5-4.5 du/ac	2.0	107	
13	Low Density Residential	26.7	1.5-4.5 du/ac	1.8	48	
14	Low Density Residential	39.0	1.5-4.5 du/ac	1.7	65	
15-A	Low Density Residential	20.9	1.5-4.5 du/ac	2.1	44	
19	Open Space Recreation	23.1				
20	Open Space Natural	301.2				
	Phase 1-A Totals	**534.9**		**0.6**	**339**	

PHASE 1-B Constuction/Sales

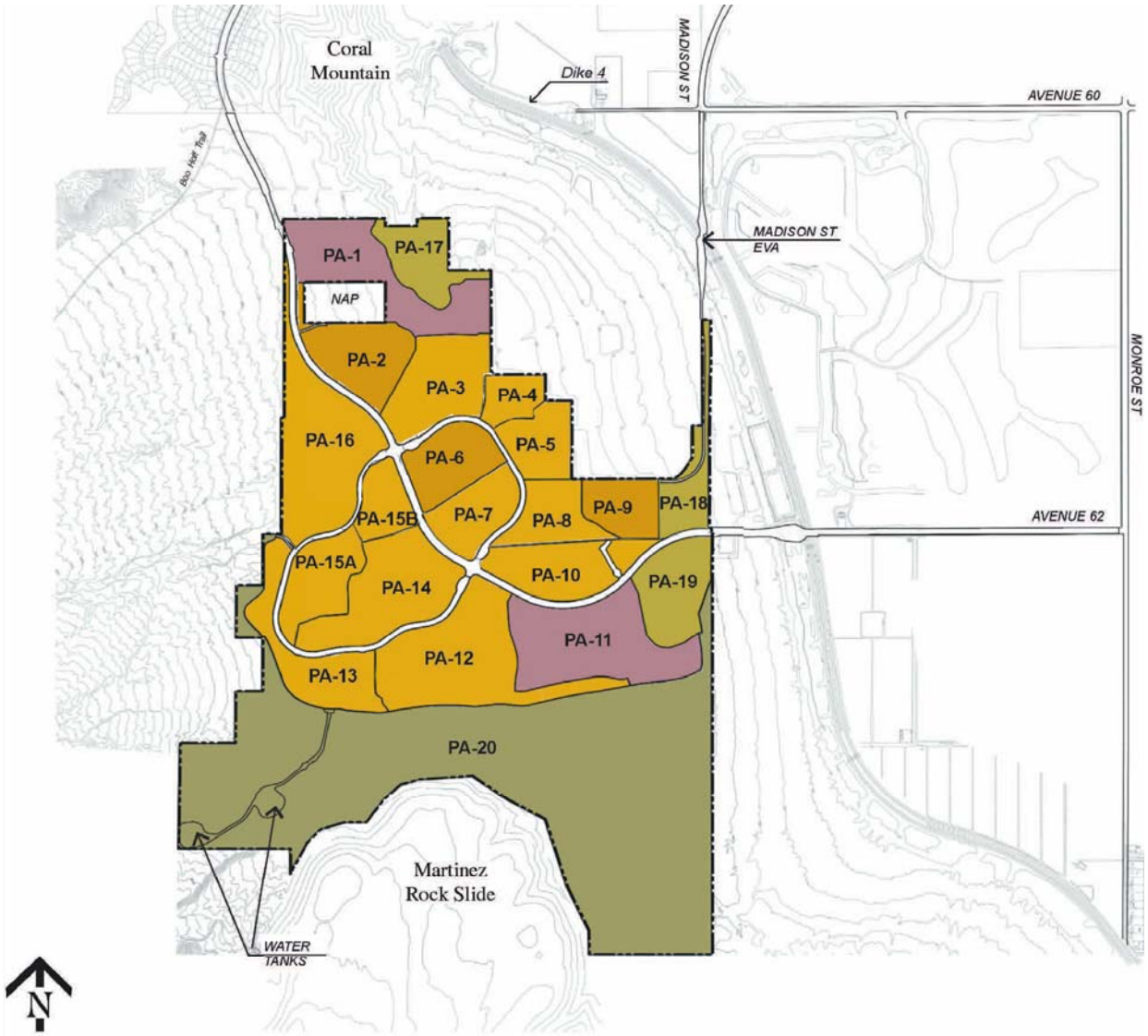
PA	Land Use	Acres	Density Range	Target Density	Target Units	Villas
5	Low Density Residential	16.2	1.5-4.5 du/ac	1.9	31	
7	Low Density Residential	18.7	1.5-4.5 du/ac	3.3	61	
8	Low Density Residential	16.9	1.5-4.5 du/ac	4.3	73	
9	Medium Density Residential	14.8	4.5-8.5 du/ac	5.0	74	
15-B	Low Density Residential	12.4	1.5-4.5 du/ac	2.1	26	
18	Open Space Recreation	14.7				
	Phase 1-B Totals	**93.7**		**2.8**	**265**	

PHASE 2 Constuction/Sales

PA	Land Use	Acres	Density Range	Target Density	Target Units	Villas
4	Low Density Residential	9.6	1.5-4.5 du/ac	2.8	27	
6	Medium Density Residential	20.1	4.5-8.5 du/ac	8.1	163	
16	Low Density Residential	50.4	1.5-4.5 du/ac	2.3	116	
	Phase 2 Totals	**80.1**		**3.8**	**306**	

PHASE 3 Constuction/Sales

PA	Land Use	Acres	Density Range	Target Density	Target Units	Villas
1	Resort / Spa	38.3				100
2	Medium Density Residential	25.9	4.5-8.5 du/ac	7.9	205	
3	Low Density Residential	29.4	1.5-4.5 du/ac	2.9	85	
17	Open Space Recreation	18.1				
	Phase 3 Totals	**111.7**		**2.6**	**290**	**100**



1.3 STUDY AREA AND ANALYSIS SCENARIOS

1.3.1 INTERSECTIONS

The following 21 study area intersections shown on Exhibit 1-2 and listed in Table 1-1 were selected for this TIA based on consultation with City of La Quinta staff.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

ID	Intersection Location	ID	Intersection Location
1	Madison Street at Avenue 58	12	Monroe Street at Airport Boulevard
2	Madison Street at Airport Bl.	13	Monroe Street at Avenue 54
3	Madison Street at Avenue 54	14	Monroe Street at Avenue 52
4	Madison Street at Avenue 52	15	Monroe Street at 50th Avenue
5	Madison Street at Avenue 50	16	Jackson Street at 62nd Avenue
6	Jefferson Street at Avenue 54	17	Jackson Street at 60th Avenue
7	Jefferson Street at Avenue 52	18	Jackson Street at 58th Avenue
8	Jefferson Street at Avenue 50	19	Jackson Street at Airport Boulevard
9	Monroe Street at Avenue 62	20	Jefferson St. & N. Loop - *(Future Intersection)*
10	Monroe Street at Avenue 60	21	Jefferson St. & S. Loop - *(Future Intersection)*
11	Monroe Street at Avenue 58		

1.3.2 ROADWAY SEGMENTS

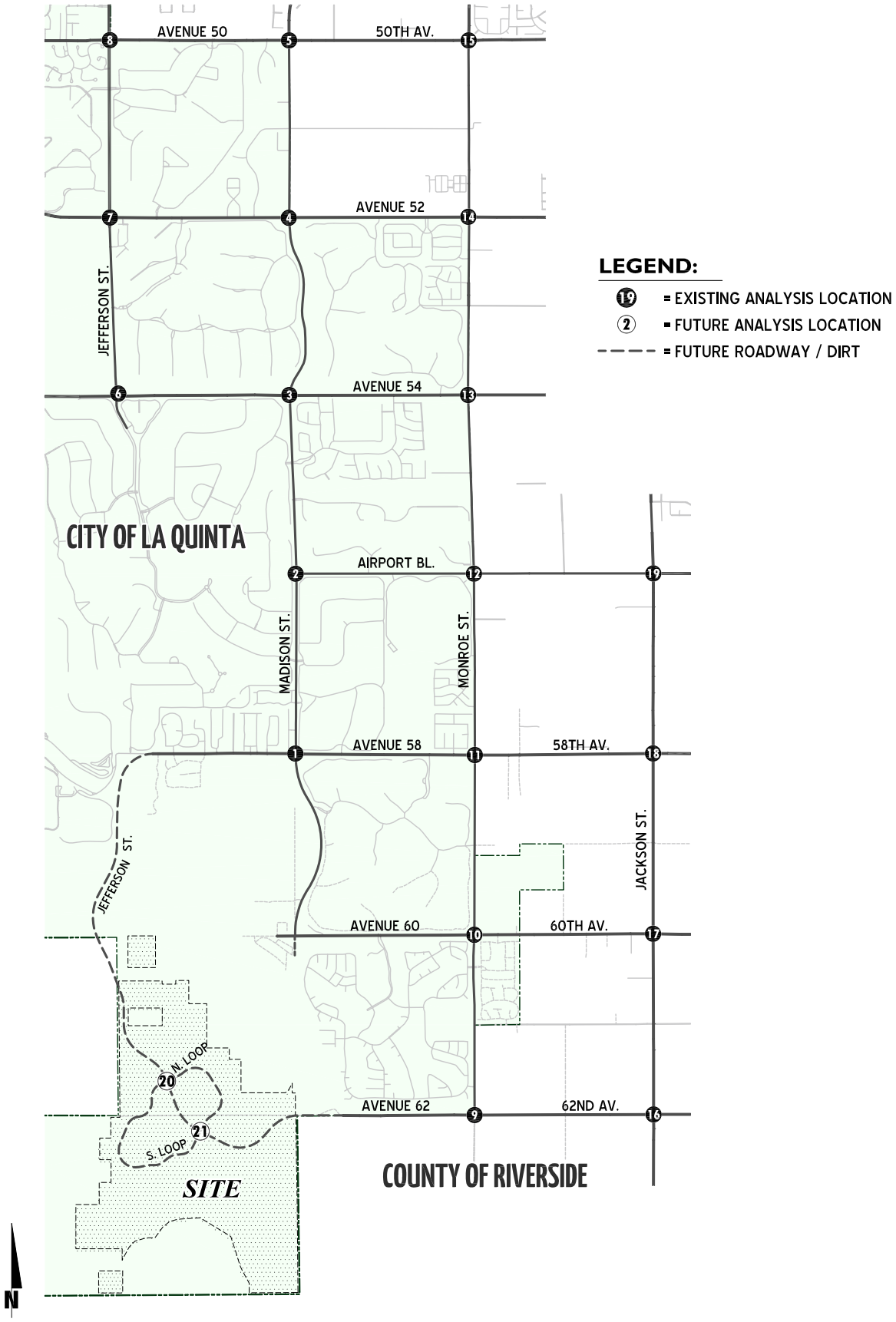
Through consultation with City staff, daily volume-to-capacity (V/C) roadway analyses have been evaluated for the following roadway segments as shown on Table 1-2:

TABLE 1-2: ROADWAY SEGMENT ANALYSIS LOCATIONS

Roadway Segment			
1	Avenue 58, west of Madison Street	7	Avenue 62, west of Jackson Street
2	Avenue 58, west of Monroe Street	8	Monroe Street, south of Avenue 60
3	Avenue 58, west of Jackson Street	9	Monroe Street, south of Avenue 58
4	Madison Street south of Avenue 56	10	Monroe Street, south of Avenue 56
5	Avenue 60, west of Jackson Street	11	Jackson Street, south of Airport Bl.
6	Avenue 62, west of Monroe Street		

The TIA included Existing (2017) conditions, but in response to City comments, the previous 2017 traffic counts has been adjusted to represent 2019 baseline conditions. A sample comparison of the 2017 data and new 2019 counts focuses on key locations (5 intersections and 5 roadway segments), documented in Section 2 of this report. Volume changes at these locations are extrapolated to the remaining existing study area locations as identified in the TIA.

EXHIBIT 1-2: TRAFFIC STUDY AREA



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The adjusted existing 2019 volumes are then utilized to estimate future project phasing scenarios (2026, 2029, and 2031).

1.3.3 ANALYSIS SCENARIOS

In accordance with the City of La Quinta's traffic study guidelines and as documented in Appendix 1.1 of this TIA, this study has analyzed the following scenarios:

- Existing (2019) Conditions
- Existing Plus Project (E+P) Conditions
- Existing Plus Ambient Growth Plus Cumulative Projects with and without Project for each of the following phases:
    - Project Phase 1
    - Project Phase 2 (With Jefferson Street connection to Avenue 58)
    - Project Phase 2 Option 2 (Without Jefferson Street connection to Avenue 58)
    - Project buildout (Phase 3, With Jefferson Street connection to Avenue 58)
- Year 2040 Conditions with Madison Street extension and with Jefferson Street connection to Avenue 58
- Year 2040 Conditions without Madison Street extension and with Jefferson Street connection to Avenue 58 (GPA Option 1)
- Year 2040 Conditions without Madison Street extension and without Jefferson Street / Avenue 62 extensions (GPA Option 2)

Detailed descriptions of each analysis scenario can be found in Sections 4 through 8 of this TIA.

1.4 CRITERIA FOR DETERMINING SIGNIFICANT IMPACTS

Potentially significant cumulative traffic impacts are divided separately into intersection and roadway segment traffic impacts per the City of La Quinta's traffic study guidelines.

1.4.1 INTERSECTIONS

Per Engineering Bulletin #06-13, the following LOS criteria will be utilized for study area intersections:

Intersection Type	LOS Criteria
Signalized Intersection	LOS "D" or better
All-way Stop Controlled Intersection	LOS "D" or better for all critical movements
Cross-Street Stop Controlled Intersection	LOS "E" or better for the side street

The City of La Quinta has established LOS "D" as the minimum level of service for its street segments.

A potentially significant cumulative impact is defined to occur at any signalized intersection if the addition of Project trips will result in the LOS for that intersection to exceed the criteria

established in Table 1-3 for Existing Plus Ambient Growth Plus Cumulative Projects traffic conditions.

TABLE 1-3: IMPACT CRITERIA FOR INTERSECTIONS ALREADY OPERATING AT LOS E OR LOS F

Significant Changes in LOS	
LOS E	An increase in delay of 2 seconds or more
LOS F	An increase in delay of 1 second or more

Source: City of La Quinta Engineering Bulletin #06-13 Table 4.0

A potentially significant cumulative impact at an unsignalized study area intersection is defined to occur when, with Project traffic included, an intersection has a projected LOS F on a side street for a two-way stop control or LOS E or worse for the intersection an all-way stop controlled intersection and the addition of Project traffic results in an addition of 3 seconds or more of delay for any movement.

1.4.2 ROADWAY SEGMENTS

A potentially significant cumulative impact is defined to occur at any study area roadway segment if the Project would cause the Existing LOS to fall to worse than LOS D for Existing Plus Ambient Growth Plus Cumulative Projects traffic conditions. A potentially significant cumulative impact is also defined to occur on any study area roadway segment that is already operating at LOS E or LOS F, if the Project traffic will increase the V/C ratio by more than 0.02 for Opening Year Cumulative With Project traffic conditions.

1.5 SUMMARY OF FINDINGS

The results of the potentially significant Project and cumulative impacts for the study area intersections for E+P and Opening Year Cumulative traffic conditions are summarized in Tables 1-4 and 1-5 . As shown on Table 1-4, the development of the proposed Project is anticipated to result in a potentially significant project impact at the intersection of Monroe Street at Avenue 52 (#14). Potentially significant cumulative impacts are anticipated at the following study area intersections, with the addition of Project traffic summarized in Table 1-5:

ID	Intersection Location	ID	Intersection Location
1	Madison Street at Avenue 58	11	Monroe Street at Avenue 58
3	Madison Street at Avenue 54	12	Monroe Street at Airport Boulevard
6	Jefferson Street at Avenue 54	13	Monroe Street at Avenue 54
7	Jefferson Street at Avenue 52	14	Monroe Street at Avenue 52
8	Jefferson Street at Avenue 50	17	Jackson Street at 60th Avenue
9	Monroe Street at Avenue 62	18	Jackson Street at 58th Avenue
10	Monroe Street at Avenue 60	19	Jackson Street at Airport Boulevard

TABLE 1-4: SUMMARY OF EXISTING AND EXISTING PLUS PROJECT INTERSECTION OPERATIONS

#	Intersection[4]	Traffic Control[2]	Existing (2019)				Existing + Project				Potentially Significant Project Specific Impact[3]
			Delay[1] (Secs)		Level of Service[1]		Delay[1] (Secs)		Level of Service[1]		
			AM	PM	AM	PM	AM	PM	AM	PM	
1	Madison St. / Avenue 58	AWS	8.5	9.3	A	A	11.0	13.9	B	B	No
2	Madison St. / Airport Blvd.	TS	9.9	8.4	A	A	8.3	6.7	A	A	No
3	Madison St. / Avenue 54	AWS	12.9	15.9	B	C	16.3	27.9	C	D	No
4	Madison St. / Avenue 52	TS	27.9	28.5	C	C	29.9	30.7	C	C	No
5	Madison St. / Avenue 50	TS	28.6	29.4	C	C	29.5	30.0	C	C	No
6	Jefferson St. / Avenue 54	AWS	12.2	16.9	B	C	17.1	21.6	C	C	No
7	Jefferson St. / Avenue 52	RDB	9.4	9.7	A	A	11.3	12.5	B	B	No
8	Jefferson St. / Avenue 50	TS	46.3	49.4	D	D	47.7	49.2	D	D	No
9	Monroe St. / Avenue 62	AWS	7.5	8.0	A	A	9.6	12.1	A	B	No
10	Monroe St. / Avenue 60	AWS	8.1	8.3	A	A	10.2	11.1	B	B	No
11	Monroe St. / Avenue 58	AWS	8.1	9.4	A	A	9.9	17.4	A	C	No
12	Monroe St. / Airport Blvd.	AWS	8.5	9.2	A	A	10.3	11.9	B	B	No
13	Monroe St. / Avenue 54	AWS	14.3	12.7	B	B	17.8	18.0	C	C	No
14	Monroe St. / Avenue 52	AWS	15.4	27.1	C	D	22.8	**50.4**	C	**F**	
	- With Project Improvements/Reimbursable	**TS**	-	-	-	-	34.2	30.3	C	C	No
15	Monroe St. / 50th Avenue	TS	16.6	18.0	B	B	16.2	17.4	B	B	No
16	Jackson St. / Avenue 62	AWS	7.4	7.6	A	A	8.3	8.6	A	A	No
17	Jackson St. / Avenue 60	AWS	7.3	7.7	A	A	7.6	8.2	A	A	No
18	Jackson St. / 58th Avenue	AWS	7.5	8.2	A	A	8.0	9.2	A	A	No
19	Jackson St. / Airport Blvd.	AWS	8.1	8.6	A	A	8.6	9.7	A	A	No
20	Jefferson St. / N. Loop	**RDB**	Future Intersection				4.0	4.7	A	A	No
21	Jefferson St. / S. Loop	**RDB**	Future Intersection				4.1	4.8	A	A	No

[1] Per the Highway Capacity Manual 6th Edition (HCM6), overall average intersection delay and level of service are shown for intersections with a 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 (or movements sharing a single lane) are shown.
BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[2] CSS = Cross-street Stop; TS = Traffic Signal; AWS = All-way Stop; RDB = Roundabout; **1** = Improvement;
1 = Improvement per City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 2012)

[3] A potentially significant project traffic impact is defined to occur at any signalized intersection if the intersection is operating at LOS E and the project causes the delay to increase by 2 seconds or more. If the signalized intersection is operating at LOS F, a potentially significant project specific traffic impact is defined to occur if the project causes the delay to increase by 1 second or more. For cross-street stop controlled intersections, a potentially significant project specific traffic impact is defined to occur if the intersection is operating at LOS F on the side street and the addition of project traffic results in an increase of 3 seconds or more of delay for any movement.

[4] It should be noted that emergency vehicle access (EVA) is provided via Madison Street, from the northerly boundary of the Project's Planning Area 18 to Avenue 60. Therefore, the intersection of Madison Street and Avenue 60 is not included in the analysis.

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TABLE 1-5: SUMMARY OF NEAR TERM INTERSECTION OPERATIONS

#	Intersection	Traffic Control[2]	Phase 1 (2026) Conditions								Phase 2 (2029) Conditions												Phase 3 (2031) Conditions								Potentially Significant Cumulative Impact[4]
			Without Project				With Project				Without Project				With Project				With Project (Option 2)[4]				Without Project				With Project				
			Delay[1] (Secs)		Level of Service[1]		Delay[1] (Secs)		Level of Service[1]		Delay[1] (Secs)		Level of Service[1]		Delay[1] (Secs)		Level of Service[1]		Delay[1] (Secs)		Level of Service[1]		Delay[1] (Secs)		Level of Service[1]		Delay[1] (Secs)		Level of Service[1]		
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
1	Madison St. / Avenue 58	AWS	17.2	**57.2**	**C**	**F**	17.2	**57.2**	**C**	**F**	21.9	**>80**	C	**F**	**37.8**	**>80**	**E**	**F**	21.9	**>80**	**C**	**F**	28.2	**>80**	**D**	**F**	**72.4**	**>80**	**F**	**F**	
	- With Cumulative Improvements	TS	26.5	32.6	C	C	26.5	32.6	C	C	26.7	35.3	C	D	32.4	39.4	C	D	26.7	35.3	C	D	27.8	38.5	C	D	34.8	43.9	C	D	No
2	Madison St. / Airport Blvd.	TS	9.6	8.5	A	A	9.6	8.5	A	A	10.3	9.4	B	A	10.3	9.4	B	A	10.3	9.4	B	A	11.0	10.5	B	B	11.1	10.5	B	B	No
3	Madison St. / Avenue 54	AWS	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	
	- With Cumulative Improvements	TS	41.0	48.6	D	D	41.2	49.0	D	D	36.1	36.7	D	D	35.6	37.0	D	D	37.5	39.1	D	D	37.3	38.7	D	D	38.9	39.8	D	D	No
4	Madison St. / Avenue 52	TS	32.2	32.9	C	C	32.3	33.1	C	C	33.1	34.6	C	C	33.8	35.7	C	D	33.4	34.9	C	C	33.9	**36.0**	C	D	34.7	**37.4**	C	D	No
5	Madison St. / Avenue 50	TS	31.9	33.4	C	C	32.2	33.6	C	C	33.0	35.0	C	C	33.3	35.2	C	D	33.3	**35.2**	C	D	34.1	**36.5**	C	D	34.5	**36.8**	C	D	No
6	Jefferson St. / Avenue 54	AWS	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	
	- With Cumulative Improvements	TS	32.6	32.4	C	C	32.8	33.4	C	C	36.2	25.2	D	C	36.4	27.5	D	C	36.4	27.5	D	C	36.9	34.5	D	C	37.6	41.4	D	D	No
7	Jefferson St. / Avenue 52	RDB	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	
	- With Cumulative Improvements	RDB	15.3	28.4	C	D	16.8	32.6	C	D	13.2	25.3	B	D	14.6	31.5	B	D	14.6	31.5	B	D	3.7	4.7	A	A	3.7	5.2	A	A	No
8	Jefferson St. / Avenue 50	TS	**55.5**	**71.8**	**E**	**E**	**55.7**	**71.8**	**E**	**E**	**55.7**	**73.5**	**E**	**E**	**56.1**	**73.7**	**E**	**E**	**56.1**	**73.7**	**E**	**E**	**56.3**	**75.2**	**E**	**E**	**56.9**	**76.2**	**E**	**E**	
	- With Cumulative Improvements	TS	50.5	45.2	D	D	50.5	45.5	D	D	51.5	47.9	D	D	51.7	48.6	D	D	51.7	48.6	D	D	52.9	50.5	D	D	53.2	51.8	D	D	No
9	Monroe St. / Avenue 62	AWS	8.7	10.8	A	B	11.3	19.4	B	C	9.0	12.5	A	B	10.8	20.8	B	C	18.7	**77.6**	C	**F**	9.7	16.6	A	C	13.3	**53.5**	B	**F**	
	- With Project Improvements/Reimbursable	TS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.3	22.4	B	C	-	-	-	-	39.2	42.4	D	D	No
10	Monroe St. / Avenue 60	AWS	15.4	21.0	C	C	**44.7**	**>80**	**E**	**F**	22.5	**49.6**	C	**E**	**38.7**	**>80**	**E**	**F**	**>80**	**>80**	**F**	**F**	36.7	**>80**	**E**	**F**	**70.8**	**>80**	**F**	**F**	
	- With Project Improvements/Reimbursable	TS	-	-	-	-	12.7	13.0	B	B	13	14.2	B	B	13.4	14.5	B	B	13.6	16.4	B	B	13.5	14.9	B	B	13.8	18.3	B	B	No
11	Monroe St. / Avenue 58	AWS	15.5	**>80**	C	**F**	**54.1**	**>80**	**F**	**F**	25.0	**>80**	C	**F**	**76.5**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**55.9**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	
	- With Cumulative Improvements	TS	26.1	33.1	C	C	26.3	37.7	C	D	28.8	34.1	C	C	29.0	39.6	C	D	29.1	**46.1**	C	D	29.0	**38.7**	C	D	29.4	**54.6**	C	D	No
12	Monroe St. / Airport Blvd.	AWS	18.4	**50.7**	C	**F**	**70.1**	**>80**	**F**	**F**	**35.1**	**>80**	**E**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**59.9**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	
	- With Cumulative Improvements	TS	10.1	10.8	B	B	10.1	11.3	B	B	11.0	12.4	B	B	11.2	14.1	B	B	11.8	15.5	B	B	11.7	15.1	B	B	12.5	22.7	B	C	No
13	Monroe St. / Avenue 54	AWS	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	
	- With Cumulative Improvements	TS	31.9	33.3	C	C	34.5	37.7	C	D	31.5	38.0	C	D	31.9	40.2	C	D	44.3	54.0	D	D	29.5	33.8	C	C	29.3	34.5	C	C	No
14	Monroe St. / Avenue 52	AWS	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	
	- With Cumulative Improvements	TS	33.6	41.0	C	D	35.6	50.2	D	D	42.0	44.5	D	D	42.5	46.1	D	D	42.7	47.8	D	D	39.6	43.7	D	D	40.1	45.7	D	D	No
15	Monroe St. / 50th Avenue	TS	17.9	24.1	B	C	18.1	24.9	B	C	19.7	33.8	B	C	20.4	36.4	C	D	20.4	36.4	C	D	22.1	49.2	C	D	23.3	54.9	C	D	No
16	Jackson St. / Avenue 62	AWS	8.3	8.9	A	A	8.7	9.7	A	A	9.6	12.3	A	B	11.1	21.5	B	C	11.1	21.5	B	C	10.9	17.8	B	C	13.9	**46.8**	B	**E**	
	- With Project Improvements/Reimbursable	TS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	27.7	C	C	No
17	Jackson St. / Avenue 60	AWS	9.0	11.3	A	B	9.2	12.0	A	B	9.9	16.0	A	C	10.5	20.1	B	C	10.5	20.1	B	C	11.3	**37.1**	B	**E**	12.4	**72.7**	B	**F**	
	- With Cumulative Improvements	TS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.1	26.7	C	C	15.3	27.3	B	C	No
18	Jackson St. / 58th Avenue	AWS	9.5	16.5	A	C	10.0	21.3	A	C	11.2	**56.9**	B	**F**	12.5	**>80**	B	**F**	12.5	**>80**	B	**F**	13.7	**>80**	B	**F**	17.3	**>80**	C	**F**	
	- With Cumulative Improvements	TS	-	-	-	-	-	-	-	-	12.3	24.8	B	C	12.5	26.1	B	C	12.5	26.1	B	C	12.3	26.7	B	C	12.7	29.4	B	C	No
19	Jackson St. / Airport Blvd.	AWS	10.2	15.4	B	C	10.9	18.8	B	C	12.1	**39.2**	B	**E**	13.7	**76.0**	B	**F**	13.7	**76.0**	B	**F**	14.9	**>80**	B	**F**	19.3	**>80**	C	**F**	
	- With Cumulative Improvements	TS	-	-	-	-	-	-	-	-	23.9	13.6	C	B	24.2	13.6	C	B	24.2	13.6	C	B	23.2	14	C	B	23.7	27.3	C	C	No
20	Jefferson St. / N. Loop	RDB	Future Intersection				2.8	2.8	A	A	Future Intersection				3.7	4.4	A	A	3.2	3.4	A	A	Future Intersection				4.0	4.7	A	A	No
21	Jefferson St. / S. Loop	RDB	Future Intersection				3.5	4.1	A	A	Future Intersection				3.8	4.3	A	A	3.9	4.7	A	A	Future Intersection				4.1	4.8	A	A	No

[1] Per the Highway Capacity Manual 6th Edition (HCM6), overall average intersection delay and level of service are shown for intersections with a 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 (or movements sharing a single lane) are shown.
BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[2] CSS = Cross-street Stop; TS = Traffic Signal; AWS = All-way Stop; RDB = Roundabout; **1** = Improvement;
1 = Improvement per City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 2012)

[3] A potentially significant cumulative traffic impact is defined to occur at any signalized intersection if the intersection is operating at LOS E and the project causes the delay to increase by 2 seconds or more. If the signalized intersection is operating at LOS F, a potentially significant cumulative traffic impact is defined to occur if the project causes the delay to increase by 1 second or more. For cross-street stop controlled intersections, a potentially significant cumulative traffic impact is defined to occur if the intersection is operating at LOS F on the side street and the addition of project traffic results in an increase of 3 seconds or more of delay for any movement.

[4] Phase 2 With Project **Option 2**: Without Jefferson Street connection from Project Site to Avenue 58.

As shown in Table 1-5, the project's cumulative impact at the abovementioned intersections are mitigated to operate at an acceptable level of service (LOS "D" or better) with the implementation of the improvements shown on Exhibit 1-3 and described in detail in Sections 4 through 6.

Project access improvements, fully funded CIP improvements and added improvements (if necessary) are shown on Exhibit 1-3. Roadway cross-sections for Project facilities are shown on Exhibit 1-4.

The results of the General Plan Buildout (2040) conditions, including GPA Option 1 and GPA Option 2 and recommended improvements are summarized in Table 1-6.

A summary of roadway segment volume-to-capacity analysis is provided on Table 1-7. Intersection recommendations to provide acceptable operations for Year 2040 for various network scenarios are also documented.

1.5.1 EXISTING (2019) CONDITIONS

As shown in Table 1-4, the intersection analysis for Existing conditions indicates that the 19 existing study area intersections are currently operating at an acceptable LOS during the peak hours.

As shown on Table 1-7, all study area roadway segments analyzed are currently operating at acceptable LOS.

1.5.2 E+P CONDITIONS

The 21 (19 existing + 2 Project intersections) study area intersections are anticipated to operate at acceptable LOS with the addition of Project traffic for E+P traffic conditions.

As shown in Table 1-4, 18 of the 19 existing study area intersections are anticipated to continue to operate at acceptable LOS with the addition of Project traffic for E+P traffic conditions.

The study area intersection of Monroe Street at Avenue 52 (#14), require installation of a traffic signal (which is funded in the CIP) in order to maintain acceptable LOS under E+P conditions.

As shown on Table 1-7, all study roadway segments analyzed are anticipated to operate at acceptable LOS for E+P and Opening Year traffic conditions, consistent with Existing traffic conditions.

1.5.3 PHASE 1 (2026) CONDITIONS

For Phase 1 (2026) traffic conditions, the following eight study area intersections are anticipated to require installation of a traffic signal (which is funded in the CIP) in order to maintain acceptable LOS under Phase 1 (2026) without and with Project conditions:

EXHIBIT 1-3 (1 OF 6): SUMMARY OF RECOMMENDED IMPROVEMENTS

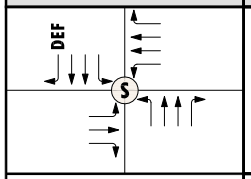
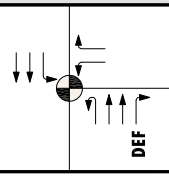
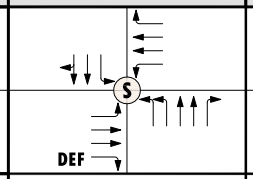
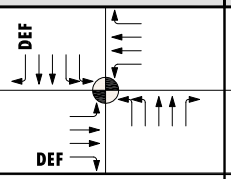
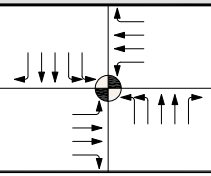
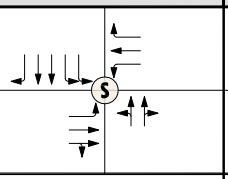
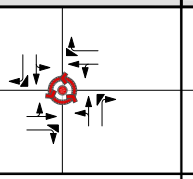
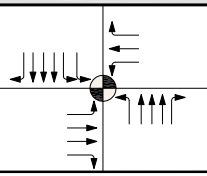
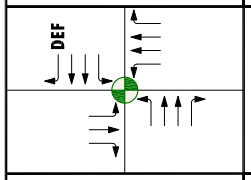
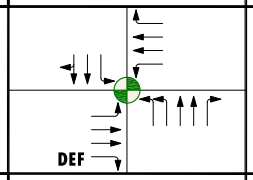
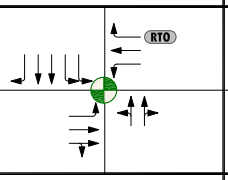
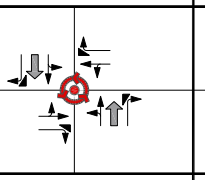
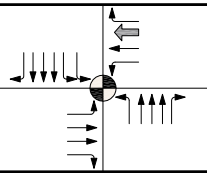
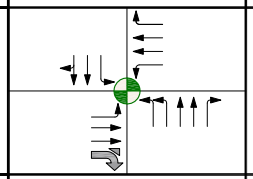
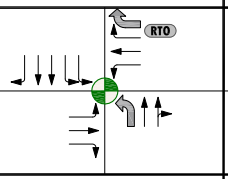
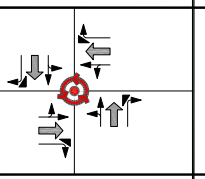
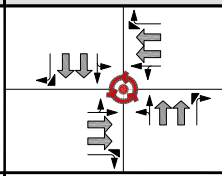
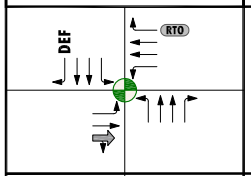
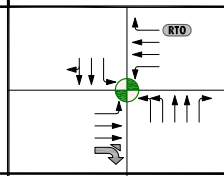
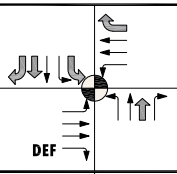
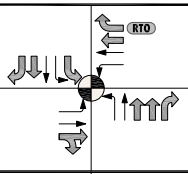
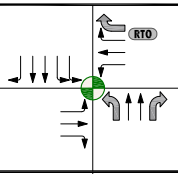
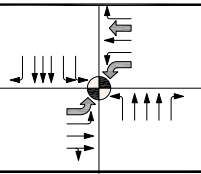
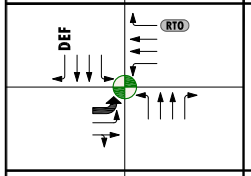
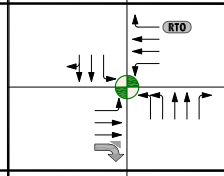
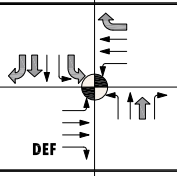
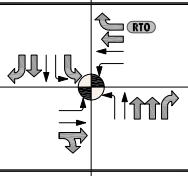
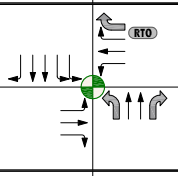
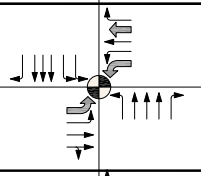
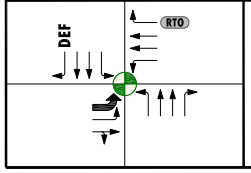
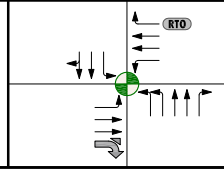
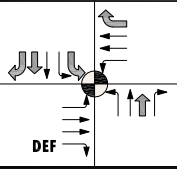
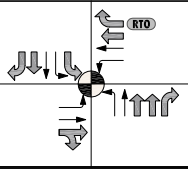
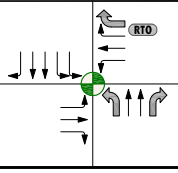
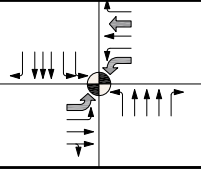
	1 MADISON ST. & AVENUE 58	2 MADISON ST. & AIRPORT BLVD.	3 MADISON ST. & AVENUE 54	4 MADISON ST. & AVENUE 52	5 MADISON ST. & AVENUE 50	6 JEFFERSON ST. & AVENUE 54	7 JEFFERSON ST. & AVENUE 52	8 JEFFERSON ST. & AVENUE 50		
EXISTING (2019) CONDITIONS									WITHOUT PROJECT	
	NO IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS	WITH PROJECT	
PHASE 1 (2026) CONDITIONS		NO IMPROVEMENTS		NO IMPROVEMENTS	NO IMPROVEMENTS				WITHOUT PROJECT	
	SAME AS PHASE 1 (2026) WITHOUT PROJECT CONDITIONS	NO IMPROVEMENTS	SAME AS PHASE 1 (2026) WITHOUT PROJECT CONDITIONS	NO IMPROVEMENTS	NO IMPROVEMENTS	SAME AS PHASE 1 (2026) WITHOUT PROJECT CONDITIONS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	WITH PROJECT	
PHASE 2 (2029) CONDITIONS	SAME AS PHASE 1 (2026) WITHOUT PROJECT CONDITIONS	NO IMPROVEMENTS		NO IMPROVEMENTS	NO IMPROVEMENTS			SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	WITHOUT PROJECT	
	SAME AS PHASE 1 (2026) WITHOUT PROJECT CONDITIONS	NO IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT CONDITIONS	NO IMPROVEMENTS	NO IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT CONDITIONS	SAME AS PHASE 2 (2029) WITHOUT PROJECT CONDITIONS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	WITH PROJECT	
	SAME AS PHASE 1 (2026) WITHOUT PROJECT CONDITIONS	NO IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT CONDITIONS	NO IMPROVEMENTS	NO IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT CONDITIONS	SAME AS PHASE 2 (2029) WITHOUT PROJECT CONDITIONS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	WITH PROJECT (OPT. 2)	

EXHIBIT 1-3 (2 OF 6): SUMMARY OF RECOMMENDED IMPROVEMENTS

1 MADISON ST. & AVENUE 58	2 MADISON ST. & AIRPORT BLVD.	3 MADISON ST. & AVENUE 54	4 MADISON ST. & AVENUE 52	5 MADISON ST. & AVENUE 50	6 JEFFERSON ST. & AVENUE 54	7 JEFFERSON ST. & AVENUE 52	8 JEFFERSON ST. & AVENUE 50	
SAME AS PHASE 1 (2026) WITHOUT PROJECT CONDITIONS	NO IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT CONDITIONS	NO IMPROVEMENTS	NO IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT CONDITIONS		SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	WITHOUT PROJECT
SAME AS PHASE 1 (2026) WITHOUT PROJECT CONDITIONS	NO IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT CONDITIONS	NO IMPROVEMENTS	NO IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT CONDITIONS	SAME AS PHASE 3 (2031) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	WITH PROJECT PHASE 3 (2031) CONDITIONS
	NO IMPROVEMENTS					SAME AS PHASE 3 (2031) WITHOUT PROJECT IMPROVEMENTS		2040 WITH MADISON ST. EXT.
	NO IMPROVEMENTS					SAME AS PHASE 3 (2031) WITHOUT PROJECT IMPROVEMENTS		2040 WITHOUT MADISON ST. EXT. (GPA OPT. 1)
	NO IMPROVEMENTS					SAME AS PHASE 3 (2031) WITHOUT PROJECT IMPROVEMENTS		2040 W/O MADISON W/ PROJECT ENTRY GATES (GPA OPT. 2)

LEGEND:

- 22 = INTERSECTION ID
- = EXISTING TRAFFIC SIGNAL
- = FUTURE TRAFFIC SIGNAL
- = EXISTING ROUNDABOUT
- = PROJECT ROUNDABOUT
- DEF = DEFACTO RIGHT TURN LANE
- RTO = EXISTING RIGHT TURN OVERLAP
- RTO = FUTURE RIGHT TURN OVERLAP
- = EXISTING LANE
- = LANE IMPROVEMENT (CONSISTENT WITH CITY OF LA QUINTA GENERAL PLAN CIRCULATION ELEMENT UPDATE TIA, MAY 2012)
- = ADDITIONAL/MODIFIED LANE IMPROVEMENT
- = FREE RIGHT TURN

EXHIBIT 1-3 (3 OF 6): SUMMARY OF RECOMMENDED IMPROVEMENTS

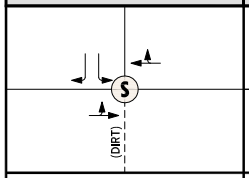
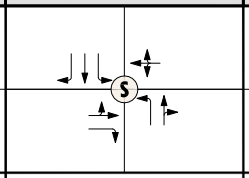
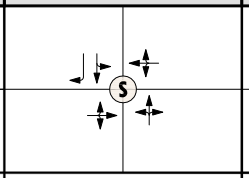
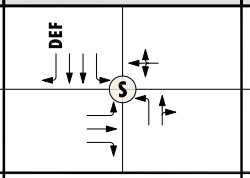
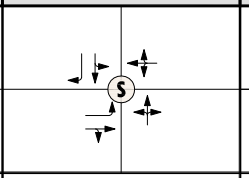
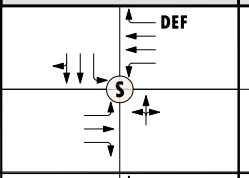
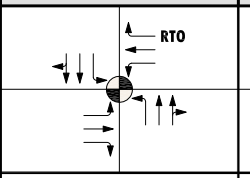
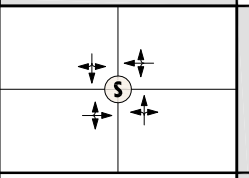
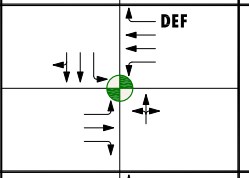
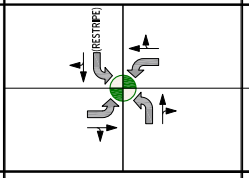
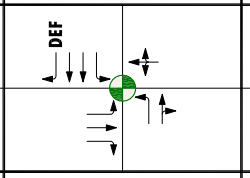
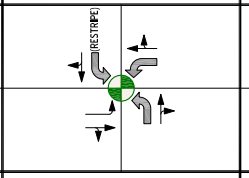
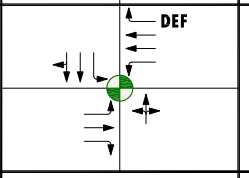
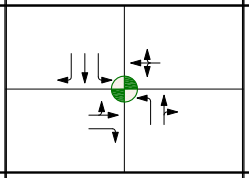
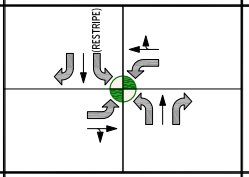
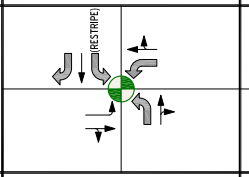
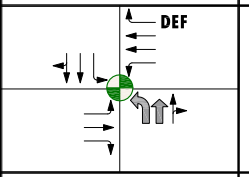
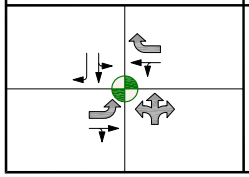
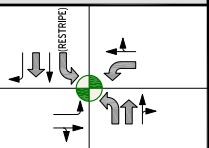
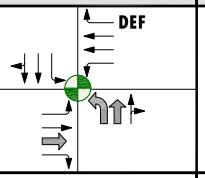
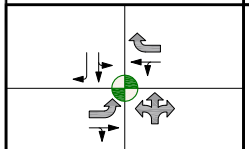
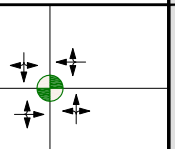
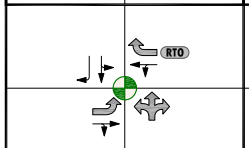
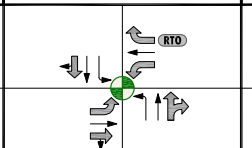
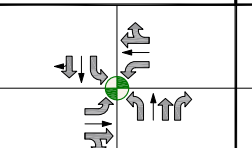
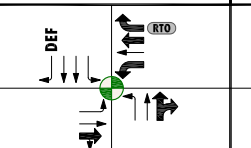
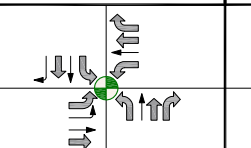
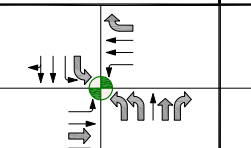
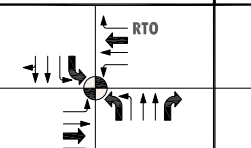
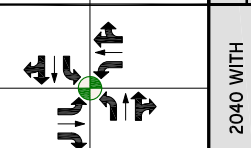
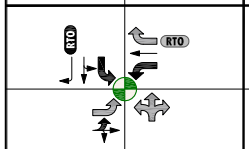
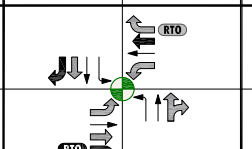
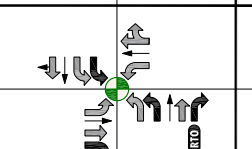
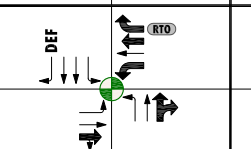
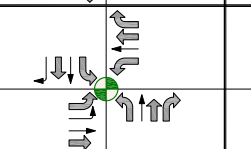
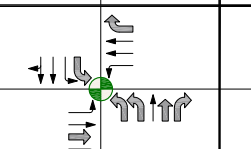
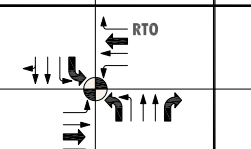
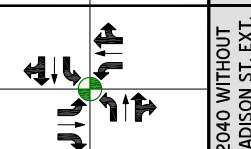
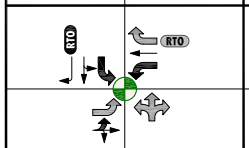
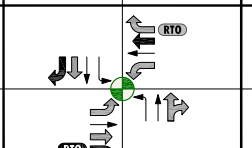
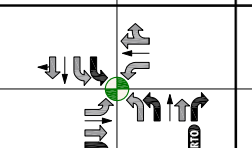
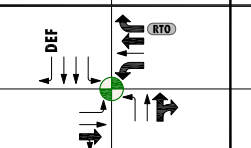
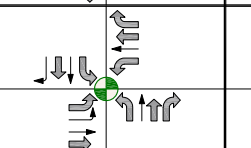
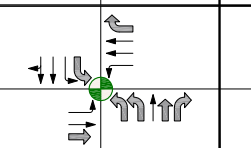
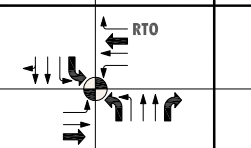
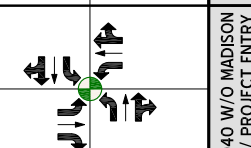
9 MONROE ST. & AVENUE 62	10 MONROE ST. & AVENUE 60	11 MONROE ST. & AVENUE 58	12 MONROE ST. & AIRPORT BLVD.	13 MONROE ST. & AVENUE 54	14 MONROE ST. & AVENUE 52	15 MONROE ST. & 50TH AVENUE	16 JACKSON ST. & 62ND AVENUE		
								WITHOUT PROJECT	EXISTING (2019) CONDITIONS
NO IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS		NO IMPROVEMENTS	NO IMPROVEMENTS	WITH PROJECT	
NO IMPROVEMENTS	NO IMPROVEMENTS					NO IMPROVEMENTS	NO IMPROVEMENTS	WITHOUT PROJECT	PHASE 1 (2026) CONDITIONS
NO IMPROVEMENTS		SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS	WITH PROJECT	
NO IMPROVEMENTS	SAME AS PHASE 1 (2026) WITH PROJECT IMPROVEMENTS		SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS			NO IMPROVEMENTS	NO IMPROVEMENTS	WITHOUT PROJECT	PHASE 2 (2029) CONDITIONS
NO IMPROVEMENTS	SAME AS PHASE 1 (2026) WITH PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS	WITH PROJECT	
	SAME AS PHASE 1 (2026) WITH PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	NO IMPROVEMENTS	NO IMPROVEMENTS	WITH PROJECT (OPT. 2)	

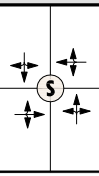
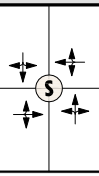
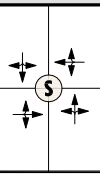
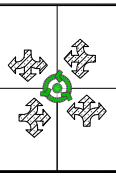
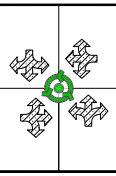
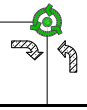
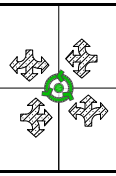
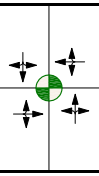
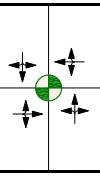
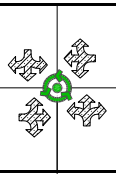
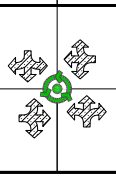
EXHIBIT 1-3 (4 OF 6): SUMMARY OF RECOMMENDED IMPROVEMENTS

9 MONROE ST. & AVENUE 62	10 MONROE ST. & AVENUE 60	11 MONROE ST. & AVENUE 58	12 MONROE ST. & AIRPORT BLVD.	13 MONROE ST. & AVENUE 54	14 MONROE ST. & AVENUE 52	15 MONROE ST. & 50TH AVENUE	16 JACKSON ST. & 62ND AVENUE	
NO IMPROVEMENTS	SAME AS PHASE 1 (2026) WITH PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS			NO IMPROVEMENTS	NO IMPROVEMENTS	WITHOUT PROJECT
	SAME AS PHASE 1 (2026) WITH PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 1 (2026) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 3 (2031) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 3 (2031) WITHOUT PROJECT IMPROVEMENTS	NO IMPROVEMENTS		WITH PROJECT — PHASE 3 (2031) CONDITIONS
								2040 WITH MADISON ST. EXT.
								2040 WITHOUT MADISON ST. EXT. (GPA OPT. 1)
								2040 W/O MADISON W/ PROJECT ENTRY GATES (GPA OPT. 2)

LEGEND:

- 22 = INTERSECTION ID
- = EXISTING TRAFFIC SIGNAL
- = FUTURE TRAFFIC SIGNAL
- = EXISTING ROUNDABOUT
- = PROJECT ROUNDABOUT
- DEF = DEFACTO RIGHT TURN LANE
- RTO = EXISTING RIGHT TURN OVERLAP
- RTO = FUTURE RIGHT TURN OVERLAP
- = EXISTING LANE
- = LANE IMPROVEMENT (CONSISTENT WITH CITY OF LA QUINTA GENERAL PLAN CIRCULATION ELEMENT UPDATE TIA, MAY 2012)
- = ADDITIONAL LANE IMPROVEMENT
- = FREE RIGHT TURN

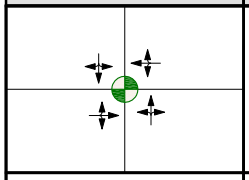
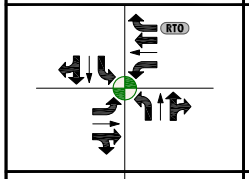
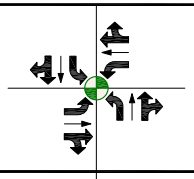
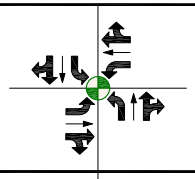
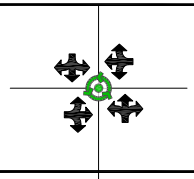
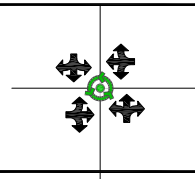
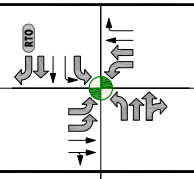
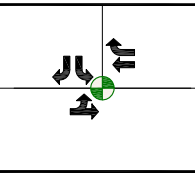
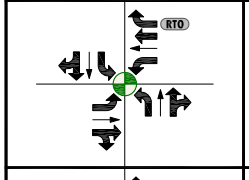
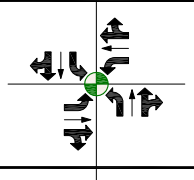
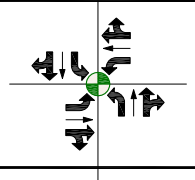
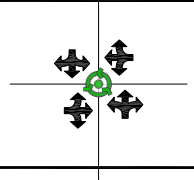
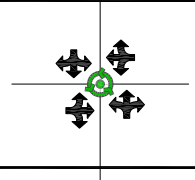
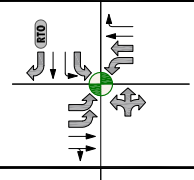
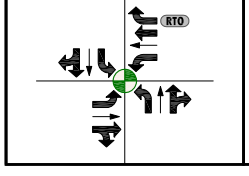
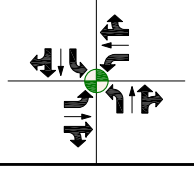
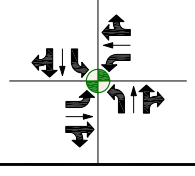
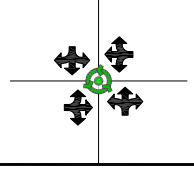
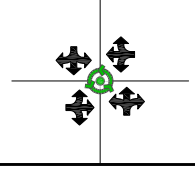
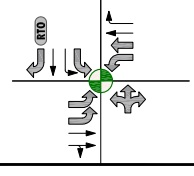
EXHIBIT 1-3 (5 OF 6): SUMMARY OF RECOMMENDED IMPROVEMENTS

17 JACKSON ST. & AVENUE 60	18 JACKSON ST. & 58TH AVENUE	19 JACKSON ST. & AIRPORT BLVD.	20 JEFFERSON ST. & N. LOOP	21 JEFFERSON ST. & S. LOOP		
			**FUTURE INTERSECTION**	**FUTURE INTERSECTION**	WITHOUT PROJECT	EXISTING (2019) CONDITIONS
NO IMPROVEMENTS	**NO IMPROVEMENTS**	**NO IMPROVEMENTS**			WITH PROJECT	
NO IMPROVEMENTS	**NO IMPROVEMENTS**	**NO IMPROVEMENTS**	**FUTURE INTERSECTION**	**FUTURE INTERSECTION**	WITHOUT PROJECT	PHASE 1 (2026) CONDITIONS
NO IMPROVEMENTS	**NO IMPROVEMENTS**	**NO IMPROVEMENTS**			WITH PROJECT	
NO IMPROVEMENTS			**FUTURE INTERSECTION**	**FUTURE INTERSECTION**	WITHOUT PROJECT	PHASE 2 (2029) CONDITIONS
NO IMPROVEMENTS	**SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS**	**SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS**		**SAME AS PHASE 1 (2026) WITH PROJECT IMPROVEMENTS**	WITH PROJECT	
NO IMPROVEMENTS	**SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS**	**SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS**		**SAME AS PHASE 1 (2026) WITH PROJECT IMPROVEMENTS**	WITH PROJECT (OPT. 2)	

LEGEND:

- 22 = INTERSECTION ID
- S = ALL WAY STOP
- = EXISTING TRAFFIC SIGNAL
- = FUTURE TRAFFIC SIGNAL
- = EXISTING ROUNDABOUT
- = PROJECT ROUNDABOUT
- = EXISTING LANE
- = LANE IMPROVEMENT (CONSISTENT WITH CITY OF LA QUINTA GENERAL PLAN CIRCULATION ELEMENT UPDATE TIA, MAY 2012)
- = PROJECT ACCESS LANE IMPROVEMENT
- = FREE RIGHT TURN
- DEF = DEFACTO RIGHT TURN LANE
- RTO = EXISTING RIGHT TURN OVERLAP
- RTO = FUTURE RIGHT TURN OVERLAP

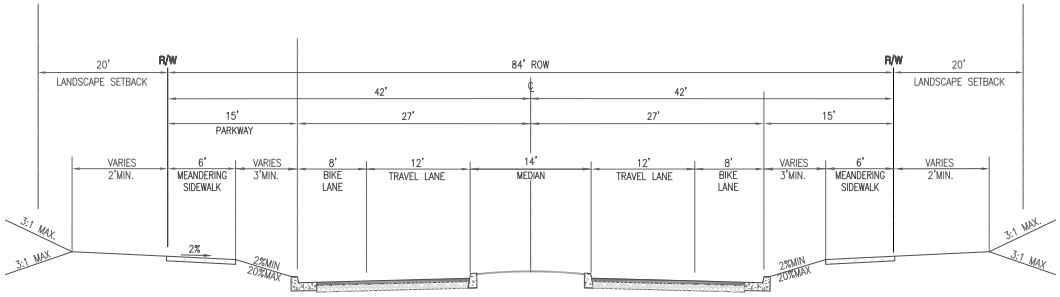
EXHIBIT 1-3 (6 OF 6): SUMMARY OF RECOMMENDED IMPROVEMENTS

17 JACKSON ST. & AVENUE 60	18 JACKSON ST. & 58TH AVENUE	19 JACKSON ST. & AIRPORT BLVD.	20 JEFFERSON ST. & N. LOOP	21 JEFFERSON ST. & S. LOOP	22 MADISON ST. & AVENUE 60	23 MADISON ST. & AVENUE 62	
	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	FUTURE INTERSECTION	FUTURE INTERSECTION	2040 INTERSECTION ANALYSIS	NOT APPLICABLE	WITHOUT PROJECT
SAME AS PHASE 3 (2031) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITHOUT PROJECT IMPROVEMENTS	SAME AS PHASE 2 (2029) WITH PROJECT IMPROVEMENTS	SAME AS PHASE 1 (2026) WITH PROJECT IMPROVEMENTS	2040 INTERSECTION ANALYSIS	NOT APPLICABLE	WITH PROJECT — PHASE 3 (2031) CONDITIONS
							2040 WITH MADISON ST. EXT.
						NOT APPLICABLE	2040 WITHOUT MADISON ST. EXT. (GPA OPT. 1)
						NOT APPLICABLE	2040 W/O MADISON W/ PROJECT ENTRY GATES (GPA OPT. 2)

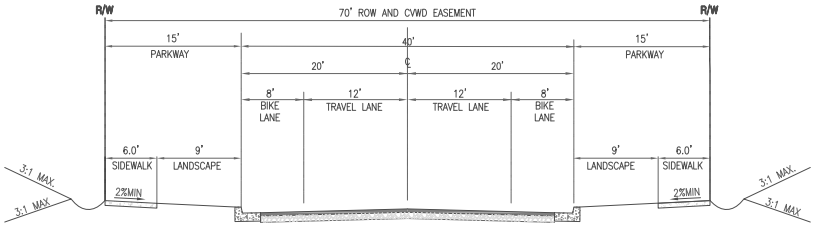
LEGEND:

- 22 = INTERSECTION ID
- = EXISTING TRAFFIC SIGNAL
- = FUTURE TRAFFIC SIGNAL
- = EXISTING ROUNDABOUT
- = PROJECT ROUNDABOUT
- DEF = DEFACTO RIGHT TURN LANE
- RTO = EXISTING RIGHT TURN OVERLAP
- RTO = FUTURE RIGHT TURN OVERLAP
- = EXISTING LANE
- = LANE IMPROVEMENT (CONSISTENT WITH CITY OF LA QUINTA GENERAL PLAN CIRCULATION ELEMENT UPDATE TIA, MAY 2012)
- = ADDITIONAL LANE IMPROVEMENT
- = FREE RIGHT TURN

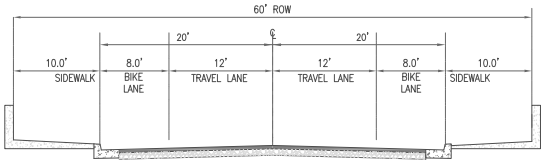
EXHIBIT 1-4: ON-SITE ROADWAY CROSS-SECTIONS



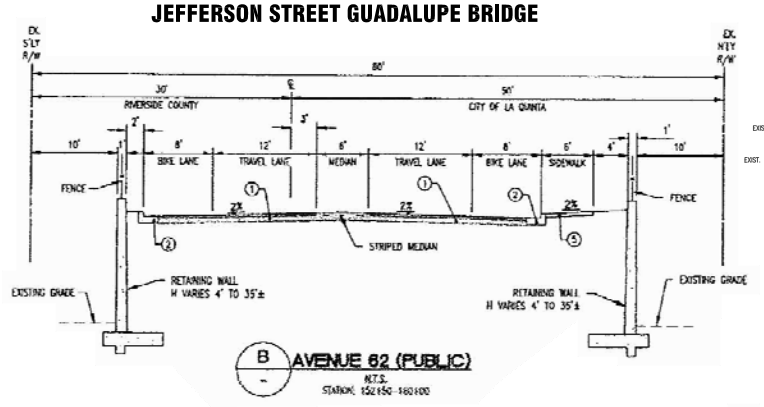
MODIFIED SECONDARY
(JEFFERSON STREET/AVENUE 62)

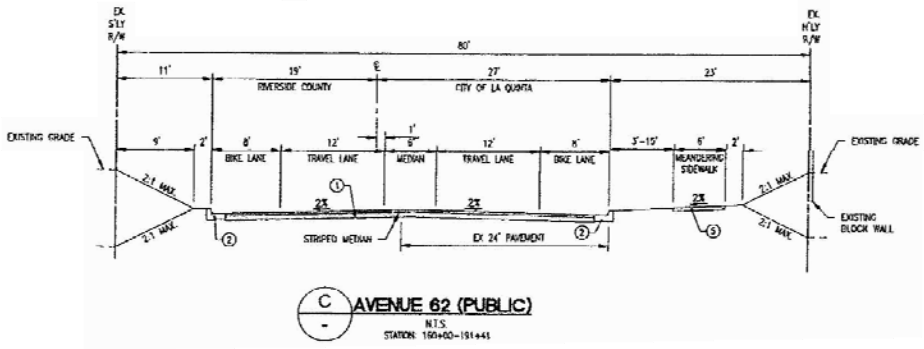


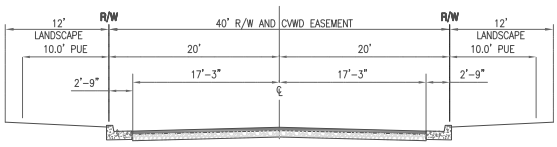
COLLECTOR



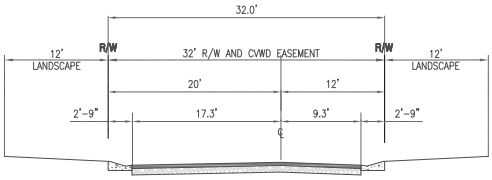
JEFFERSON STREET GUADALUPE BRIDGE



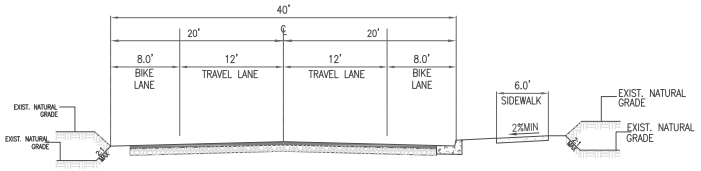




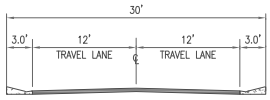
LOCAL, PARKING ON BOTH SIDES



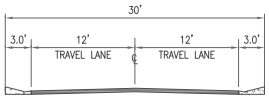
LOCAL, PARKING ON ONE SIDE



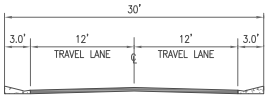
INTERIM OFF-SITE JEFFERSON STREET ACCESS CONNECTIONS



EMERGENCY VEHICLE ACCESS (EVA)



ACCESS DRIVE TO NAP PARCEL



SECTION 5 ACCESS DRIVE ON WEST BOUNDARY

TABLE 1-6: SUMMARY OF LONG RANGE (2040) INTERSECTION OPERATIONS *(Page 1 of 2)*

#	Intersection	Traffic Control[3]	2040 W/ Madison Extension				2040 (GPA Option 1)				2040 (GPA Option 2)			
			Delay[1] (Secs)		Level of Service[1]		Delay[1] (Secs)		Level of Service[1]		Delay[1] (Secs)		Level of Service[1]	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Madison St. / Avenue 58													
	- With GPCE Update Improvements[3]	**TS**	35.8	54.7	D	D	37.7	**67.8**	D	**E**	40.5	**74.0**	D	**E**
	- With Modified GPCE Improvements	**TS**	-	-	-	-	33.2	51.5	C	D	34.8	54.2	C	D
2	Madison St. / Airport Blvd.	TS	24.9	30.6	C	C	24.7	28.8	C	C	23.9	27.5	C	C
3	Madison St. / Avenue 54													
	- With GPCE Update Improvements[3]	**TS**	41.7	54.3	D	D	41.7	51.7	D	D	41.7	51.0	D	D
4	Madison St. / Avenue 52													
	- With GPCE Update Improvements[3]	TS	52.1	54.0	D	D	50.9	53.6	D	D	53.3	54.6	D	D
5	Madison St. / Avenue 50													
	- With GPCE Update Improvements[3]	TS	40.8	53.1	D	D	39.8	50.1	D	D	41.2	54.2	D	D
6	Jefferson St. / Avenue 54													
	- With GPCE Update Improvements[3]	**TS**	21.2	39.4	C	D	23.5	49.0	C	D	22.2	44.8	C	D
7	Jefferson St. / Avenue 52													
	- With GPCE Update Improvements[3]	RDB	5.8	8.3	A	A	5.9	9.1	A	A	5.8	8.6	A	A
8	Jefferson St. / Avenue 50													
	- With GPCE Update Improvements[3]	TS	42.8	44.7	D	D	40.5	43.1	D	D	43.3	44.8	D	D
9	Monroe St. / Avenue 62													
	- With GPCE Update Improvements[3]	**TS**	32.1	29.0	C	C	53.0	**137.3**	D	**F**	**65.4**	**149.7**	**E**	**F**
	- With Added GPCE Improvements	**TS**	-	-	-	-	42.3	53.8	D	D	44.6	54.3	D	D
10	Monroe St. / Avenue 60													
	- With GPCE Update Improvements[3]	**TS**	37.1	46.6	D	D	45.4	**103.3**	D	**F**	46.4	**106.7**	D	**F**
	- With Added GPCE Improvements	**TS**	-	-	-	-	42.9	52.6	D	D	37.3	54.9	D	D
11	Monroe St. / Avenue 58													
	- With GPCE Update Improvements[3]	**TS**	41.4	54.2	D	D	51.2	**77.8**	D	**E**	**57.0**	**83.4**	**E**	**F**
	- With Added GPCE Improvements	**TS**	-	-	-	-	39.1	51.8	D	D	41.6	54.1	D	D
12	Monroe St. / Airport Blvd.													
	- With DIF & County Improvements[4]	**TS**	33.6	42.3	C	D	33.9	44.7	C	D	33.2	45.0	C	D
13	Monroe St. / Avenue 54													
	- With GPCE Update Improvements[3]	**TS**	32.0	54.7	C	D	32.4	54.6	C	D	31.8	54.7	C	D
14	Monroe St. / Avenue 52													
	- With GPCE Update Improvements[3]	**TS**	38.3	54.7	D	D	38.2	54.4	D	D	38.7	54.9	D	D
15	Monroe St. / 50th Avenue													
	- With Improvements	TS	34.2	54.7	C	D	36.0	54.9	D	D	35.5	54.3	D	D
16	Jackson St. / 62nd Avenue													
	- With Improvements	**TS**	44.4	38.9	D	D	47.4	40.7	D	D	46.5	40.8	D	D
17	Jackson St. / 60th Avenue													
	- With Improvements	**TS**	37.6	45.2	D	D	38.0	54.8	D	D	37.4	54.7	D	D
18	Jackson St. / 58th Avenue													
	- With Improvements	**TS**	27.5	35.8	C	D	29.7	36.8	C	D	29.9	36.9	C	D

TABLE 1-6: SUMMARY OF LONG RANGE (2040) INTERSECTION OPERATIONS

(Page 2 of 2)

#	Intersection	Traffic Control[3]	2040 W/ Madison Extension				2040 (GPA Option 1)				2040 (GPA Option 2)			
			Delay[1] (Secs)		Level of Service[1]		Delay[1] (Secs)		Level of Service[1]		Delay[1] (Secs)		Level of Service[1]	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
19	Jackson St. / Airport Blvd. - With Improvements	**TS**	38.4	39.1	D	D	39.0	40.1	D	D	38.5	41.0	D	D
20	Jefferson St. / N. Loop	**RDB**	5.7	7.0	A	A	6.1	8.4	A	A	5.1	6.1	A	A
21	Jefferson St. / S. Loop	**RDB**	5.9	7.3	A	A	6.4	8.9	A	A	5.3	6.3	A	A
22	Madison St. / Avenue 60 - With GPCE Update Improvements[3]	**TS**	48.4	49.1	D	D	35.1	53.3	D	D	35.2	54.0	D	D
23	Madison St. / Avenue 62 - With Improvements	**TS**	14.4	25.5	B	C	-	-	-	-	-	-	-	-

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal
For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] CSS = Cross-street Stop; TS = Traffic Signal; AWS = All-way Stop; RDB = Roundabout; **1** = Improvement

[3] Source: City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 2012. Prepared by Iteris)

[4] DIF = Development Impact Fee

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TABLE 1-7: SUMMARY OF ROADWAY SEGMENT ANALYSIS

Roadway	Segment	Roadway Designation	# of Lanes[7]	Existing and Near Term Capacity[1]	Existing (2019)		E+P		Potentially Significant Project Specific Impact[2]	Phase 3 (2031) Conditions				Potentially Significant Cumulative Impact[3]	# of Lanes[7]	2040 Capacity[1]	2040 W/ Madison		2040 (GPA Option 1)		2040 (GPA Option 2)	
										Without Project		With Project										
					ADT[3]	V/C	ADT[3]	V/C		ADT[3]	V/C	ADT[3]	V/C				ADT[3]	V/C	ADT[3]	V/C	ADT[3]	V/C
Avenue 58	West of Madison Street	Secondary	3	21,000 [4]	1,600	0.08	7,300	0.35	No	6,000	0.29	11,600	0.55	No	**4**	28,000	12,000	0.43	12,500	0.45	13,500	0.48
	West of Monroe Street	Secondary	4	28,000	2,300	0.08	4,000	0.14	No	8,100	0.29	9,800	0.35	No	4	28,000	10,200	0.36	14,000	0.50	14,000	0.50
	West of Jackson Street	Secondary	2	14,000 [4]	1,800	0.13	3,000	0.21	No	7,700	0.55	8,900	0.64	No	**4**	28,000	18,600	0.66	19,000	0.68	19,000	0.68
Madison St.	South of Avenue 56	Primary	4	42,600	6,700	0.16	10,100	0.24	No	20,500	0.48	23,900	0.56	No	4	42,600	35,600	0.84	34,000	0.80	34,000	0.80
60th Avenue	West of Jackson Street	Primary	2	19,000 [6]	1,200	0.06	1,800	0.09	No	6,100	0.32	6,700	0.35	No	**4**	42,600	12,000	0.28	15,000	0.35	15,000	0.35
Avenue 62	West of Monroe Street	Modified Secondary	2	19,000	600	0.03	6,300	0.33	No	1,800	0.09	7,500	0.39	No	2	19,000	9,600	0.51	13,000	0.68	14,000	0.74
	West of Jackson Street	Secondary	2	14,000 [4]	1,700	0.12	4,000	0.29	No	6,700	0.48	9,000	0.64	No	**4**	28,000	19,800	0.71	19,000	0.68	19,000	0.68
Monroe St.	South of Avenue 60	Secondary	2	14,000 [4]	1,600	0.11	5,000	0.36	No	8,200	0.59	11,600	0.83	No	**4**	28,000	19,000	0.68	25,000	0.89	25,000	0.89
	South of Avenue 58	Primary	2	19,000 [6]	2,700	0.14	5,500	0.29	No	12,100	0.64	14,900	0.78	No	**4**	42,600	26,000	0.61	27,000	0.63	27,000	0.63
	South of Avenue 56	Primary	3	31,950 [5]	3,400	0.11	6,800	0.21	No	12,500	0.39	15,900	0.50	No	**4**	42,600	25,000	0.59	26,000	0.61	27,000	0.63
Jackson St.	South of Airport Boulevard	Primary	2	19,000 [6]	2,400	0.13	3,500	0.18	No	10,400	0.55	11,500	0.61	No	**4**	42,600	28,400	0.67	29,000	0.68	29,000	0.68

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] These maximum roadway capacities have been extracted from the City of La Quinta Engineering Bulletin #06-13.
These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS E service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic.

[2] A potentially significant project traffic impact is defined to occur on any road segment if the segment is projected to be operating at LOS E or LOS F with project traffic included and the V/C is increased by 0.02 or more by addition of

[3] A potentially significant cumulative traffic impact is defined to occur on any road segment if the project would cause the existing LOS to fall to worse than LOS D for Opening Year Cumulative With Project volumes. A potentially significant cumulative traffic impact is also defined to occur if the segment is projected to be operating at LOS E or LOS F with project traffic included and the V/C is increased by 0.02 or more by addition of project traffic.

[4] Capacity was calculated as a ratio of 4-lane Secondary capacity.

[5] Capacity was calculated as a ratio of 4-lane Primary capacity.

[6] Estimated capacity for 2-lane Primary.

[7] 1 = Existing number of lanes; **4** = City of La Quinta General Plan Buildout number of lanes

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- #1 - Madison Street at Avenue 58
- #3 - Madison Street at Avenue 54
- #6 - Jefferson Street at Avenue 54
- #10 – Monroe Street at Avenue 60
- #11 – Monroe Street at Avenue 58
- #12 – Monroe Street at Airport Boulevard
- #13 – Monroe Street at Avenue 54
- #14 – Monroe Street at Avenue 52

Phase 1 (2026) analysis results indicates that the intersections of Jefferson Street at Avenue 52 (#7) and Jefferson Street at Avenue 50 (#8) experiences deficient operations under cumulative "without project" conditions. Jefferson Street at Avenue 52 (#7) requires reconstruction of the current roundabout design to incorporate 2 circulating lanes around the center island. This effectively accommodates an additional through lane in the northbound and southbound directions to provide acceptable LOS. Jefferson Street at Avenue 50 (#8) requires a 2nd westbound through lane. The improvements are needed with or without the Project, so a fair share contribution is appropriate.

All study roadway segments analyzed are anticipated to operate at acceptable LOS for Phase 1 (2026) without and with Project traffic conditions, consistent with Existing traffic conditions.

1.5.4 PHASE 2 (2029) CONDITIONS

For EAPC Phase 2(2029) traffic conditions, the following eight study area intersections are anticipated to require installation of a traffic signal (which is funded in the CIP) in order to maintain acceptable LOS:

- #1 - Madison Street at Avenue 58
- #3 - Madison Street at Avenue 54
- #6 - Jefferson Street at Avenue 54
- #10 – Monroe Street at Avenue 60
- #11 – Monroe Street at Avenue 58
- #12 - Monroe Street at Airport Boulevard
- #13 – Monroe Street at Avenue 54
- #14 - Monroe Street at Avenue 52

EAPC Phase 2 (2029) analysis results indicates that the intersections of Jefferson Street at Avenue 52 (#7), Jefferson Street at Avenue 50 (#8), Jackson Street at Avenue 58 (#18),and Jackson Street at Airport Boulevard (#19) experiences deficient operations under cumulative "without project" conditions. Jefferson Street at Avenue 52 requires reconstruction of the current roundabout design to incorporate 2 circulating lanes around the center island. This effectively accommodates an additional through lane in the northbound and southbound directions to provide acceptable LOS.

Jefferson Street at Avenue 50 (#8) requires a 2nd westbound through lane. Jackson Street at Avenue 58 (#18) and Jackson Street at Airport Boulevard (#19) requires a traffic signal to provide acceptable LOS. The improvements are needed with or without the Project, so a fair share contribution is appropriate.

All study roadway segments analyzed are anticipated to operate at acceptable LOS for EAPC Phase 2 (2029) traffic conditions, consistent with Existing traffic conditions.

However, if Project Phase 2 Option 2 (without Jefferson Street connection to Avenue 58) is utilized, the intersection of Monroe Street at Avenue 62 (#9) and will require installation of a traffic signal (for eventual reimbursement via the City of La Quinta CIP) in order to maintain acceptable LOS. In addition, the roadway segment of Monroe Street, south of Avenue 60 appears to exceed the theoretical daily segment LOS thresholds if Option 2 scenario is utilized. Further review of the more detailed peak hour intersection analysis indicates that the recommended improvements at adjacent study area intersections provide acceptable level of service. Therefore, roadway segment widening is not anticipated.

1.5.5 EAPC PHASE 3 (2031) CONDITIONS

For EAPC Phase 3 (2031) traffic conditions, the following eight study area intersections are anticipated to require installation of a traffic signal in order to maintain acceptable LOS under EAPC (2031) conditions:

- #1 - Madison Street at Avenue 58
- #3 - Madison Street at Avenue 54
- #6 - Jefferson Street at Avenue 54
- #10 – Monroe Street at Avenue 60
- #11 - Monroe Street at Avenue 58
- #12 - Monroe Street at Airport Boulevard
- #13 - Monroe Street at Avenue 54
- #14 - Monroe Street at Avenue 52

EAPC Phase 3 (2031) analysis results indicates that the intersections of Jefferson Street at Avenue 52 (#7), Jefferson Street at Avenue 50 (#8), Jackson Street at Avenue 60 (#17), Jackson Street at Avenue 58 (#18), and Jackson Street at Airport Boulevard (#19) experiences deficient operations under cumulative "without project" conditions. Jefferson Street at Avenue 52 (#7) requires reconstruction of the current roundabout design to incorporate 2 circulating lanes around the center island. This effectively accommodates an additional through lane in the northbound and southbound directions to provide acceptable LOS. Jefferson Street at Avenue 50 (#8) requires a 2nd westbound through lane. Jackson Street at Avenue 60 (#17), Jackson Street at Avenue 58 (#18) and Jackson Street at Airport Boulevard (#19) requires a traffic signal to provide acceptable LOS. The improvements are needed with or without the Project, so a fair share contribution is appropriate.

EAPC Phase 3 (2031) analysis results indicates that the intersections of Monroe Street at Avenue 62 (#9) and Jackson Street at Avenue 62 (#16) experiences deficient operations under cumulative "with project" conditions and will require installation of traffic signal (for eventual reimbursement via the City of La Quinta CIP) in order to maintain acceptable LOS.

For the intersection of Madison Street at Avenue 58 (#1), addition of Project traffic requires the installation of the traffic signal. Therefore, the required signal will be installed by the Project, and reimbursement to the Project developer may be provided for all but the Project's fair share by future developments, or CIP, or DIF.

For the remaining deficient study area intersections, the improvements are needed for with or without the Project, so a fair share contribution is appropriate for these locations.

All study roadway segments analyzed are anticipated to operate at acceptable LOS for EAPC Phase 3 (2031) traffic conditions.

1.5.6 YEAR 2040 CONDITIONS

For General Plan Buildout (Year 2040) conditions, as shown in Table 1-7, intersection lane recommendations determined in Chapter 7 of this report and shown on Exhibit 1-3 provide acceptable LOS under Year 2040 traffic conditions (i.e., LOS D or better). Recommended intersection lanes were determined for:

- General Plan Buildout (Year 2040) With Madison Street Extension (Existing General Plan). This scenario includes the following:

  1. Future Madison Street extension, south of Avenue 60 to Avenue 62.
  2. Future Jefferson Street connection from Avenue 58 to Avenue 62.

- General Plan Buildout (Year 2040) Without Madison Street Extension (GPA Option 1). This scenario includes the following:

  1. Termination of Madison Street as a General Plan roadway, south of Avenue 60.
  2. Future Jefferson Street connection from Avenue 58 to Avenue 62.
  3. Emergency vehicle access (EVA) is provided via Madison Street, from the northerly boundary of the Project's Planning Area 18 to Avenue 60.

- General Plan Buildout (Year 2040) Without Madison Street Extension and With Project Entry Gates (GPA Option 2). This scenario includes the following:

  1. Termination of Madison Street as a General Plan roadway, south of the Avenue 60.
  2. Future Jefferson Street connection from Avenue 58 to Project boundary.
  3. The deletion of Jefferson Street as General Plan roadway south of the hypothetical westerly extension of Avenue 60, and the deletion of Avenue 62 west of the hypothetical southerly extension of Madison Street.
  4. On-site entry gates on Jefferson Street. Jefferson Street is a private roadway within the Project boundary.

5. Emergency vehicle access (EVA) is provided via Madison Street, from the northerly boundary of the Project's Planning Area 18 to Avenue 60.

For General Plan Buildout (Year 2040) with Madison Street Extension, lane recommendations for intersections included in the City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis are consistent with that report.

Four intersections require modifications to the previously identified improvements for General Plan buildout conditions. If either of the following alternatives occur:

- General Plan Buildout (Year 2040) without Madison Street Extension (GPA Option 1)
- General Plan Buildout (Year 2040) without Madison Street Extension and with Project Entry Gates (GPA Option 2)

The four intersections which would require modifications with either of the above two scenarios are as follows:

- Madison Street at Avenue 58
- Monroe Street at Avenue 62
- Monroe Street at Avenue 60
- Monroe Street at Avenue 58

As shown on Table 1-7, study roadway segments analyzed are anticipated to operate at acceptable LOS under Year 2040 traffic conditions, including GPA Option 1 and GPA Option 2, without changes in roadway classifications.

1.5.7 SITE ACCESS AND ON-SITE CIRCULATION

The recommended site access improvements and on-site circulation for the Project are described below and illustrated on Exhibit 8-1. The Travertine Project is proposed to be served by two main access points to the surrounding area: 1) the southerly extension of South Jefferson as a Modified Secondary, south of Avenue 58, and 2) the westerly extension of Avenue 62 as a Modified Secondary, west of Monroe Street. Off-site, Jefferson Street is recommended to be constructed from the Project boundary to Avenue 58 as an interim section with 1 lane northbound, 1 lane southbound, bike lanes, and a sidewalk adjacent to the west side of the street. Avenue 62 should be constructed from the Project boundary to Monroe Street as a similar interim street cross-section with a sidewalk on the north side. For emergency access purposes, an EVA alignment is provided via Madison Street, south of Avenue 60 to the northerly edge of the Project's Planning Area 18.

On-site Modified Secondary and Collector facilities shall be constructed to their ultimate General Plan designation, including curb-and-gutter and sidewalk improvements for new Project roadways. Sidewalks and Class II bike lanes shall be provided along Jefferson Street and Avenue 62 within the Project.

The internal residential circulating collector roadway (Loop) intersects with Jefferson Street at two roundabout-controlled intersections (Jefferson Street at North Loop and Jefferson Street at South Loop).

Additional Project access points along Jefferson Street are provided as cross-street stop controlled intersections with median breaks at five intersections.

2 EXISTING CONDITIONS

In response to City comments, the previous 2017 traffic counts (utilized in the 2018 TIA) are adjusted to represent 2019 baseline conditions. This section provides a summary of the updated (2019) existing conditions. The analysis methodologies, level of service definitions, and required level of service are consistent with those utilized in the TIA.

2.1 TRAFFIC VOLUMES AND CONDITIONS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected on August 15th, 2017, April 9th, 2019, May 7th, 2019, and September 10, 2019. Based on discussions with City staff, the following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 6:00 AM and 8:30 AM)
- Weekday PM Peak Hour (peak hour between 2:30 PM and 5:30 PM)

A sample comparison of the 2017 data and new 2019 counts focuses on key locations (5 intersections and 5 roadway segments), as listed in Tables 2-1 and 2-2, respectively. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 2.1.

TABLE 2-1: 2019 INTERSECTION COUNT LOCATIONS

ID	Intersection Location	ID	Intersection Location
1	Madison Street at Avenue 58	11	Monroe Street at Avenue 58
5	Madison Street at Avenue 50	13	Monroe Street at Avenue 54
9	Monroe Street at Avenue 62		

TABLE 2-2: 2019 ROADWAY SEGMENT COUNT LOCATIONS

Roadway Segment			
3	Avenue 58, west of Jackson Street	8	Monroe Street, south of Avenue 60
4	Madison Street south of Avenue 56	10	Monroe Street, south of Avenue 56
7	Avenue 62, west of Jackson Street		

Volume changes at these locations are extrapolated to the remaining existing study area locations as identified in the TIA. The average AM/PM peak hour intersection growth between 2017 and 2019 counts data at selected study area and nearby intersections is approximately 2.66%. The additional 2.66% growth rate is applied to the study area intersections with 2017 counts to reflect 2019 conditions.

The raw traffic count data provided in Appendix 2.1 was adjusted to maintain flow conservation between applicable study area intersections (i.e., no unexplained loss of vehicles between no or limited access intersections). Existing traffic volumes with seasonal adjustments are shown on Exhibits 2-1 through 2-3.

Existing weekday average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 2-1. Where 2019 counts are unavailable, ADT volumes are estimated using the formula below for each intersection leg (consistent with 2018 TIA) and compared to the 2017 ADT's with 2.66% growth to reflect 2019 conditions:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 10.753 = Leg Volume

For those roadway segments which have 24-hour tube count data available in close proximity to the study area, a comparison between the PM peak hour and daily traffic volumes indicated that the peak-to-daily relationship of approximately 9.30 percent would sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses. As such, the above equation utilizing a factor of 10.753 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 9.30 percent (i.e., 1/0.0930 = 10.753).

2.2 EXISTING INTERSECTION LEVEL OF SERVICE

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 1.3 *Level of Service Definitions and Analysis Methodologies* of this report.

The intersection operations analysis results are summarized in Table 2-3 which indicates that the 19 existing study area intersections are currently operating at an acceptable LOS during the peak hours. The intersection operations analysis worksheets are included in Appendix 2.2 of this traffic phasing analysis.

2.3 EXISTING ROADWAY SEGMENT LEVEL OF SERVICE

The roadway segment capacities are approximate figures only, and are used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet traffic demand.

Table 2-4 provides a summary of the Existing conditions roadway segment capacity analysis based on the roadway segment capacity thresholds identified in the TIA. As shown on Table 2-4, study area roadway segments analyzed are currently operating at acceptable LOS.

EXHIBIT 2-1: EXISTING (2019) AVERAGE DAILY TRAFFIC (ADT) (WITH PEAK SEASON ADJUSTMENT)

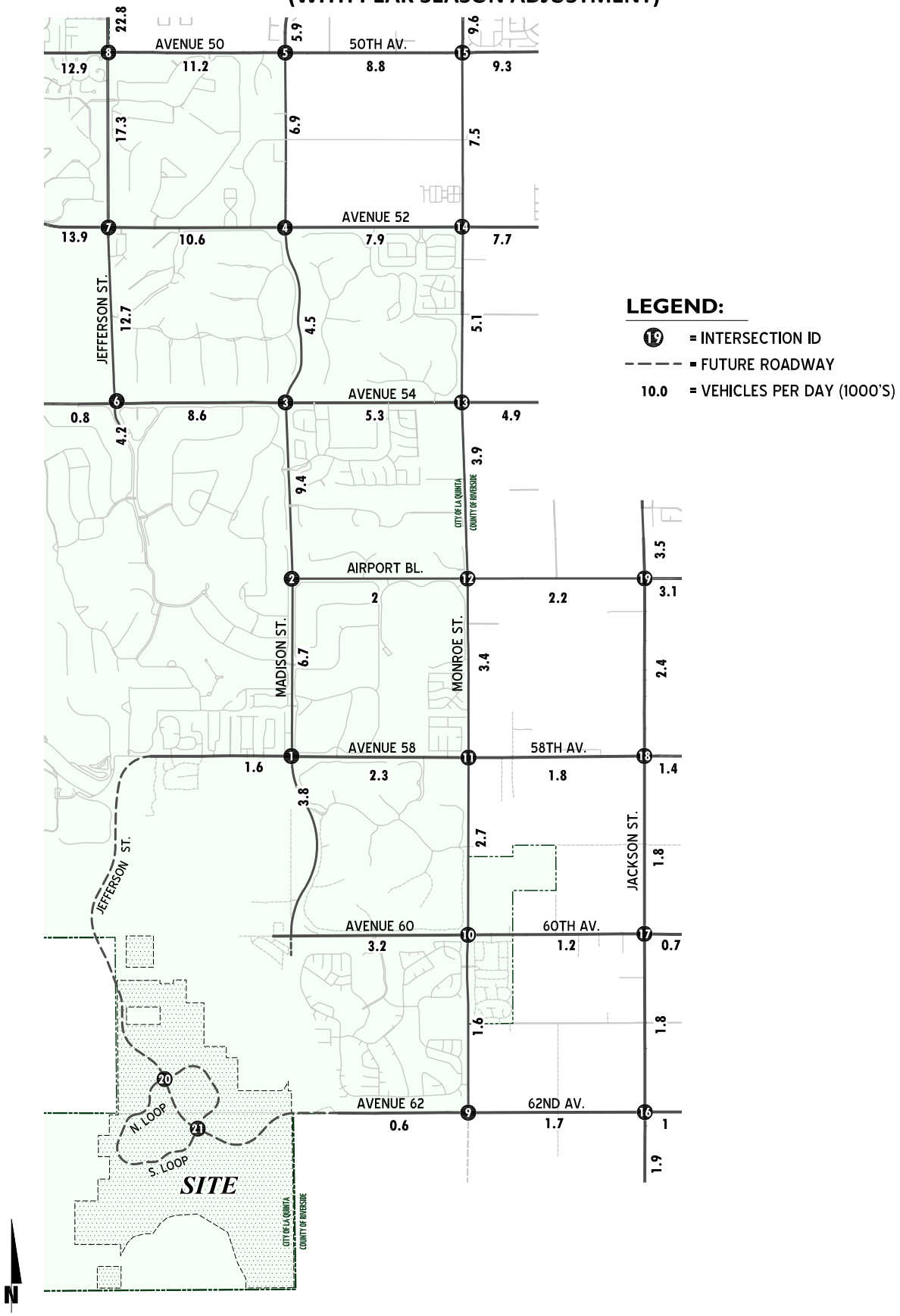
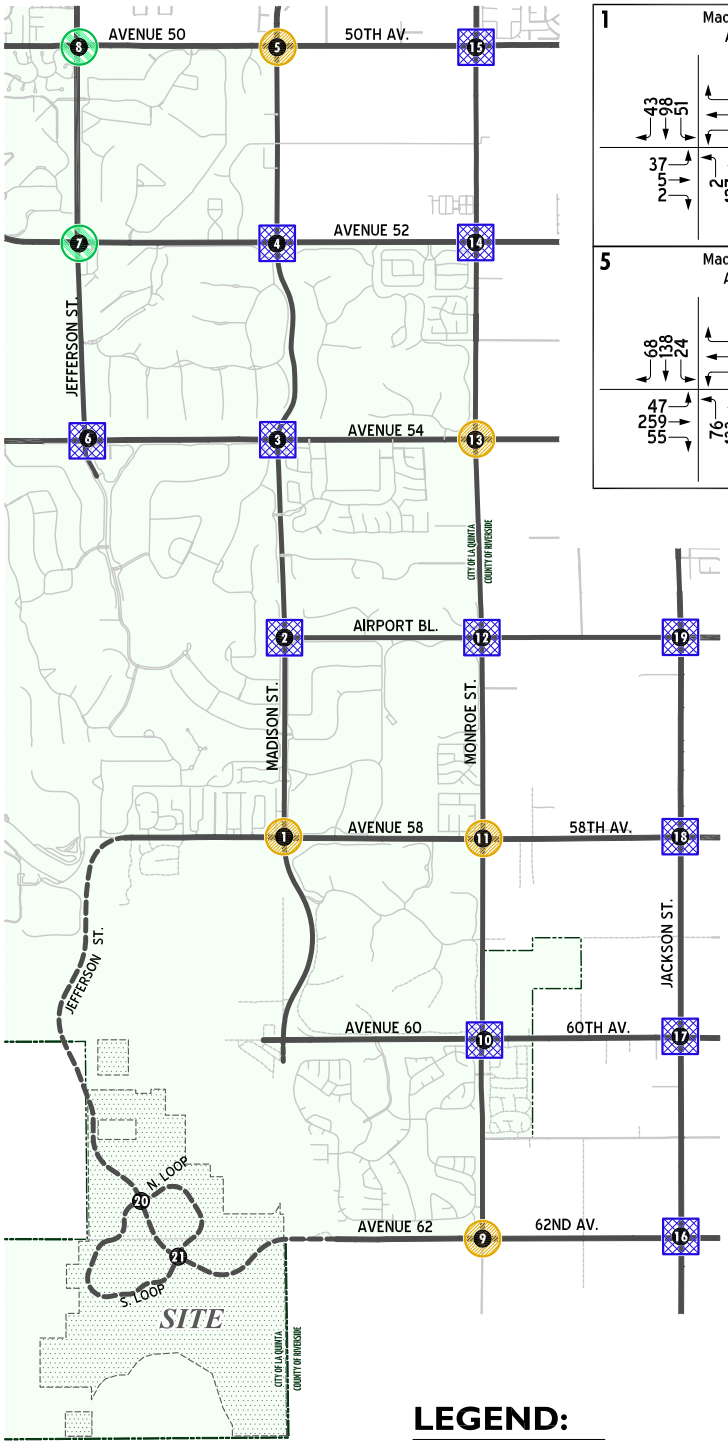
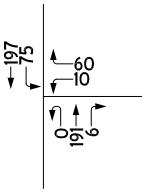


EXHIBIT 2-2: EXISTING (2019) AM PEAK HOUR INTERSECTION VOLUMES (WITH PEAK SEASON ADJUSTMENT)

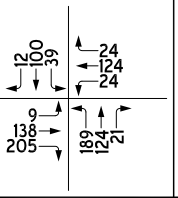


1 Madison St. & Avenue 58

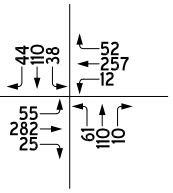
2 Madison St. & Airport Blvd.



3 Madison St. & Avenue 54

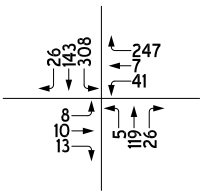


4 Madison St. & Avenue 52

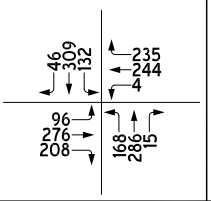


5 Madison St. & Avenue 50

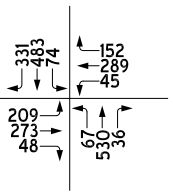
6 Jefferson St. & Avenue 54



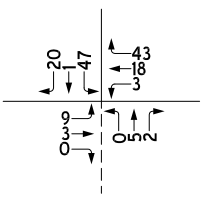
7 Jefferson St. & Avenue 52



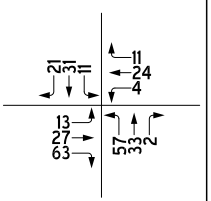
8 Jefferson St. & Avenue 50



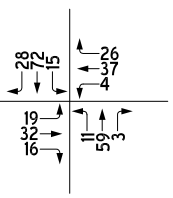
9 Monroe St. & Avenue 62



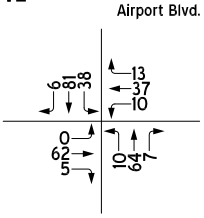
10 Monroe St. & Avenue 60



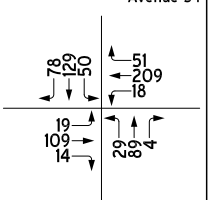
11 Monroe St. & Avenue 58



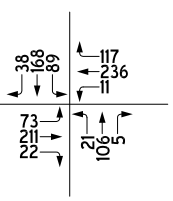
12 Monroe St. & Airport Blvd.



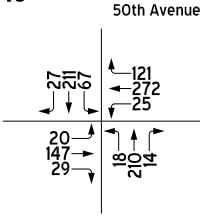
13 Monroe St. & Avenue 54



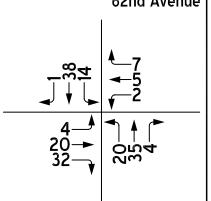
14 Monroe St. & Avenue 52



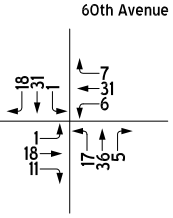
15 Monroe St. & 50th Avenue



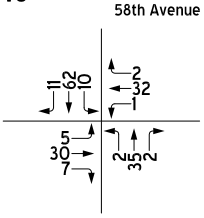
16 Jackson St. & 62nd Avenue



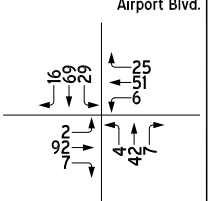
17 Jackson St. & 60th Avenue



18 Jackson St. & 58th Avenue



19 Jackson St. & Airport Blvd.



20 Jefferson St. & N. Loop

FUTURE INTERSECTION

21 Jefferson St. & S. Loop

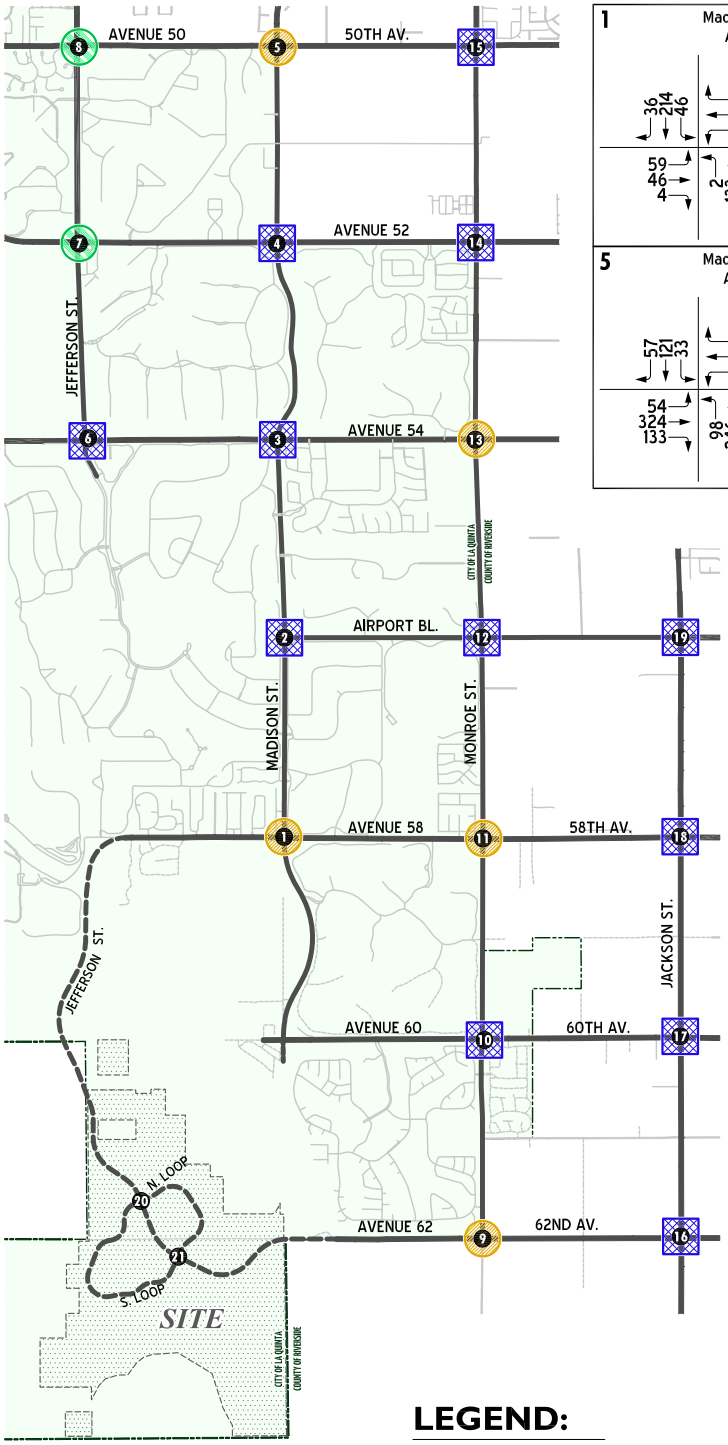
FUTURE INTERSECTION

LEGEND:

- 21 = INTERSECTION ID
- = COUNT DATE: 5/7/2019
- = COUNT DATE: 4/9/2019
- = ESTIMATED 2019 PEAK HOUR VOLUMES (2017 COUNTS HAVE BEEN ADJUSTED TO ESTIMATE 2019 CONDITIONS)

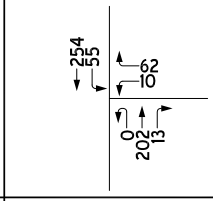
N

EXHIBIT 2-3: EXISTING (2019) PM PEAK HOUR INTERSECTION VOLUMES (WITH PEAK SEASON ADJUSTMENT)

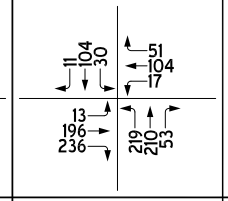


1 Madison St. & Avenue 58

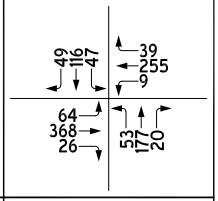
2 Madison St. & Airport Blvd.



3 Madison St. & Avenue 54

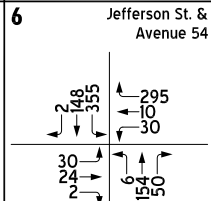


4 Madison St. & Avenue 52

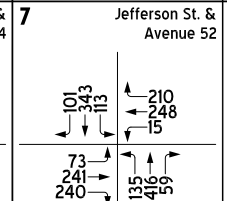


5 Madison St. & Avenue 50

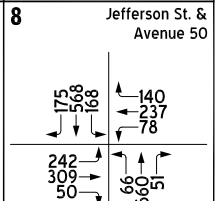
6 Jefferson St. & Avenue 54



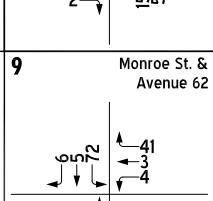
7 Jefferson St. & Avenue 52



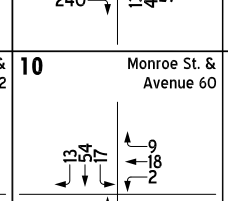
8 Jefferson St. & Avenue 50



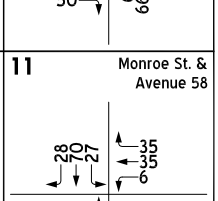
9 Monroe St. & Avenue 62



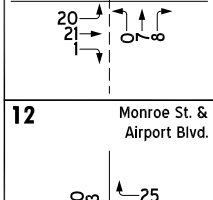
10 Monroe St. & Avenue 60



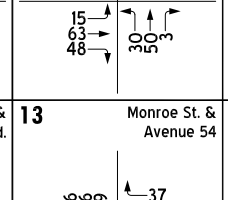
11 Monroe St. & Avenue 58



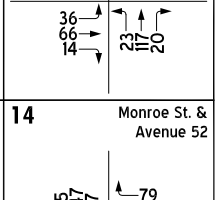
12 Monroe St. & Airport Blvd.



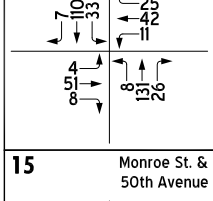
13 Monroe St. & Avenue 54



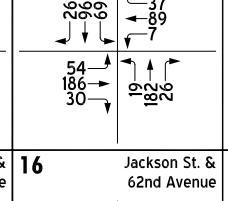
14 Monroe St. & Avenue 52



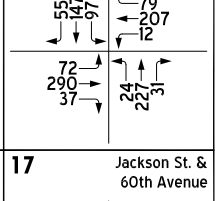
15 Monroe St. & 50th Avenue



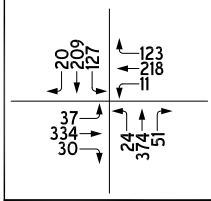
16 Jackson St. & 62nd Avenue



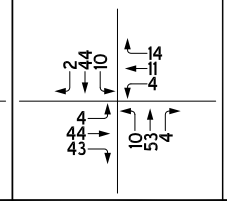
17 Jackson St. & 60th Avenue



18 Jackson St. & 58th Avenue



19 Jackson St. & Airport Blvd.



20 Jefferson St. & N. Loop

FUTURE INTERSECTION

21 Jefferson St. & S. Loop

FUTURE INTERSECTION

LEGEND:

- 21 = INTERSECTION ID
- = COUNT DATE: 5/7/2019
- = COUNT DATE: 4/9/2019
- = ESTIMATED 2019 PEAK HOUR VOLUMES (2017 COUNTS HAVE BEEN ADJUSTED TO ESTIMATE 2019 CONDITIONS)

N

TABLE 2-3: INTERSECTION ANALYSIS FOR EXISTING (2019) CONDITIONS (WITH SEASONAL FACTOR ADJUSTMENT)

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Madison St. / Avenue 58	AWS	1	2	1	1	2	d	1	1	1	1	2	1	8.5	9.3	A	A
2	Madison St. / Airport Blvd.	TS	1	2	d	1	2	0	0	0	0	1	0	1	9.9	8.4	A	A
3	Madison St. / Avenue 54	AWS	2	2	1	1	2	0	1	2	d	1	2	1	12.9	15.9	B	C
4	Madison St. / Avenue 52	TS	2	2	1	2	2	d	1	2	d	1	2	1	27.9	28.5	C	C
5	Madison St. / Avenue 50	TS	2	2	1	2	2	1	1	2	1	1	2	1	28.6	29.4	C	C
6	Jefferson St. / Avenue 54	AWS	0.5	1	0.5	2	2	1	1	2	0	1	1	1	12.2	16.9	B	C
7	Jefferson St. / Avenue 52	RDB	0.5	0.5	1>>	0.5	0.5	1>>	0.5	0.5	1>>	0.5	0.5	1>>	9.4	9.7	A	A
8	Jefferson St. / Avenue 50	TS	1	3	1	2	3	1	1	2	1	1	1	1	46.3	49.4	D	D
9	Monroe St. / Avenue 62	AWS	0	0	0	1	0	1	0.5	0.5	0	0	1	0	7.5	8.0	A	A
10	Monroe St. / Avenue 60	AWS	1	1	0	1	1	1	0.5	0.5	1	0	1!	0	8.1	8.3	A	A
11	Monroe St. / Avenue 58	AWS	0	1!	0	0.5	0.5	1	0	1!	0	0	1!	0	8.1	9.4	A	A
12	Monroe St. / Airport Blvd.	AWS	1	1	0	1	2	d	1	1	1	0	1!	0	8.5	9.2	A	A
13	Monroe St. / Avenue 54	AWS	0	1!	0	0.5	0.5	1	1	1	0	0	1!	0	14.3	12.7	B	B
14	Monroe St. / Avenue 52	AWS	0	1!	0	1	2	0	1	1	1	1	2	d	15.4	27.1	C	D
15	Monroe St. / 50th Avenue	TS	1	2	0	1	2	0	1	1	1	1	1	1>	16.6	18.0	B	B
16	Jackson St. / Avenue 62	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	7.4	7.6	A	A
17	Jackson St. / Avenue 60	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	7.3	7.7	A	A
18	Jackson St. / 58th Avenue	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	7.5	8.2	A	A
19	Jackson St. / Airport Blvd.	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	8.1	8.6	A	A
20	Jefferson St. / N. Loop		Intersection Does Not Exist															
21	Jefferson St. / S. Loop		Intersection Does Not Exist															

[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 Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

[2] Per the Highway Capacity Manual 6th Edition (HCM6), overall average intersection delay and level of service are shown for intersections with a 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 (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 10.1 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop; RDB = Roundabout

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TABLE 2-4: ROADWAY VOLUME/CAPACITY ANALYSIS FOR EXISTING (2019) CONDITIONS (WITH SEASONAL FACTOR ADJUSTMENT)

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	Capacity[2]	ADT[3]	Volume/ Capacity Ratio
Avenue 58	West of Madison Street	Secondary	3	21,000 [4]	1,600	0.08
	West of Monroe Street	Secondary	4	28,000	2,300	0.08
	West of Jackson Street	Secondary	2	14,000 [4]	1,800	0.13
Madison St.	South of Avenue 56	Primary	4	42,600	6,700	0.16
60th Avenue	West of Jackson Street	Primary	2	19,000 [6]	1,200	0.06
Avenue 62	West of Monroe Street	Modified Secondary	2	19,000	600	0.03
	West of Jackson Street	Secondary	2	14,000 [4]	1,700	0.12
Monroe St.	South of Avenue 60	Secondary	2	14,000 [4]	1,600	0.11
	South of Avenue 58	Primary	2	19,000 [6]	2,700	0.14
	South of Avenue 56	Primary	3	31,950 [5]	3,400	0.11
Jackson St.	South of Airport Boulevard	Primary	2	19,000 [6]	2,400	0.13

[1] Existing Number of Through lanes

[2] Source: City of La Quinta Engineering Bulletin #06-13 (July 2015)

[3] Average Daily Traffic (ADT) expressed in vehicles per day.

[4] Capacity was calculated as a ratio of 4-lane Secondary capacity.

[5] Capacity was calculated as a ratio of 4-lane Primary capacity.

[6] Estimated capacity for 2-lane Primary.

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2.4 EXISTING TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. Based on the peak hour volume based Warrant #3 of the 2012 Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices* (MUTCD), as amended for use in California, the following 4 unsignalized study area intersections currently warrant a traffic signal:

- Madison Street at Avenue 54 (Traffic signal improvement included in the La Quinta GP)
- Jefferson Street at Avenue 54 (Traffic signal improvement included in the La Quinta CIP 2018-2023 as "unfunded additional projects")
- Monroe Street at Avenue 54 (Traffic signal and lane improvements included in the La Quinta GP)
- Monroe Street at Avenue 52 (Traffic signal improvement included in the La Quinta GP)

The traffic signal warrant worksheets for Existing traffic conditions are included in Appendix 2.3 of this report.

3 EXISTING PLUS PROJECT TRAFFIC ANALYSIS

This section evaluates Existing plus Project (E+P) traffic conditions to determines circulation system deficiencies that would occur on the existing roadway system in the scenario of the Project buildout (phase 3) being placed upon Existing traffic conditions. For the purposes of this analysis, the E+P analysis scenario was utilized to determine potentially significant Project impacts associated solely with the development of the proposed Project and the corresponding mitigation measures necessary to mitigate these impacts. Project buildout (phase 3) land use, trip distribution, and trip assignment are discussed in detail in Section 6 of this report.

Exhibit 3-1 shows the existing plus project daily traffic projections on study area roadway segments. Exhibit 3-2 presents the existing plus project weekday AM peak hour volumes at study area intersections. Exhibit 3-3 depicts the existing plus project weekday PM peak hour volumes at study area analysis locations.

3.1 OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under E+P traffic conditions. The intersection analysis results are summarized in Table 3-1, which indicates that the study area intersections are projected to operate at acceptable level of service, with existing geometry, with the exception of Monroe Street / Avenue 52 (#14). Installation of a traffic signal at this location is anticipated to improve the intersection to provide acceptable LOS

The intersection operations analysis worksheets for E+P traffic conditions are included in Appendix 3.1 of this TIA.

Table 3-2 provides a summary of the roadway segment analysis for E+P traffic conditions. As shown on Table 3-2, all study roadway segments analyzed are anticipated to operate at acceptable LOS under E+P traffic conditions.

3.2 TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrant analyses have been performed at all applicable unsignalized study area intersections for Existing Plus Project traffic conditions (see Appendix 3.2). Two additional intersections are projected to satisfy traffic signal warrants:

- Madison Street at Avenue 58 (Traffic signal improvement included in the La Quinta GP)
- Monroe Street at Avenue 62

EXHIBIT 3-1: EXISTING PLUS PROJECT AVERAGE DAILY TRAFFIC (ADT)

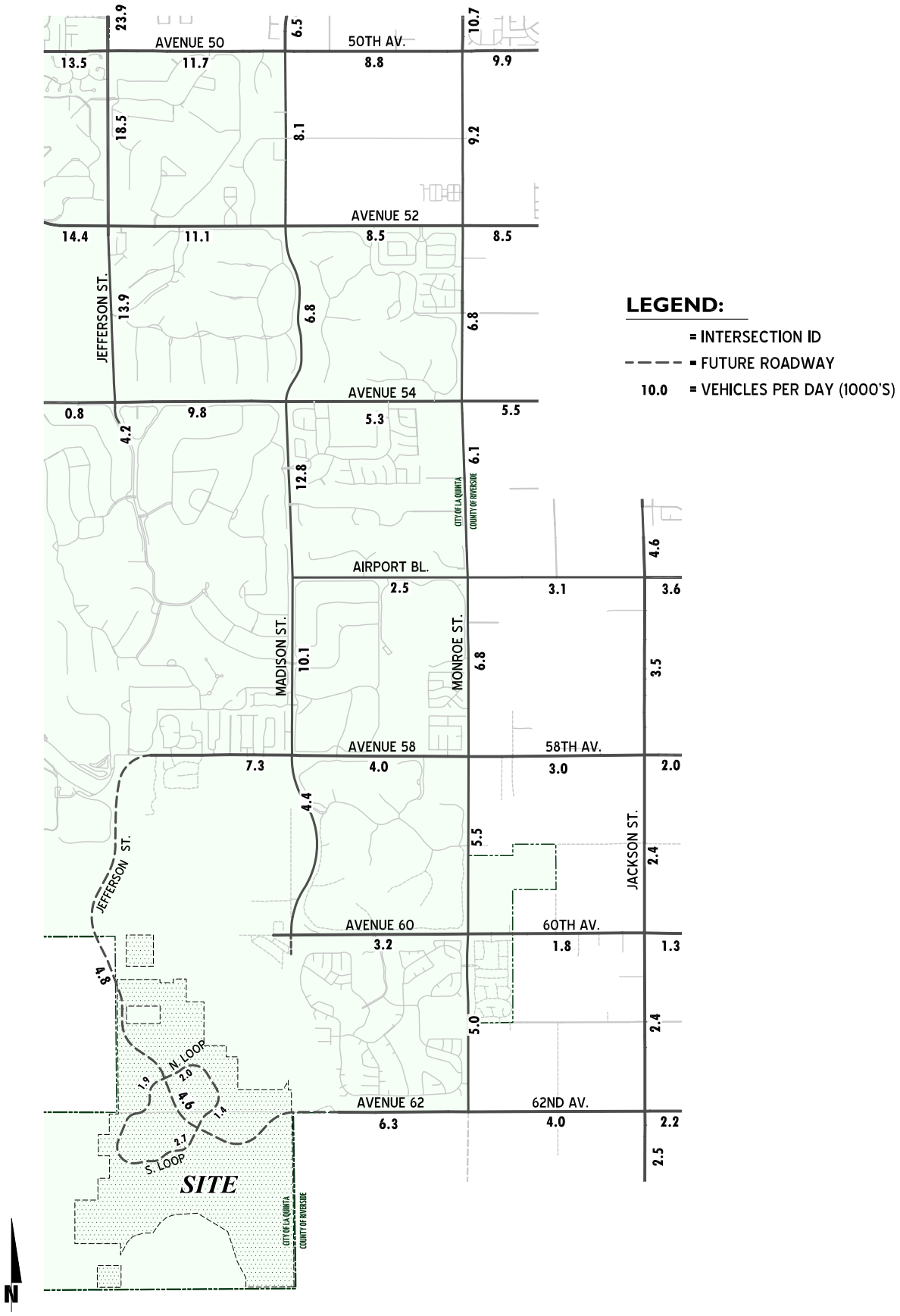
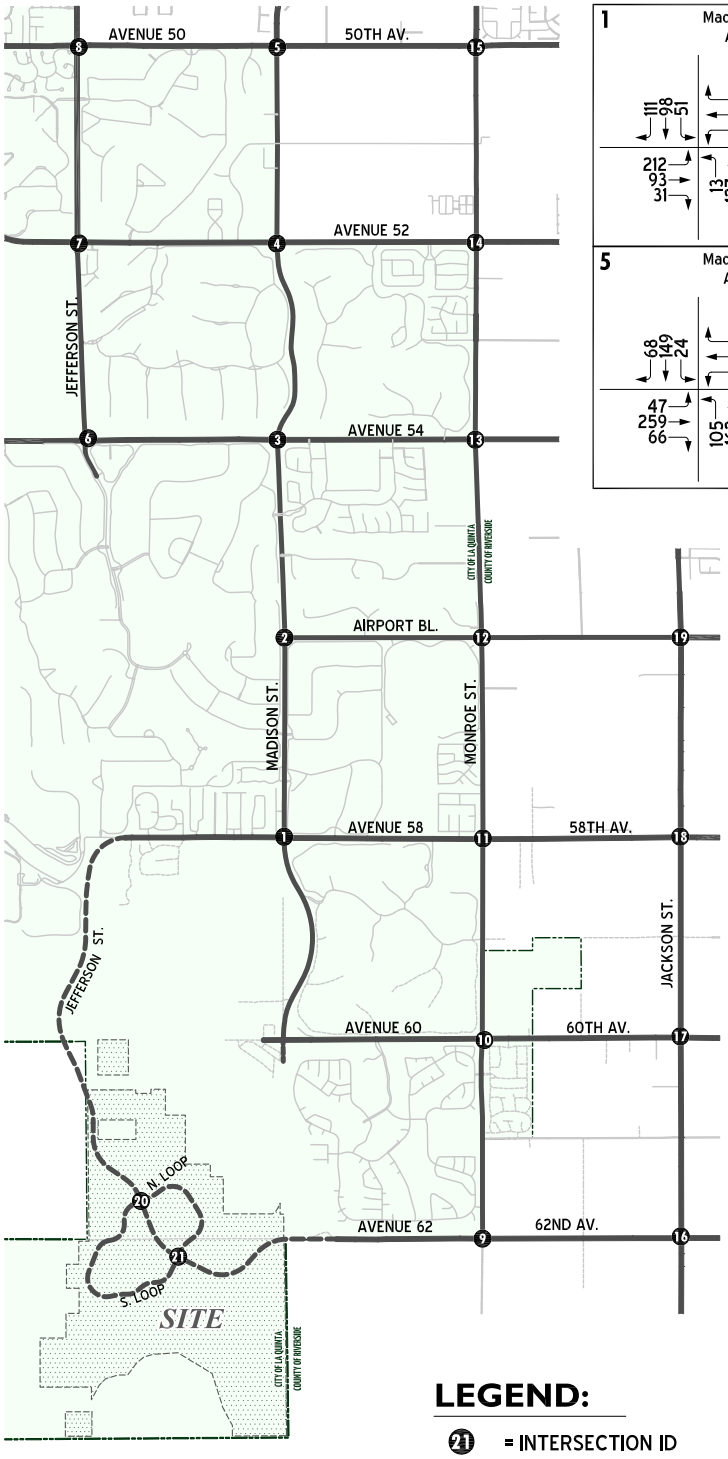


EXHIBIT 3-2: EXISTING PLUS PROJECT
AM PEAK HOUR INTERSECTION VOLUMES



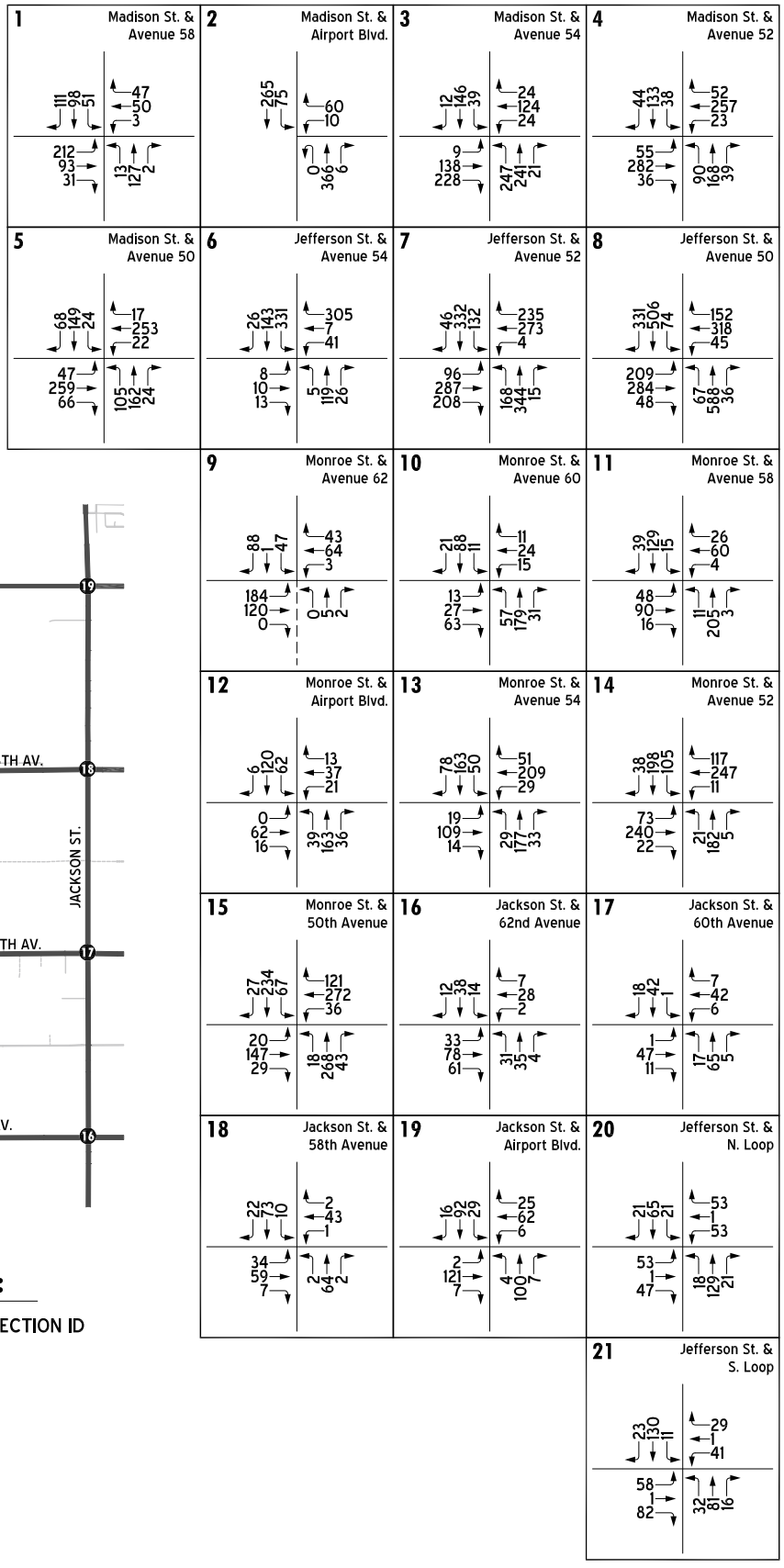
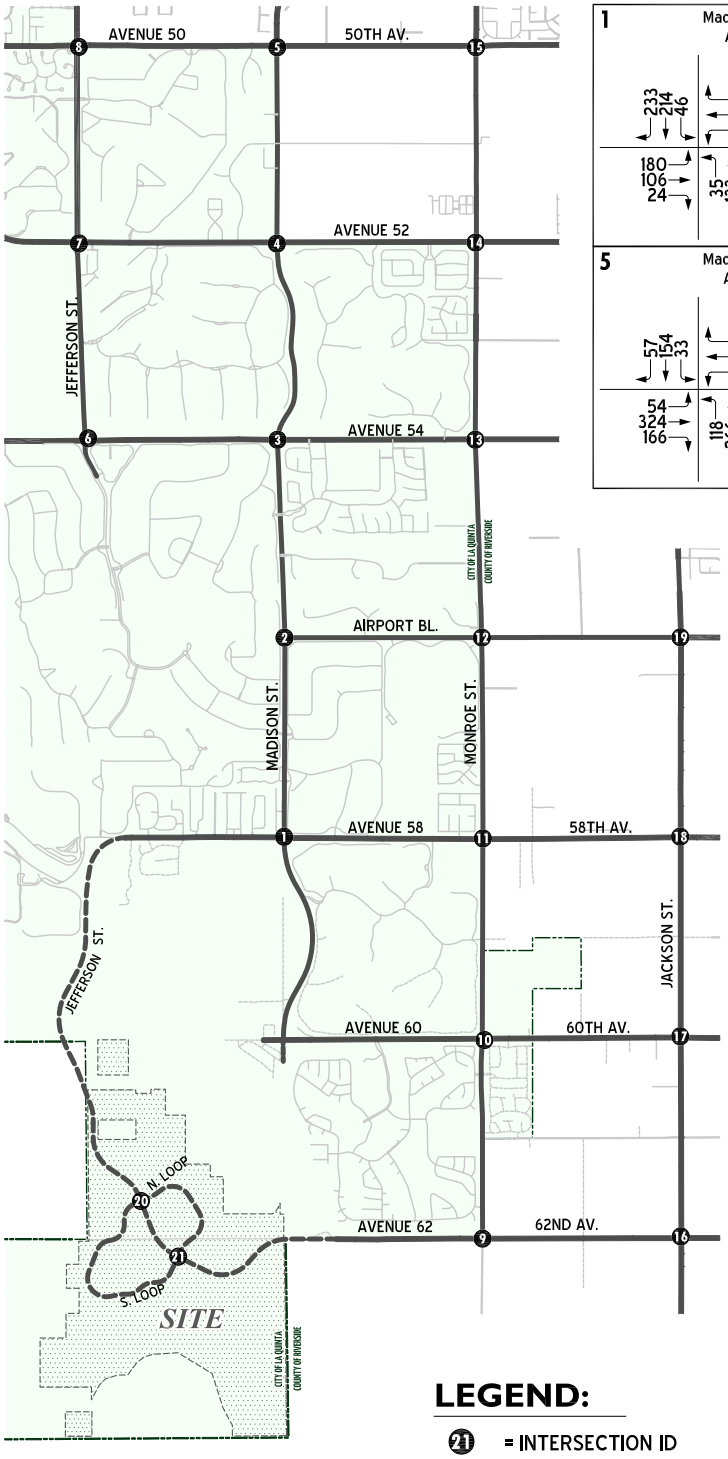


EXHIBIT 3-3: EXISTING PLUS PROJECT
PM PEAK HOUR INTERSECTION VOLUMES



1 Madison St. & Avenue 58

2 Madison St. & Airport Blvd.

3 Madison St. & Avenue 54

4 Madison St. & Avenue 52

5 Madison St. & Avenue 50

6 Jefferson St. & Avenue 54

7 Jefferson St. & Avenue 52

8 Jefferson St. & Avenue 50

9 Monroe St. & Avenue 62

10 Monroe St. & Avenue 60

11 Monroe St. & Avenue 58

12 Monroe St. & Airport Blvd.

13 Monroe St. & Avenue 54

14 Monroe St. & Avenue 52

15 Monroe St. & 50th Avenue

16 Jackson St. & 62nd Avenue

17 Jackson St. & 60th Avenue

18 Jackson St. & 58th Avenue

19 Jackson St. & Airport Blvd.

20 Jefferson St. & N. Loop

21 Jefferson St. & S. Loop

TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING PLUS PROJECT CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Madison St. / Avenue 58																	
	- Without Improvements	AWS	1	2	1	1	2	d	1	1	1	1	2	1	11.0	13.9	B	B
2	Madison St. / Airport Blvd.	TS	1	2	d	1	2	0	0	0	0	1	0	1	8.3	6.7	A	A
3	Madison St. / Avenue 54																	
	- Without Improvements	AWS	2	2	1	1	2	0	1	2	d	1	2	1	16.3	27.9	C	D
4	Madison St. / Avenue 52	TS	2	2	1	2	2	d	1	2	d	1	2	1	29.9	30.7	C	C
5	Madison St. / Avenue 50	TS	2	2	1	2	2	1	1	2	1	1	2	1	29.5	30.0	C	C
6	Jefferson St. / Avenue 54																	
	- Without Improvements	AWS	0.5	1	0.5	2	2	1	1	2	0	1	1	1	17.1	21.6	C	C
7	Jefferson St. / Avenue 52																	
	- Without Improvements	RDB	0.5	0.5	1>>	0.5	0.5	1>>	0.5	0.5	1>>	0.5	0.5	1>>	11.3	12.5	B	B
8	Jefferson St. / Avenue 50																	
	- Without Improvements	TS	1	3	1	2	3	1	1	2	1	1	1	1	47.7	49.2	D	D
9	Monroe St. / Avenue 62																	
	- Without Improvements	AWS	0	0	0	1	0	1	0.5	0.5	0	0	1	0	9.6	12.1	A	B
10	Monroe St. / Avenue 60																	
	- Without Improvements	AWS	1	1	0	1	1	1	0.5	0.5	1	0	1!	0	10.2	11.1	B	B
11	Monroe St. / Avenue 58																	
	- Without Improvements	AWS	0	1!	0	0.5	0.5	1	0	1!	0	0	1!	0	9.9	17.4	A	C
12	Monroe St. / Airport Blvd.																	
	- Without Improvements	AWS	1	1	0	1	2	d	1	1	1	0	1!	0	10.3	11.9	B	B
13	Monroe St. / Avenue 54																	
	- Without Improvements	AWS	0	1!	0	0.5	0.5	1	1	1	0	0	1!	0	17.8	18.0	C	C
14	Monroe St. / Avenue 52																	
	- Without Improvements	AWS	0	1!	0	1	2	0	1	1	1	1	2	d	22.8	**50.4**	C	**F**
	- With Improvements	**TS**	0	1!	0	1	2	0	1	1	1	1	2	d	34.2	30.3	C	C
15	Monroe St. / 50th Avenue	TS	1	2	0	1	2	0	1	1	1	1	1	1>	16.2	17.4	B	B
16	Jackson St. / Avenue 62																	
	- Without Improvements	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	8.3	8.6	A	A
17	Jackson St. / Avenue 60																	
	- Without Improvements	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	7.6	8.2	A	A
18	Jackson St. / 58th Avenue																	
	- Without Improvements	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	8.0	9.2	A	A
19	Jackson St. / Airport Blvd.																	
	- Without Improvements	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	8.6	9.7	A	A
20	Jefferson St. / N. Loop	**RDB**	0	**1!**	0	0	**1!**	0	0	**1!**	0	0	**1!**	0	4.0	4.7	A	A
21	Jefferson St. / S. Loop	**RDB**	0	**1!**	0	0	**1!**	0	0	**1!**	0	0	**1!**	0	4.1	4.8	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 Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane; **1** = Improvement

1 = Improvement per City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 2012)

[2] Per the Highway Capacity Manual 6th Edition (HCM6), overall average intersection delay and level of service are shown for intersections with a 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 (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 10.1 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop; RDB = Roundabout

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TABLE 3-2: ROADWAY VOLUME/CAPACITY ANALYSIS FOR EXISTING PLUS PROJECT CONDITIONS

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	Capacity[2]	With Project	Volume/ Capacity Ratio
Avenue 58	West of Madison Street	Secondary	3	21,000 [4]	7,300	0.35
	West of Monroe Street	Secondary	4	28,000	4,000	0.14
	West of Jackson Street	Secondary	2	14,000 [4]	3,000	0.21
Madison St.	South of Avenue 56	Primary	4	42,600	10,100	0.24
60th Avenue	West of Jackson Street	Primary	2	19,000 [6]	1,800	0.09
Avenue 62	West of Monroe Street	Modified Secondary	2	19,000	6,300	0.33
	West of Jackson Street	Secondary	2	14,000 [4]	4,000	0.29
Monroe St.	South of Avenue 60	Secondary	2	14,000 [4]	5,000	0.36
	South of Avenue 58	Primary	2	19,000 [6]	5,500	0.29
	South of Avenue 56	Primary	3	31,950 [5]	6,800	0.21
Jackson St.	South of Airport Boulevard	Primary	2	19,000 [6]	3,500	0.18

[1] Existing Number of Through lanes

[2] Source: City of La Quinta Engineering Bulletin #06-13 (July 2015)

[3] Average Daily Traffic (ADT) expressed in vehicles per day.

[4] Capacity was calculated as a ratio of 4-lane Secondary capacity.

[5] Capacity was calculated as a ratio of 4-lane Primary capacity.

[6] Estimated capacity for 2-lane Primary.

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4 PROJECT PHASE 1 TRAFFIC ANALYSIS

This section discusses Project Phase 1 conditions, which includes Existing (2019) volumes, Ambient Growth traffic for 7 years, cumulative development traffic, and Project traffic. The results of the Phase 1 HCM intersection analysis and roadway segment capacity analysis are also presented.

4.1 PROJECT LAND USE AND TRIP GENERATION

Project Phase 1 is anticipated to occur in 2026, and includes 530 single family detached residential homes, 74 duplex residential units, and PA 11 resort/golf uses (golf practice, golf academy, and banquet accommodations)..

Trip generation represents the amount of traffic which is both attracted to and produced by a development. The Project trip generation rates used for the traffic phasing analysis are based on the Institute of Transportation Engineers (ITE) Trip Generation manual, 10th Edition (2017).

Trip generation rates are presented on Table 4-1 for Phase 1 conditions. ITE trip generation rates for Single Family Detached (Code 210), Multifamily Housing (Low-Rise) (Code 220), and Golf Course (Code 430) are used.

ITE LU Code 430 indicates golf course sites may also have driving ranges and clubhouses with a pro shop, restaurant, lounge, and banquet facilities. This LU code is therefore used to estimate the vehicle trips generated by resort/golf uses in PA 11, resulting in 365 trip ends per day on a typical weekday, with 21 vehicles per hour (VPH) during the weekday AM peak hour, and 34 VPH during the weekday PM peak hour.

As shown on Table 4-1, Phase 1 of the proposed Project is anticipated to generate a net total of 5,836 external trip-ends per day on a typical weekday with 442 external vehicles per hour (VPH) during the weekday AM peak hour and 590 external VPH during the weekday PM peak hour.

The project land uses consists of a mix of recreation and residential uses, so reasonable assumptions regarding internal interactions between these uses are included in the trip generation calculations.

4.2 PROJECT TRIP DISTRIBUTION

The trip distribution pattern for Phase 1 of the proposed Project is graphically depicted on Exhibit 4-1. The westerly extension of Avenue 62 as an interim section (40-foot pavement section), west of Monroe Street is used for Project Phase 1 access.

At the first intersection after leaving the Project (Monroe Street at Avenue 62), approximately 80% of the traffic is anticipated to turn left (north) while the remaining 20% continue east. Much of the Project traffic heading northward continues north of Avenue 58 (70%).

TABLE 4-1: PROJECT PHASE 1 (2026) TRIP GENERATION SUMMARY

Trip Generation Rates[1]										
	ITE LU		AM Peak Hour			PM Peak Hour			
Land Use	Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	210	530 DU	0.19	0.55	0.74	0.62	0.37	0.99	9.44
Multifamily Housing (Low-Rise)	220	74 DU	0.11	0.35	0.46	0.35	0.21	0.56	7.32
Resort/Golf[3]	430	12 HOLES	1.39	0.37	1.76	1.54	1.37	2.91	30.38

Trip Generation Results									
	ITE LU		AM Peak Hour			PM Peak Hour			
Land Use	Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	210	530 DU	101	292	393	329	196	525	5,003
Multifamily Housing (Low-Rise)	220	74 DU	8	26	34	26	16	42	542
Internal to Resort/Golf			*0*	*(2)*	*(2)*	*(2)*	*(2)*	*(4)*	*(37)*
Residential External Trips			109	316	425	353	210	563	5,508
Resort/Golf[3]	430	12 HOLES	17	4	21	18	16	34	365
Internal to Residential			*(2)*	*0*	*(2)*	*(2)*	*(2)*	*(4)*	*(37)*
Resort/Golf[3] External Trips			15	4	19	16	14	30	328
Project Subtotal			126	322	448	373	228	601	5,910
Internal Capture Subtotal			*(2)*	*(2)*	*(4)*	*(4)*	*(4)*	*(8)*	*(74)*
Phase 1 (2026) Project Total External Trips			**124**	**320**	**444**	**369**	**224**	**593**	**5,836**

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition (2017).

[2] DU = Dwelling Unit

[3] Resort/Golf (golf practice, golf academy, and banquet accommodations).

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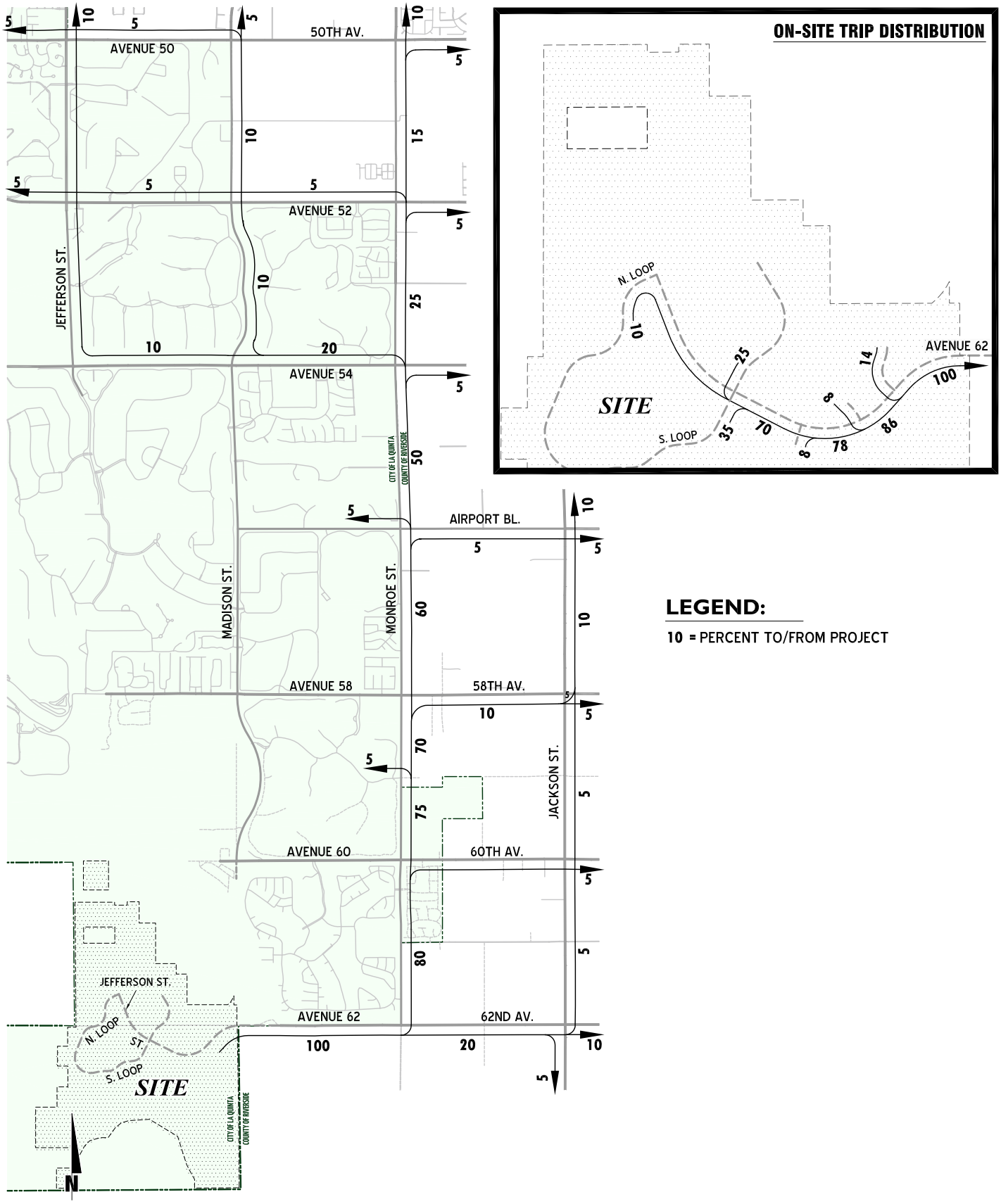
EXHIBIT 4-1: PHASE 1 (2026) PROJECT TRIP DISTRIBUTION



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4.3 MODAL SPLIT

Although the use of public transit, walking, and/or bicycling have the potential to reduce Project-related traffic, such reductions have not been taken into considerations in this traffic study in order to provide a conservative analysis of the Project's potential to add traffic at study area analysis locations.

4.4 TRAFFIC VOLUME ASSIGNMENT

Based on the identified Project Phase 1 development area traffic generation and trip distribution pattern, Project only ADT and weekday AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-2 through 4-4, respectively.

Ambient growth between 2019 and 2026 as well as cumulative development are incorporated in the cumulative traffic projections shown on Exhibits 4-5 through 4-7. Exhibit 4-5 shows the cumulative (2026) daily traffic projections on study area roadway segments. Exhibit 4-6 presents the cumulative (2026) weekday AM peak hour volumes at study area intersections. Exhibit 4-7 depicts the cumulative (2026) weekday PM peak hour volumes at study area analysis locations.

4.5 OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under Phase 1 (2026) Without and With Project traffic conditions. The intersection analysis results are summarized in Table 4-2. The intersection operations analysis worksheets for Phase 1 (2026) Without and With Project traffic conditions are included in Appendix 4.1 of this report.

One off-site intersection (Monroe Street at Avenue 60) experiences a Project impact for Phase 1 conditions. The intersection improvement to provide acceptable LOS for Monroe Street at Avenue 60 is construction of a traffic signal, which is recommended to be implemented by the Project for eventual reimbursement via the City of La Quinta CIP.

Table 4-2 indicates that the following eight study area intersections experience deficient operations under cumulative "without project" conditions, requiring CIP-funded improvements in order to maintain acceptable LOS for both Phase 1 Without and With Project conditions:

- Madison Street at Avenue 58 (Traffic signal improvement included in the La Quinta GP)
- Madison Street at Avenue 54 (Traffic signal improvement included in the La Quinta GP)
- Jefferson Street at Avenue 54 (Traffic signal improvement included in the La Quinta CIP 2018-2023 as "unfunded additional projects", WB Right Turn Overlap improvement included in the La Quinta GP)
- Jefferson Street at Avenue 50 (2nd WB Through Lane improvement included in the La Quinta GP)
- Monroe Street at Avenue 58 (Traffic signal improvement included in the La Quinta GP)
- Monroe Street at Airport Boulevard (Traffic signal improvement included in the La Quinta CIP 2018-2023 as "unfunded additional projects")
- Monroe Street at Avenue 54 (Traffic signal and lane improvements included in the La Quinta GP)
- Monroe Street at Avenue 52 (Traffic signal improvement included in the La Quinta GP)

EXHIBIT 4-2: PROJECT ONLY PHASE 1 (2026)
AVERAGE DAILY TRAFFIC (ADT)

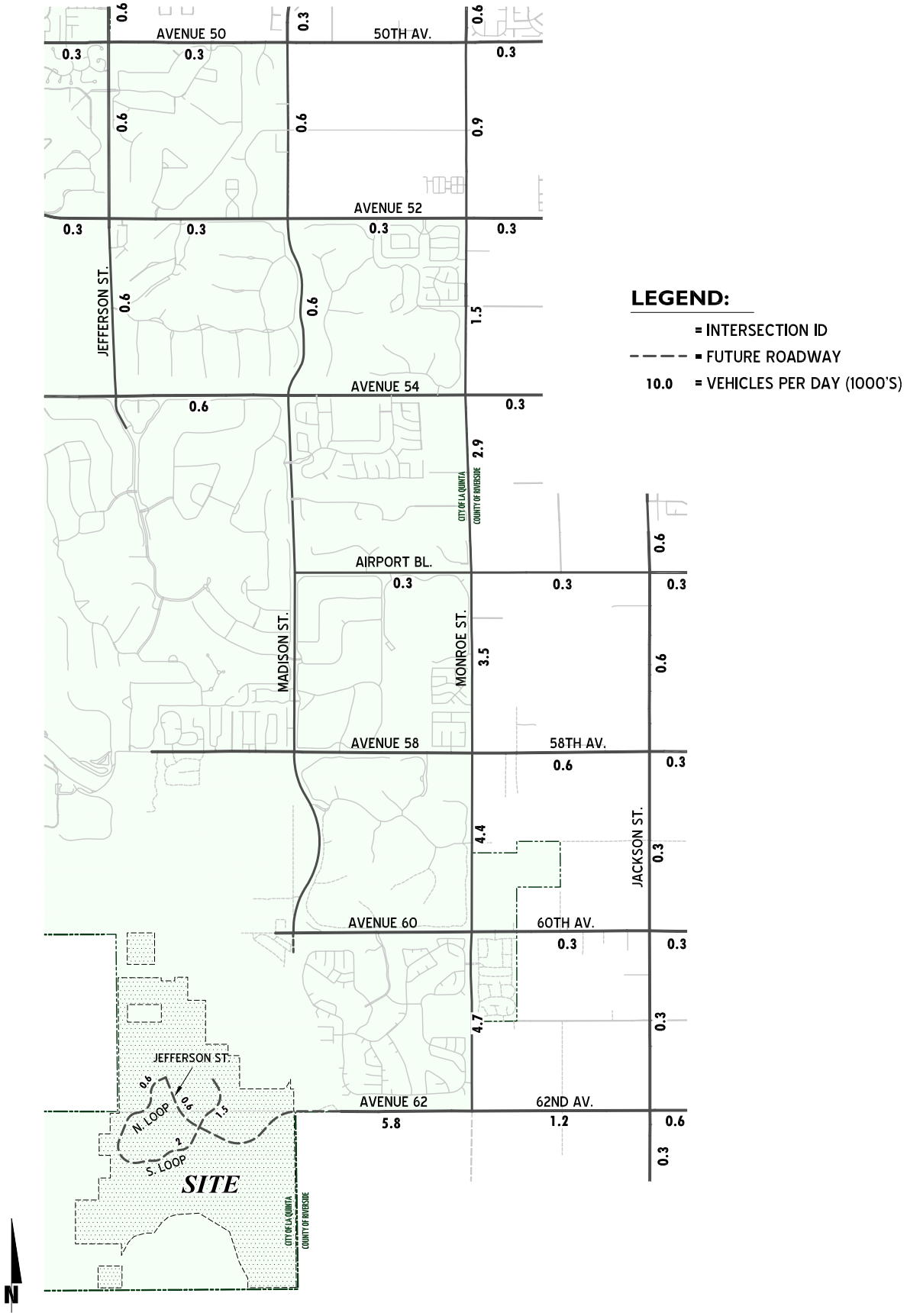
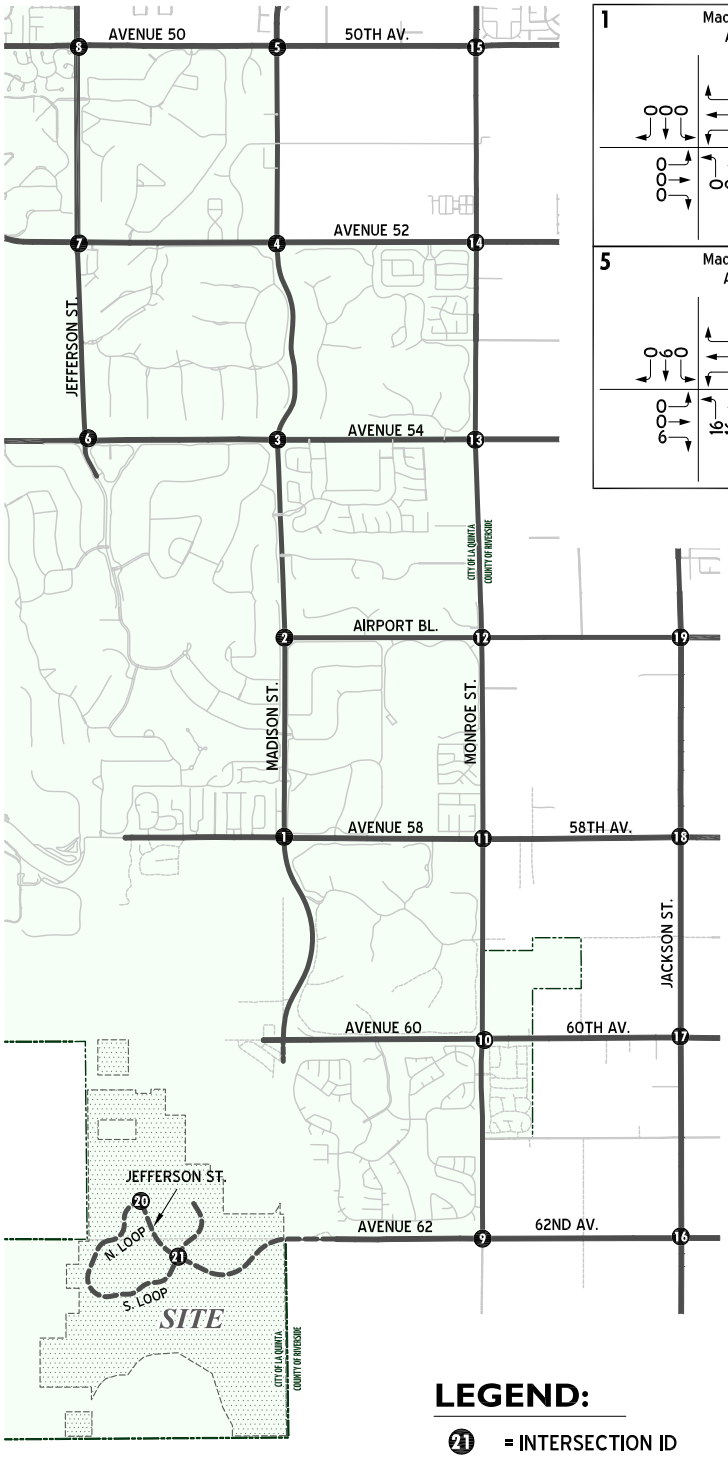


EXHIBIT 4-3: PROJECT ONLY PHASE 1 (2026)
AM PEAK HOUR INTERSECTION VOLUMES



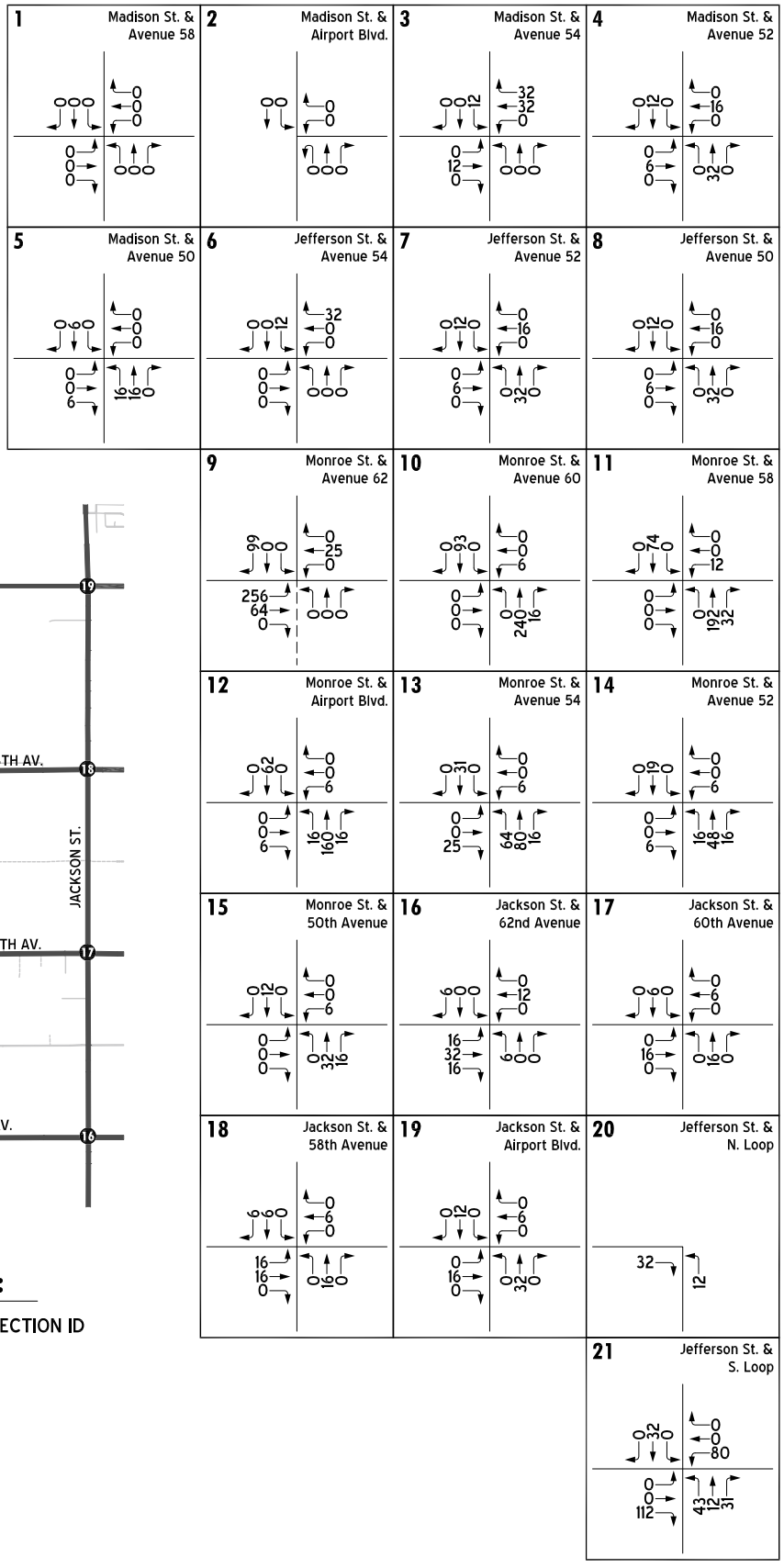
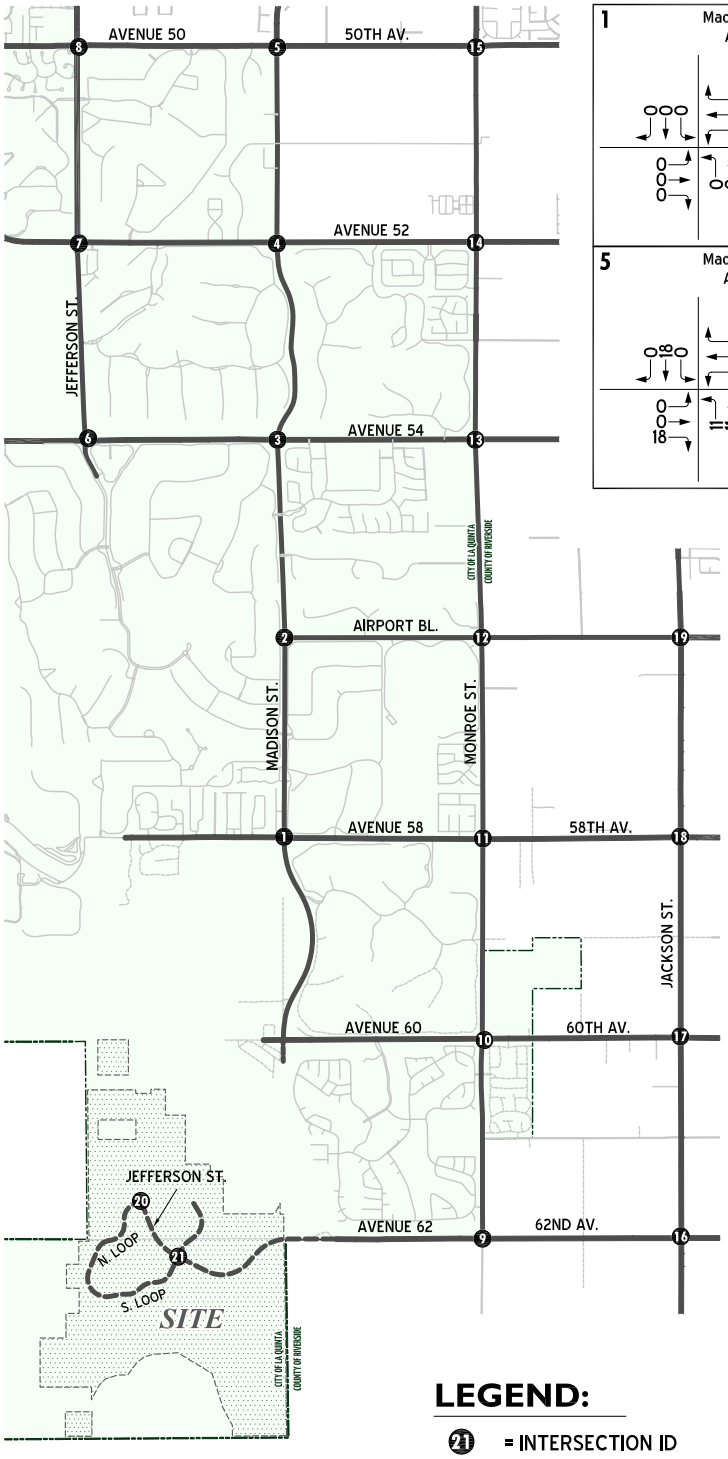


EXHIBIT 4-4: PROJECT ONLY PHASE 1 (2026)
PM PEAK HOUR INTERSECTION VOLUMES



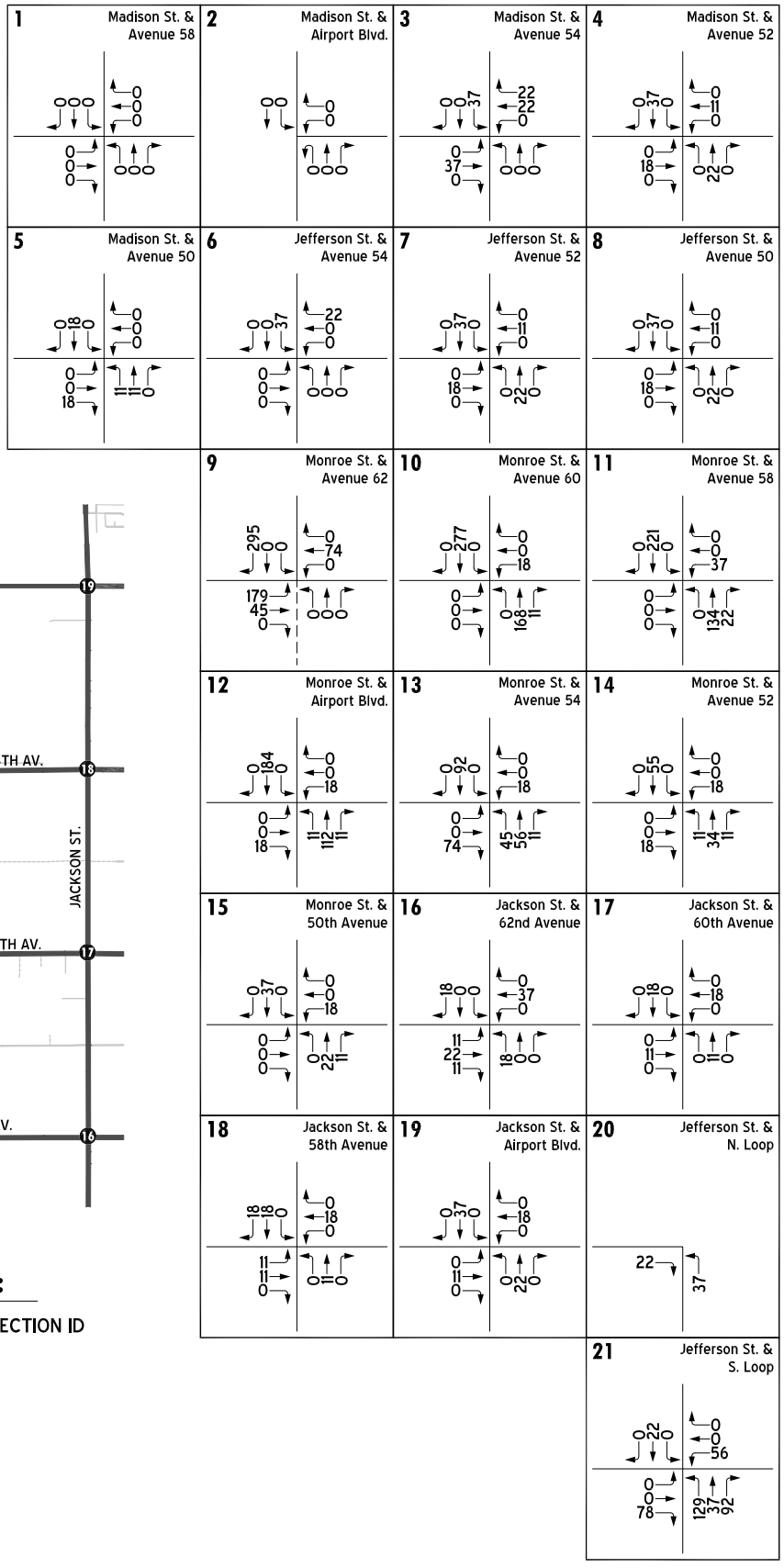


EXHIBIT 4-5: CUMULATIVE WITH PHASE 1 PROJECT (2026)
AVERAGE DAILY TRAFFIC (ADT)

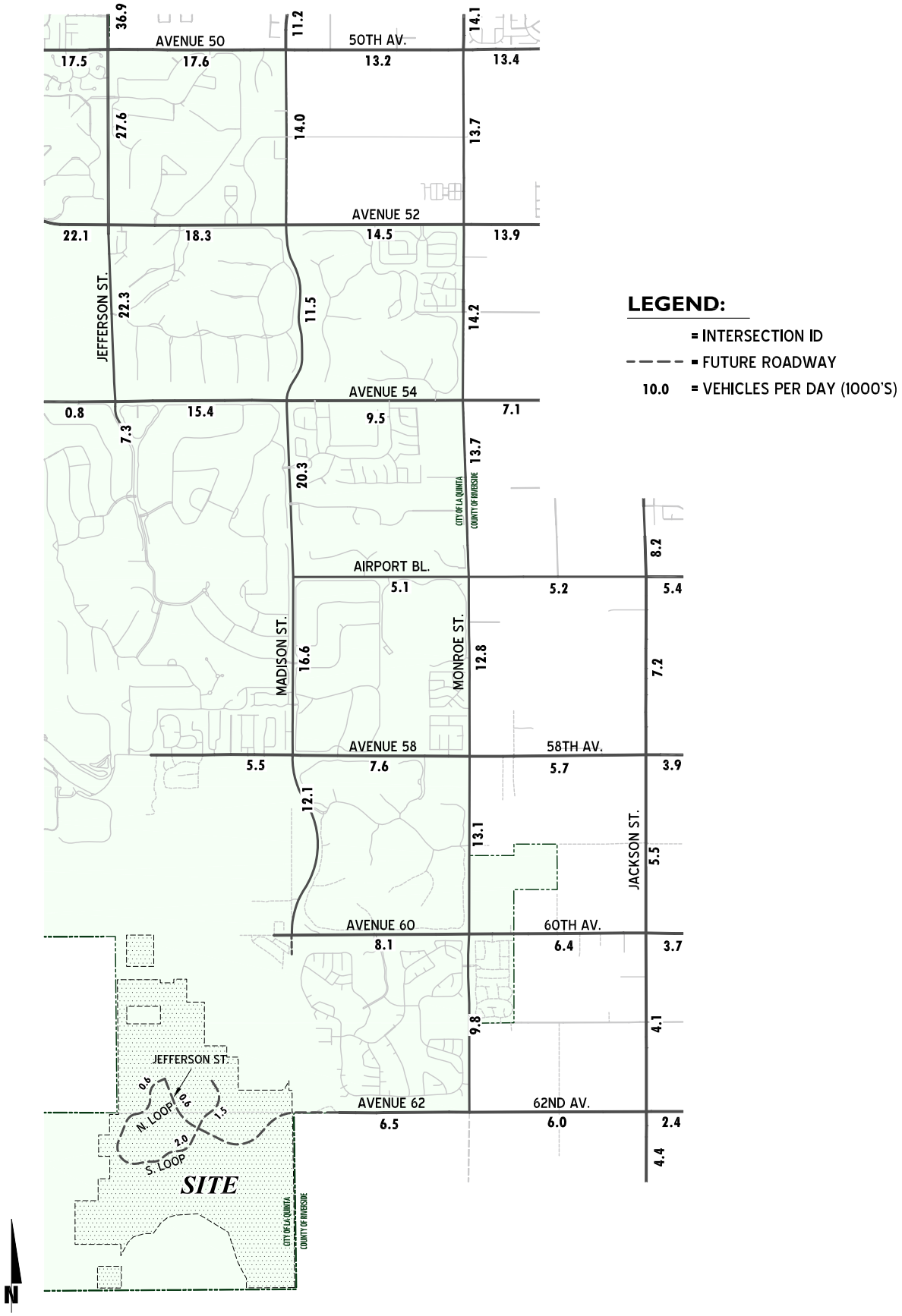
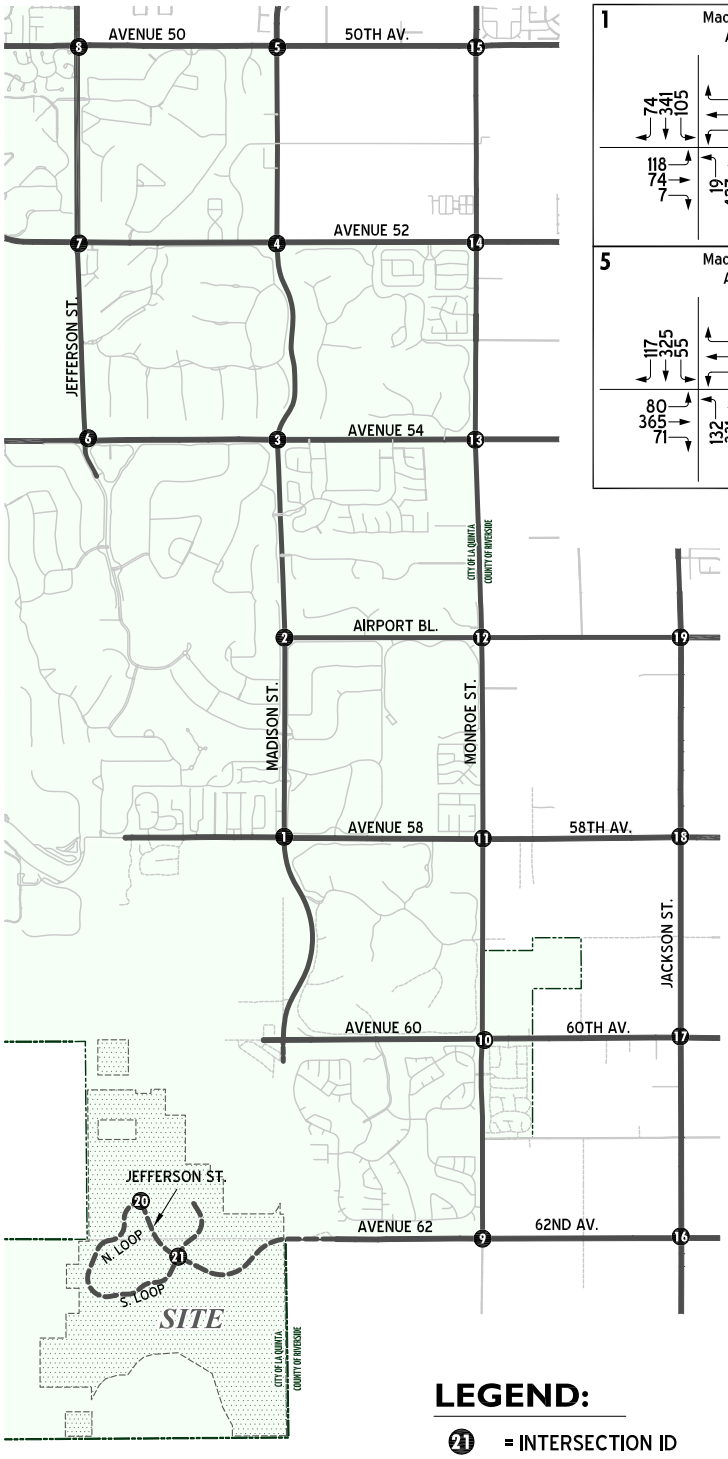


EXHIBIT 4-6: CUMULATIVE WITH PHASE 1 PROJECT (2026)
AM PEAK HOUR INTERSECTION VOLUMES



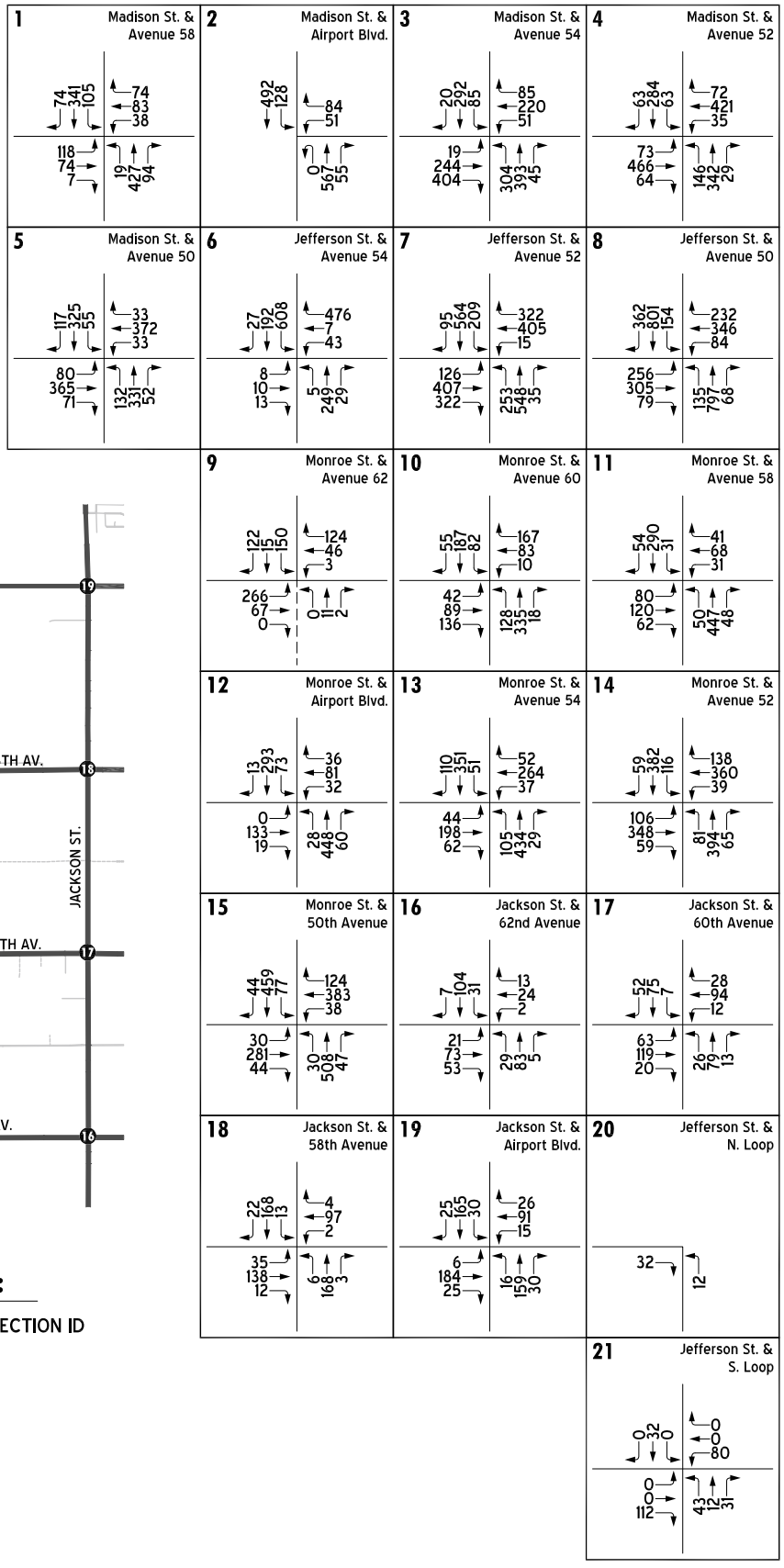
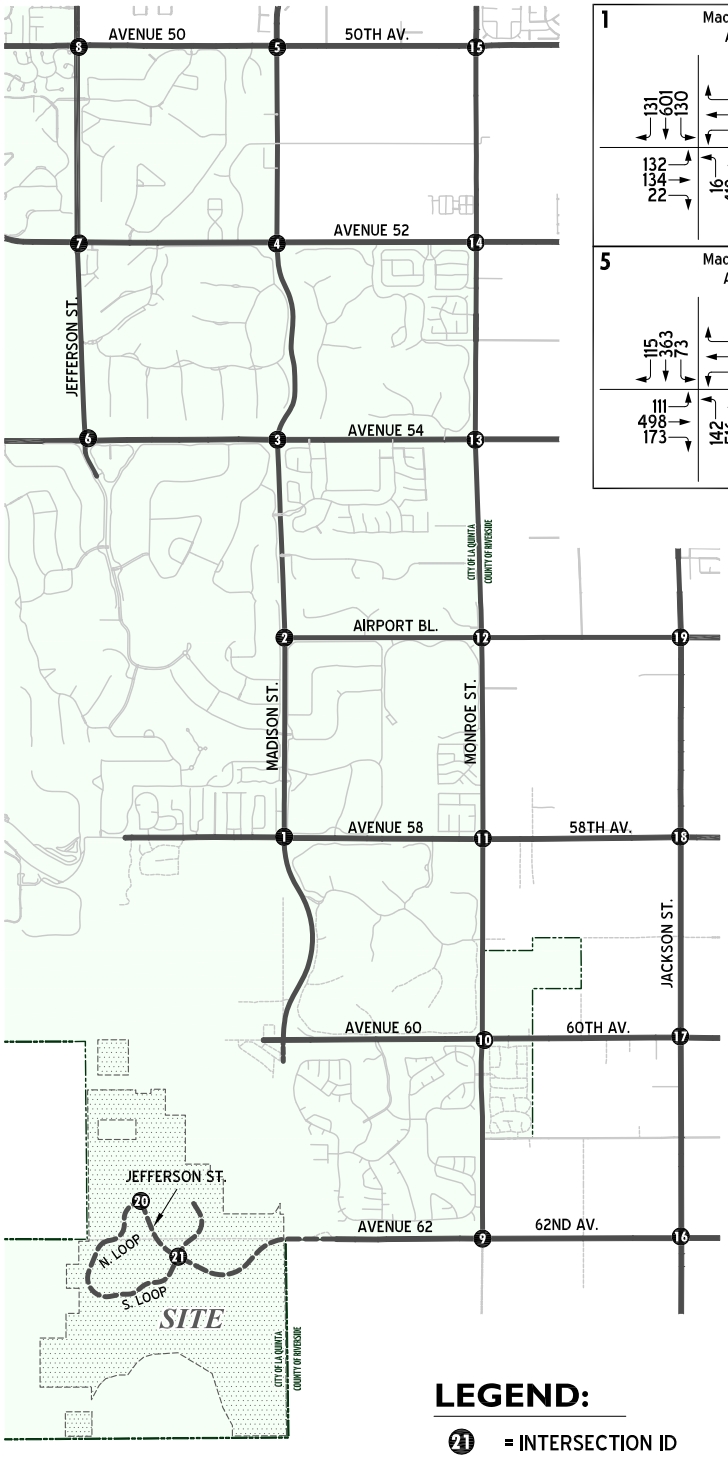


EXHIBIT 4-7: CUMULATIVE WITH PHASE 1 PROJECT (2026)
PM PEAK HOUR INTERSECTION VOLUMES

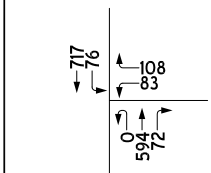


LEGEND:

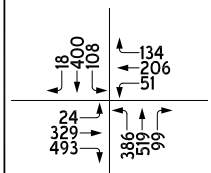
21 = INTERSECTION ID

1 Madison St. & Avenue 58

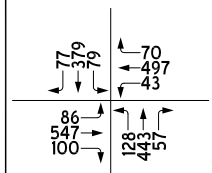
2 Madison St. & Airport Blvd.



3 Madison St. & Avenue 54

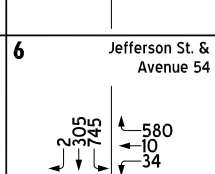


4 Madison St. & Avenue 52

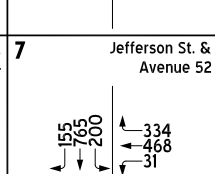


5 Madison St. & Avenue 50

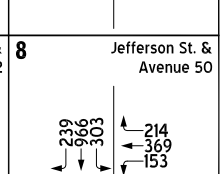
6 Jefferson St. & Avenue 54



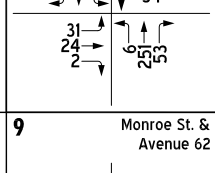
7 Jefferson St. & Avenue 52



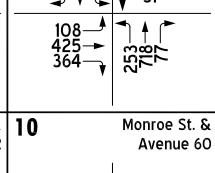
8 Jefferson St. & Avenue 50



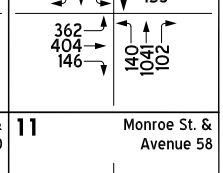
9 Monroe St. & Avenue 62



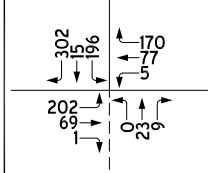
10 Monroe St. & Avenue 60



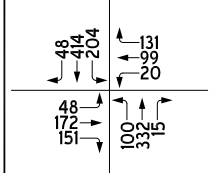
11 Monroe St. & Avenue 58



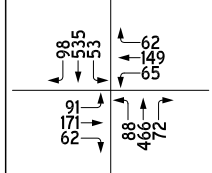
12 Monroe St. & Airport Blvd.



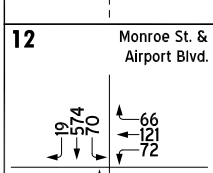
13 Monroe St. & Avenue 54



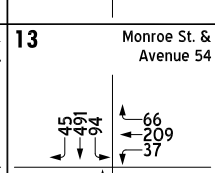
14 Monroe St. & Avenue 52



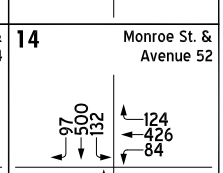
15 Monroe St. & 50th Avenue



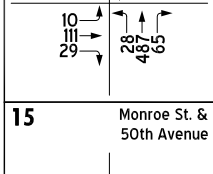
16 Jackson St. & 62nd Avenue



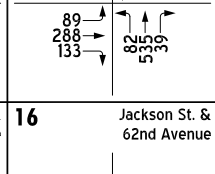
17 Jackson St. & 60th Avenue



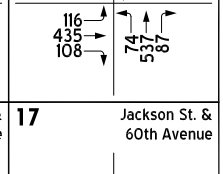
18 Jackson St. & 58th Avenue



19 Jackson St. & Airport Blvd.



20 Jefferson St. & N. Loop



21 Jefferson St. & S. Loop

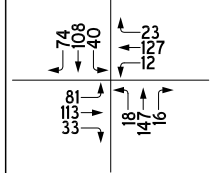


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TABLE 4-2: INTERSECTION ANALYSIS FOR PHASE 1 (2026) CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Without Project				With Project			
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (Secs)		Level of Service[2]		Delay[2] (Secs)		Level of Service[2]	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	Madison St. / Avenue 58																					
	- Without Improvements	AWS	1	2	1	1	2	d	1	1	1	1	2	1	17.2	**57.2**	C	**F**	17.2	**57.2**	C	**F**
	- With Improvements	TS	1	2	1	1	2	d	1	1	1	1	2	1	26.5	32.6	C	C	26.5	32.6	C	C
2	Madison St. / Airport Blvd.	TS	1	2	d	1	2	0	0	0	0	1	0	1	9.6	8.5	A	A	9.6	8.5	A	A
3	Madison St. / Avenue 54																					
	- Without Improvements	AWS	2	2	1	1	2	0	1	2	d	1	2	1	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	2	2	1	1	2	0	1	2	d	1	2	1	41.0	48.6	D	D	41.2	49.0	D	D
4	Madison St. / Avenue 52	TS	2	2	1	2	2	d	1	2	d	1	2	1	32.2	32.9	C	C	32.3	33.1	C	C
5	Madison St. / Avenue 50	TS	2	2	1	2	2	1	1	2	1	1	2	1	31.9	33.4	C	C	32.2	33.6	C	C
6	Jefferson St. / Avenue 54																					
	- Without Improvements	AWS	0.5	1	0.5	2	2	1	1	2	0	1	1	1	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	0.5	1	0.5	2	2	1	1	1	1	1	1	1>	32.6	32.4	C	C	32.8	33.4	C	C
7	Jefferson St. / Avenue 52																					
	- Without Improvements	RDB	0.5	0.5	1>>	0.5	0.5	1>>	0.5	0.5	1>>	0.5	0.5	1>>	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	RDB	0.5	**1.5**	1>>	0.5	**1.5**	1>>	0.5	0.5	1>>	0.5	0.5	1>>	15.3	28.4	C	D	16.8	32.6	C	D
8	Jefferson St. / Avenue 50																					
	- Without Improvements	TS	1	3	1	2	3	1	1	2	1	1	1	1	**55.5**	**71.8**	**E**	**E**	**55.7**	**71.8**	**E**	**E**
	- With Improvements	TS	1	3	1	2	3	1	1	2	1	1	**2**	1	50.5	45.2	D	D	50.5	45.5	D	D
9	Monroe St. / Avenue 62	AWS	0	0	0	1	0	1	0.5	0.5	0	0	1	0	8.7	10.8	A	B	11.3	19.4	B	C
10	Monroe St. / Avenue 60																					
	- Without Improvements	AWS	1	1	0	1	1	1	0.5	0.5	1	0	1!	0	15.4	21.0	C	C	**44.7**	**>80**	**E**	**F**
	- With Improvements	TS	1	1	0	1	1	1	0.5	0.5	1	0	1!	0	-	-	-	-	12.7	13.0	B	B
11	Monroe St. / Avenue 58																					
	- Without Improvements	AWS	0	1!	0	0.5	0.5	1	0	1!	0	0	1!	0	15.5	**>80**	C	**F**	**54.1**	**>80**	**F**	**F**
	- With Improvements	TS	**1**	1	0	**1**	1	0	**1**	1	0	**1**	1	0	26.1	33.1	C	C	26.3	37.7	C	D
12	Monroe St. / Airport Blvd.																					
	- Without Improvements	AWS	1	1	0	1	2	d	1	1	1	0	1!	0	18.4	**50.7**	C	**F**	**70.1**	**>80**	**F**	**F**
	- With Improvements	TS	1	1	0	1	2	d	1	1	1	0	1!	0	10.1	10.8	B	B	10.1	11.3	B	B
13	Monroe St. / Avenue 54																					
	- Without Improvements	AWS	0	1!	0	0.5	0.5	1	1	1	0	0	1!	0	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	**1**	1	0	**1**	1	0	1	1	0	**1**	1	0	31.9	33.3	C	C	34.5	37.7	C	D
14	Monroe St. / Avenue 52																					
	- Without Improvements	AWS	0	1!	0	1	2	0	1	1	1	1	2	d	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	0	1!	0	1	2	0	1	1	1	1	2	d	33.6	41.0	C	D	35.6	50.2	D	D
15	Monroe St. / 50th Avenue	TS	1	2	0	1	2	0	1	1	1	1	1	1>	17.9	24.1	B	C	18.1	24.9	B	C
16	Jackson St. / Avenue 62	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	8.3	8.9	A	A	8.7	9.7	A	A
17	Jackson St. / Avenue 60	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	9.0	11.3	A	B	9.2	12.0	A	B
18	Jackson St. / 58th Avenue	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	9.5	16.5	A	C	10.0	21.3	A	C
19	Jackson St. / Airport Blvd.	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	10.2	15.4	B	C	10.9	18.8	B	C
20	Jefferson St. / N. Loop	RDB	0	0	**1**	0	0	0	0	0	0	**1**	0	0	Intersection does not exist				2.8	2.8	A	A
21	Jefferson St. / S. Loop	RDB	0	**1!**	0	0	**1!**	0	0	**1!**	0	0	**1!**	0	Intersection does not exist				3.5	4.1	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 Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane; **1** = Improvement

1 = Improvement per City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 2012)

[2] Per the Highway Capacity Manual 6th Edition (HCM6), overall average intersection delay and level of service are shown for intersections with a 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 (or movements sharing a single lane) are shown.

Delay and level of service is calculated using Synchro 10.1 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop; RDB = Roundabout

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Table 4-2 also indicates that the intersection of Jefferson Street at Avenue 52 experiences deficient operations under cumulative "without project" conditions. As shown in Table 4-2, Jefferson Street at Avenue 52 requires reconstruction of the current roundabout design to incorporate 2 circulating lanes around the center island. This effectively accommodates an additional through lane in the northbound and southbound directions to provide acceptable LOS.

For locations where improvements are needed in 2026 without the Project, a fair share contribution is appropriate for the Project Phase 1 development. Exhibit 4-8 shows the recommended Phase 1 access features and Project contributions to off-site improvements.

Table 4-3 provides a summary of the Phase 1 (2026) roadway segment traffic conditions. As shown on Table 4-3, all study roadway segments analyzed are anticipated to operate at acceptable LOS under Phase 1 (2026) traffic conditions.

4.6 PHASE 1 SITE ACCESS IMPROVEMENTS

To provide access to the Project Phase 1 development area, public access will be accommodated on the westerly extension of Avenue 62 into the site. The Project will be responsible to construct interim cross-section improvements along Avenue 62 west of Monroe Street and extending across Dike No. 4 to include one lane in each direction, with 40' pavement section with sidewalk on the north side.

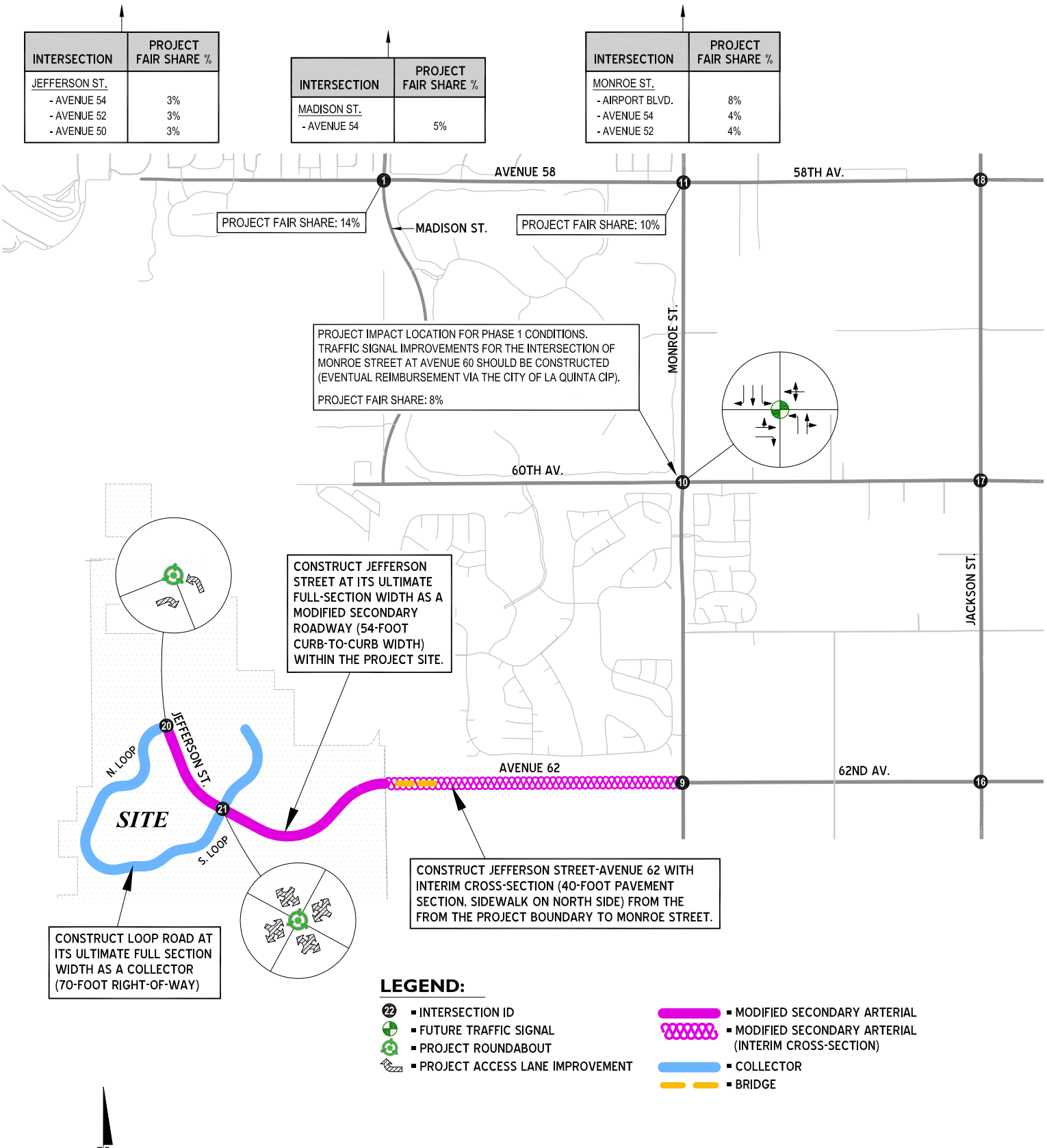
Within the Project boundary, the Avenue 62 extension (which becomes Jefferson Street) should be constructed at its ultimate full section width as a Modified Secondary (54-foot curb-to-curb), with curb and gutters, sidewalks, and Class II bike lanes. The Phase 1 Avenue 62 / Jefferson Street will extend from the east Project boundary to the on-site North Loop intersection as shown on Exhibit 4-9. Along this segment of Jefferson Street, two roundabout intersections will be implemented at Jefferson Street / North Loop and Jefferson Street / South Loop.

Jefferson Street temporarily ends at the North Loop intersection for Phase 1. This results in an interim roundabout design with the future north and east legs of the intersection temporarily closed. Implementing the interim roundabout configuration provides a turning path for vehicles between the west and south legs of the intersection, rather than an L-shaped (knuckle) intersection. Ultimate roundabout design features at the on-site Project intersections are documented in Section 8.3 of the TIA.

Segments of the Loop Road will be constructed at its ultimate full section width as a Collector (40-foot curb-to-curb), with curb and gutters and parkway improvements for the segments of Loop Road located southwest of Jefferson Street, and also northerly from the Jefferson Street / South Loop intersection, as indicated on Exhibit 4-9.

Other local street Project access points along Jefferson Street within the Phase 1 development area will require median openings and left turn pockets and cross-street stop traffic control as indicated in the 2018 TIA.

EXHIBIT 4-8: PHASE 1 (2026) RECOMMENDED ACCESS FEATURES AND CONTRIBUTIONS TO OFF-SITE IMPROVEMENTS



NOTE: PROJECT FAIR SHARE BASED UPON GENERAL PLAN SCENARIOS (TRAVERTINE SPECIFIC PLAN TIA, APRIL 2018, TABLE 9-2)

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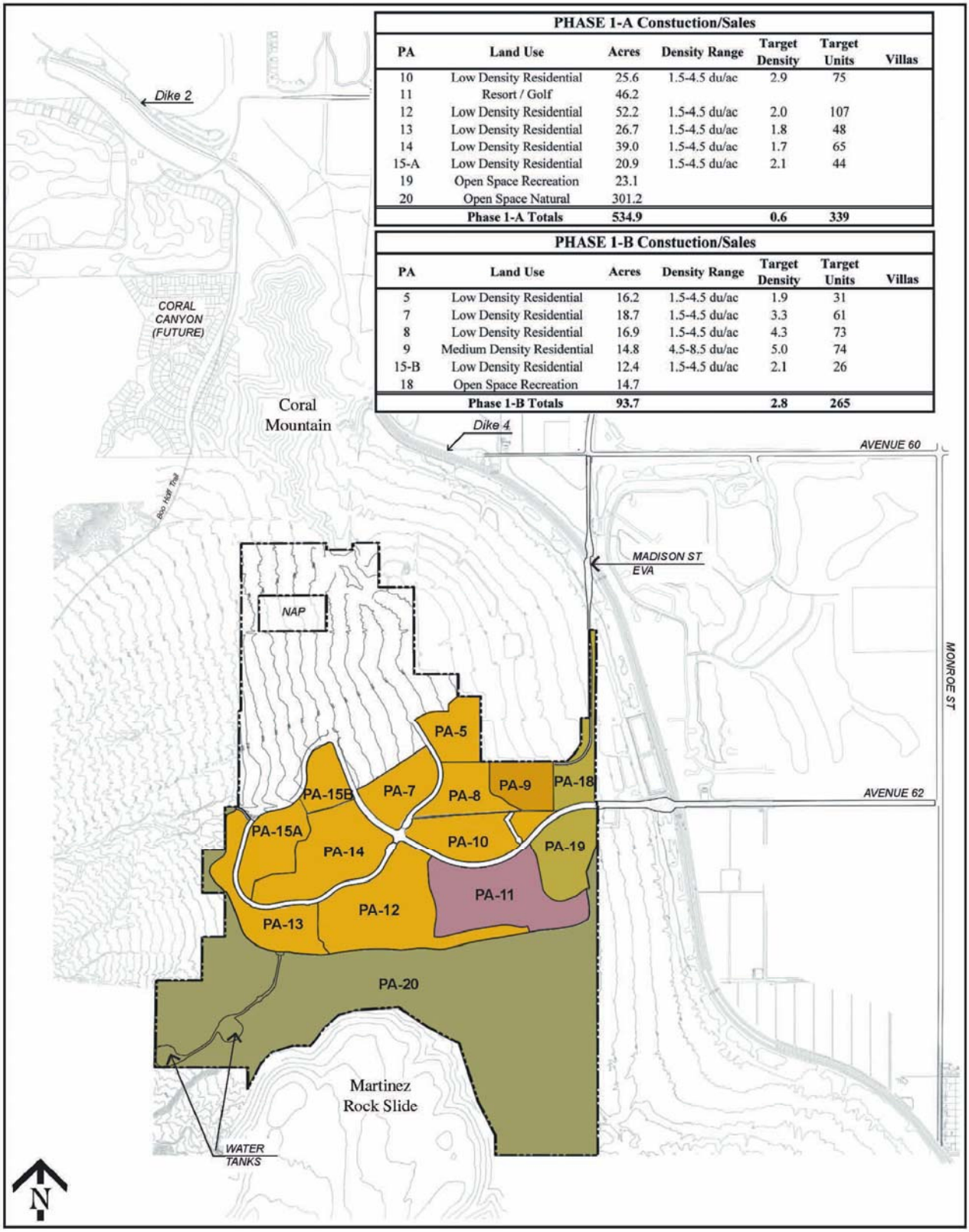
URBAN CROSSROADS

EXHIBIT 4-9: PHASE 1 SITE DEVELOPMENT PLAN



PHASE 1-A Constuction/Sales

PA	Land Use	Acres	Density Range	Target Density	Target Units	Villas
10	Low Density Residential	25.6	1.5-4.5 du/ac	2.9	75	
11	Resort / Golf	46.2				
12	Low Density Residential	52.2	1.5-4.5 du/ac	2.0	107	
13	Low Density Residential	26.7	1.5-4.5 du/ac	1.8	48	
14	Low Density Residential	39.0	1.5-4.5 du/ac	1.7	65	
15-A	Low Density Residential	20.9	1.5-4.5 du/ac	2.1	44	
19	Open Space Recreation	23.1				
20	Open Space Natural	301.2				
	Phase 1-A Totals	**534.9**		**0.6**	**339**	

PHASE 1-B Constuction/Sales

PA	Land Use	Acres	Density Range	Target Density	Target Units	Villas
5	Low Density Residential	16.2	1.5-4.5 du/ac	1.9	31	
7	Low Density Residential	18.7	1.5-4.5 du/ac	3.3	61	
8	Low Density Residential	16.9	1.5-4.5 du/ac	4.3	73	
9	Medium Density Residential	14.8	4.5-8.5 du/ac	5.0	74	
15-B	Low Density Residential	12.4	1.5-4.5 du/ac	2.1	26	
18	Open Space Recreation	14.7				
	Phase 1-B Totals	**93.7**		**2.8**	**265**	

TABLE 4-3: ROADWAY VOLUME/CAPACITY ANALYSIS FOR EXISTING PLUS AMBIENT PLUS CUMULATIVE PLUS PROJECT PHASE 1 (2026) CONDITIONS

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	Capacity[2]	Without Project		With Project	
					ADT[3]	Volume/ Capacity Ratio	ADT[3]	Volume/ Capacity Ratio
Avenue 58	West of Madison Street	Secondary	3	21,000 [4]	5,500	0.26	5,500	0.26
	West of Monroe Street	Secondary	4	28,000	6,700	0.24	6,700	0.24
	West of Jackson Street	Secondary	2	14,000 [4]	5,100	0.36	5,700	0.41
Madison St.	South of Avenue 56	Primary	4	42,600	16,900	0.40	16,900	0.40
60th Avenue	West of Jackson Street	Primary	2	19,000 [6]	4,600	0.24	4,900	0.26
Avenue 62	West of Monroe Street	Modified Secondary	2	19,000	700	0.04	6,500	0.34
	West of Jackson Street	Secondary	2	14,000 [4]	4,800	0.34	6,000	0.43
Monroe St.	South of Avenue 60	Secondary	2	14,000 [4]	5,100	0.36	9,800	0.70
	South of Avenue 58	Primary	2	19,000 [6]	8,700	0.46	13,100	0.69
	South of Avenue 56	Primary	3	31,950 [5]	9,300	0.29	12,800	0.40
Jackson St.	South of Airport Boulevard	Primary	2	19,000 [6]	6,300	0.33	6,900	0.36

[1] Existing Number of Through lanes

[2] Source: City of La Quinta Engineering Bulletin #06-13 (July 2015)

[3] Average Daily Traffic (ADT) expressed in vehicles per day.

[4] Capacity was calculated as a ratio of 4-lane Secondary capacity.

[5] Capacity was calculated as a ratio of 4-lane Primary capacity.

[6] Estimated capacity for 2-lane Primary.

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In order to provide secondary emergency access to the Phase 1 development area, an EVA alignment is identified (see Exhibit 4-9). The EVA alignment extends from the northerly edge of Planning Area 18 to the intersection of Madison Street at Avenue 60.

4.7 TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrant analyses have been performed at all applicable unsignalized study area intersections for Phase 1 (2026) Without Project traffic conditions (see Appendix 4.2). Five additional intersections are projected to satisfy traffic signal warrants:

- Madison Street at Avenue 58 (Traffic signal improvement included in the La Quinta GP)
- Monroe Street at Airport Boulevard (Traffic signal improvement included in the La Quinta CIP 2018-2023 as "unfunded additional projects")
- Monroe Street at Avenue 58 (Traffic signal improvement included in the La Quinta GP)
- Monroe Street at Avenue 60 (Traffic signal improvement included in the La Quinta GP)
- Jackson Street at Airport Boulevard
- Jackson Street at Avenue 58

For Phase 1 (2026) With Project traffic conditions, Monroe Street at Avenue 62 is also projected to satisfy traffic signal warrants.

5 PROJECT PHASE 2 TRAFFIC ANALYSIS

This section discusses Project Phase 2 conditions, which includes Existing (2019) volumes, Ambient Growth traffic for 10 years, cumulative development traffic, and Project traffic. The results of the Phase 2 HCM intersection analysis and roadway segment capacity analysis are also presented.

5.1 PROJECT PHASE 2 LAND USE AND TRIP GENERATION

Project Phase 2 is anticipated to occur in 2029, and includes 673 single family detached residential homes, 237 duplex residential units, and PA 11 resort/golf uses (golf practice, golf academy, and banquet accommodations).

Trip generation rates are presented on Table 5-1 for Phase 2 conditions. As shown on Table 5-1, Phase 2 of the proposed Project is anticipated to generate a net total of 8,343 external trip-ends per day on a typical weekday with 620 external vehicles per hour (VPH) during the weekday AM peak hour and 821 external VPH during the weekday PM peak hour.

5.2 PROJECT TRIP DISTRIBUTION

For Project Phase 2 conditions, two public access routes are provided: 1) the southerly extension of South Jefferson as an interim section (40-foot pavement section, sidewalk on west side), south of Avenue 58, and 2) the westerly extension of Avenue 62 as an interim section (40-foot pavement section, sidewalk on north side), west of Monroe Street (consistent with Phase 1 conditions).

The trip distribution pattern for Phase 2 of the proposed Project is graphically depicted on Exhibit 5-1. For Project Phase 2 conditions, both Project access locations are used, with approximately 50% of traffic using the westerly extension of Avenue 62, west of Monroe Street and approximately 50% of traffic using southerly extension of South Jefferson, south of Avenue 58.

Similar to Phase 1 conditions, approximately 70% of Project traffic travels north of Avenue 58.

It should be noted that an optional Phase 2 scenario (Option 2) has also been evaluated in response to City of La Quinta's request to modify the analysis without the future Jefferson Street connection from Project boundary to Avenue 58 since BLM may not grant a permit by the current Phase 2 (2029) build year. For Phase 2 Option 2 scenario, the off-site trip distribution pattern is consistent with Phase 1 which utilizes Avenue 62 as the sole access point.

5.3 TRAFFIC VOLUME ASSIGNMENT

Based on the identified Project Phase 2 traffic generation and trip distribution pattern, Project only ADT and weekday AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-2 through 5-4, respectively.

TABLE 5-1: PROJECT PHASE 2 (2029) TRIP GENERATION SUMMARY

Trip Generation Rates[1]										
	ITE LU		AM Peak Hour			PM Peak Hour			
Land Use	Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	210	673 DU	0.19	0.55	0.74	0.62	0.37	0.99	9.44
Multifamily Housing (Low-Rise)	220	237 DU	0.11	0.35	0.46	0.35	0.21	0.56	7.32
Resort/Golf[3]	430	12 HOLES	1.39	0.37	1.76	1.54	1.37	2.91	30.38

Trip Generation Results									
	ITE LU		AM Peak Hour			PM Peak Hour			
Land Use	Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	210	673 DU	128	370	498	417	249	666	6,353
Multifamily Housing (Low-Rise)	220	237 DU	26	83	109	83	50	133	1,735
Internal to Resort/Golf			*(1)*	*(3)*	*(4)*	*(2)*	*(3)*	*(5)*	*(55)*
Residential External Trips			153	450	603	498	296	794	8,033
Resort/Golf[3]	430	12 HOLES	17	4	21	18	16	34	365
Internal to Residential			*(3)*	*(1)*	*(4)*	*(3)*	*(2)*	*(5)*	*(55)*
Resort/Golf[3] External Trips			14	3	17	15	14	29	310
Project Subtotal			171	457	628	518	315	833	8,453
Internal Capture Subtotal			*(4)*	*(4)*	*(8)*	*(5)*	*(5)*	*(10)*	*(110)*
Phase 2 (2029) Project Total External Trips			**167**	**453**	**620**	**513**	**310**	**823**	**8,343**

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition (2017).

[2] DU = Dwelling Unit

[3] Resort/Golf (golf practice, golf academy, and banquet accommodations).

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EXHIBIT 5-1: PHASE 2 (2029) PROJECT TRIP DISTRIBUTION

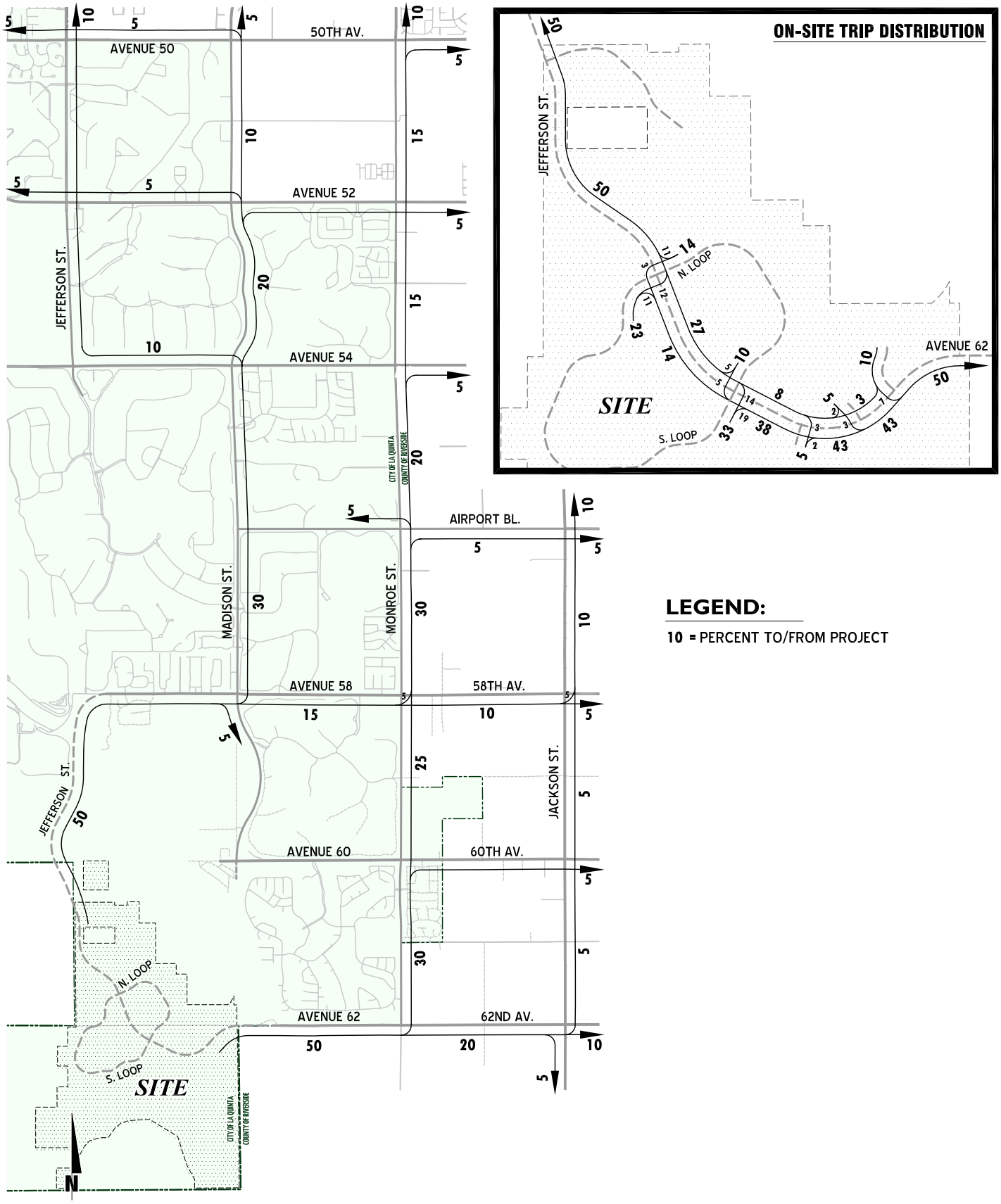


EXHIBIT 5-2: PROJECT ONLY PHASE 2 (2029)
AVERAGE DAILY TRAFFIC (ADT)

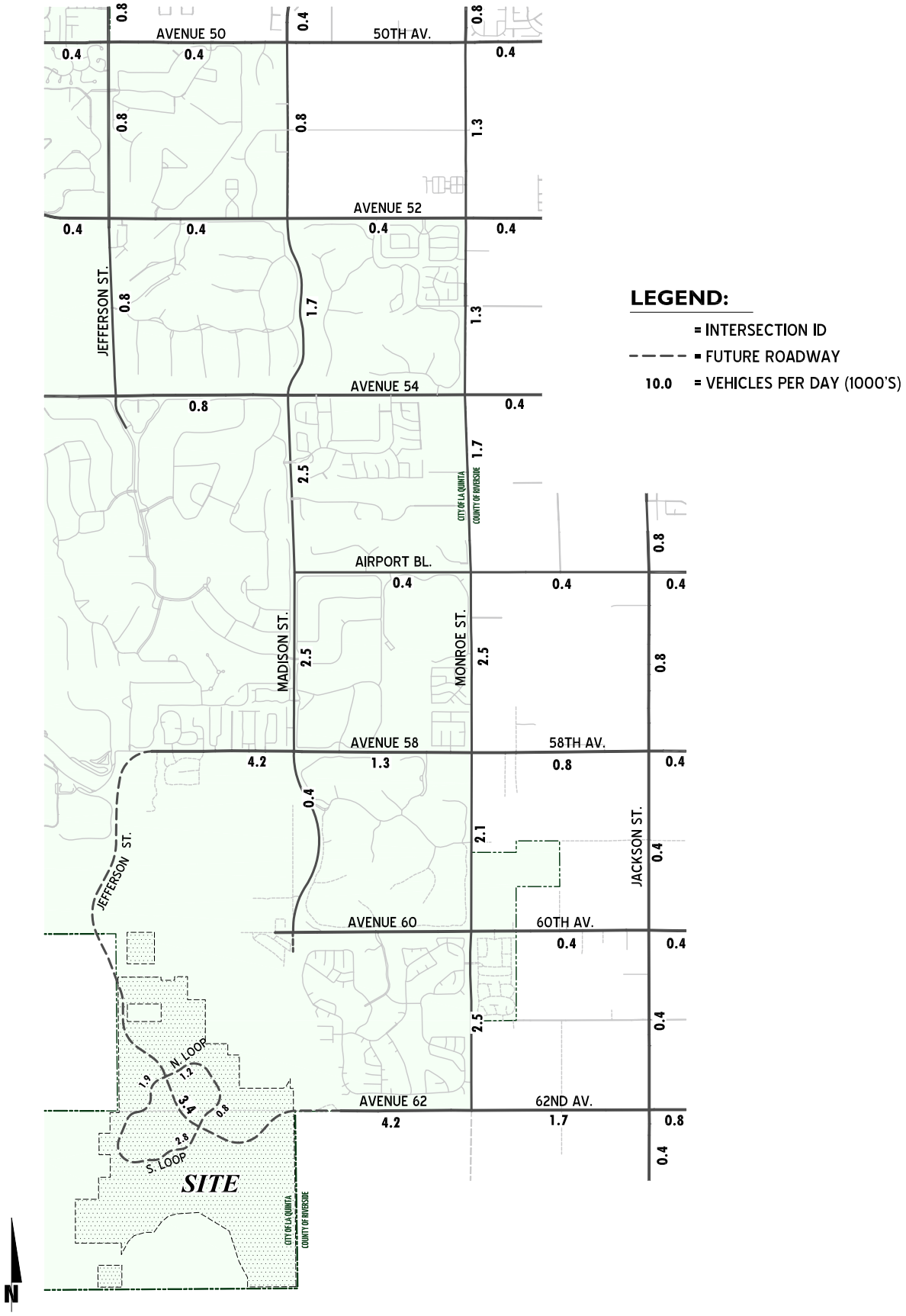
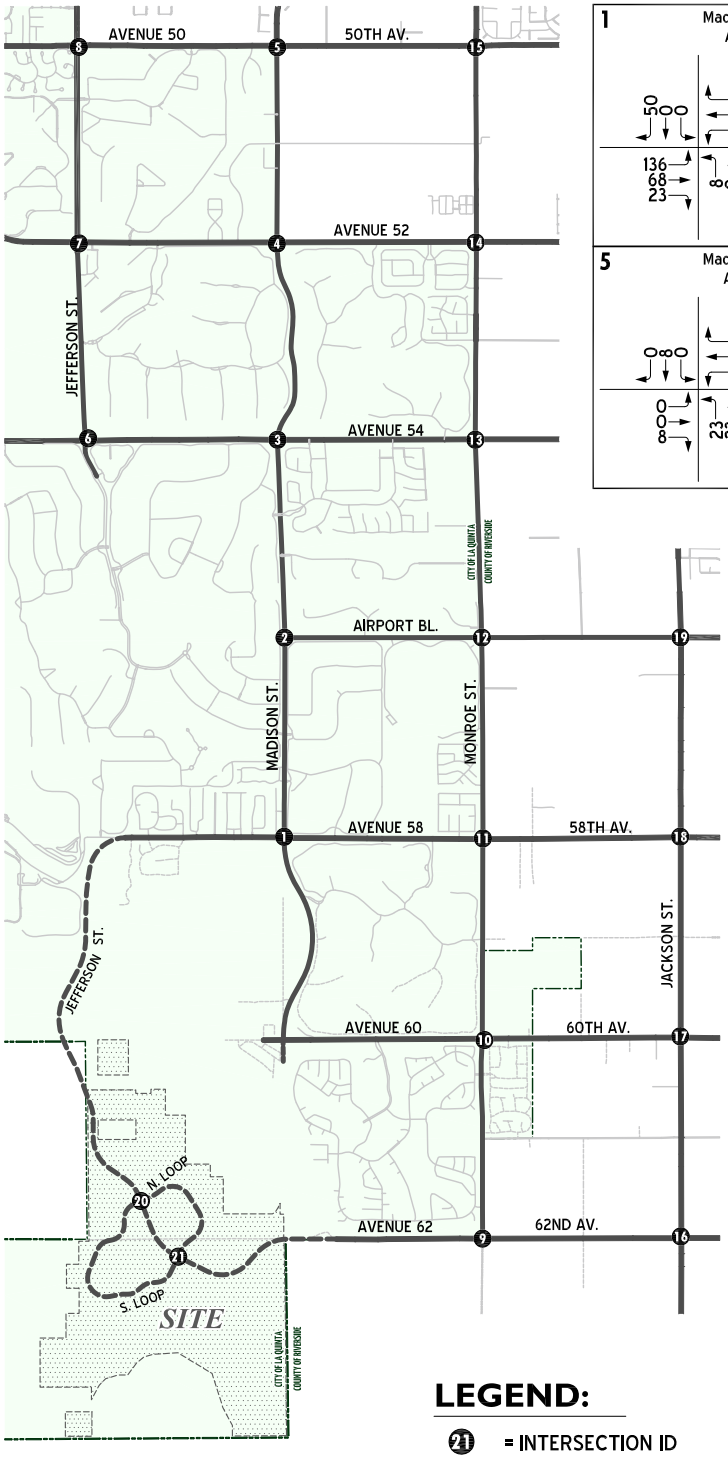


EXHIBIT 5-3: PROJECT ONLY PHASE 2 (2029)
AM PEAK HOUR INTERSECTION VOLUMES



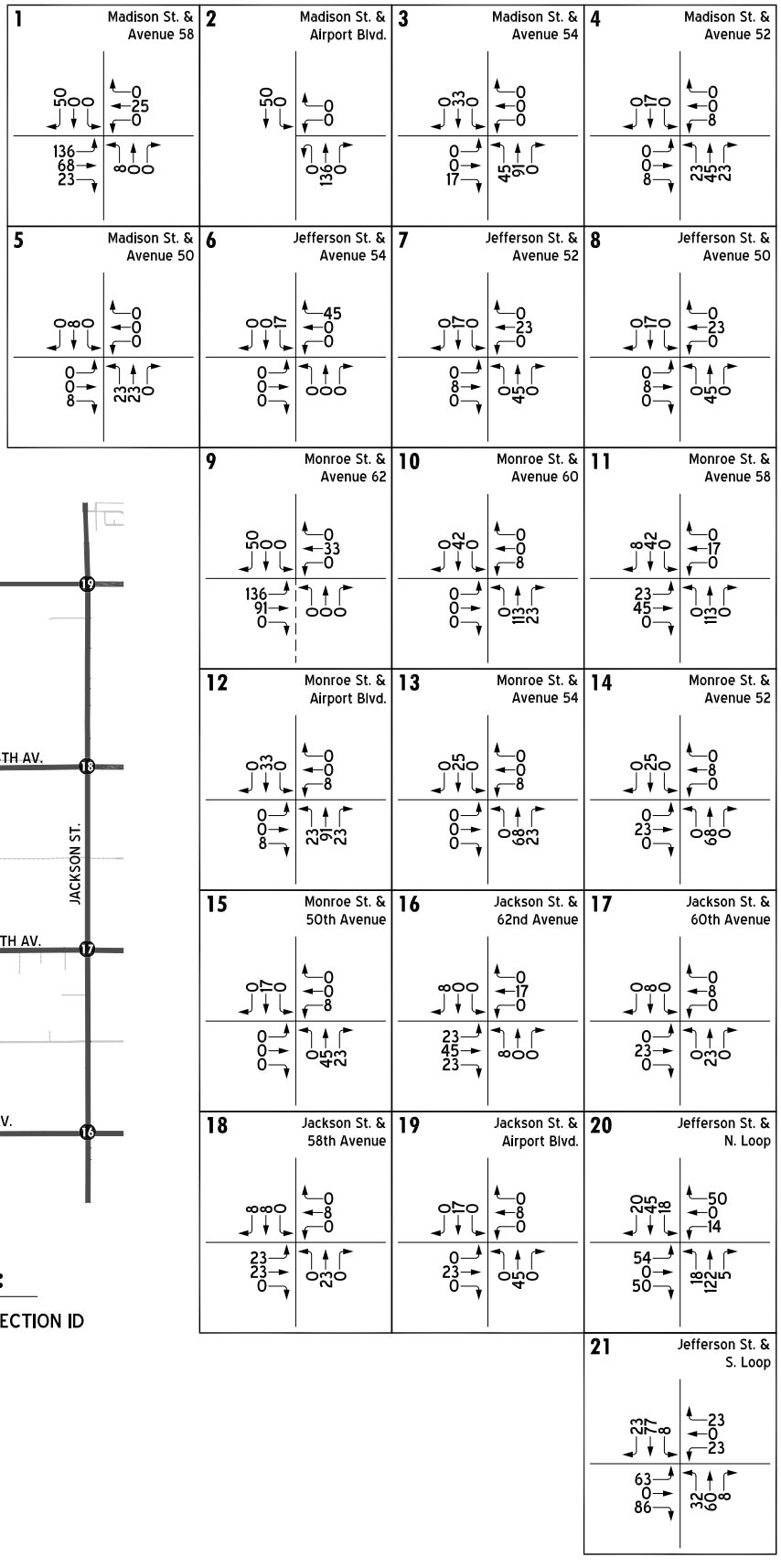
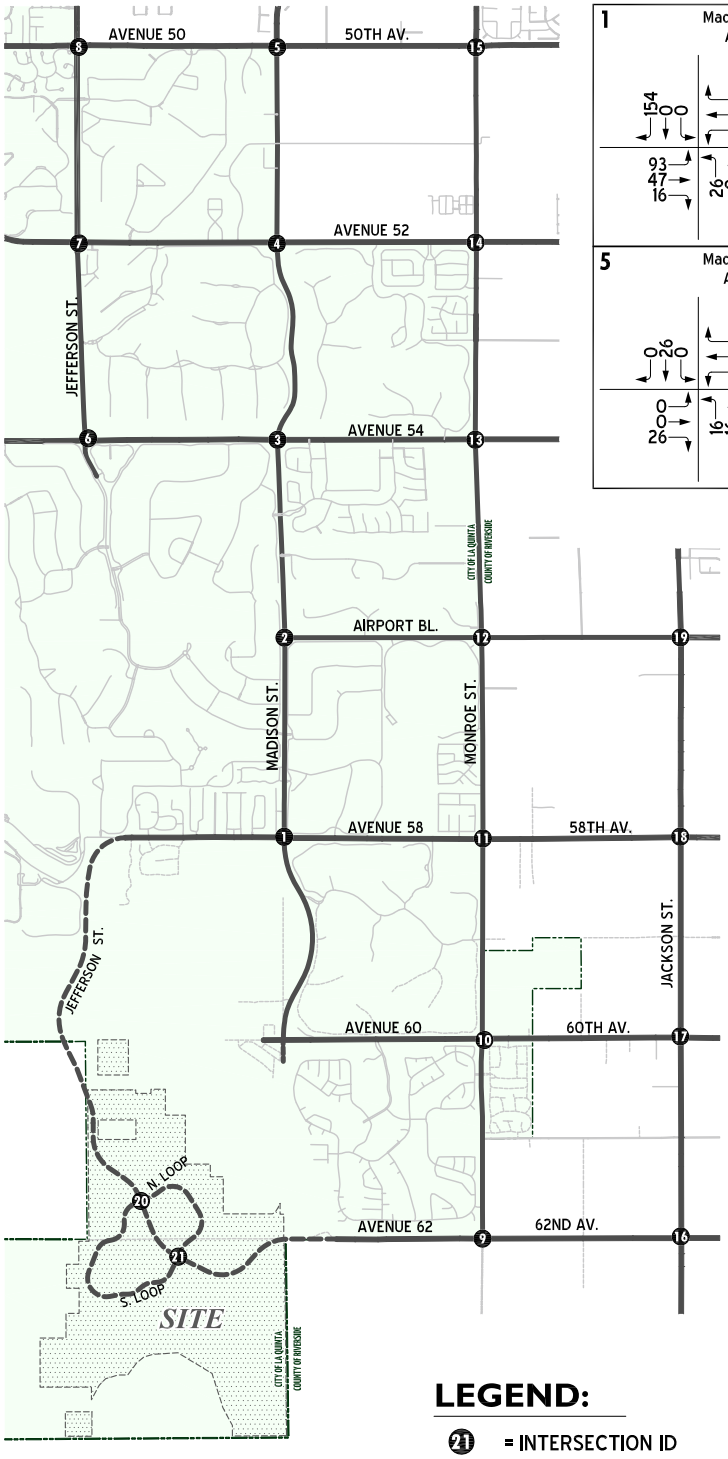
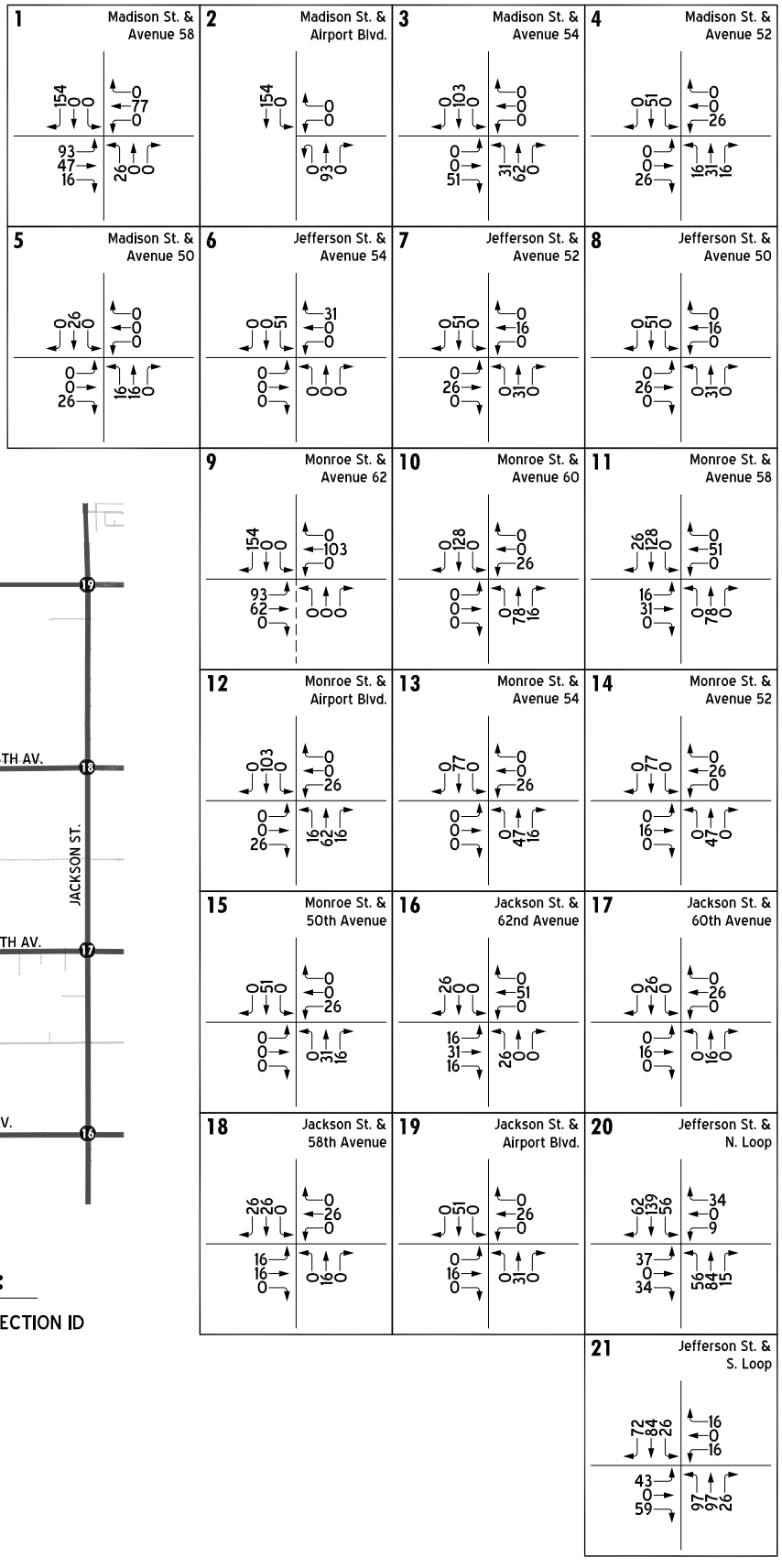


EXHIBIT 5-4: PROJECT ONLY PHASE 2 (2029)
PM PEAK HOUR INTERSECTION VOLUMES





Ambient growth between 2019 and 2029 as well as cumulative development are incorporated in the cumulative traffic projections shown on Exhibits 5-5 through 5-7. Exhibit 5-5 shows the cumulative (2029) daily traffic projections on study area roadway segments. Exhibit 5-6 presents the cumulative (2029) weekday AM peak hour volumes at study area intersections. Exhibit 5-7 depicts the cumulative (2029) weekday PM peak hour volumes at study area analysis locations.

For Phase 2 Option 2 conditions (without Jefferson Street connection to Avenue 58), daily traffic projections on study area roadway segments and weekday AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-8 through 5-10, respectively.

5.4 OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under Phase 2 (2029) Without, With Project, and With Project Option 2 traffic conditions. The intersection analysis results are summarized in Table 5-2. The intersection operations analysis worksheets for Phase 2 (2029) Without and With Project traffic conditions are included in Appendix 5.1 of this report. The intersection operations analysis worksheets for Phase 2 (2029) With Project Option 2 traffic conditions are included in Appendix 5.2 of this report.

Two additional off-site study area intersections (beyond the intersections identified for Phase 1) are anticipated to require improvements to serve 2029 conditions without the Project:

- Jackson Street at Avenue 58
- Jackson Street at Airport Boulevard

Table 5-2 also indicates that the intersection of Jefferson Street at Avenue 52 experiences deficient operations under cumulative "without project" conditions. Jefferson Street at Avenue 52 requires reconstruction of the current roundabout design to incorporate 2 circulating lanes around the center island. This effectively accommodates an additional through lane in the northbound, southbound, eastbound, and westbound directions to provide acceptable LOS.

For Phase 2 Option 2 conditions, intersection analysis results presented in Table 5-2 indicate that if Option 2 scenario (without Jefferson Street connection to Avenue 58) is utilized, the intersection of Monroe Street at Avenue 62 (#9) is anticipated to require traffic signal improvement to serve Phase 2 (2029) With Project Option 2 conditions. Intersection operations analysis worksheets for Phase 2 (2029) With Project Option 2 traffic conditions are included in Appendix 5.2 of this report.

For locations where improvements are needed in 2029 without the Project, a fair share contribution is appropriate for the Project Phase 2 development. Exhibit 5-11 shows the recommended access features and Project contributions to off-site improvements. Project Phase 2 development plan is shown on Exhibit 5-12.

Table 5-3 provides a summary of the roadway segment analysis for Phase 2 (2029) traffic conditions. As shown on Table 5-3, study roadway segments are anticipated to operate at acceptable LOS under Phase 2 (2029) traffic conditions. However, if Option 2 scenario is utilized, the roadway segment of Monroe Street, south of Avenue 60 appears to exceed the theoretical

daily segment LOS thresholds. It should be noted however that where the peak hour roadway segment analysis indicates a deficiency (unacceptable LOS), a review of the more detailed peak hour intersection analysis is undertaken. Further review of the more detailed peak hour intersection analysis indicates that the recommended improvements at adjacent study area intersections provide acceptable level of service. Therefore, roadway segment widening is not anticipated.

5.5 PHASE 2 SITE ACCESS IMPROVEMENTS

Off-site, the Project will be responsible to construct interim cross-section improvements along Jefferson Street from the Project boundary to Avenue 58 and extending across Guadalupe Creek Diversion Dike to include one lane in each direction, with 40' pavement section with sidewalk on the west side.

On-site, Jefferson Street should be constructed from the North Loop intersection to the northerly Project boundary at its ultimate full section width, with curb and gutters. However, if Option 2 scenario is implemented, this connection is not anticipated to be in place by Phase 2 conditions.

EXHIBIT 5-5: CUMULATIVE WITH PHASE 2 PROJECT (2029)
AVERAGE DAILY TRAFFIC (ADT)

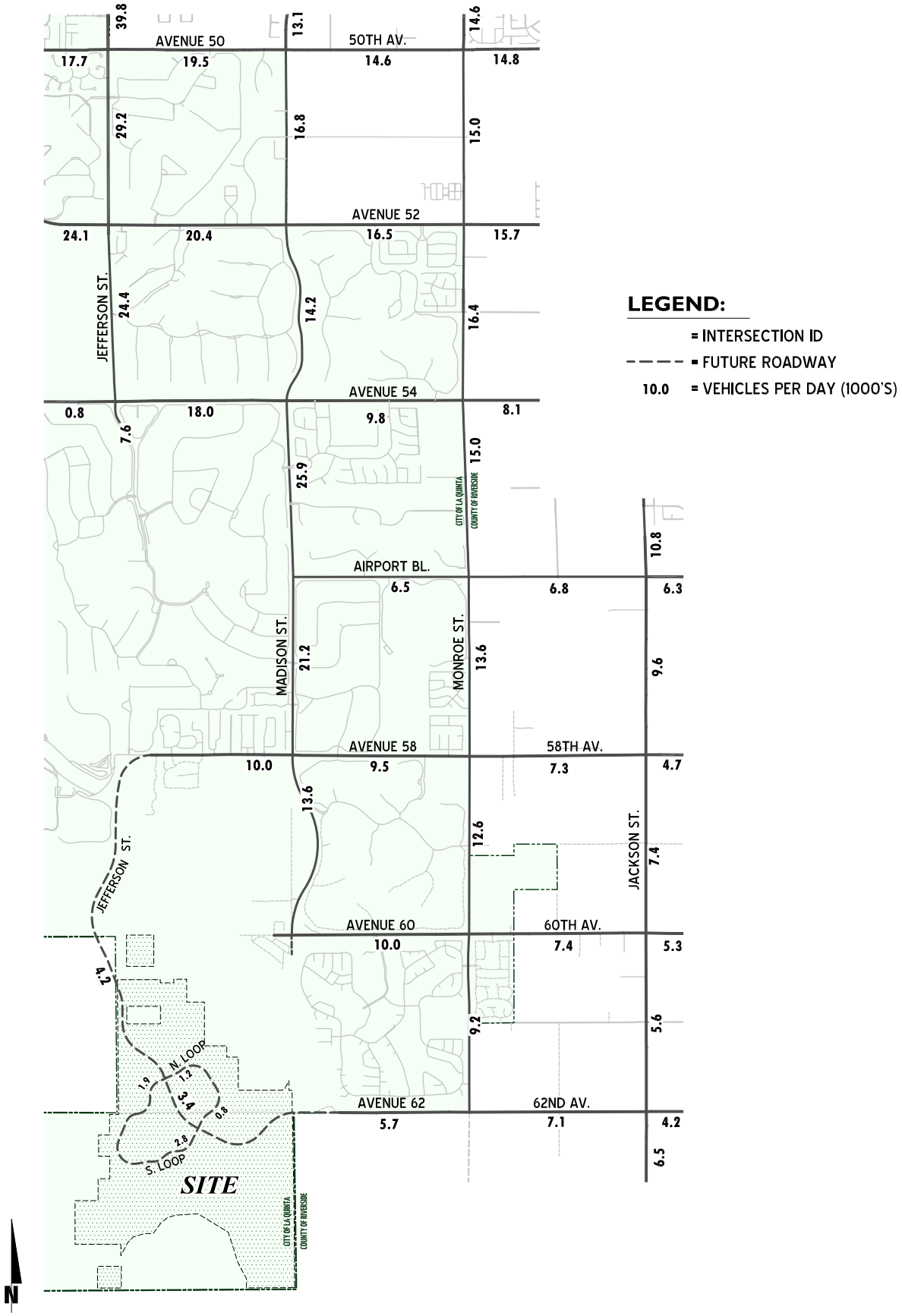
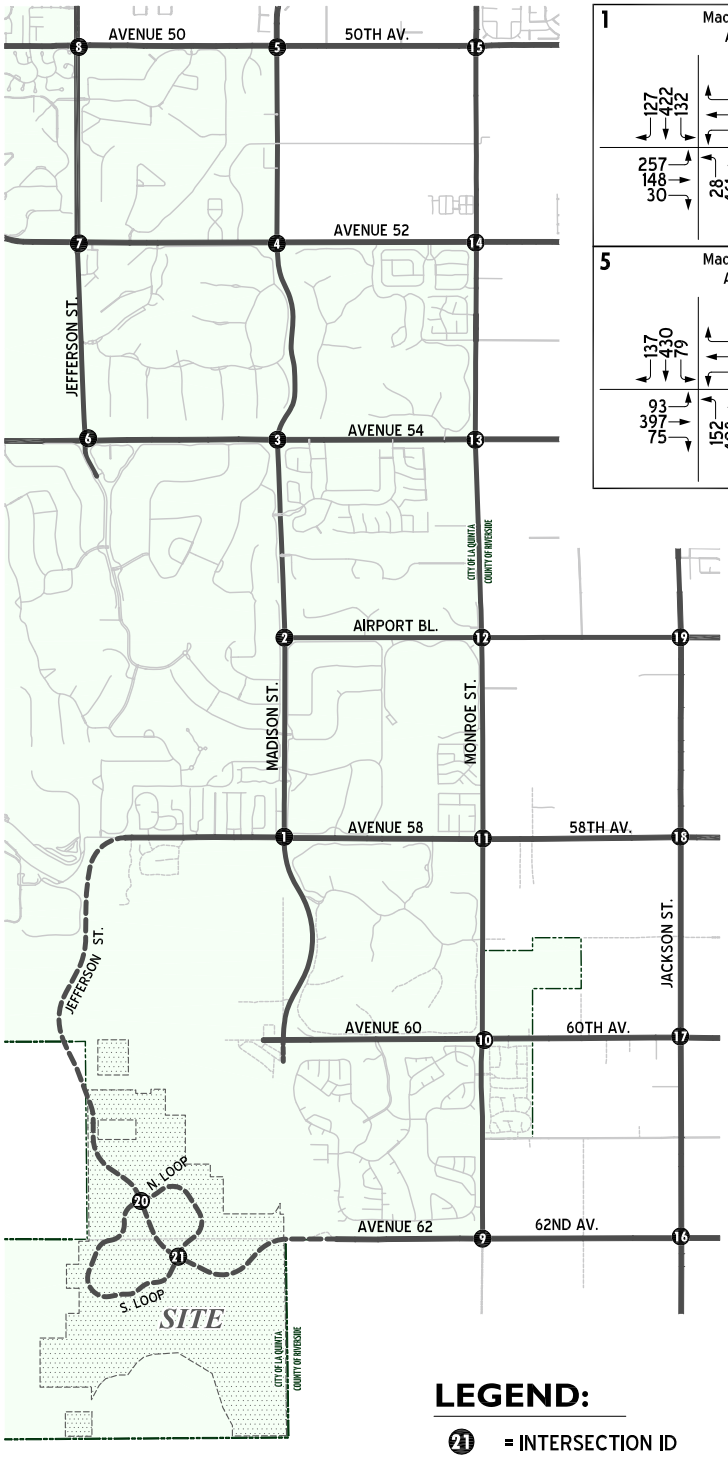


EXHIBIT 5-6: CUMULATIVE WITH PHASE 2 PROJECT (2029)
AM PEAK HOUR INTERSECTION VOLUMES



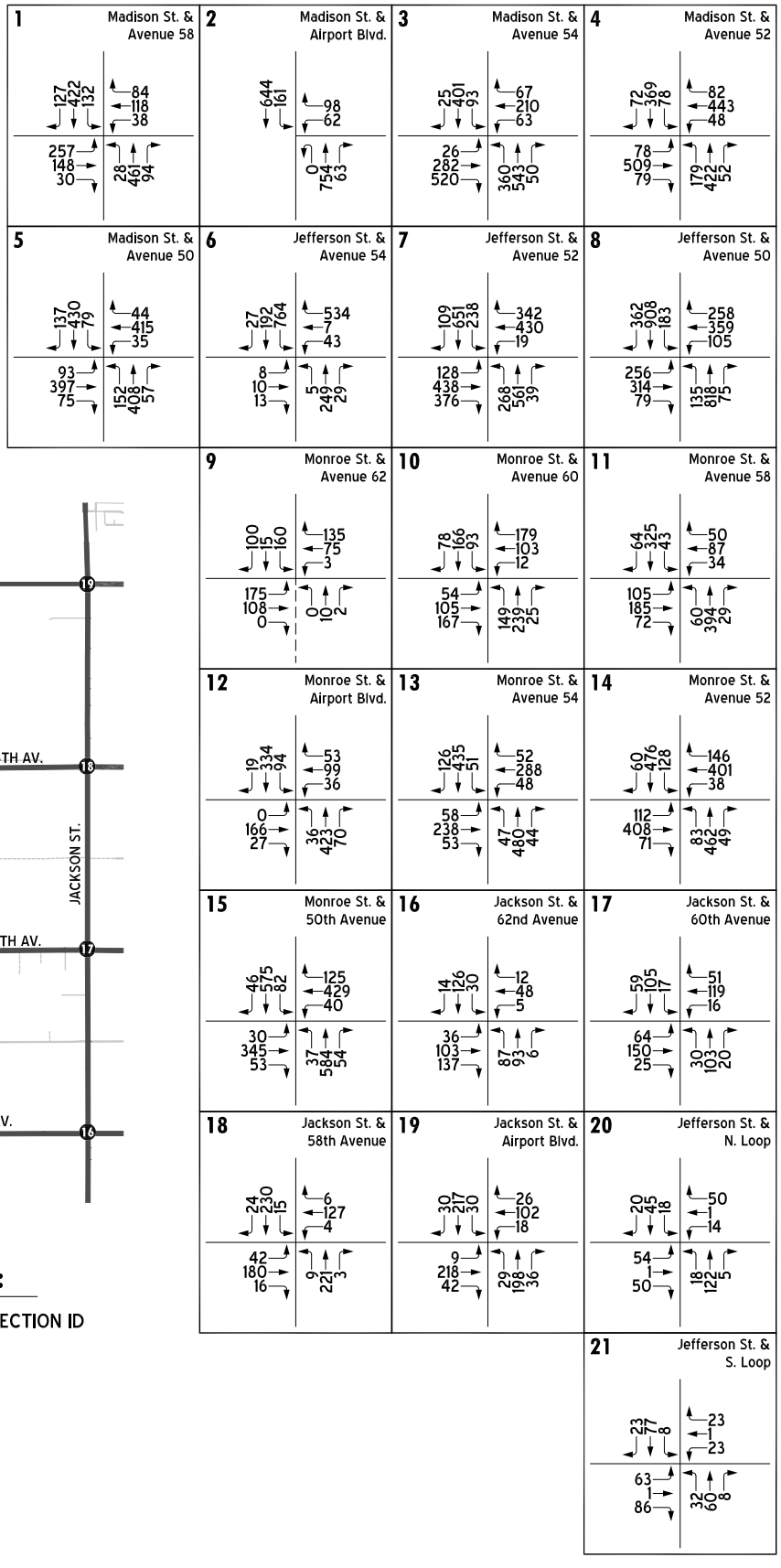
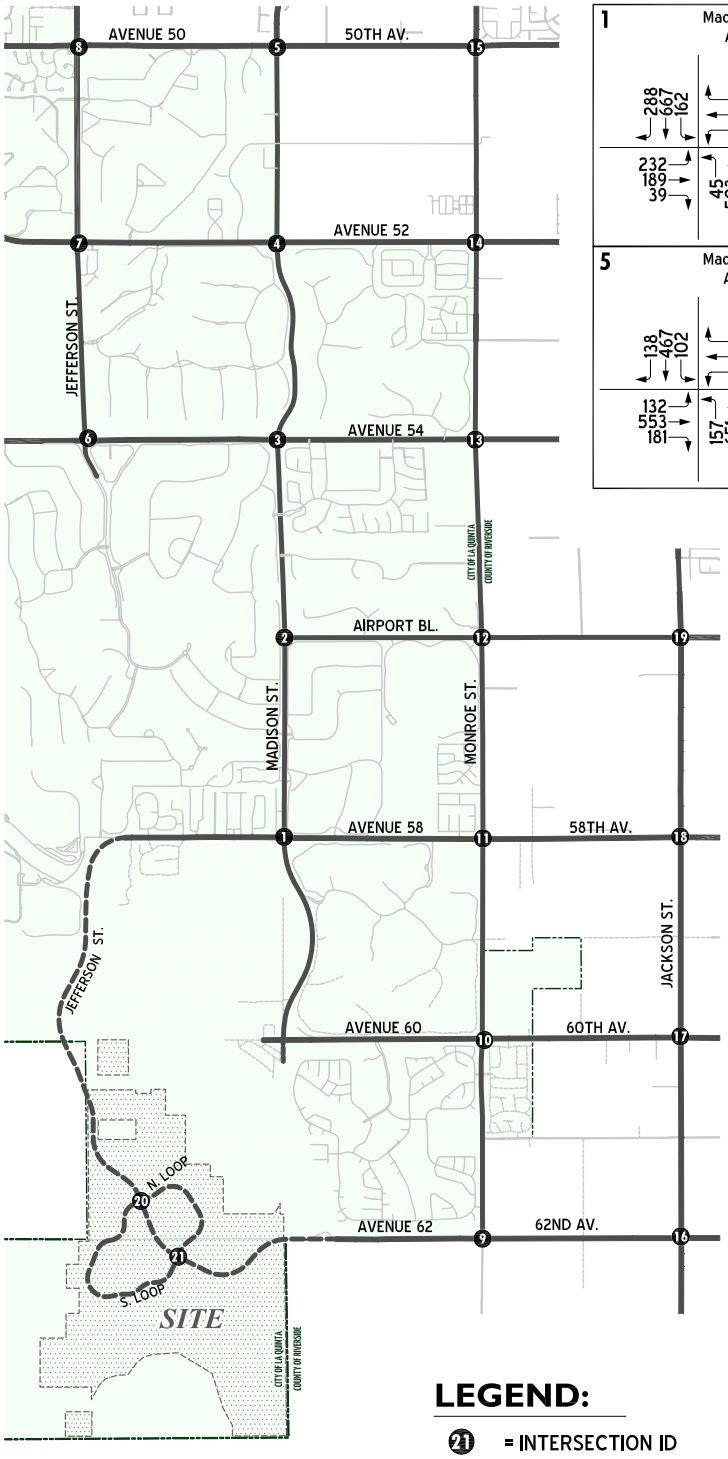


EXHIBIT 5-7: CUMULATIVE WITH PHASE 2 PROJECT (2029)
PM PEAK HOUR INTERSECTION VOLUMES

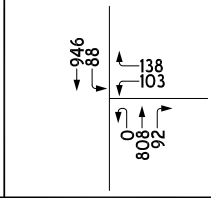


LEGEND:

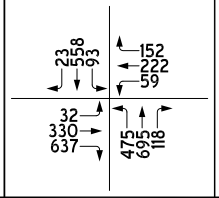
21 = INTERSECTION ID

1 Madison St. & Avenue 58

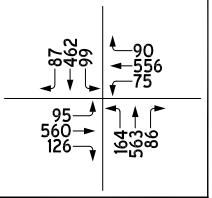
2 Madison St. & Airport Blvd.



3 Madison St. & Avenue 54

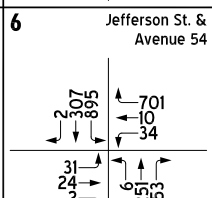


4 Madison St. & Avenue 52

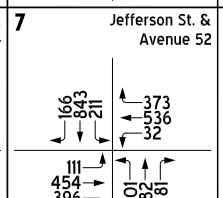


5 Madison St. & Avenue 50

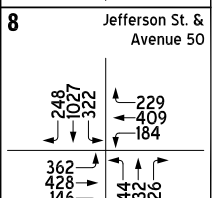
6 Jefferson St. & Avenue 54



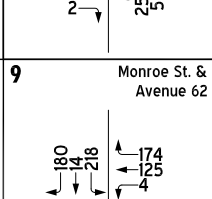
7 Jefferson St. & Avenue 52



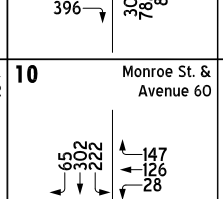
8 Jefferson St. & Avenue 50



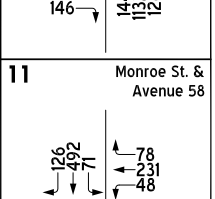
9 Monroe St. & Avenue 62



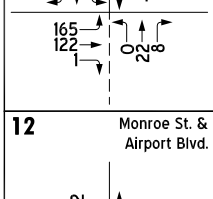
10 Monroe St. & Avenue 60



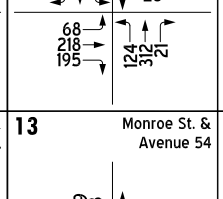
11 Monroe St. & Avenue 58



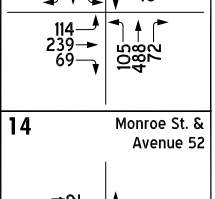
12 Monroe St. & Airport Blvd.



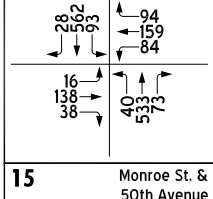
13 Monroe St. & Avenue 54



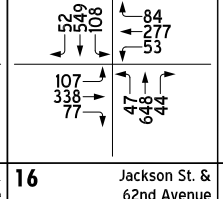
14 Monroe St. & Avenue 52



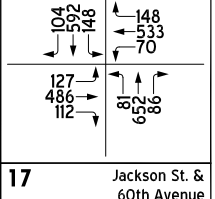
15 Monroe St. & 50th Avenue



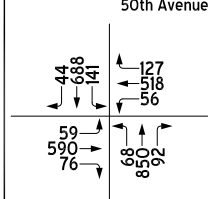
16 Jackson St. & 62nd Avenue



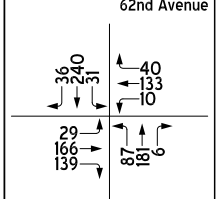
17 Jackson St. & 60th Avenue



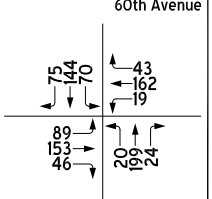
18 Jackson St. & 58th Avenue



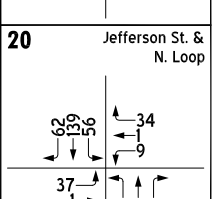
19 Jackson St. & Airport Blvd.



20 Jefferson St. & N. Loop



21 Jefferson St. & S. Loop



N

EXHIBIT 5-8: CUMULATIVE WITH PHASE 2 PROJECT (2029) OPTION 2
AVERAGE DAILY TRAFFIC (ADT)

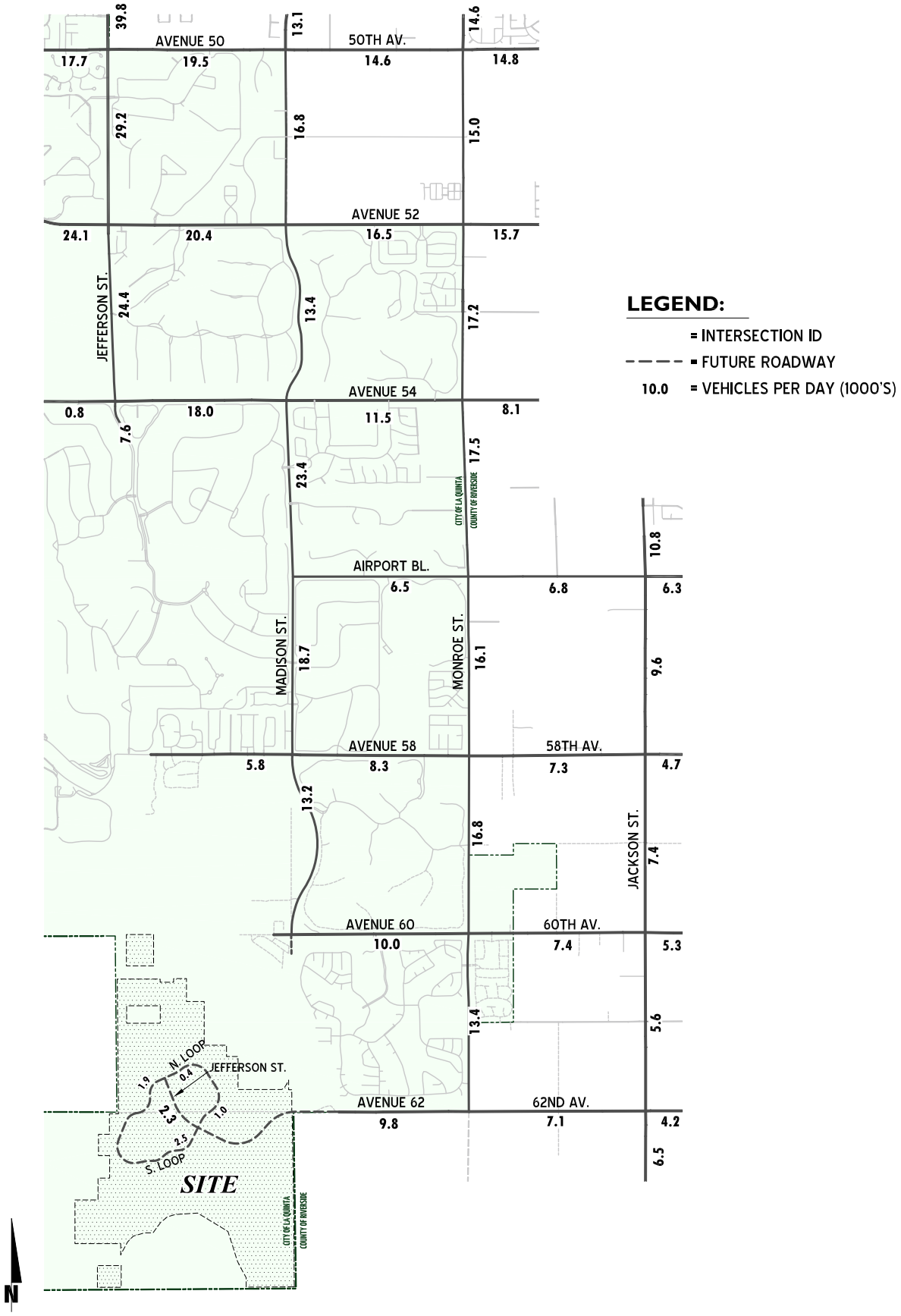
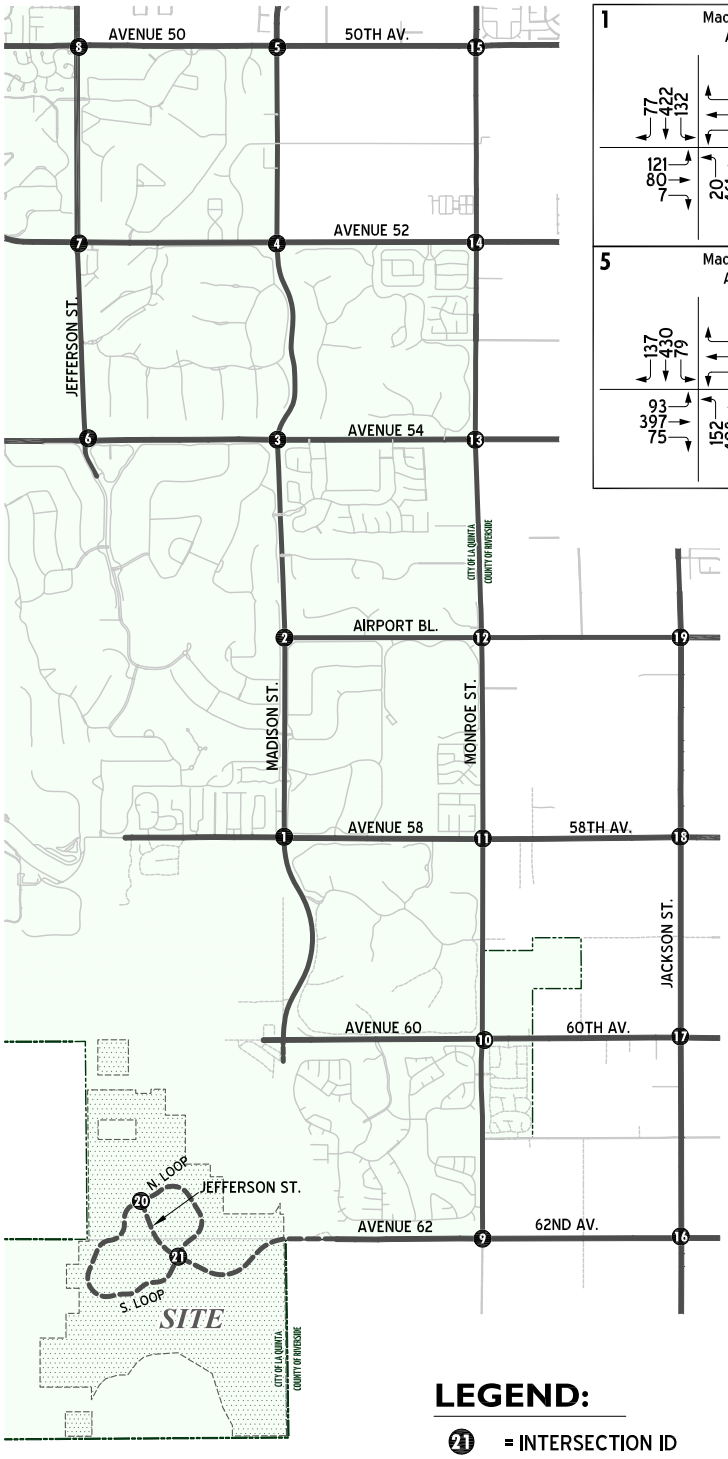
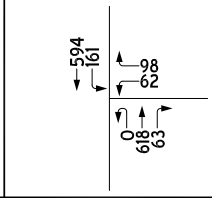


EXHIBIT 5-9: CUMULATIVE WITH PHASE 2 PROJECT (2029) OPTION 2
AM PEAK HOUR INTERSECTION VOLUMES

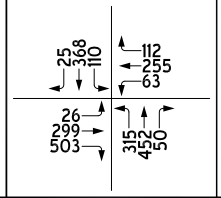


1 Madison St. & Avenue 58

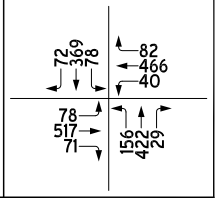
2 Madison St. & Airport Blvd.



3 Madison St. & Avenue 54

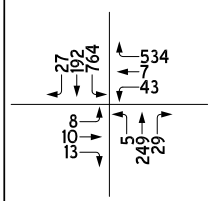


4 Madison St. & Avenue 52

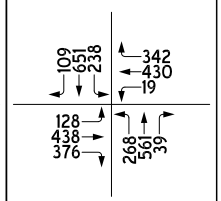


5 Madison St. & Avenue 50

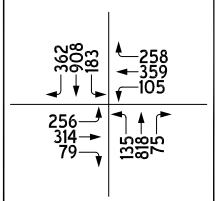
6 Jefferson St. & Avenue 54



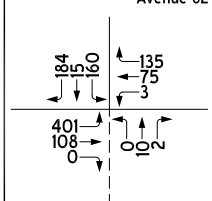
7 Jefferson St. & Avenue 52



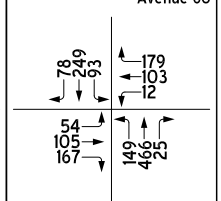
8 Jefferson St. & Avenue 50



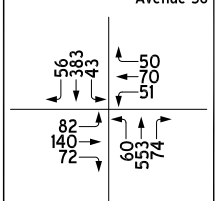
9 Monroe St. & Avenue 62



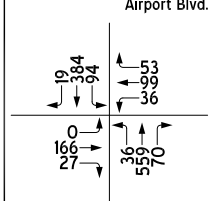
10 Monroe St. & Avenue 60



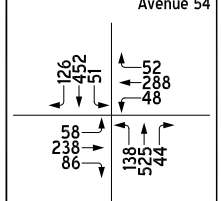
11 Monroe St. & Avenue 58



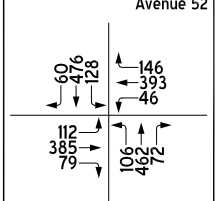
12 Monroe St. & Airport Blvd.



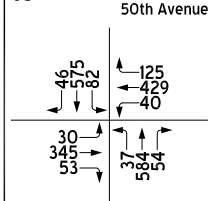
13 Monroe St. & Avenue 54



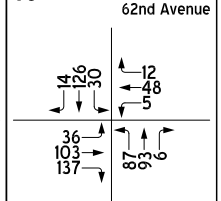
14 Monroe St. & Avenue 52



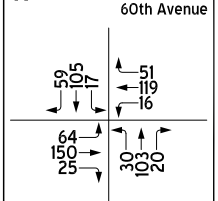
15 Monroe St. & 50th Avenue



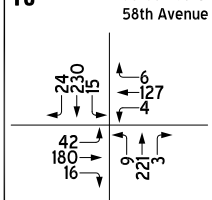
16 Jackson St. & 62nd Avenue



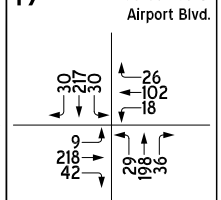
17 Jackson St. & 60th Avenue



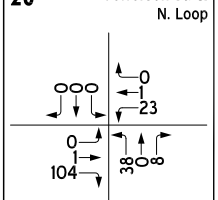
18 Jackson St. & 58th Avenue



19 Jackson St. & Airport Blvd.



20 Jefferson St. & N. Loop



21 Jefferson St. & S. Loop

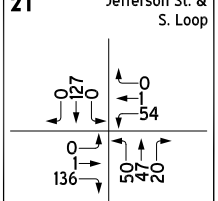
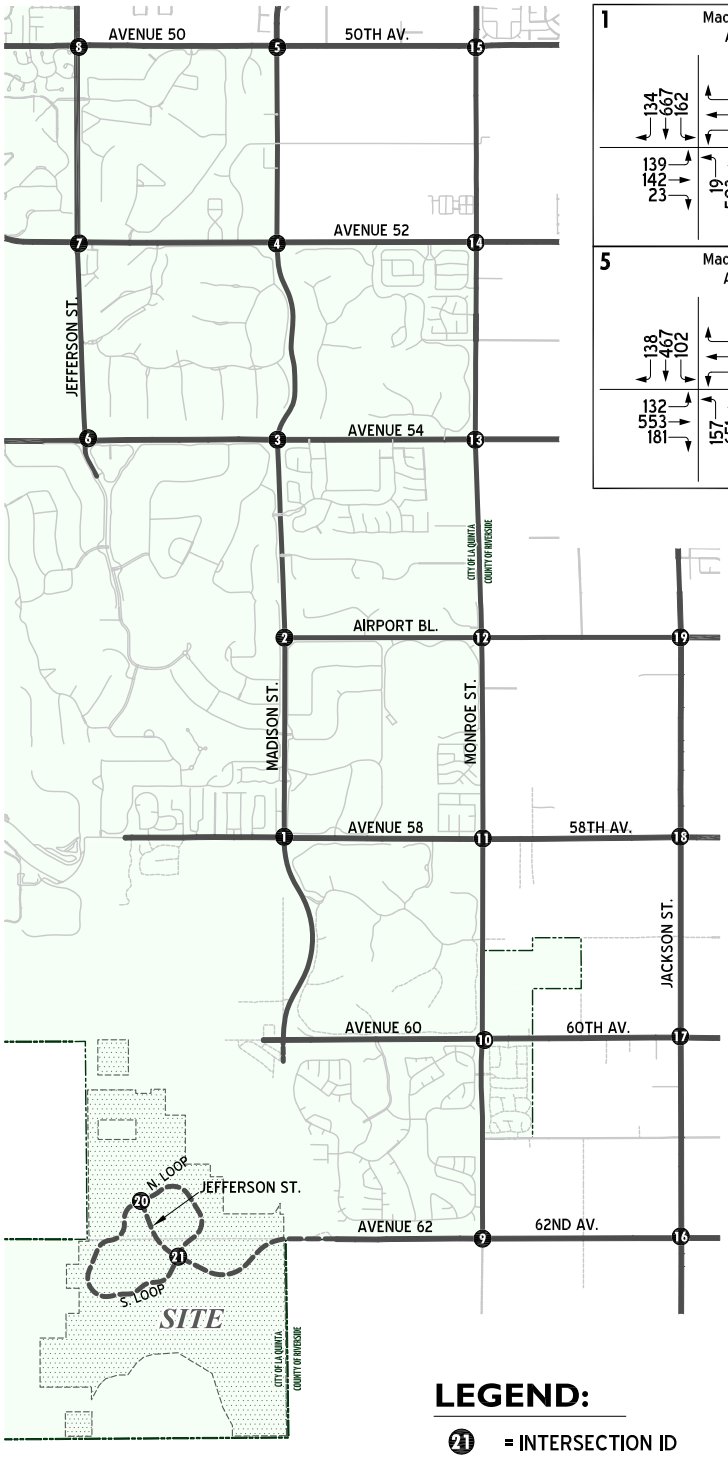
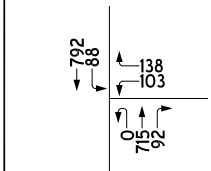


EXHIBIT 5-10: CUMULATIVE WITH PHASE 2 PROJECT (2029) OPTION 2
PM PEAK HOUR INTERSECTION VOLUMES

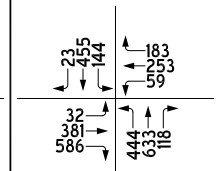


1 Madison St. & Avenue 58

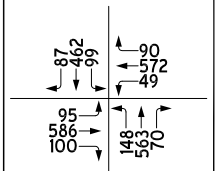
2 Madison St. & Airport Blvd.



3 Madison St. & Avenue 54

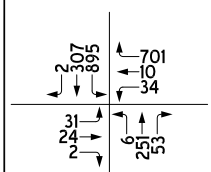


4 Madison St. & Avenue 52

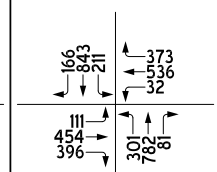


5 Madison St. & Avenue 50

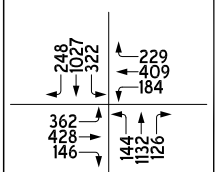
6 Jefferson St. & Avenue 54



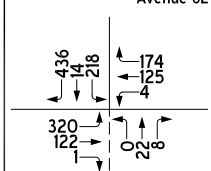
7 Jefferson St. & Avenue 52



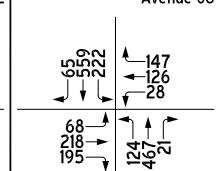
8 Jefferson St. & Avenue 50



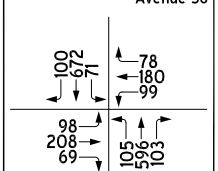
9 Monroe St. & Avenue 62



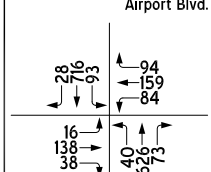
10 Monroe St. & Avenue 60



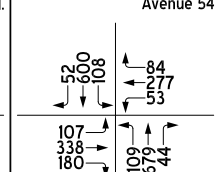
11 Monroe St. & Avenue 58



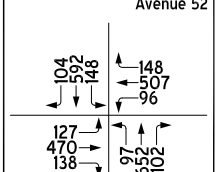
12 Monroe St. & Airport Blvd.



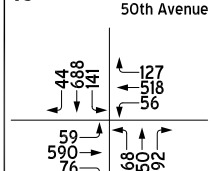
13 Monroe St. & Avenue 54



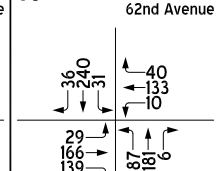
14 Monroe St. & Avenue 52



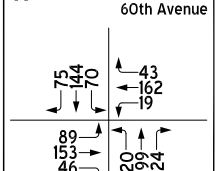
15 Monroe St. & 50th Avenue



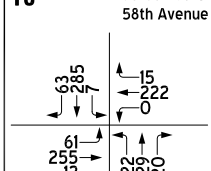
16 Jackson St. & 62nd Avenue



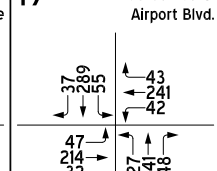
17 Jackson St. & 60th Avenue



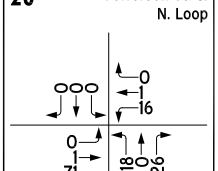
18 Jackson St. & 58th Avenue



19 Jackson St. & Airport Blvd.



20 Jefferson St. & N. Loop



21 Jefferson St. & S. Loop

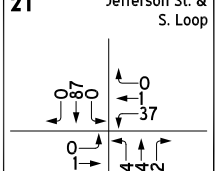


TABLE 5-2: INTERSECTION ANALYSIS FOR PHASE 2 (2029) CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Without Project				With Project				With Project (Option 2)[4]			
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (Secs)		Level of Service[2]		Delay[2] (Secs)		Level of Service[2]		Delay[2] (Secs)		Level of Service[2]	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Madison St. / Avenue 58																									
	- Without Improvements	AWS	1	2	1	1	2	d	1	1	1	1	2	1	21.9	**>80**	C	**F**	**37.8**	**>80**	**E**	**F**	21.9	**>80**	C	**F**
	- With Improvements	TS	1	2	1	1	2	d	1	1	1	1	2	1	26.7	35.3	C	D	32.4	39.4	C	D	26.7	35.3	C	D
2	Madison St. / Airport Blvd.	TS	1	2	d	1	2	0	0	0	0	1	0	1	10.3	9.4	B	A	10.3	9.4	B	A	10.3	9.4	B	A
3	Madison St. / Avenue 54																									
	- Without Improvements	AWS	2	2	1	1	2	0	1	2	d	1	2	1	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	2	2	1	1	2	0	1	2	1>>	1	2	1	36.1	36.7	D	D	35.6	37.0	D	D	37.5	39.1	D	D
4	Madison St. / Avenue 52	TS	2	2	1	2	2	d	1	2	d	1	2	1	33.1	34.6	C	C	33.8	35.7	C	D	33.4	34.9	C	C
5	Madison St. / Avenue 50	TS	2	2	1	2	2	1	1	2	1	1	2	1	33.0	35.0	C	C	33.3	35.2	C	D	33.3	35.2	C	D
6	Jefferson St. / Avenue 54																									
	- Without Improvements	AWS	0.5	1	0.5	2	2	1	1	2	0	1	1	1	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	2	0	2	2	1	1	1	1	1	1	1>	36.2	25.2	D	C	36.4	27.5	D	C	36.4	27.5	D	C
7	Jefferson St. / Avenue 52																									
	- Without Improvements	RDB	0.5	0.5	1>>	0.5	0.5	1>>	0.5	0.5	1>>	0.5	0.5	1>>	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- Without Improvements	RDB	0.5	**1.5**	1>>	0.5	**1.5**	1>>	0.5	**1.5**	1>>	0.5	**1.5**	1>>	13.2	25.3	B	D	14.6	31.5	B	D	14.6	31.5	B	D
8	Jefferson St. / Avenue 50																									
	- Without Improvements	TS	1	3	1	2	3	1	1	2	1	1	1	1	**55.7**	**73.5**	**E**	**E**	**56.1**	**73.7**	**E**	**E**	**56.1**	**73.7**	**E**	**E**
	- With Improvements	TS	1	3	1	2	3	1	1	2	1	1	2	1	51.5	47.9	D	D	51.7	48.6	D	D	51.7	48.6	D	D
9	Monroe St. / Avenue 62																									
	- Without Improvements	AWS	0	0	0	1	0	1	0.5	0.5	0	0	1	0	9.0	12.5	A	B	10.8	20.8	B	C	18.7	**77.6**	C	**F**
	- With Improvements	TS	0	1!	0	0.5	0.5	1	1	1	0	0.5	0.5	1	-	-	-	-	-	-	-	-	15.3	22.4	B	C
10	Monroe St. / Avenue 60																									
	- Without Improvements	AWS	1	1	0	1	1	1	0.5	0.5	1	0	1!	0	22.5	**49.6**	C	**E**	**38.7**	**>80**	**E**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	1	0	1	1	1	0.5	0.5	1	0	1!	0	13.0	14.2	B	B	13.4	14.5	B	B	13.6	16.4	B	B
11	Monroe St. / Avenue 58																									
	- Without Improvements	AWS	0	1!	0	0.5	0.5	1	0	1!	0	0	1!	0	25.0	**>80**	C	**F**	**76.5**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	1	1	1	1	1	1	1	0	1	1	0	28.8	34.1	C	C	29.0	39.6	C	D	29.1	46.1	C	D
12	Monroe St. / Airport Blvd.																									
	- Without Improvements	AWS	1	1	0	1	2	d	1	1	1	0	1!	0	**35.1**	**>80**	**E**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	1	0	1	2	d	1	1	1	0	1!	0	11.0	12.4	B	B	11.2	14.1	B	B	11.8	15.5	B	B
13	Monroe St. / Avenue 54																									
	- Without Improvements	AWS	0	1!	0	0.5	0.5	1	1	1	0	0	1!	0	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	1	0	1	1	1	1	1	0	1	1	0	31.5	38.0	C	D	31.9	40.2	C	D	44.3	54.0	D	D
14	Monroe St. / Avenue 52																									
	- Without Improvements	AWS	0	1!	0	1	2	0	1	1	1	1	2	d	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	2	0	1	2	0	1	1	1	1	2	d	42.0	44.5	D	D	42.5	46.1	D	D	42.7	47.8	D	D
15	Monroe St. / 50th Avenue	TS	1	2	0	1	2	0	1	1	1	1	1	1>	19.7	33.8	B	C	20.4	36.4	C	D	20.4	36.4	C	D
16	Jackson St. / Avenue 62	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	9.6	12.3	A	B	11.1	21.5	B	C	11.1	21.5	B	C
17	Jackson St. / Avenue 60	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	9.9	16.0	A	C	10.5	20.1	B	C	10.5	20.1	B	C
18	Jackson St. / 58th Avenue																									
	- Without Improvements	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	11.2	**56.9**	B	**F**	12.5	**>80**	B	**F**	12.5	**>80**	B	**F**
	- With Improvements	TS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	12.3	24.8	B	C	12.5	26.1	B	C	12.5	26.1	B	C
19	Jackson St. / Airport Blvd.																									
	- Without Improvements	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	12.1	**39.2**	B	**E**	13.7	**76.0**	B	**F**	13.7	**76.0**	B	**F**
	- With Improvements	TS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	23.9	13.6	C	B	24.2	13.6	C	B	24.2	13.6	C	B
20	Jefferson St. / N. Loop	RDB	0	1!	0	0	1!	0	0	1!	0	0	1!	0	Intersection does not exist				3.7	4.4	A	A	3.2	3.4	A	A
21	Jefferson St. / S. Loop	RDB	0	1!	0	0	1!	0	0	1!	0	0	1!	0	Intersection does not exist				3.8	4.3	A	A	3.9	4.7	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 Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane; 1 = Improvement

1 = Improvement per City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 2012)

[2] Per the Highway Capacity Manual 6th Edition (HCM6), overall average intersection delay and level of service are shown for intersections with a 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 (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 10.1 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop; RDB = Roundabout

[4] Option 2: Without Jefferson Street connection to Avenue 58.

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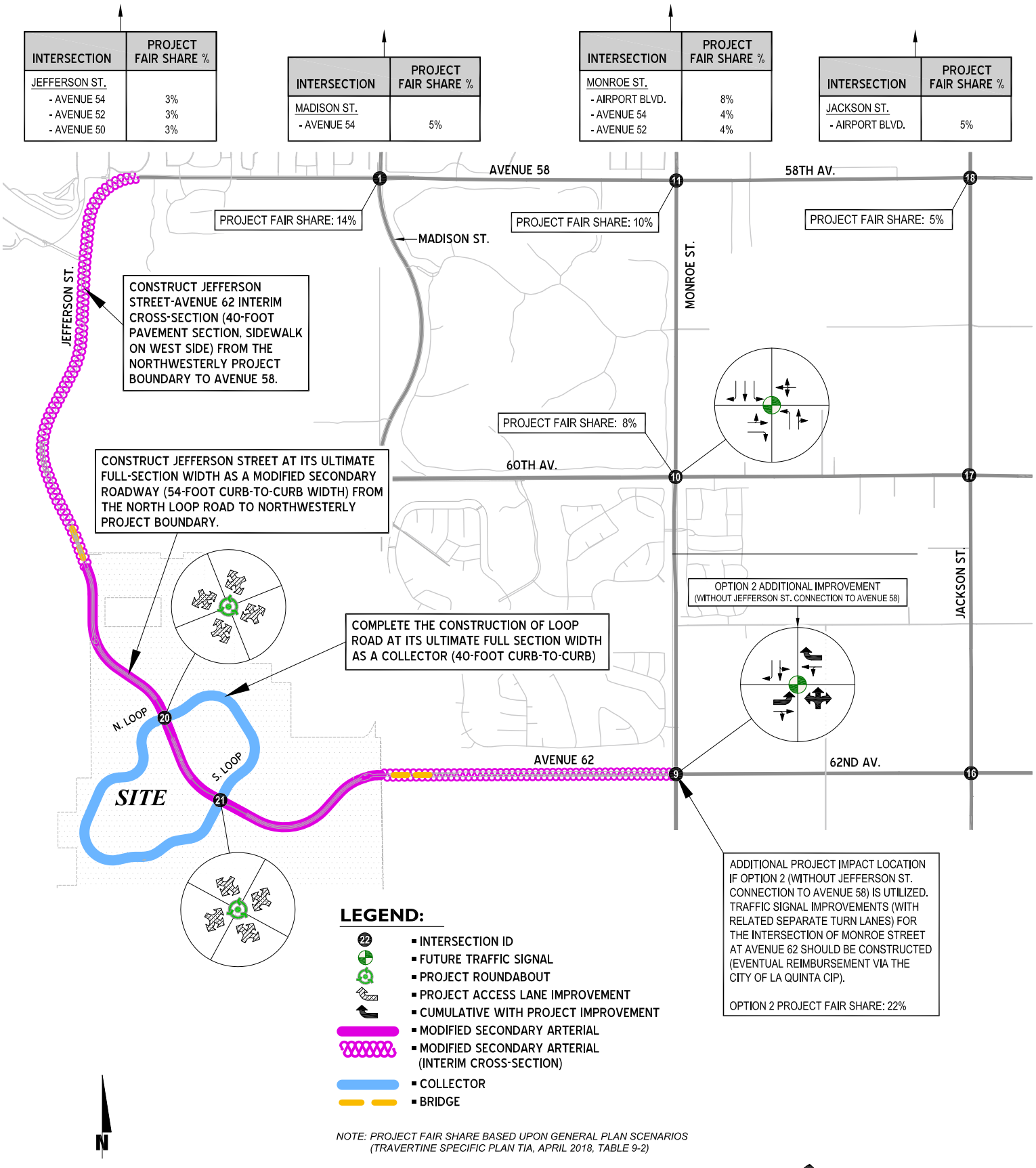
EXHIBIT 5-11: PHASE 2 (2029) RECOMMENDED ACCESS FEATURES AND CONTRIBUTIONS TO OFF-SITE IMPROVEMENTS



NOTE: PROJECT FAIR SHARE BASED UPON GENERAL PLAN SCENARIOS (TRAVERTINE SPECIFIC PLAN TIA, APRIL 2018, TABLE 9-2)

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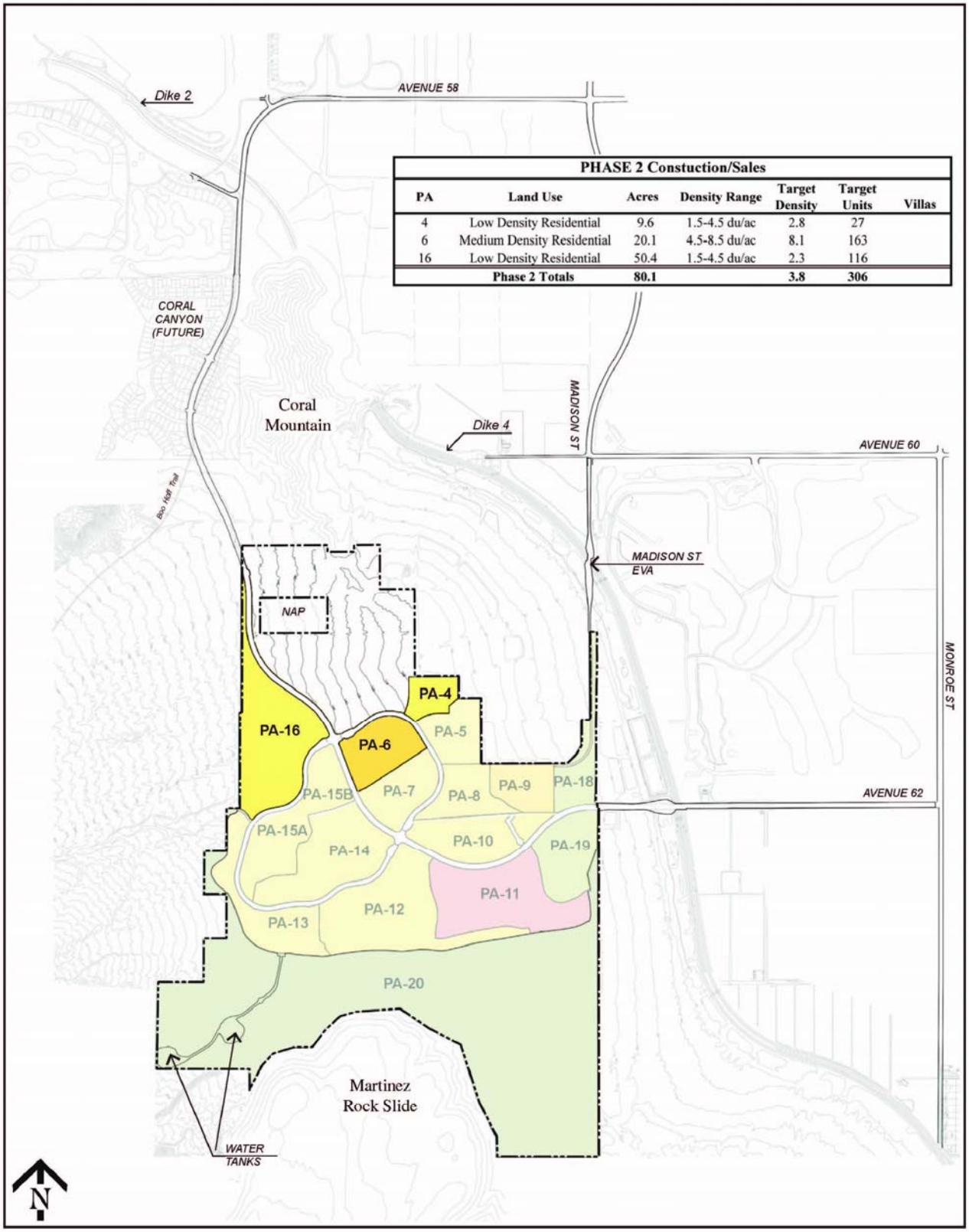
URBAN CROSSROADS

EXHIBIT 5-12: PHASE 2 SITE DEVELOPMENT PLAN



PHASE 2 Constuction/Sales

PA	Land Use	Acres	Density Range	Target Density	Target Units	Villas
4	Low Density Residential	9.6	1.5-4.5 du/ac	2.8	27	
6	Medium Density Residential	20.1	4.5-8.5 du/ac	8.1	163	
16	Low Density Residential	50.4	1.5-4.5 du/ac	2.3	116	
	Phase 2 Totals	**80.1**		**3.8**	**306**	

TABLE 5-3: ROADWAY VOLUME/CAPACITY ANALYSIS FOR EXISTING PLUS AMBIENT PLUS CUMULATIVE PLUS PROJECT PHASE 2 (2029) CONDITIONS

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	Capacity[2]	Without Project		With Project		With Project (Option 2)[7]	
					ADT[3]	Volume/ Capacity Ratio	ADT[3]	Volume/ Capacity Ratio	ADT[3]	Volume/ Capacity Ratio
Avenue 58	West of Madison Street	Secondary	3	21,000 [4]	5,800	0.28	10,000	0.48	5,800	0.28
	West of Monroe Street	Secondary	4	28,000	7,500	0.27	8,800	0.31	7,500	0.27
	West of Jackson Street	Secondary	2	14,000 [4]	6,500	0.46	7,300	0.52	7,300	0.52
Madison St.	South of Avenue 56	Primary	4	42,600	18,900	0.44	21,500	0.50	18,900	0.44
60th Avenue	West of Jackson Street	Primary	2	19,000 [6]	5,400	0.28	5,800	0.31	5,800	0.31
Avenue 62	West of Monroe Street	Modified Secondary	2	19,000	1,500	0.08	5,700	0.30	9,800	0.52
	West of Jackson Street	Secondary	2	14,000 [4]	5,500	0.39	7,100	0.51	7,100	0.51
Monroe St.	South of Avenue 60	Secondary	2	14,000 [4]	6,700	0.48	9,200	0.66	13,400	**0.96**
	South of Avenue 58	Primary	2	19,000 [6]	10,600	0.56	12,600	0.66	16,800	0.88
	South of Avenue 56	Primary	3	31,950 [5]	11,100	0.35	13,600	0.43	16,100	0.50
Jackson St.	South of Airport Boulevard	Primary	2	19,000 [6]	8,500	0.45	9,300	0.49	9,300	0.49

[1] Existing Number of Through lanes

[2] Source: City of La Quinta Engineering Bulletin #06-13 (July 2015)

[3] Average Daily Traffic (ADT) expressed in vehicles per day.

[4] Capacity was calculated as a ratio of 4-lane Secondary capacity.

[5] Capacity was calculated as a ratio of 4-lane Primary capacity.

[6] Estimated capacity for 2-lane Primary.

[7] Option 2: Without Jefferson Street connection to Avenue 58.

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For Phase 2, the Project should complete construction of Loop Road at its ultimate full section width as a Collector (40-foot curb-to-curb), with curb and gutters.

Other local street Project access points along Jefferson Street within the Phase 2 development area will require median openings and left turn pockets and cross-street stop traffic control as indicated in the 2018 TIA.

5.6 TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrant analyses have been performed at all applicable unsignalized study area intersections for Phase 2 (2029) Without Project traffic conditions (see Appendix 5.3). Two additional intersections are projected to satisfy traffic signal warrants:

- Jackson Street at Avenue 60
- Jackson Street at Avenue 62

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6 PROJECT PHASE 3 TRAFFIC ANALYSIS

This section discusses Project Phase 3 conditions, which includes Existing (2019) volumes, Ambient Growth traffic for 12 years, cumulative development traffic, and Project traffic. The results of the Phase 3 HCM intersection analysis and roadway segment capacity analysis are also presented.

6.1 PROJECT PHASE 3 LAND USE AND TRIP GENERATION

Project Phase 3 is anticipated to occur in 2031, and includes 758 single family detached residential homes, 442 duplex residential units, a 100-room resort hotel, and PA 11 resort/golf uses (golf practice, golf academy, and banquet accommodations).

Trip generation rates are presented on Table 6-1 for Phase 3 conditions. As shown on Table 6-1, Phase 3 of the proposed Project is anticipated to generate a net total of 11,321 external trip-ends per day on a typical weekday with 812 external vehicles per hour (VPH) during the weekday AM peak hour and 1,057 external VPH during the weekday PM peak hour.

6.2 PROJECT TRIP DISTRIBUTION

For Project Phase 3 conditions, two public access routes are provided: 1) the southerly extension of South Jefferson as an interim section (40-foot pavement section, sidewalk on west side), south of Avenue 58, and 2) the westerly extension of Avenue 62 as an interim section (40-foot pavement section, sidewalk on north side), west of Monroe Street (consistent with Phase 1 conditions).

The trip distribution pattern for the proposed Project is graphically depicted on Exhibit 6-1. For Project Phase 3 conditions, both Project access locations are used, with approximately half of Project traffic using each access.

Similar to Phases 1 and 2 conditions, approximately 70% of Project traffic travels north of Avenue 58.

6.3 TRAFFIC VOLUME ASSIGNMENT

Based on the identified Project Phase 3 development area traffic generation and trip distribution pattern, Project only ADT and weekday AM and PM peak hour intersection turning movement volumes are shown on Exhibits 6-2 through 6-4, respectively.

Ambient growth between 2019 and 2031 as well as cumulative development are incorporated in the cumulative traffic projections shown on Exhibits 6-5 through 6-7. Exhibit 6-5 shows the cumulative (2031) daily traffic projections on study area roadway segments. Exhibit 6-6 presents the cumulative (2031) weekday AM peak hour volumes at study area intersections. Exhibit 6-7 depicts the cumulative (2031) weekday PM peak hour volumes at study area analysis locations.

TABLE 6-1: PROJECT PHASE 3 (2031) TRIP GENERATION SUMMARY

Trip Generation Rates[1]										
			AM Peak Hour			PM Peak Hour			
Land Use	ITE LU Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	210	758 DU	0.19	0.55	0.74	0.62	0.37	0.99	9.44
Multifamily Housing (Low-Rise)	220	442 DU	0.11	0.35	0.46	0.35	0.21	0.56	7.32
Hotel	310	100 RM	0.36	0.26	0.62	0.36	0.37	0.73	12.23
Resort/Golf[3]	430	12 HOLES	1.39	0.37	1.76	1.54	1.37	2.91	30.38

Trip Generation Results									
			AM Peak Hour			PM Peak Hour			
Land Use	ITE LU Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	210	758 DU	144	417	561	470	280	750	7,156
Multifamily Housing (Low-Rise)	220	442 DU	49	155	204	155	93	248	3,235
Internal to Hotel & Resort/Golf			*(6)*	*(12)*	*(18)*	*(12)*	*(12)*	*(24)*	*(256)*
Residential External Trips			187	560	747	613	361	974	10,135
Hotel	310	100 RM	36	26	62	36	37	73	1,223
Internal to Residential & Resort/Golf			*(5)*	*(4)*	*(9)*	*(5)*	*(6)*	*(11)*	*(256)*
Hotel External Trips			31	22	53	31	31	62	967
Resort/Golf[3]	430	12 HOLES	17	4	21	18	16	34	365
Internal to Residential & Hotel			*(7)*	*(2)*	*(9)*	*(7)*	*(6)*	*(13)*	*(146)*
Resort/Golf[3] External Trips			10	2	12	11	10	21	219
Project Subtotal			246	602	848	679	426	1,105	11,979
Internal Capture Subtotal			*(18)*	*(18)*	*(36)*	*(24)*	*(24)*	*(48)*	*(658)*
Phase 3 (2031) Project Total External Trips			**228**	**584**	**812**	**655**	**402**	**1,057**	**11,321**

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition (2017).

[2] DU = Dwelling Unit; RM = Occupied Room

[3] Resort/Golf (golf practice, golf academy, and banquet accommodations).

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EXHIBIT 6-1: PHASE 3 (2031) PROJECT TRIP DISTRIBUTION

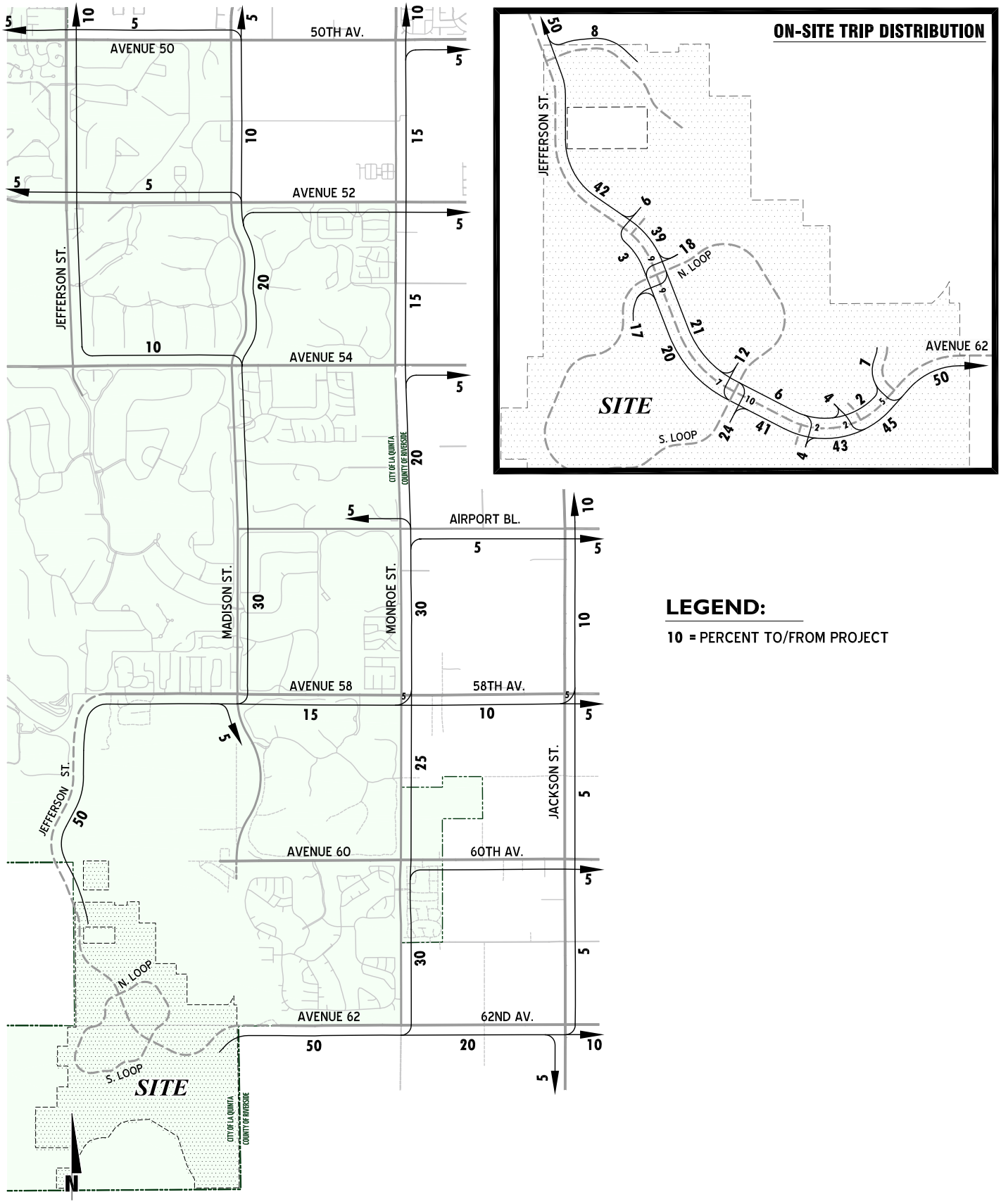


EXHIBIT 6-2: PROJECT ONLY PHASE 2 (2029)
AVERAGE DAILY TRAFFIC (ADT)

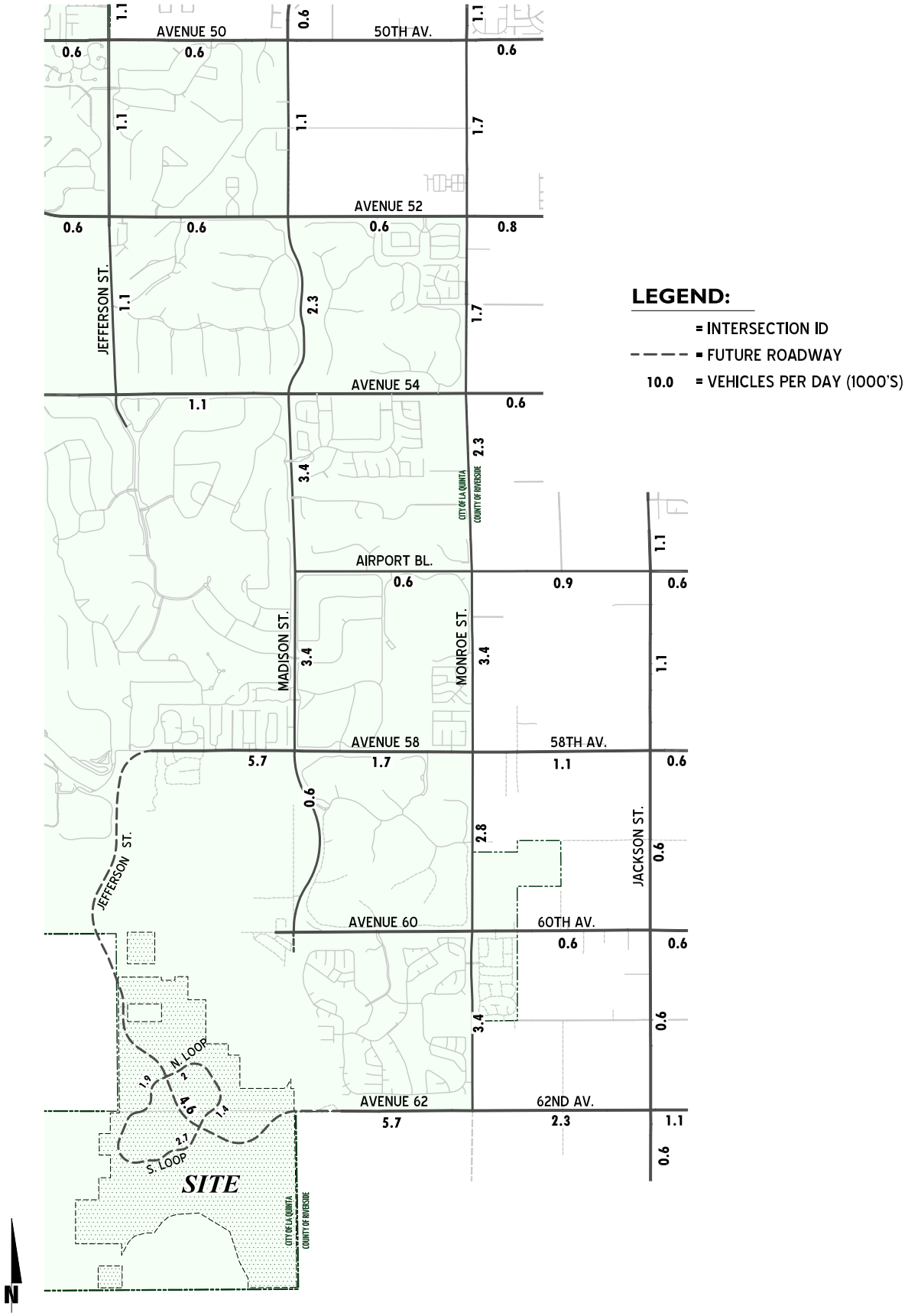
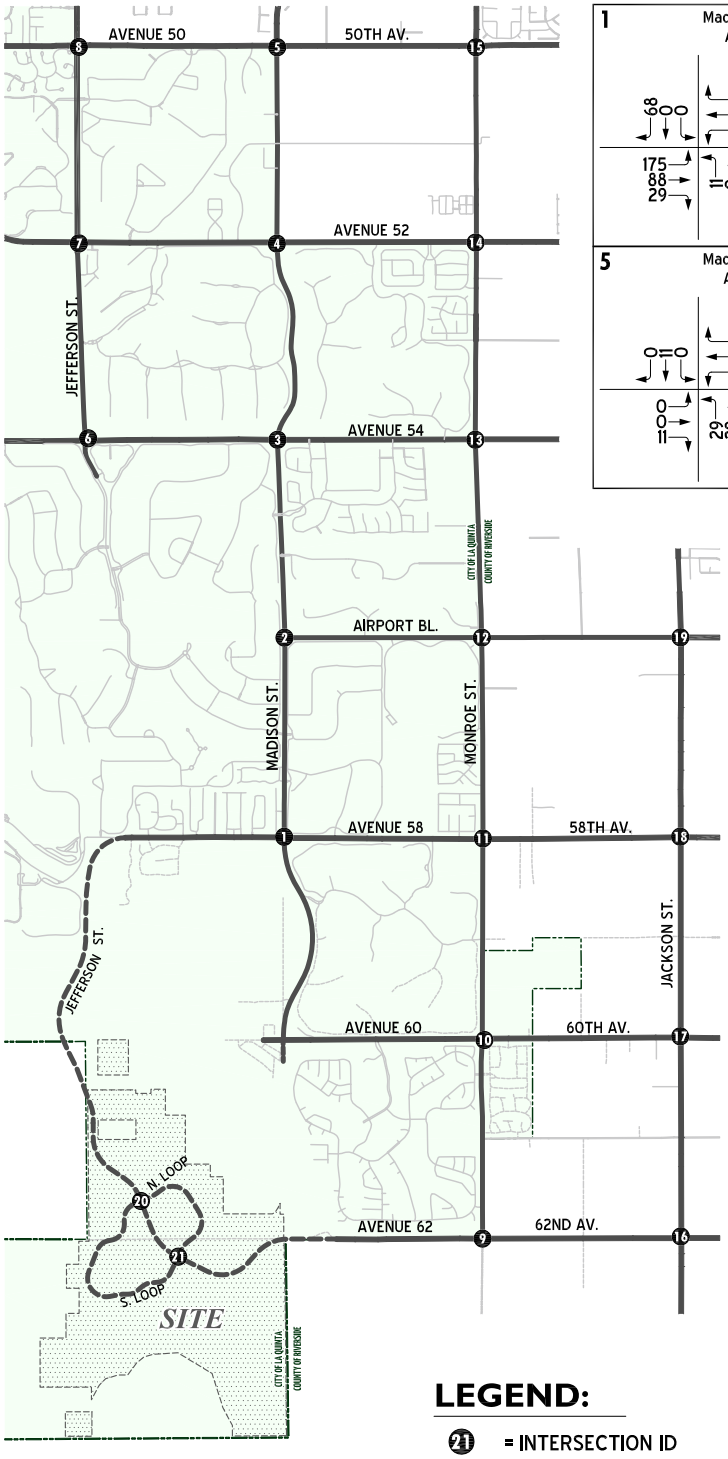


EXHIBIT 6-3: PROJECT ONLY PHASE 3 (2031)
AM PEAK HOUR INTERSECTION VOLUMES



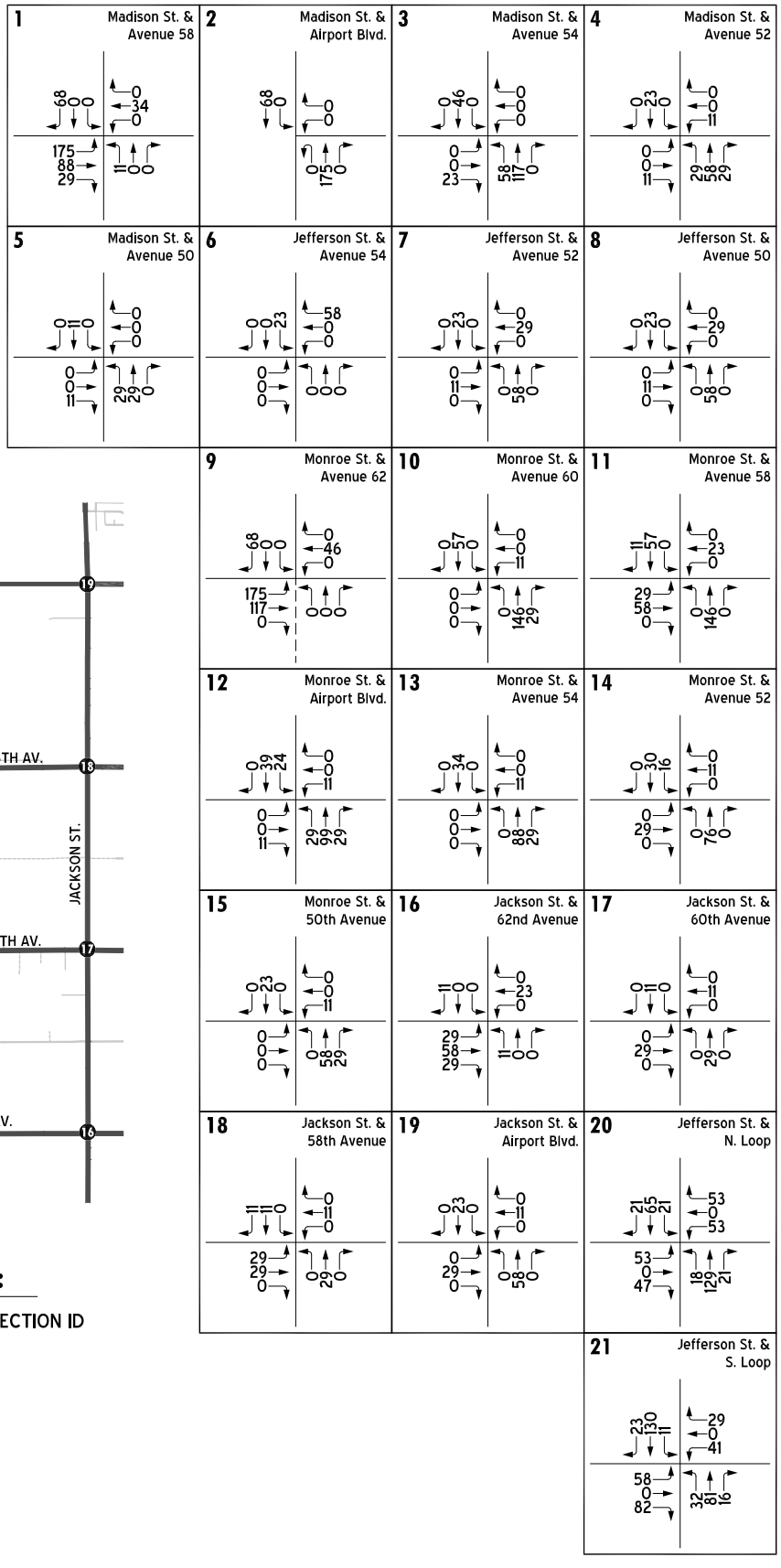
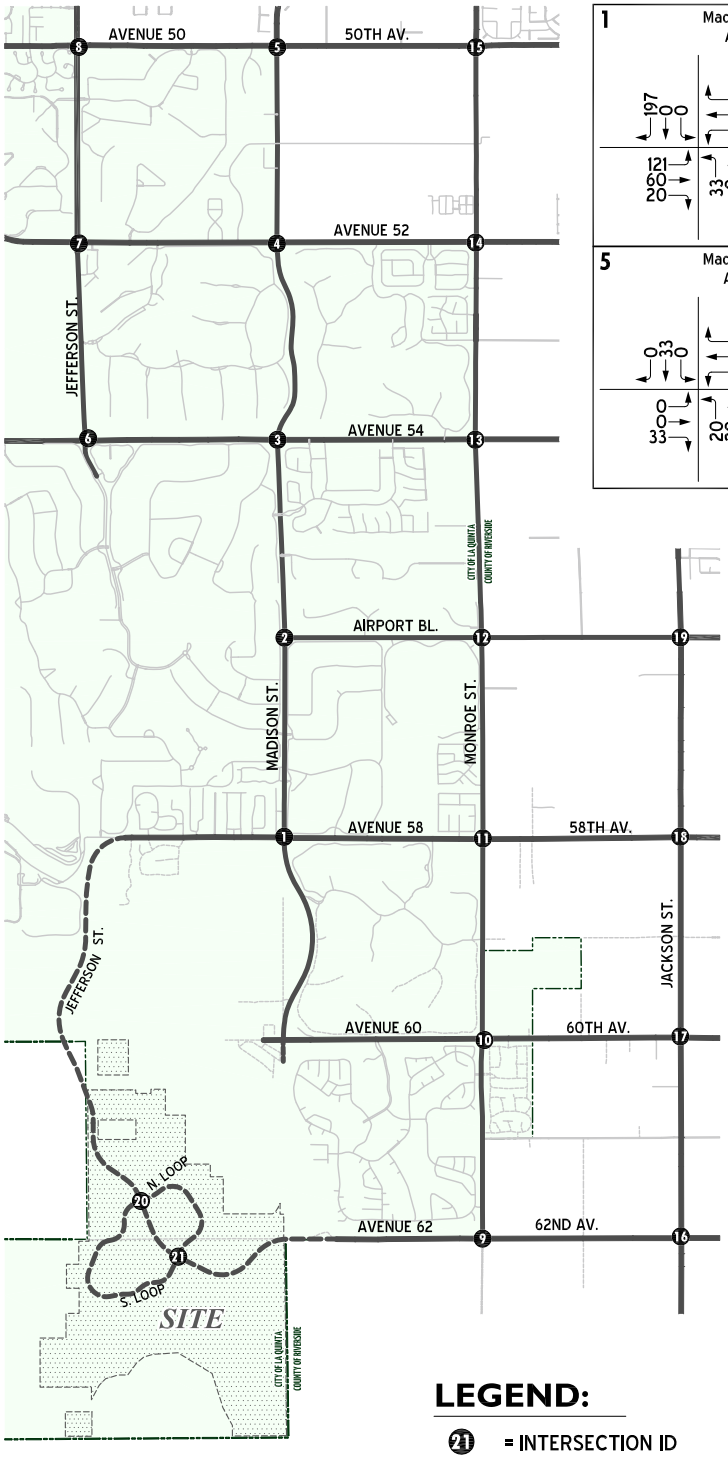


EXHIBIT 6-4: PROJECT ONLY PHASE 3 (2031)
PM PEAK HOUR INTERSECTION VOLUMES



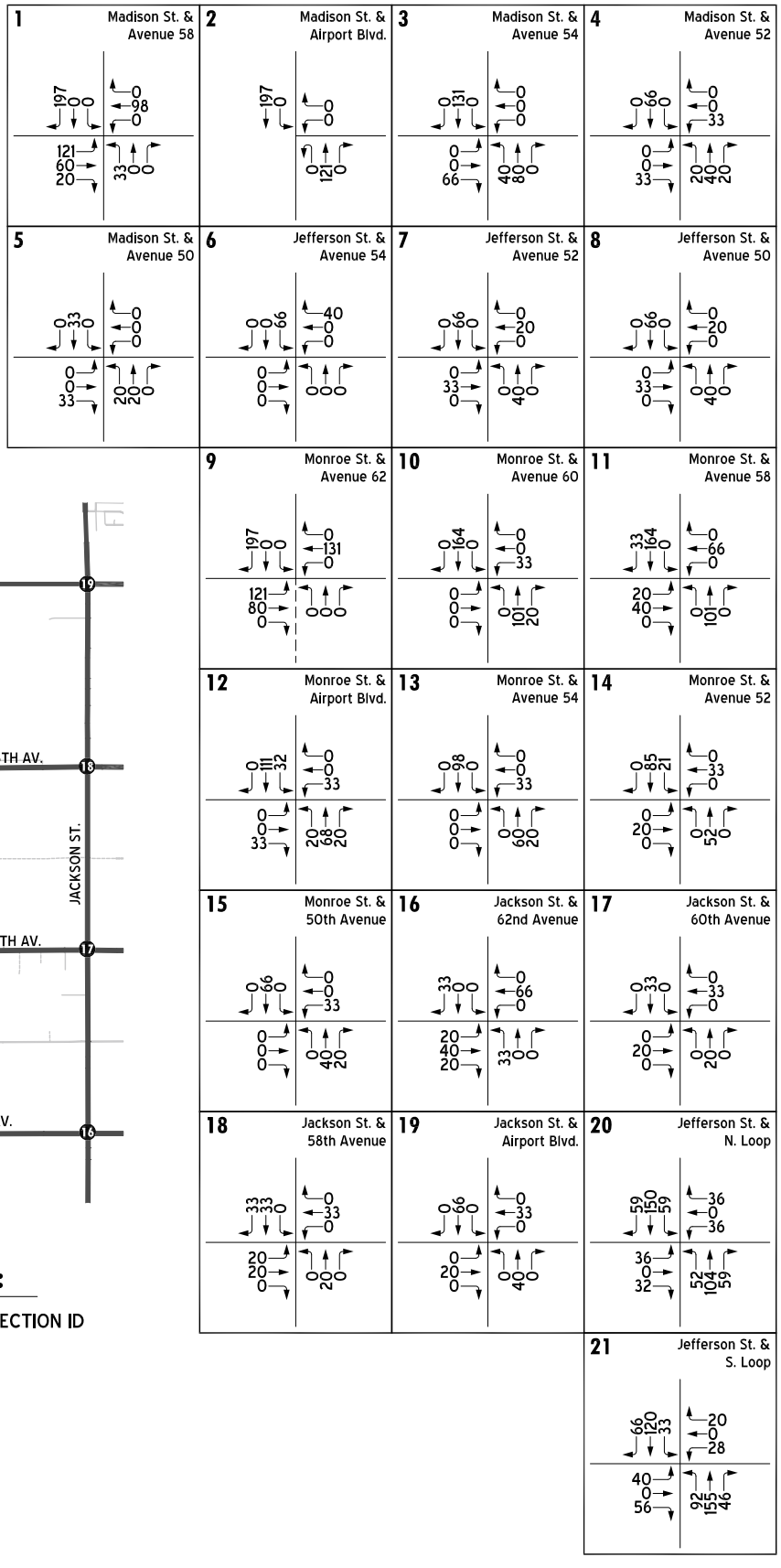


EXHIBIT 6-5: CUMULATIVE WITH PHASE 3 PROJECT (2031)
AVERAGE DAILY TRAFFIC (ADT)

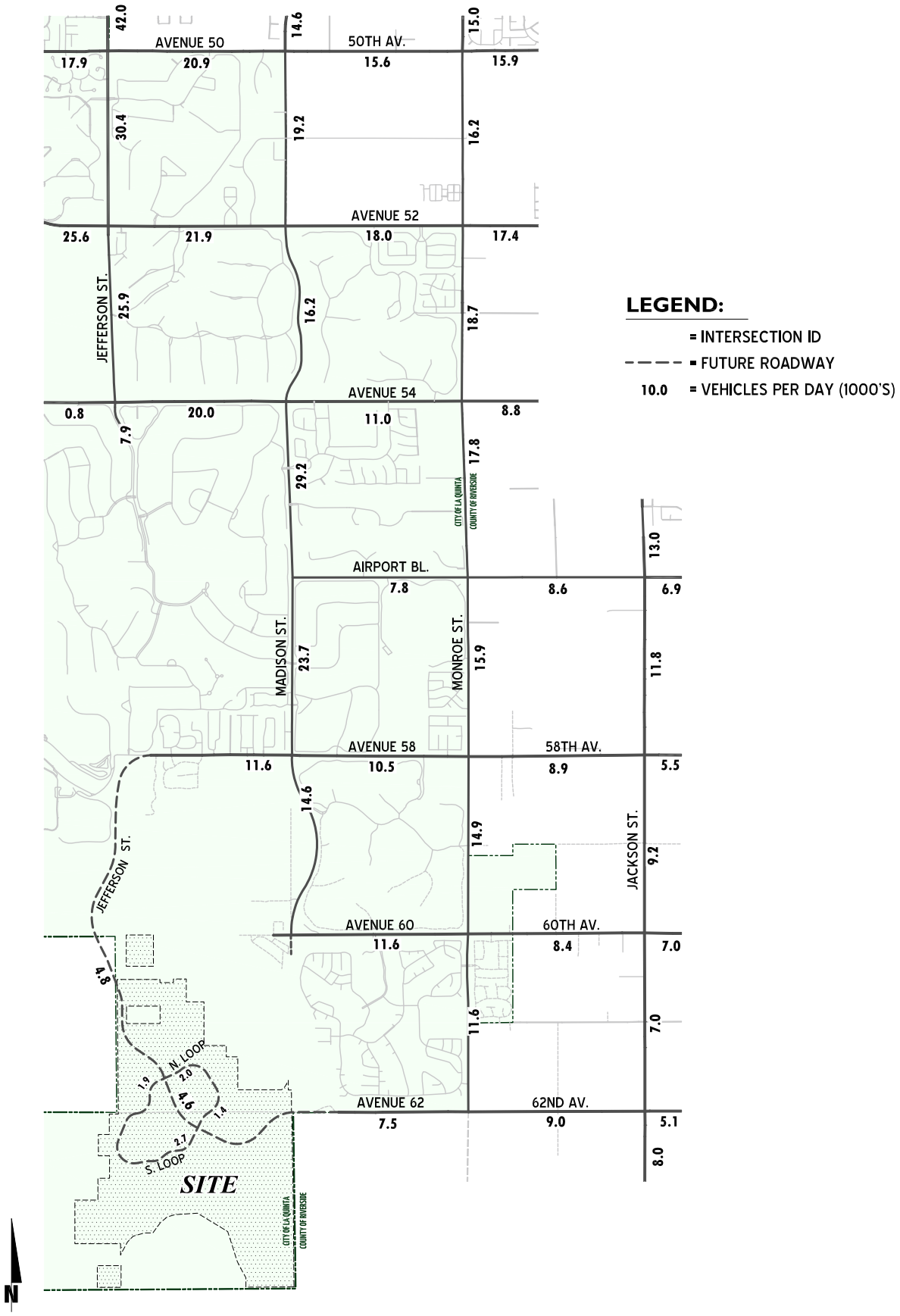
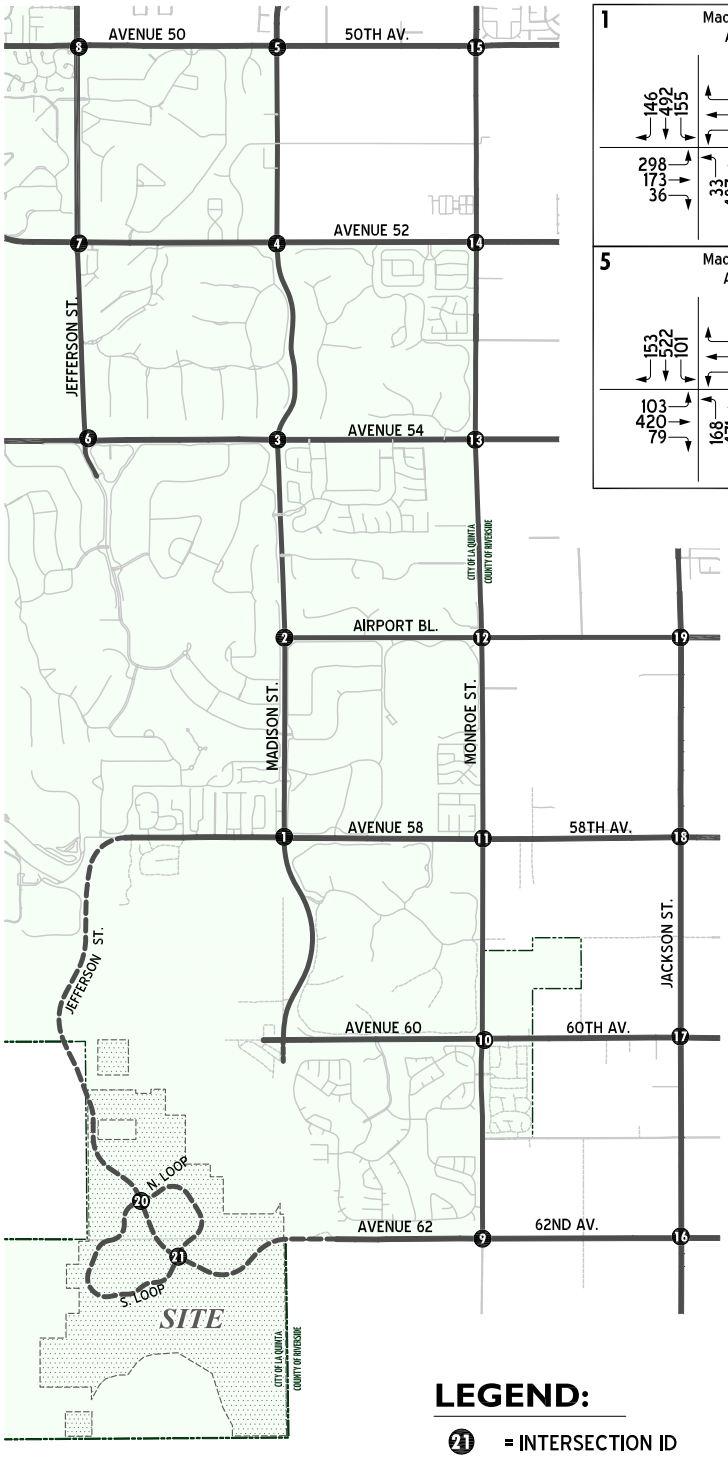
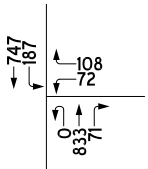


EXHIBIT 6-6: CUMULATIVE WITH PHASE 3 PROJECT (2031)
AM PEAK HOUR INTERSECTION VOLUMES

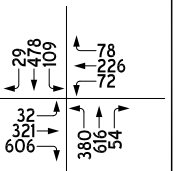


1 Madison St. & Avenue 58

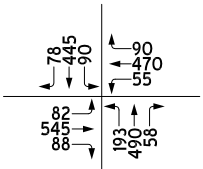
2 Madison St. & Airport Blvd.



3 Madison St. & Avenue 54

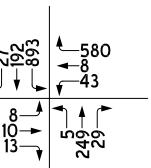


4 Madison St. & Avenue 52

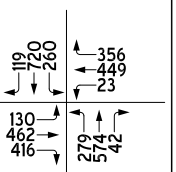


5 Madison St. & Avenue 50

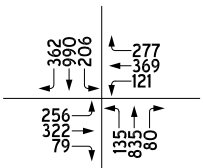
6 Jefferson St. & Avenue 54



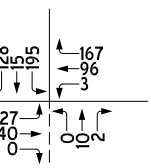
7 Jefferson St. & Avenue 52



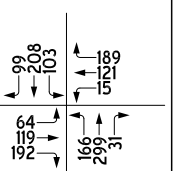
8 Jefferson St. & Avenue 50



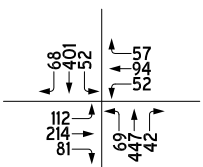
9 Monroe St. & Avenue 62



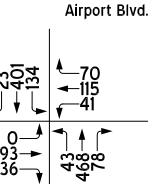
10 Monroe St. & Avenue 60



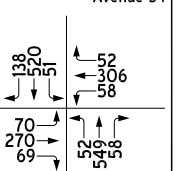
11 Monroe St. & Avenue 58



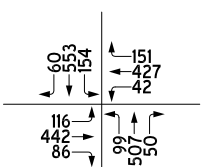
12 Monroe St. & Airport Blvd.



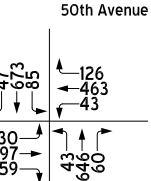
13 Monroe St. & Avenue 54



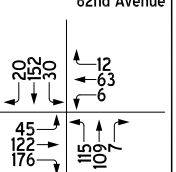
14 Monroe St. & Avenue 52



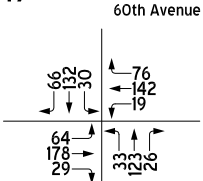
15 Monroe St. & 50th Avenue



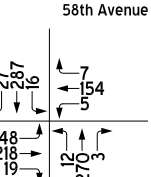
16 Jackson St. & 62nd Avenue



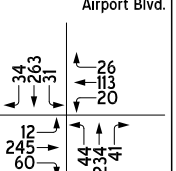
17 Jackson St. & 60th Avenue



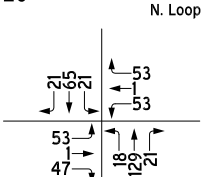
18 Jackson St. & 58th Avenue



19 Jackson St. & Airport Blvd.



20 Jefferson St. & N. Loop



21 Jefferson St. & S. Loop

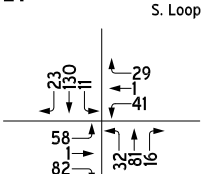
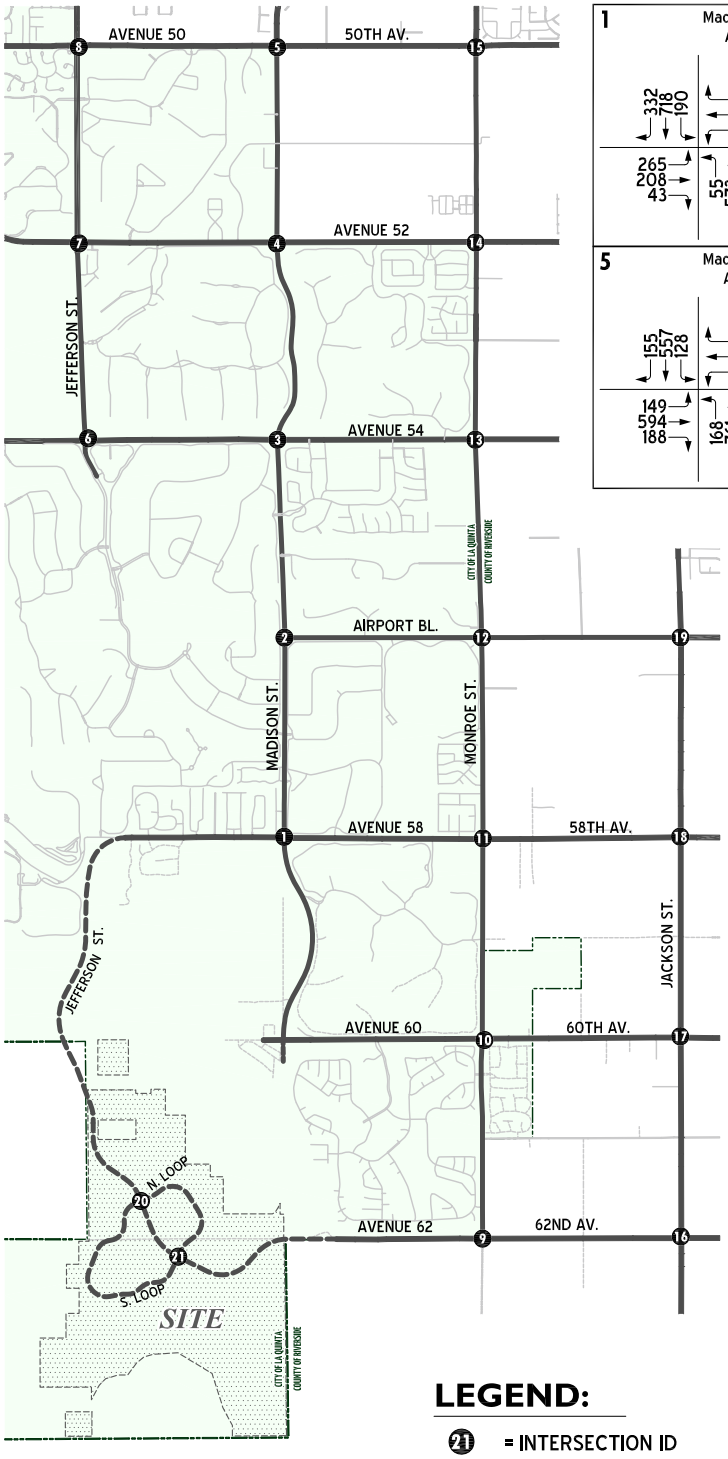


EXHIBIT 6-7: CUMULATIVE WITH PHASE 3 PROJECT (2031)
PM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

21 = INTERSECTION ID

1 Madison St. & Avenue 58

2 Madison St. & Airport Blvd.

3 Madison St. & Avenue 54

4 Madison St. & Avenue 52

5 Madison St. & Avenue 50

6 Jefferson St. & Avenue 54

7 Jefferson St. & Avenue 52

8 Jefferson St. & Avenue 50

9 Monroe St. & Avenue 62

10 Monroe St. & Avenue 60

11 Monroe St. & Avenue 58

12 Monroe St. & Airport Blvd.

13 Monroe St. & Avenue 54

14 Monroe St. & Avenue 52

15 Monroe St. & 50th Avenue

16 Jackson St. & 62nd Avenue

17 Jackson St. & 60th Avenue

18 Jackson St. & 58th Avenue

19 Jackson St. & Airport Blvd.

20 Jefferson St. & N. Loop

21 Jefferson St. & S. Loop

N

6.4 OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under Phase 3 (2031) Without and With Project traffic conditions. The intersection analysis results are summarized in Table 6-2.

Table 6-2 indicates that the following two study area intersections experience Project impacts, requiring CIP-funded improvements in order to maintain acceptable LOS under Phase 3 With Project conditions:

- Monroe Street at Avenue 62
- Jackson Street at Avenue 62

The intersection improvements to provide acceptable LOS at these two locations are traffic signals (with related separate turn lanes), which is recommended to be constructed by the Project for eventual reimbursement via the City of La Quinta CIP.

The intersection operations analysis worksheets for EAPC Project Phase 3 (2031) traffic conditions are included in Appendix 6.1 of this TIA.

Additional cumulative improvements are required to serve 2031 "without project" conditions at three study area intersections (beyond the improvement needs identified for Project Phases 1 and 2):

- Jackson Street at Avenue 60, (traffic signal)
- Monroe Street at Avenue 54 (2nd northbound left turn lane, 2nd southbound left turn lane)
- Monroe Street at Avenue 52 (2nd eastbound through lane)

These cumulative "without project" improvement needs are mitigated by fair share contributions at each location.

Table 6-2 also indicates that the intersection of Jefferson Street at Avenue 52 experiences deficient operations under cumulative "without project" conditions. Jefferson Street at Avenue 52 requires reconstruction of the current roundabout design to incorporate 3 circulating lanes around the center island. This effectively accommodates 2 additional through lanes in the northbound, southbound, eastbound, and westbound directions to provide acceptable LOS. These improvements were previously identified in the City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 14, 2012), for the City's buildout (2035) enhanced intersection configurations.

Exhibit 6-8 shows the recommended access features and Project contributions to off-site improvements. Project Phase 3 development plan is shown on Exhibit 6-9.

Table 6-3 provides a summary of the roadway segment analysis for Phase 3 (2031) traffic conditions. As shown on Table 6-3, all study roadway segments analyzed are anticipated to operate at acceptable LOS under Phase 3 (2031) traffic conditions.

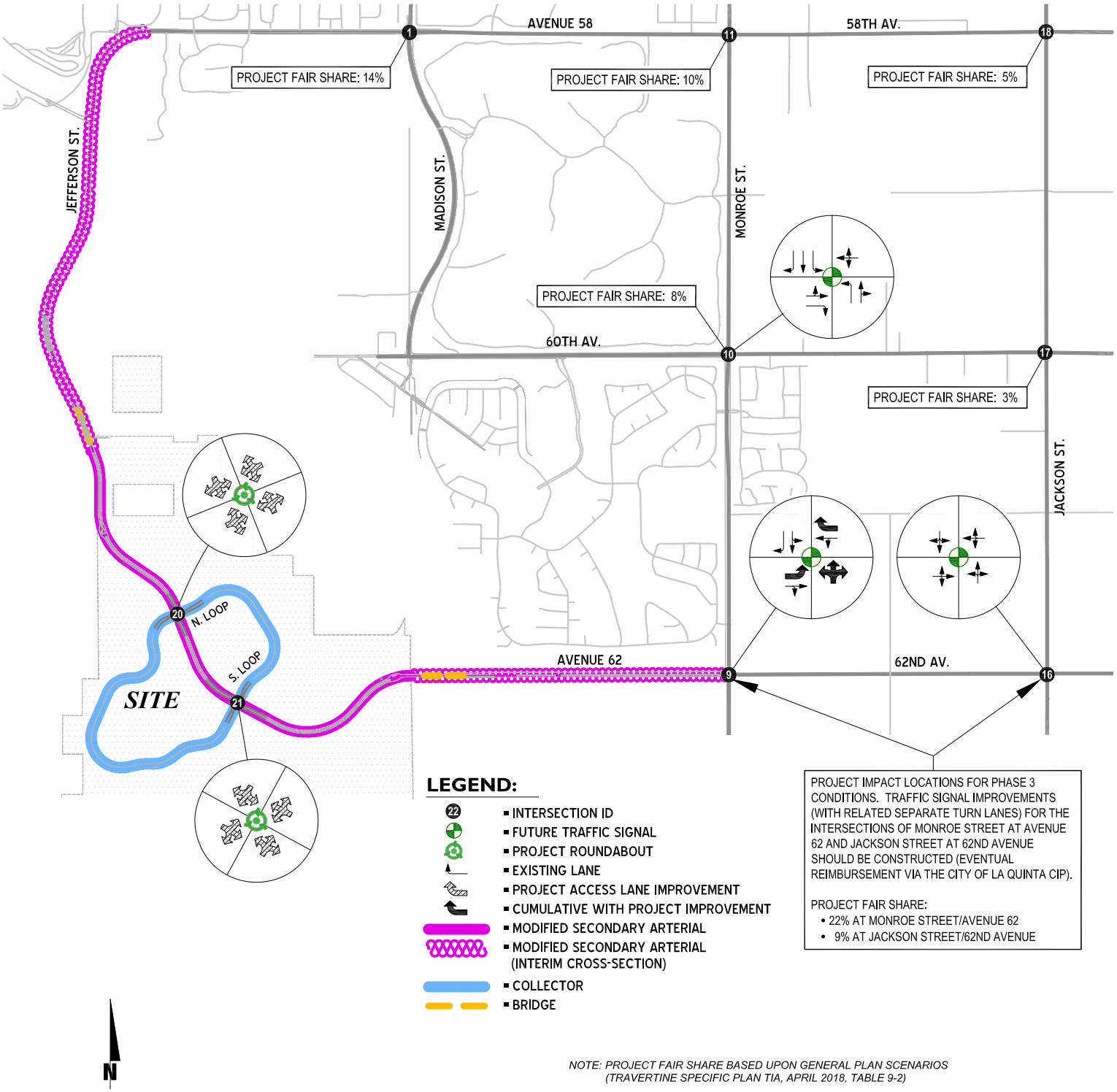
EXHIBIT 6-8: PHASE 3 (2031) RECOMMENDED ACCESS FEATURES AND CONTRIBUTIONS TO OFF-SITE IMPROVEMENTS

INTERSECTION	PROJECT FAIR SHARE %
JEFFERSON ST.	
- AVENUE 54	3%
- AVENUE 52	3%
- AVENUE 50	3%

INTERSECTION	PROJECT FAIR SHARE %
MADISON ST.	
- AVENUE 54	5%

INTERSECTION	PROJECT FAIR SHARE %
MONROE ST.	
- AIRPORT BLVD.	8%
- AVENUE 54	4%
- AVENUE 52	4%

INTERSECTION	PROJECT FAIR SHARE %
JACKSON ST.	
- AIRPORT BLVD.	5%



PROJECT IMPACT LOCATIONS FOR PHASE 3 CONDITIONS. TRAFFIC SIGNAL IMPROVEMENTS (WITH RELATED SEPARATE TURN LANES) FOR THE INTERSECTIONS OF MONROE STREET AT AVENUE 62 AND JACKSON STREET AT 62ND AVENUE SHOULD BE CONSTRUCTED (EVENTUAL REIMBURSEMENT VIA THE CITY OF LA QUINTA CIP).

PROJECT FAIR SHARE:
- 22% AT MONROE STREET/AVENUE 62
- 9% AT JACKSON STREET/62ND AVENUE

NOTE: PROJECT FAIR SHARE BASED UPON GENERAL PLAN SCENARIOS (TRAVERTINE SPECIFIC PLAN TIA, APRIL 2018, TABLE 9-2)

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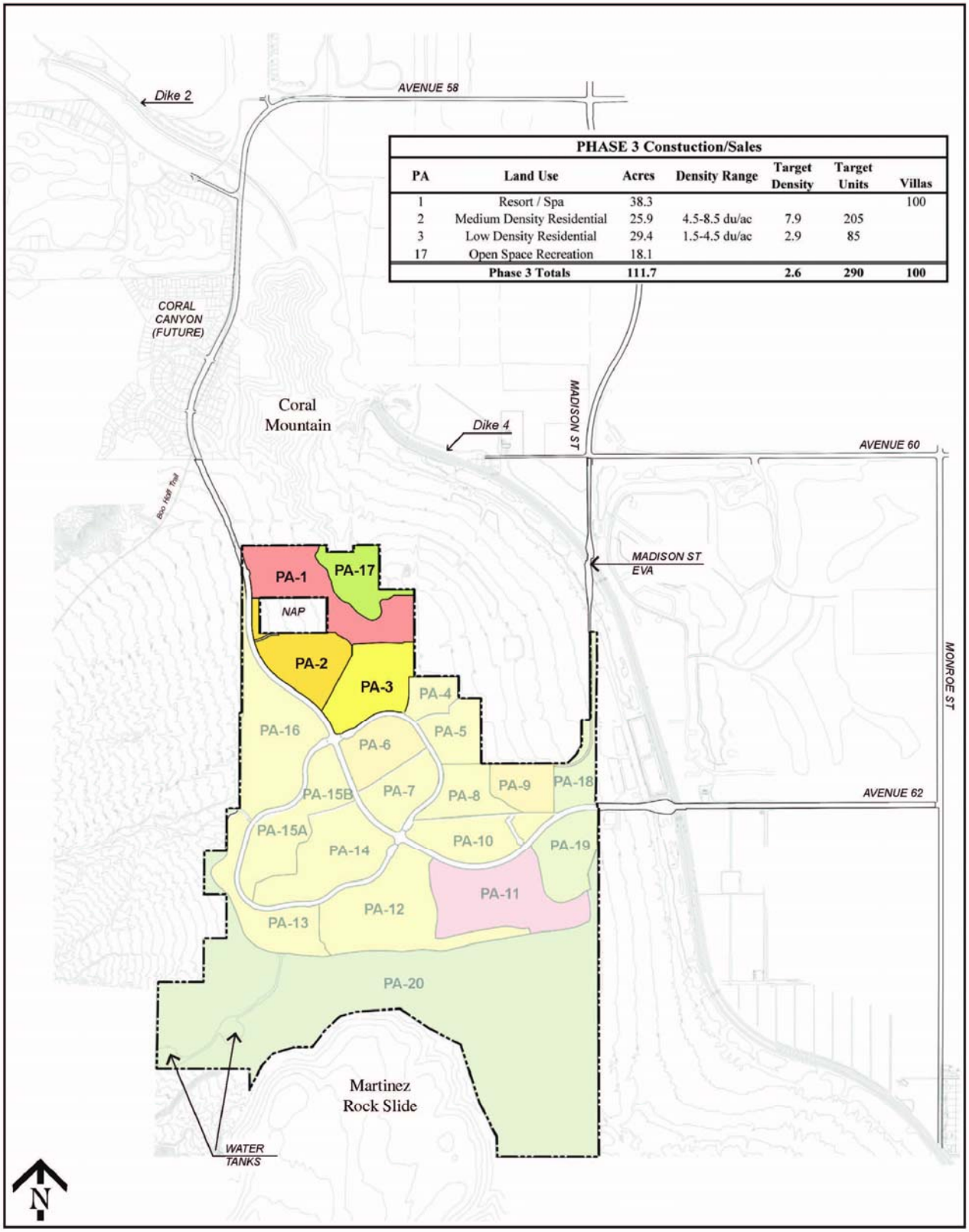
URBAN CROSSROADS

EXHIBIT 6-9: PHASE 3 SITE DEVELOPMENT PLAN



PHASE 3 Constuction/Sales						
PA	Land Use	Acres	Density Range	Target Density	Target Units	Villas
1	Resort / Spa	38.3				100
2	Medium Density Residential	25.9	4.5-8.5 du/ac	7.9	205	
3	Low Density Residential	29.4	1.5-4.5 du/ac	2.9	85	
17	Open Space Recreation	18.1				
	Phase 3 Totals	**111.7**		**2.6**	**290**	**100**

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TABLE 6-2: INTERSECTION ANALYSIS FOR PHASE 3 (2031) CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Without Project				With Project			
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (Secs)		Level of Service[2]		Delay[2] (Secs)		Level of Service[2]	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	Madison St. / Avenue 58																					
	- Without Improvements	AWS	1	2	1	1	2	d	1	1	1	1	2	1	28.2	**>80**	D	**F**	**72.4**	**>80**	**F**	**F**
	- With Improvements	TS	1	2	1	1	2	d	1	1	1	1	2	1	27.8	38.5	C	D	34.8	43.9	C	D
2	Madison St. / Airport Blvd.	TS	1	2	d	1	2	0	0	0	0	1	0	1	11.0	10.5	B	B	11.1	10.5	B	B
3	Madison St. / Avenue 54																					
	- Without Improvements	AWS	2	2	1	1	2	0	1	2	d	1	2	1	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	2	2	1	1	2	0	1	2	1>>	1	2	1	37.3	38.7	D	D	38.9	39.8	D	D
4	Madison St. / Avenue 52	TS	2	2	1	2	2	d	1	2	d	1	2	1	33.9	36.0	C	D	34.7	37.4	C	D
5	Madison St. / Avenue 50	TS	2	2	1	2	2	1	1	2	1	1	2	1	34.1	36.5	C	D	34.5	36.8	C	D
6	Jefferson St. / Avenue 54																					
	- Without Improvements	AWS	0.5	1	0.5	2	2	1	1	2	0	1	1	1	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	2	0	2	2	1	1	1	1	1	1	1>	36.9	34.5	D	C	37.6	41.4	D	D
7	Jefferson St. / Avenue 52																					
	- Without Improvements	RDB	0.5	0.5	1>>	0.5	0.5	1>>	0.5	0.5	1>>	0.5	0.5	1>>	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	RDB	0.5	2.5	1>>	0.5	2.5	1>>	0.5	2.5	1>>	0.5	2.5	1>>	3.7	4.7	A	A	3.7	5.2	A	A
8	Jefferson St. / Avenue 50																					
	- Without Improvements	TS	1	3	1	2	3	1	1	2	1	1	1	1	**56.3**	**75.2**	**E**	**E**	**56.9**	**76.2**	**E**	**E**
	- With Improvements	TS	1	3	1	2	3	1	1	2	1	1	**2**	1	52.9	50.5	D	D	53.2	51.8	D	D
9	Monroe St. / Avenue 62																					
	- Without Improvements	AWS	0	0	0	1	0	1	0.5	0.5	0	0	1	0	9.7	16.6	A	C	13.3	**53.5**	B	**F**
	- With Improvements	TS	0	1!	0	0.5	0.5	1	1	1	0	0.5	0.5	1	-	-	-	-	39.2	42.4	D	D
10	Monroe St. / Avenue 60																					
	- Without Improvements	AWS	1	1	0	1	1	1	0.5	0.5	1	0	1!	0	**36.7**	**>80**	**E**	**F**	**70.8**	**>80**	**F**	**F**
	- With Improvements	TS	1	1	0	1	1	1	0.5	0.5	1	0	1!	0	13.5	14.9	B	B	13.8	18.3	B	B
11	Monroe St. / Avenue 58																					
	- Without Improvements	AWS	0	1!	0	0.5	0.5	1	0	1!	0	0	1!	0	**55.9**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	1	1	1	1	1	1	1	0	1	1	0	29.0	38.7	C	D	29.4	54.6	C	D
12	Monroe St. / Airport Blvd.																					
	- Without Improvements	AWS	1	1	0	1	2	d	1	1	1	0	1!	0	**59.9**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	1	0	1	2	d	1	1	1	0	1!	0	11.7	15.1	B	B	12.5	22.7	B	C
13	Monroe St. / Avenue 54																					
	- Without Improvements	AWS	0	1!	0	0.5	0.5	1	1	1	0	0	1!	0	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	2	0	1	2	1	1	1	0	1	1	0	29.5	33.8	C	C	29.3	34.5	C	C
14	Monroe St. / Avenue 52																					
	- Without Improvements	AWS	0	1!	0	1	2	0	1	1	1	1	2	d	**>80**	**>80**	**F**	**F**	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	2	0	1	2	0	1	2	1	1	2	d	39.6	43.7	D	D	40.1	45.7	D	D
15	Monroe St. / 50th Avenue	TS	1	2	0	1	2	0	1	1	1	1	1	1>	22.1	49.2	C	D	23.3	54.9	C	D
16	Jackson St. / Avenue 62																					
	- Without Improvements	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	10.9	17.8	B	C	13.9	**46.8**	B	**E**
	- With Improvements	TS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	-	-	-	-	26.0	27.7	C	C
17	Jackson St. / Avenue 60																					
	- Without Improvements	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	11.3	**37.1**	B	**E**	12.4	**72.7**	B	**F**
	- With Improvements	TS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	29.1	26.7	C	C	15.3	27.3	B	C
18	Jackson St. / 58th Avenue																					
	- Without Improvements	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	13.7	**>80**	B	**F**	17.3	**>80**	C	**F**
	- With Improvements	TS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	12.3	26.7	B	C	12.7	29.4	B	C

TABLE 6-2: INTERSECTION ANALYSIS FOR PHASE 3 (2031) CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Without Project				With Project			
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (Secs)		Level of Service[2]		Delay[2] (Secs)		Level of Service[2]	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
19	Jackson St. / Airport Blvd.																					
	- Without Improvements	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	14.9	**>80**	B	**F**	19.3	**>80**	C	**F**
	- With Improvements	**TS**	0	1!	0	0	1!	0	0	1!	0	0	1!	0	23.2	14.0	C	B	23.7	27.3	C	C
20	Jefferson St. / N. Loop	**RDB**	0	**1!**	0	0	**1!**	0	0	**1!**	0	0	**1!**	0	Intersection does not exist				4.0	4.7	A	A
21	Jefferson St. / S. Loop	**RDB**	0	**1!**	0	0	**1!**	0	0	**1!**	0	0	**1!**	0	Intersection does not exist				4.1	4.8	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 Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane; **1** = Improvement

1 = Improvement per City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 2012)

[2] Per the Highway Capacity Manual 6th Edition (HCM6), overall average intersection delay and level of service are shown for intersections with a 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 (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 10.1 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop; RDB = Roundabout

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TABLE 6-3: ROADWAY VOLUME/CAPACITY ANALYSIS FOR EXISTING PLUS AMBIENT PLUS CUMULATIVE PLUS PROJECT PHASE 3 (2031) CONDITIONS

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	Capacity[2]	Without Project		With Project	
					ADT[3]	Volume/ Capacity Ratio	ADT[3]	Volume/ Capacity Ratio
Avenue 58	West of Madison Street	Secondary	3	21,000 [4]	6,000	0.29	11,600	0.55
	West of Monroe Street	Secondary	4	28,000	8,100	0.29	9,800	0.35
	West of Jackson Street	Secondary	2	14,000 [4]	7,700	0.55	8,900	0.64
Madison St.	South of Avenue 56	Primary	4	42,600	20,500	0.48	23,900	0.56
60th Avenue	West of Jackson Street	Primary	2	19,000 [6]	6,100	0.32	6,700	0.35
Avenue 62	West of Monroe Street	Modified Secondary	2	19,000	1,800	0.09	7,500	0.39
	West of Jackson Street	Secondary	2	14,000 [4]	6,700	0.48	9,000	0.64
Monroe St.	South of Avenue 60	Secondary	2	14,000 [4]	8,200	0.59	11,600	0.83
	South of Avenue 58	Primary	2	19,000 [6]	12,100	0.64	14,900	0.78
	South of Avenue 56	Primary	3	31,950 [5]	12,500	0.39	15,900	0.50
Jackson St.	South of Airport Boulevard	Primary	2	19,000 [6]	10,400	0.55	11,500	0.61

[1] Existing Number of Through lanes

[2] Source: City of La Quinta Engineering Bulletin #06-13 (July 2015)

[3] Average Daily Traffic (ADT) expressed in vehicles per day.

[4] Capacity was calculated as a ratio of 4-lane Secondary capacity.

[5] Capacity was calculated as a ratio of 4-lane Primary capacity.

[6] Estimated capacity for 2-lane Primary.

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6.5 PHASE 3 SITE ACCESS IMPROVEMENTS

Off-site, the Project Phase 1 access improvements on the westerly extension of Avenue 62 and the Project Phase 2 access improvements along Jefferson Street will continue to provide access for buildout of the Project in Phase 3.

The Phase 1 interim cross-section improvements along Avenue 62 west of Monroe Street and extending across Dike No. 4 include one lane in each direction, with 40' pavement section with sidewalk on the north side.

The Phase 2 interim cross-section improvements along Jefferson Street from the Project boundary to Avenue 58 and extending across Guadalupe Creek Diversion Dike to include one lane in each direction, with 40' pavement section with sidewalk on the west side.

Along Jefferson Street within the site, two roundabout intersections are implemented during Phases 1 and 2 at Jefferson Street / North Loop and Jefferson Street / South Loop. Other local street Project access points along Jefferson Street within the Phase 3 development area will require median openings and left turn pockets and cross-street stop traffic control as indicated in the 2018 TIA.

7 YEAR 2040 CONDITIONS TRAFFIC ANALYSIS

This section discusses the results of the General Plan Buildout (Year 2040) HCM intersection analysis and roadway segment capacity analysis. This analysis will determine if the City of La Quinta Circulation Element is adequate to accommodate future traffic at the target LOS, or if additional mitigation is necessary. This section provides recommended intersection and segment lanes to provide acceptable levels of service for three roadway network scenarios.

7.1 GENERAL PLAN BUILDOUT (YEAR 2040) WITH MADISON STREET EXTENSION CONDITIONS

This scenario includes the following alignment: 1.) Future Madison Street extension, south of Avenue 60 to Avenue 62; 2.) Future Jefferson Street connection from Avenue 58 to Avenue 62.

General Plan Buildout (Year 2040) with Madison Street Extension ADT, weekday AM and weekday PM peak hour volumes are shown on Exhibits 7-1 through 7-3, respectively.

7.1.1 INTERSECTION OPERATIONS ANALYSIS

The lane configurations and traffic controls assumed to be in place for General Plan Buildout (Year 2040) with Madison Street Extension conditions are consistent with the City of La Quinta General Plan buildout (2035) intersection configurations (May 2012).

LOS calculations were conducted for the study intersections to evaluate their operations under General Plan Buildout (Year 2040) with Madison Street Extension traffic conditions. The intersection analysis results are summarized in Table 7-1.

The intersection operations analysis worksheets for General Plan Buildout (Year 2040) with Madison Street Extension traffic conditions are included in Appendix 7.1 of this TIA. All intersections are anticipated to experience acceptable operations under General Plan Buildout (Year 2040) with Madison Street Extension conditions with improvements.

7.1.2 ROADWAY SEGMENT CAPACITY ANALYSIS

The roadway segment capacities are approximate figures only, and are typically used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet future forecasted traffic demand. Table 7-2 provides a summary of the General Plan Buildout (Year 2040) with Madison Street Extension traffic conditions roadway segment capacity analysis based on the City of La Quinta roadway segment capacity thresholds identified previously in Table 3-4. As shown on Table 7-2, The study roadway segments analyzed are anticipated to operate at acceptable LOS for General Plan Buildout (Year 2040) with Madison Street Extension traffic conditions. However, one roadway segment along Madison Street, between Avenue 54 and Airport Boulevard (as shown on Exhibit 7-1) appears to exceed the theoretical daily segment LOS thresholds. It should be noted that where the peak hour roadway segment analysis indicates a deficiency (unacceptable LOS), a review of the more detailed peak hour intersection analysis is undertaken. Further review of the more detailed peak hour intersection analysis indicates that the recommended improvements at adjacent study area intersections provide acceptable level of service. Therefore, roadway segment widening is not anticipated.

EXHIBIT 7-1: 2040 CONDITIONS WITH MADISON STREET EXTENSION
AVERAGE DAILY TRAFFIC (ADT)

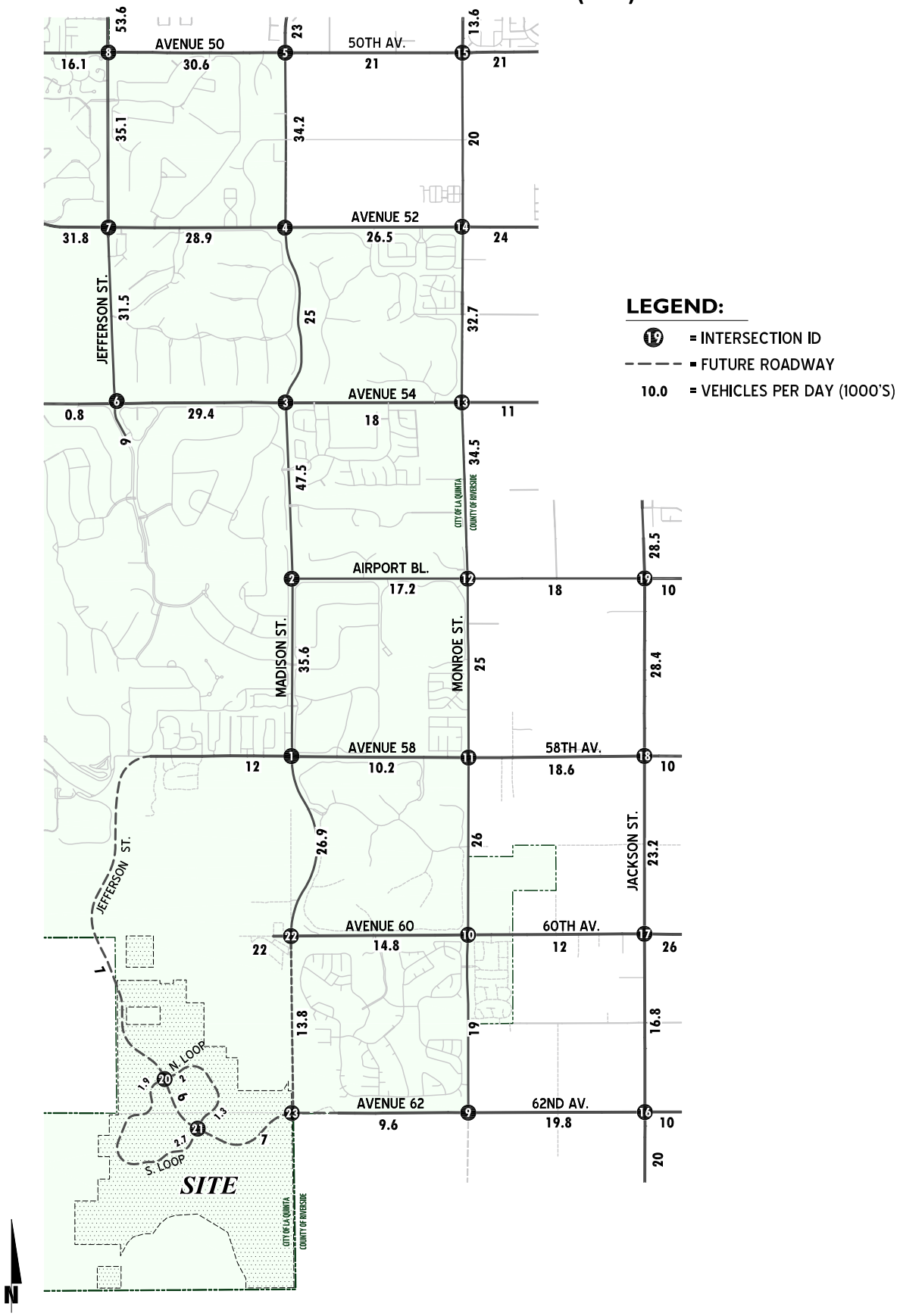
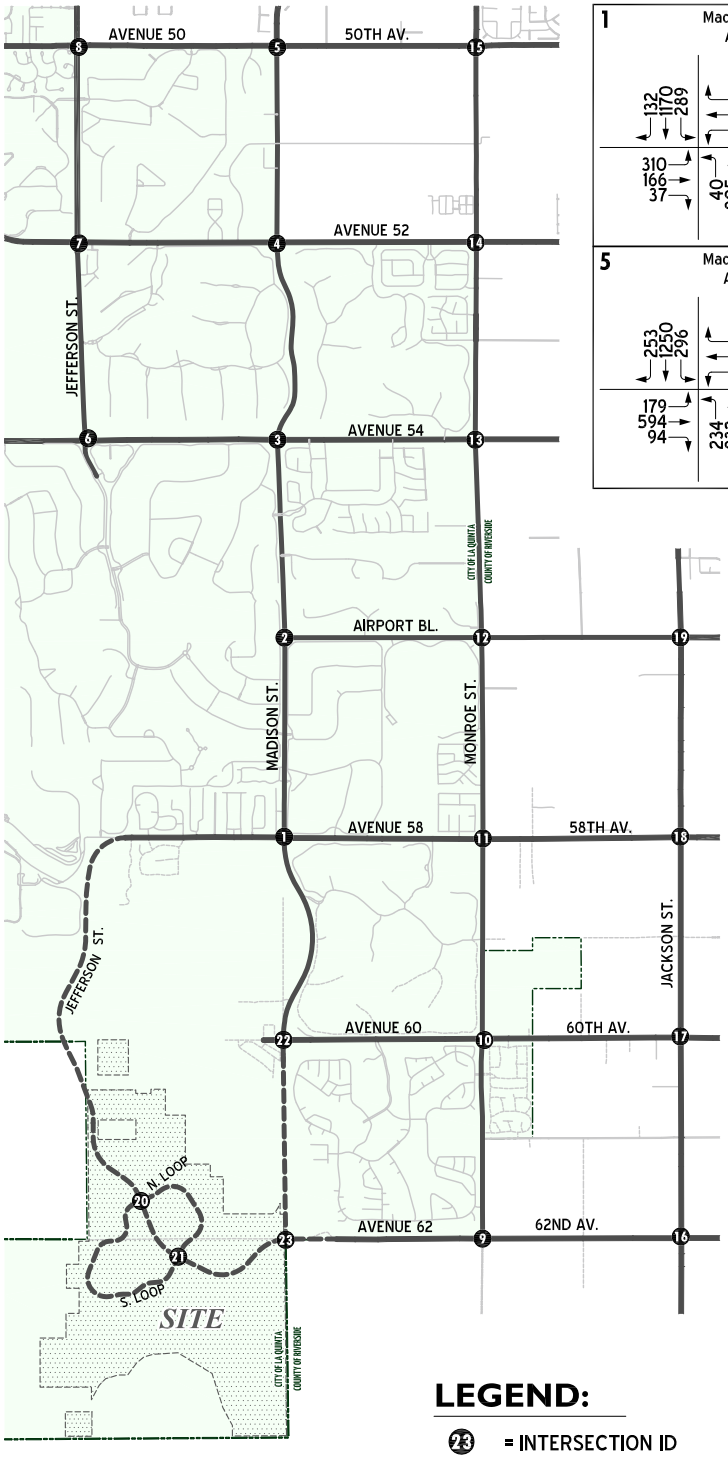


EXHIBIT 7-2: 2040 CONDITIONS WITH MADISON STREET EXTENSION
AM PEAK HOUR INTERSECTION VOLUMES



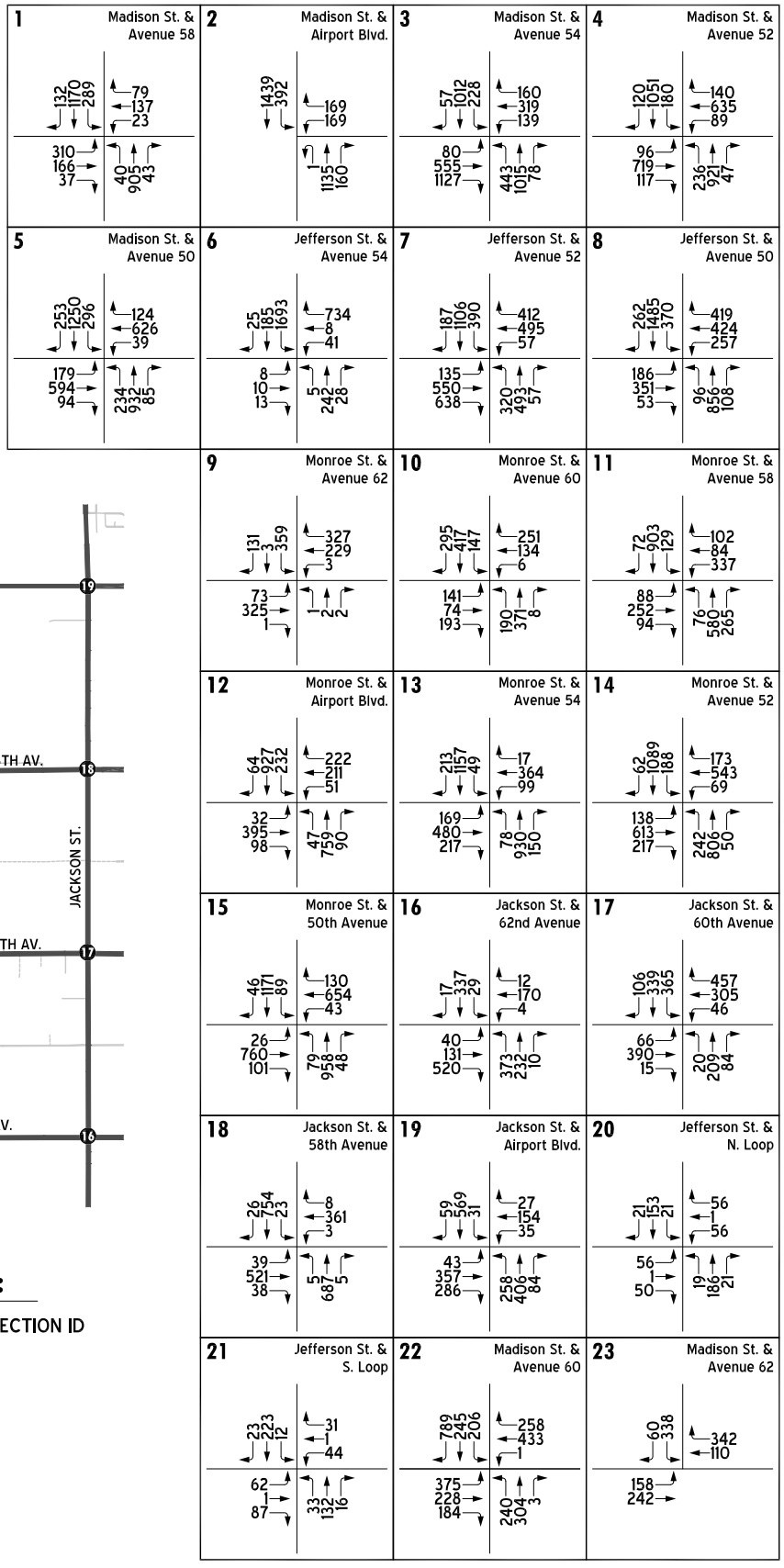
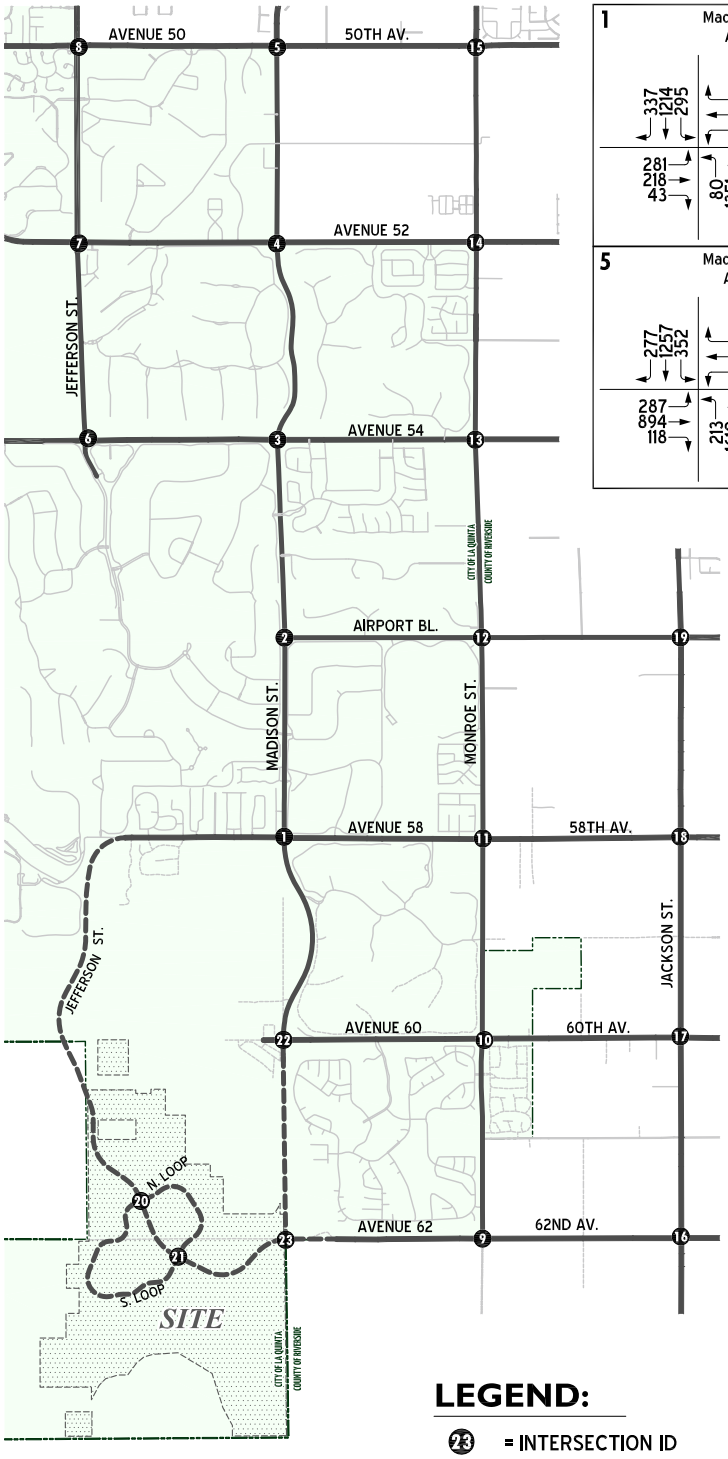


EXHIBIT 7-3: 2040 CONDITIONS WITH MADISON STREET EXTENSION
PM PEAK HOUR INTERSECTION VOLUMES



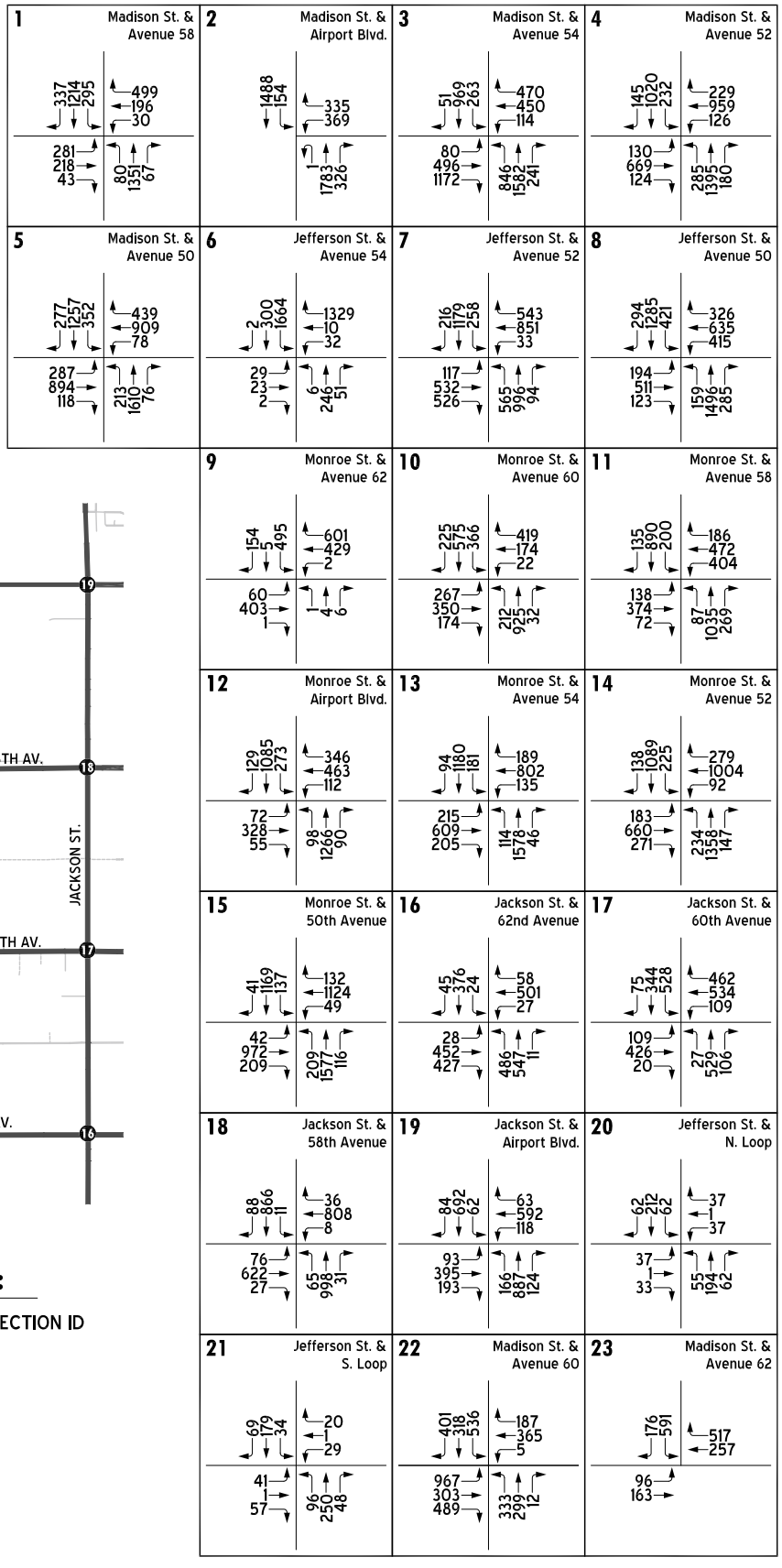


TABLE 7-1: INTERSECTION ANALYSIS FOR 2040 CONDITIONS WITH MADISON STREET EXTENSION CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Madison St. / Avenue 58	**TS**	1	2	1	1	2	d	1	**2**	0	1	2	**1>**	35.8	54.7	D	D
2	Madison St. / Airport Blvd.	TS	1	2	d	1	2	0	0	0	0	1	0	1	24.9	30.6	C	C
3	Madison St. / Avenue 54	**TS**	2	2	1	1	2	0	1	2	**1>>**	1	2	**1>**	41.7	54.3	D	D
4	Madison St. / Avenue 52	TS	1	**2**	1	**2**	**2**	**1**	1	2	d	1	2	**1**	52.1	54.0	D	D
5	Madison St. / Avenue 50	TS	1	**3**	**1**	**2**	**2**	**1**	1	**2**	0	1	**2**	**1>**	40.8	53.1	D	D
6	Jefferson St. / Avenue 54	**TS**	**1**	2	**1**	2	2	1	1	1	1	1	1	**2>**	21.2	39.4	C	D
7	Jefferson St. / Avenue 52[4]	RDB	0.5	**2.5**	1>>	0.5	**2.5**	1>>	0.5	**2.5**	1>>	0.5	**2.5**	1>>	5.8	8.3	A	A
8	Jefferson St. / Avenue 50	TS	1	3	1	2	3	1	**2**	2	0	**2**	**2**	1	42.8	44.7	D	D
9	Monroe St. / Avenue 62	**TS**	0	**1!**	0	0.5	0.5	1	**1**	1	0	0.5	0.5	**1>**	32.1	29.0	C	C
10	Monroe St. / Avenue 60	**TS**	1	**2**	0	1	**2**	0	1	**2**	0	**1**	1	**1>**	37.1	46.6	D	D
11	Monroe St. / Avenue 58	**TS**	1	**2**	**1**	**1**	**2**	0	**1**	**2**	0	**1**	**2**	0	41.4	54.2	D	D
12	Monroe St. / Airport Blvd.	**TS**	1	**2**	0	1	2	d	1	**2**	0	**1**	**2**	**1>**	33.6	42.3	C	D
13	Monroe St. / Avenue 54	**TS**	**1**	**2**	**1**	**1**	**2**	1	**2**	**2**	**1**	**1**	**2**	**1**	32.0	54.7	C	D
14	Monroe St. / Avenue 52	**TS**	**2**	**2**	**1**	**2**	2	0	1	**2**	1	1	2	**1**	38.3	54.7	D	D
15	Monroe St. / 50th Avenue	TS	**2**	2	**1**	**2**	2	0	1	**2**	1	1	**2**	1>	34.2	54.7	C	D
16	Jackson St. / 62nd Avenue	**TS**	**1**	**2**	0	**1**	**2**	0	**1**	1	**1**	**1**	**2**	0	44.4	38.9	D	D
17	Jackson St. / 60th Avenue	**TS**	**1**	**2**	0	**1**	**2**	0	**1**	**2**	0	**1**	**2**	**1>**	37.6	45.2	D	D
18	Jackson St. / 58th Avenue	**TS**	**1**	**2**	0	**1**	**2**	0	**1**	**2**	0	**1**	**2**	0	27.5	35.8	C	D
19	Jackson St. / Airport Blvd.	**TS**	**1**	**2**	0	**1**	**2**	0	**1**	**2**	0	**1**	**2**	0	38.4	39.1	D	D
20	Jefferson St. / N. Loop	**RDB**	0	**1!**	0	0	**1!**	0	0	**1!**	0	0	**1!**	0	5.7	7.0	A	A
21	Jefferson St. / S. Loop	**RDB**	0	**1!**	0	0	**1!**	0	0	**1!**	0	0	**1!**	0	5.9	7.3	A	A
22	Madison St. / Avenue 60	**TS**	**1**	**2**	0	**2**	**2**	**1>**	**2**	2	0	**1**	**2**	1	48.4	49.1	D	D
23	Madison St. / Avenue 62	**TS**	0	0	0	**1**	0	**1**	**0.5**	**0.5**	0	0	**1**	**1**	14.4	25.5	B	C

[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 Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane; **1** = Improvement

1 = Improvement per City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 2012)

[2] Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a 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 (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop; RDB = Roundabout

[4] Since roundabout analysis in Synchro is limited to a maximum of 2 lanes per approach, traffix has been utilized at this location (similar to the City of La Quinta General Plan Buildout TIA worksheets).

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TABLE 7-2: ROADWAY VOLUME/CAPACITY ANALYSIS FOR 2040 CONDITIONS WITH MADISON STREET EXTENSION CONDITIONS

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	Capacity[2]	ADT[3]	Volume/ Capacity Ratio
Avenue 58	West of Madison Street	Secondary	4	28,000	12,000	0.43
	West of Monroe Street	Secondary	4	28,000	10,200	0.36
	West of Jackson Street	Secondary	4	28,000	18,600	0.66
Madison St.	South of Avenue 56	Primary	4	42,600	35,600	0.84
60th Avenue	West of Jackson Street	Primary	4	42,600	12,000	0.28
Avenue 62	West of Monroe Street	Modified Secondary	2	19,000	9,600	0.51
	West of Jackson Street	Secondary	4	28,000	19,800	0.71
Monroe St.	South of Avenue 60	Secondary	4	28,000	19,000	0.68
	South of Avenue 58	Primary	4	42,600	26,000	0.61
	South of Avenue 56	Primary	4	42,600	25,000	0.59
Jackson St.	South of Airport Boulevard	Primary	4	42,600	28,400	0.67

[1] 1 = Existing number of lanes; 4 = City of La Quinta General Plan Buildout number of lanes

[2] Source: City of La Quinta Engineering Bulletin #06-13 (July 2015)

[3] Average Daily Traffic (ADT) expressed in vehicles per day.

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7.1.3 TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrant analyses have been performed at all applicable unsignalized study area intersections for General Plan Buildout (Year 2040) with Madison Street Extension traffic conditions (see Appendix 7.2). Three additional study area intersections are anticipated to warrant traffic signals beyond those warranted for EAPC conditions (Jackson Street at Avenue 62, Jackson Street at Avenue 60, and Jackson Street at Avenue 58).

7.2 GENERAL PLAN BUILDOUT (YEAR 2040) WITHOUT MADISON STREET EXTENSION (GPA OPTION 1) CONDITIONS

This scenario includes the following alignment:

1. Termination of Madison Street as a General Plan roadway, south of Avenue 60.
2. Future Jefferson Street connection from Avenue 58 to Avenue 62.
3. Emergency vehicle access (EVA) is provided via Madison Street, from the northerly boundary of the Project's Planning Area 18 to Avenue 60.

General Plan Buildout (Year 2040) without Madison Street Extension (GPA Option 1) ADT, weekday AM and weekday PM peak hour volumes are shown on Exhibits 7-4 through 7-6, respectively.

7.2.1 INTERSECTION OPERATIONS ANALYSIS

The lane configurations and traffic controls assumed to be in place for General Plan Buildout (Year 2040) without Madison Street Extension (GPA Option 1) conditions are consistent with the City of La Quinta General Plan buildout (2035) intersection configurations (May 2012).

LOS calculations were conducted for the study intersections to evaluate their operations under General Plan Buildout (Year 2040) without Madison Street Extension (GPA Option 1) traffic conditions. The intersection analysis results are summarized in Table 7-3, which also documents intersection lanes anticipated to provide acceptable LOS operations during the peak hours. For intersections included in the City of La Quinta General Plan analysis, four intersections require modification of typical improvements indicated for General Plan Buildout (Year 2040) with Madison Street Extension:

- Madison Street at Avenue 58
- Monroe Street at Avenue 62
- Monroe Street at Avenue 60
- Monroe Street at Avenue 58

The intersection operations analysis worksheets for General Plan Buildout (Year 2040) without Madison Street Extension (GPA Option 1) traffic conditions are included in Appendix 7.3 of this TIA. All intersections are anticipated to experience acceptable operations under General Plan Buildout (Year 2040) without Madison Street Extension conditions with improvements.

7.2.2 ROADWAY SEGMENT CAPACITY ANALYSIS

The roadway segment capacities are approximate figures only, and are typically used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet future forecasted traffic demand. Table 7-4 provides a summary

EXHIBIT 7-4: 2040 WITHOUT MADISON STREET EXTENSION (GPA OPTION 1) AVERAGE DAILY TRAFFIC (ADT)

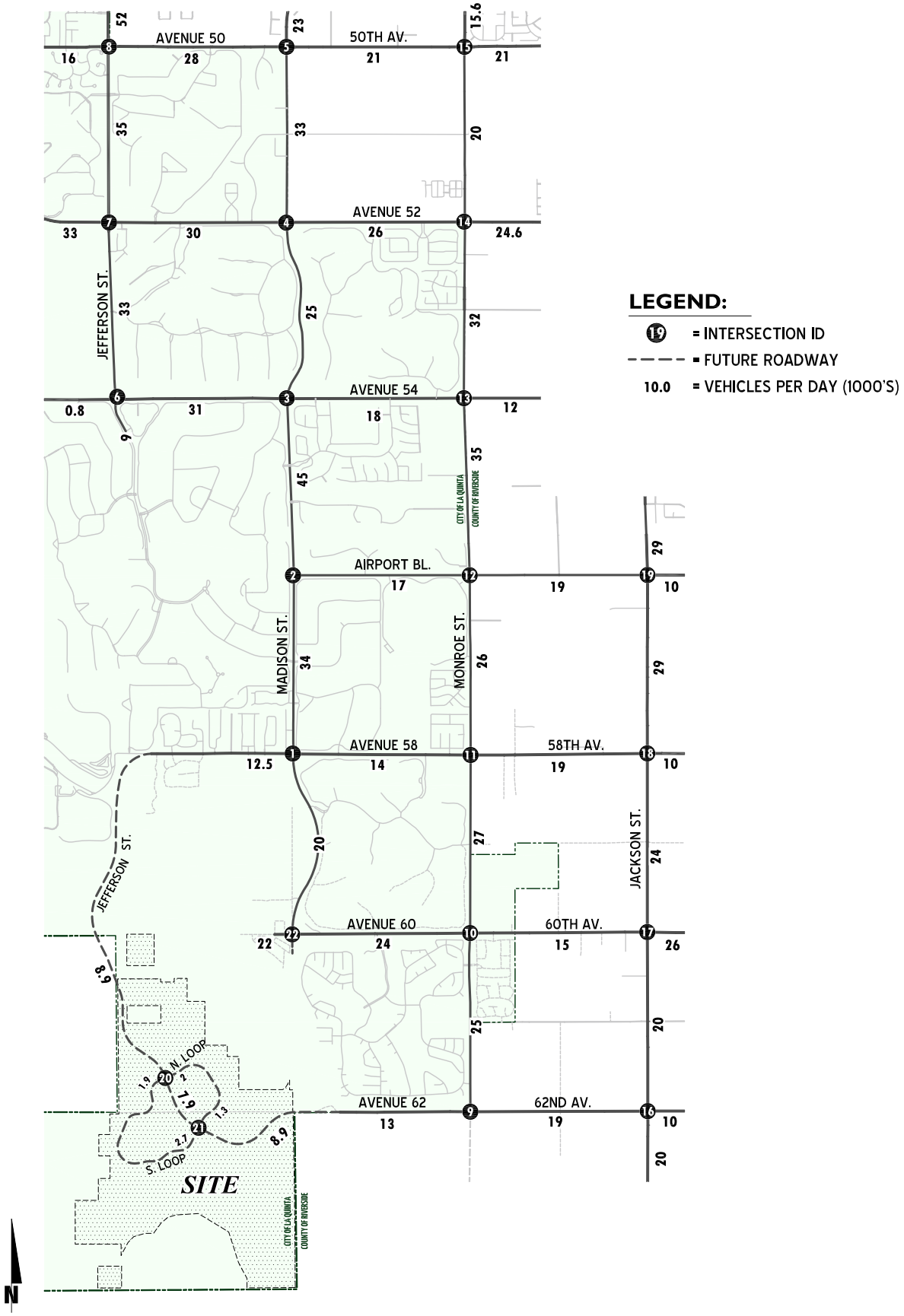
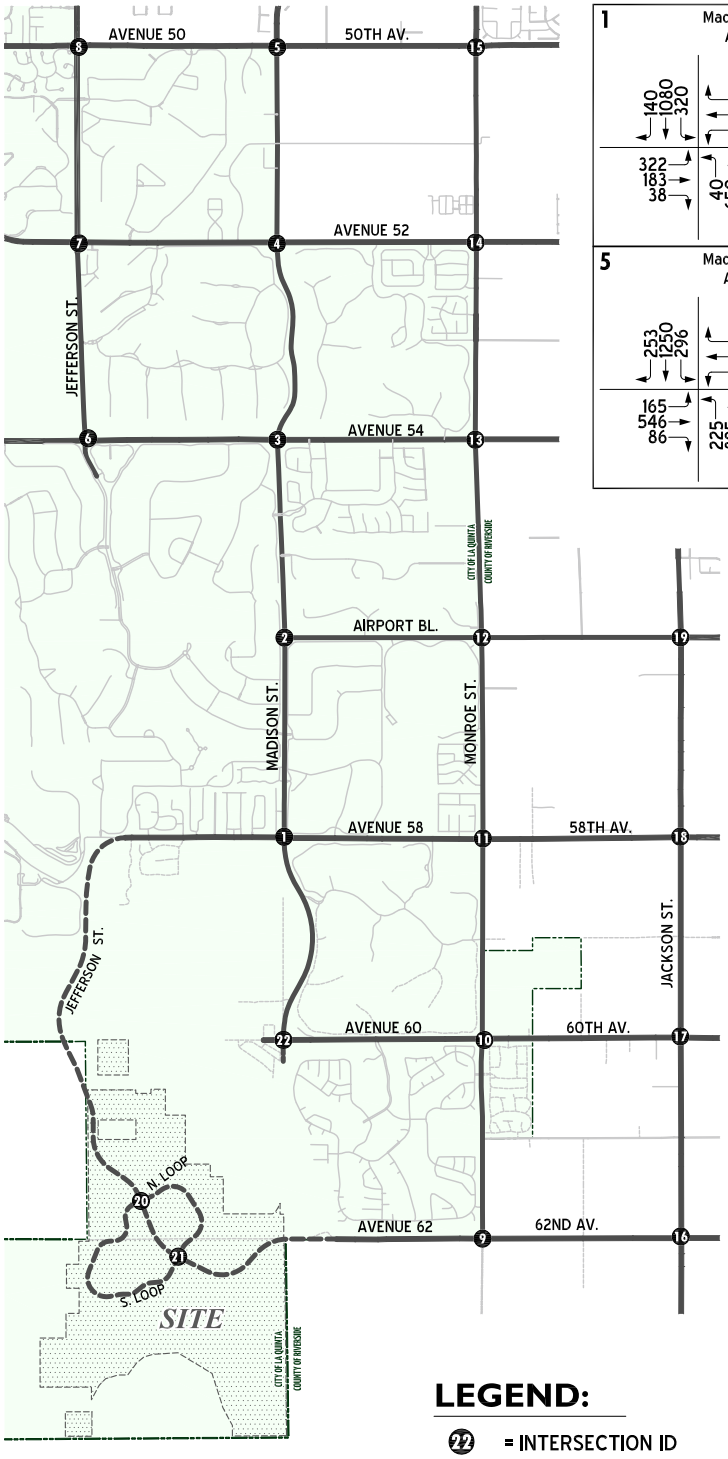


EXHIBIT 7-5: 2040 WITHOUT MADISON STREET EXTENSION (GPA OPTION 1) AM PEAK HOUR INTERSECTION VOLUMES



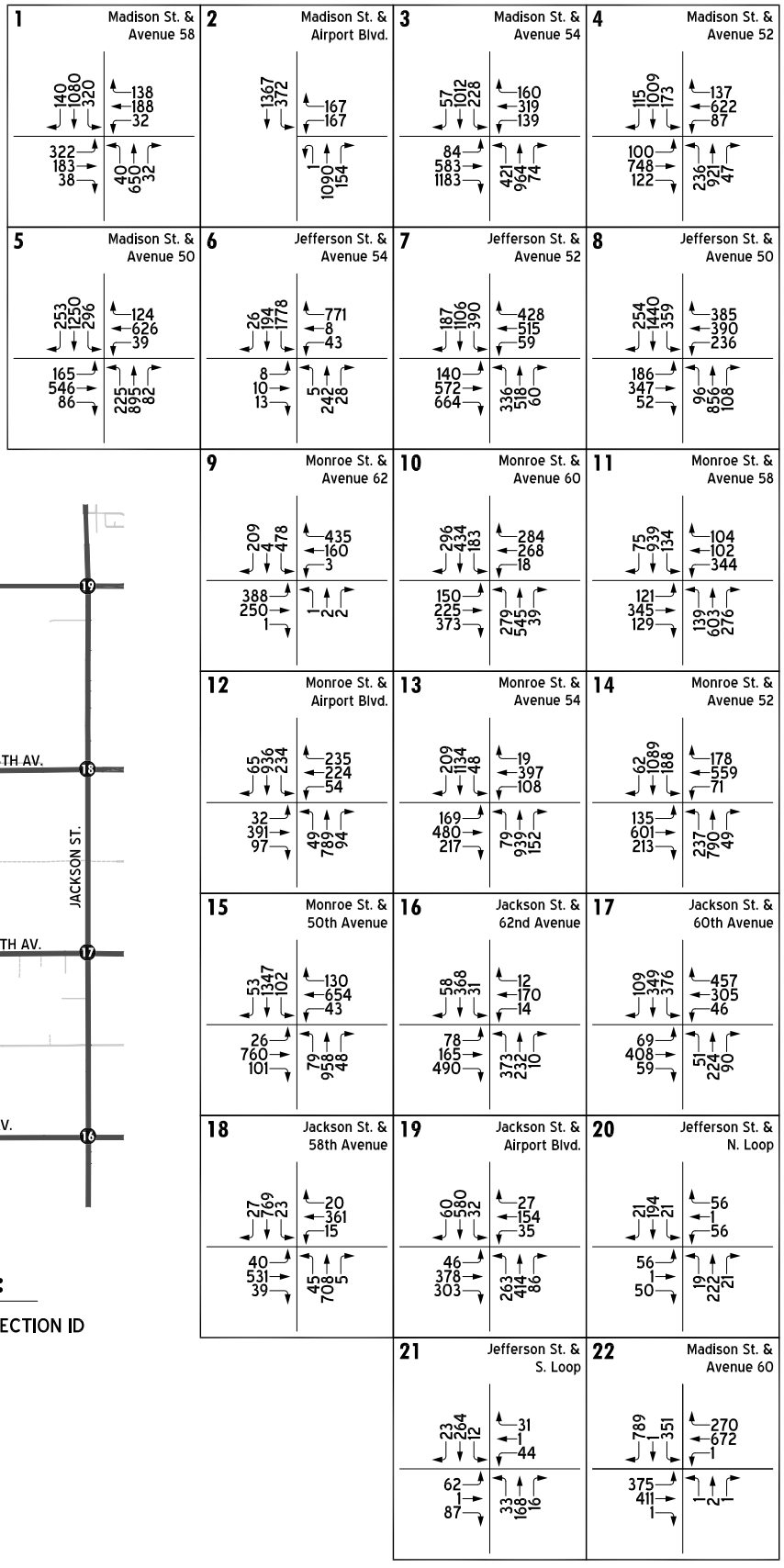
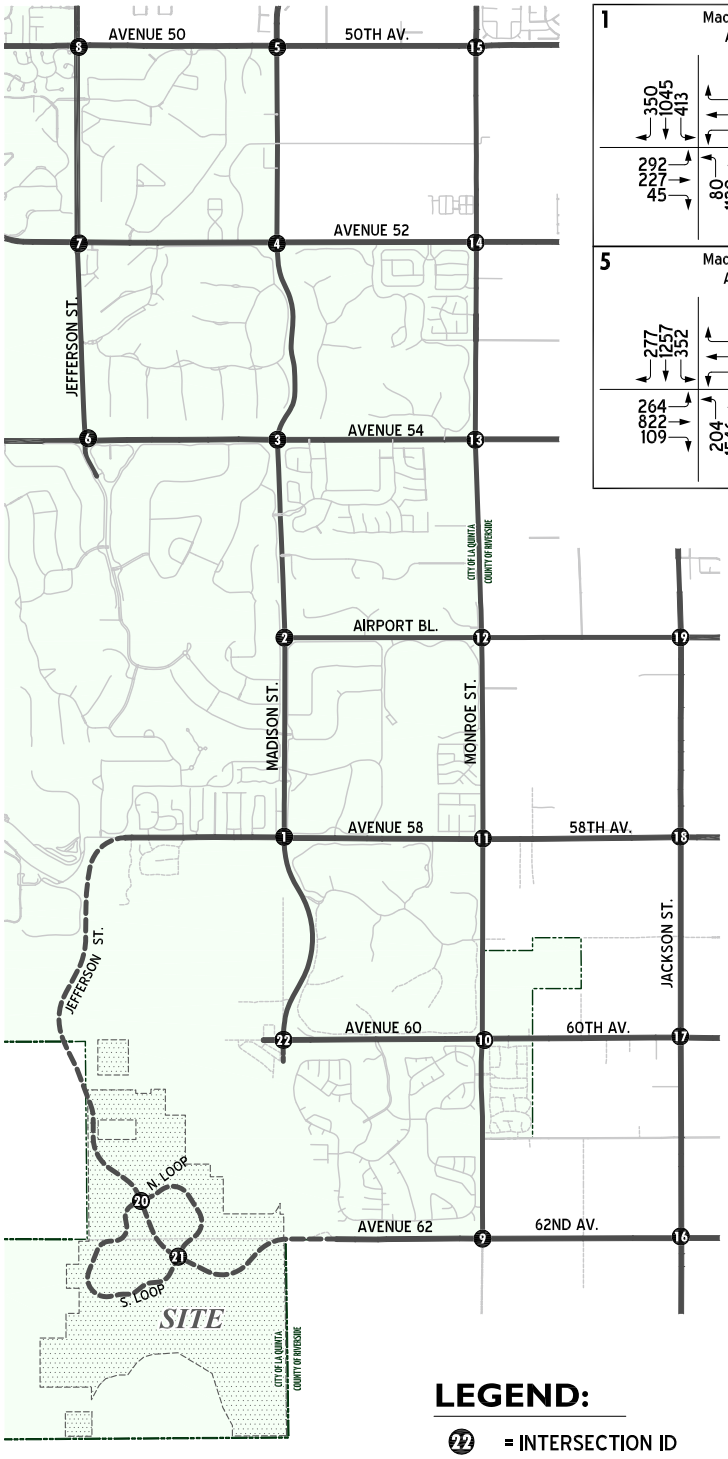


EXHIBIT 7-6: 2040 WITHOUT MADISON STREET EXTENSION (GPA OPTION 1) PM PEAK HOUR INTERSECTION VOLUMES



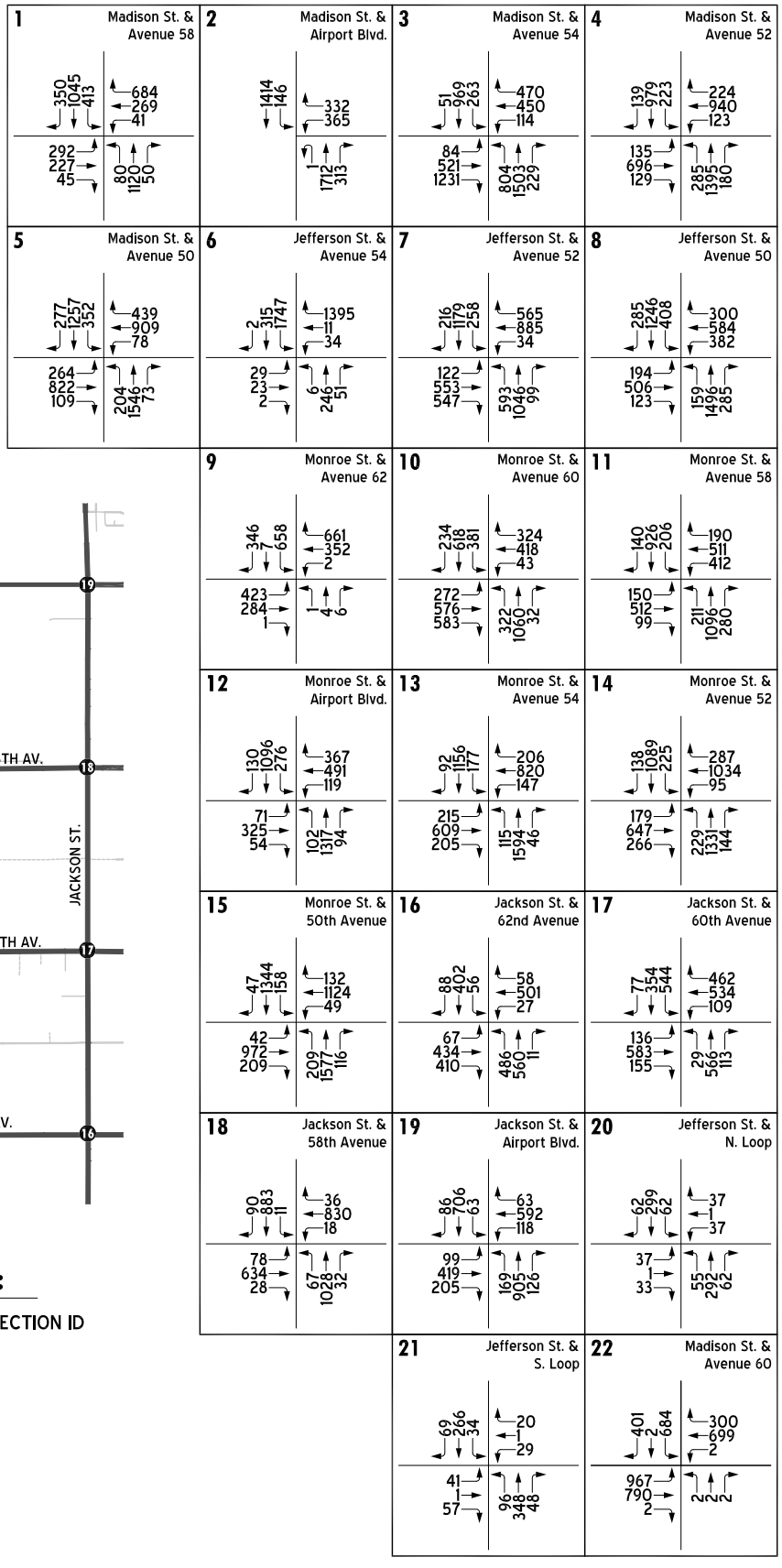


TABLE 7-3: INTERSECTION ANALYSIS FOR 2040 WITHOUT MADISON STREET EXTENSION (GPA OPTION 1)

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Madison St. / Avenue 58																	
	- With GPCE Update Improvements	TS	1	2	1	1	2	d	1	2	0	1	2	1>	37.7	**67.8**	D	**E**
	- With Modified GPCE Improvements	TS	1	2	1	1	2	d	2	1	0	1	2	1>	33.2	51.5	C	D
2	Madison St. / Airport Blvd.	TS	1	2	d	1	2	0	0	0	0	1	0	1	24.7	28.8	C	C
3	Madison St. / Avenue 54	TS	2	2	1	1	2	0	1	2	1>>	1	2	1>	41.7	51.7	D	D
4	Madison St. / Avenue 52	TS	1	2	1	2	2	1	1	2	d	1	2	1	50.9	53.6	D	D
5	Madison St. / Avenue 50	TS	1	3	1	2	2	1	1	2	0	1	2	1>	39.8	50.1	D	D
6	Jefferson St. / Avenue 54	TS	1	2	1	2	2	1	1	1	1	1	1	2>	23.5	49.0	C	D
7	Jefferson St. / Avenue 52[4]	RDB	0.5	2.5	1>>	0.5	2.5	1>>	0.5	2.5	1>>	0.5	2.5	1>>	5.9	9.1	A	A
8	Jefferson St. / Avenue 50	TS	1	3	1	2	3	1	2	2	0	2	2	1	40.5	43.1	D	D
9	Monroe St. / Avenue 62																	
	- With GPCE Update Improvements	TS	0	1!	0	0.5	0.5	1	1	1	0	0.5	0.5	1>	53.0	**137.3**	D	**F**
	- With Added GPCE Improvements	TS	0	1!	0	1.5	0.5	1>	1	1!	0	1	1	1>	42.3	53.8	D	D
10	Monroe St. / Avenue 60																	
	- With GPCE Update Improvements	TS	1	2	0	1	2	0	1	2	0	1	1	1>	45.4	**103.3**	D	**F**
	- With Added GPCE Improvements	TS	1	2	0	1	2	1	1	2	1>	1	2	1>	42.9	52.6	D	D
11	Monroe St. / Avenue 58																	
	- With GPCE Update Improvements	TS	1	2	1	1	2	0	1	2	0	1	2	0	51.2	**77.8**	D	**E**
	- With Added GPCE Improvements	TS	2	2	1>	2	2	0	1	2	1	1	2	0	39.1	51.8	D	D
12	Monroe St. / Airport Blvd.	TS	1	2	0	1	2	d	1	2	0	1	2	1>	33.9	44.7	C	D
13	Monroe St. / Avenue 54	TS	1	2	1	1	2	1	2	2	1	1	2	1	32.4	54.6	C	D
14	Monroe St. / Avenue 52	TS	2	2	1	2	2	0	1	2	1	1	2	1	38.2	54.4	D	D
15	Monroe St. / 50th Avenue	TS	2	2	1	2	2	0	1	2	1	1	2	1>	36.0	54.9	D	D
16	Jackson St. / 62nd Avenue	TS	1	2	0	1	2	0	1	1	1	1	2	0	47.4	40.7	D	D
17	Jackson St. / 60th Avenue	TS	1	2	0	1	2	0	1	2	0	1	2	1>	38.0	54.8	D	D
18	Jackson St. / 58th Avenue	TS	1	2	0	1	2	0	1	2	0	1	2	0	29.7	36.8	C	D
19	Jackson St. / Airport Blvd.	TS	1	2	0	1	2	0	1	2	0	1	2	0	39.0	40.1	D	D
20	Jefferson St. / N. Loop	RDB	0	1!	0	0	1!	0	0	1!	0	0	1!	0	6.1	8.4	A	A
21	Jefferson St. / S. Loop	RDB	0	1!	0	0	1!	0	0	1!	0	0	1!	0	6.4	8.9	A	A
22	Madison St. / Avenue 60																	
	- With GPCE Update Improvements	TS	0	1!	0	2	1	1>	2	2	0	1	2	1	35.1	53.3	D	D

[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 Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane; 1 = Improvement

1 = Improvement per City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 2012)

[2] Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a 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 (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop; RDB = Roundabout

[4] Since roundabout analysis in Synchro is limited to a maximum of 2 lanes per approach, traffix has been utilized at this location (similar to the City of La Quinta General Plan Buildout TIA worksheets).

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TABLE 7-4: ROADWAY VOLUME/CAPACITY ANALYSIS FOR 2040 WITHOUT MADISON STREET EXTENSION (GPA OPTION 1)

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	Capacity[2]	ADT[3]	Volume/ Capacity Ratio
Avenue 58	West of Madison Street	Secondary	4	28,000	12,500	0.45
	West of Monroe Street	Secondary	4	28,000	14,000	0.50
	West of Jackson Street	Secondary	4	28,000	19,000	0.68
Madison St.	South of Avenue 56	Primary	4	42,600	34,000	0.80
60th Avenue	West of Jackson Street	Primary	4	42,600	15,000	0.35
Avenue 62	West of Monroe Street	Modified Secondary	2	19,000	13,000	0.68
	West of Jackson Street	Secondary	4	28,000	19,000	0.68
Monroe St.	South of Avenue 60	Secondary	4	28,000	25,000	0.89
	South of Avenue 58	Primary	4	42,600	27,000	0.63
	South of Avenue 56	Primary	4	42,600	26,000	0.61
Jackson St.	South of Airport Boulevard	Primary	4	42,600	29,000	0.68

[1] 1 = Existing number of lanes; 4 = City of La Quinta General Plan Buildout number of lanes

[2] Source: City of La Quinta Engineering Bulletin #06-13 (July 2015)

BOLD = Estimated to exceed threshold daily capacity values and subject to further evaluation of peak hour performance at key intersections along these routes.

[3] Average Daily Traffic (ADT) expressed in vehicles per day.

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of the General Plan Buildout (Year 2040) without Madison Street Extension (GPA Option 1) traffic conditions roadway segment capacity analysis based on the City of La Quinta roadway segment capacity thresholds identified previously in Table 3-4. As shown on Table 7-4, the study roadway segments analyzed are anticipated to operate at acceptable LOS for General Plan Buildout (Year 2040) without Madison Street Extension (GPA Option 1) traffic conditions. However, one roadway segment along Madison Street, between Avenue 54 and Airport Boulevard (as shown on Exhibit 7-1) appears to exceed the theoretical daily segment LOS thresholds. Further review of the more detailed peak hour intersection analysis indicates that the recommended improvements at adjacent study area intersections provide acceptable level of service. Therefore, roadway segment widening is not anticipated.

7.3 GENERAL PLAN BUILDOUT (YEAR 2040) WITHOUT MADISON STREET EXTENSION AND WITH PROJECT ENTRY GATES (GPA OPTION 2) CONDITIONS

This scenario includes the following alignment:

1. Termination of Madison Street as a General Plan roadway, south of the Avenue 60.
2. Future Jefferson Street connection from Avenue 58 to Project boundary.
3. The deletion of Jefferson Street as General Plan roadway south of the hypothetical westerly extension of Avenue 60, and the deletion of Avenue 62 west of the hypothetical southerly extension of Madison Street.
4. On-site entry gates on Jefferson Street. Jefferson Street is a private roadway within the Project boundary.
5. Emergency vehicle access (EVA) is provided via Madison Street, from the northerly boundary of the Project's Planning Area 18 to Avenue 60.

General Plan Buildout (Year 2040) without Madison Street Extension and with Project Entry Gates (GPA Option 2) ADT, weekday AM and weekday PM peak hour volumes are shown on Exhibits 7-7 through 7-9, respectively.

7.3.1 INTERSECTION OPERATIONS ANALYSIS

The lane configurations and traffic controls assumed to be in place for General Plan Buildout (Year 2040) without Madison Street Extension and with Project Entry Gates (GPA Option 2) conditions are consistent with the City of La Quinta General Plan buildout (2035) intersection configurations (May 2012).

LOS calculations were conducted for the study intersections to evaluate their operations under General Plan Buildout (Year 2040) without Madison Street Extension and with Project Entry Gates (GPA Option 2) traffic conditions. The intersection analysis results are summarized in Table 7-5, which also documents intersection lanes anticipated to provide acceptable LOS operations during the peak hours. For intersections included in the City of La Quinta General Plan analysis, four intersections require modification of typical improvements indicated for General Plan Buildout (Year 2040) with Madison Street Extension:

- Madison Street at Avenue 58
- Monroe Street at Avenue 62
- Monroe Street at Avenue 60
- Monroe Street at Avenue 58

The intersection operations analysis worksheets for General Plan Buildout (Year 2040) without Madison Street Extension and with Project Entry Gates (GPA Option 2) traffic conditions are included in Appendix 7.4 of this TIA. All intersections are anticipated to experience acceptable operations under General Plan Buildout (Year 2040) without Madison Street Extension and with Project Entry Gates (GPA Option 2) conditions.

7.3.2 ROADWAY SEGMENT CAPACITY ANALYSIS

The roadway segment capacities are approximate figures only, and are typically used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet future forecasted traffic demand. Table 7-6 provides a summary of the General Plan Buildout (Year 2040) without Madison Street Extension and with Project Entry

EXHIBIT 7-7: 2040 WITHOUT MADISON STREET EXTENSION AND WITH PROJECT ENTRY GATES (GPA OPTION 2) AVERAGE DAILY TRAFFIC (ADT)

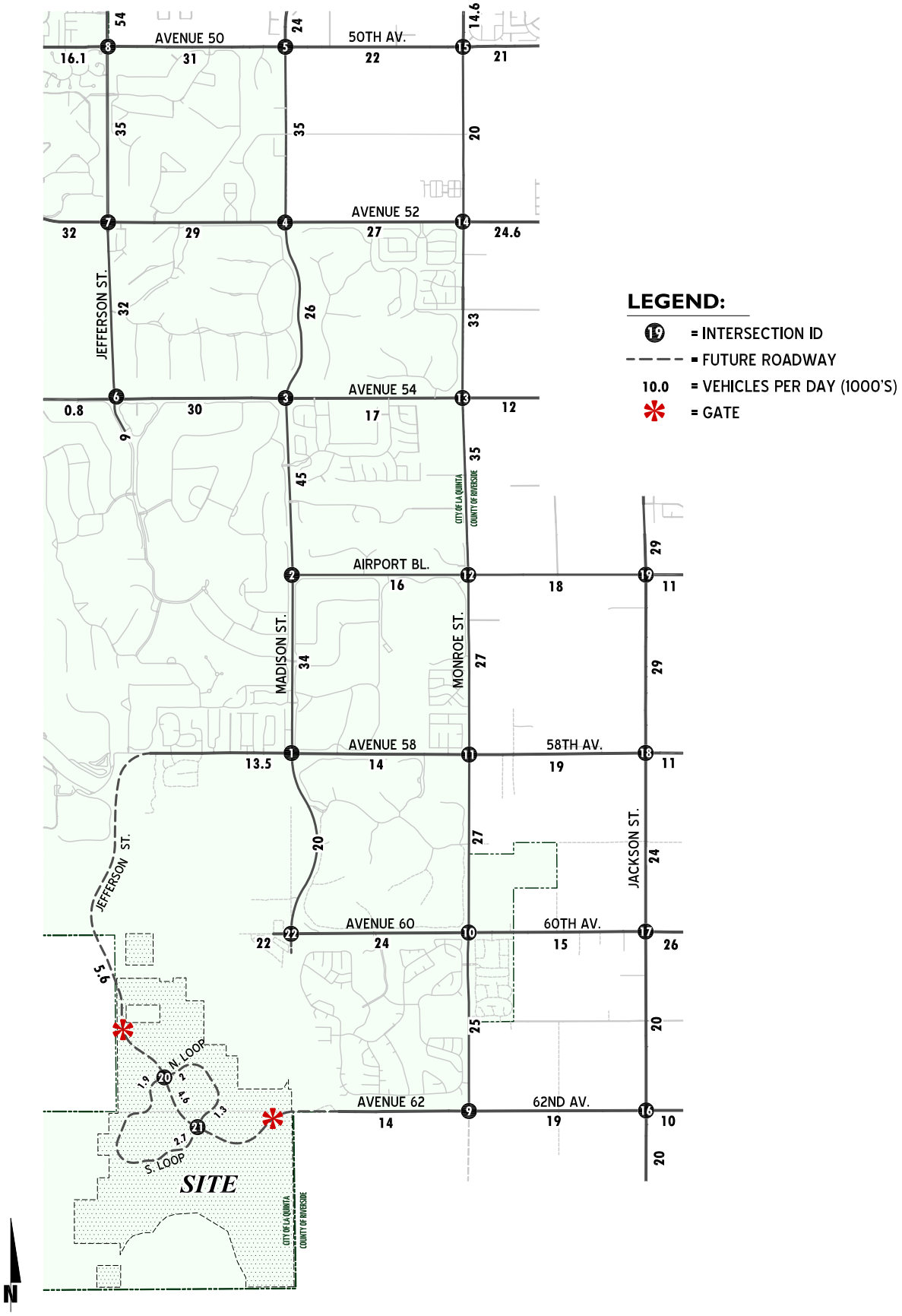
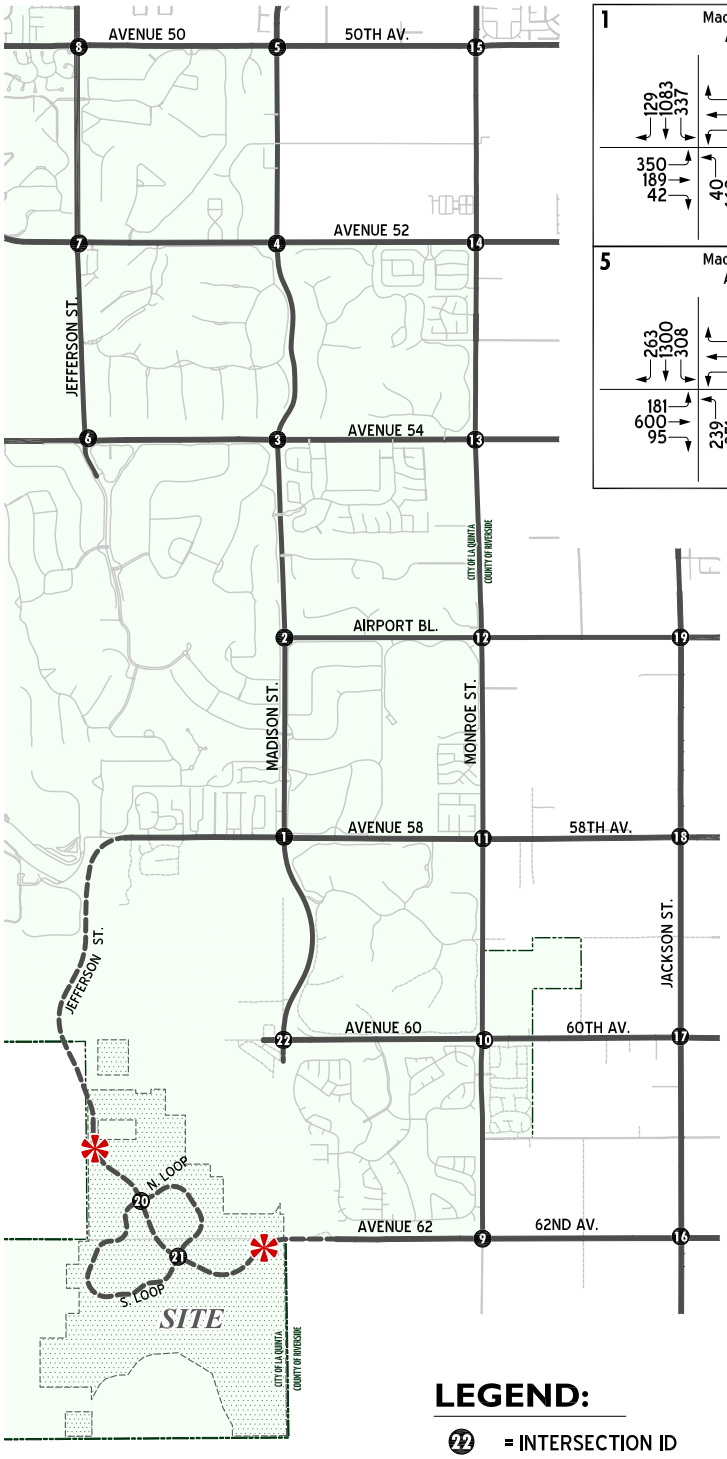


EXHIBIT 7-8: 2040 WITHOUT MADISON STREET EXTENSION AND WITH PROJECT ENTRY GATES (GPA OPTION 2) AM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

22 = INTERSECTION ID

* = GATE

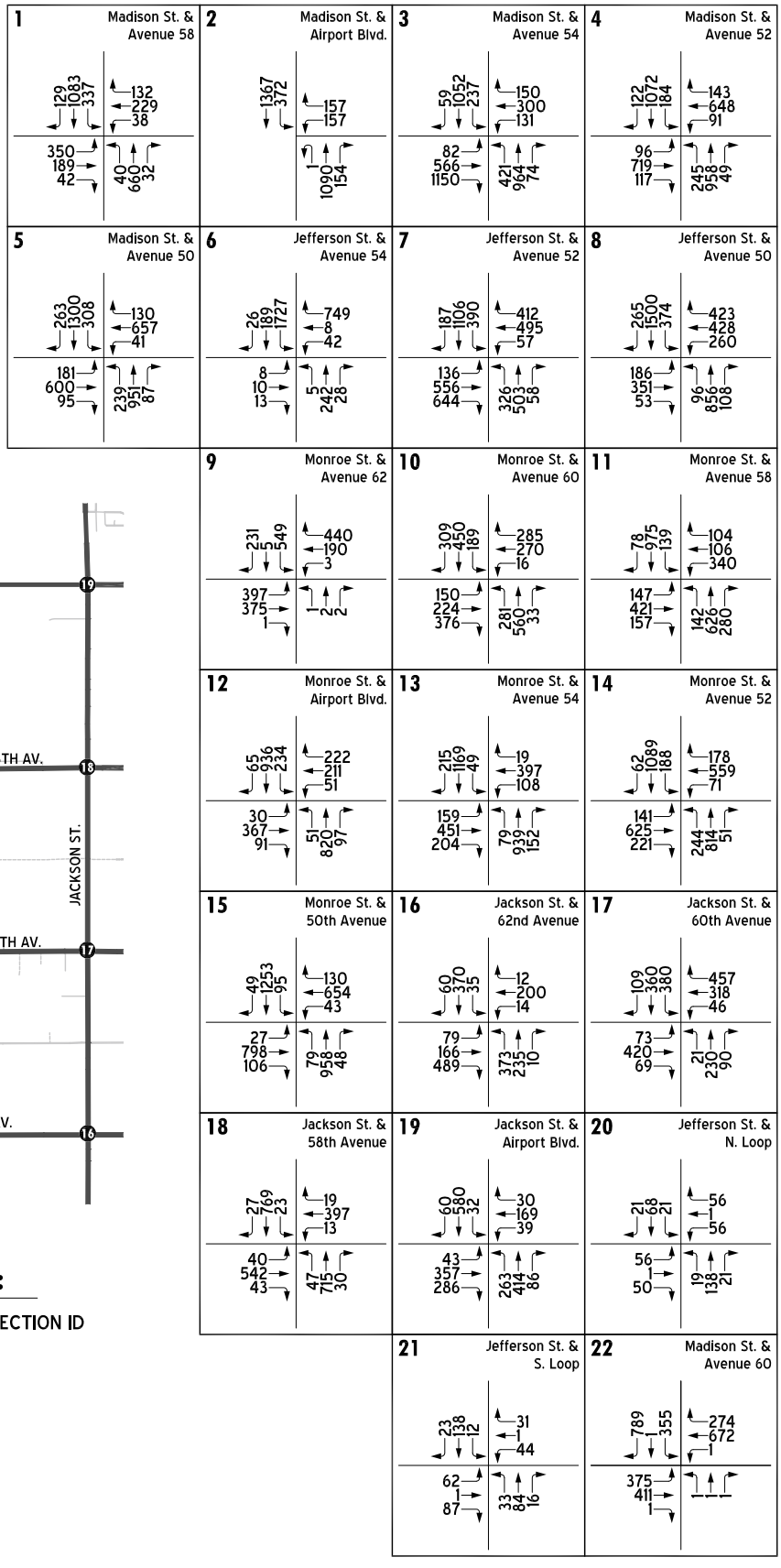
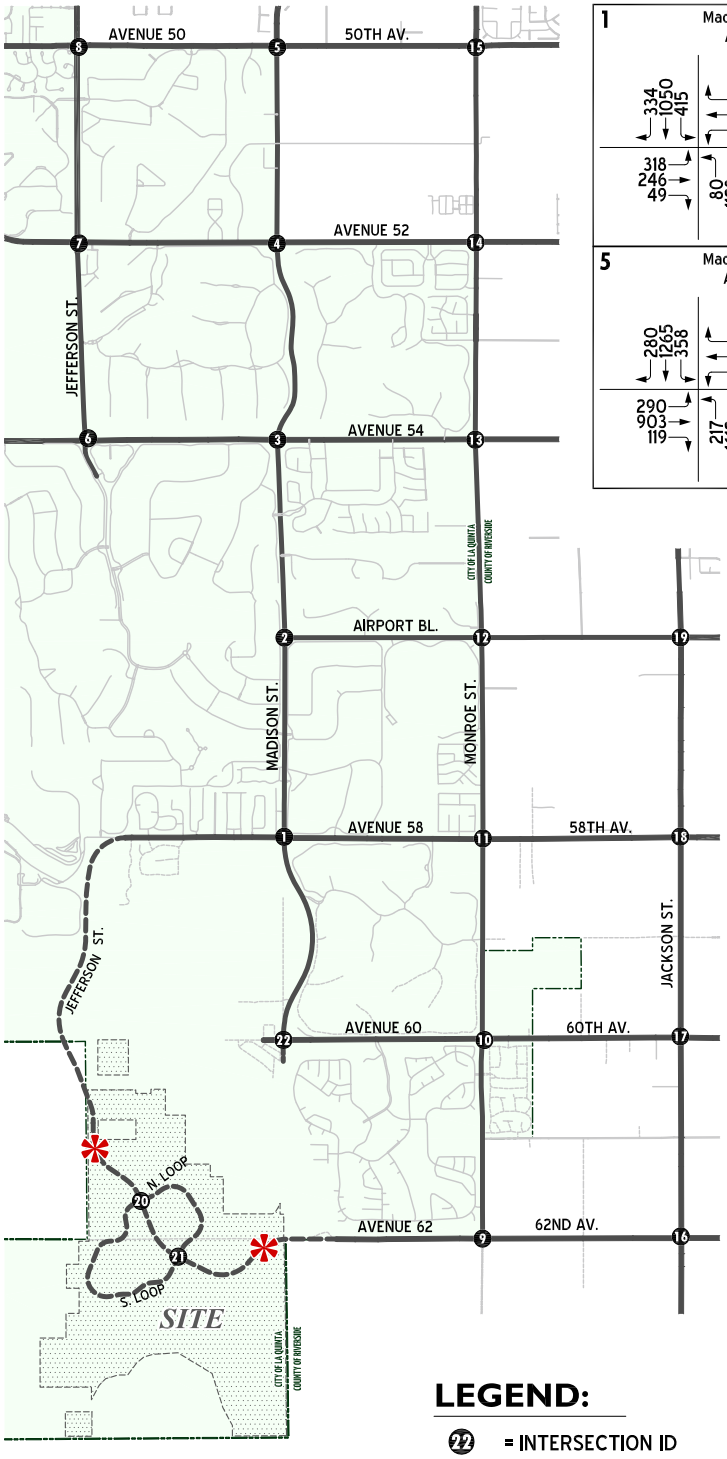


EXHIBIT 7-9: 2040 WITHOUT MADISON STREET EXTENSION AND WITH PROJECT ENTRY GATES (GPA OPTION 2) PM PEAK HOUR INTERSECTION VOLUMES



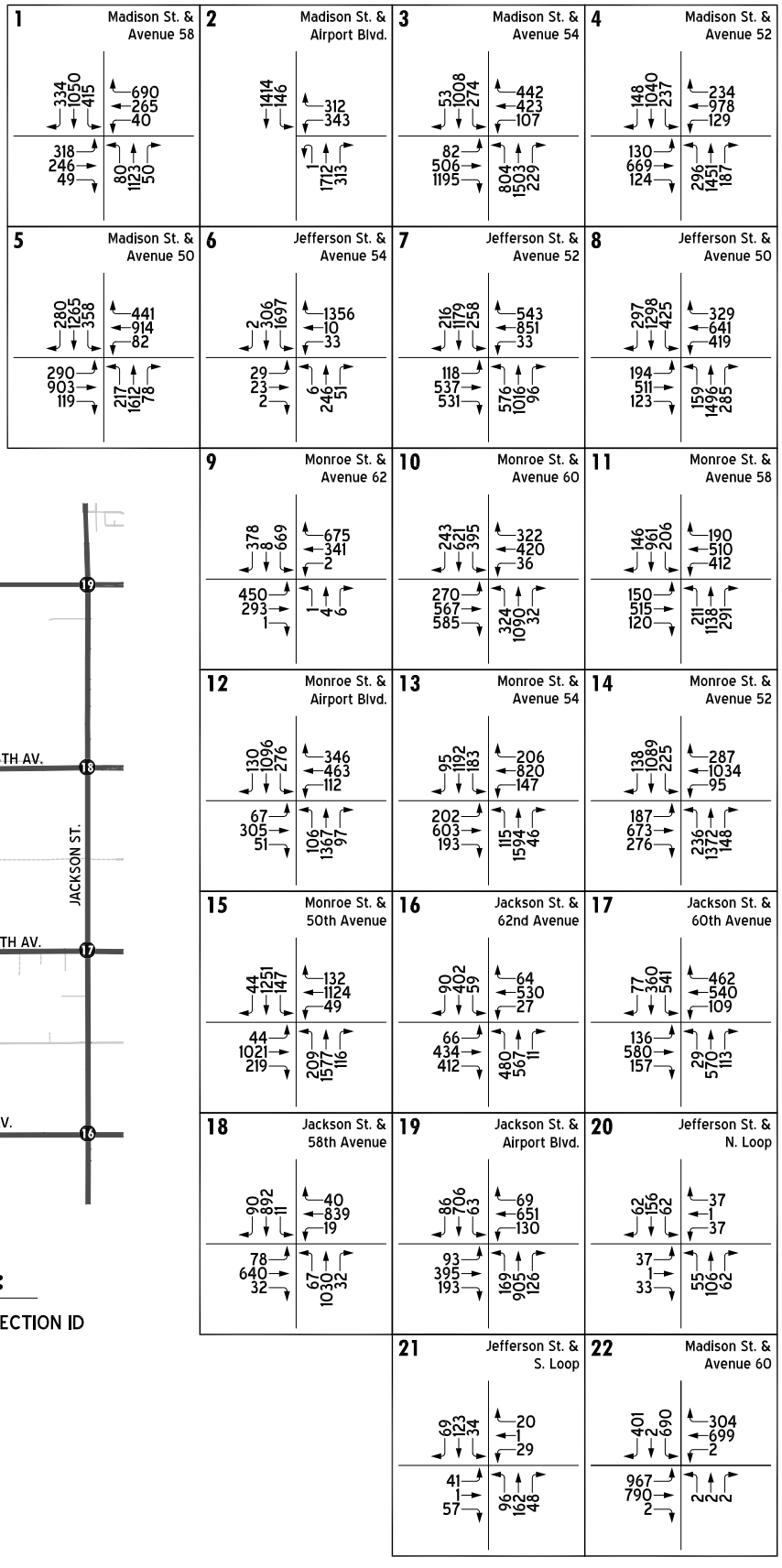


TABLE 7-5: INTERSECTION ANALYSIS FOR
2040 WITHOUT MADISON STREET EXTENSION AND WITH PROJECT ENTRY GATES (GPA OPTION 2)

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Madison St. / Avenue 58																	
	- With GPCE Update Improvements	TS	1	2	1	1	2	d	1	2	0	1	2	1>	40.5	**74.0**	D	**E**
	- With Modified GPCE Improvements	TS	1	2	1	1	2	d	2	1	0	1	2	1>	34.8	54.2	C	D
2	Madison St. / Airport Blvd.	TS	1	2	d	1	2	0	0	0	0	1	0	1	23.9	27.5	C	C
3	Madison St. / Avenue 54	TS	2	2	1	1	2	0	1	2	1>>	1	2	1>	41.7	51.0	D	D
4	Madison St. / Avenue 52	TS	1	2	1	2	2	1	1	2	d	1	2	1	53.3	54.6	D	D
5	Madison St. / Avenue 50	TS	1	3	1	2	2	1	1	2	0	1	2	1>	41.2	54.2	D	D
6	Jefferson St. / Avenue 54	TS	1	2	1	2	2	1	1	1	1	1	1	2>	22.2	44.8	C	D
7	Jefferson St. / Avenue 52[4]	RDB	0.5	2.5	1>>	0.5	2.5	1>>	0.5	2.5	1>>	0.5	2.5	1>>	5.8	8.6	A	A
8	Jefferson St. / Avenue 50	TS	1	3	1	2	3	1	2	2	0	2	2	1	43.3	44.8	D	D
9	Monroe St. / Avenue 62																	
	- With GPCE Update Improvements	TS	0	1!	0	0.5	0.5	1	1	1	0	0.5	0.5	1>	**65.4**	**149.7**	**E**	**F**
	- With Added GPCE Improvements	TS	0	1!	0	1.5	0.5	1>	1	1!	0	1	1	1>	44.6	54.3	D	D
10	Monroe St. / Avenue 60																	
	- With GPCE Update Improvements	TS	1	2	0	1	2	0	1	2	0	1	1	1>	46.4	**106.7**	D	**F**
	- With Added GPCE Improvements	TS	1	2	0	1	2	1	1	2	1>	1	2	1>	37.3	54.9	D	D
11	Monroe St. / Avenue 58																	
	- With GPCE Update Improvements	TS	1	2	1	1	2	0	1	2	0	1	2	0	**57.0**	**83.4**	**E**	**F**
	- With Added GPCE Improvements	TS	2	2	1>	2	2	0	1	2	1	1	2	0	41.6	54.1	D	D
12	Monroe St. / Airport Blvd.	TS	1	2	0	1	2	d	1	2	0	1	2	1>	33.2	45.0	C	D
13	Monroe St. / Avenue 54	TS	1	2	1	1	2	1	2	2	1	1	2	1	31.8	54.7	C	D
14	Monroe St. / Avenue 52	TS	2	2	1	2	2	0	1	2	1	1	2	1	38.7	54.9	D	D
15	Monroe St. / 50th Avenue	TS	2	2	1	2	2	0	1	2	1	1	2	1>	35.5	54.3	D	D
16	Jackson St. / 62nd Avenue	TS	1	2	0	1	2	0	1	1	1	1	2	0	46.5	40.8	D	D
17	Jackson St. / 60th Avenue	TS	1	2	0	1	2	0	1	2	0	1	2	1>	37.4	54.7	D	D
18	Jackson St. / 58th Avenue	TS	1	2	0	1	2	0	1	2	0	1	2	0	29.9	36.9	C	D
19	Jackson St. / Airport Blvd.	TS	1	2	0	1	2	0	1	2	0	1	2	0	38.5	41.0	D	D
20	Jefferson St. / N. Loop	RDB	0	1!	0	0	1!	0	0	1!	0	0	1!	0	5.1	6.1	A	A
21	Jefferson St. / S. Loop	RDB	0	1!	0	0	1!	0	0	1!	0	0	1!	0	5.3	6.3	A	A
22	Madison St. / Avenue 60																	
	- With GPCE Update Improvements	TS	0	1!	0	2	1	1>	2	2	0	1	2	1	35.2	54.0	D	D

[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 Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane; 1 = Improvement

1 = Improvement per City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 2012)

[2] Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a 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 (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop; RDB = Roundabout

[4] Since roundabout analysis in Synchro is limited to a maximum of 2 lanes per approach, traffix has been utilized at this location (similar to the City of La Quinta General Plan Buildout TIA worksheets).

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TABLE 7-6: ROADWAY VOLUME/CAPACITY ANALYSIS FOR 2040 WITHOUT MADISON STREET EXTENSION AND WITH PROJECT ENTRY GATES (GPA OPTION 2)

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	Capacity[2]	ADT[3]	Volume/ Capacity Ratio
Avenue 58	West of Madison Street	Secondary	**4**	28,000	13,500	0.48
	West of Monroe Street	Secondary	4	28,000	14,000	0.50
	West of Jackson Street	Secondary	**4**	28,000	19,000	0.68
Madison St.	South of Avenue 56	Primary	4	42,600	34,000	0.80
60th Avenue	West of Jackson Street	Primary	**4**	42,600	15,000	0.35
Avenue 62	West of Monroe Street	Modified Secondary	2	19,000	14,000	0.74
	West of Jackson Street	Secondary	**4**	28,000	19,000	0.68
Monroe St.	South of Avenue 60	Secondary	**4**	28,000	25,000	0.89
	South of Avenue 58	Primary	**4**	42,600	27,000	0.63
	South of Avenue 56	Primary	**4**	42,600	27,000	0.63
Jackson St.	South of Airport Boulevard	Primary	**4**	42,600	29,000	0.68

[1] 1 = Existing number of lanes; **1** = City of La Quinta General Plan Buildout number of lanes

[2] Source: City of La Quinta Engineering Bulletin #06-13 (July 2015)

BOLD = Estimated to exceed threshold daily capacity values and subject to further evaluation of peak hour performance at key intersections along these routes.

[3] Average Daily Traffic (ADT) expressed in vehicles per day.

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Gates (GPA Option 2) traffic conditions roadway segment capacity analysis based on the City of La Quinta roadway segment capacity thresholds identified previously in Table 3-4. As shown on Table 7-6, the study roadway segments analyzed are anticipated to operate at acceptable LOS for General Plan Buildout (Year 2040) without Madison Street Extension and with Project Entry Gates (GPA Option 2) traffic conditions. However, one roadway segment along Madison Street, between Avenue 54 and Airport Boulevard (as shown on Exhibit 7-1) appears to exceed the theoretical daily segment LOS thresholds. Further review of the more detailed peak hour intersection analysis indicates that the recommended improvements at adjacent study area intersections provide acceptable level of service. Therefore, roadway segment widening is not anticipated.

7.4 EVACUATION AND ACCESS CONSIDERATIONS WITH FLOOD EVENTS

The Jefferson Street and Avenue 62 roadway extensions into the project site will require crossings of the Guadalupe Creek Diversion Dikes and Dike No. 4. The conceptual design for the crossings include the use of a multiple arch bridge. The bridge configuration and sizing shall be determined during the final design. The design shall address freeboard and scour calculations as well as impacts to the dikes.

With the existing General Plan circulation infrastructure in the Project area, as well as GPA Option 1 (the termination of Madison Street as a General Plan Roadway south of Avenue 60) or GPA Option 2 (on-site entry gates for Jefferson Street and Avenue 62 roadway extensions, in addition to the termination of Madison Street as a General Plan Roadway south of Avenue 60), access alternatives for evacuation will nevertheless be provided using the Jefferson Street and Avenue 62 roadway extensions into the project site.

Development of the Travertine Specific Plan will have the potential to create cumulative impacts if not properly mitigated to address water quality, drainage, flooding and water supply. Cumulative impacts would generally be confined to an increase in the amount of water retention behind Dike No. 4 from increased impervious surfaces (i.e., paved roads, roofs, sidewalks, etc.) created from the development of the project. However, with the incorporating of the Stormwater Management Plan's design standards and objectives for stormwater runoff, the development of onsite infiltration basins (Basins A, B, and C) and the project's adherence to the Flood Hazard and Mitigation Plan as identified in the Drainage Master Plan, would contribute in reducing cumulative impacts in regard to increased water retention and increased silt and sand deposition behind Dike No. 4.

The conceptual design and layout of the proposed flood protection for the project was developed and evaluated as a part of the Drainage Master Plan. Mitigation Measure HWQ-6, as identified in Section 4.9 of the Travertine Specific Plan Admin Draft EIR (v1), Hydrology and Water Quality, requires that more detailed engineering and design, consistent with design standards established by the City of La Quinta and CVWD shall be completed at the Tentative Map and Final Map stages of development within each development planning area, resulting in the precise location, alignment, and sizing of all regional drainage facilities, to the satisfaction of the City Engineer or his/her designee, and CVWD. The following summarizes the requirements and criteria to be evaluated as a part of the more detailed facility design.

- All facilities shall be designed in accordance with the latest version of the CVWD Development Design Manual.
- Regional Hydrology of The Drainage Master Plan is acceptable for use in the final design. Regional facilities shall be designed using the bulked 1- percent annual chance event.
- Updated hydraulic analyses utilizing a refined grid-cell size and detailed topography, grading and facility alignments shall be prepared to determine design water surface elevations and flow velocities along the perimeter flood barriers and Guadalupe Diversion Dikes.
- Evaluate flow depths and velocities on a reach-by-reach basis to determine: a) water surface elevations, b) freeboard requirements, c) lining requirements in terms of materials and lining thickness, d) scour depths, e) potential for deposition of sediments, and f) the need for channel stabilization to control degradation or bed incision.
- Adjust flood protection system configuration (in terms of barrier and levee heights/scour depths and bridge crossing configurations) based on the refined hydraulic analysis. Determine the optimum configuration of channels, barriers, and levees with necessary containment and erosion control structures which will provide the 100-year flood protection and blend effectively with natural environment (where appropriate) and the proposed development.
- Bridges at the Jefferson Road crossing of the Guadalupe Dike and the Avenue 62 crossing of Dike No. 4 shall be designed in accordance with the scour requirements in Section K-3.11 of the Development Design Manual.
- Prepare detailed designs and specifications for facilities including levee improvements, erosion protection (natural appearing where possible), and channel stabilization structures for the required facilities.

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8 PROJECT INTERNAL CIRCULATION

8.1 PROJECT INTERSECTION CONTROLS AND STREET CROSS-SECTIONS

The Travertine Project is proposed to be served by two main access points to the surrounding area: 1) the southerly extension of South Jefferson as a Modified Secondary, south of Avenue 58, and 2) the westerly extension of Avenue 62 as a Modified Secondary, west of Monroe Street.

The internal residential circulating roadway (Loop) intersects with Jefferson Street at two roundabout-controlled intersections (Jefferson Street at North Loop and Jefferson Street at South Loop). Roundabout design features are documented in this Section 8.3.

Five additional Project access points along Jefferson Street are provided as cross-street stop controlled intersections with median breaks to allow left turns. All five full access intersections meet Jefferson Street as three-legged intersections, with turning volume of less than 50 vehicles per hour in the peak hour. The opposing volume in each instance is less than 500 vehicles per hour in the peak hour, and the left turn bays / lanes needed are less than the minimum (100' with 90' transition), so the minimum is recommended.

8.1.1 PROJECT ROADWAY CROSS-SECTIONS

Exhibit 8-1 illustrates the on-site recommended roadway lane improvements, and roadway cross-sections are shown on Exhibit 8-2. Construction of on-site improvements shall occur in conjunction with adjacent Project development activity or as needed for Project access purposes. These improvements should be in place prior to occupancy. On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the Project site.

Jefferson Street – Jefferson Street is a north-south oriented roadway located along the Project's northern boundary. Off-site, construct Jefferson Street from the Project boundary to Avenue 58 as an interim section with 1 lane northbound, 1 lane southbound, bike lanes, and a sidewalk adjacent to the west side of the street. Within the Project boundary, Jefferson Street should be constructed at its ultimate full section width, with curb and gutters.

Avenue 62 – Avenue 62 is an east-west oriented roadway located along the Project's northern boundary. Construct Avenue 62 from the Project boundary to Monroe Street as an interim section with 1 lane eastbound, 1 lane westbound, bike lanes, and a sidewalk adjacent to the north side of the street. Within the Project boundary, Avenue 62 should be constructed at its ultimate full section width, with curb and gutters.

Loop – The North and South Loop roads operate as a circular roadway between the North and South Loop intersections with Jefferson Street. Construct Loop Road at its ultimate full section width as a Collector (70-foot right-of-way), with curb and gutters.

Where necessary, roadways providing site access and site-adjacent intersections will be constructed consistent with / within the recommended roadway classifications and respective cross-sections in the City of La Quinta General Plan Circulation Element.

EXHIBIT 8-1: ON-SITE RECOMMENDED LANE IMPROVEMENTS

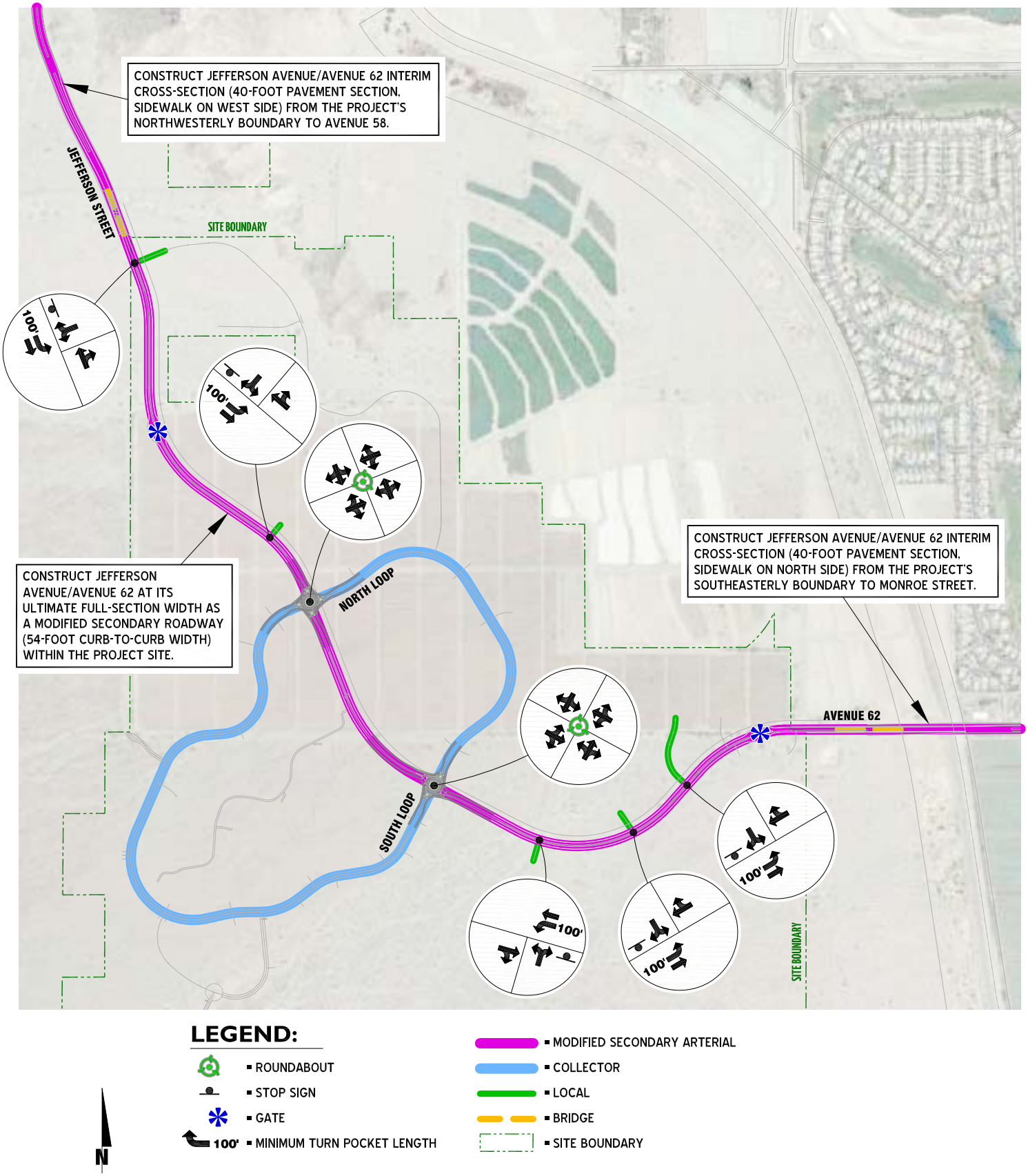
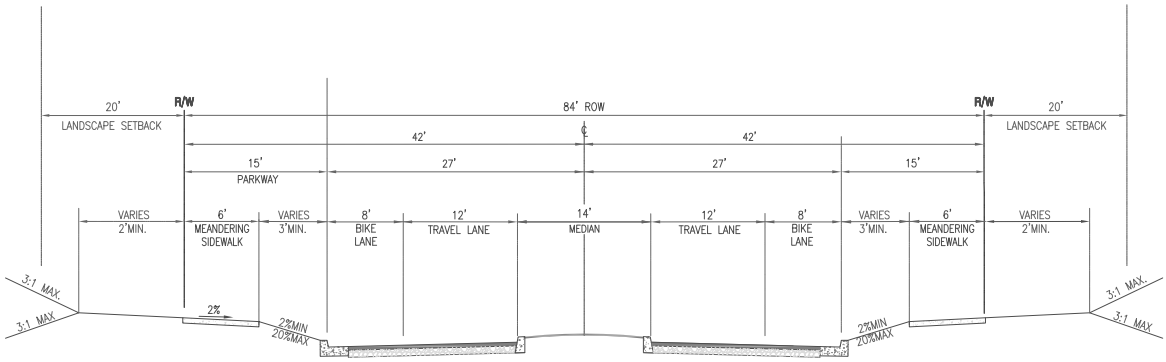
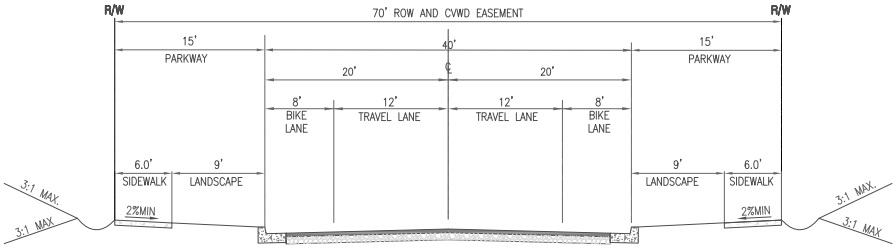


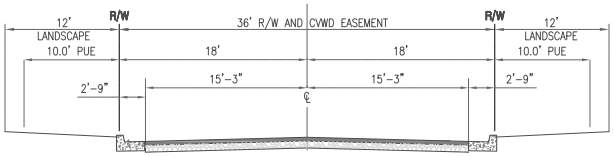
EXHIBIT 8-2: ON-SITE ROADWAY CROSS-SECTIONS



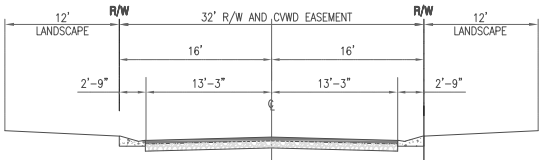
MODIFIED SECONDARY
(JEFFERSON STREET/AVENUE 62)



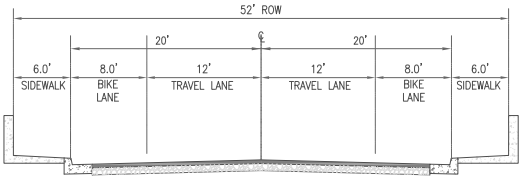
COLLECTOR



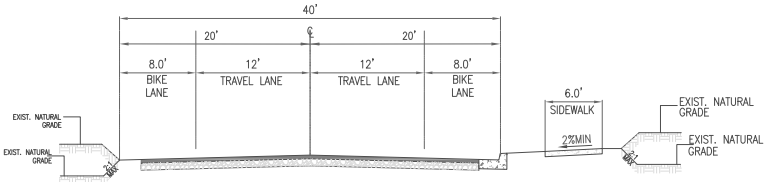
LOCAL, PARKING ON BOTH SIDES



LOCAL, PARKING ON ONE SIDE



JEFFERSON STREET GUADALUPE BRIDGE AND AVENUE 62 BRIDGE



INTERIM OFF-SITE JEFFERSON STREET AND AVENUE 62 ACCESS CONNECTIONS

8.2 PEDESTRIAN / BICYCLE ACCOMMODATIONS

Exhibit 8-3 shows Project pedestrian and bicycle accommodations. Sidewalks and Class II bike lanes are provided along Jefferson Street and Loop throughout the Project. Off-site, the interim section of Jefferson Street from the Project boundary to Avenue 58 includes a sidewalk on the west side. The interim section Avenue 62 from the Project boundary to Monroe Street includes a sidewalk on the north side.

Hiking trails generally run outside the developed portion of the Project. A Multi-Use trail bisects the loop and connects east to the hiking trail, as well, with grade separation at Jefferson Street (i.e. the trail goes under the roadway).

8.3 ROUNDABOUT DESIGN FEATURES

8.3.1 JEFFERSON STREET / NORTH LOOP

The roundabout layout for Jefferson Street at North Loop is illustrated on Exhibit 8-4. As shown on Exhibit 8-5, design features for this roundabout include single lane entries on the four approaches (northbound, southbound, eastbound, and westbound). An inscribed diameter of 110 feet and lane entries with widths of 20' (NB), 19' (EB), 20' (SB), and 19' (WB) is shown. The Jefferson Street at North Loop roundabout has been designed to accommodate the WB-50 truck as shown on Exhibit 8-6. The additional right of way areas needed for the proposed roundabouts are accounted for in the Project circulation design.

The fastest path allowed by the geometry (see Exhibit 8-7 for Jefferson Street at North Loop) determines the negotiation speed for that particular movement into, through, and exiting the roundabout. It is the smoothest, flattest path possible for a single vehicle, in the absence of other traffic and ignoring all lane markings. The fastest path is drawn for a vehicle traversing through the entry, around the central island, and out the relevant exit. Note that the fastest path methodology does not represent expected vehicle speeds, but rather theoretical attainable entry speeds for design purposes. Actual speeds can vary substantially based on vehicle suspension, individual driving abilities, and tolerance for gravitational forces.

8.3.2 JEFFERSON STREET / SOUTH LOOP

The roundabout layout for Jefferson Street at South Loop is illustrated on Exhibit 8-8. As shown on Exhibit 8-9, design features for this roundabout include single lane entries on the four approaches (northbound, southbound, eastbound, and westbound). An inscribed diameter of 110 feet and lane entries with widths of 20' (NB), 19' (EB), 20' (SB), and 21' (WB) is shown. The Jefferson Street at South Loop roundabout has been designed to accommodate the WB-50 truck as shown on Exhibit 8-10.

The fastest path allowed by the geometry is shown on Exhibit 8-11. Tables 8-1 and 8-2 show the speed performance checks for both Travertine roundabouts through movements and right turn movements, respectively.

EXHIBIT 8-3: PEDESTRIAN / BICYCLE ROUTES

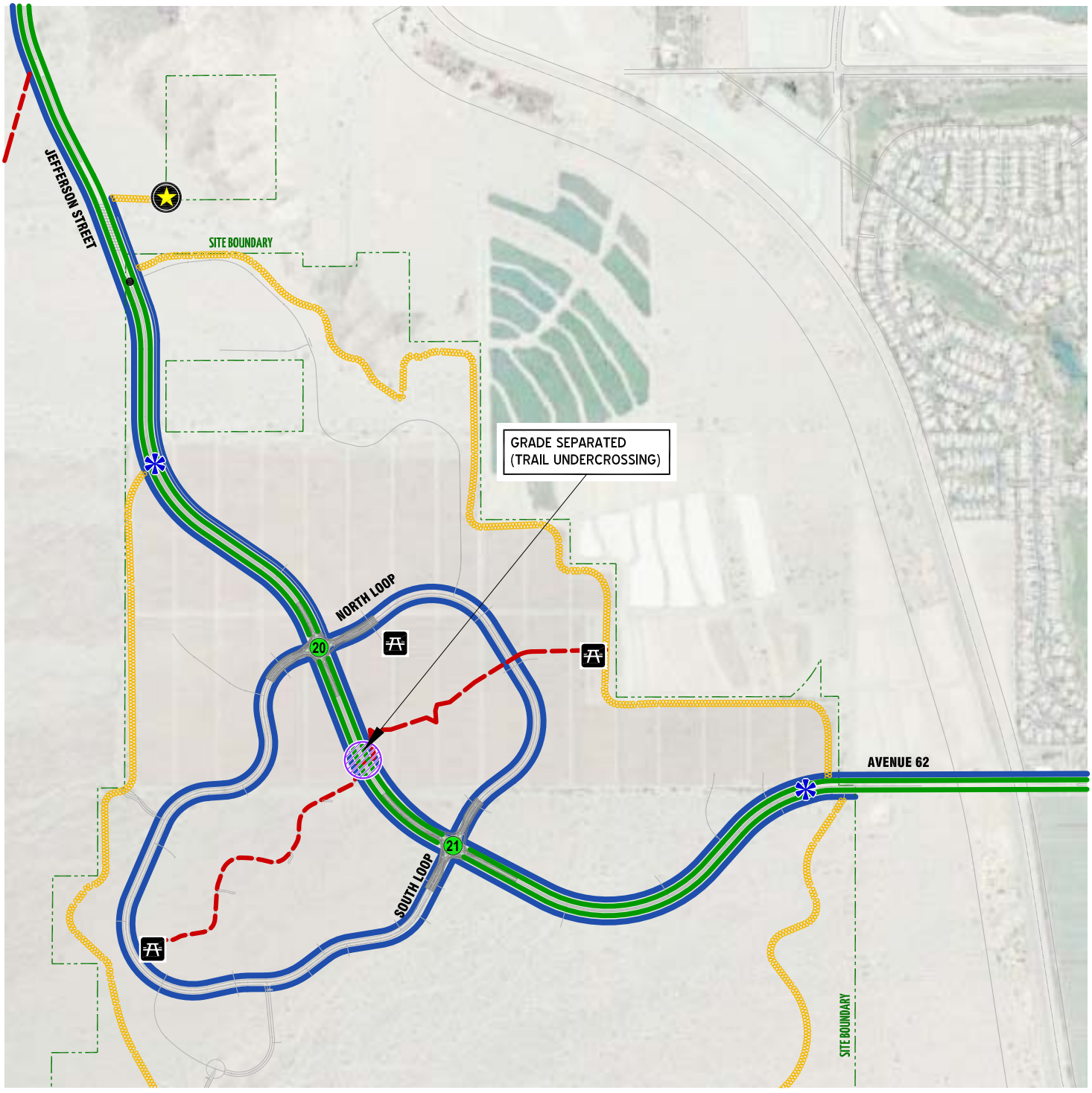


EXHIBIT 8-4: JEFFERSON STREET AT NORTH LOOP
CONCEPTUAL ROUNDABOUT LAYOUT

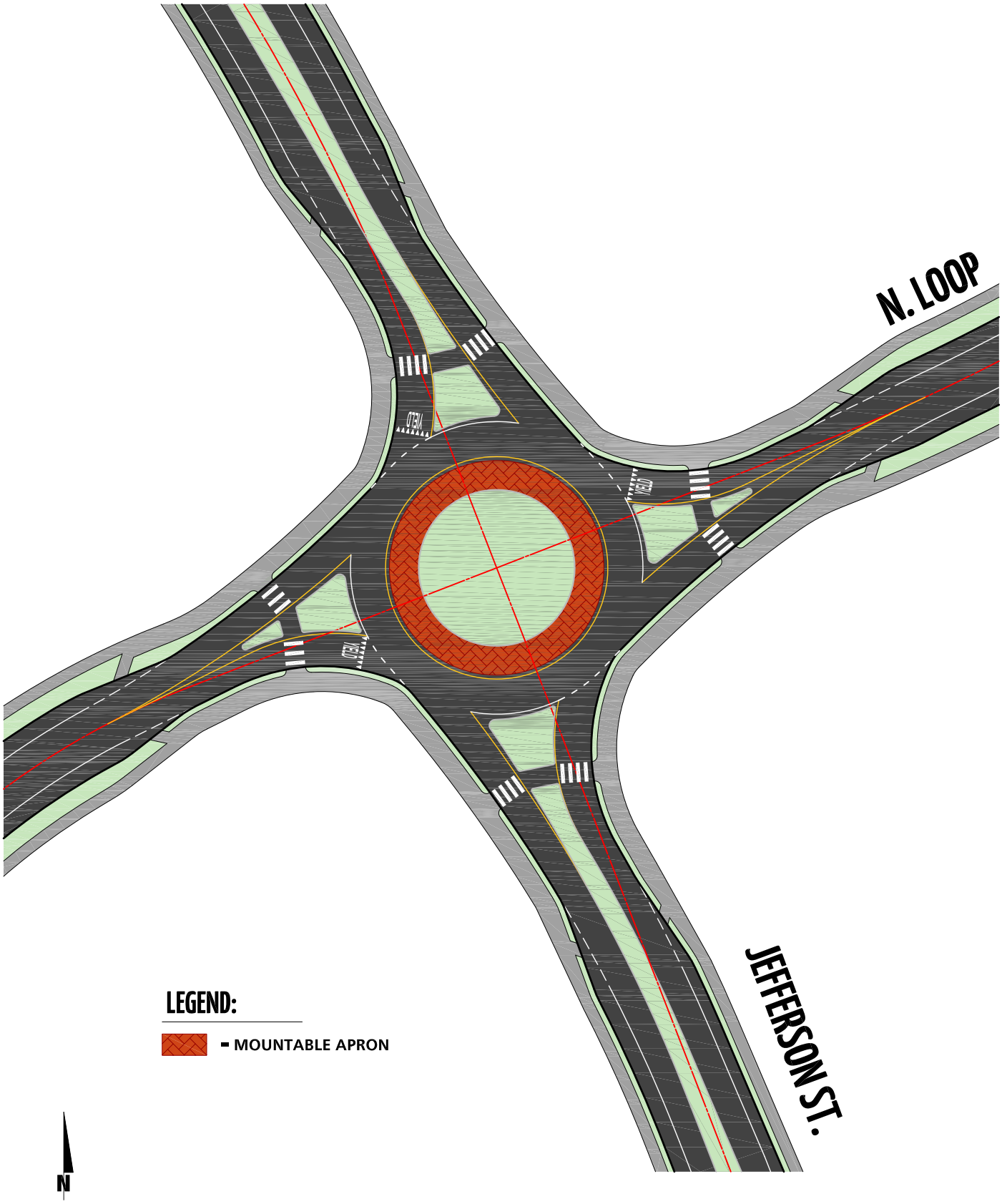


EXHIBIT 8-5: JEFFERSON STREET AT NORTH LOOP
ROUNDABOUT DESIGN FEATURES

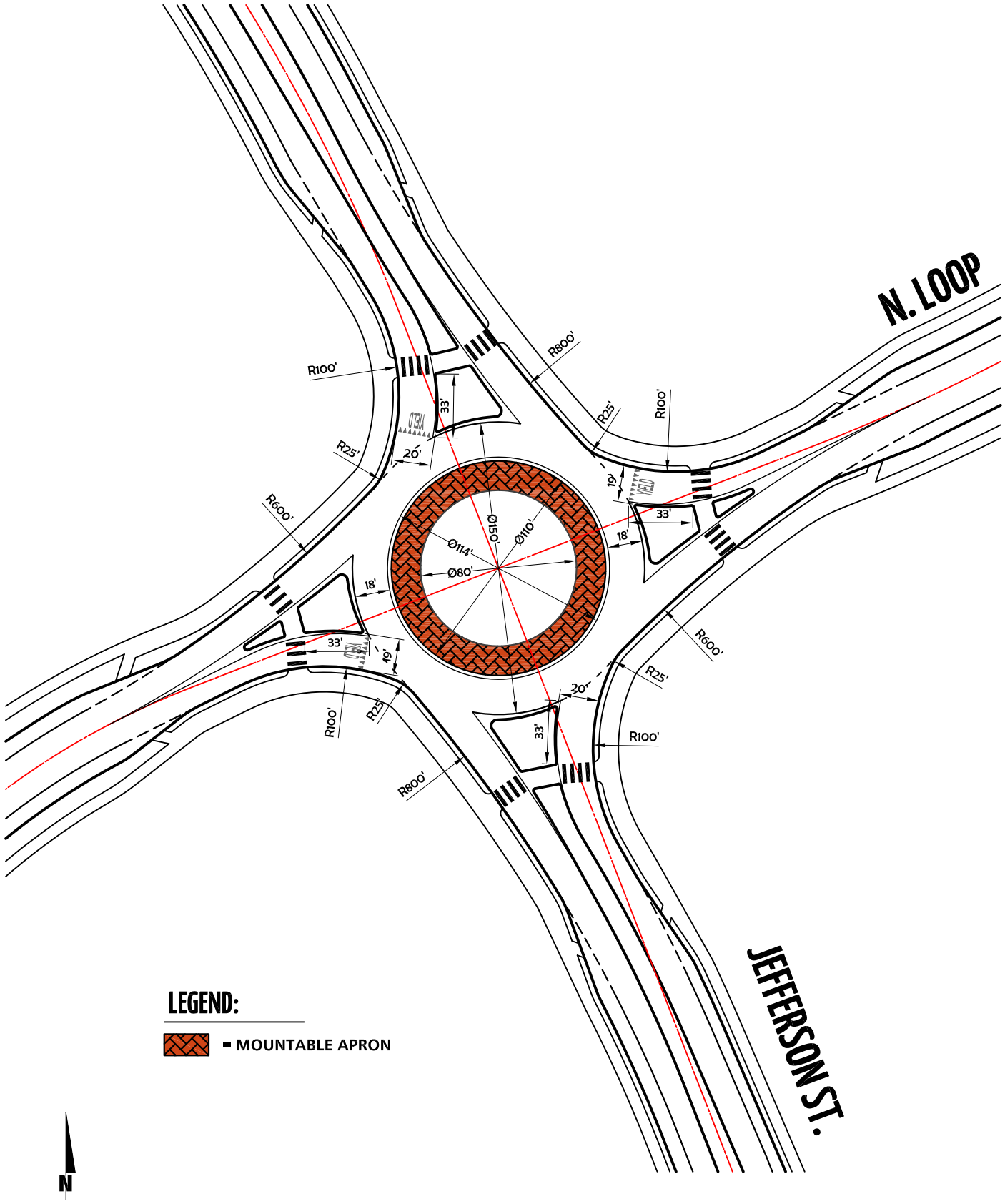


EXHIBIT 8-6: JEFFERSON STREET AT NORTH LOOP
WB-50 TRUCK PATH OVERLAY

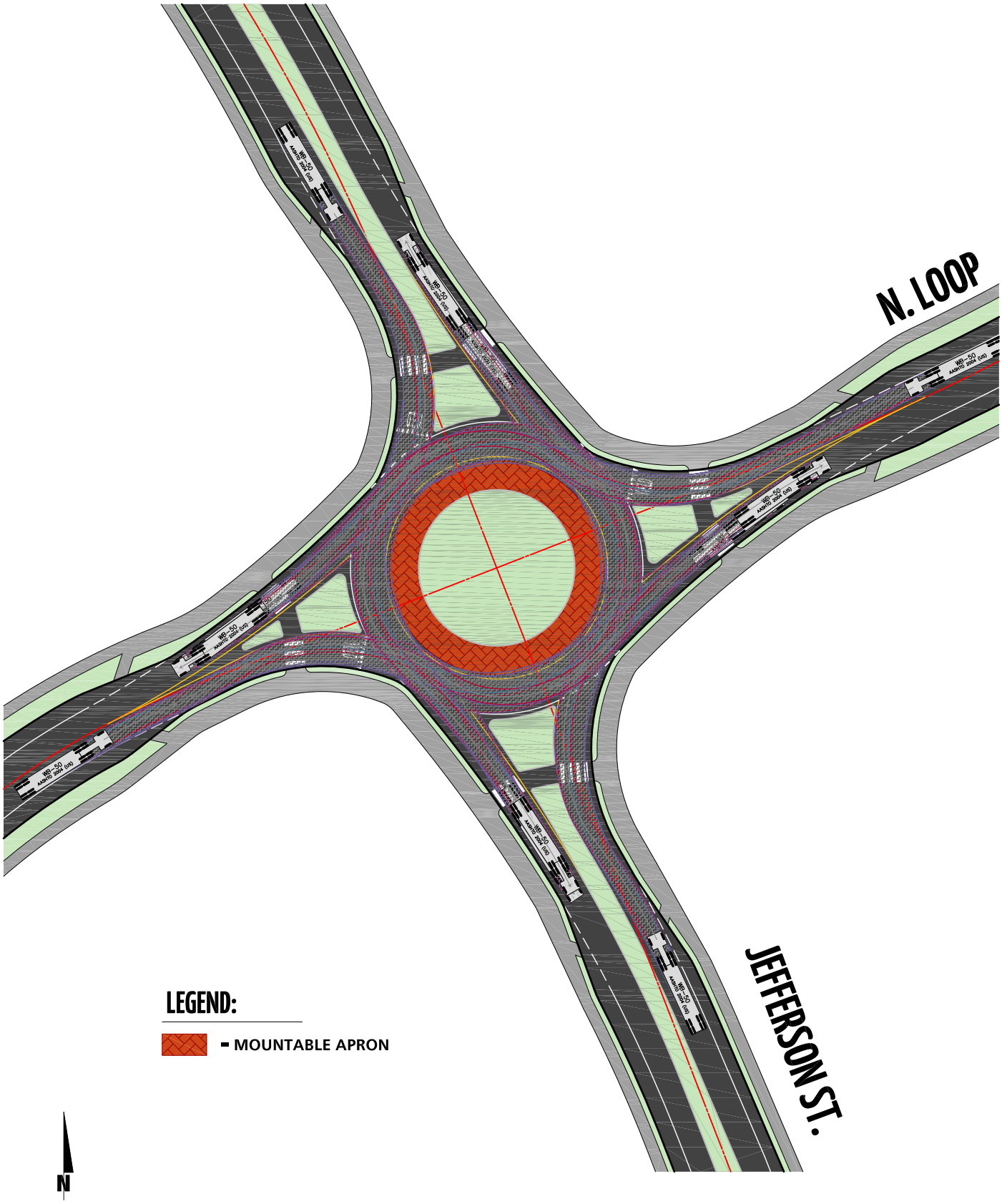


EXHIBIT 8-7: JEFFERSON STREET AT NORTH LOOP
FHWA FASTEST VEHICLE PATHS

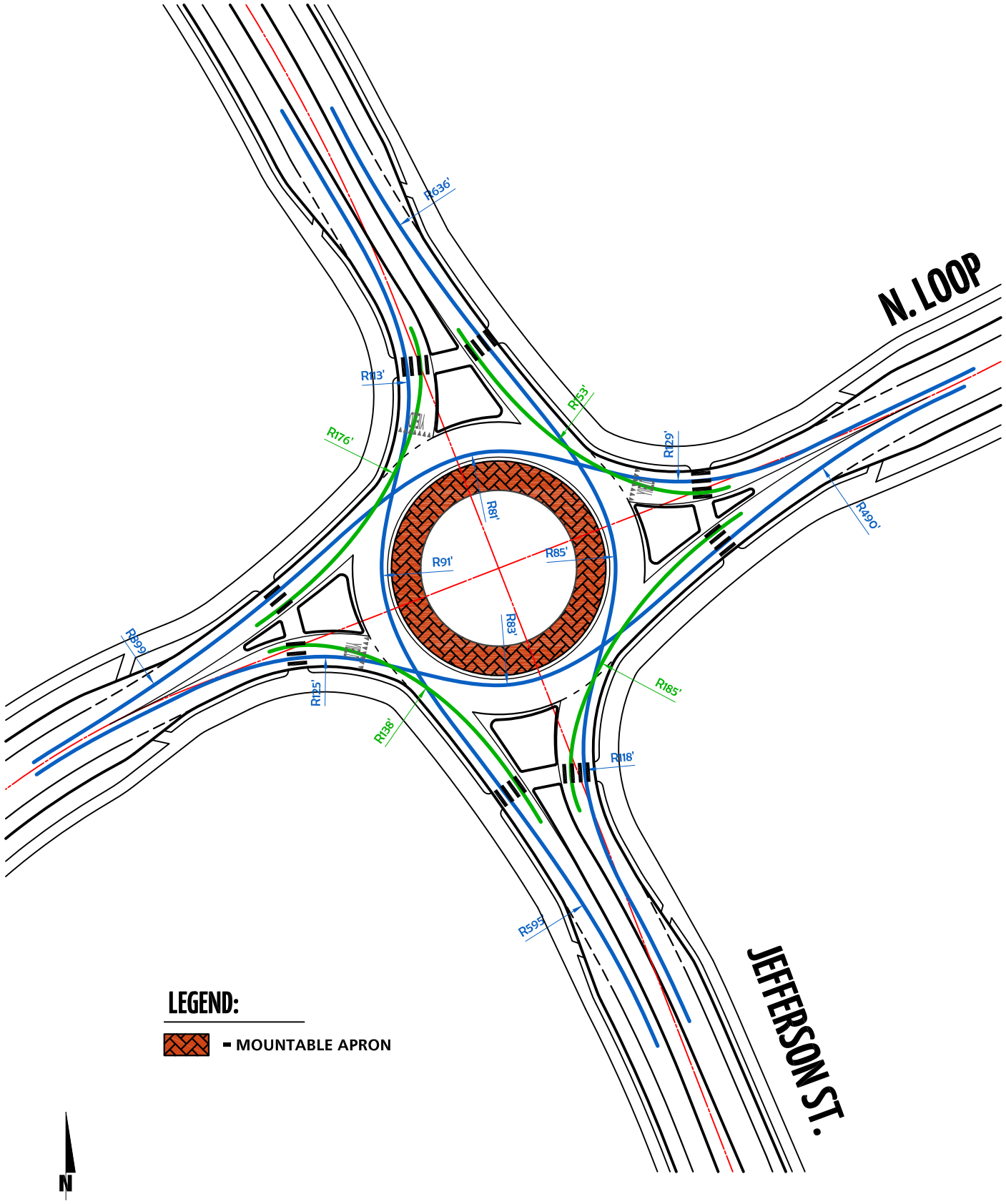


EXHIBIT 8-8: JEFFERSON STREET AT SOUTH LOOP
CONCEPTUAL ROUNDABOUT LAYOUT

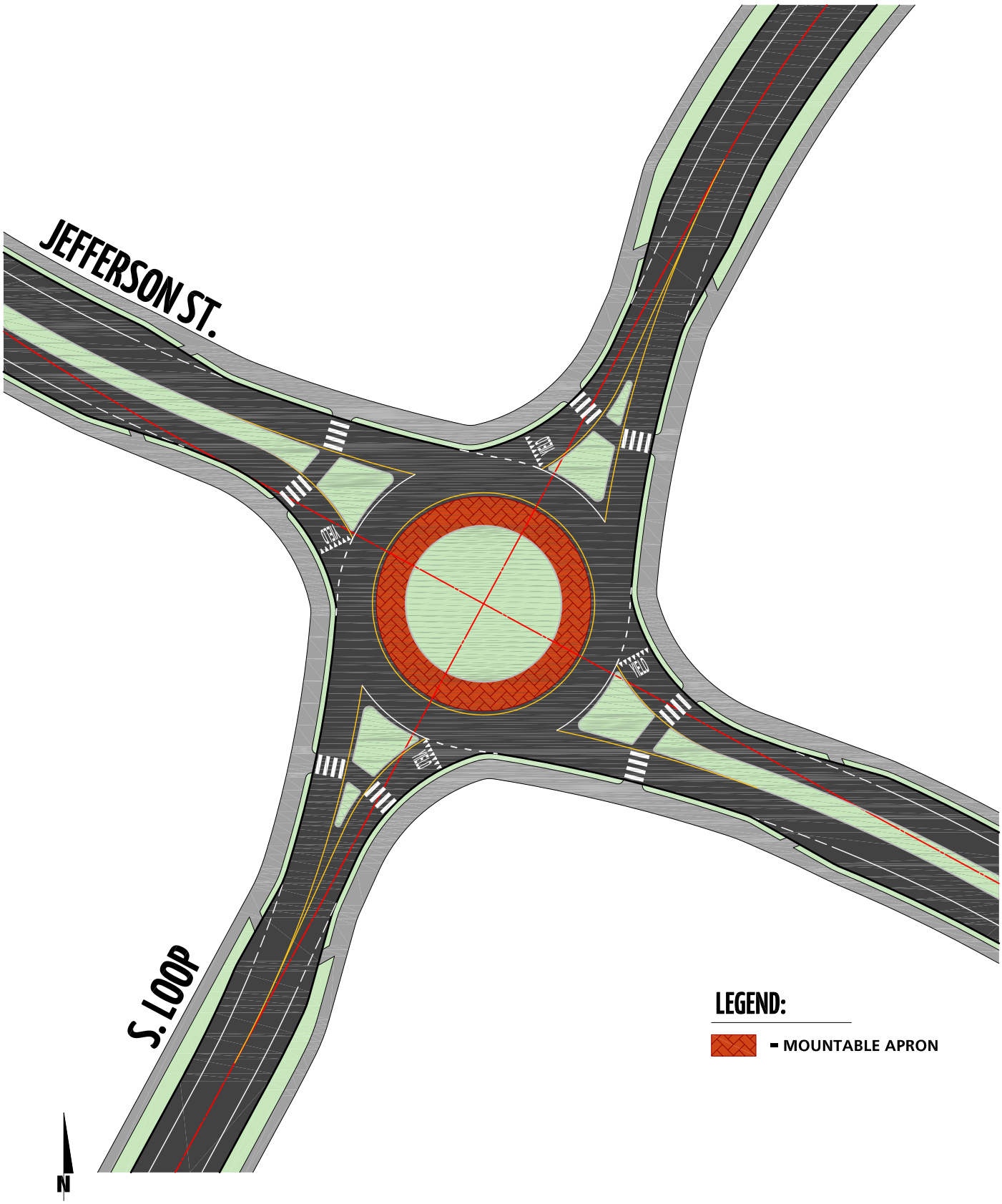


EXHIBIT 8-9: JEFFERSON STREET AT SOUTH LOOP
ROUNDABOUT DESIGN FEATURES

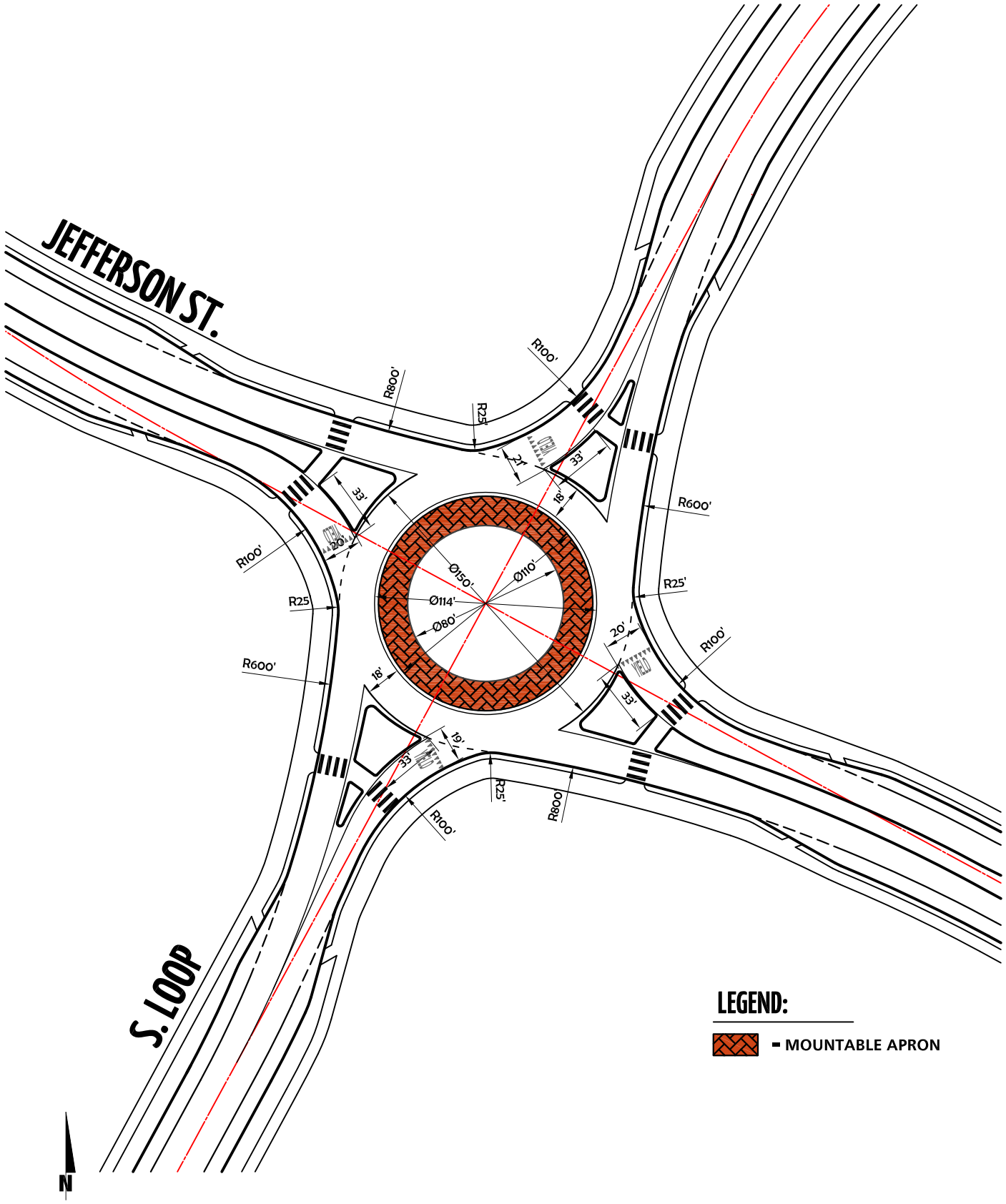


EXHIBIT 8-10: JEFFERSON STREET AT SOUTH LOOP
WB-50 TRUCK PATH OVERLAY

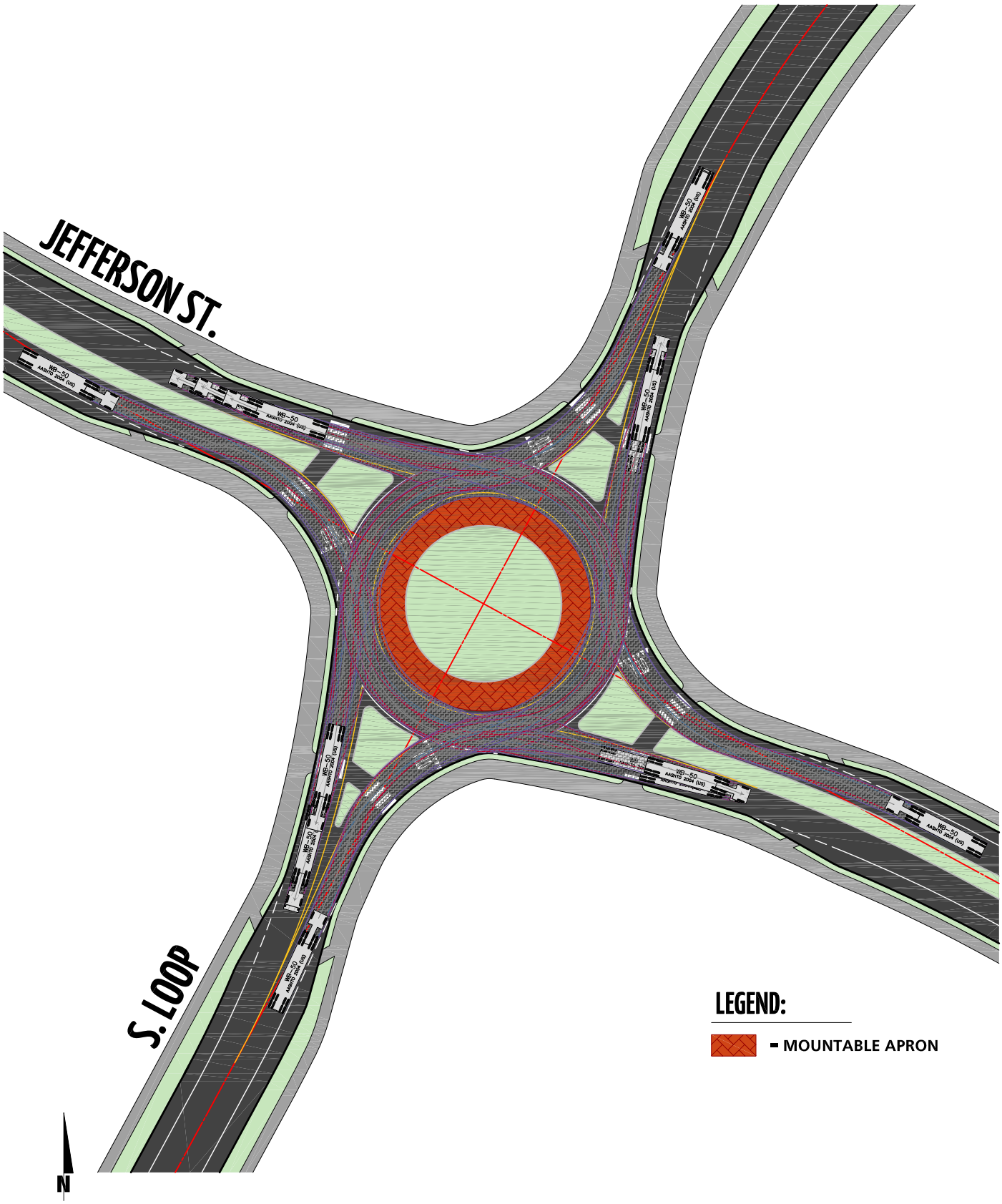


EXHIBIT 8-11: JEFFERSON STREET AT SOUTH LOOP
FHWA FASTEST VEHICLE PATHS

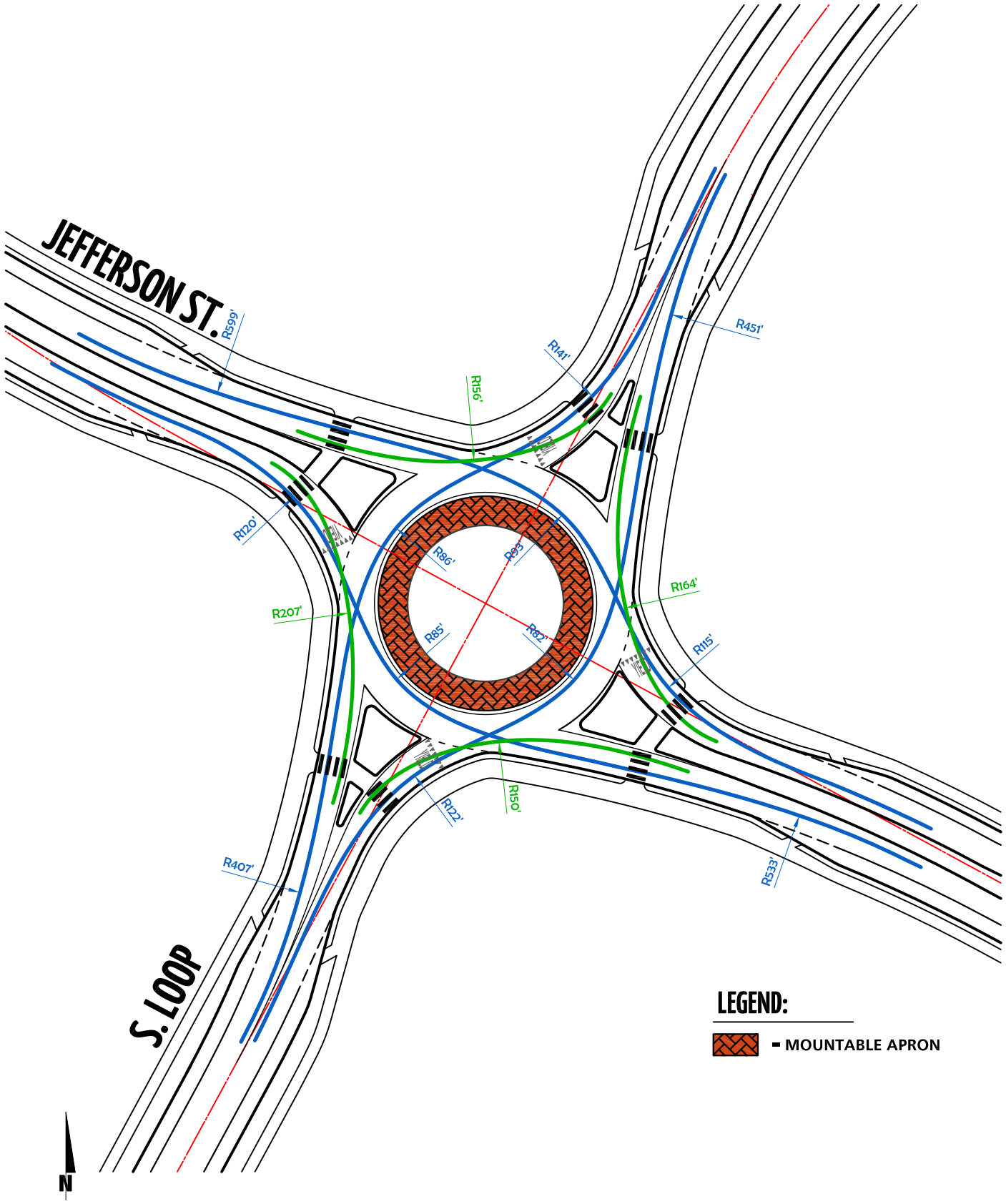


Table 8-1

Speed Performance Check for Travertine Roundabouts Through Movements

Approach		Fastest Entry Speed	Fastest Circulating Speed	Fastest Exit Speed
Northern Jefferson St. Roundabout	NB	18	18	26
	SB	18	18	27
	EB	18	18	27
	WB	17	17	27
Southern Jefferson St. Roundabout	NB	20	18	26
	SB	18	18	27
	EB	17	17	26
	WB	18	18	27

Design Criteria:

1. Flattest path possible for single 6 foot wide vehicle, in the absence of other traffic and ignoring all lane markings, traversing through the entry, around the central island, and out the exit, maintaining 2 foot clearance to pavement edges. These are higher speed paths than the natural paths of vehicles within lane markings.
2. Roundabout Design Criteria
   - Maximum Entry Design Speed:
     - 25 mph Single-Lane and 30 mph Multi-Lane Roundabout
   - Internal Circulating Speed:
     - 15 mph to 35 mph
   - Maximum Exit Speed:
     - 30 mph Single-Lane and/or Multi-Lane Roundabout

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Table 8-2

Speed Performance Check for Travertine Roundabouts Right Turn Movements

Approach		Right Turn Speed
Northern Jefferson St. Roundabout	NB	24
	SB	23
	EB	21
	WB	22
Southern Jefferson St. Roundabout	NB	23
	SB	25
	EB	22
	WB	22

Design Criteria:

1. Flattest path possible for single 6 foot wide vehicle, in the absence of other traffic and ignoring all lane markings, traversing through the entry, around the central island, and out the exit, maintaining 2 foot clearance to pavement edges. These are higher speed paths than the natural paths of vehicles within lane markings.
2. Roundabout Design Criteria
   - Maximum Entry Design Speed:
     - 25 mph Single-Lane and/or Multi-Lane Roundabout
   - Internal Circulating Speed:
     - 15 mph to 35 mph
   - Maximum Exit Speed:
     - 30 mph Single-Lane and/or Multi-Lane Roundabout

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9 FINDINGS AND RECOMMENDATIONS

9.1 PROJECT TRAFFIC

At buildout, the proposed mixed-use Project consists of approximately 758 single family detached residential homes, 442 duplex residential units, a 100-room resort hotel and PA 11 resort/golf uses (golf practice, golf academy, and banquet accommodations). The Project is anticipated to be constructed in phases with the total development for each phase summarized below:

- Phase 1 (2026) – 530 single family detached residential homes, 74 duplex residential units, and PA 11 resort/golf uses (golf practice, golf academy, and banquet accommodations). Phase 1 of the proposed Project is anticipated to generate a total of 5,836 external trip-ends per day on a typical weekday with 442 external vehicles per hour (VPH) during the weekday AM peak hour and 590 external VPH during the weekday PM peak hour.
- Phase 2 (2029) – additional 143 single family detached residential homes and 163 duplex residential units. Phase 2 of the proposed Project is anticipated to generate a cumulative total of 8,343 external trip-ends per day on a typical weekday with 620 external vehicles per hour (VPH) during the weekday AM peak hour and 821 external VPH during the weekday PM peak hour.
- Phase 3 (2031) – additional 85 single family detached residential homes, 205 duplex residential units and a 100-room resort hotel. The proposed Project is anticipated to generate a cumulative total of approximately 11,979 trip-ends per day on a typical weekday with 848 vehicles per hour (VPH) during the weekday AM peak hour and 1,105 VPH during the weekday PM peak hour.

9.2 PROJECT ACCESS

Project Phase 1 includes the westerly extension of Avenue 62 as an interim section, west of Monroe Street, with an emergency only access northerly from the Project to Madison Street/Avenue 60 intersection. Project Phases 2 and 3 include the southerly extension of South Jefferson as an interim section, south of Avenue 58.

Project access features and study area improvements required in conjunction with each phase of development are presented in Sections 3 through 6 of this report. For each study area intersection, the sequencing of improvements is summarized previously on Exhibits 1-4 through 1-7. Roadway cross-sections for Project facilities are shown on Exhibit 1-4.

For Project Phase 1 conditions, the following site access improvements are recommended:

- Within the Phase 1 development area, construct Jefferson Street from the east Project boundary to the North Loop intersection at its ultimate full section width as a Modified Secondary (54-foot curb-to-curb), with curb and gutters, sidewalks, and Class II bike lanes.
- East of the Project boundary to Monroe Street, construct Avenue 62 with interim cross-section improvements to include 40’ pavement section with sidewalk on the north side.
- Construct roundabout intersections at Jefferson Street / North Loop and Jefferson Street / South Loop, with related segments of the North Loop and South Loop Collector facilities.

- Construct a secondary emergency vehicle access (EVA) connection from the northerly boundary of Planning Area 18 to Madison Street / Avenue 60.

For Project Phase 2 conditions, the following site access improvements are recommended:

- Construct Jefferson Street off-site from the Project boundary to Avenue 58 as an interim section (40-foot pavement section, sidewalk on west side), resulting in the provision of 2 public access connections (in conjunction with Phase 1 improvements) between the Project and surrounding areas.
- Within the Project boundary, construct the remaining segment of Jefferson Street at its ultimate full section width, with curb and gutters.
- Complete construction of Loop Road at its ultimate full section width as a Collector (40-foot curb-to-curb), with curb and gutters.

For Project Buildout (Phase 3) conditions, site access is recommended to be consistent with Project Phase 2.

9.3 OFF-SITE PROJECT PHASE IMPACTS AND CUMULATIVE NEEDS

Table 9-1 documents improvements for existing plus project and near term by phase conditions. Table 9-2 summarizes the intersection operations results for General Plan Buildout (2040) conditions.

Existing intersection operations were presented in Section 2 of this TIA. The 19 existing study area intersections are currently operating at an acceptable LOS during the peak hours. The following 4 unsignalized study area intersections currently warrant a traffic signal:

- (#3) - Madison Street at Avenue 54
- (#6) - Jefferson Street at Avenue 54
- (#13) - Monroe Street at Avenue 54
- (#14) - Monroe Street at Avenue 52

9.3.1 E+P CONDITIONS

For Existing Plus Project conditions, intersection operations were presented previously in Section 3 of this TIA. The intersection of Monroe Street at Avenue 52 (#14) is anticipated to require an installation of a traffic signal (which is funded in the CIP) in order to maintain acceptable LOS under E+P conditions.

9.3.2 PROJECT PHASE 1 (2026) CONDITIONS

Off-site intersection improvements for 2026 conditions include the following:

Project Responsibilities

Project Phase 1 intersection analysis results were presented on Table 4-2. Construct traffic signal improvements for the intersection of Monroe Street at Avenue 60 (#10) for eventual reimbursement via the City of La Quinta CIP.

TABLE 9-1: SUMMARY OF E+P AND PHASED INTERSECTION IMPROVEMENTS

ID	Intersection	Jurisdiction	Existing + Project	Recommended Improvements							Funding Source?	General Plan Buildout 2040 Project Fair Share (%)[1]
				Phase 1 (2026)		Phase 2 (2029)			Phase 3 (2031)			
				Without Project	With Project	Without Project	With Project	W/ Project Opt. 2	Without Project	With Project		
1	Madison St. / Avenue 58	City of La Quinta	None	• Install Traffic Signal	• Same	• Same	• Same	• Same	• Same	• Same	DIF / CIP[3,4]	14%
3	Madison St. / Avenue 54	City of La Quinta	None	• Install Traffic Signal	• Same	• Same • 1 EB free RT lane	• Same • Same	• Same • Same	• Same • Same	• Same • Same	DIF / CIP	5%
6	Jefferson St. / Avenue 54	City of La Quinta	None	• Install Traffic Signal • WBR overlap phase	• Same • Same	• Same • Same • 1 NBL • 2nd WBR	• Same • Same • Same • Same	• Same • Same • Same • Same	• Same • Same • Same • Same	• Same • Same • Same • Same	DIF / CIP	3%
7	Jefferson St. / Avenue 52	City of La Quinta	None	• 2nd NBT • 2nd SBT	• Same • Same	• Same • Same • 2nd EBT • 2nd WBT	• Same • Same • Same • Same	• Same • Same • Same • Same	• 2nd NBT, 3rd NBT • 2nd SBT, 3rd SBT • 2nd EBT, 3rd EBT • 2nd WBT, 3rd WBT	• Same • Same • Same • Same		3%
8	Jefferson St. / Avenue 50	City of La Quinta/ City of Indio	None	• 2nd WBT	• Same	• Same	• Same	• Same	• Same	• Same	La Quinta CIP	3%
9	Monroe St. / Avenue 62	City of La Quinta/ County of Riverside	None	None	None	None	None	• Install Traffic Signal	None	• Install Traffic Signal	Project (Reimbursable)/ La Quinta CIP	22%
10	Monroe St. / Avenue 60	City of La Quinta/ County of Riverside	None	None	• Install Traffic Signal	• Same	• Same	• Same	• Same	• Same	Project (Reimbursable)/ La Quinta CIP	8%
11	Monroe St. / Avenue 58	City of La Quinta/ County of Riverside	None	• Install Traffic Signal • 1 NBL • 1 SBL (restripe) • 1 EBL • 1 WBL	• Same • Same • Same • Same • Same	• Same • 1 NBL, 1 NBR • 1 SBL (restripe), 1 SBR • Same • Same	• Same • Same • Same • Same • Same	• Same • Same • Same • Same • Same	• Same • Same • Same • Same • Same	• Same • Same • Same • Same • Same	DIF / CIP[3,4]	10%
12	Monroe St. / Airport Blvd.	City of La Quinta/ County of Riverside	None	• Install Traffic Signal	• Same	• Same	• Same	• Same	• Same	• Same	DIF / CIP	8%
13	Monroe St. / Avenue 54	City of La Quinta/ County of Riverside	None	• Install Traffic Signal • 1 NBL • 1 SBL (restripe) • 1 WBL	• Same • Same • Same • Same	• Same • Same • 1 SBL (restripe), 1 SBR • Same	• Same • Same • Same • Same	• Same • Same • Same • Same	• Same • 1 NBL, 2nd NBT • 1 SBL (restripe), 2nd SBT, 1 SBR • Same	• Same • Same • Same • Same	DIF / CIP[3,4]	4%
14	Monroe St. / Avenue 52	City of La Quinta/ City of Indio / County of Riverside	• Install Traffic Signal	• Install Traffic Signal	• Same	• Same	• Same • 1 NBL, 2nd NBT	• Same • 1 NBL, 2nd NBT	• Same • Same	• Same • Same	DIF / CIP[3,4]	4%
16	Jackson St. / Avenue 62	City of Indio	None	None	None	None	None	None	None	• Install Traffic Signal	Project (reimbursable)/ TBD[5]	9%
17	Jackson St. / Avenue 60	City of Indio	None	None	None	None	None	None	• Install Traffic Signal	• Same	TBD[5]	3%
18	Jackson St. / 58th Avenue	City of Indio	None	None	None	• Install Traffic Signal	• Same	• Same	• Same	• Same	TBD[5]	5%

TABLE 9-1: SUMMARY OF E+P AND PHASED INTERSECTION IMPROVEMENTS

ID	Intersection	Jurisdiction	Existing + Project	Recommended Improvements							Funding Source?	General Plan Buildout 2040 Project Fair Share (%)[1]
				Phase 1 (2026)		Phase 2 (2029)			Phase 3 (2031)			
				Without Project	With Project	Without Project	With Project	W/ Project Opt. 2	Without Project	With Project		
19	Jackson St. / Airport Blvd.	City of Indio	None	None	None	• Install Traffic Signal	None	None	None	None	TBD[5]	5%
20	Jefferson St. / N. Loop	City of La Quinta	None	None None	• Install single lane roundabout	• Same	• Same	• Same	• Same	• Same	Project	N/A[2]
21	Jefferson St. / S. Loop	City of La Quinta	None	None	• Install single lane roundabout	• Same	• Same	• Same	• Same	• Same	Project	N/A[2]

[1] Program improvements constructed by project may be eligible for fee credit, at discretion of City. Source: Travertine Specific Plan TIA, April 2018 (Table 9-2 for General Plan Buildout 2040 Fair Share Calculations, Option 1)

[2] Fair Share is not applicable (N/A) for the improvements identified as they are needed to facilitate site access and would be constructed by the Project as design features.

[3] City of La Quinta CIP also include a roundabout improvement for near-term conditions.

[4] Source: City of La Quinta 2035 General Plan include the traffic signal improvement.

[5] City of Indio Funding Sources To Be Determined - City General Plan update in process.

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TABLE 9-2: SUMMARY OF 2040 INTERSECTION IMPROVEMENTS

ID	Intersection	Jurisdiction	Recommended Improvements[1]			Funding Source?	Project Fair Share (%)[2]		
			Existing General Plan (2040 w/ Madison Street Extension)	GPA Option 1 (2040 w/o Madison Street Extension)	GPA Option 2 (2040 w/o Madison Street Extension and w/ Project Entry Gates)		Existing General Plan	GPA Option 1	GPA Option 2
1	Madison St. / Avenue 58	City of La Quinta	• Install Traffic Signal • 2nd EB through lane • WBR overlap phase	• Same • N/A • Same	• Same • N/A • Same	La Quinta CIP	18%	14%	13%
				Modified Improvements: • Modify EB approach to provide 2EBL , 1 EBT/R lanes	*Modified Improvements:* • Same	TBD[5]			
3	Madison St. / Avenue 54	City of La Quinta	• Install Traffic Signal • 1 EB free RT lane • WBR overlap phase	• Same • Same • Same	• Same • Same • Same	La Quinta CIP	7%	5%	5%
4	Madison St. / Avenue 52	City of La Quinta/ City of Indio	• 2nd NBT lane • 2nd SBL, 2nd SBT, & 1 SBR • 1 WBR turn lane	• Same • Same • Same	• Same • Same • Same	La Quinta CIP	6%	4%	4%
5	Madison St. / Avenue 50	City of La Quinta/ City of Indio	• 2nd & 3rd NBT, 1 NBR • 2nd SBL, 2nd SBT, & 1 SBR • 2nd EBT lane • 2nd WBT, 1 WBR w/ overlap	• Same • Same • Same • Same	• Same • Same • Same • Same	La Quinta CIP	4%	2%	2%
6	Jefferson St. / A	City of La Quinta	• Install Traffic Signal • 1 NBL, 1 NBR • 2nd WBR w/ overlap phase	• Same • Same • Same	• Same • Same • Same	La Quinta CIP	3%	3%	3%
7	Jefferson St. / Avenue 52	City of La Quinta	• 3 lane roundabout	• Same	• Same	La Quinta CIP	3%	3%	3%
8	Jefferson St. / Avenue 50	City of La Quinta/ City of Indio	• 2nd EBL turn lane • 2nd WBL, 2nd WBT	• Same • Same	• Same • Same	La Quinta CIP	3%	3%	3%
9	Monroe St. / Avenue 62	City of La Quinta/ County of Riverside	• Install Traffic Signal • 1 shared NBL/T/R lane • 1 EBL turn lane • 1 WBR with overlap phase	• Same • Same • Same • Same	• Same • Same • Same • Same	La Quinta CIP	15%	22%	19%
				Additional GPCE Improvements • 1 SBL and SBR overlap • Modify EBT/R to shared EBL/T/R • 1 WBL	*Additional GPCE Improvements* • Same • Same • Same	TBD[5]			
10	Monroe St. / Avenue 60	City of La Quinta/ County of Riverside	• Install Traffic Signal • 2nd NBT lane • 2nd SBT lane • 2nd EBT lane • 1 WBL, 1 WBR w/ overlap	• Same • Same • Same • Same • Same	• Same • Same • Same • Same • Same	La Quinta CIP	4%	8%	8%
				Additional GPCE Improvements • 1 SBR • 1 EBR with overlap phase • 2nd WBT	*Additional GPCE Improvements* • Same • Same • Same	TBD[5]			

TABLE 9-2: SUMMARY OF 2040 INTERSECTION IMPROVEMENTS *(Page 2 of 3)*

ID	Intersection	Jurisdiction	Recommended Improvements[1]			Funding Source?	Project Fair Share (%)[2]		
			Existing General Plan (2040 w/ Madison Street Extension)	GPA Option 1 (2040 w/o Madison Street Extension)	GPA Option 2 (2040 w/o Madison Street Extension and w/ Project Entry Gates)		Existing General Plan	GPA Option 1	GPA Option 2
11	Monroe St. / Avenue 58	City of La Quinta/ County of Riverside	• Install Traffic Signal • 2nd NBT, 1 NBR • 1 SBL, 2nd SBT lane • 1 EBL, 2nd EBT lane • 1 WBL, 2nd WBT lane	• Same • Same • Same • Same • Same	• Same • Same • Same • Same • Same	La Quinta CIP	6%	10%	10%
				Additional GPCE Improvements	*Additional GPCE Improvements*				
				• 2nd NBL & NBR overlap phase	• Same	TBD[5]			
				• 2nd SBL	• Same				
				• 1 EBR	• Same				
12	Monroe St. / Airport Blvd.	City of La Quinta/ County of Riverside	• Install Traffic Signal	• Same	• Same	La Quinta CIP	4%	8%	8%
			Additional Improvements	*Additional Improvements*	*Additional Improvements*				
			• 2nd NBT	• Same	• Same	TBD[7]			
			• 2nd EBT	• Same	• Same				
			• 1 WBL, 2nd WBT, 1 WBR w/ overlap phase	• Same	• Same				
13	Monroe St. / Avenue 54	City of La Quinta/ County of Riverside	• Install Traffic Signal • 1 NBL, 2nd NBT, 1 NBR • 1 SBL, 2nd SBT, 1 NBR • 2nd EBL, 2nd EBT, 1 EBR • 1 WBL, 2nd WBT, 1 WBR	• Same • Same • Same • Same • Same	• Same • Same • Same • Same • Same	La Quinta CIP	2%	4%	4%
14	Monroe St. / Avenue 52	City of La Quinta/ City of Indio / County of Riverside	• Install Traffic Signal • 2 NBL, 2nd NBT, 1 NBR • 2nd SBL • 2nd EBT • 1 WBR	• Same • Same • Same • Same • Same	• Same • Same • Same • Same • Same	La Quinta CIP	2%	4%	4%
15	Monroe St. / 50th Avenue	City of Indio	• 2nd NBL, 1 NBR • 2nd SBL • 2nd EBT • 2nd WBT	• Same • Same • Same • Same	• Same • Same • Same • Same	TBD[4]	2%	3%	3%
16	Jackson St. / 62nd Avenue	City of Indio	• Install Traffic Signal • 1 NBL, 2nd NBT • 1 SBL, 2nd SBT • 1 EBL, 1 EBR • 1 WBL, 2nd WBT	• Same • Same • Same • Same • Same	• Same • Same • Same • Same • Same	TBD[4]	9%	9%	8%
17	Jackson St. / 60th Avenue	City of Indio	• Install Traffic Signal • 1 NBL, 2nd NBT • 1 SBL, 2nd SBT • 1 EBL, 2nd EBT • 1 WBL, 2nd WBT, 1 WBR w/ Overlap phase	• Same • Same • Same • Same • Same • Same	• Same • Same • Same • Same • Same • Same	TBD[4]	4%	3%	3%

TABLE 9-2: SUMMARY OF 2040 INTERSECTION IMPROVEMENTS

ID	Intersection	Jurisdiction	Recommended Improvements[1]			Funding Source?	Project Fair Share (%)[2]		
			Existing General Plan (2040 w/ Madison Street Extension)	GPA Option 1 (2040 w/o Madison Street Extension)	GPA Option 2 (2040 w/o Madison Street Extension and w/ Project Entry Gates)		Existing General Plan	GPA Option 1	GPA Option 2
18	Jackson St. / 58th Avenue	City of Indio	• Install Traffic Signal • 1 NBL, 2nd NBT • 1 SBL, 2nd SBT • 1 EBL, 2nd EBT • 1 WBL, 2nd WBT	• Same • Same • Same • Same • Same	• Same • Same • Same • Same • Same	TBD[4]	3%	5%	5%
19	Jackson St. / Airport Blvd.	City of Indio	• Install Traffic Signal • 1 NBL, 2nd NBT • 1 SBL, 2nd SBT • 1 EBL, 2nd EBT • 1 WBL, 2nd WBT	• Same • Same • Same • Same • Same	• Same • Same • Same • Same • Same	TBD[4]	6%	5%	5%
20	Jefferson St. / N. Loop	City of La Quinta	• Install single lane roundabout	• Same	• Same	Project	N/A[3]	N/A[3]	N/A[3]
21	Jefferson St. / S. Loop	City of La Quinta	• Install single lane roundabout	• Same	• Same	Project	N/A[3]	N/A[3]	N/A[3]
22	Madison St. / Avenue 60	City of La Quinta	• Install Traffic Signal • 1 NBL, 2 NBT • 2nd SBL, 2 SBT, & 1 SBR w/ Overlap phase • 2 EBL • 1 WBL, 2nd WBT	• Same • 1 Shared NBT/R • 2nd SBL, 1 SBT, 1 SBR w/ Overlap phase • Same • Same	• Same • Same (GPA Option 1) • Same (GPA Option 1) • Same • Same	CIP	7%	0%	0%
23	Madison St. / Avenue 62	City of La Quinta/ County of Riverside	• Install Traffic Signal • 1 SBL, 1 SBT • 1 EBT • 1 WBT, 1 WBR	*Intersection does not exist*	*Intersection does not exist*	TBD[6]	34%	-	-

[1] Intersection improvements within the City of La Quinta are consistent with the City's General Plan City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 2012).

[2] Program improvements constructed by project may be eligible for fee credit, at discretion of City. See Table 9-2 for General Plan Buildout 2040 Fair Share Calculations.

[3] Fair Share is not applicable (N/A) for the improvements identified as they are needed to facilitate site access and would be constructed by the Project as design features.

[4] City of Indio Funding Sources To Be Determined - City General Plan update in process.

[5] City of La Quinta Funding Sources To Be Determined for lane improvements associated with GPA Options.

[6] City of La Quinta/County of Riverside Funding Sources To Be Determined for lane improvements which are consistent with existing General Plan.

[7] City of La Quinta/County of Riverside Funding Sources To Be Determined for lane improvements which are consistent with existing General Plan and GPA Options.

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Project Contributions to Cumulative Needs

Provide fair share contributions (shown on Exhibit 4-8 of this report) to improvements required to provide acceptable LOS at eight study area intersections:

Madison Street at Avenue 58 (#1) - install CIP-funded traffic signal control

Madison Street at Avenue 54 (#3) - install CIP-funded traffic signal control

Jefferson Street at Avenue 54 (#6) - install CIP-funded traffic signal control, convert 2nd eastbound through lane into right turn lane, provide westbound right turn overlap phasing

Jefferson Street at Avenue 50 (#8) - provide second westbound through lane

Monroe Street at Avenue 58 (#11) - install CIP-funded traffic signal control, provide separate northbound left turn lane, provide separate northbound right turn lane, provide separate southbound left turn lane, provide separate eastbound left turn lane, provide separate westbound left turn lane

Monroe Street at Airport Boulevard (#12) - install CIP-funded traffic signal control

Monroe Street at Avenue 54 (#13) - install CIP-funded traffic signal control, provide separate southbound left turn lane, provide separate westbound left turn lane

Monroe Street at Avenue 52 (#14) - install CIP-funded traffic signal control

Project Phase 1 analysis indicates that ***Jefferson Street at Avenue 52 (#7)*** experiences deficient operations under cumulative "without project" conditions. Jefferson Street at Avenue 52 requires reconstruction of the current roundabout design to incorporate 2 circulating lanes around the center island. This effectively accommodates an additional through lane in the northbound and southbound directions to provide acceptable LOS.

9.3.3 PROJECT PHASE 2 (2029) CONDITIONS

Off-site intersection improvements for 2029 conditions include the following:

Project Responsibilities

Project Phase 2 intersection analysis results were previously presented on Table 5-2. No Project impacts were identified for Project Phase 2 conditions.

However, if Project Phase 2 Option 2 (without Jefferson Street connection to Avenue 58) is utilized, a Project impact is anticipated at the intersection of Monroe Street at Avenue 62 (#9) and will require installation of a traffic signal (for eventual reimbursement via the City of La Quinta CIP) in order to maintain acceptable LOS.

Project Contributions to Cumulative Needs

The following additional study area intersections are anticipated to require improvements in order to maintain acceptable LOS under Project Phase 2 conditions (in addition to those identified for Project Phase 1):

Jackson Street at Avenue 58 (#18) - install CIP-funded traffic signal control

Jackson Street at Airport Boulevard (#19) - install CIP-funded traffic signal control

Project Phase 2 analysis also results in deficient operations at ***Jefferson Street at Avenue 52 (#7)*** under cumulative "without project" and "with project" conditions. Jefferson Street at Avenue 52 requires reconstruction of the current roundabout design to incorporate 2 circulating lanes around the center island. This effectively accommodates an additional through lane in the northbound, southbound, eastbound, and westbound directions to provide acceptable LOS.

At four of the intersections identified for Project Phase 1 as needing improvements, additional improvements are necessary for Project Phase 2 conditions:

> ***Madison Street at Avenue 54 (#3)*** - convert eastbound defacto right turn lane into free right turn lane
>
> ***Jefferson Street at Avenue 54 (#6)*** - provide separate northbound left turn lane
>
> ***Monroe Street at Avenue 58 (#11)*** - provide separate northbound right turn lane
>
> ***Monroe Street at Avenue 52 (#14)*** - provide separate northbound left turn lane, provide second northbound through lane

If Project Phase 2 Option 2 (without Jefferson Street connection to Avenue 58) is utilized, the intersection of ***Monroe Street at Avenue 62 (#9)*** is anticipated to require traffic signal improvement to serve Phase 2 (2029) With Project Option 2 conditions. In addition, the roadway segment of ***Monroe Street, south of Avenue 60*** appears to exceed the theoretical daily segment LOS thresholds if Option 2 scenario is utilized. However, further review of the more detailed peak hour intersection analysis indicates that the recommended improvements at adjacent study area intersections provide acceptable level of service. Therefore, roadway segment widening is not anticipated.

9.3.4 PROJECT PHASE 3 (2031) CONDITIONS

Off-site intersection improvements for 2031 conditions include the following:

Project Responsibilities

Project Phase 3 intersection analysis results were previously presented on Table 6-2, and two additional study area intersections are anticipated to require improvements in order to maintain acceptable LOS under Project Phase 3 conditions:

> ***Monroe Street at Avenue 62 (#9)*** - install CIP-funded traffic signal control, provide northbound shared left-through-right lane, provide separate eastbound left turn lane, provide separate westbound right turn lane
>
> ***Jackson Street at Avenue 62 (#16)*** - install CIP-funded traffic signal control

Project Contributions to Cumulative Needs

Additional cumulative improvements are required to serve 2031 "without project" conditions at three study area intersections (beyond the improvement needs identified for Project Phases 1 and 2):

> ***Jackson Street at Avenue 60 (#17)*** - provide traffic signal

Monroe Street at Avenue 54 (#13) - provide second northbound through lane, provide second southbound through lane

Monroe Street at Avenue 52 (#1) - provide second eastbound through lane

Project Phase 3 analysis also results in deficient operations at ***Jefferson Street at Avenue 52 (#7)*** under cumulative "without project" and "with project" conditions. Jefferson Street at Avenue 52 requires reconstruction of the current roundabout design to incorporate 3 circulating lanes around the center island. This effectively accommodates 2 additional through lanes in the northbound, southbound, eastbound, and westbound directions to provide acceptable LOS. These improvements were previously identified in the City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis (May 14, 2012), for the City's buildout (2035) enhanced intersection configurations.

9.3.5 GENERAL PLAN BUILDOUT (YEAR 2040) WITH MADISON STREET EXTENSION CONDITIONS

All intersections are anticipated to experience acceptable operations under General Plan Buildout (Year 2040) with the Madison Street Extension south of Avenue 60 as shown on the current City of La Quinta General Plan, based upon improvements indicated in the City of La Quinta General Plan Circulation Element Update Traffic Impact Analysis.

9.3.6 GENERAL PLAN BUILDOUT (YEAR 2040) WITHOUT MADISON STREET EXTENSION (GPA OPTION 1) CONDITIONS

All intersections are anticipated to experience acceptable operations under General Plan Buildout (Year 2040) with Madison Street Extension conditions with improvements. For intersections included in the City of La Quinta General Plan analysis, four intersections require modification of typical improvements indicated for General Plan Buildout (Year 2040) with Madison Street Extension.

Madison Street at Avenue 58 (#1) – In addition to General Plan geometrics, provide the following lanes:

- EB Approach: Convert inside through lane into 2nd left turn lane

Monroe Street at Avenue 62 (#9) – In addition to General Plan geometrics, provide the following lanes:

- SB Approach: Provide 2nd left turn lane, add right turn overlap phase to existing right turn lane
- EB Approach: Convert through-right lane into left-through-right lane
- WB Approach: Provide separate left turn lane

Monroe Street at Avenue 60 (#10) – In addition to General Plan geometrics, provide the following lanes:

- SB Approach: Provide separate right turn lane
- EB Approach: Provide separate right turn lane with right turn overlap phase

- WB Approach: Provide 2nd through lane

Monroe Street at Avenue 58 (#11) – In addition to General Plan geometrics, provide the following lanes:

- NB Approach: Provide 2nd left turn lane, add right turn overlap phase to right turn lane
- SB Approach: Provide 2nd left turn lane
- EB Approach: Provide separate right turn lane

9.3.7 General Plan Buildout (Year 2040) without Madison Street Extension and with Project Entry Gates (GPA Option 2) Conditions

The General Plan improvement configurations anticipated at the following four intersections would need to be modified, consistent with GPA Option 1 recommendations, without the Madison Street Extension south of Avenue 60 and with Project Entry Gates (GPA Option 2):

- Madison Street at Avenue 58
- Monroe Street at Avenue 62
- Monroe Street at Avenue 60
- Monroe Street at Avenue 58

Recommended General Plan improvements at these locations are the same as included for the General Plan Buildout (Year 2040) without Madison Street Extension (GPA Option 1) scenario (see list in Section 9.3.6 above), so the Project entry gates do not result in additional changes to the roadway system.

9.4 Fair Share Contribution

Project mitigation may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development should be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City's discretion).

Tables 9-1 and 9-2 shows the project fair share percentages for Year 2040 conditions, GPA Option 1. However, these percentages are an approximation only as they are intended only for discussion purposes and do not imply any legal responsibility or formula for contributions or mitigation.

9.5 Vehicle Miles Traveled

Project VMT (Vehicle Miles Traveled) has been evaluated and provided in a separate letter *"Travertine Specific Plan Vehicle Miles Traveled (VMT) Analysis"*, dated November 3, 2020.

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10 REFERENCES

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