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LOCAL MOBILITY ANALYSIS
RIO VISTA APARTMENTS PROJECT
Brawley, California
May 14, 2026

LLG Ref. 3-25-4083

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1.0 INTRODUCTION

Linscott, Law & Greenspan Engineers (LLG) has prepared the following Local Mobility Analysis (LMA) to determine and evaluate the potential impacts to the local transportation system due to the proposed Rio Vista Apartments project (hereafter referred to as the Project). The Project is located along the north side of W. River Road and west of N. Rio Vista Avenue in the City of Brawley. The Project proposes to construct a 133-unit apartment complex.

The following items are included in this traffic study:

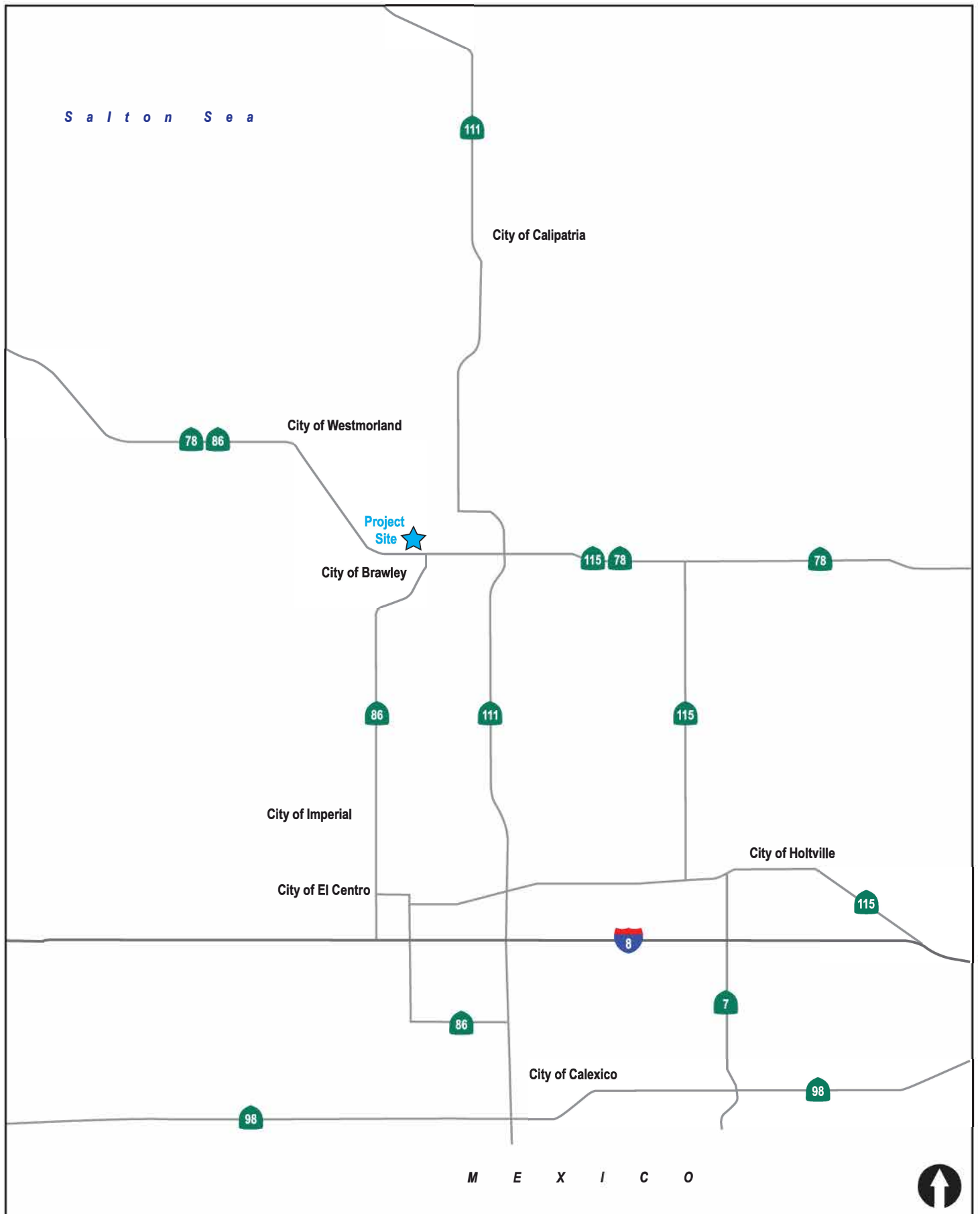
- Project Description
- Existing Conditions Discussion
- Analysis Approach and Methodology
- Performance Criteria
- Analysis of Existing Conditions
- Trip Generation/Distribution/Assignment
- Opening Year Analysis
- Active Transportation Review
- Site Access and Circulation Review
- Conclusions

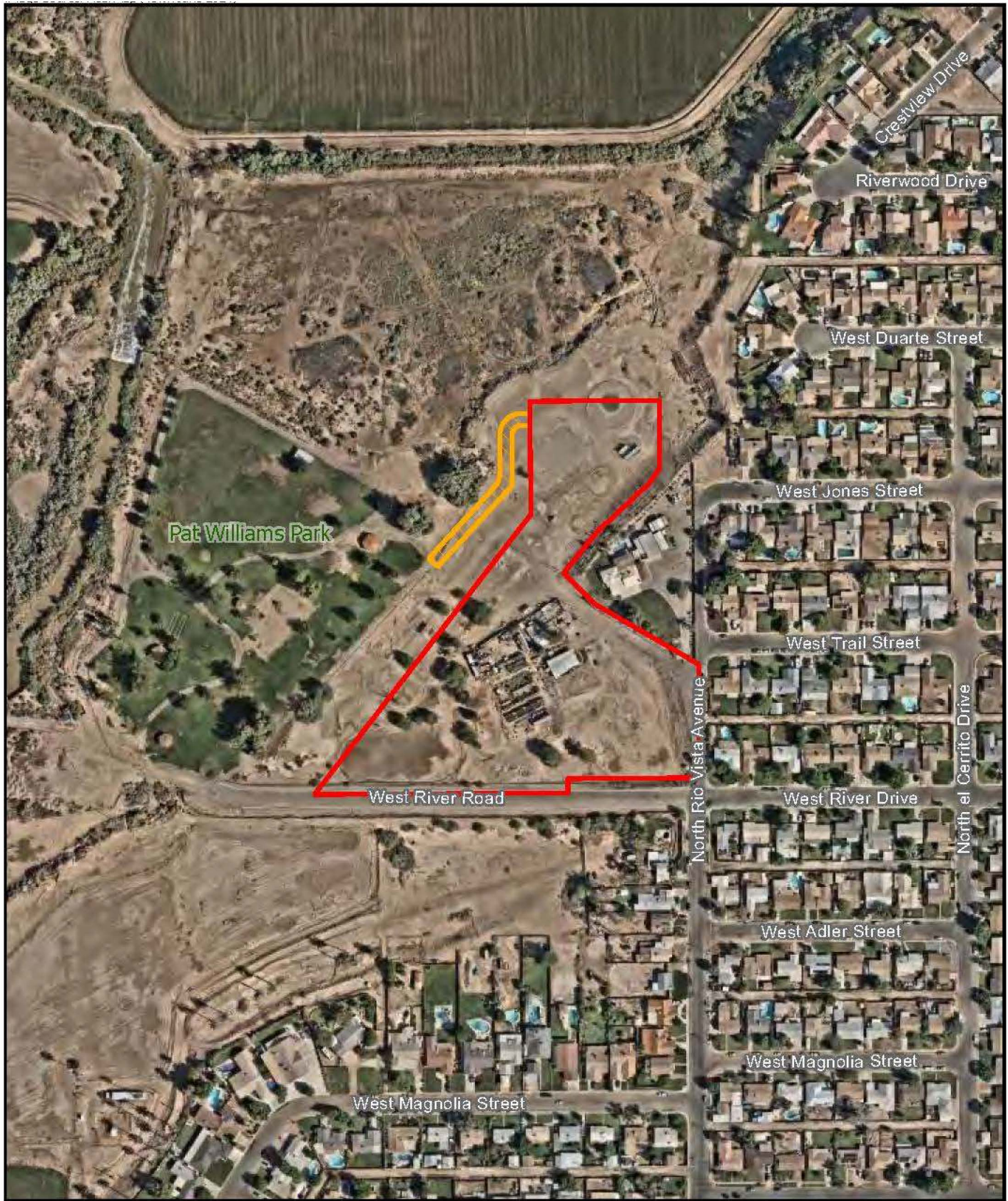
2.0 PROJECT DESCRIPTION

The Project site is located at 4603 N. Rio Vista Avenue in the City of Brawley. The project consists of five parcels (Assessor's Parcel Numbers [APNs] 046-050-016, 046-050-030, 046-050-028, 046-050-028, 046-050-039 and 046-050-038). The 7.21-acre site is currently occupied by an equestrian center that would be demolished as part of the project.

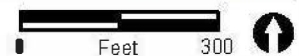
The Project proposes to construct 133 multifamily residential dwellings, a mix of one-bedroom and two-bedroom units. The apartment complex will include amenities such as a pool, a 4,400 square foot (SF) clubhouse, a dog park, and three green spaces. Vehicular access to the site is proposed via one (1) full access driveway along West River Road and (1) full access driveway along North Rio Vista Avenue. The Project will provide 278 surface parking stalls including 16 spaces compliant with the American with Disabilities Act (ADA). The project would dedicate 0.36 acres of right-of-way (ROW) to West River Road and dedicate 0.17 acres of ROW to North Rio Vista Avenue. The development footprint of the project site, including ROW dedications, would total 7.87 acres. Off-site improvements would consist of extending an existing road through Pat Williams Park that would provide fire access from West River Road to the northwest corner of the project site. This off-site roadway extension would total 0.24 acres, increasing the total development footprint to 8.11 acres.

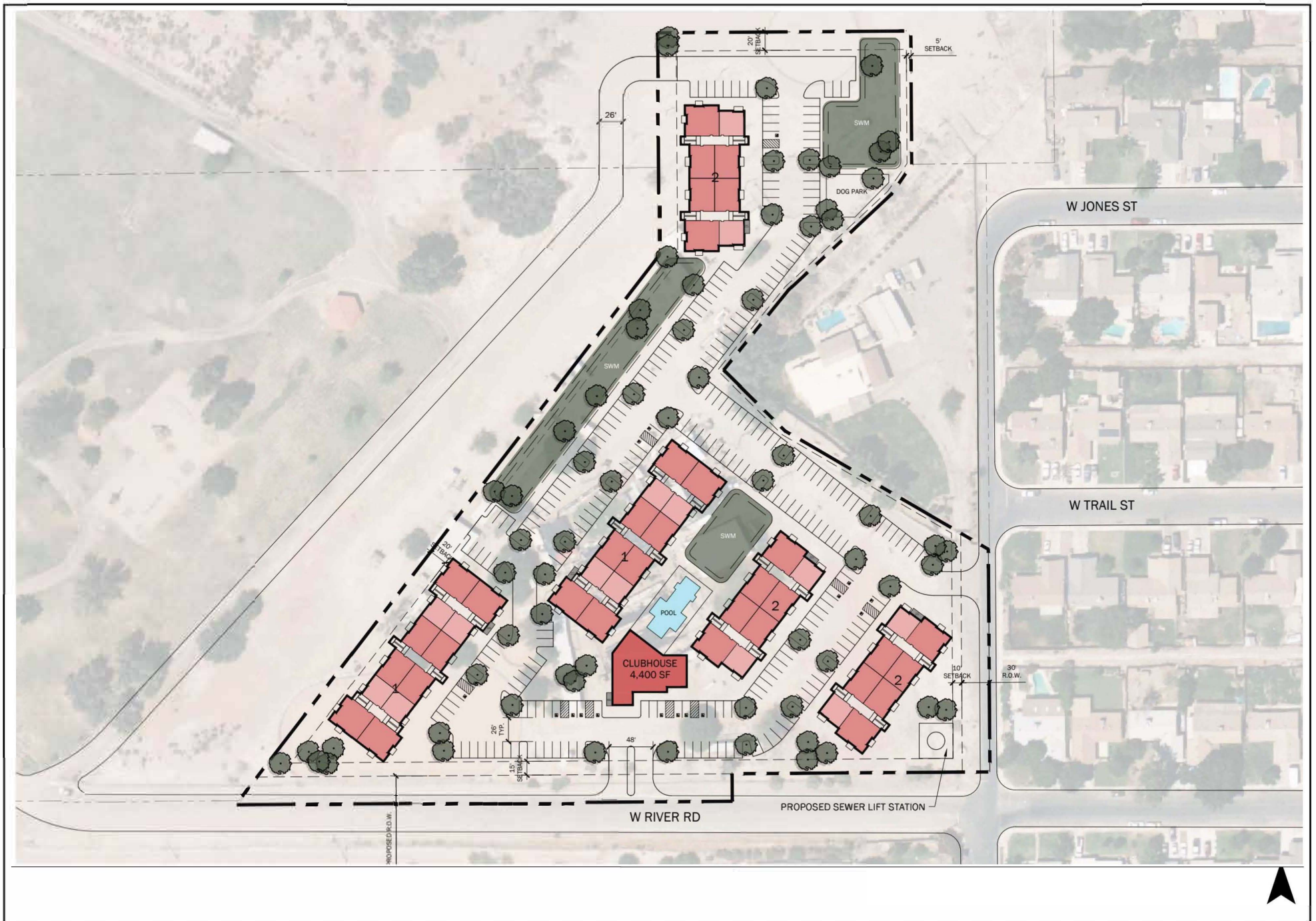
Figure 2-1 shows the Project vicinity. *Figure 2-2* shows a more detailed Project area map. *Figure 2-3* depicts the conceptual site plan.





-  Project Boundary
-  Off-site Fire Access Road Improvement





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Figure 2-3
Project Site Plan

Brawley Apartments

3.0 EXISTING CONDITIONS

Effective evaluation of the traffic impacts associated with the proposed Project requires an understanding of the existing transportation system within the project area. *Figure 3-1* shows an existing conditions diagram, including signalized intersections and lane configurations.

The specific study area includes the following intersections and street segments based on the anticipated distribution of the project traffic and area of potential impact:

Intersections

1. N. Rio Vista Avenue / W. River Road
2. N. Rio Vista Avenue / W. A Street
3. N. Rio Vista Avenue / W. Main Street
4. N. Western Avenue / W. River Drive
5. N. Western Avenue / W. A Street
6. N. Western Avenue / W. Main Street
7. W. River Road / Project Driveway

3.1 Existing Street Network

The following is a description of the existing street network in the study area.

N. Rio Vista Avenue is classified as a Local Collector on the City of Brawley General Plan. Within the study area, N Rio Vista Avenue is currently constructed as a two-lane undivided roadway with sidewalks provided on the westerly side of the roadway. Bike lanes are not provided. On-street parking is permitted, and the posted speed limit is 25 mph.

N. Western Avenue is classified as a Secondary Arterial on the City of Brawley Circulation Element. N. Western Avenue is currently constructed as a two-lane undivided roadway between River Drive and Main Street. Class II bike lanes are provided on both sides of the roadway. Sidewalks are only provided on the westerly side of the roadway between A Street and River Drive. On-street parking is permitted, and the posted speed limit is 25 mph.

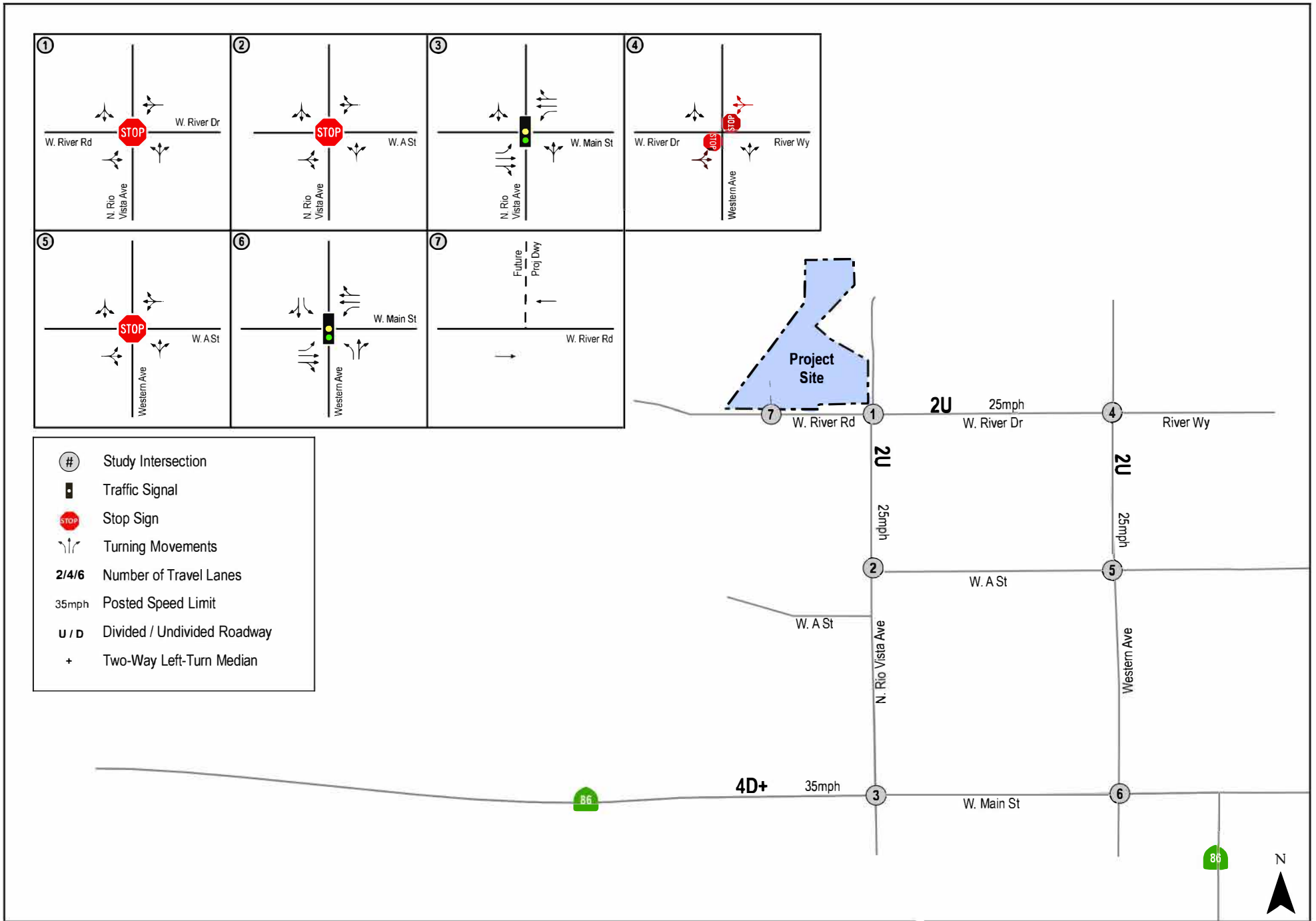
River Drive is classified as a Secondary Arterial on the City of Brawley Circulation Element. Within the study area, River Drive is currently constructed as a two-lane undivided roadway with sidewalks provided on both sides between Rio Vista Avenue and Western Avenue. Bike lanes are not provided. On-street parking is generally permitted. The posted speed limit is 25 mph.

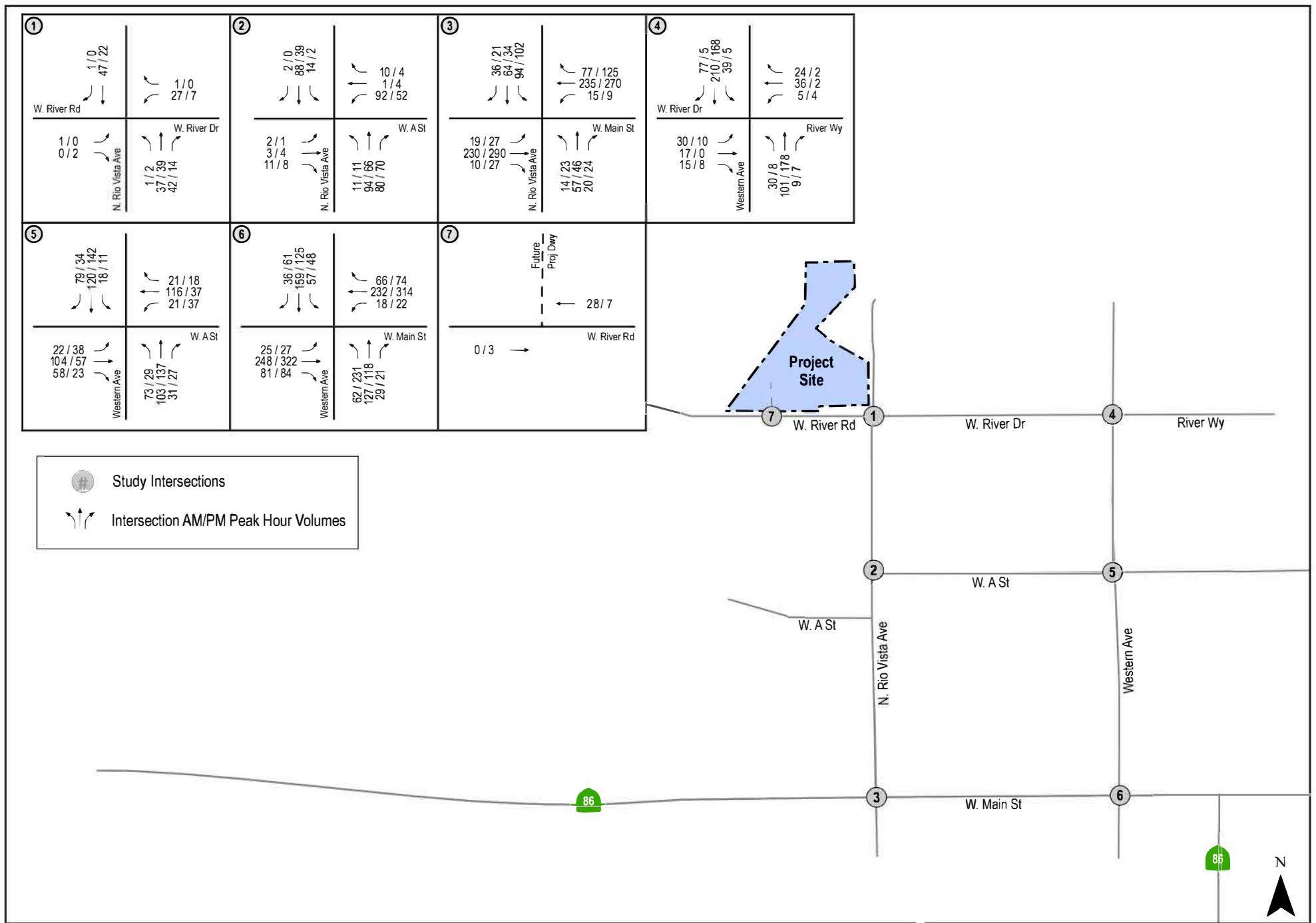
W. Main Street is classified as a Major Arterial on the City of Brawley Circulation Element. W. Main Street is currently constructed as a four-lane divided roadway with a two-way left turn lane median. Noncontiguous sidewalks are provided on both sides between Rio Vista Avenue and Western Avenue. Bike lanes are not provided and on street parking is not permitted. The posted speed limit is 35 mph.

3.2 Existing Traffic Volumes

Weekday AM/PM peak hour intersection turning movement traffic counts were conducted at the study area intersections on Thursday, June 5, 2025 when schools were in session. The peak hour counts were conducted during the commuter peak hours of 7:00-9:00 AM and 4:00-6:00 PM.

Figure 3–2 shows the Existing Traffic Volumes. *Appendix A* contains the count sheets.





4.0 ANALYSIS APPROACH AND METHODOLOGY

Level of service (LOS) is the term used to denote the different operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. Level of service provides an index to the operational qualities of a roadway segment or an intersection. Level of service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. Level of service designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments.

4.1 Intersections

Signalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 19 of the *Highway Capacity Manual 7th Edition (HCM 7)*, with the assistance of the *Synchro* (version 12) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection Level of Service (LOS). Caltrans location-specific signal timing information such as minimum greens, cycle lengths, splits for the freeway interchanges were included in the analysis, where available.

Unsignalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay and Levels of Service (LOS) was determined based upon the procedures found in Chapter 20 and 21 of the *HCM 7*, with the assistance of the *Synchro* (version 12) computer software.

5.0 ROADWAY IMPROVEMENT CRITERIA

The criteria for determining the need for roadway improvements at study area intersections were developed by Linscott, Law and Greenspan, Engineers and are based upon the City of Brawley General Plan (September 2008) goals and performance criteria for circulation. The City uses a minimum level of service of LOS C as its circulation performance criteria. *Table 5-1* summarizes the criteria for determining the need for roadway improvements.

In general, an intersection operating at LOS C or better that degrades to LOS D or worse or adds more than 2 seconds of average delay to an intersection that operates at LOS D or worse under pre-project conditions may require the project to provide roadway improvements.

TABLE 5-1
DETERMINATION OF THE NEED FOR ROADWAY IMPROVEMENTS

Level of Service with Project	Allowable Change Due to Project Effect				
	Freeways		Roadway Segments		Intersections
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)
D, E & F	0.01	1.0	0.02	1.0	2.0

General Notes:

1. V/C = Volume to Capacity Ratio
2. Speed = Arterial speed measured in miles per hour
3. Delay = Average stopped delay per vehicle measured in seconds for intersections.
4. LOS = Level of Service

6.0 ANALYSIS OF EXISTING CONDITIONS

6.1 Peak Hour Intersection Levels of Service

Table 6–1 summarizes the peak hour intersection operations under Existing conditions. As seen in **Table 6–1**, all intersections are calculated to currently operate at LOS C or better during the AM and PM peak hours except for:

- Intersection #6 N. Western Avenue / W. Main Street – LOS D (PM peak hour)

Appendix B contains the Existing intersection analysis calculation worksheets.

**TABLE 6–1
EXISTING INTERSECTION OPERATIONS**

Intersection	Control Type	Peak Hour	Existing	
			Delay ^a	LOS ^b
1. N. Rio Vista Ave / W. River Rd	AWSC ^c	AM PM	7.4 7.1	A A
2. N. Rio Vista Ave / W. A St	AWSC	AM PM	8.9 7.7	A A
3. N. Rio Vista Ave / W. Main St	Signal	AM PM	17.9 17.5	B B
4. N. Western Ave / W. River Dr	MSSC ^d	AM PM	19.7 11.8	C B
5. N. Western Ave / W. A St	AWSC	AM PM	11.1 9.6	B A
6. N. Western Ave / W. Main St	Signal	AM PM	28.5 40.3	C D
7. W. River Rd / Project Driveway	MSSC	AM PM	— —	— —

Footnotes:

- a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. AWSC – All Way Stop Controlled intersection.
d. MSSC – Minor Stop Street Controlled intersection. Minor street turn delay is reported.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

7.0 TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

The following is a discussion of the Project trip generation calculations and the Project traffic distribution and assignment on the local network.

7.1 Trip Generation

As described in *Section 2.0*, the Project proposes to construct 133 dwelling units. However, the analysis presented in this report is based on the maximum development of 144 dwellings units, which provides a slightly conservative analysis. The trip rate for Land Use 220 Multifamily Housing (Low-Rise) provided in the Institute of Transportation Engineer (ITE) *Trip Generation Manual*, 12th Edition was used to estimate the trips generated by the Project.

Table 7–1 summarizes the Project trip generation. As shown in *Table 7–1*, the proposed project is calculated to generate 931 ADT with 63 AM peak hour trips (15 inbound / 48 outbound) and 76 PM peak hour trips (47 inbound / 29 outbound).

7.1 Trip Distribution/Assignment

The Project traffic was distributed and assigned to the street system based on a review of the site location, proximity to Highway 86 and State Route 111, existing traffic patterns in the area, a review of trip distribution of similar land uses from recently approved development projects in the vicinity and anticipated traffic patterns to and from the site.

Figure 7–1 shows the Project Traffic Distribution. **Figure 7–2** shows the Project Traffic Volumes.

**TABLE 7–1
PROJECT TRIP GENERATION**

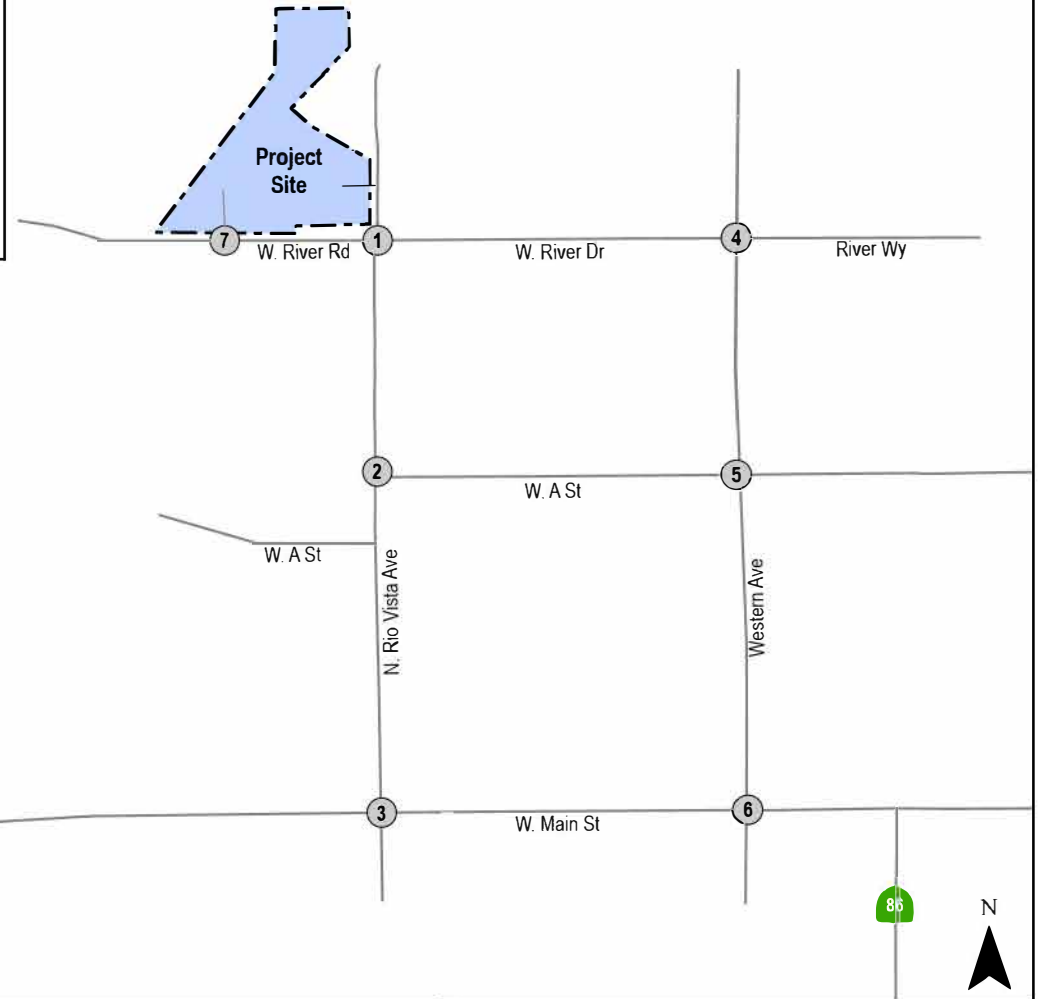
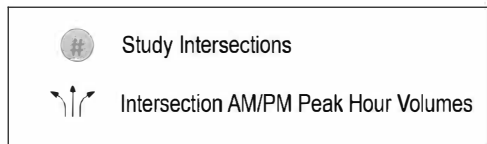
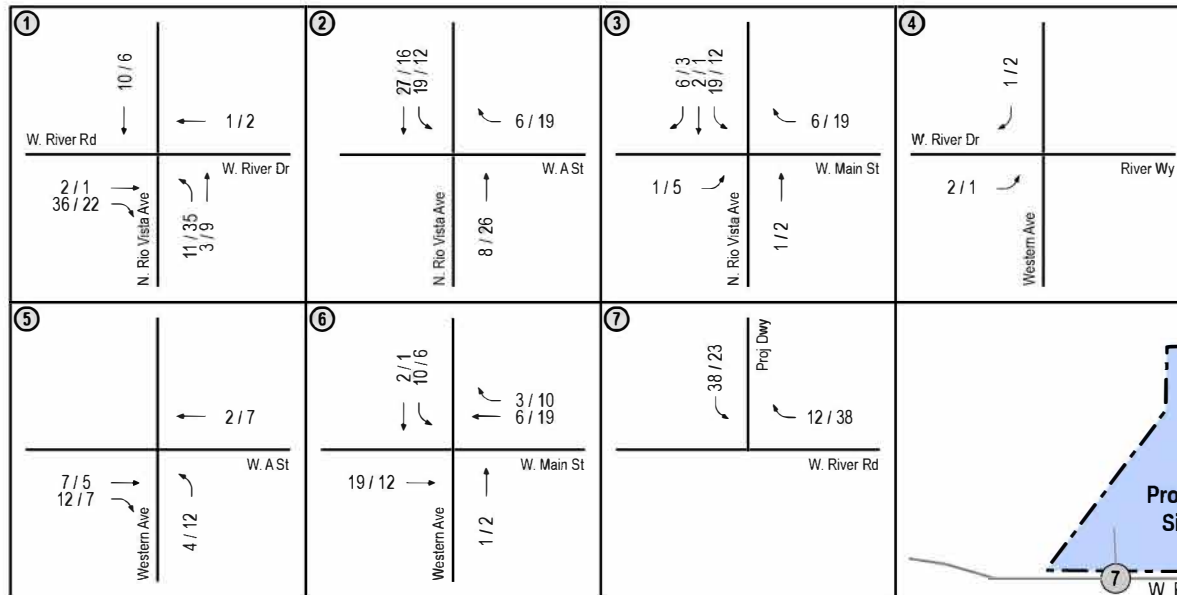
Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour					PM Peak Hour				
		Rate	Volume	Rate	In:Out	Volume			Rate	In:Out	Volume		
					Split	In	Out	Total		Split	In	Out	Total
Multifamily Housing (220)	144 DU	a	931	a	24:76	15	48	63	a	62:38	47	29	76

Footnotes:

- a. Calculated based on fitted curve equation(s) provided in the *Trip Generation Manual*.

General Notes:

1. Rates are based on Institute of Transportation Engineers (ITE) *Trip Generation Manual* 12th Edition
2. DU = dwelling units



8.0 ANALYSIS OF OPENING YEAR SCENARIOS

8.1 Opening Year Conditions

Cumulative traffic consists of traffic generated by the development projects in the nearby area and ambient growth. Cumulative development was accounted for using an ambient growth factor applied to existing traffic volumes. An ambient growth factor of 1% per year for a period of three (3) years was applied to existing traffic volumes based on an estimated opening year of 2028.

Figure 8–1 shows the Opening Year Traffic Volumes. *Figure 8–2* shows the Opening Year + Project Traffic Volumes.

8.2 Opening Year without Project

8.2.1 Intersection Analysis

Table 8–1 summarizes the peak hour intersection operations for the Opening Year without Project condition. As seen in *Table 8–1*, all intersections are calculated to operate at LOS C or better during the AM and PM peak hours except for:

- Intersection #6 N. Western Avenue / W. Main Street – LOS D (PM peak hour)

Appendix C contains the Existing + Project intersection analysis calculation worksheets.

8.3 Opening Year + Project

8.3.1 Intersection Analysis

Table 8–1 summarizes the peak hour intersection operations for the Opening Year + Project condition. As seen in *Table 8–1*, all intersections are calculated to operate at LOS C or better during the AM and PM peak hours except for:

- Intersection #6 N. Western Avenue / W. Main Street – LOS D (PM peak hour)

Based on the significance criteria detailed in *Section 5.0*, improvements are required if the project adds 2 or more seconds of delay. Since the Project adds only 0.1 seconds of delay, improvements are not required.

Appendix D contains the Existing + Project intersection analysis calculation worksheets.

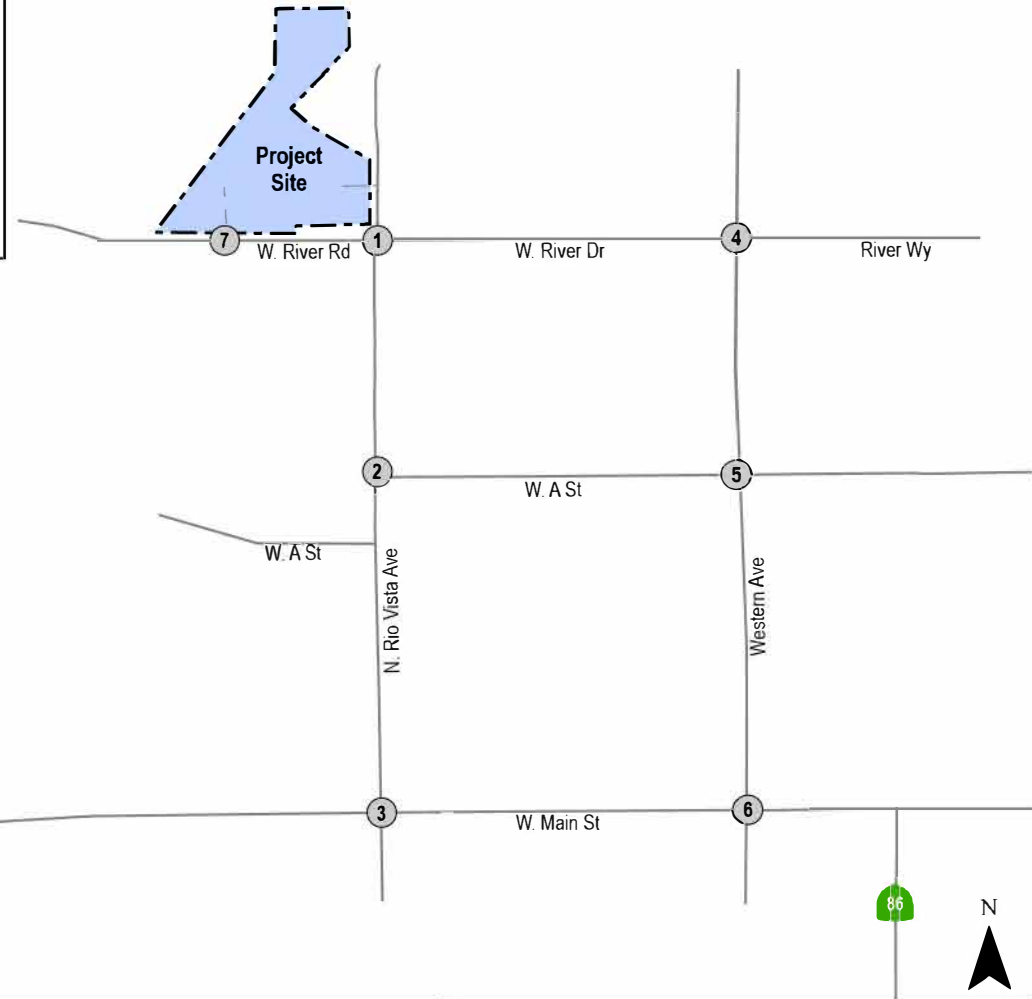
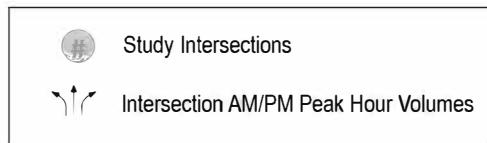
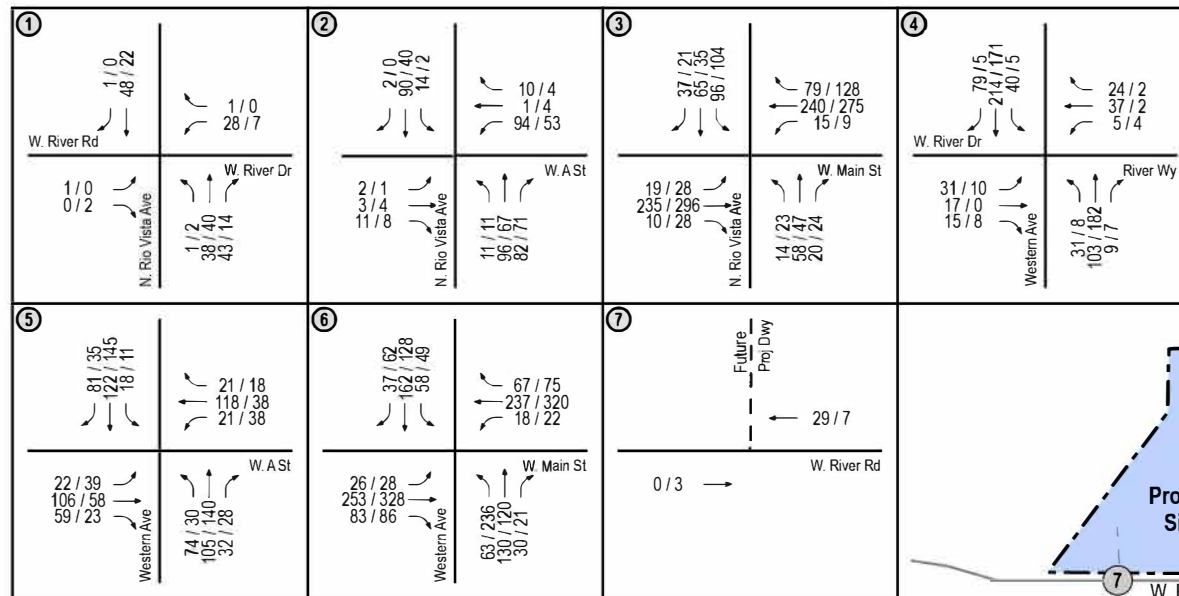
**TABLE 8-1
OPENING YEAR INTERSECTION OPERATIONS**

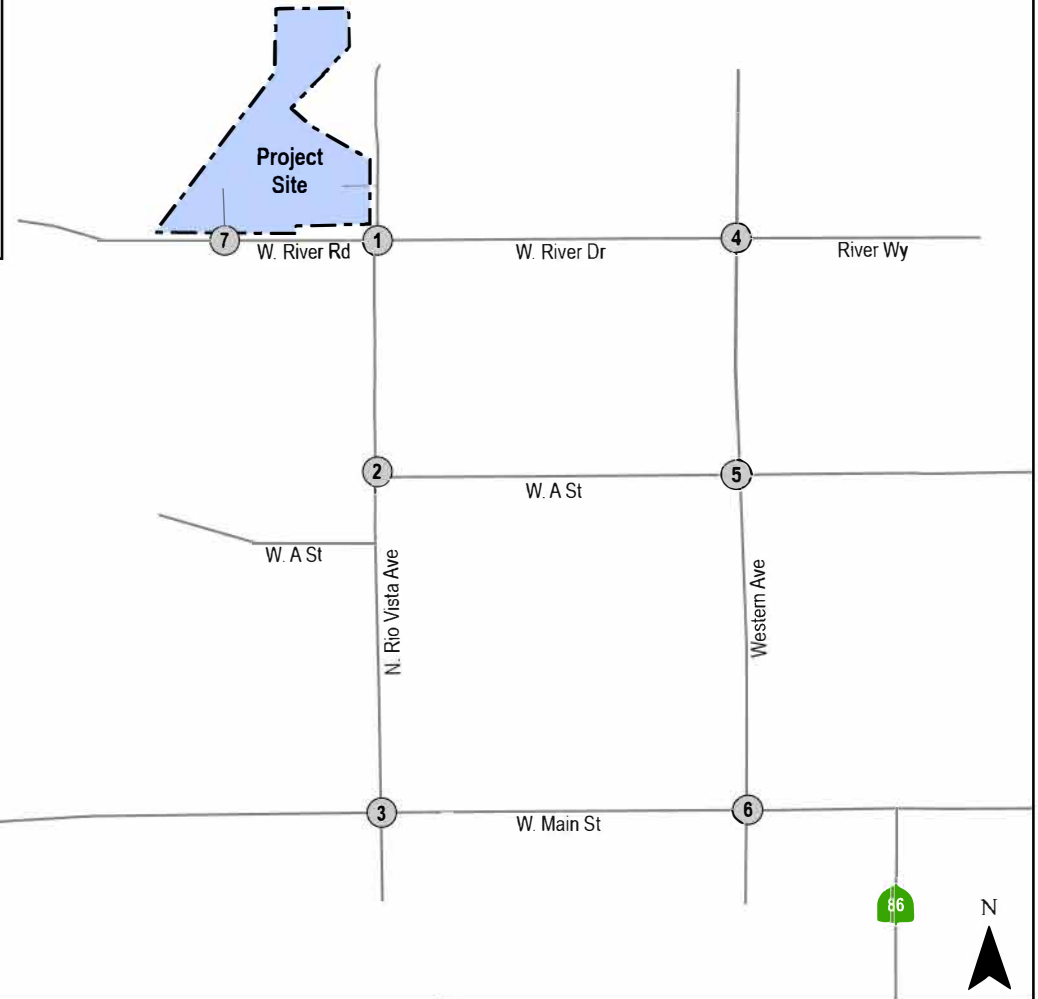
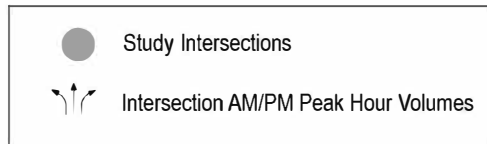
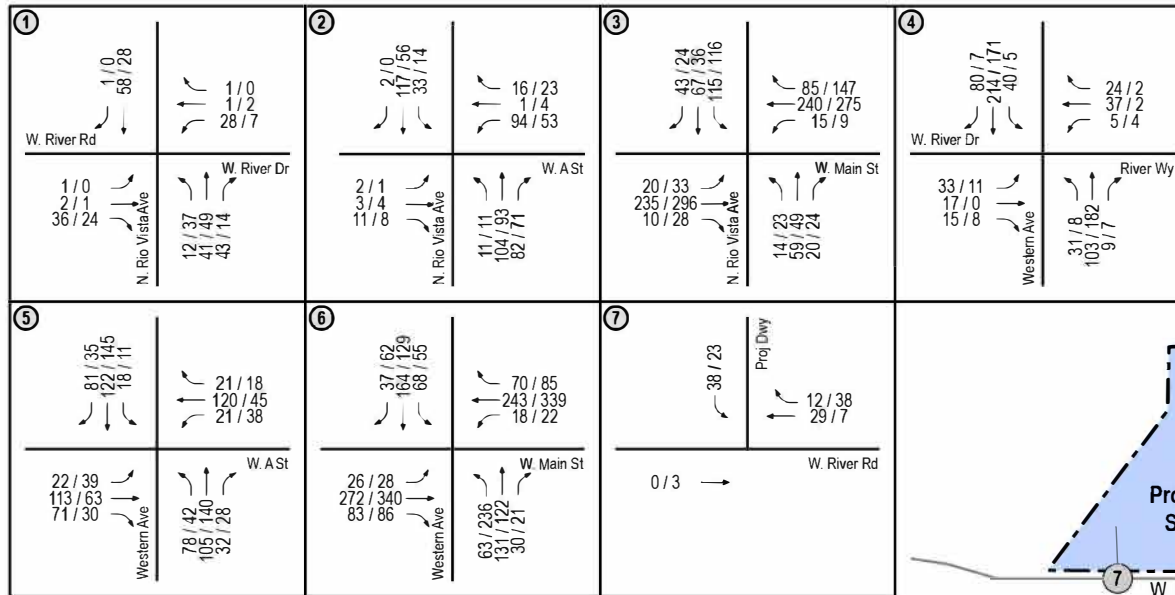
Intersection	Control Type	Peak Hour	Opening Year without Projects		Opening Year + Project		Δ^c
			Delay ^a	LOS ^b	Delay	LOS	
1. N. Rio Vista Ave / W. River Rd	AWSC ^d	AM	7.4	A	7.7	A	0.3
		PM	7.1	A	7.4	A	0.3
2. N. Rio Vista Ave / W. A St	AWSC	AM	9.0	A	9.4	A	0.4
		PM	7.8	A	8.1	A	0.3
3. N. Rio Vista Ave / W. Main St	Signal	AM	18.1	B	18.9	B	0.8
		PM	17.6	B	18.4	B	0.8
4. N. Western Ave / W. River Dr	MSSC ^e	AM	20.5	C	21.0	C	0.5
		PM	11.8	B	11.9	B	0.1
5. N. Western Ave / W. A St	AWSC	AM	11.3	B	11.6	B	0.3
		PM	9.7	A	10.0	B	0.3
6. N. Western Ave / W. Main St	Signal	AM	28.6	C	28.6	C	0.0
		PM	40.8	D	40.9	D	0.1
7. W. River Rd / Project Driveway	MSSC	AM	—	—	8.9	A	—
		PM	—	—	8.8	A	—

Footnotes:

- a. Average delay expressed in seconds per vehicle.
- b. Level of Service.
- c. Δ denotes an increase in delay due to project.
- d. AWSC – All Way Stop Controlled intersection.
- e. MSSC – Minor Stop Street Controlled intersection. Minor street left turn delay is reported.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F





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Figure 8-2

Opening Year + Project Traffic Volumes

Brawley Apartments

9.0 ACTIVE TRANSPORTATION REVIEW

9.1 Pedestrian Mobility

Within the study area, sidewalks are currently provided on the following street segments:

- River Drive – both sides from Rio Vista Avenue and Western Avenue.
- Rio Vista Avenue – both sides from Main Street to D Street, westerly side from D Street to Magnolia Street
- Western Avenue – westerly side from A Street to River Drive
- Main Street – noncontiguous sidewalks from Rio Vista Avenue to Western Avenue.

The nearest intersection is at the N. Rio Vista Avenue / W. River Road intersection, which currently does not have any high visibility crosswalks. ADA curb ramps are provided on the northeast and southeast of this intersection.

Based on the *City of Brawley Non-Motorized Transportation Plan*, there is a proposed Class I Shared-Use Path that starts at Pat Williams Park which is adjacent to the site and ends at Cattle Call Park.

The Project will provide sidewalks along its frontage on W. River Road and N. Rio Vista Avenue.

9.2 Bicycle Mobility

Class II bike lanes are provided along Western Avenue and A Street.

Based on the *City of Brawley Non-Motorized Transportation Plan*, Class II bike lanes are planned to be constructed along River Drive and Main Street (east of Rio Vista Avenue). Class III bike routes are planned on Rio Vista Avenue and Main Street (west of Rio Vista Avenue).

9.3 Transit Mobility

Transit service in the Project area is served by Imperial Valley Transit bus routes 2, 22 and Gold. A detailed description of the bus routes is provided below. **Appendix E** contains the bus route schedule and map.

Route 2 provides service to the area via Rio Vista Avenue, within the City of Brawley. Route 2 operates between 6:00 AM and 10:20 PM on weekdays with headways of approximately 50 minutes. On Saturdays, it operates between 6:20 AM and 7:45 PM with a headway of approximately 90 minutes. On Sundays, this route operates between 7:15 AM and 3:50 PM with headways of approximately 150 minutes. The nearest bus stop is at the Rio Vista Avenue / E Street intersection.

Route 22 provides service to the area via Rio Vista Avenue. within the City of Brawley. Bus route 22 only operates when Imperial Valley Campus (IVC) is in session. It runs in the morning from 6:20 AM to 9:50AM and in the evening from 2:00 PM to 5:10 PM. This route usually runs on the weekday only with headways of approximately 120 minutes. The nearest bus stop is on Rio Vista Avenue / E street.

Gold Line provides service to the area via A Street, within the City of Brawley. The Gold line operates Monday-Friday between 8:00 AM and 5:15PM with headways of approximately 60-minute frequency. This route is not operational on Saturday or Sundays. The nearest stop is located at Western Avenue / A Street.

10.0 SITE ACCESS REVIEW

As described in *Section 2.0*, the Project's access would be via one driveway on W. River Road and one driveway on N. Rio Vista Avenue. The driveway on W. River Road will be approximately 48 feet wide and serve as full access. The majority of project traffic is expected to use the W. River Road driveway which is calculated to operate at LOS A, as seen in *Table 8-1*.

11.0 CONCLUSION

LLG has prepared this LMA to determine and evaluate the potential impacts to the local transportation system due to the proposed Rio Vista Apartments project. The Project is calculated to generate 931 ADT with 63 AM peak hour trips (15 in / 48 out) and 76 PM peak hour trips (47 in / 29 out).

With the addition of Project traffic, the study area intersections are calculated to continue to operate at LOS D or better. Therefore, no roadway improvements are required based on the standards and thresholds discussed in *Section 5.0* of this report.