This section of the Draft Environmental Impact Report (Draft EIR or DEIR) describes the potential transportation and circulation impacts associated with the proposed McCabe Ranch II Specific Plan (proposed project). The information in this section is based on a traffic impact analysis (TIA) prepared by PMC. The traffic analysis is included as **Appendix H** of this Draft EIR.

4.14.1 EXISTING SETTING

The proposed project is located within the Heber Specific Plan Area of Imperial County, north of the community of Heber and south of the City of El Centro. The project site is bounded by McCabe Road to the north, Dogwood Road on the east, State Route 86 (SR 86) on the west, and the western extension of Correll Road to the south.

Based on the anticipated distribution of project traffic, this Draft EIR focuses on the following intersections, street segments and freeway mainline, identified in coordination with the Imperial County Department of Public Works, for the subsequent analysis.

UNSIGNALIZED INTERSECTIONS

- Austin Road / McCabe Road
- La Brucherie Road / McCabe Road
- Clark Road / McCabe Road
- SR-86 / McCabe Road (note: this intersection was subsequently signalized)
- SR-86 / Main Entry Parkway – West
- SR-86 / Correll Road Extension (note: this intersection to be signalized with project)
- Corfman Road / Heber Road
- Farnsworth Road / Danenberg Drive
- Farnsworth Road / McCabe Road (note: this intersection to be signalized with project)
- Appaloosa Road / McCabe Road
- Dogwood Avenue / I-8 Westbound Ramps
- Dogwood Avenue / I-8 Eastbound Ramps
- Dogwood Avenue / McCabe Road – North
- Dogwood Avenue / McCabe Road – South
- Dogwood Avenue / Main Entry Parkway – East (note: this intersection to be signalized with project)
- Dogwood Avenue / Black Hills Road
- Dogwood Avenue / Correll Road

- Dogwood Avenue / SR-86
- Dogwood Avenue / Fawcett Road
- Dogwood Avenue / Willoughby Road
- Pitzer Road / Correll Road
- Pitzer Road / SR-86
- SR-111 / McCabe Road

SIGNALIZED INTERSECTIONS

- 4th Street / Main Street
- 4th Street / Ross Road
- SR-86 / I-8 Westbound Ramps
- SR-86 / I-8 Eastbound Ramps
- SR-86 / Danenberg Drive
- Dogwood Avenue / Evan Hewes Highway
- Dogwood Avenue / Ross Avenue
- Dogwood Avenue / Danenberg Drive
- Dogwood Avenue / SR-98
- Pitzer Road / McCabe Road
- SR-111 / SR-86

STREET SEGMENTS

- SR-86 (4th Street): Main Street to Ross Road
- SR-86 (4th Street): Ross Road to I-8
- SR-86: I-8 to Danenberg Drive
- SR-86: Danenberg Drive to McCabe Road
- SR-86: McCabe Road to Heber Road
- SR-86: Corfman Road to Dogwood Avenue
- SR-86: Dogwood Avenue to Pitzer Road
- SR-86: Pitzer Road to SR-111

- Dogwood Avenue: Evan Hewes Highway to Ross Road
- Dogwood Avenue: Ross Road to I-8
- Dogwood Avenue: I-8 to Danenberg Drive
- Dogwood Avenue: Danenberg Drive to McCabe Road
- Dogwood Avenue: McCabe Road to SR-86
- Dogwood Avenue: SR-86 to Fawcett Road
- Dogwood Avenue: Fawcett Road to Willoughby Road
- Dogwood Avenue: Willoughby Road to Cole Road
- Dogwood Avenue: Cole Road to SR-98
- Danenberg Drive: SR-86 to Dogwood Avenue
- Farnsworth Road: Dannenberg Drive to McCabe Road
- Pitzer Road: McCabe Road to SR-86
- McCabe Road: Austin Road to La Brucherie Road
- McCabe Road: La Brucherie Road to SR-86
- McCabe Road: SR-86 to Dogwood Avenue
- McCabe Road: Dogwood Avenue to Pitzer Road
- McCabe Road: Pitzer Road to SR-111
- Correll Road: Dogwood Avenue to Pitzer Road

FREEWAY MAINLINE

- 8: Imperial Avenue to SR-86 (4th Street)
- I-8: SR-86 (4th Street) to Dogwood Avenue
- I-8: Dogwood Avenue to SR-111

EXISTING TRANSPORTATION NETWORK

Roadways

The principal roadways in the vicinity of the proposed project are briefly described below. Roadway classification was determined from a review of the County of Imperial and City of El Centro Circulation Elements, field observations, and information obtained from Caltrans. **Figure 4.14-1 (a,b,c,d)** illustrates the existing transportation conditions.

Interstate 8 (I-8) is the primary east-west route through Imperial County between San Diego, California, and Yuma, Arizona. Providing two travel lanes in each direction, I-8 has complete grade separations at all interchanges.

State Route 86 (SR 86) is a two-lane conventional highway with one lane of travel in each direction south of Danenberg Drive and a four-lane roadway with two lanes of travel in each direction north of Danenberg Drive.

Dogwood Avenue is a north-south two-lane undivided roadway from Evan Hewes Highway to I-8. From I-8 to McCabe Road, Dogwood Avenue varies between a four-lane roadway with a two-way left-turn lane to a two-lane undivided roadway. From SR 86 to SR 98, Dogwood Road is a two-lane undivided roadway. It is important to note that Dogwood Avenue is the name used in the City of El Centro, while Dogwood Road is used in unincorporated Imperial County.

Danenberg Drive is a two-lane east-west undivided roadway with one lane of travel in each direction.

Farnsworth Road is a two-lane north-south undivided roadway with one lane of travel in each direction.

Pitzer Road is a two-lane north-south undivided roadway with one lane of travel in each direction. It is currently paved between Chick Road and McCabe Road but a portion remains unpaved between McCabe Road and SR 86.

McCabe Road is an two-lane east-west undivided roadway with one lane of travel in each direction.

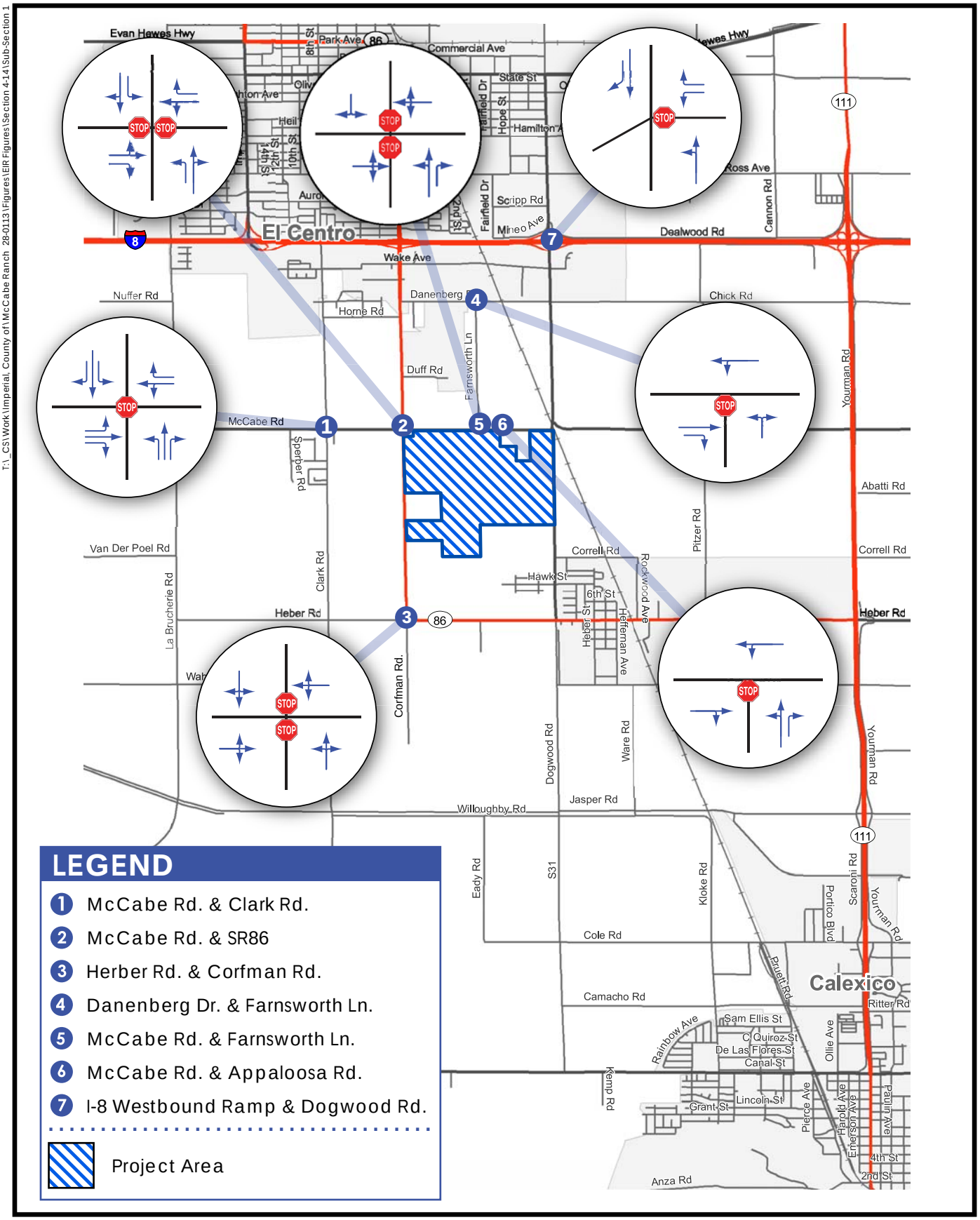
Correll Road is a two-lane east-west undivided roadway with one lane of travel in each direction.

Airports

The two closest primary public use airports to the project site are the Imperial County Airport and the Calexico International Airport. The Imperial County Airport is located in the City of Imperial approximately 7 miles northwest of the project site on SR 86. The Imperial County Airport is primarily a general aviation facility but is served by one commercial airline. The Calexico International Airport is located in the City of Calexico approximately 8 miles south of the project site near the U.S.-Mexico Border, west of SR 111. The Calexico International Airport is a general aviation facility.

Railroads

A Union Pacific Railroad (UPRR) freight line is located east and north of the project site. This rail line runs in a northwest–southeast alignment immediately northeast of the project area. The railroad line crosses Dogwood Road north of the project site between the intersections of Dogwood Road and McCabe Road (north) and Dogwood Road and McCabe Road (south). There are no stops or passenger rail service within the project area.



LEGEND

1. McCabe Rd. & Clark Rd.
2. McCabe Rd. & SR86
3. Herber Rd. & Corfman Rd.
4. Danenberg Dr. & Farnsworth Ln.
5. McCabe Rd. & Farnsworth Ln.
6. McCabe Rd. & Appaloosa Rd.
7. I-8 Westbound Ramp & Dogwood Rd.

Project Area

No Scale

N

Figure 4.14-1a
Existing Conditions

PMC

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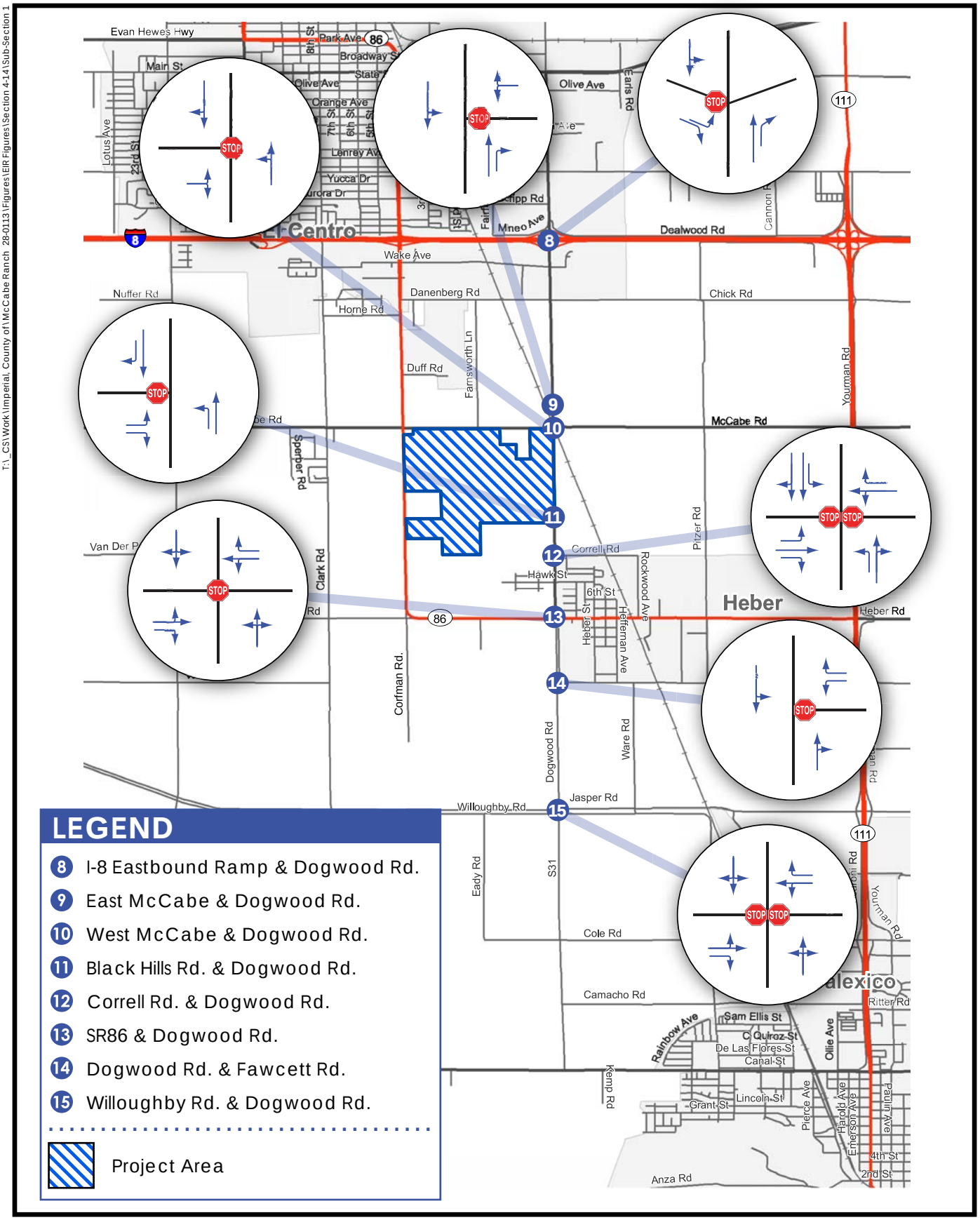


LEGEND

- 8 I-8 Eastbound Ramp & Dogwood Rd.
- 9 East McCabe & Dogwood Rd.
- 10 West McCabe & Dogwood Rd.
- 11 Black Hills Rd. & Dogwood Rd.
- 12 Correll Rd. & Dogwood Rd.
- 13 SR86 & Dogwood Rd.
- 14 Dogwood Rd. & Fawcett Rd.
- 15 Willoughby Rd. & Dogwood Rd.

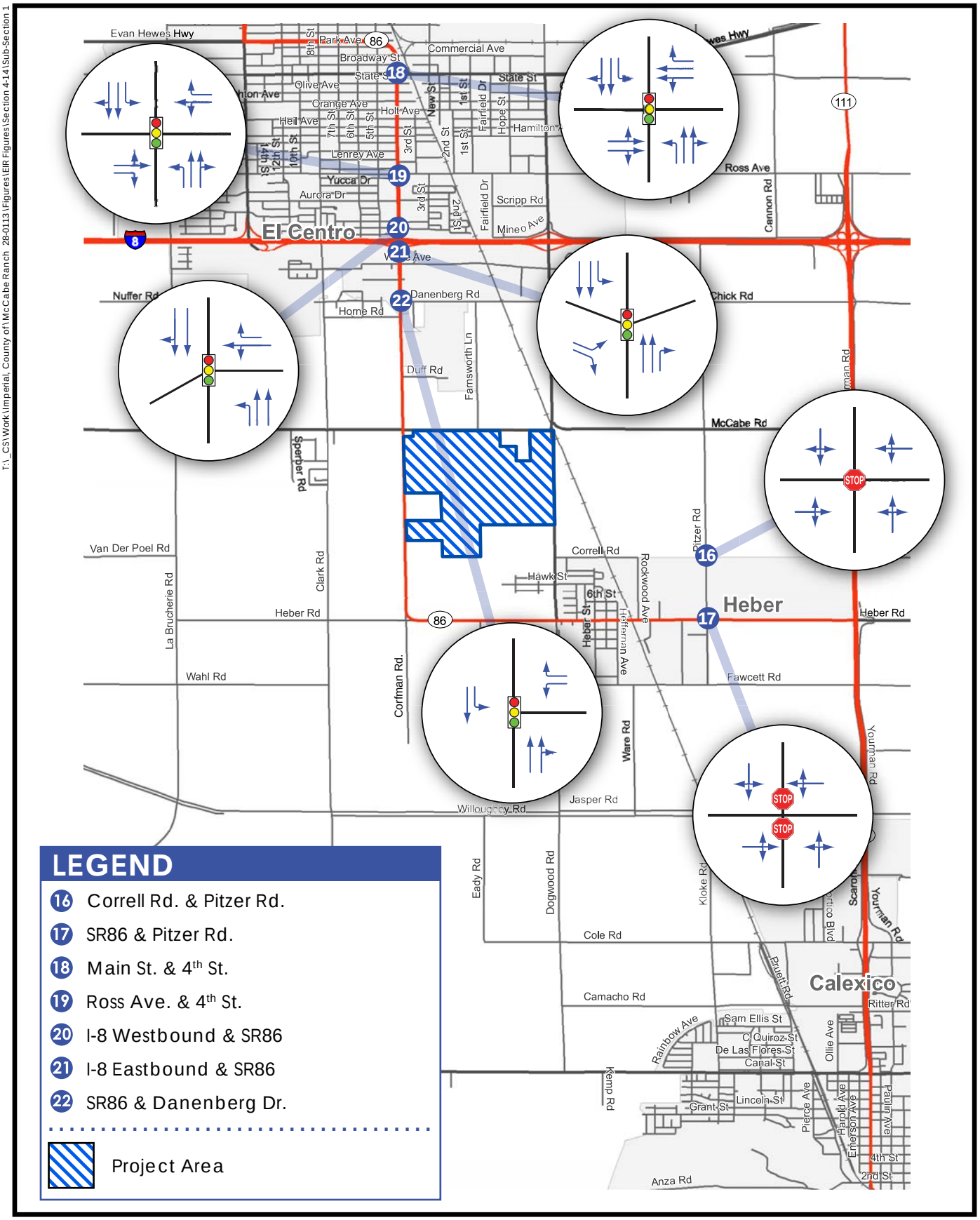
Project Area

No Scale

N

Figure 4.14-1b
Existing Conditions

PMC

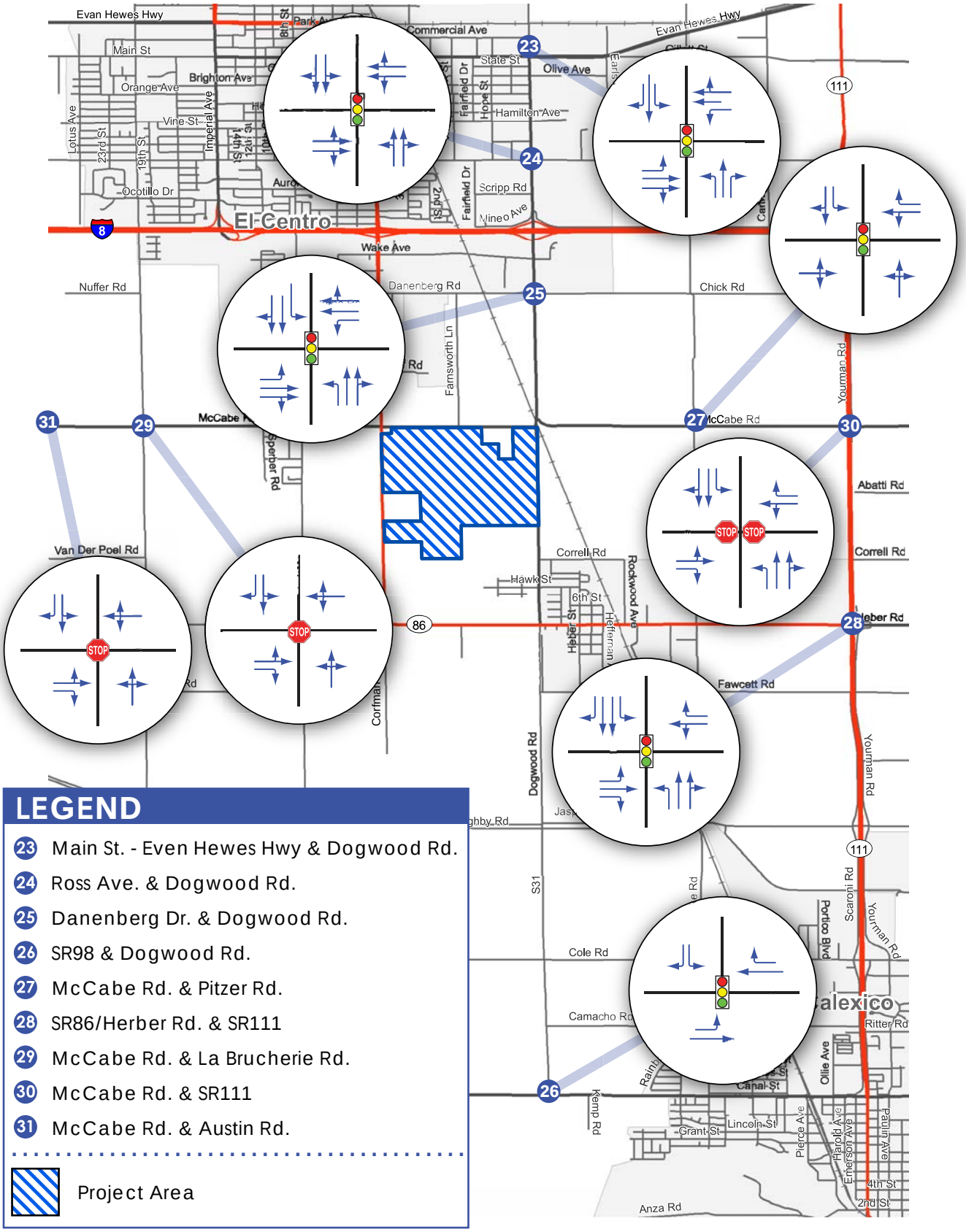


No Scale

N

Figure 4.14-1c
Existing Conditions

PMC



LEGEND

- 23 Main St. - Even Hewes Hwy & Dogwood Rd.
- 24 Ross Ave. & Dogwood Rd.
- 25 Danenberg Dr. & Dogwood Rd.
- 26 SR98 & Dogwood Rd.
- 27 McCabe Rd. & Pitzer Rd.
- 28 SR86/Herber Rd. & SR111
- 29 McCabe Rd. & La Brucherie Rd.
- 30 McCabe Rd. & SR111
- 31 McCabe Rd. & Austin Rd.

Project Area

No Scale

N

Figure 4.14-1d
Existing Conditions

PMC

Transit Service

Imperial Valley Transit (IVT) provides an inter-city fixed route bus system, with an existing service route operating along Dogwood Road near the project site. IVT Routes 100 and 150 provide service that run in the vicinity of the project area between El Centro and Calexico from approximately 6:00 AM until 11:00 PM weekdays, and 6:00 AM to 6:00 PM on Saturdays.

Parking

Currently, the proposed project site is occupied by farmland, and no on-site parking is available.

Bicycle Facilities

Portions of Dogwood Road in the project vicinity have been upgraded as a Class II bicycle lane. No other bicycle improvements have been made in the immediate project vicinity.

Pedestrian Facilities

Correll Road south of the project site has been improved with sidewalks. No other pedestrian improvements have been made in the immediate project vicinity.

EXISTING TRAFFIC VOLUMES

Table 4.14-1 is a summary of existing average daily traffic volumes in the vicinity of the proposed project. **Figure 4.14-2 (a,b,c,d)** depicts the existing AM and PM peak hour traffic volumes.

TABLE 4.14-1
EXISTING ADT VOLUMES ON STUDY STREET SEGMENTS

Street Segment	Capacity (LOS E)[1]	ADT[2]	LOS[3]	V/C[4]
SR-86				
Main Street to Ross Road	34,200	27,570	**D**	0.81
Ross Road to I-8	34,200	30,170	**D**	0.88
I-8 to Danenberg Drive	34,200	22,470	B	0.66
Danenberg Drive to McCabe Road	16,200	22,470	**F**	1.39
McCabe Road to Heber Road	16,200	7,530	**D**	0.46
Corfman Road to Dogwood Avenue	16,200	6,570	C	0.41
Dogwood Avenue to Pitzer Road	16,200	7,550	**D**	0.47
Pitzer Road to SR-111	16,200	7,320	**D**	0.45
Dogwood Avenue				
Evan Hewes Highway to Ross Road	16,200	12,900	**E**	0.80
Ross Road to I-8	16,200	13,550	**E**	0.84
I-8 to Danenberg Drive	34,200	18,180	B	0.53
Danenberg Drive to McCabe Road	34,200	10,850	A	0.32
McCabe Road to SR-86	16,200	11,660	**E**	0.72
SR-86 to Fawcett Road	16,200	8,490	**D**	0.52
Fawcett Road to Willoughby Road	16,200	7,990	**D**	0.49
Willoughby Road to Cole Road	16,200	8,700	**D**	0.54
Cole Road to SR-98	16,200	10,020	**D**	0.62
Danenberg Drive				
SR-86 to Dogwood Avenue	16,200	4,020	B	0.25
Farnsworth Road				
Dannenberg Drive to McCabe Road	16,200	950	A	0.06

Street Segment	Capacity (LOS E)[1]	ADT[2]	LOS[3]	V/C[4]
Pitzer Road				
McCabe Road to SR-86	16,200	1,530	A	0.09
McCabe Road				
Austin Road to La Brucherie Road	16,200	910	A	0.06
La Brucherie to SR-86	16,200	3,400	B	0.21
SR-86 to Dogwood Avenue	16,200	3,310	B	0.20
Dogwood Avenue to Pitzer Road	16,200	190	A	0.01
Pitzer Road to SR-111	34,200	50	A	0.00
Correll Road				
Dogwood Avenue to Pitzer Road	16,200	1,280	A	0.08

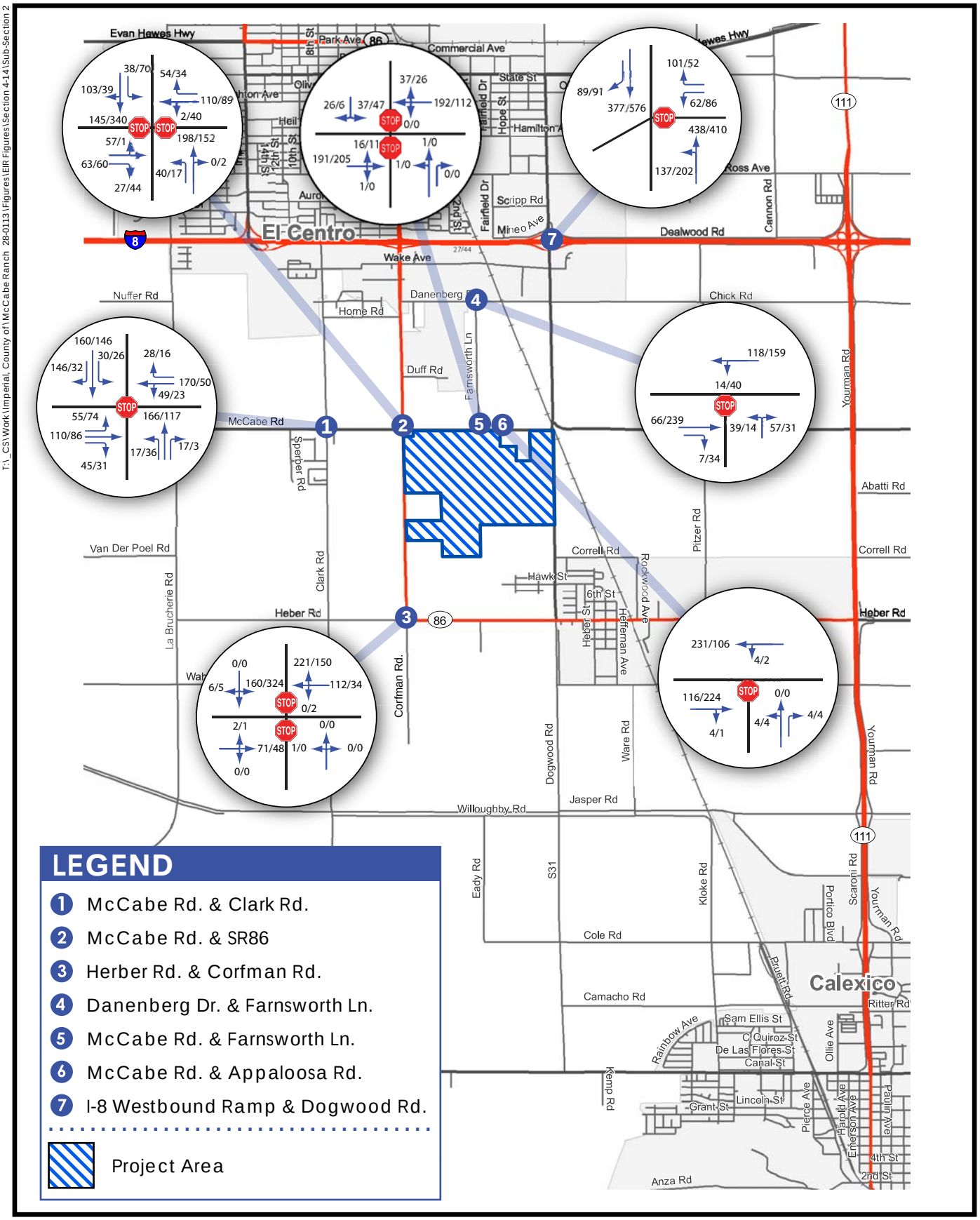
Notes: [1] Capacities based on County of Imperial Roadway Classification Table. [2] average daily traffic volumes. [3] level of service. [4] volume to capacity ratio.

Source: PMC, 2010

EXISTING TRAFFIC OPERATIONS

Level of Service Approach

Level of service (LOS) is the term used to denote the different operating conditions that occur on a given roadway segment or intersection 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, travel speed, travel delay, freedom to maneuver, and safety. LOS provides an index to the operational qualities of a roadway segment or an intersection. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. LOS designation is reported differently for unsignalized intersections, signalized intersections, street segments, and freeway mainline, as described below (PMC, 2010).



No Scale

N

Figure 4.14-2a

Existing AM/PM Traffic Volumes

PMC

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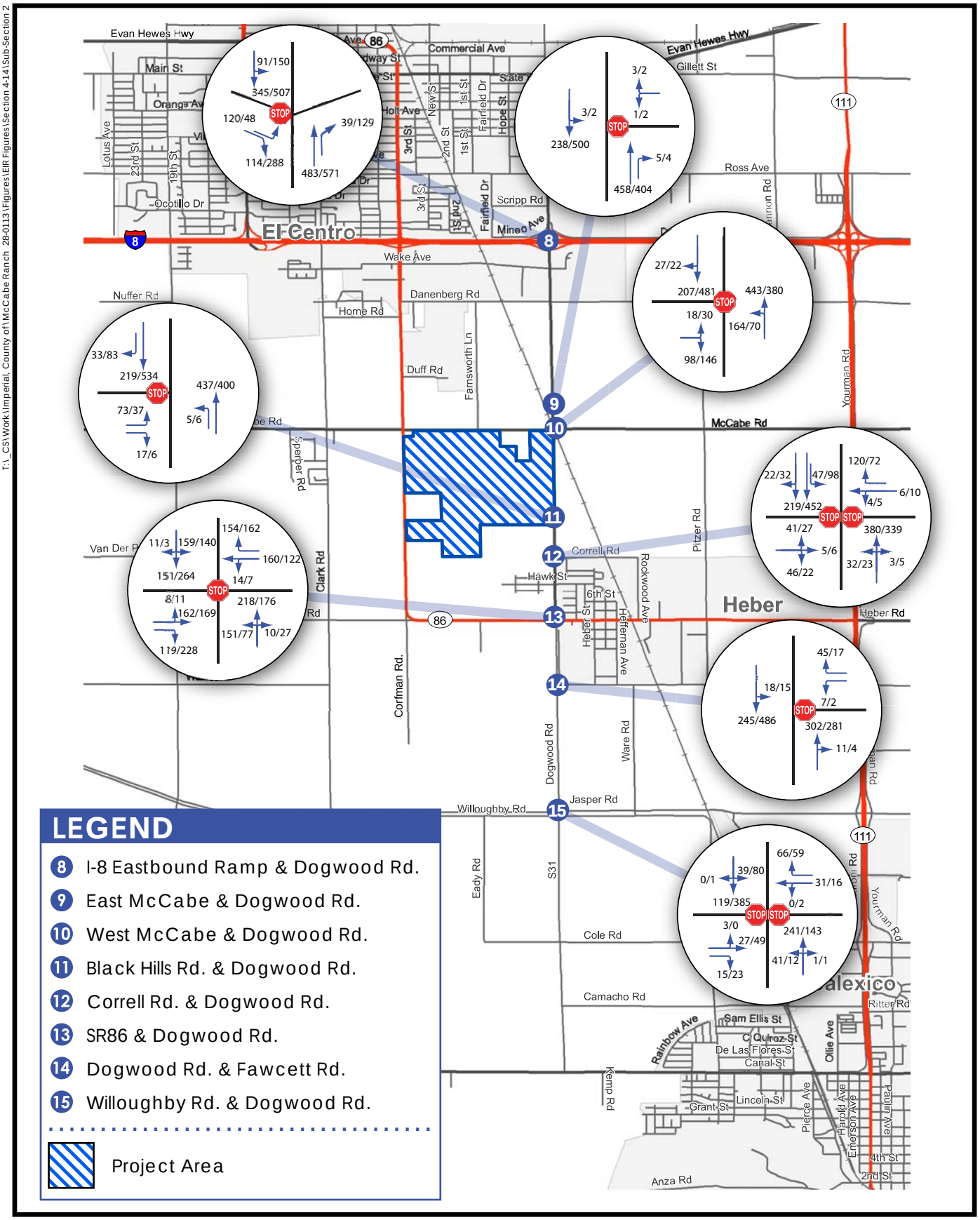


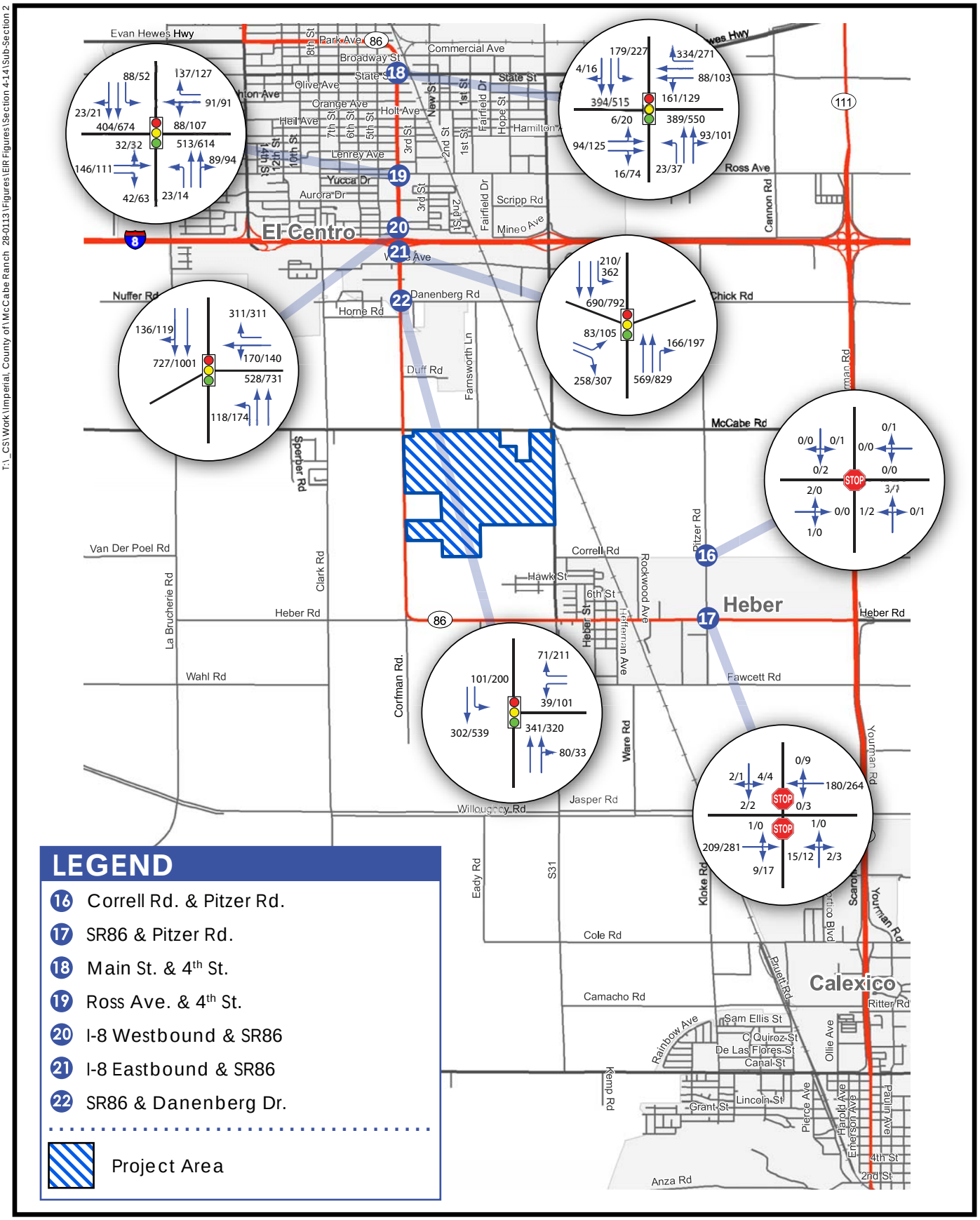
No Scale

N

Figure 4.14-2b

Existing AM/PM Traffic Volumes

PMC



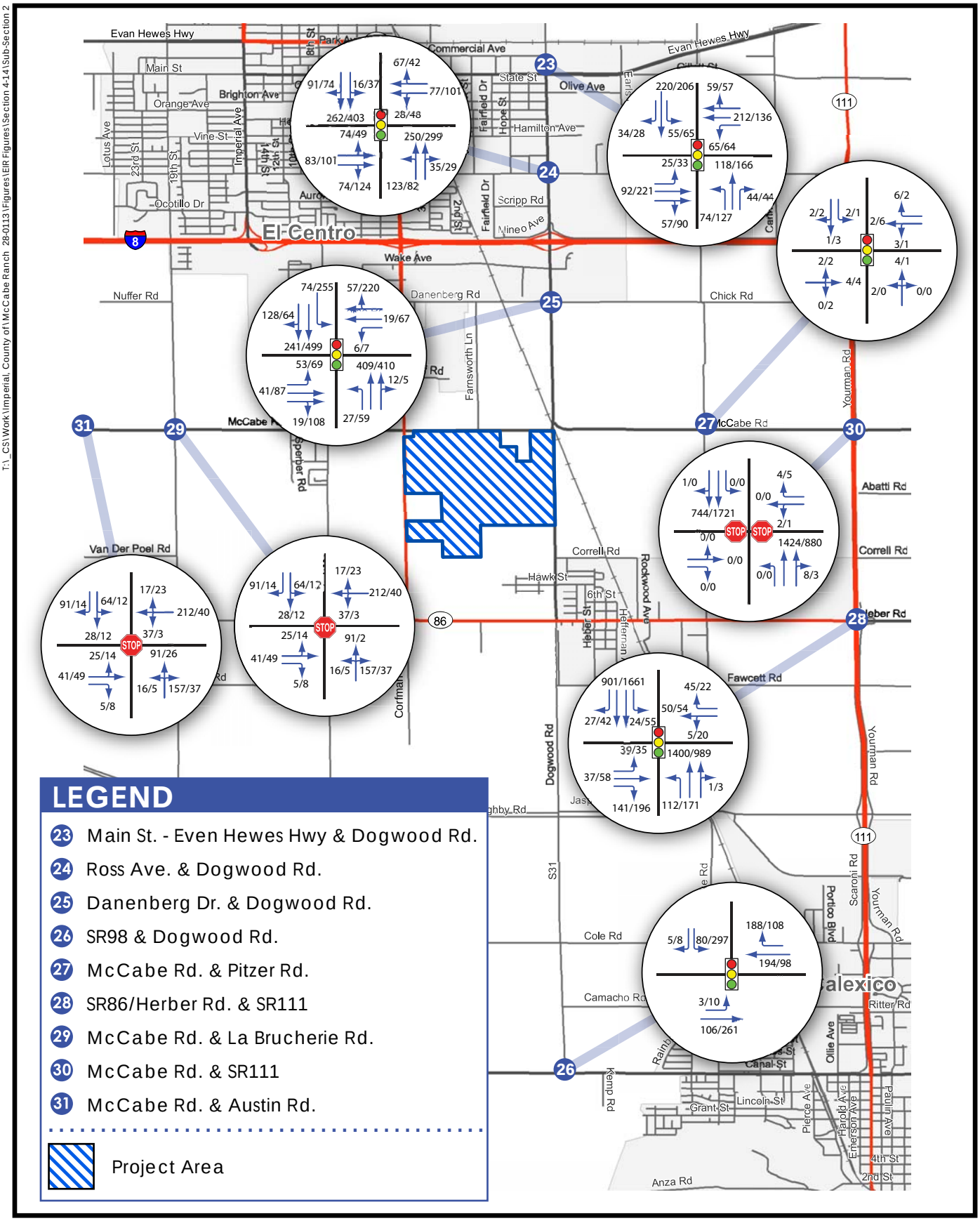
No Scale

N

Figure 4.14-2c

Existing AM/PM Traffic Volumes

PMC



No Scale

N

Figure 4.14-2d

Existing AM/PM Traffic Volumes

PMC

Unsignalized Intersections

Unsignalized intersections were analyzed for the weekday AM and PM peak hour conditions. The vehicle delay and levels of service were determined based upon the procedures found in Chapter 17 of the 2000 Highway Capacity Manual (HCM), using the Traffix (version 7.9) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection LOS. **Table 4.14-2** summarizes the delay thresholds for unsignalized intersections. Under the HCM methodology, LOS is based on the average stopped delay per vehicle for all movements at all-way stop-controlled intersection. For one-way or two-way stop-controlled intersections, LOS is based on delay of the worst stop-controlled movement using the LOS ranges shown in **Table 4.14-2** (PMC, 2010).

Signalized Intersections

Signalized intersections were analyzed for the weekday AM and PM peak hour conditions. Average vehicle delay was determined using the methodology found in Chapter 16 of the 2000 Highway Capacity Manual (HCM), using the Traffix (version 7.9) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection level of service. **Table 4.14-3** summarizes the delay thresholds for signalized intersections (PMC, 2010).

TABLE 4.14-2
LEVEL OF SERVICE THRESHOLDS FOR UNSIGNALIZED INTERSECTIONS

Average Control Delay per Vehicle (Seconds/Vehicle)			Level of Service
0.0	≤	10.0	A
10.1	to	15.0	B
15.1	to	25.0	C
25.1	to	35.0	D
35.1	to	50.0	E
	≥	50.1	F

Source: PMC, 2010

TABLE 4.14-3
LEVEL OF SERVICE THRESHOLDS FOR SIGNALIZED INTERSECTIONS

Average Control Delay per Vehicle (Seconds/Vehicle)			Level of Service
0.0	≤	10.0	A
10.1	to	20.0	B
21.1	to	35.0	C
35.1	to	55.0	D
55.1	to	80.0	E
	≥	80.0	F

Source: PMC, 2010

ILV Intersection Analysis

Signalized intersection associated with Caltrans facilities were also analyzed using the Intersecting Lane Vehicles (ILV) methodology as described in Chapter 400, Topic 406 of the California Highway Design Manual, in addition to the HCM intersection analysis described in Section 4.3.2. The ILV methodology is based on the concept that the capacity of intersecting lanes of traffic is 1,500 vehicles per hour. For the typical local street interchange there is usually a critical intersection of a ramp and the crossroads that establish the capacity of the interchange. Listed below are the values of ILV per hour for the various traffic flow conditions:

- Under – ILV per hour < 1,200: Stable flow with slight, but acceptable delay. Occasional signal loading may develop. Fee mid-block operations.

- Near – ILV per hour 1,200 to 1,500: Unstable flow with considerable delays possible. Some vehicles occasionally wait two or more cycles to pass through the intersection. Continuous backup occur at some approaches.

- Over – ILV per hour > 1,500: Stop and go operation with severe delay and heavy congestion. Traffic volume is limited by maximum discharge rates of each phase. Continuous backup in varying degrees occurs on all approaches. Where downstream capacity is restrictive, mainline congestion can impede orderly discharge through the intersection.

The amount of congestion depends on how much the ILV per hour value exceeds 1,500. Observed flow rates will normally not exceed 1,500 ILV per hour and the excess will be delayed in a queue. The ILV analysis is used for information purposes rather than as a method by which to determine significance. Appendix H, Traffic Impact Analysis, Appendix C of contains the ILV analysis sheets.

Street Segments

The street segment analysis is based upon the comparison of average daily traffic volumes with the City of El Centro and County of Imperial Roadway Classification Level of Service and ADT Tables (PMC, 2010).

Freeway Mainline

The analysis of freeway segment LOS is based on the procedure developed by the California Department of Transportation (Caltrans) District 11 and follows the methods described in the 2000 Highway Capacity Manual (HCM). The procedure involves comparing the peak hour volume of the mainline segment to the theoretical capacity of the roadway, also known as the volume-to-capacity ratio (V/C).

The procedure for calculating freeway LOS involves estimation of volume-to-capacity (V/C) ratio using the following equation:

V/C = (Daily Volume * Peak Hour Percent * Directional Factor * Truck Factor) / Capacity

Daily Volume = average daily traffic (ADT)
Peak Hour Percent = percentage of ADT occurring during the peak hour
Directional Factor = truck/terrain factor to represent influence of heavy vehicles and grades
Capacity = 2,000 vehicles/lane/hour/lane for mainline, and 1,200 for auxiliary lanes

The resulting V/C is then compared to accepted ranges of V/C values corresponding to the various levels of service for each facility classification, as shown in **Table 4.14-4**. The corresponding LOS represents an approximation of existing or anticipated future freeway operating conditions in the peak direction of travel during the peak hour (PMC, 2010).

TABLE 4.14-4
CALTRANS DISTRICT 11
FREEWAY SEGMENT LEVEL OF SERVICE DEFINITIONS

LOS	V/C	Congestion / Delay	Traffic Description
Used for Freeways, Expressways, and Conventional highways			
A	< 0.41	None	Free flow
B	0.42-0.62	None	Free to stable flow, light to moderate volumes
C	0.63-0.80	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted
D	0.81-0.82	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver
E	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor
Used for Freeways and Expressways			
F(0)	1.01-1.25	Considerable 0-1 hour delay	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go
F(1)	1.26-1.35	Severe 1-2 hour delay	Very heavy congestion, very long queues
F(2)	1.36-1.46	Very severe 2-3 hour delay	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods
F(3)	> 1.46	Extremely severe 3+ hours of delay	Gridlock

Source: PMC, 2010

Level of Service Analysis

Intersections

Intersection capacity analysis was conducted for intersections under existing conditions. As shown in **Table 4.14-5**, the following intersections currently operate at LOS D or worse:

- Dogwood Avenue / I-8 Westbound Ramps (LOS F during the PM peak hour)
- SR 111 / McCabe Road (LOS D during the AM peak hour)

TABLE 4.14-5
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing	
			Delay[1]	LOS[2]
1 Austin Road / McCabe Road	AWSC[3]	AM	11.4	B
		PM	7.9	A
2 La Brucherie Road / McCabe Road	AWSC	AM	11.4	B
		PM	7.8	A
3 Clark Road / McCabe Road	AWSC	AM	11.6	B
		PM	9.5	A
4 SR-86 / McCabe Road	TWSC[4]	AM	19.2	C
		PM	21.4	C
5 SR-86 / Main Entry Parkway – West	TWSC	AM	0.0	A
		PM	0.0	A
6 SR-86 / Correll Road Extension	TWSC	AM	0.0	A
		PM	0.0	A
7 Corfman Road / Heber Road	TWSC	AM	12.2	B
		PM	12.1	B
8 Farnsworth Road / Danenberg Drive	TWSC	AM	9.5	A
		PM	10.5	B
9 Farnsworth Road / McCabe Road	TWSC	AM	13.0	B
		PM	14.0	B
10 Appaloosa Road / McCabe Road	TWSC	AM	9.7	A
		PM	9.9	A
11 Dogwood Avenue / I-8 Westbound Ramps	TWSC	AM	19.2	C
		PM	58.6	**F**
12 Dogwood Avenue / I-8 Eastbound Ramps	TWSC	AM	23.0	C
		PM	22.8	C
13 Dogwood Avenue / McCabe Road - North	TWSC	AM	11.7	B
		PM	13.7	B
14 Dogwood Avenue / McCabe Road - South	AWSC	AM	21.5	C
		PM	19.0	B
15 Dogwood Avenue / Main Entry Parkway - East	TWSC	AM	0.1	A
		PM	0.1	A
16 Dogwood Avenue / Black Hills Road	TWSC	AM	14.1	B
		PM	18.1	C
17 Dogwood Avenue / Correll Road	TWSC	AM	17.2	C
		PM	14.4	B
18 Dogwood Avenue / SR-86	AWSC	AM	16.7	C
		PM	17.6	C
19 Dogwood Avenue / Fawcett Road	TWSC	AM	11.9	B
		PM	14.3	B
20 Dogwood Avenue / Willoughby Road	TWSC	AM	12.3	B
		PM	15.3	C
21 Pitzer Road / Correll Road	AWSC	AM	6.8	A
		PM	6.8	A
22 Pitzer Road / SR-86	TWSC	AM	11.4	B
		PM	12.9	B
23 SR-111 / McCabe Road	TWSC	AM	28.4	**D**
		PM	18.0	C
24 4th Street / Main Street	Signal	AM	25.4	C
		PM	26.6	C
25 4th Street / Ross Road	Signal	AM	24.7	C
		PM	21.0	C

Intersection	Control Type	Peak Hour	Existing	
			Delay[1]	LOS[2]
26 SR-86 / I-8 Westbound Ramps	Signal	AM	18.1	B
		PM	18.0	B
27 SR-86 / I-8 Eastbound Ramps	Signal	AM	19.2	B
		PM	21.3	C
28 SR-86 / Danenberg Drive	Signal	AM	13.3	B
		PM	18.4	B
29 Dogwood Avenue / Evan Hewes Highway	Signal	AM	25.5	C
		PM	26.8	C
30 Dogwood Avenue / Ross Avenue	Signal	AM	29.4	C
		PM	29.6	C
31 Dogwood Avenue / Danenberg Drive	Signal	AM	17.7	B
		PM	26.2	C
32 Dogwood Avenue / SR-98	Signal	AM	8.7	A
		PM	17.2	B
33 Pitzer Road / McCabe Road	Signal	AM	22.5	C
		PM	22.2	C
34 SR-111 / SR-86	Signal	AM	12.5	B
		PM	17.1	B

Notes: [1] Average delay expressed in seconds per vehicle. [2] level of service. [3] all-way strop controlled intersection. [4] two-way stop controlled intersection – minor street worst-case approach delay is reported.

Source: PMC, 2010

Street Segments

Table 4.14-6 shows the street segment analysis for existing roadway conditions. As shown in **Table 4.14-6**, all of the street segments are currently operate at LOS C or better except:

- SR 86 (4th Street): Main Street to Ross Road (LOS D)
- SR 86 (4th Street): Ross Road to I-8 (LOS D)
- SR 86: Danenberg Drive to McCabe Road (LOS F)
- SR 86: McCabe Road to SR 86 (LOS D)
- SR 86: Dogwood Road to Pitzer Road (LOS D)
- SR 86: Pitzer Road to SR 111 (LOS D)
- Dogwood Avenue: Evan Hewes Highway to Ross Road (LOS E)
- Dogwood Avenue: Ross Road to I-8 (LOS E)
- Dogwood Road: McCabe Road to SR 86 (LOS E)
- Dogwood Road: SR 86 to Fawcett Road (LOS D)
- Dogwood Road: Fawcett Road to Willoughby Road (LOS D)
- Dogwood Road: Willoughby Road to Cole Road (LOS D)
- Dogwood Road: Cole Road to SR 98 (LOS D)

TABLE 4.14-6
EXISTING STREET SEGMENT OPERATIONS

Street Segment	Capacity (LOS E)[1]	ADT[2]	LOS[3]	V/C[4]
SR 86				
Main Street to Ross Road	34,200	27,570	**D**	0.81
Ross Road to I-8	34,200	30,170	**D**	0.88
I-8 to Danenberg Drive	34,200	22,470	B	0.66
Danenberg Drive to McCabe Road	16,200	22,470	**F**	1.39
McCabe Road to Heber Road	16,200	7,530	**D**	0.46
Corfman Road to Dogwood Road	16,200	6,570	C	0.41
Dogwood Road to Pitzer Road	16,200	7,550	**D**	0.47
Pitzer Road to SR 111	16,200	7,320	**D**	0.45
Dogwood Avenue/Dogwood Road				
Evan Hewes Highway to Ross Road	16,200	12,900	**E**	0.80
Ross Road to I-8	16,200	13,550	**E**	0.84
I-8 to Danenberg Drive	34,200	18,180	B	0.53
Danenberg Drive to McCabe Road	34,200	10,850	A	0.32
McCabe Road to SR 86	16,200	11,660	**E**	0.72
SR 86 to Fawcett Road	16,200	8,490	**D**	0.52
Fawcett Road to Willoughby Road	16,200	7,990	**D**	0.49
Willoughby Road to Cole Road	16,200	8,700	**D**	0.54
Cole Road to SR 98	16,200	10,020	**D**	0.62
Danenberg Drive				
SR 86 to Dogwood Avenue	16,200	4,020	B	0.25
Farnsworth Road				
Dannenberg Drive to McCabe Road	16,200	950	A	0.06
Pitzer Road				
McCabe Road to SR 86	16,200	1,530	A	0.09
McCabe Road				
Austin Road to La Brucherie Road	16,200	910	A	0.06
La Brucherie to SR 86	16,200	3,400	B	0.21
SR 86 to Dogwood Road	16,200	3,310	B	0.20
Dogwood Road to Pitzer Road	16,200	190	A	0.01
Pitzer Road to SR 111	34,200	50	A	0.00
Correll Road				
Dogwood Road to Pitzer Road	16,200	1,280	A	0.08

Notes: [1] Capacities based on County of Imperial Roadway Classification Table. [2] average daily traffic volumes. [3] level of service. [4] volume-to-capacity ratio.

Source: PMC, 2010

Freeway Mainline

Table 4.14-7 shows that under existing conditions, all of the freeway mainline segments operate at LOS B or better.

TABLE 4.14-7
EXISTING FREEWAY MAINLINE OPERATIONS INTERSTATE 8

Freeway Segment	Dir.	# of Lanes	Hourly Capacity[1]	Adjusted ADT[2]	Peak Hour Volume		V/C[3]		LOS[4]	
					AM	PM	AM	PM	AM	PM
Imperial Avenue to SR 86	EB	2	4,400	35,370	2,103	2,450	0.48	0.56	B	B
	WB	2	4,400		1,641	2,046	0.37	0.47	A	B
SR 86 to Dogwood Avenue	EB	2	4,400	38,490	2,283	2,659	0.52	0.60	B	B
	WB	2	4,400		1,782	2,221	0.41	0.50	A	B
Dogwood Avenue to SR 111	EB	2	4,400	35,890	2,127	2,477	0.48	0.56	B	B
	WB	2	4,400		1,660	2,069	0.38	0.47	A	B

Notes: [1] Capacities calculated at 2,200 vehicles per lane per hour. [2] existing 2007 ADT volumes from Caltrans grown to 2009 at 2% per year and rounded to 10. [3] level of service. [4] volume-to-capacity ratio.

Source: PMC, 2010

4.14.2 REGULATORY FRAMEWORK

STATE

State of California Traffic Impact Study Requirements

The California Department of Transportation (Caltrans) has established the following trip generation thresholds to determine when a traffic impact study is required.

- The proposed project generates over 100 peak hour trips assigned to a state highway facility.
- The proposed project generates 50 to 100 peak hour trips assigned to a state highway facility and affected state highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS C or D).
- The proposed project generates one to 49 peak hour trips assigned to a state highway facility and one of more of the following:
  - Affected state highway facilities experiencing significant delay; unstable or forced traffic flow conditions (LOS E or F).
  - The potential risk for a traffic incident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).
  - Change in local circulation networks that impact a state highway facility (i.e., direct access to state highway facility, a non-standard highway geometric design, etc.).

The Caltrans traffic impact study guidelines do not establish an impact threshold of significance but does identify the Highway Capacity Manual (HCM) methodology for analysis of traffic impacts.

REGIONAL

Southern California Association of Governments Regional Comprehensive Plan and Regional Transportation Plan

The Southern California Association of Governments (SCAG) Regional Comprehensive Plan (RCP) is applicable to individual projects and is primarily used to encourage patterns of urban development and local land use that would relieve infrastructure costs and make better use of the existing facilities. The RCP encourages development in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.

The 2008 Regional Transportation Plan (RTP) provides long-range regional strategies that include new construction and improvements to the existing transportation system to enhance the movement of people and goods. It improves the quality of life in Southern California by planning for economic growth and by addressing air quality challenges with environmentally friendly strategies and technologies.

LOCAL

County of Imperial General Plan

The County of Imperial General Plan Circulation and Scenic Highways Element, Land Use Element, and Conservation and Open Space Element policies related to the proposed project are identified below. **Table 4.14-8** summarizes the project's consistency with the applicable General Plan policies. While this Draft EIR analyzes the project's consistency with the General Plan pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

TABLE 4.14-8
PROJECT CONSISTENCY WITH APPLICABLE GENERAL PLAN POLICIES

General Plan Policies	Consistency with General Plan	Analysis
Circulation and Scenic Highways Element		
Policy: Distribute the costs of transportation improvements equitably among those who will benefit, including current roadway users.	Yes	The project applicant shall pay fair share contributions toward capital roadway improvements that will mitigate impacts on the roadway network.
Policy: Participate in the establishment of regional traffic mitigation fees to be assessed on new development. The fees shall cover a reasonable share of the costs of providing local and sub regional transportation improvements needed for serving new development in the unincorporated area.	Yes	In order to mitigate impacts below a level of significance, a fair share contribution toward segment improvements is required from the project applicant.

General Plan Policies	Consistency with General Plan	Analysis
Policy: Seek all available means to finance improvements, including state and federal grants, to ensure that a non-motorized system is implemented, in addition to the current motorized system being adequately maintained.	Yes	The proposed project shall require the project applicant to fund their fair share of required infrastructure improvements. The project does not have design elements that would conflict with adopted plans, policies, or programs that support non-motorized transportation or other alternative modes of transportation.
Policy: Seek to work cooperatively with the Cities to require that development is their jurisdiction, also to contribute its fair share to County road improvements.	Yes	The project applicant shall pay fair share contributions toward capital roadway improvements that will mitigate impacts on the roadway network.
Roadway Improvement Policies		
Policy: It shall be the policy and direction under this circulation element that the dedication of rights of way and street improvements as a condition of issuance of a building permit and/or land use development application shall be required. All such rights of ways established in the functional road classifications shall be protected and procurement of needed rights of ways and improvements shall be made wherever possible. The County Planning and Development Services Director in conjunction with the County Road Commissioner shall review every building permit and land use development application in regards to obtaining the necessary right of ways and public improvements as a condition of permit issuance. This shall also be performed during the CEQA review of any projects which fall under the CEQA Guidelines. All setbacks established by County Ordinance shall be deemed to commence from the edge of ultimate right of ways on any parcel or property fronting on a public street, right of way, or any other public transit corridor and not from the property line.	Yes	The proposed project site is bounded by McCabe Road to the north, Dogwood Road to the east, SR 86 to the west, and the western extension of Correll Road to the south. McCabe Road is classified as a Prime Arterial requiring 136-foot right-of-way. Dogwood Road is classified as a Modified Prime Arterial (with planned transit) requiring 164-foot right-of-way and is also designated within the County Bicycle Master Plan portion of the County Circulation and Scenic Highways Element as a bicycle route. Correll Road is classified as a Minor Arterial requiring 102-foot right-of-way. SR 86 is classified as a State Highway, with a recommended 2050 classification as a Prime Arterial. The proposed project identifies sufficient right-of-way to meet the designated classifications with the exception of SR 86, for which it does not provide specifics to determine if the proposed project provides sufficient right-of-way widths. A total of seven vehicular access points are proposed, two along SR 86 from the west, two along McCabe Road from the north, and three along Dogwood Road from the east.
Policy: The County shall assure that each addition to the circulation system is a functional link on the total system so that new routes and links are coordinated with existing routes to ensure that each new and existing roadway continues to function as it was intended.	Yes	Vehicular access to and throughout the project will be provided by a hierarchy of existing, improved, and new roadways.

General Plan Policies	Consistency with General Plan	Analysis
Policy: The County shall require or provide adequate traffic safety measures on all new and existing roadways. These measures may include, but not be limited to, appropriate levels of maintenance, proper street design, traffic control devices (signs, signals, and striping), street lighting, and coordination with the school districts to provide school crossing signs and protection.	Yes	The proposed project would be subject to review by the Imperial County Sheriff's Office, the Imperial County Fire Department, and other applicable agencies regarding adequate emergency access. The proposed project would incorporate adequate emergency access locations as required by the County Fire Department. Prior to final site plan approval, the County will coordinate with the County Fire Department to design adequate circulation and access into the final site plan.
Policy: The County shall give priority to funding and implementing projects which either complete links on the circulation system, or relieve existing deficiencies.	Yes	The proposed project will occur on existing farm land and (at project buildout) connect proposed developments in the adjacent areas. Internal project circulation will also not disrupt any existing multimodal transportation that currently occurs in the area (railroad, bicycle routes, and transit service).
Policy: Where feasible, the County shall interconnect traffic signals to form area networks or corridor systems. These systems shall be timed to facilitate the flow of through traffic on the arterial system, thus enhancing the movement of vehicles and goods through the County, while reducing fuel consumption and air pollution.	Yes	Many of the mitigation measures proposed for the project involve the signalization of area intersections to maintain acceptable County intersection LOS.
Policy: The County shall impose appropriate pro-rated fees for construction of roadway facilities and associated landscaping to ensure that all new development contributes to the completion of the circulation system. In addition to pre-permit collection, such fees may be imposed through creation of assessment districts.	Yes	The project proponents will contribute their fair share contribution of recommended infrastructure improvements to facilitate the increase in traffic as associated with the project.
Policy: The County shall only approve and build streets as per County of Imperial Design Standards. Likewise, the County shall not allow impacts to other jurisdictions to be unmitigated, nor shall the County allow impacts created by projects within incorporated areas, to be unmitigated in the County.	Yes	A total of seven vehicular access points are proposed for the project area. All circulation needs within the Specific Plan area that involve certain roadway standards and are proposed for modification have and will meet County of Imperial building and design standards.
Policy: Require development to provide all necessary grading, installation of curbs, gutters, sidewalks, and parkway tree planting, unless these improvements are provided through other means.	Yes	For all project proposed roadways and modifications to existing roadways, landscape easements and open space buffers have been established.

General Plan Policies	Consistency with General Plan	Analysis
Policy: Assure that new developments adopted by the Specific Plan process (In accordance with the General Plan Land Use Element, Section 1-D) have appropriate circulation access. The provision of such access may include the development of new local roads along with intersections or interchanges (that may not be currently listed in the Circulation Element) to the existing local and regional road networks. Areas that may require additional, intersections or interchanges to the road networks when new large scale development occurs include, but not be limited to the County's outlining communities of Salton Sea/ West Shores, Palo Verde, Ocotillo, and Bard/ Winterhaven.	Yes	The internal circulation analysis revealed that the proposed project will provide new access points through the addition of major and minor collectors along with improvements to the existing transportation system and meet all required LOS levels after mitigation.
Transportation Demand Policies		
Policy: The County shall encourage the reduction of vehicle miles, reduction of the total number of daily peak hour vehicular trips, and provide better utilization of the circulation system through development and implementation of Transportation Demand Management and Transportation Systems Management programs. These may include implementation of mandatory peak hour trip reduction, requirements for staggered work hours, telecommunications, increased development of employment centers where transit usage is highly viable, encouraging ride sharing in the public and private sector, provision for park and ride facilities adjacent to the regional transportation system, preparation of Traffic Management Plans and provision for transit subsidies.	Yes	The project includes a mix of land uses to reduce per-capita trips and VMT associated with the project that includes residential, commercial, educational, and recreational uses. The project does not have design elements that would conflict with adopted plans, policies, or programs that support non-motorized transportation or other alternative modes of transportation. All project-related developments will also comply with established Imperial County Municipal Codes as related to off-street parking (90402.01 Required parking spaces) for all proposed project land uses and will be addressed by subsequent project-level environmental review.
Public Transit and Railway Improvement Policies		
Policy: The County shall require developers to construct, where appropriate, transit facilities, including bus pull-outs on arterials and collectors and bus stop amenities, including lighted shelters, benches, telephones, and route information signs.	Yes	The proposed project provides sufficient right-of-way to implement planned transit improvements envisioned along Dogwood Road. Additionally, the proposed project provides for transit stops along the east-west main entry parkway if future transit service is provided through the proposed project site.
Policy: The County shall update and maintain a recreational trails bikeway plan to recommend use of bicycle routes. These routes shall connect residential areas with schools, parks, recreation areas, major employment centers, and neighborhood commercial centers.	Yes	The proposed project includes sufficient right-of-way to implement the planned Class II bicycle lanes along Dogwood Road, in addition to providing sufficient right-of-way for similar bicycle facilities along McCabe Road and Correll Road.

Additionally, the County of Imperial Public Works Department (DPW) reviews development projects for consistency with infrastructure requirements of the County. A letter dated December 5, 2008, from the County, provided requirements to be incorporated in the project as conditions of approval.

4.14.3 IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The following thresholds for measuring a project's environmental impacts are based on State CEQA Guidelines Appendix G. For the purposes of this Draft EIR, transportation and circulation impacts are considered significant if the following could result from implementation of the proposed project:

1) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections).

2) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.

3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

5) Result in inadequate emergency access.

6) Result in inadequate parking capacity.

7) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

The County of Imperial's standards for determining significance (relative to the first threshold listed above) were used to assess the project's direct and cumulative impact on intersections, street segments, and freeway mainline. These standards focus on the project's direct impact on intersections and roadway segments compared to existing conditions. They also focus on the project's incremental impact on cumulative operations of intersections and roadway segments when other related proposed projects that could add traffic in the future are considered.

Direct Impacts

The County of Imperial has established LOS C or better as the acceptable level of service at intersections and roadway segments. In general, a location operating at LOS C or better under existing conditions that degrades to a LOS D or worse due to project traffic is considered a significant direct impact. A location operating at LOS D or E under existing conditions that degrades is considered a significant direct impact based on criteria identified in **Table 4.14-9**. If the intersection or roadway segment is currently operating at LOS F, the project would have a significant direct impact if it intersection delay by 10 or more seconds or increases the roadway segment V/C ratio by more than 0.09, respectively.

It is important to note that the City of El Centro has established that LOS D is acceptable on SR 86 (4th Street) between I-8 and Main Street and on Dogwood Avenue between I-8 and Evan Hewes Highway. However, for purposes of this Draft EIR, the more conservative County of Imperial LOS C standard is utilized as an acceptable level of service.

For mainline freeway operations, Caltrans endeavors to maintain a LOS between LOS C and LOS D, though, as noted in Caltrans' Guide for the Preparation of Traffic Impact Studies, they recognize this may not always be possible. Caltrans indicates that when a freeway is operating at an acceptable level of service, that should be maintained.

Cumulative Impacts

The County's thresholds of significance for a project's cumulative impacts incorporate traffic generated by other related proposed projects that could influence future traffic conditions in the study area. These are summarized in **Table 4.14-9**. A cumulative impact can occur if the intersection or segment LOS is already operating below County standards and the project traffic increases the intersection delay by more than 2 seconds or the roadway segment V/C ratio by more than 0.02.

TABLE 4.14-9
SIGNIFICANCE CRITERIA

Existing	Existing + Project	Existing + Project + Cumulative Projects	Impact Type
Intersections			
LOS C or better	LOS C or better	LOS C or better	None
LOS C or better	LOS C or better and project adds < 2.0 seconds of delay	LOS D or worse	None
LOS C or better	LOS C or better and project adds > 2.0 seconds of delay	LOS D or worse	Cumulative
LOS C or better	LOS D or worse	LOS D or worse	Direct
LOS D	LOS D and project adds < 2.0 seconds of delay	LOS D or worse	None
LOS D	LOS D and project adds > 2.0 seconds of delay	LOS D or worse	Cumulative
LOS D	LOS E or F	LOS E or F	Direct
LOS E	LOS E and project adds < 2.0 seconds of delay	LOS E or F	None
LOS E	LOS E and project adds > 2.0 seconds of delay	LOS E or F	Cumulative
LOS E	LOS F	LOS F	Direct
LOS F	Project add < 2.0 seconds of delay	LOS F	None
LOS F	Project adds 2.0 to 9.9 seconds of delay	LOS F	Cumulative
LOS F	Project adds 10.0 or more seconds of delay	LOS F	Direct
Segments			
LOS C or better	LOS C or better	LOS C or better	None
LOS C or better	LOS or better and project increases V/C by < 0.02	LOS D or worse	None
LOS C or better	LOS C or better and project increase V/C by >0.02	LOS D or worse	Cumulative
LOS C or better	LOS D or worse	LOS D or worse	Direct[1]
LOS D	LOS D and project increases V/C by < 0.02	LOS D or worse	None

Existing	Existing + Project	Existing + Project + Cumulative Projects	Impact Type
LOS D	LOS D and project increases V/C by > 0.02	LOS D or worse	Cumulative
LOS D	LOS E or F	LOS E or F	Direct
LOS E	LOS E and project increases V/C by < 0.02	LOS E or F	None
LOS E	LOS E and project increases V/C by > 0.02	LOS E or F	Cumulative
LOS E	LOS F	LOS F	Direct
LOS F	Project increases V/C by < 0.02	LOS F	None
LOS F	Project increases V/C by > 0.02 and < 0.09	LOS F	Cumulative
LOS F	Project increases V/C by > 0.09	LOS F	Direct

Notes: LOS = Level of Service; V/C = Volume-to-Capacity Ratio; [1] Exception: If Existing + Project segment operation is LOS D and intersections along segment are LOS D or better, then there is no significant impact.
Source: PMC, 2010

It should be noted that if an intersection or roadway segment operates at LOS C or better under existing conditions and the proposed project adds a small amount of traffic resulting in an increase of 2 seconds or less in intersection delay or roadway segment V/C increase of 0.02 or less, the project is not considered to have a significant impact even if the addition of cumulative traffic causes the LOS to degrade to a poor LOS (i.e., in CEQA terms, the project's contribution is not deemed to be "cumulatively considerable") (PMC, 2010).

Due to lack of a congestion management agency or applicable congestion management plan for Imperial County, threshold #2 above is not applicable and is not evaluated further in this Draft EIR (PMC, 2010).

METHODOLOGY

For purposes of this DEIR , the proposed project was analyzed in four phases. The timeline of when the various phases will be built is wholly dependent on market conditions. However, for purposes of this traffic study, the build-out of the proposed project is assumed to occur over the span of 16 years, with each phase four years in length.

This traffic analysis assesses the key intersections and street segments in the project area. The study area intersections and segments are analyzed in the following scenarios to determine the potential impacts to the street network:

- Existing traffic volumes (2009)
- Existing + project Phase I traffic volumes (2015)
- Existing + project Phase I & II traffic volumes (2019)
- Existing + project Phase I, II, & III traffic volumes (2023)
- Existing + project Phase I, II, III, & IV (total project) traffic volumes (2027)
- Existing + total project + cumulative projects traffic volumes (2027)
- Long-term traffic volumes (2050)

Trip Generation, Distribution, and Assignment

Trip Generation

The ITE Trip Generation Manual (7th Edition, 2003) was used to determine the traffic generated for the proposed project. Trip rates identified by the San Diego Association of Governments (SANDAG) were also considered, but not ultimately used, as the ITE rates generally are higher and were used to produce a more conservative estimate of potential trip generation for the proposed project. As shown in **Table 4.14-10** and **Table 4.14-11**, the proposed project is estimated to generate 37,884 ADT, with 2,384 inbound and 2,420 outbound trips during the AM peak hour, and 2,254 inbound and 2,328 outbound trips during the PM peak hour. (PMC, 2010).

Trip Distribution and Assignment

The project traffic was distributed and assigned to the street system based on (a) the project's proximity to state highways and arterials; (b) the locations of neighboring communities such as Calexico, Heber, and El Centro; and (c) the location of employment, retail, and educational opportunities. The proximity to the international border with Mexico and locations of population centers was also factored into the distribution (PMC, 2010).

TABLE 4.14-10
PROJECT DAILY AND WEEKDAY AM PEAK HOUR TRIP GENERATION

Use (ITE Land Use Code)	Size		Daily	Weekday AM Peak Hour		
				In	Out	Total
Single Family Detached Housing (210)[1]	Per	DU	9.57	0.19	0.56	0.75
Mid-Rise Apartment (223)[2]	Per	DU	6.72	0.09	0.21	0.3
Elementary School (520)[3, 4]	per	TSF	14.49	2.53	2.16	4.69
County Park (412)[4]	per	Acre	2.28	0.008	0.002	0.01
Proposed Single Family Housing[1]	1,271	DU	12,163	241	712	953
Proposed High Density Multi-Family[2]	600	DU	4,032	54	126	180
Proposed Elementary School (McCabe)[3, 4]	399	TSF	4,047	707	603	1,310
Proposed Elementary School (Heber)[3, 4]	448	TSF	4,544	793	677	1,471
Proposed Park (open)[4]	36	Acre	41	0	0	0
Subtotal Phase I			***24,828***	***1,796***	***2,118***	***3,914***
Single Family Detached Housing (210)[1]	Per	DU	9.57	0.19	0.56	0.75
Mid-Rise Apartment (223)[2]	Per	DU	6.72	0.09	0.21	0.3
County Park (412)[4]	Per	Acre	2.28	0.008	0.002	0.01
Proposed Single Family Housing[1]	229	DU	2,192	44	128	172
Proposed High Density Multi-Family[2]	200	DU	1,344	18	42	60
Proposed Park (open)[4]	8	Acre	13	0	0	0
Proposed Park (gated)[5]	–	–	–	–	–	–
Subtotal Phase II			***3,548***	***62***	***170***	***232***
Shopping Center (820)[6]	per	TSF	42.94	0.63	0.4	1.03
Proposed Commercial[6]	134.6	TSF	4,624	68	43	111
Subtotal Phase III			***4,624***	***68***	***43***	***111***
Business Park (770)[7]	per	TSF	12.76	1.2	0.23	1.43
Proposed Business Park[7]	402.93	TSF	4,884	459	88	547
Subtotal Phase IV			***4,884***	***459***	***88***	***547***
Total Project (Phase I, II, III, and IV)			**37,884**	**2,384**	**2,420**	**4,804**

Notes: Some error due to rounding. [1] Single family housing represents all housing types described in the McCabe Ranch II Specific Plan. [2] No weekday daily rate available for Mid-Rise Apartment, extrapolated from ITE 220, Apartment. [3] ITE offers no AM/PM peak hour of adjacent street traffic for Elementary School ITE 520, used peak hour of generator rates. [4] Assumed internal capture rates of 30% for each elementary school, and 50% for park (open) uses. [5] Gated park use will generate no trips. [6] Assumed 20% internal capture for shopping center. [7] Assumed 5% internal capture for business park. Source: PMC, 2010

TABLE 4.14-11
PROJECT DAILY AND WEEKDAY PM PEAK HOUR TRIP GENERATION

Use (ITE Land Use Code)	Size		Daily	Weekday PM Peak Hour		
				In	Out	Total
Single Family Detached Housing (210)[1]	Per	DU	9.57	0.64	0.37	1.01
Mid-Rise Apartment (223)[2]	Per	DU	6.72	0.23	0.16	0.39
Elementary School (520)[3, 4]	per	TSF	14.49	1.35	1.78	3.13
County Park (412)[4]	per	Acre	2.28	0.025	0.035	0.06
Proposed Single Family Housing[1]	1,271	DU	12,163	813	470	1,284
Proposed High Density Multi-Family[2]	600	DU	4,032	138	96	234
Proposed Elementary School (McCabe)[3, 4]	399	TSF	4,047	377	497	874
Proposed Elementary School (Heber)[3, 4]	448	TSF	4,544	423	558	982
Proposed Park (open)[4]	36	Acre	41	0	1	1
Subtotal Phase I			***24,828***	***1,752***	***1,622***	***3,375***
Single Family Detached Housing (210)[1]	Per	DU	9.57	0.64	0.37	1.01
Mid-Rise Apartment (223)[2]	Per	DU	6.72	0.23	0.16	0.39
County Park (412)[4]	Per	Acre	2.28	0.025	0.035	0.06
Proposed Single Family Housing[1]	229	DU	2,192	147	85	231
Proposed High Density Multi-Family[2]	200	DU	1,344	46	32	78
Proposed Park (open)[4]	8	Acre	13	0	0	0
Proposed Park (gated)[5]	–	–	–	–	–	–
Subtotal Phase II			***3,548***	***193***	***117***	***310***
Shopping Center (820)[6]	per	TSF	42.94	1.8	1.95	3.75
Proposed Commercial[6]	134.6	TSF	4,624	194	210	404
Subtotal Phase III			***4,624***	***194***	***210***	***404***
Business Park (770)[7]	per	TSF	12.76	0.3	0.99	1.29
Proposed Business Park[7]	402.93	TSF	4,884	115	379	494
Subtotal Phase IV			***4,884***	***115***	***379***	***494***
Total Project (Phase I, II, III, and IV)			**37,884**	**2,254**	**2,328**	**4,582**

Notes: Some error due to rounding. [1] Single-family housing represents all housing types described in the McCabe Ranch II Specific Plan. [2] No weekday daily rate available for Mid-Rise Apartment, extrapolated from ITE 220, Apartment. [3] ITE offers no AM/PM peak hour of adjacent street traffic for Elementary School ITE 520, used peak hour of generator rates. [4] Assumed internal capture rates of 30% for each elementary school, and 50% for park (open) uses. [5] Gated park use will generate no trips. [6] Assumed 20% internal capture for shopping center. [7] Assumed 5% internal capture for business park.

Source: PMC, 2010

Figure 4.14-3 depicts the regional trip distribution in the project area; **Figure 4.14-4 (a,b,c,d,e)**, **Figure 4.14-5 (a,b,c,d,e)**, **Figure 4.14-6 (a,b,c,d,e)**, and **Figure 4.14-7 (a,b,c,d,e)** illustrate the project traffic volume assignments for Phase I, Phases I and II, Phases I, II, and III, and total project (Phases I, II, III, and IV), respectively, based on this distribution.

Figure 4.14-8 (a,b,c,d,e) shows the existing traffic volumes with the addition of Phase I project traffic. **Figure 4.14-9 (a,b,c,d,e)** shows the existing traffic volumes with the addition of Phases I and II project traffic. **Figure 4.14-10 (a,b,c,d,e)** shows the existing traffic volumes with the addition of Phases I, II, and III project traffic. **Figure 4.14-11 (a,b,c,d,e)** shows the existing traffic volumes with the addition of total project traffic (Phases I, II, III, and IV).

Analysis of Near-Term Scenarios

The scenarios analyzed below assess the traffic impact of Phase I, Phases I and II, Phases I, II, and III, and the total project (Phases I, II, III, and IV) compared to existing conditions. This analysis includes intersection, street segment, and freeway mainline operations.

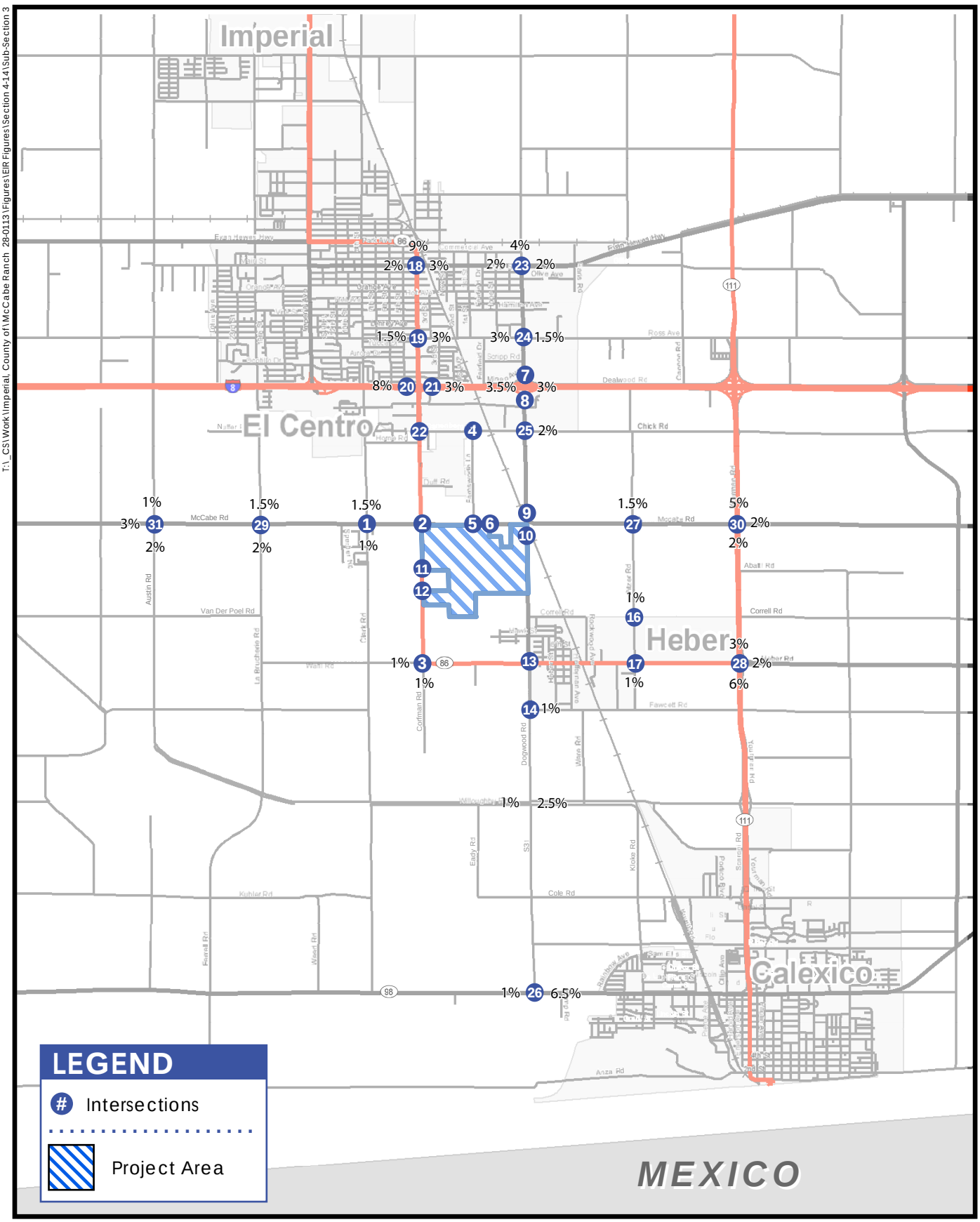
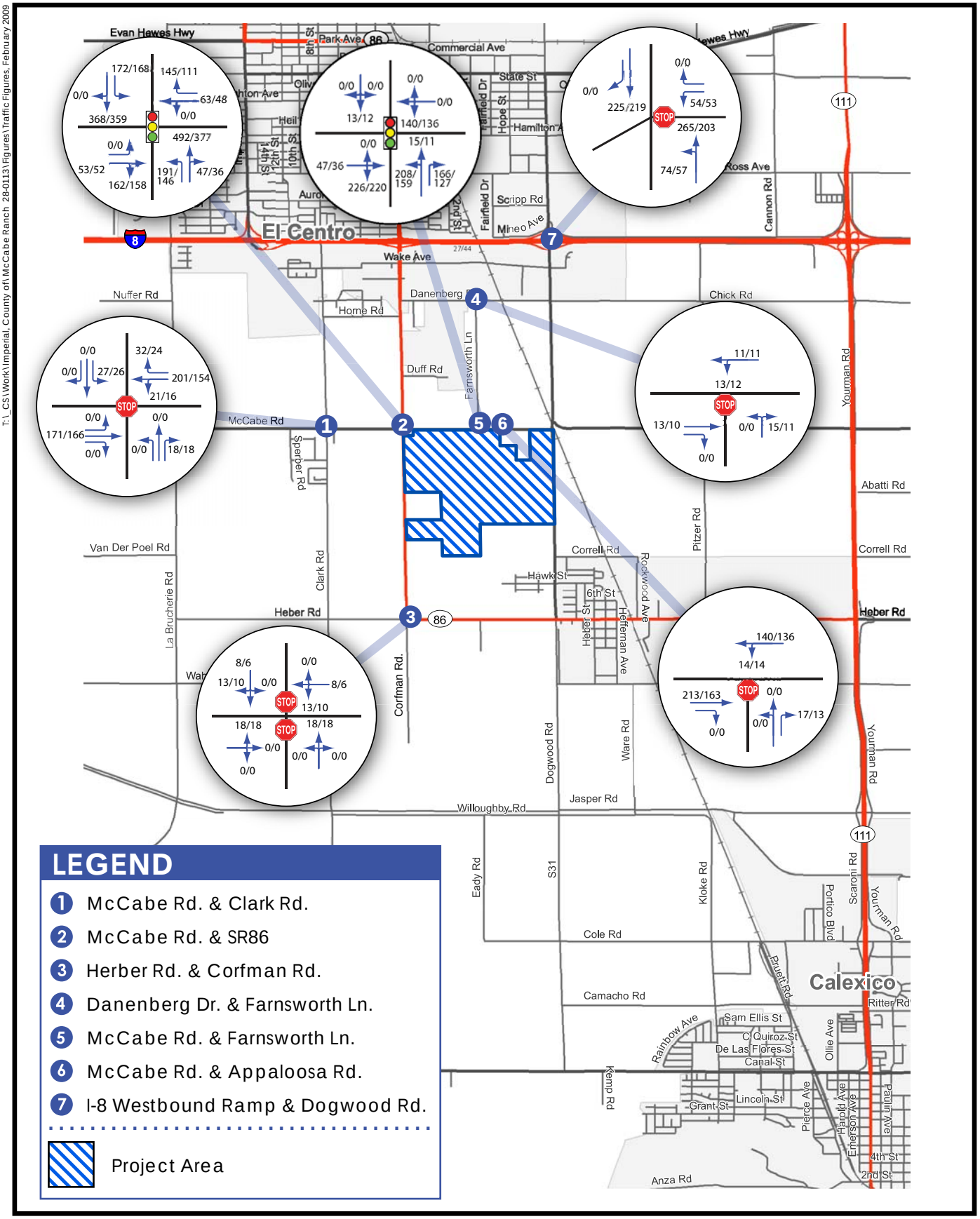


Figure 4.14-3
Regional Trip Distribution



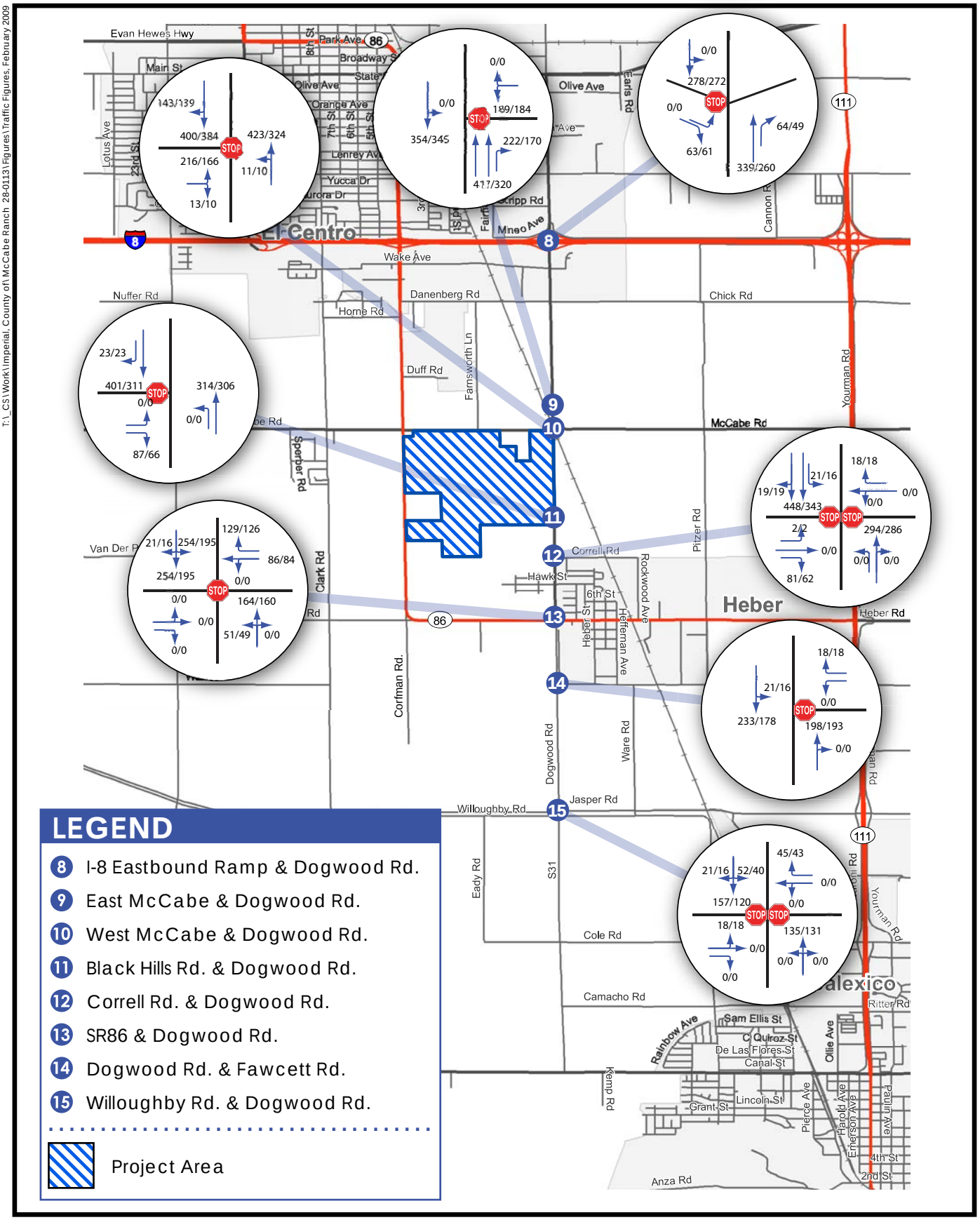
No Scale

N

Figure 4.14-4a

Phase I AM/PM Traffic Volumes

PMC



LEGEND

- 8 I-8 Eastbound Ramp & Dogwood Rd.
- 9 East McCabe & Dogwood Rd.
- 10 West McCabe & Dogwood Rd.
- 11 Black Hills Rd. & Dogwood Rd.
- 12 Correll Rd. & Dogwood Rd.
- 13 SR86 & Dogwood Rd.
- 14 Dogwood Rd. & Fawcett Rd.
- 15 Willoughby Rd. & Dogwood Rd.

Project Area

No Scale

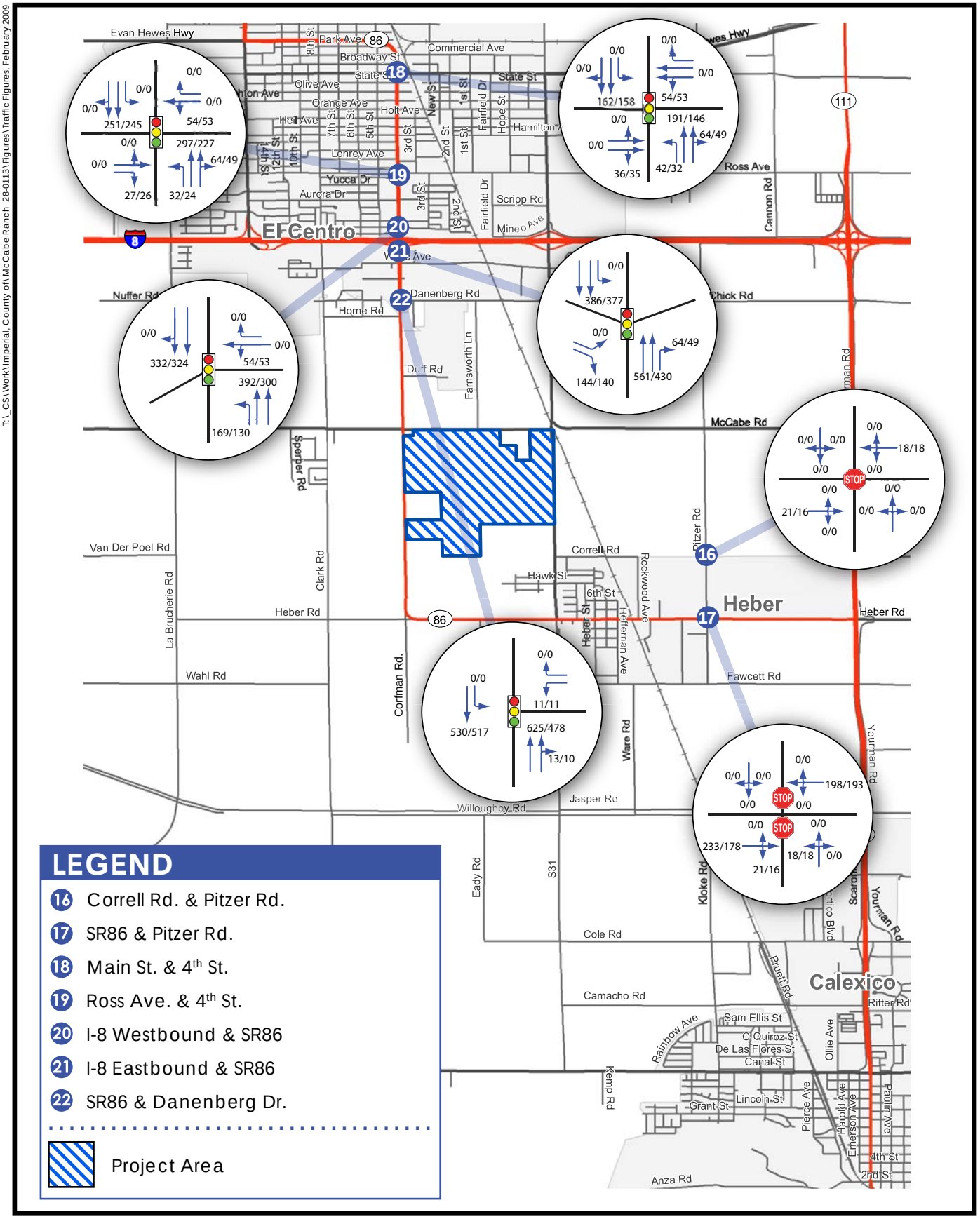
N

Figure 4.14-4b

Phase I AM/PM Traffic Volumes

PMC

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



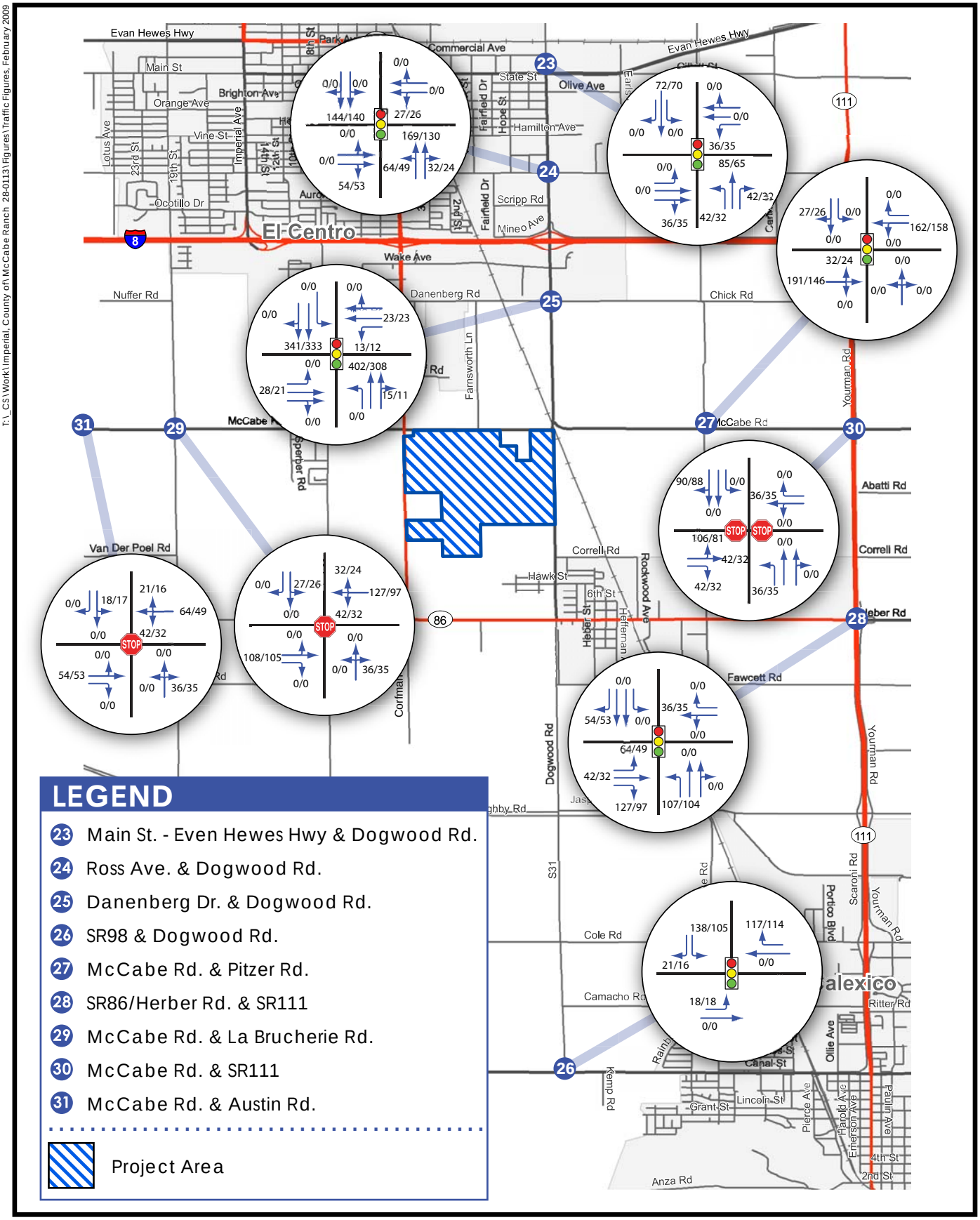
No Scale

N

Figure 4.14-4c

Phase I AM/PM Traffic Volumes

PMC



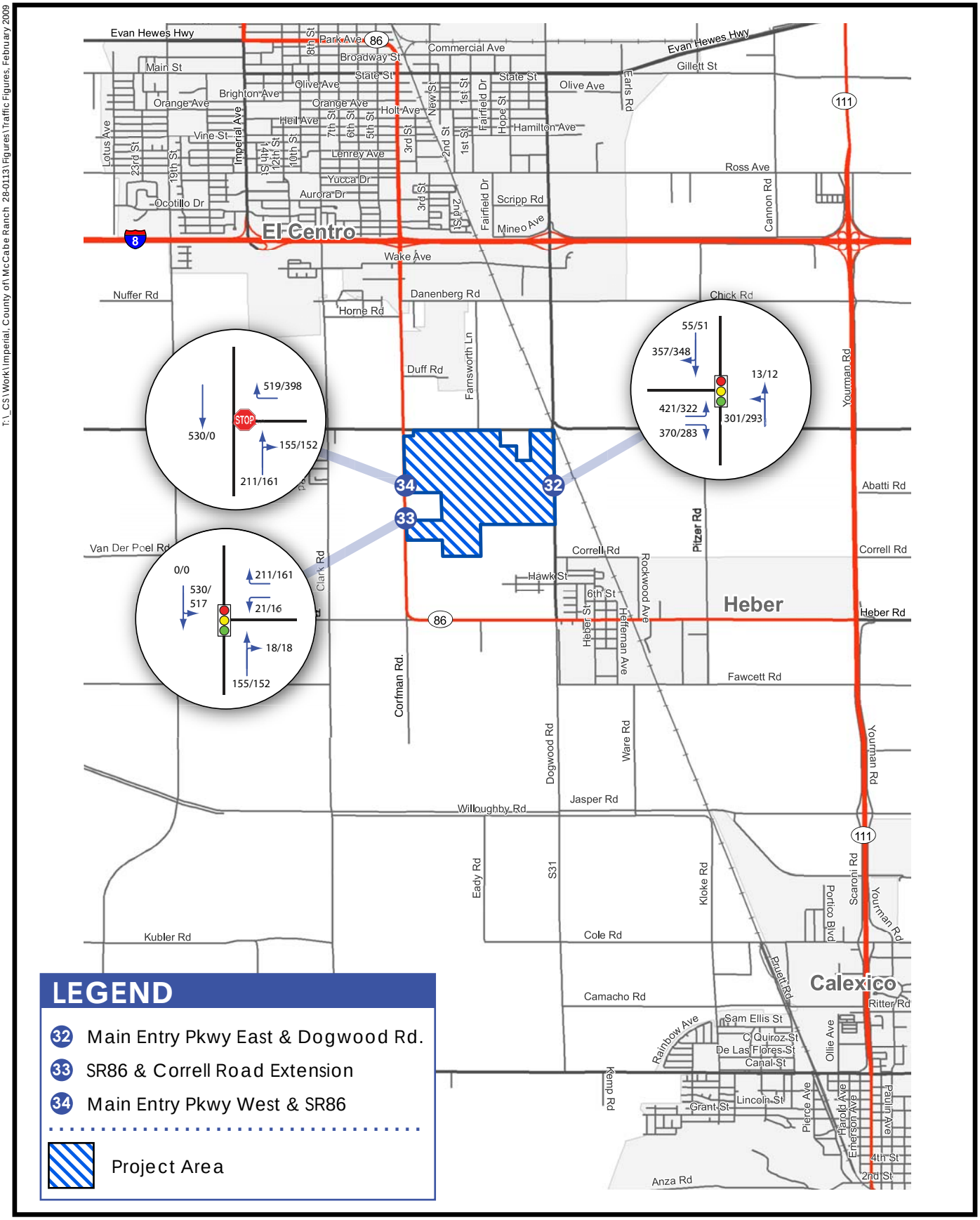
No Scale

N

Figure 4.14-4d

Phase I AM/PM Traffic Volumes

PMC



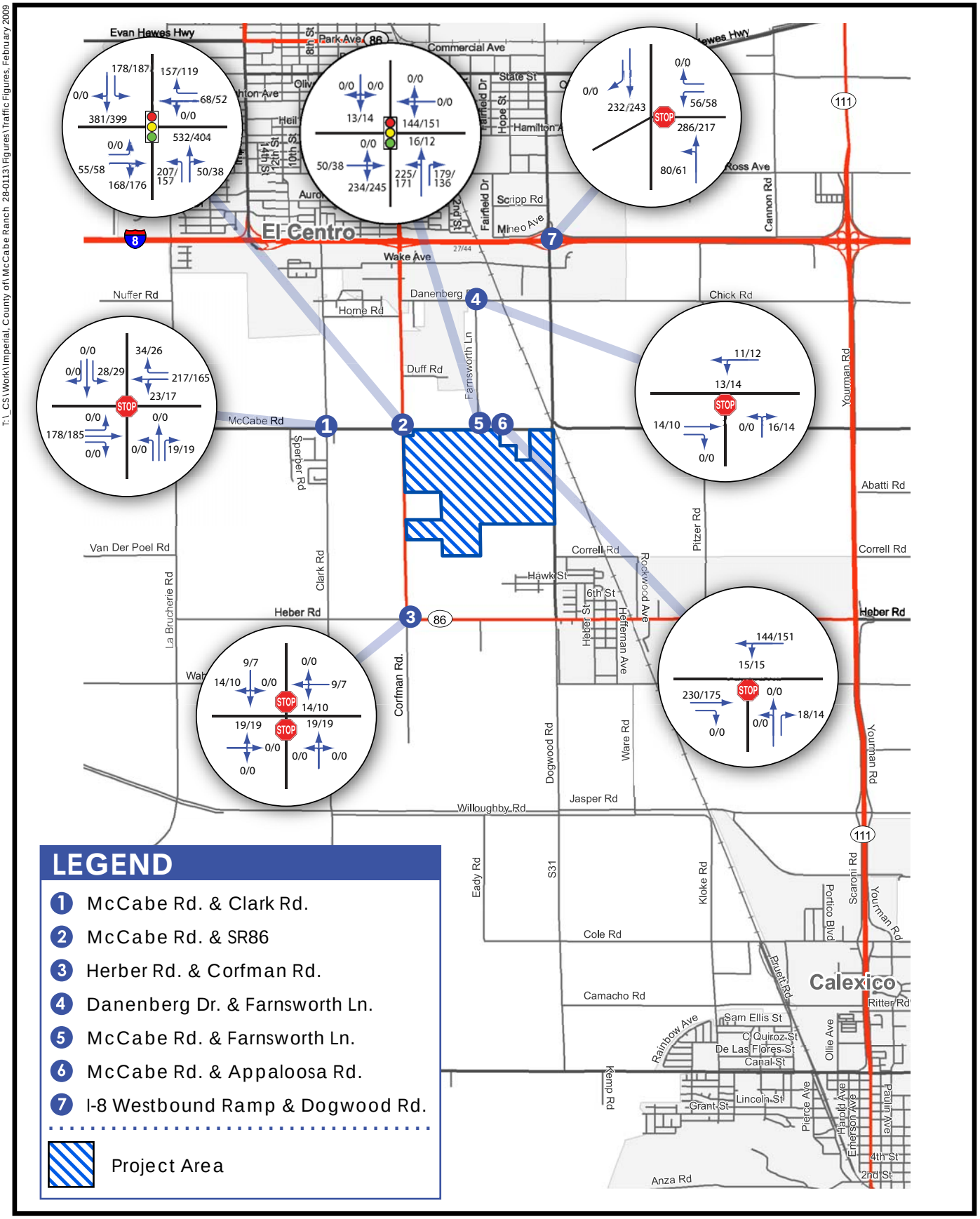
No Scale

N

Figure 4.14-4e

Phase I AM/PM Traffic Volumes

PMC



No Scale

N

Figure 4.14-5a

Phase I & II AM/PM Traffic Volumes

PMC

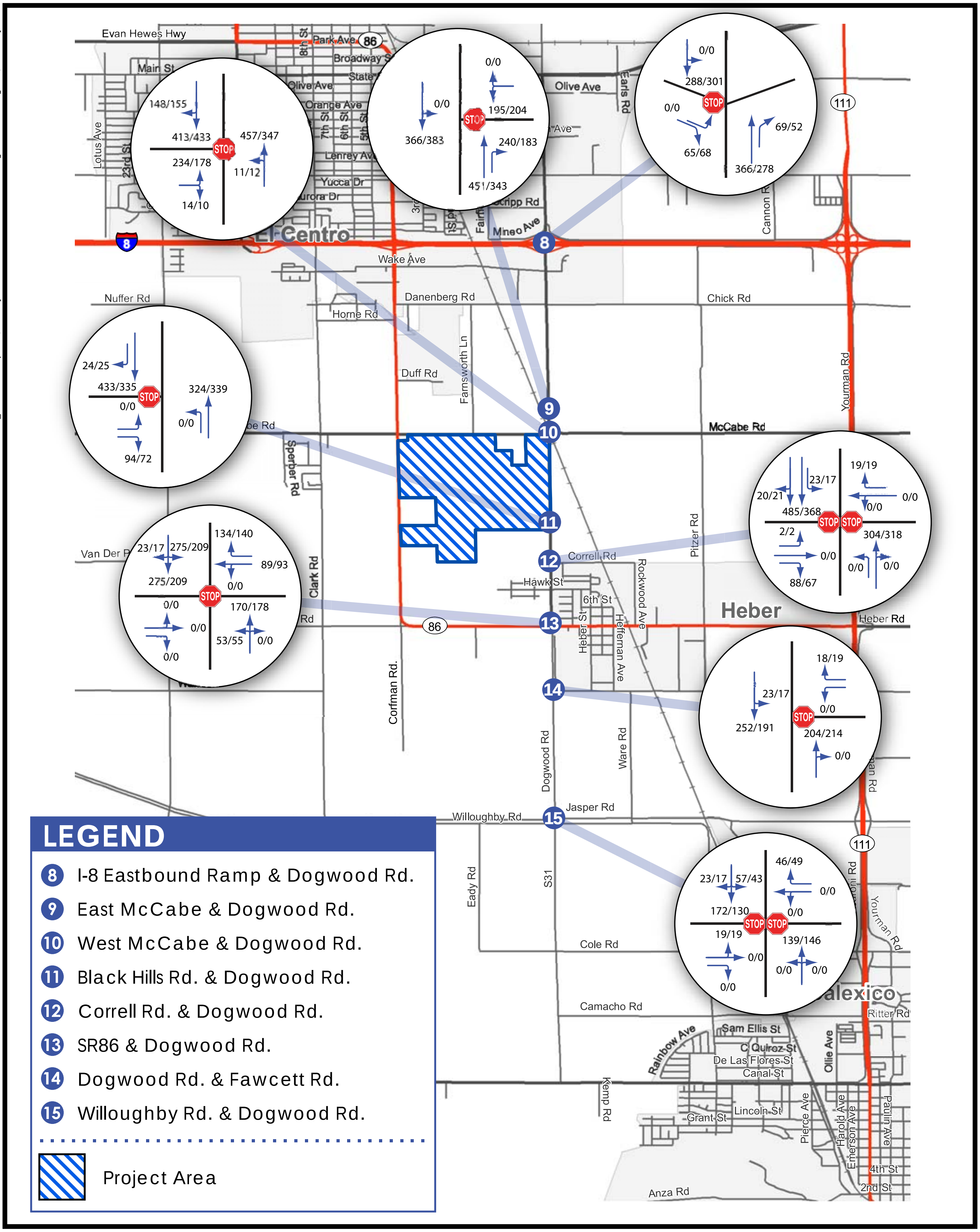
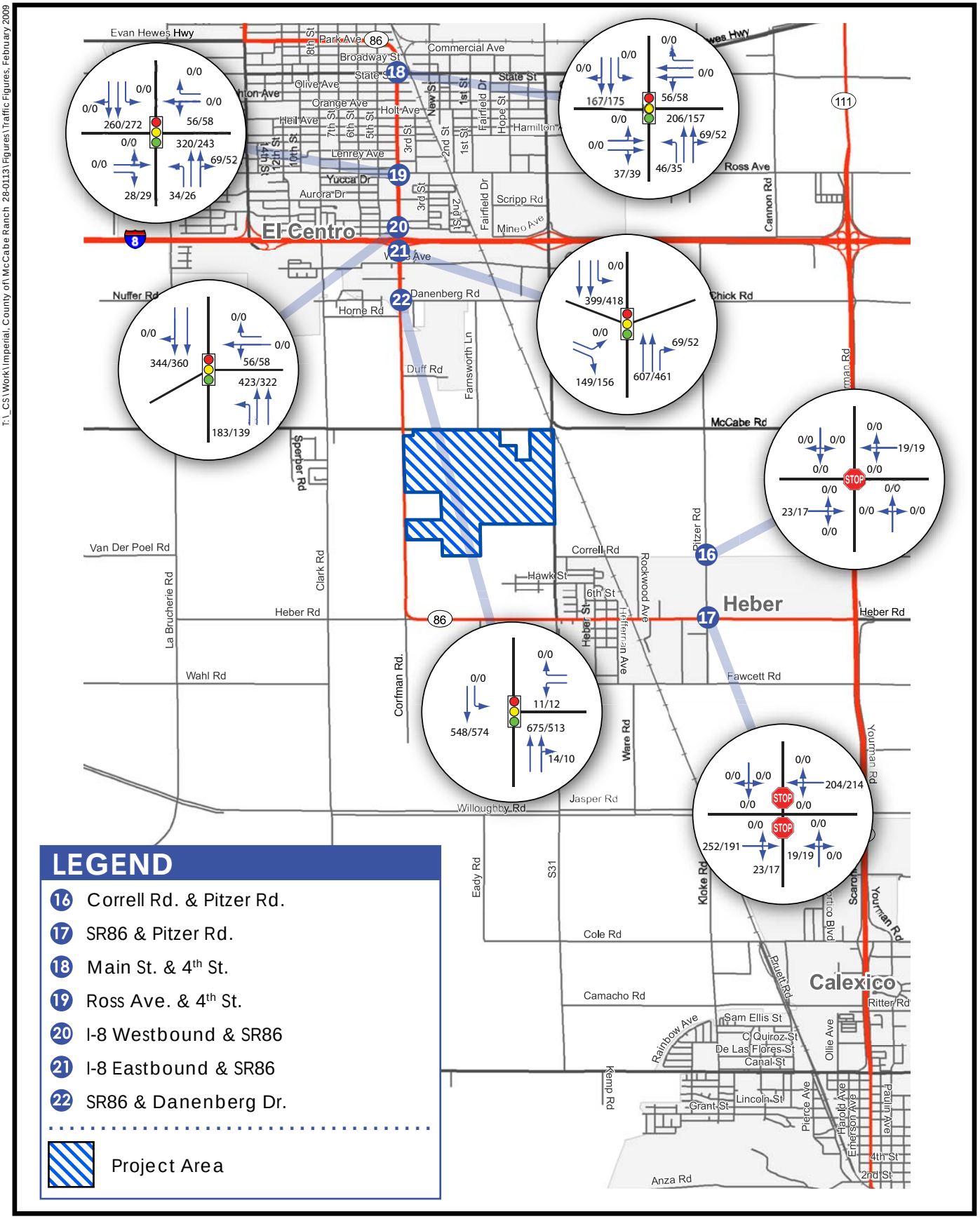


Figure 4.14-5b

Phase I & II AM/PM Traffic Volumes

PMC

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



No Scale

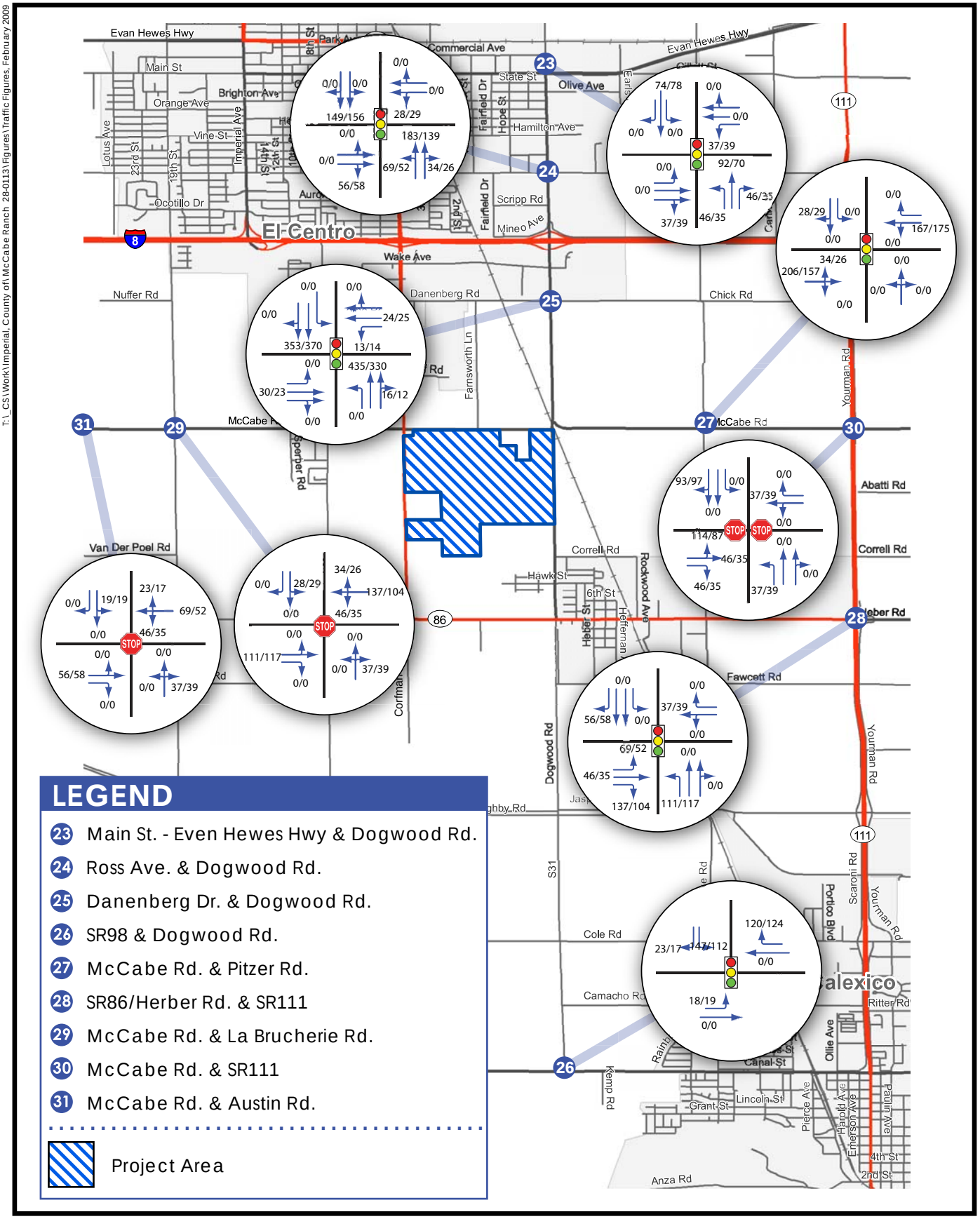
N

Figure 4.14-5c

Phase I & II AM/PM Traffic Volumes

PMC

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



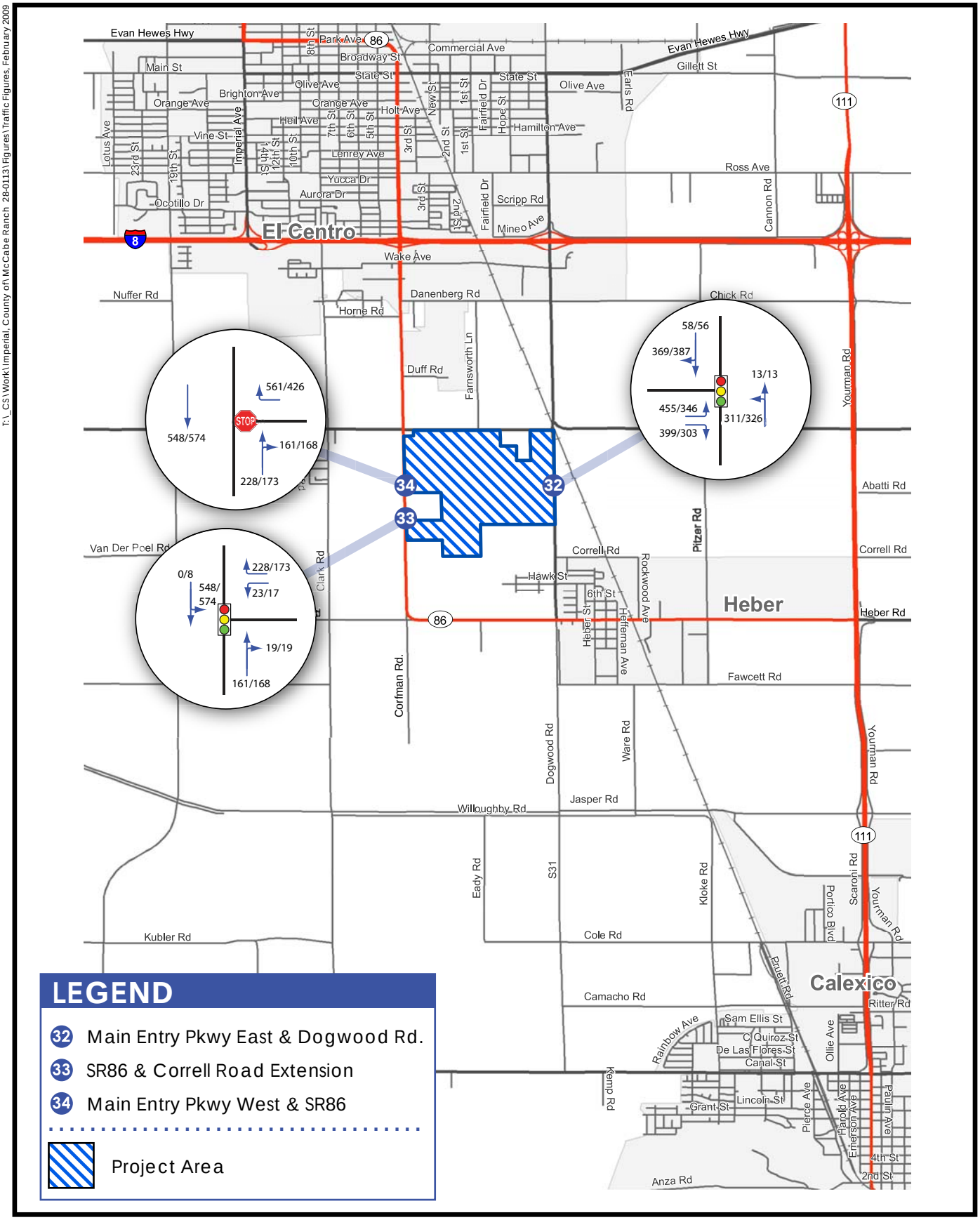
No Scale

N

Figure 4.14-5d

Phase I & II AM/PM Traffic Volumes

PMC



No Scale

N

Figure 4.14-5e

Phase I & II AM/PM Traffic Volumes

PMC

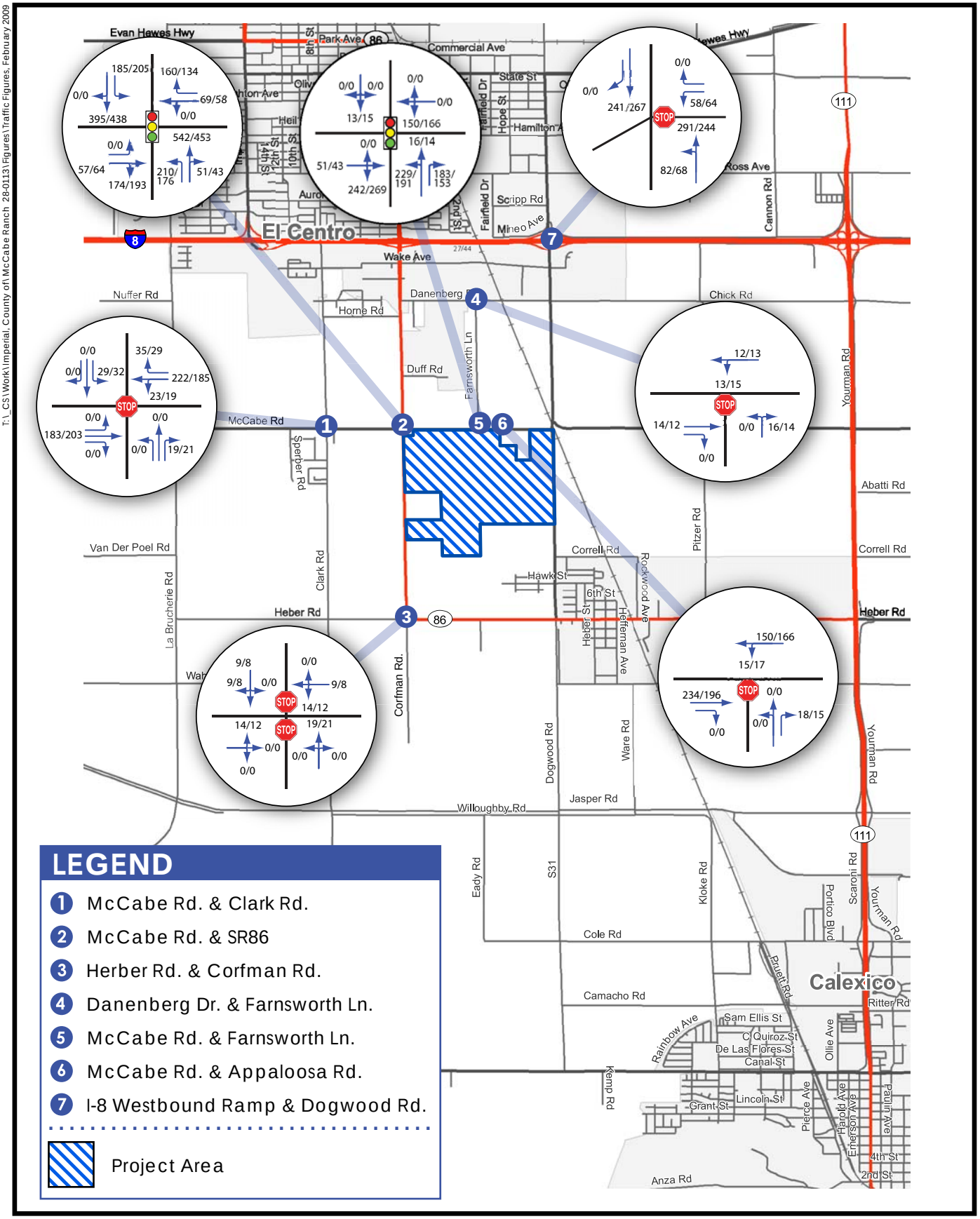
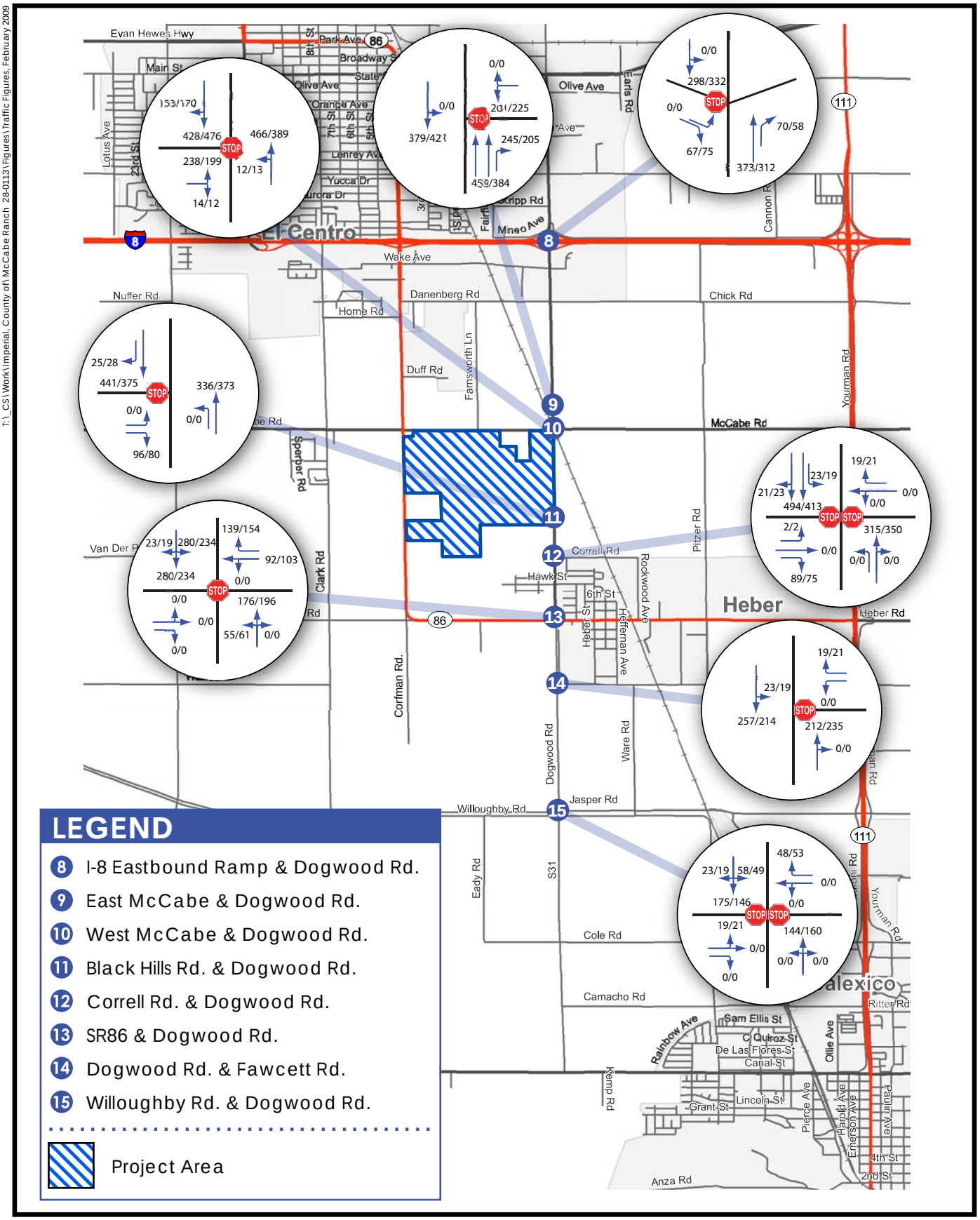


Figure 4.14-6a

Phase I, II & III AM/PM Traffic Volumes

PMC



LEGEND

- 8 I-8 Eastbound Ramp & Dogwood Rd.
- 9 East McCabe & Dogwood Rd.
- 10 West McCabe & Dogwood Rd.
- 11 Black Hills Rd. & Dogwood Rd.
- 12 Correll Rd. & Dogwood Rd.
- 13 SR86 & Dogwood Rd.
- 14 Dogwood Rd. & Fawcett Rd.
- 15 Willoughby Rd. & Dogwood Rd.

Project Area

No Scale

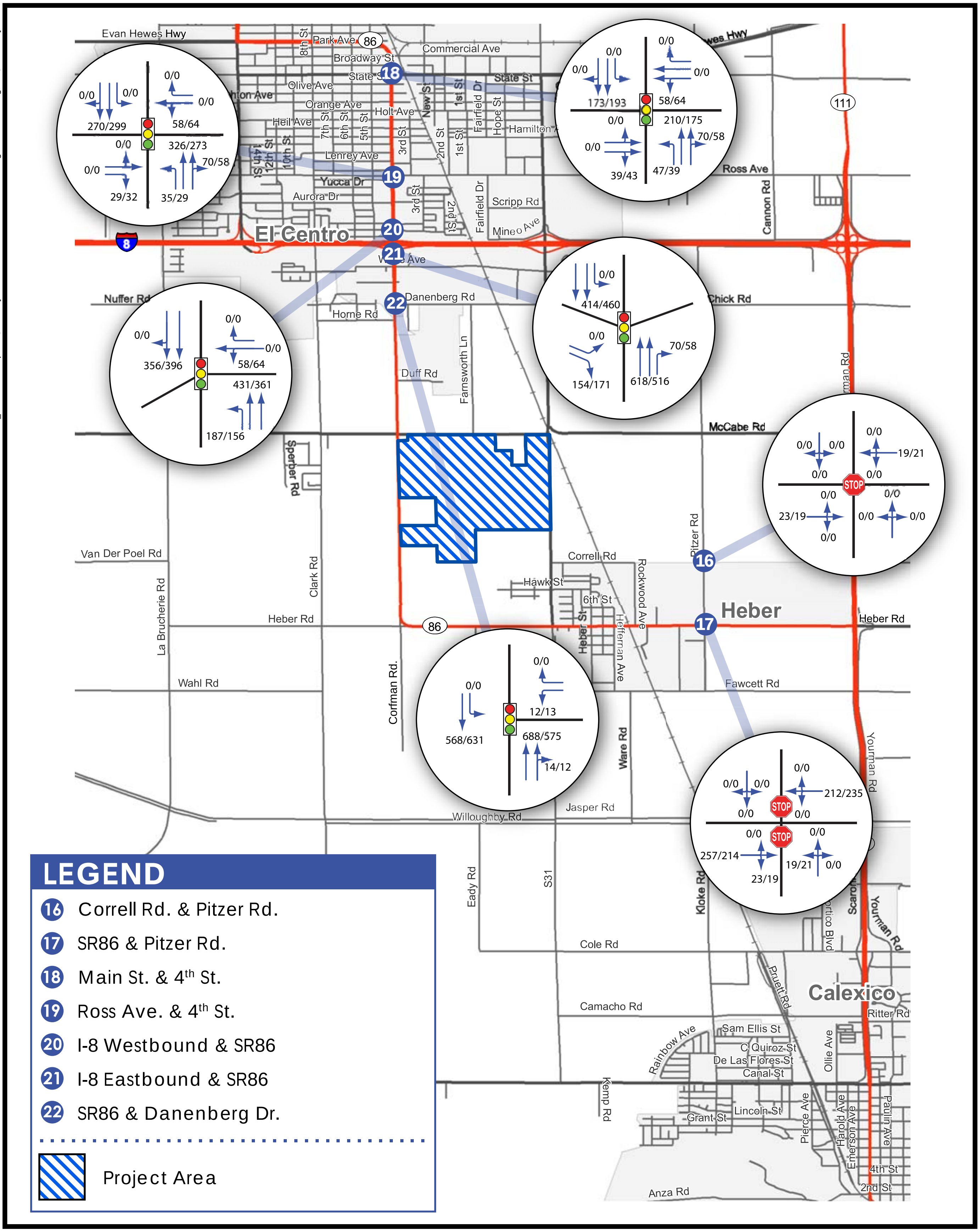
N

Figure 4.14-6b

Phase I, II & III AM/PM Traffic Volumes

PMC

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



No Scale

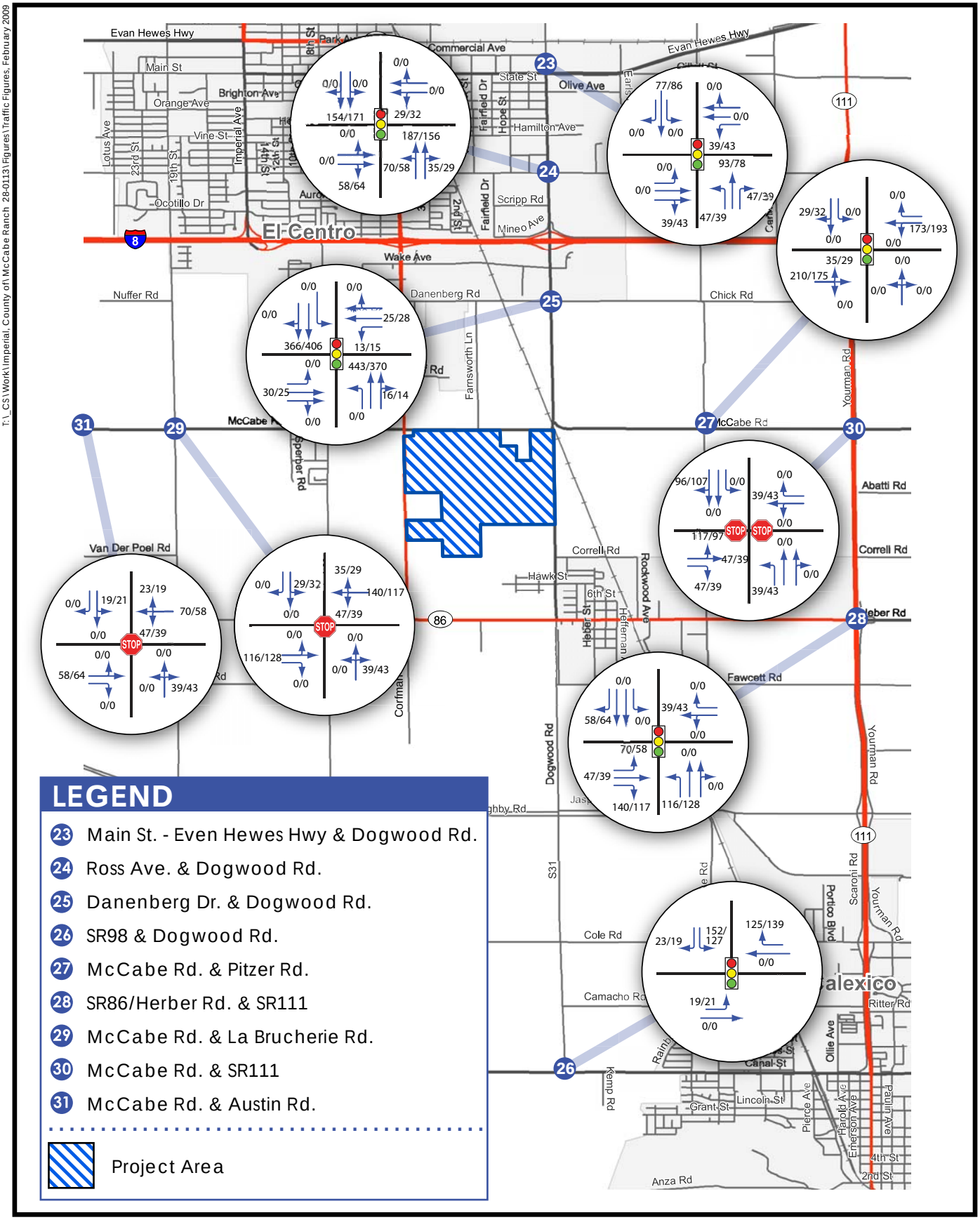
N

Figure 4.14-6c

Phase I, II & III AM/PM Traffic Volumes

PMC®

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



LEGEND

23 Main St. - Even Hewes Hwy & Dogwood Rd.
24 Ross Ave. & Dogwood Rd.
25 Danenberg Dr. & Dogwood Rd.
26 SR98 & Dogwood Rd.
27 McCabe Rd. & Pitzer Rd.
28 SR86/Herber Rd. & SR111
29 McCabe Rd. & La Brucherie Rd.
30 McCabe Rd. & SR111
31 McCabe Rd. & Austin Rd.

Project Area

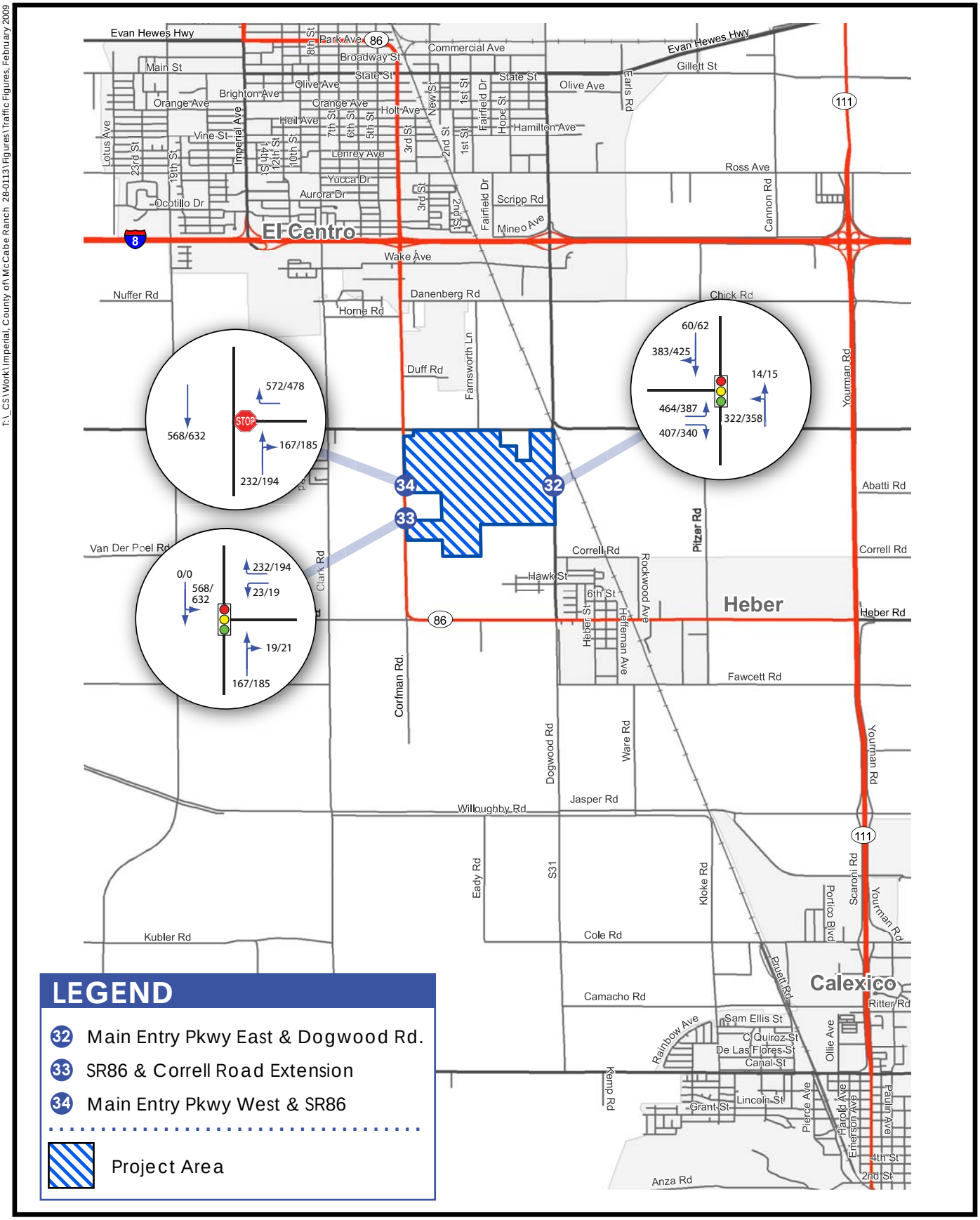
No Scale

N

Figure 4.14-6d

Existing Phase I, II & III AM/PM Traffic Volumes

PMC



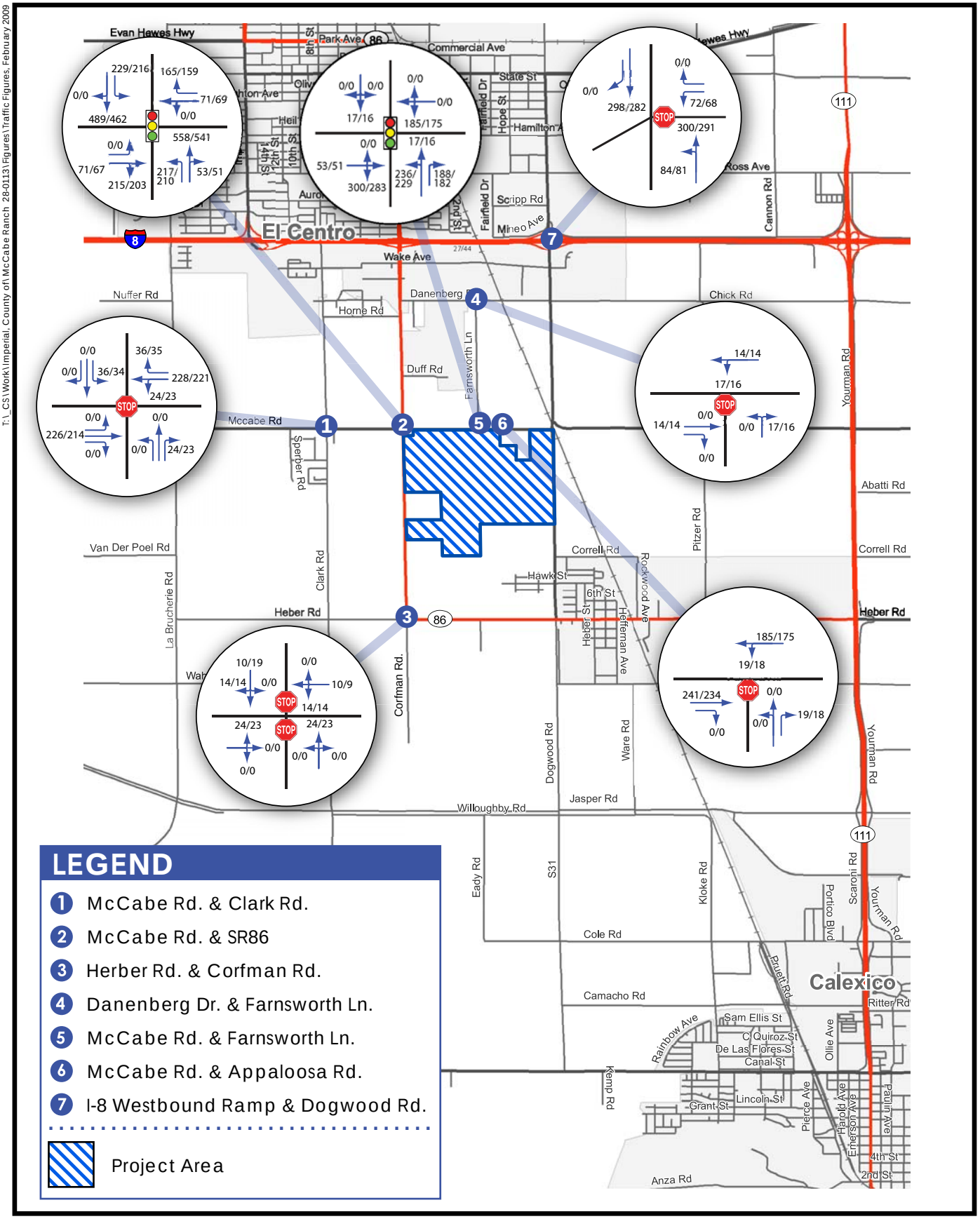
No Scale

N

Figure 4.14-6e

Phase I, II & III AM/PM Traffic Volumes

PMC



LEGEND

1. McCabe Rd. & Clark Rd.
2. McCabe Rd. & SR86
3. Herber Rd. & Corfman Rd.
4. Danenberg Dr. & Farnsworth Ln.
5. McCabe Rd. & Farnsworth Ln.
6. McCabe Rd. & Appaloosa Rd.
7. I-8 Westbound Ramp & Dogwood Rd.

Project Area

No Scale

N

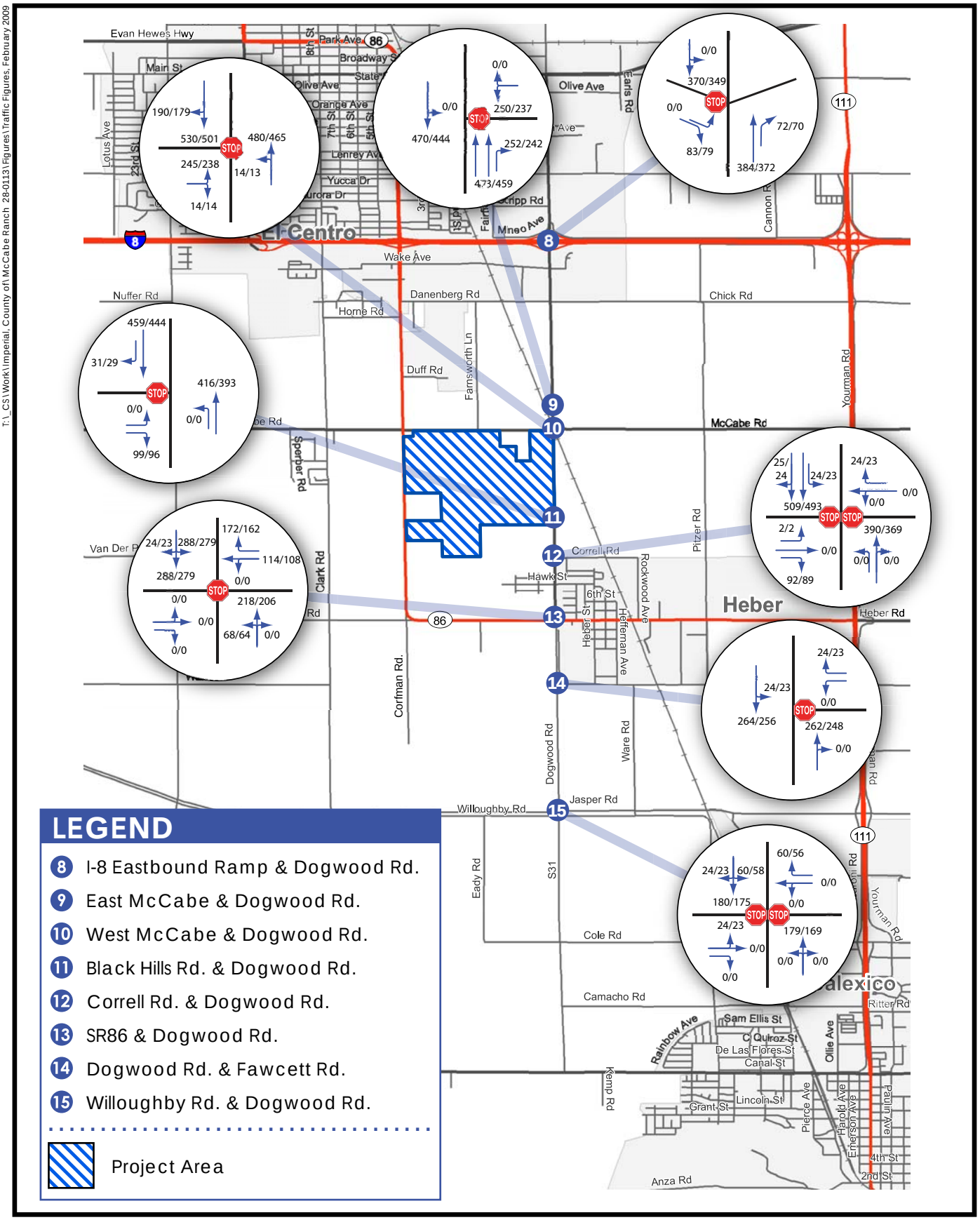
Figure 4.14-7a

Total Project (Phase I, II, III, & IV)

AM/PM Peak Hour Traffic Volumes

PMC®

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



No Scale

N

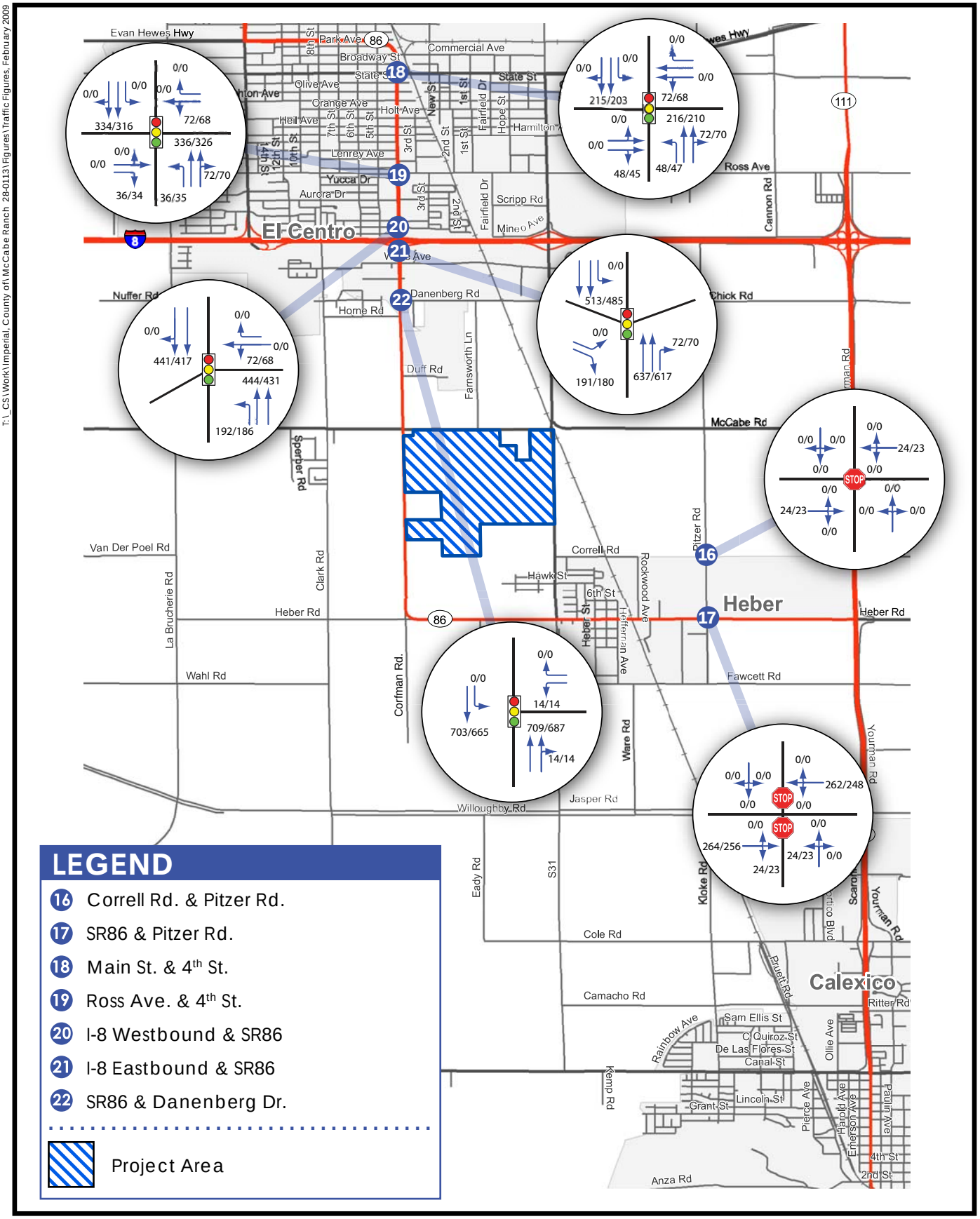
Figure 4.14-7b

Total Project (Phase I, II, III, & IV)

AM/PM Peak Hour Traffic Volumes

PMC®

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



No Scale

N

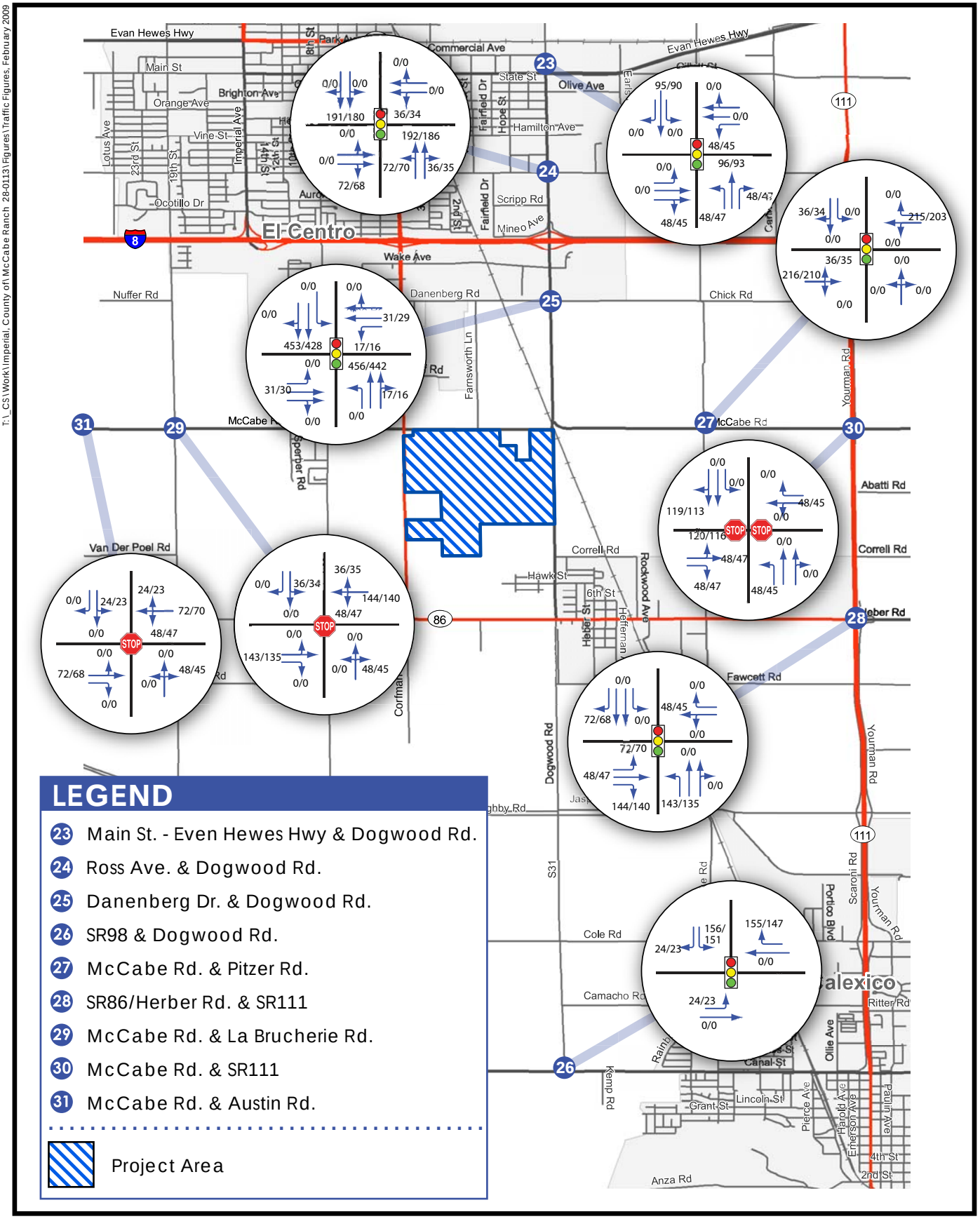
Figure 4.14-7c

Total Project (Phase I, II, III, & IV)

AM/PM Peak Hour Traffic Volumes

PMC

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



LEGEND

23 Main St. - Even Hewes Hwy & Dogwood Rd.
24 Ross Ave. & Dogwood Rd.
25 Danenberg Dr. & Dogwood Rd.
26 SR98 & Dogwood Rd.
27 McCabe Rd. & Pitzer Rd.
28 SR86/Herber Rd. & SR111
29 McCabe Rd. & La Brucherie Rd.
30 McCabe Rd. & SR111
31 McCabe Rd. & Austin Rd.

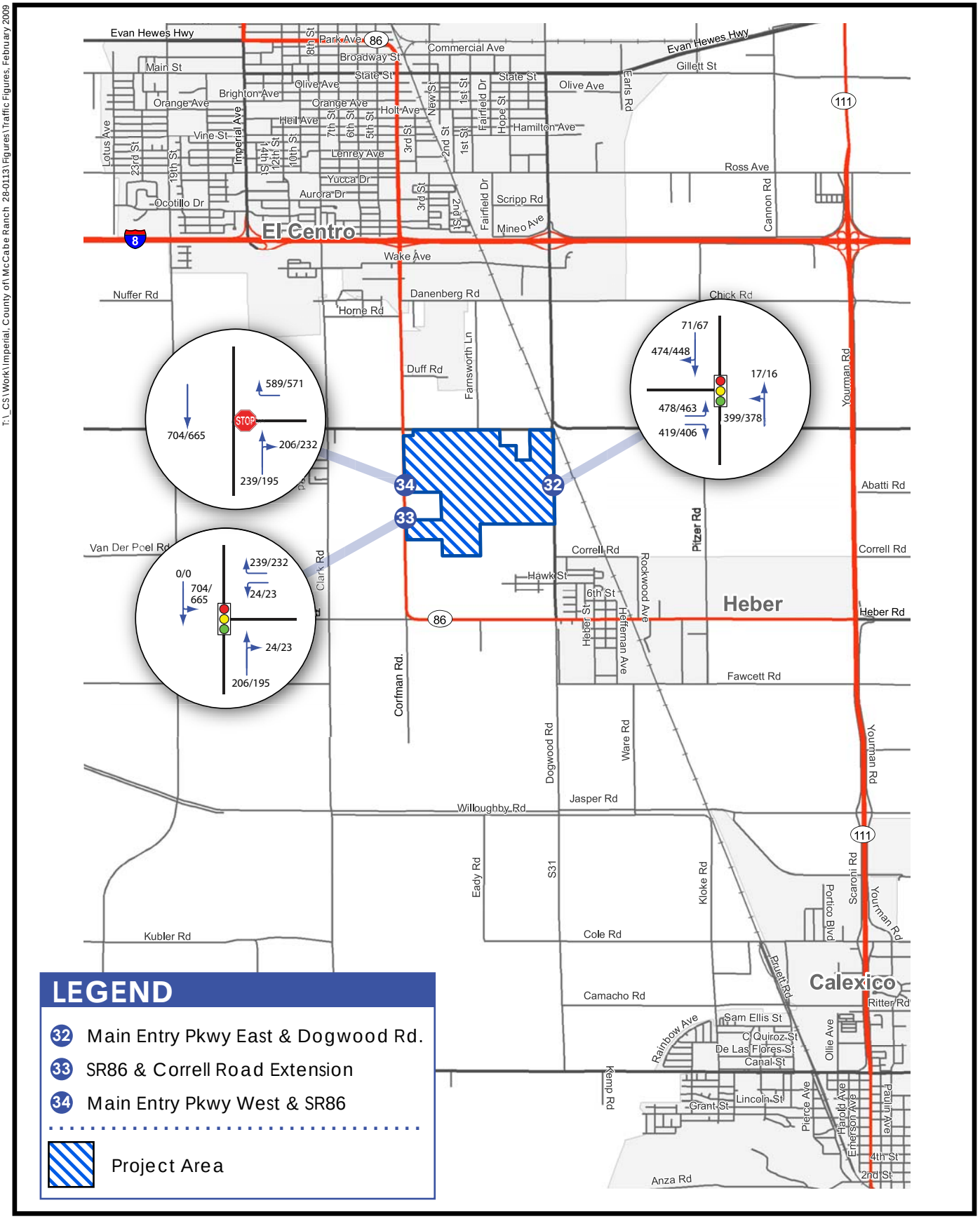
Project Area

No Scale

N

Figure 4.14-7d
Total Project (Phase I, II, III, & IV)
AM/PM Peak Hour Traffic Volumes

PMC®



No Scale

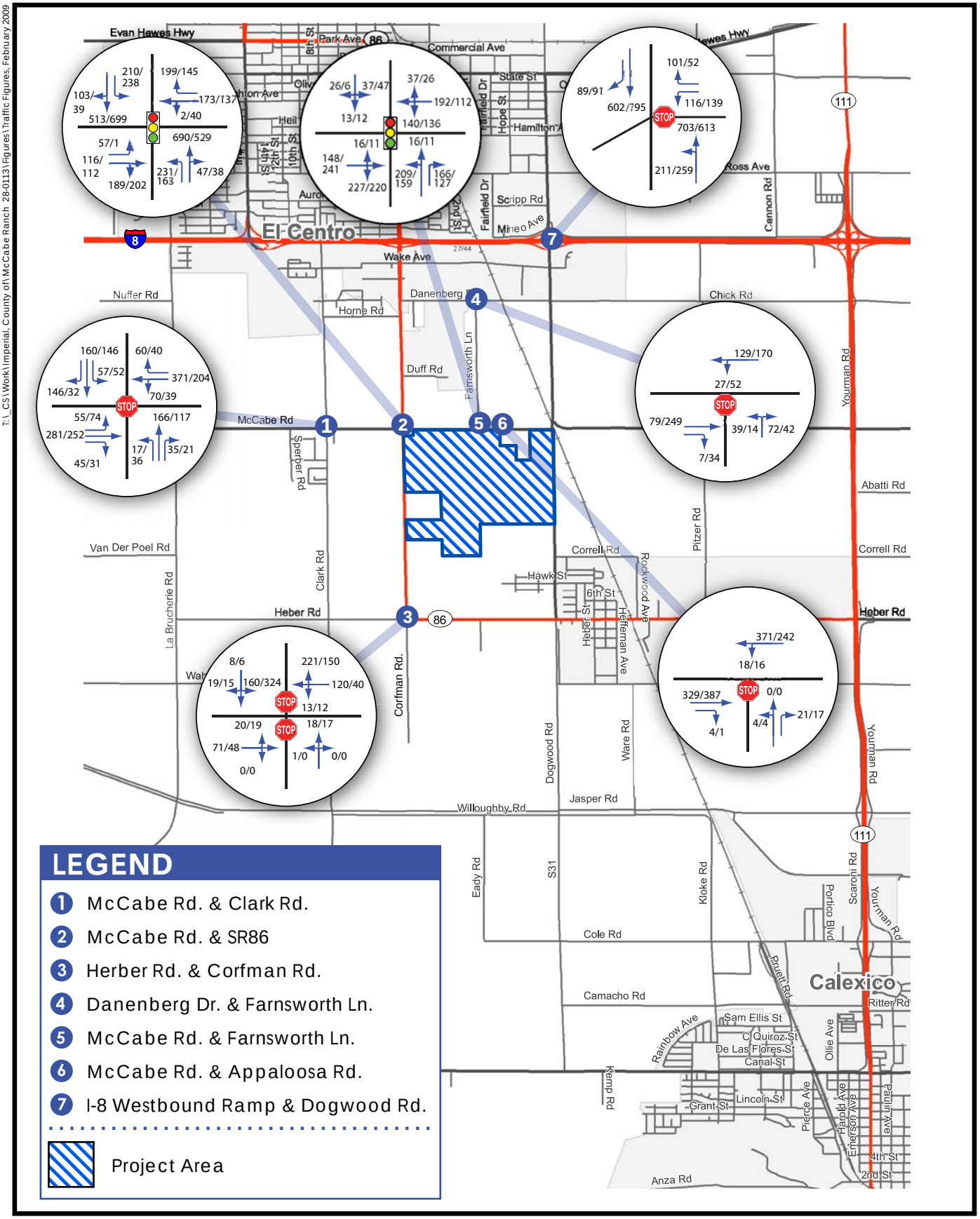
N

Figure 4.14-7e

Total Project (Phase I, II, III, & IV)

AM/PM Peak Hour Traffic Volumes

PMC®



No Scale

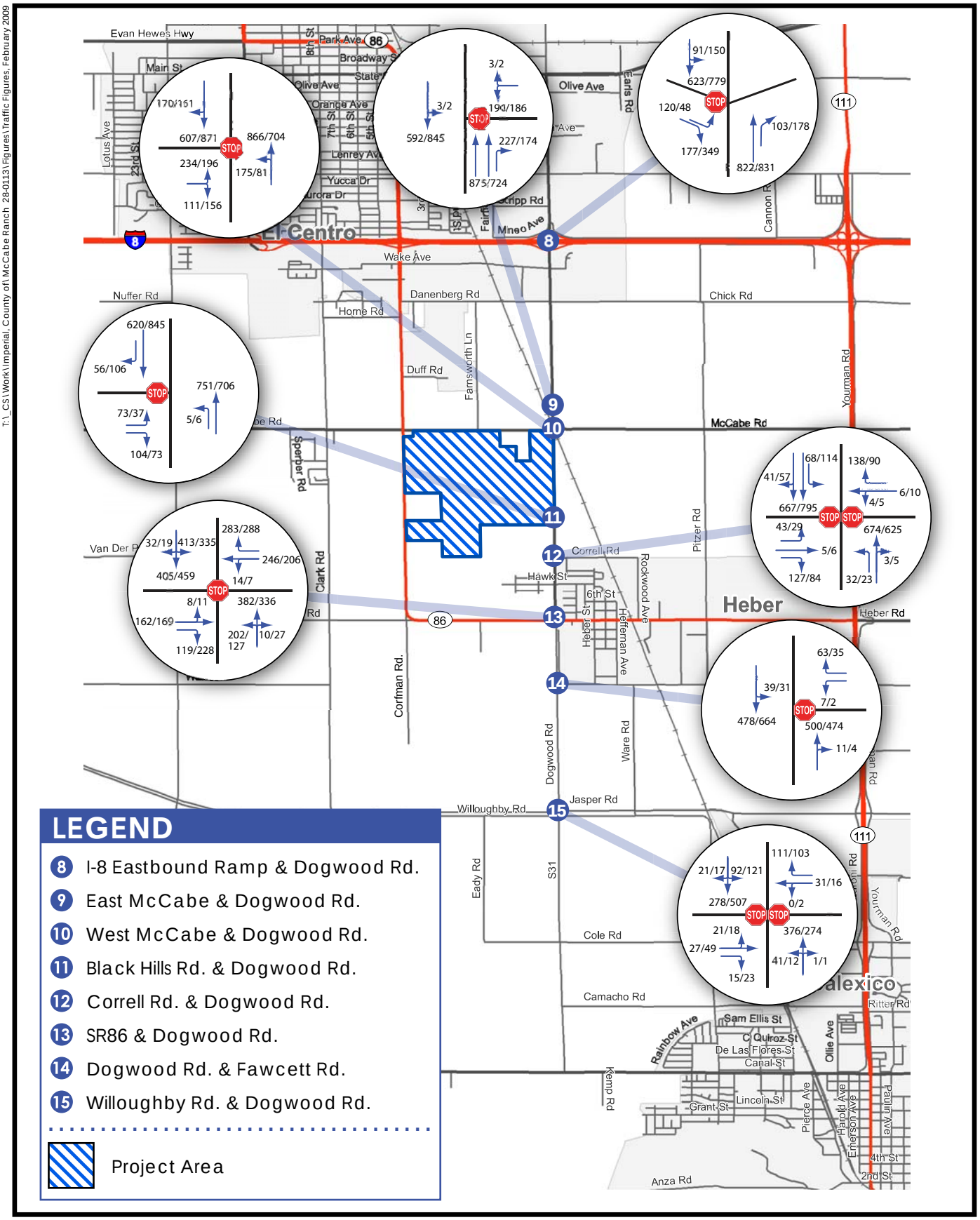
N

Figure 4.14-8a

Existing Plus Phase I Project

AM/PM Peak Hour Traffic Volumes

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



LEGEND

8. I-8 Eastbound Ramp & Dogwood Rd.
9. East McCabe & Dogwood Rd.
10. West McCabe & Dogwood Rd.
11. Black Hills Rd. & Dogwood Rd.
12. Correll Rd. & Dogwood Rd.
13. SR86 & Dogwood Rd.
14. Dogwood Rd. & Fawcett Rd.
15. Willoughby Rd. & Dogwood Rd.

Project Area

No Scale

N

Figure 4.14-8b

Existing Plus Phase I Project

AM/PM Peak Hour Traffic Volumes

PMC®

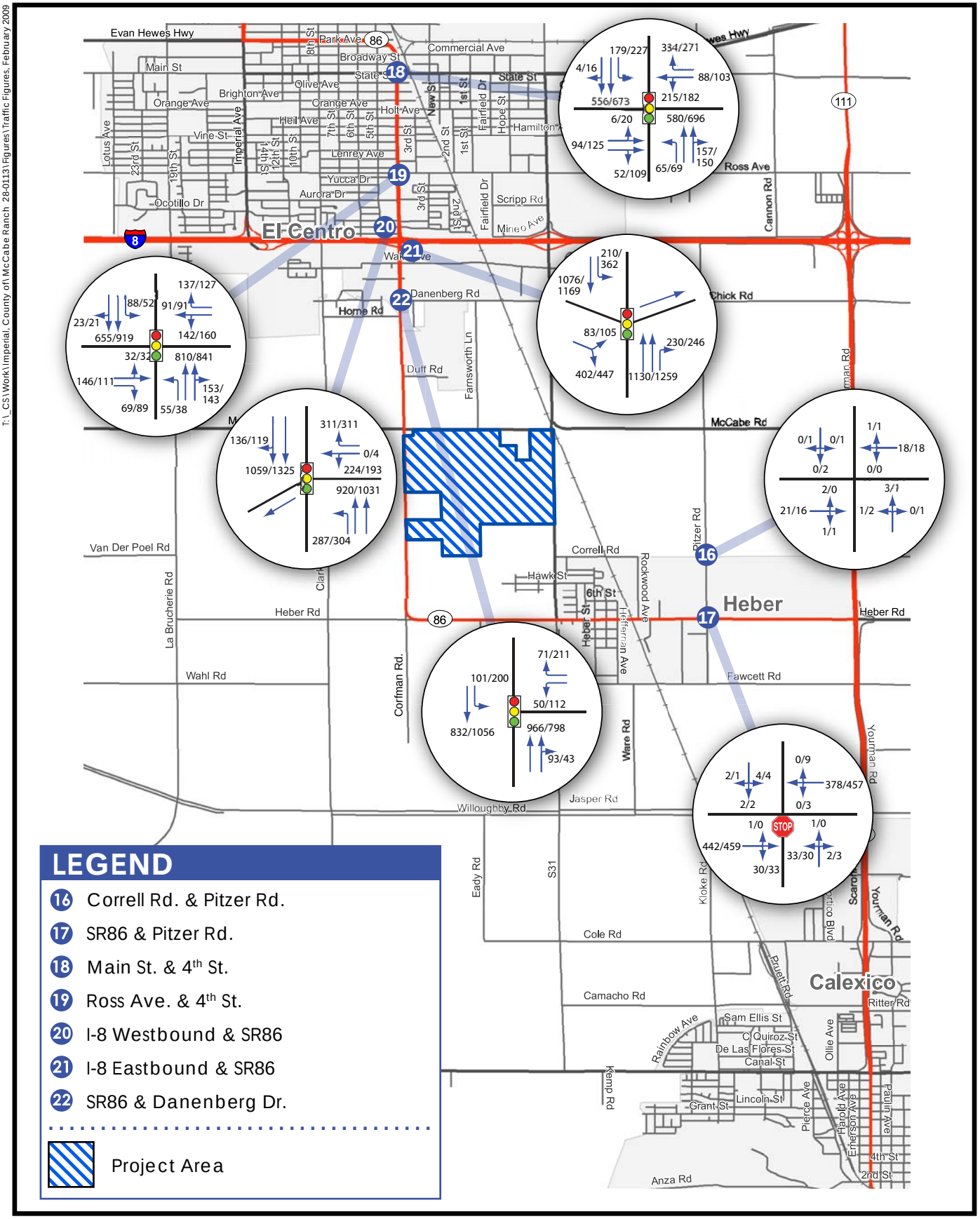


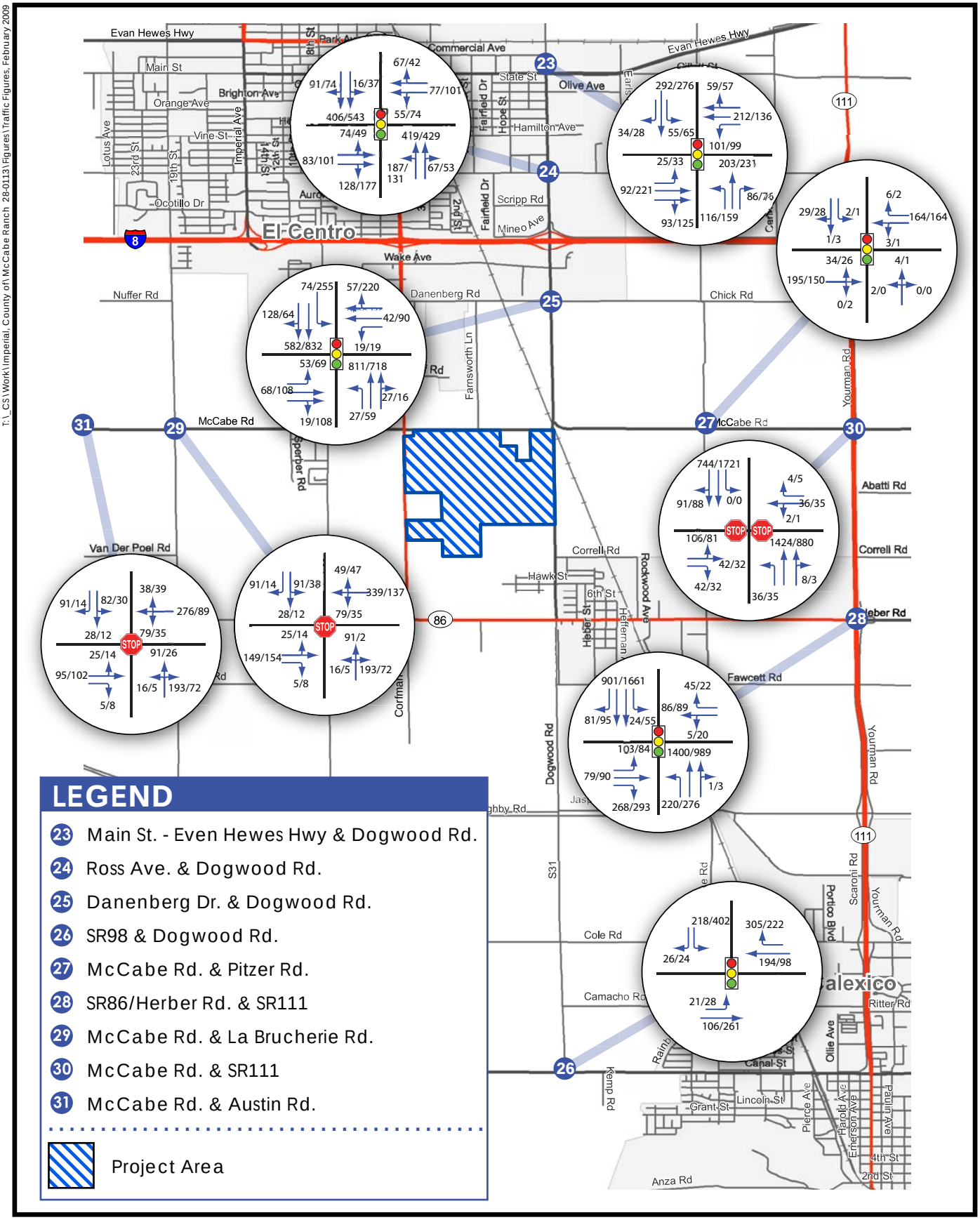
Figure 4.14-8c

Existing Plus Phase I Project

AM/PM Peak Hour Traffic Volumes

PMC®

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



LEGEND

- 23 Main St. - Even Hewes Hwy & Dogwood Rd.
- 24 Ross Ave. & Dogwood Rd.
- 25 Danenberg Dr. & Dogwood Rd.
- 26 SR98 & Dogwood Rd.
- 27 McCabe Rd. & Pitzer Rd.
- 28 SR86/Herber Rd. & SR111
- 29 McCabe Rd. & La Brucherie Rd.
- 30 McCabe Rd. & SR111
- 31 McCabe Rd. & Austin Rd.

Project Area

No Scale

N

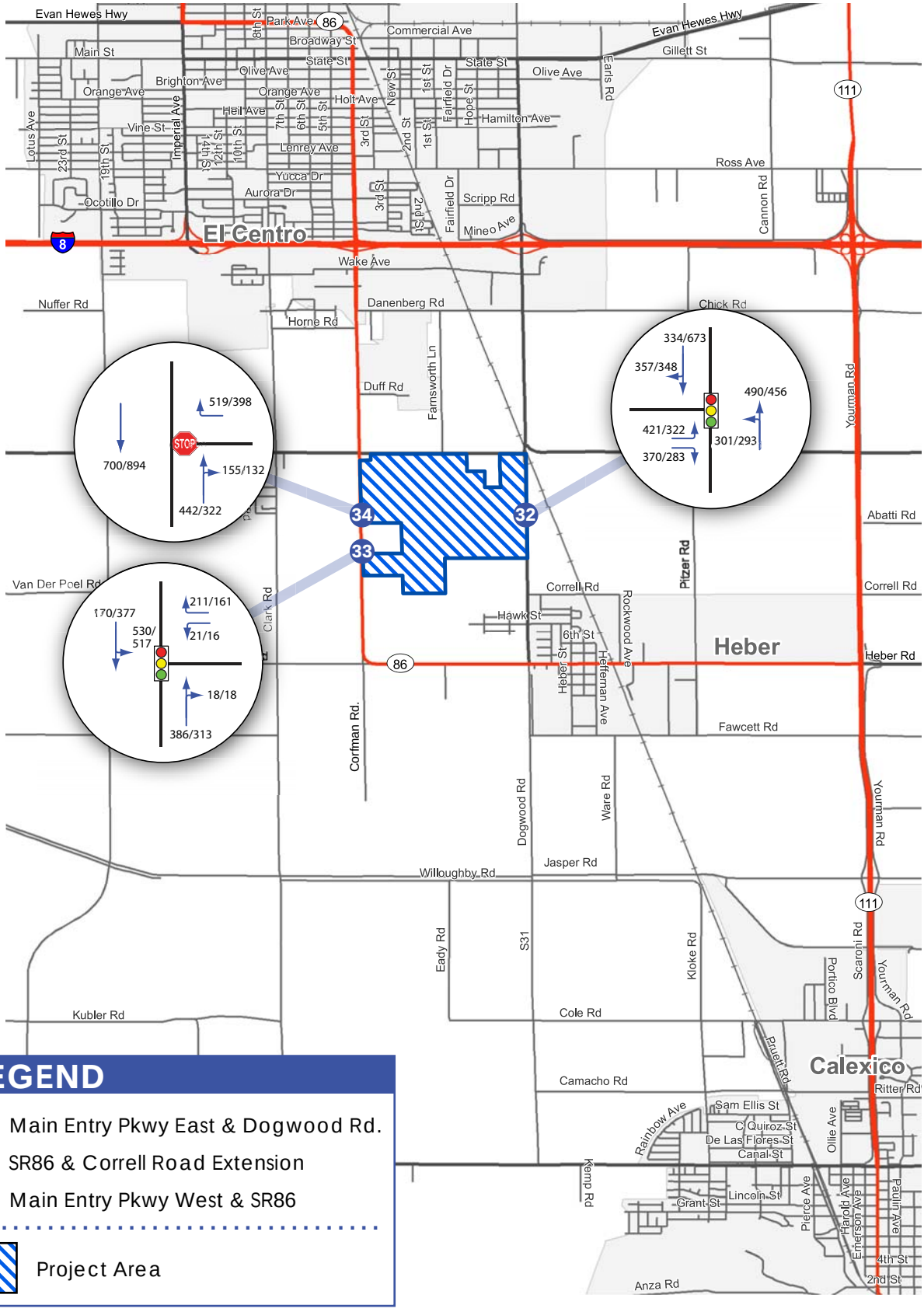
Figure 4.14-8d

Existing Plus Phase I Project

AM/PM Peak Hour Traffic Volumes

PMC®

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



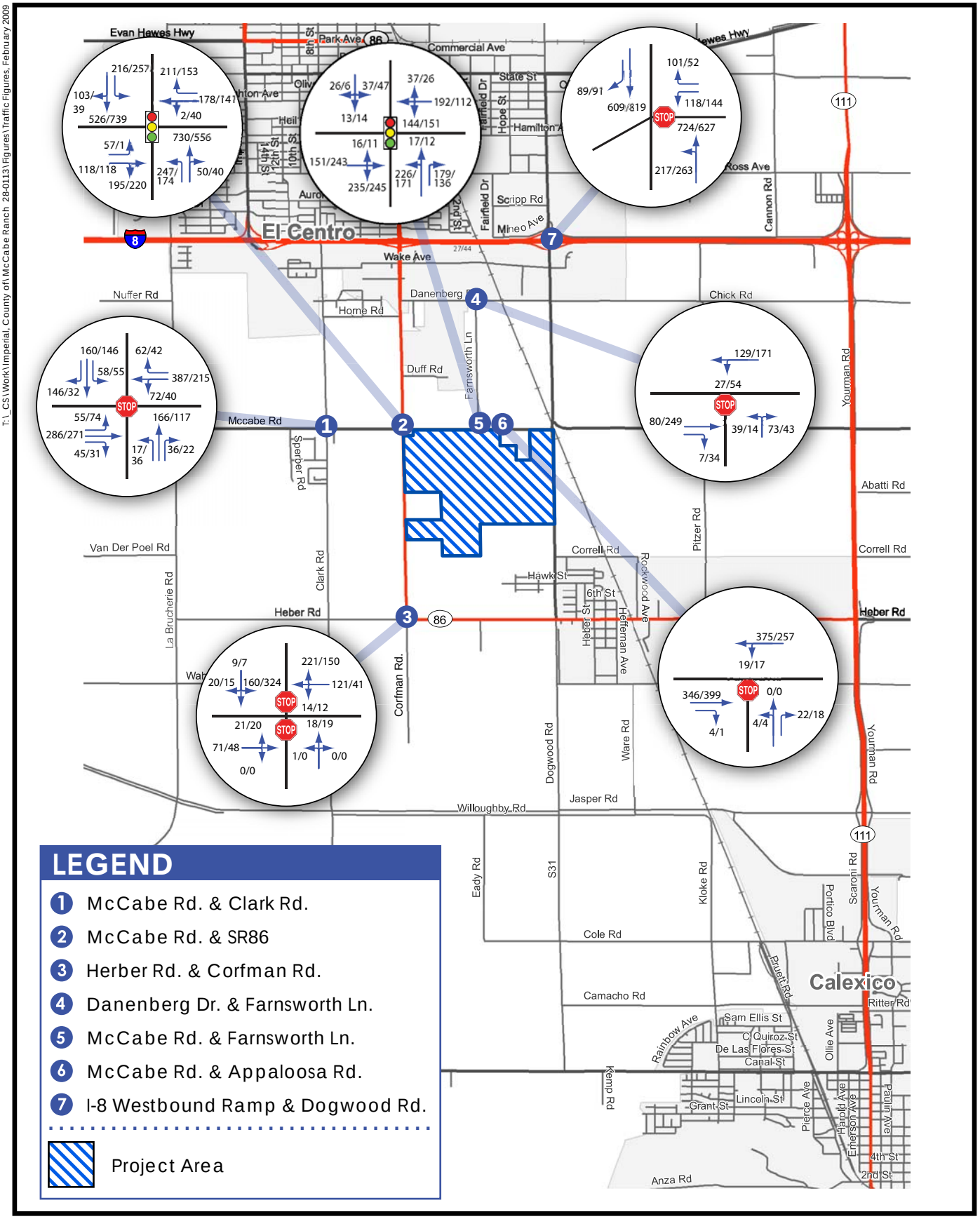
No Scale

N

Figure 4.14-8e

Existing Plus Phase I Project

AM/PM Peak Hour Traffic Volumes



No Scale

N

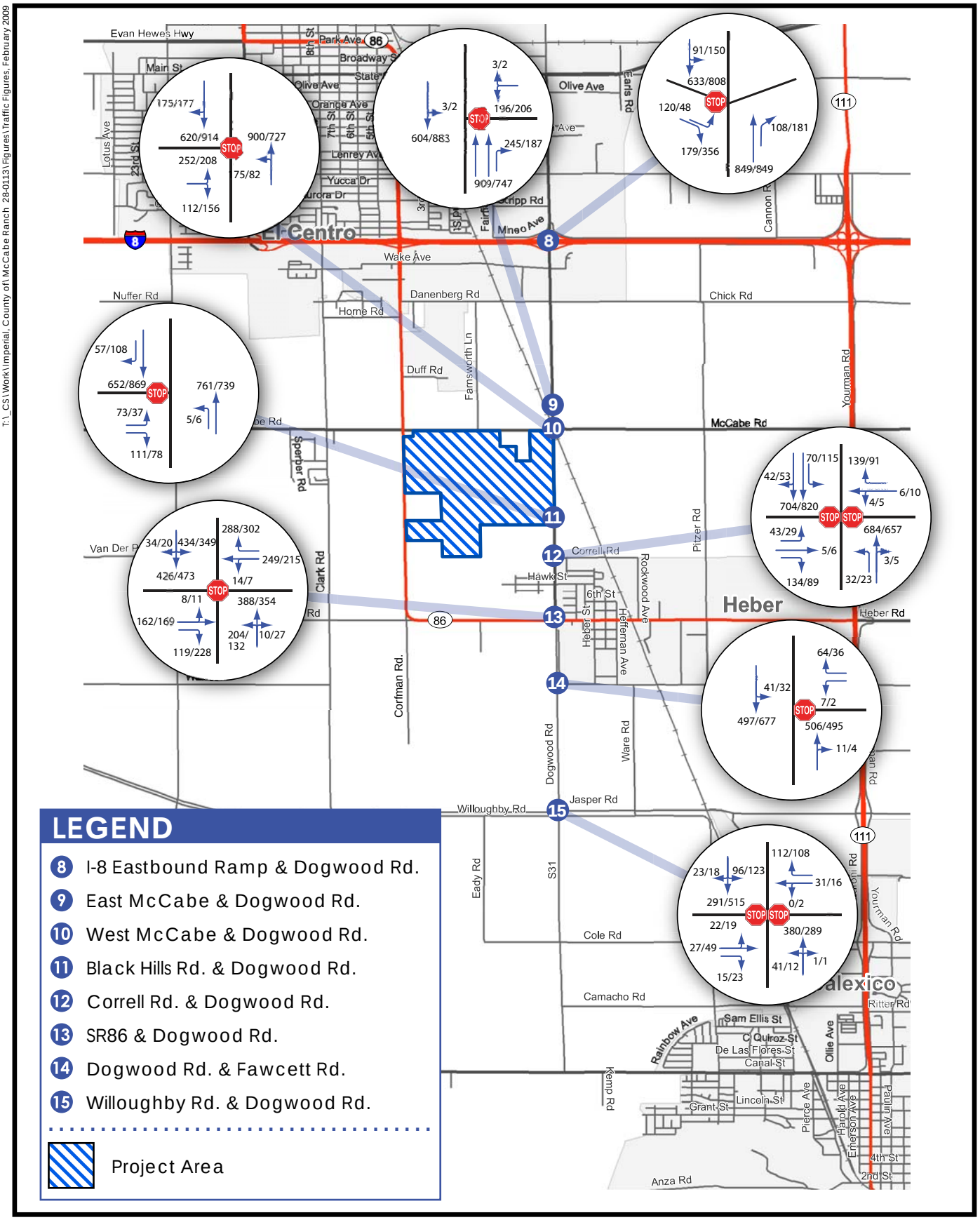
Figure 4.14-9a

Existing Plus Phase I & II Project

AM/PM Peak Hour Traffic Volumes

PMC®

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



LEGEND

8. I-8 Eastbound Ramp & Dogwood Rd.
9. East McCabe & Dogwood Rd.
10. West McCabe & Dogwood Rd.
11. Black Hills Rd. & Dogwood Rd.
12. Correll Rd. & Dogwood Rd.
13. SR86 & Dogwood Rd.
14. Dogwood Rd. & Fawcett Rd.
15. Willoughby Rd. & Dogwood Rd.

Project Area

No Scale

N

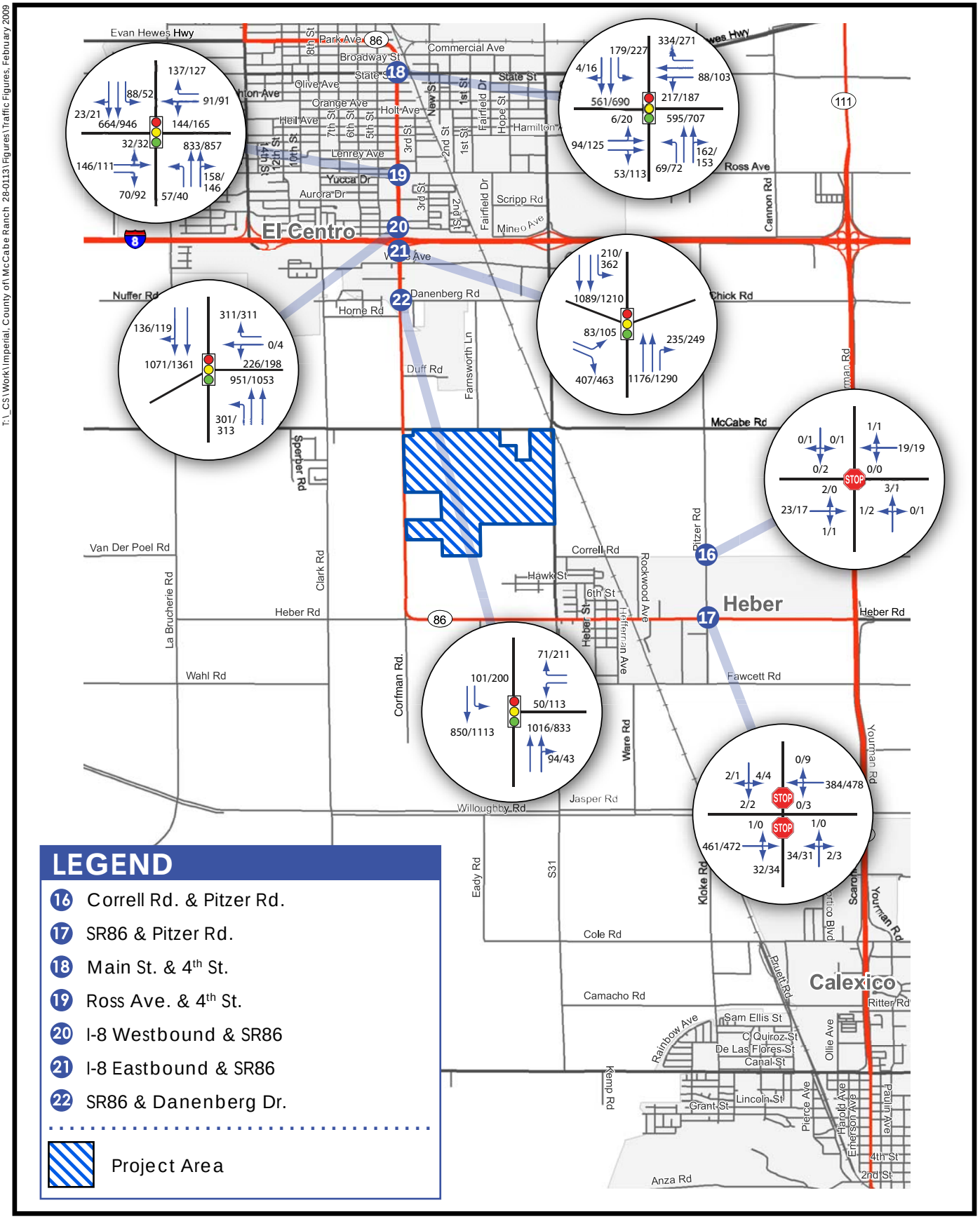
Figure 4.14-9b

Existing Plus Phase I & II Project

AM/PM Peak Hour Traffic Volumes

PMC®

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



No Scale

N

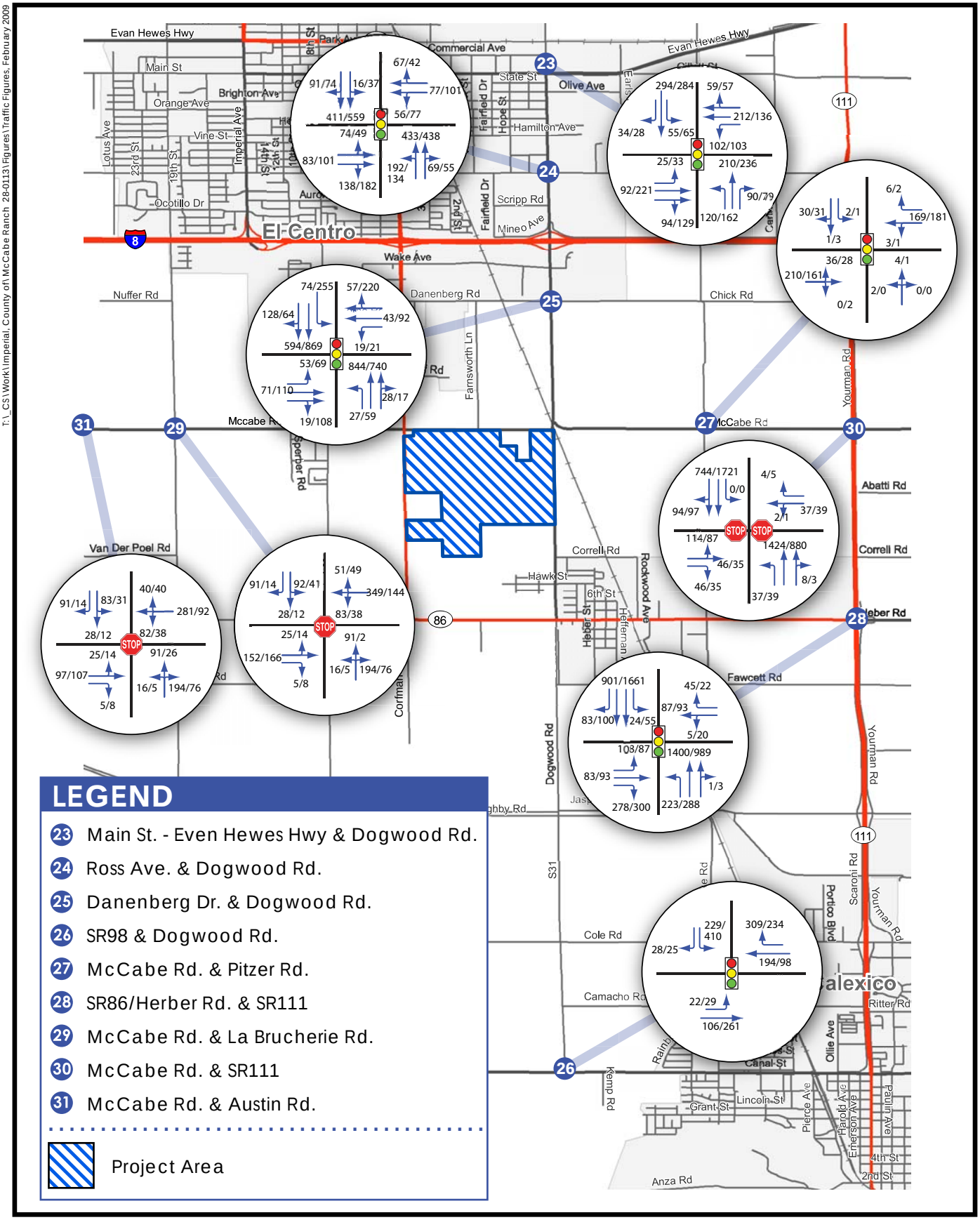
Figure 4.14-9c

Existing Plus Phase I & II Project

AM/PM Peak Hour Traffic Volumes

PMC®

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



LEGEND

23 Main St. - Even Hewes Hwy & Dogwood Rd.
24 Ross Ave. & Dogwood Rd.
25 Danenberg Dr. & Dogwood Rd.
26 SR98 & Dogwood Rd.
27 McCabe Rd. & Pitzer Rd.
28 SR86/Herber Rd. & SR111
29 McCabe Rd. & La Brucherie Rd.
30 McCabe Rd. & SR111
31 McCabe Rd. & Austin Rd.

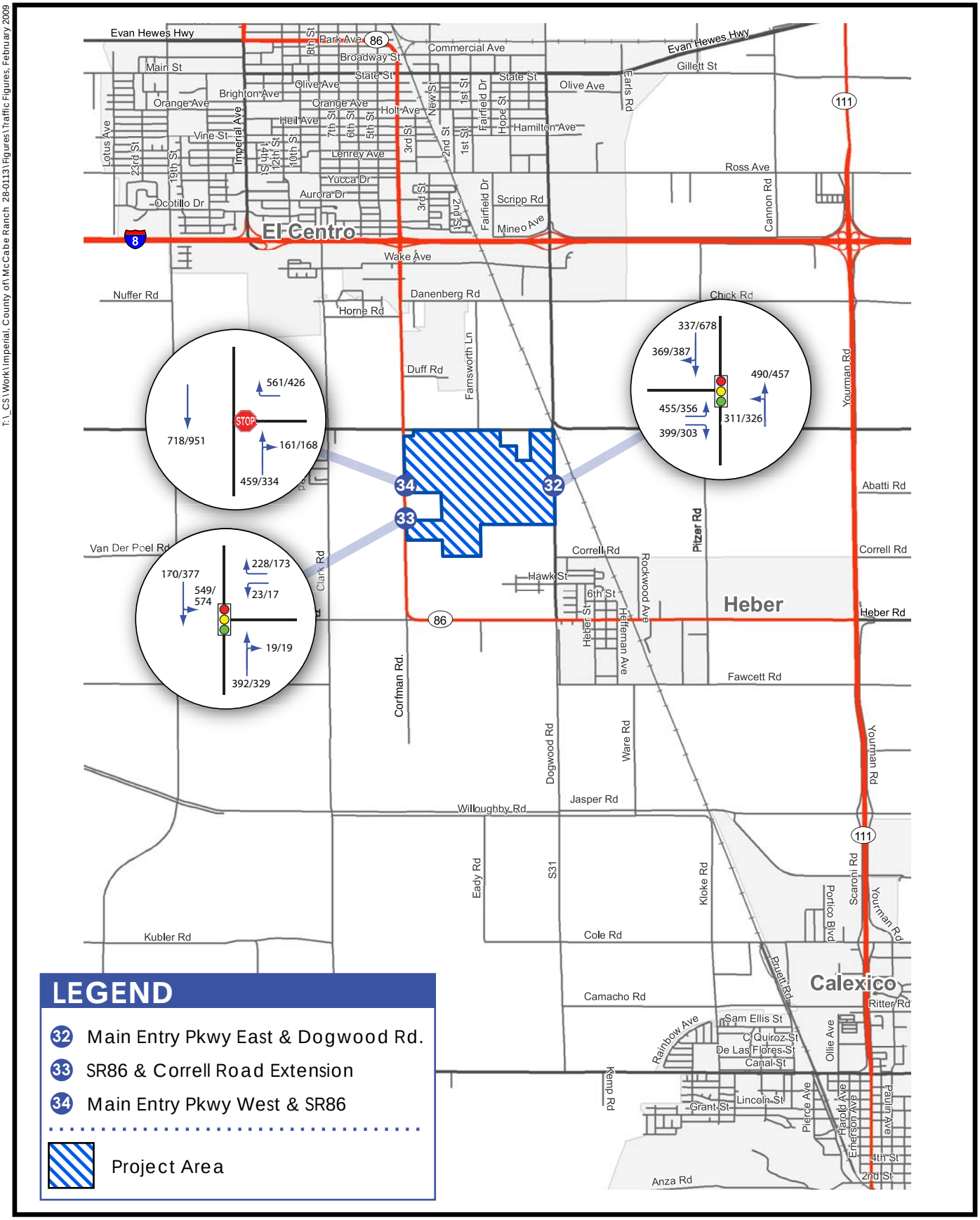
Project Area

No Scale

N

Figure 4.14-9d
Existing Plus Phase I & II Project
AM/PM Peak Hour Traffic Volumes

PMC®



No Scale

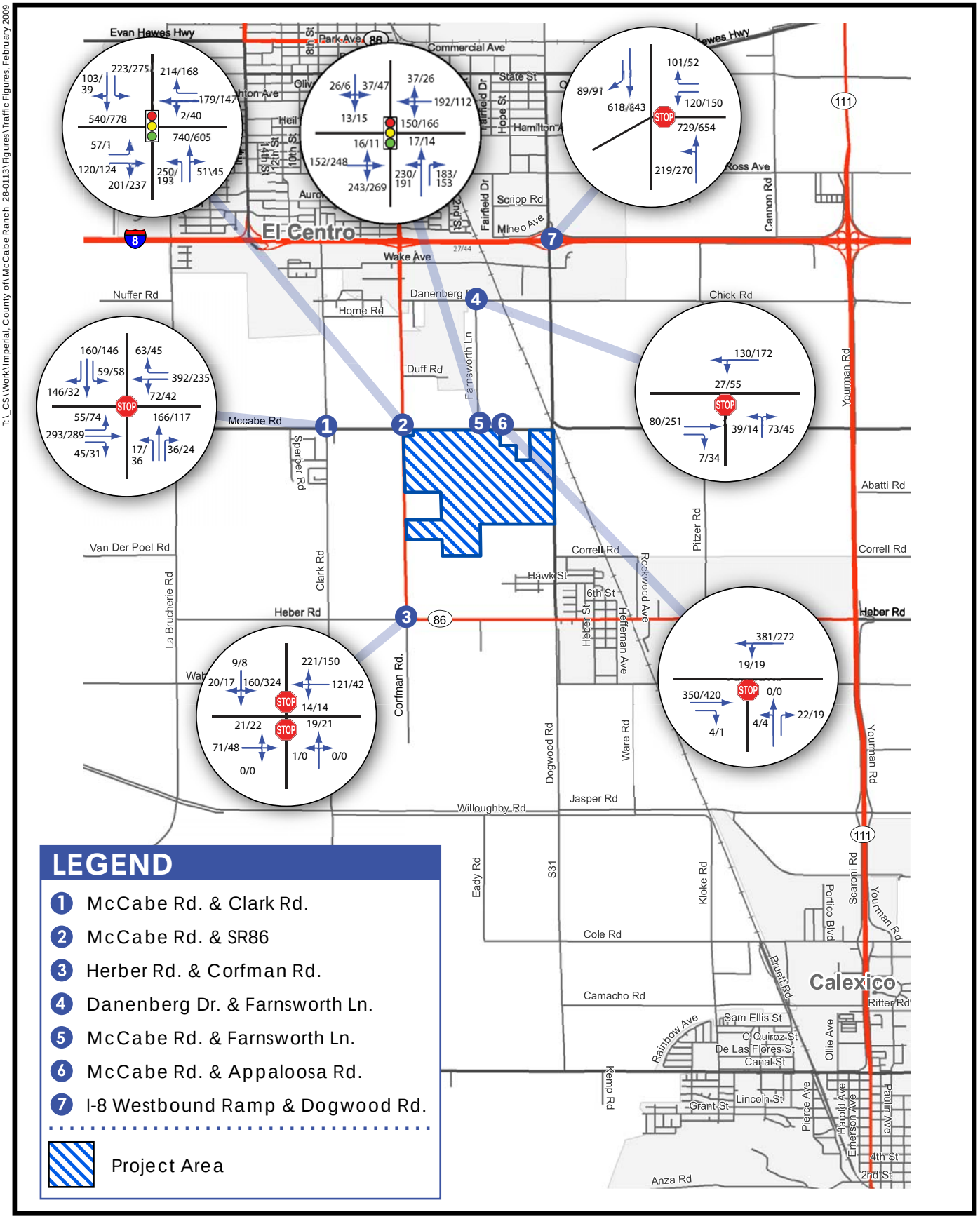
N

Figure 4.14-9e

Existing Plus Phase I, II, & III Project

AM/PM Peak Hour Traffic Volumes

PMC®



No Scale

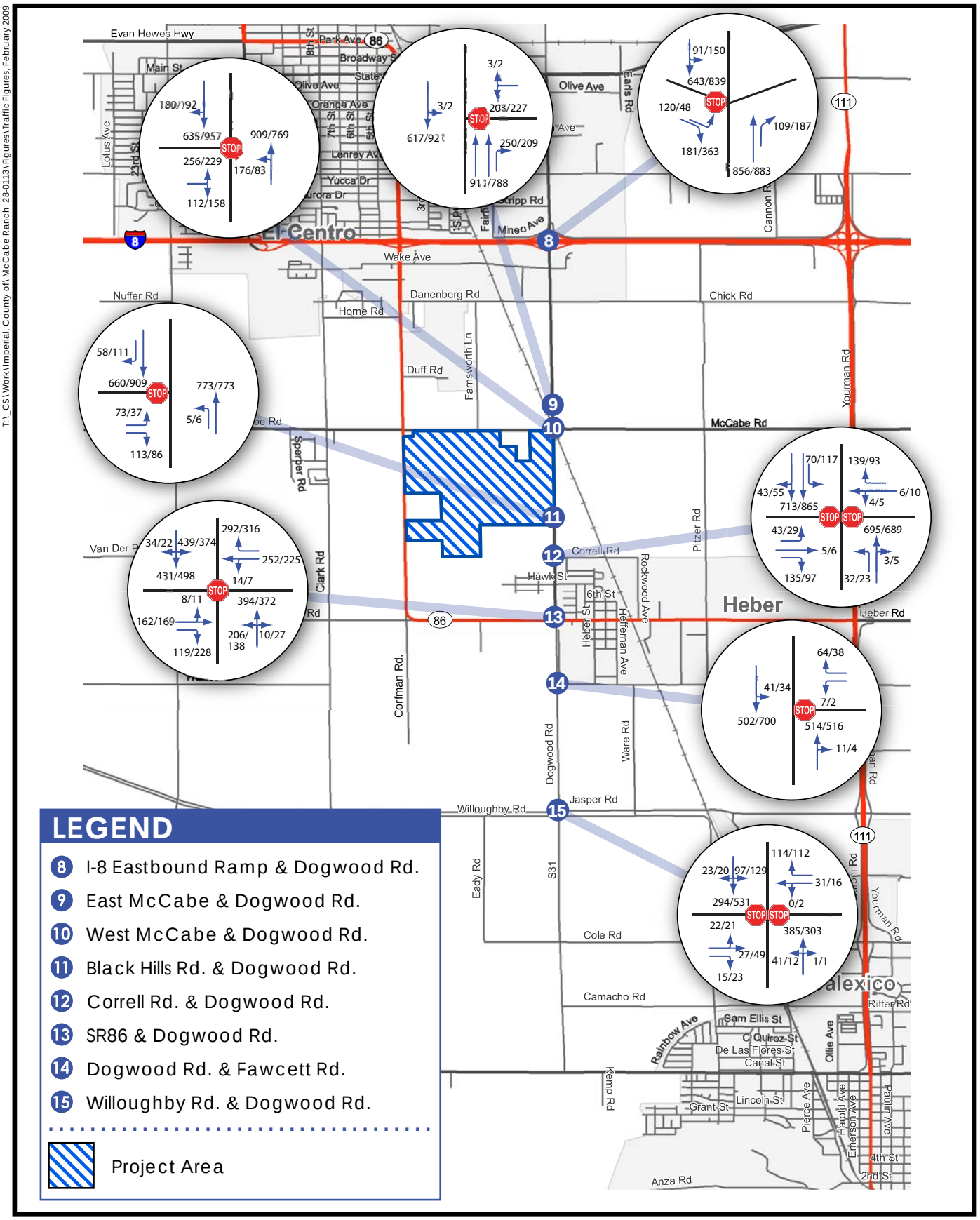
N

Figure 4.14-10a

Existing Plus Phase I, II, & III Project

AM/PM Peak Hour Traffic Volumes

PMC®



LEGEND

8. I-8 Eastbound Ramp & Dogwood Rd.
9. East McCabe & Dogwood Rd.
10. West McCabe & Dogwood Rd.
11. Black Hills Rd. & Dogwood Rd.
12. Correll Rd. & Dogwood Rd.
13. SR86 & Dogwood Rd.
14. Dogwood Rd. & Fawcett Rd.
15. Willoughby Rd. & Dogwood Rd.

Project Area

No Scale

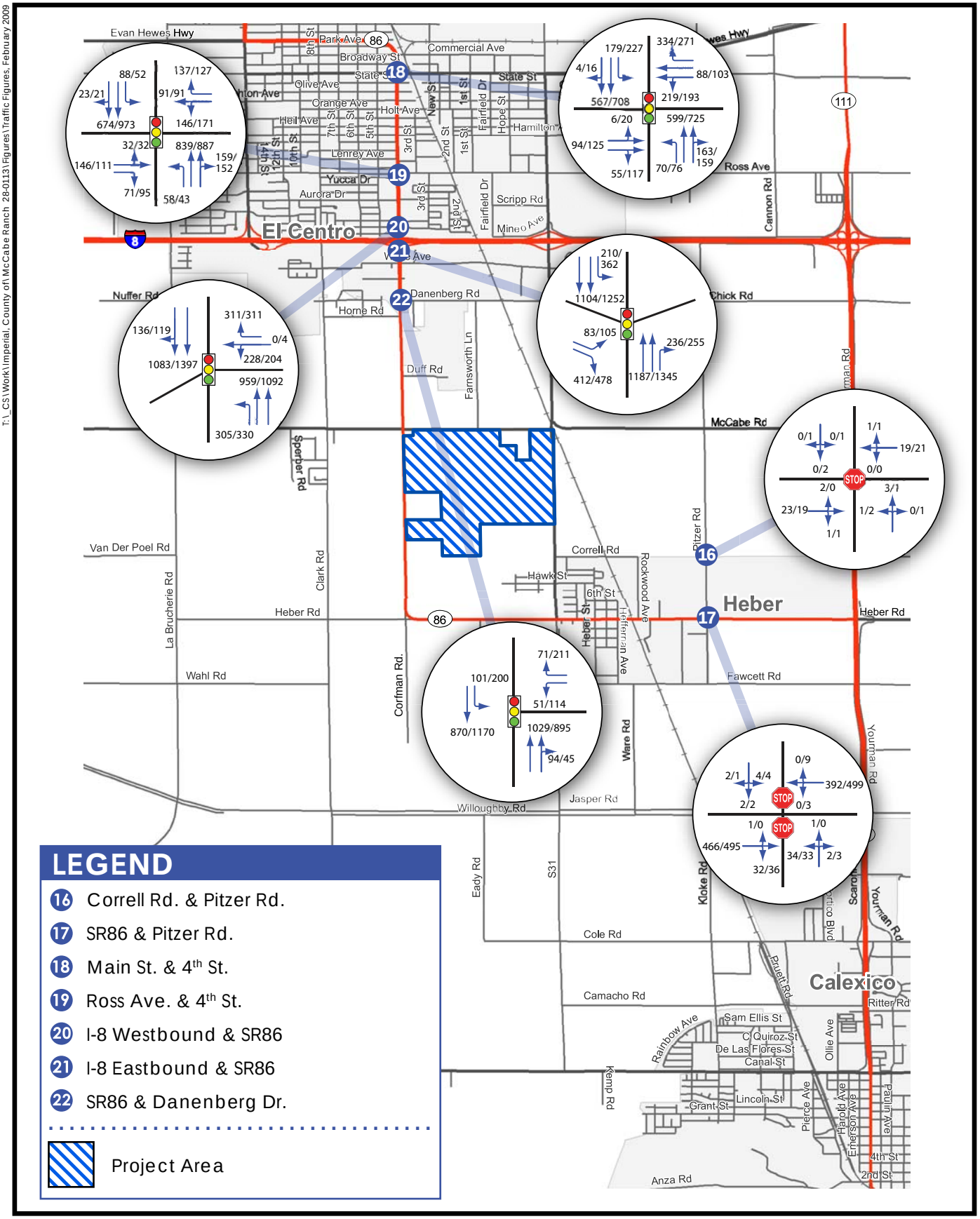
N

Figure 4.14-10b

Existing Plus Phase I, II, & III Project

AM/PM Peak Hour Traffic Volumes

PMC®



LEGEND

16 Correll Rd. & Pitzer Rd.
17 SR86 & Pitzer Rd.
18 Main St. & 4th St.
19 Ross Ave. & 4th St.
20 I-8 Westbound & SR86
21 I-8 Eastbound & SR86
22 SR86 & Danenberg Dr.

Project Area

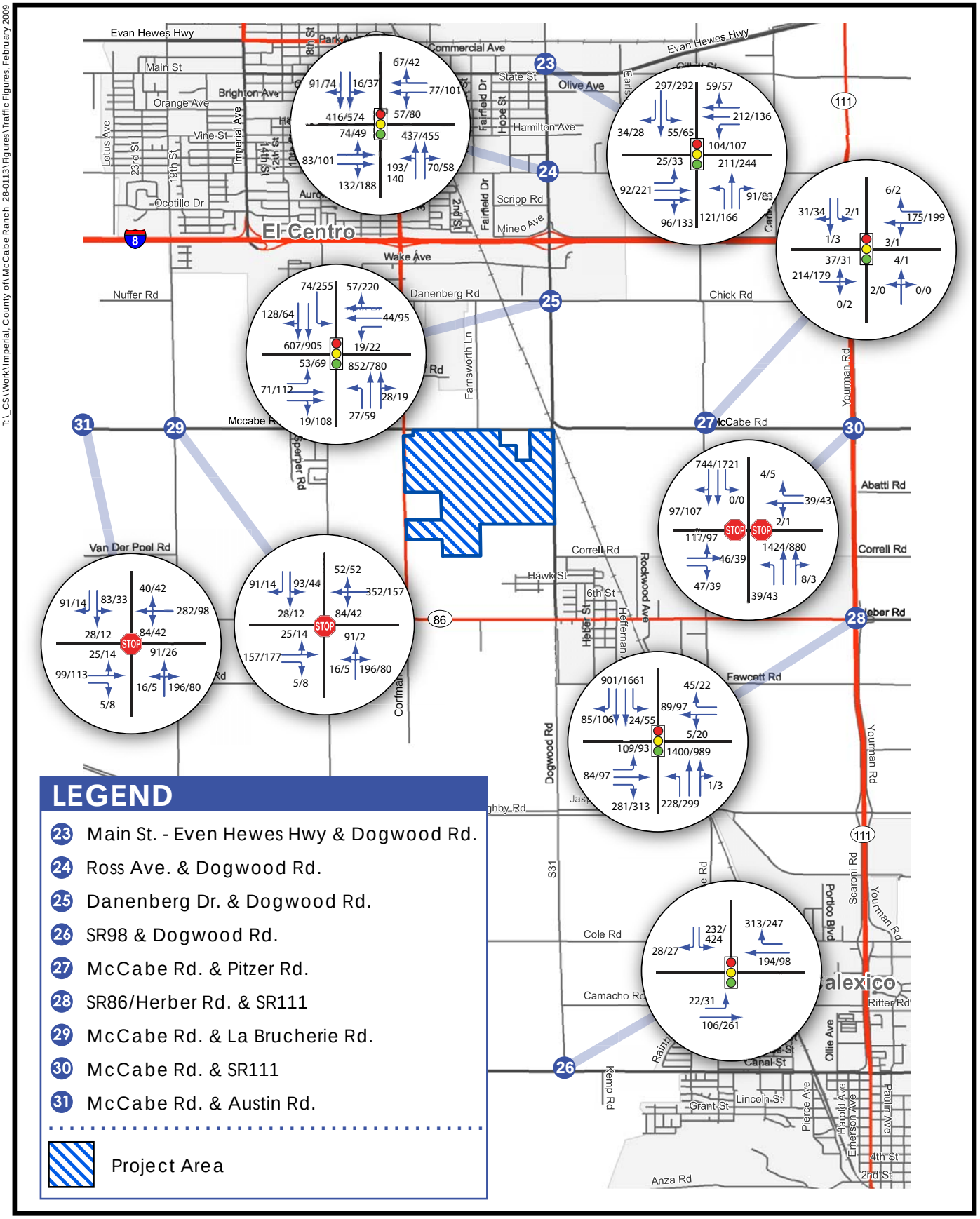
No Scale

N

Figure 4.14-10c
Existing Plus Phase I, II, & III Project
AM/PM Peak Hour Traffic Volumes

PMC®

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



LEGEND

23 Main St. - Even Hewes Hwy & Dogwood Rd.
24 Ross Ave. & Dogwood Rd.
25 Danenberg Dr. & Dogwood Rd.
26 SR98 & Dogwood Rd.
27 McCabe Rd. & Pitzer Rd.
28 SR86/Herber Rd. & SR111
29 McCabe Rd. & La Brucherie Rd.
30 McCabe Rd. & SR111
31 McCabe Rd. & Austin Rd.

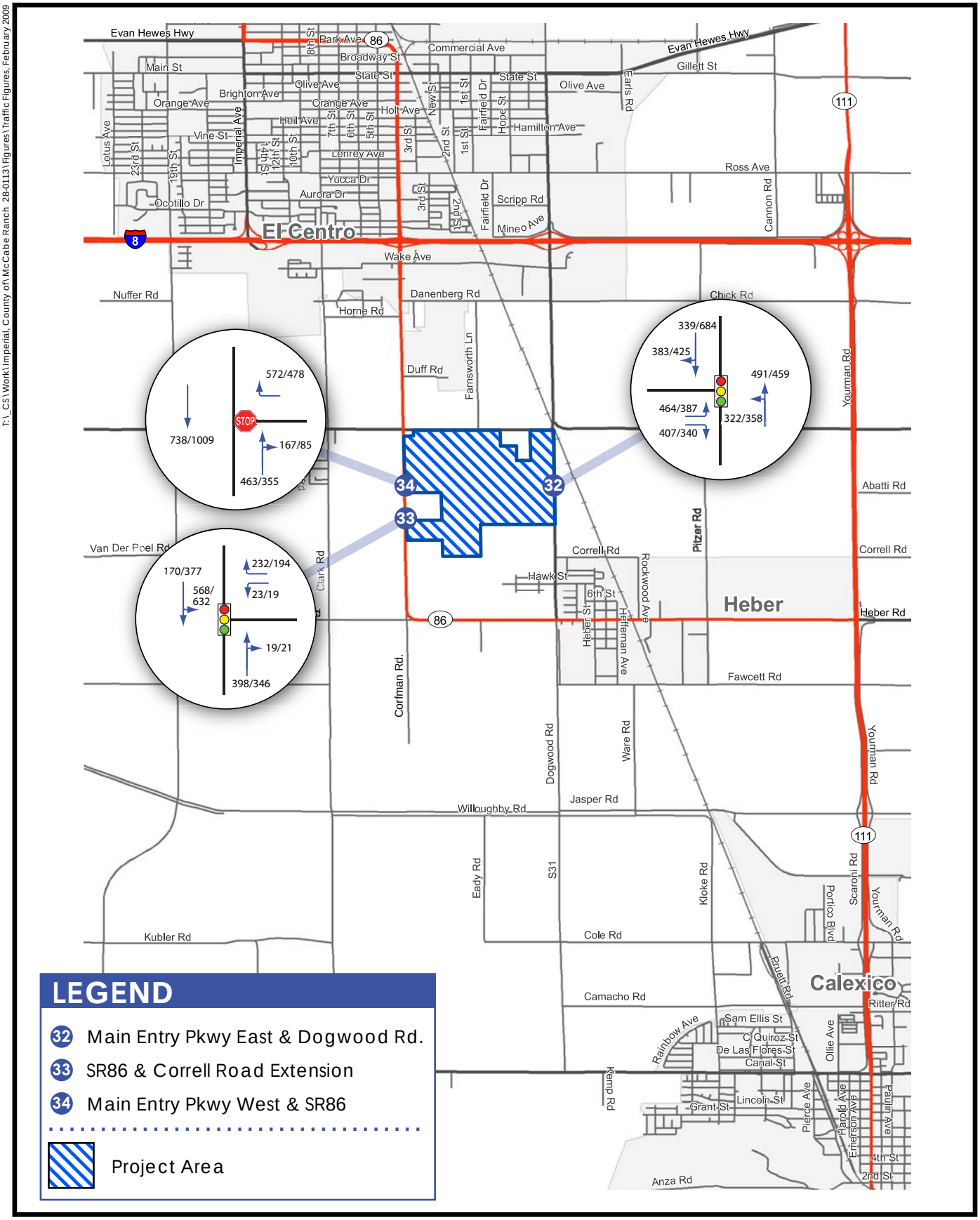
Project Area

No Scale

N

Figure 4.14-10d
Existing Plus Phase I, II, & III Project
AM/PM Peak Hour Traffic Volumes

PMC®



No Scale

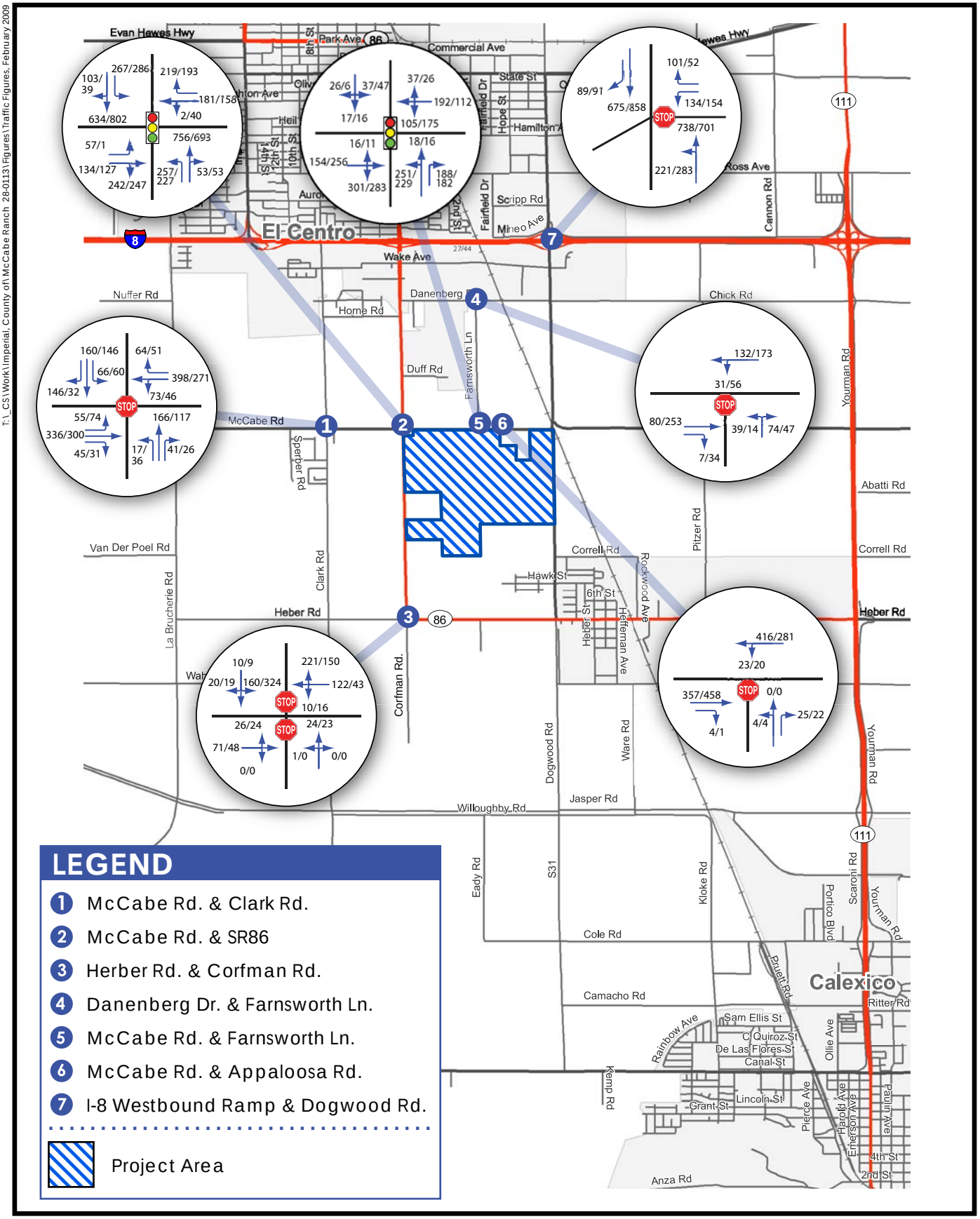
N

Figure 4.14-10e

Existing Plus Phase I, II, & III Project

AM/PM Peak Hour Traffic Volumes

PMC®



No Scale

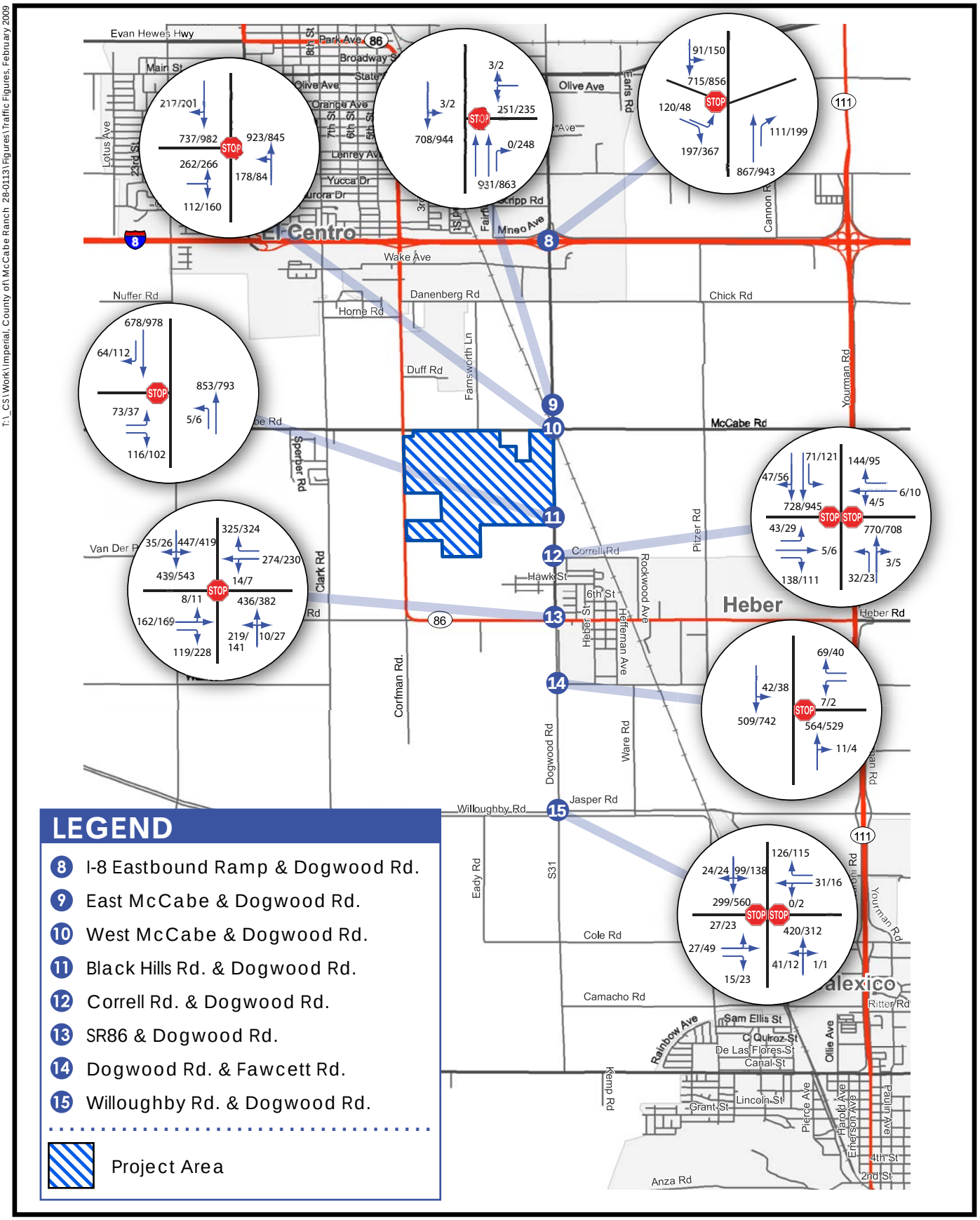
N

Figure 4.14-11a

Existing Plus Total Project (Phase I, II, III, & IV)

AM/PM Peak Hour Traffic Volumes

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



LEGEND

8. I-8 Eastbound Ramp & Dogwood Rd.
9. East McCabe & Dogwood Rd.
10. West McCabe & Dogwood Rd.
11. Black Hills Rd. & Dogwood Rd.
12. Correll Rd. & Dogwood Rd.
13. SR86 & Dogwood Rd.
14. Dogwood Rd. & Fawcett Rd.
15. Willoughby Rd. & Dogwood Rd.

Project Area

No Scale

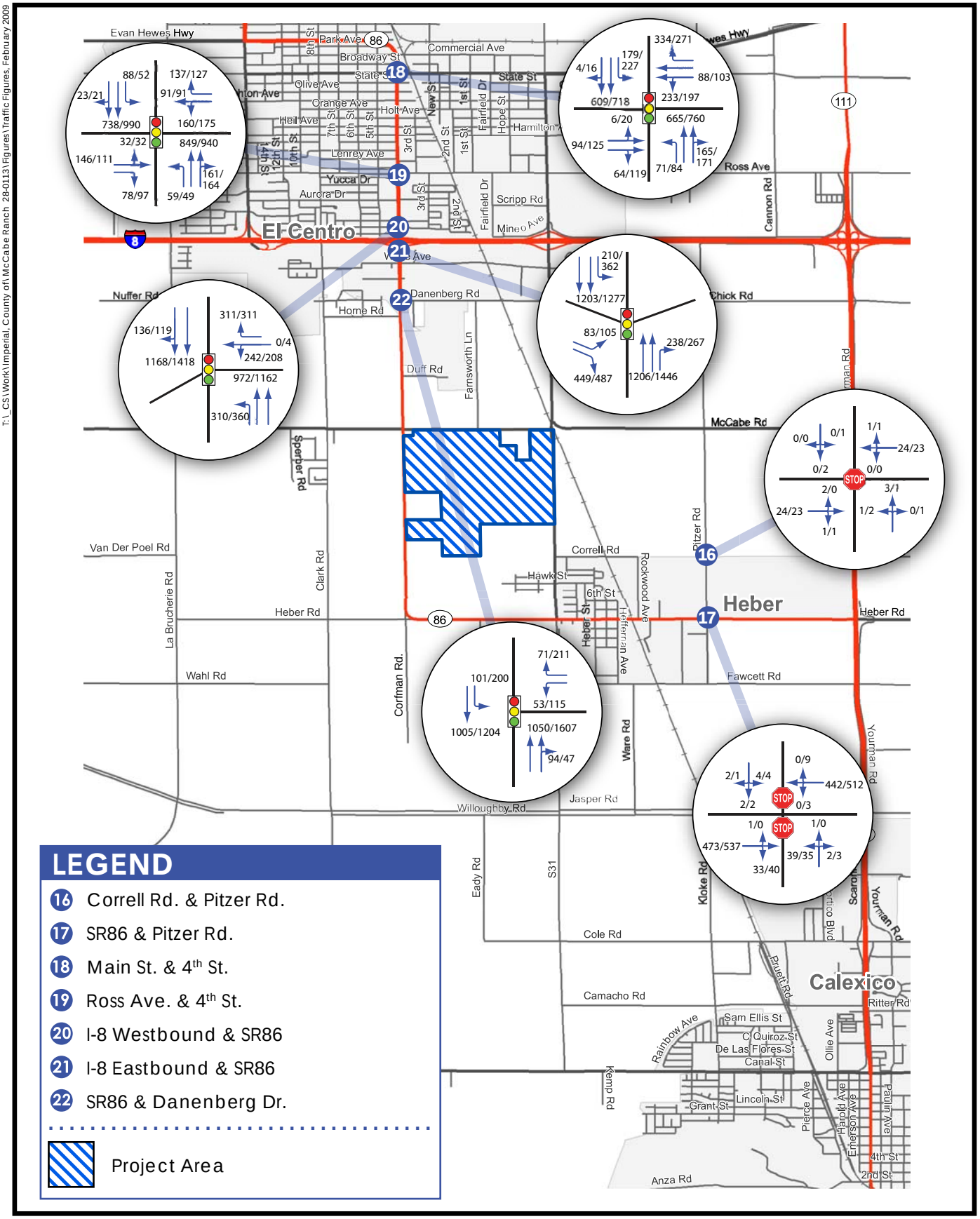
N

Figure 4.14-11b

Existing Plus Total Project (Phase I, II, III, & IV)

AM/PM Peak Hour Traffic Volumes

PMC®



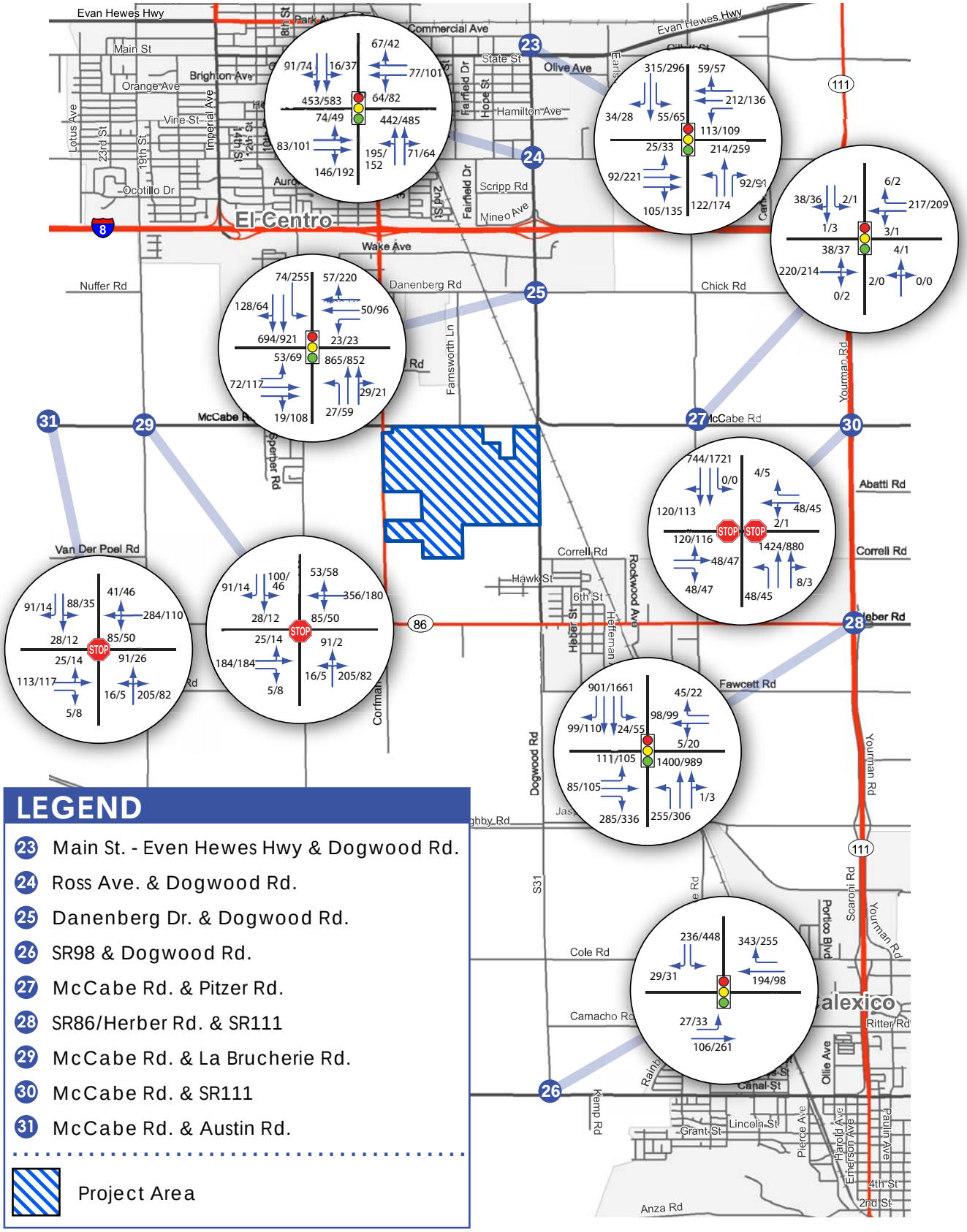
No Scale

N

Figure 4.14-11c

Existing Plus Total Project (Phase I, II, III, & IV)

AM/PM Peak Hour Traffic Volumes



No Scale

N

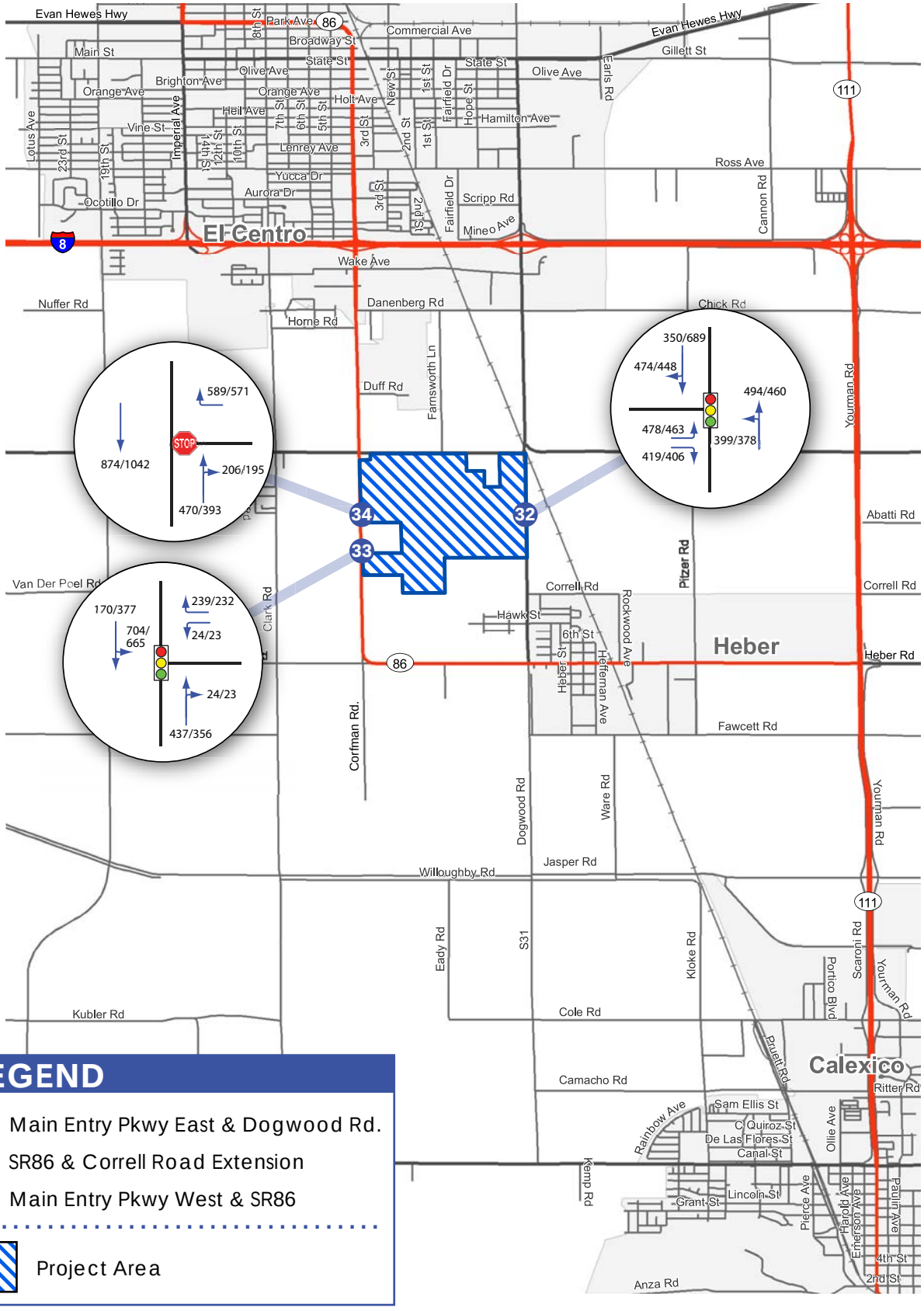
Figure 4.14-11d

Existing Plus Total Project (Phase I, II, III, & IV)

AM/PM Peak Hour Traffic Volumes

PMC®

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



No Scale

N

Figure 4.14-11e

Existing Plus Total Project (Phase I, II, III, & IV)

AM/PM Peak Hour Traffic Volumes

PMC®

Following the existing plus total project traffic analysis is a discussion of the existing plus total project plus cumulative projects analysis results. The existing plus total project plus cumulative projects analysis is analyzed in relation to the existing plus total project scenario. This analysis includes the results for the intersection, street segment, and freeway mainline operations.

Existing plus Proposed Project Phase I

Intersection Operations

Table 4.14-12 shows that with the addition of the Phase I proposed project traffic, all intersections are calculated to operate at a LOS C or better except for the following (PMC, 2010):

- Clark Road / McCabe Road (LOS D during the AM peak hour)
- Dogwood Avenue / I-8 Westbound Ramps (LOS F during the AM and PM peak hour)
- Dogwood Avenue / I-8 Eastbound Ramps (LOS F during the AM and PM peak hour)
- Dogwood Avenue / McCabe Road – North (LOS F during the AM and PM peak hour)
- Dogwood Avenue / McCabe Road – South (LOS F during the AM and PM peak hour)
- Dogwood Avenue / Black Hills Road (LOS D during the AM and PM peak hour)
- Dogwood Avenue / Correll Drive (LOS F during the AM and PM peak hour)
- Dogwood Avenue / SR-86 (LOS F during the AM and PM peak hour)
- Dogwood Avenue / Fawcett Road (LOS D during the PM peak hour)
- Dogwood Avenue / Willoughby Road (LOS D during the AM and PM peak hour)
- SR-111 / McCabe Road (LOS F during the AM and PM peak hour)

Street Segment Operations

Table 4.14-13 shows that with the addition of the Phase I proposed project traffic, all of the street segments are calculated to operate at a LOS C or better except for the following (PMC, 2010):

- SR-86 (4th Street): Main Street to Ross Road (LOS E)
- SR-86 (4th Street): Ross Road to I-8(LOS F)
- I-8 to Danenberg Drive (LOS D)
- Danenberg Drive to McCabe Road (LOD F)
- SR-86: McCabe Road to Heber Road (LOS E)
- SR-86: Corfman Road to Dogwood Avenue (LOS E)
- SR-86: Dogwood Avenue to Pitzer Road (LOS D)

- SR-86: Pitzer Road to SR-111(LOS D)
- Dogwood Avenue: Evan Hewes Highway to Ross Road (LOS E)
- Dogwood Avenue: Ross Road to I-8 (LOS F)
- Dogwood Avenue: McCabe Road to SR-86 (LOS F)
- Dogwood Avenue: SR-86 to Fawcett Road (LOS E)
- Dogwood Avenue: Fawcett Road to Willoughby Road (LOS D)
- Dogwood Avenue: Willoughby Road to Cole Road (LOS D)
- Dogwood Avenue: Cole Road to SR-98 (LOS E)
- McCabe Road: SR-86 to Dogwood Avenue (LOS D)

Freeway Mainline Operations

Table 4.14-14 shows that with the addition of the Phase I proposed project traffic, all freeway mainline segments are calculated to operate at a LOS B or better. Because buildout of the proposed project would not result in degraded freeway mainline operations and therefore would not result in direct impacts, no further discussion of freeway mainline analysis operations are addressed in this Draft EIR.

TABLE 4.14-12
NEAR-TERM INTERSECTION OPERATIONS

	Intersection	Control Type	Peak Hour	Existing		Existing + Project Phase I			Existing + Project Phases I & II			Existing + Project Phases I, II, & III			Existing + Total Project (Phases I, II, III, & IV)			Existing + Total Project + Cumulative Projects		Type of Impact
				Delay[1]	LOS[2]	Delay	LOS	Δ[3]	Delay	LOS	Δ	Delay	LOS	Δ	Delay	LOS	Δ	Delay	LOS	
1	Austin Road / McCabe Road	AWSC[4]	AM	11.4	B	16.0	C	4.6	16.6	C	5.2	16.8	C	5.4	17.6	C	6.2	>100	**F**	**Cumulative**
			PM	7.9	A	8.9	A	1.0	9.0	A	1.1	9.1	A	1.2	9.4	A	1.5	47.6	**E**	None
2	La Brucherie Road / McCabe Road	AWSC	AM	11.4	B	22.5	C	11.1	24.7	C	13.3	25.7	**D**	14.3	28.7	**D**	17.3	>100	**F**	**Direct**
			PM	7.8	A	9.5	A	1.7	9.7	A	1.9	10.0	A	2.2	10.5	B	2.7	>100	**F**	**Cumulative**
3	Clark Road / McCabe Road	AWSC	AM	11.6	B	25.7	**D**	14.1	28.7	**D**	17.1	30.0	**D**	18.4	35.3	**E**	23.7	>100	**F**	**Direct**
			PM	9.5	A	12.7	B	3.2	13.2	B	3.7	14.1	B	4.6	15.3	C	5.8	>100	**F**	**Cumulative**
4	SR-86 / McCabe Road	TWSC[5]/ Signal	AM	19.2	C	31.6	C	>10.0	32.8	C	>10.0	33.4	C	>10.0	36.8	D	>10.0	>100	**F**	**Direct**
			PM	21.4	C	29.4	C	>10.0	30.8	C	>10.0	33.0	C	>10.0	36.3	D	>10.0	>100	**F**	**Direct**
5	SR-86 / Main Entry Parkway – West	TWSC	AM	0.0	A	18.1	C	18.1	20.8	C	20.8	21.9	C	21.9	25.5	C	25.5	54.3	**F**	**Cumulative**
			PM	0.0	A	13.2	B	13.2	14.1	B	14.1	15.9	C	15.9	21.1	C	21.1	39.1	**E**	**Cumulative**
6	SR-86 / Correll Road Extension	Signal[6]	AM	0.0	A	23.7	C	23.7	24.2	C	24.2	24.3	C	24.3	25.2	C	25.2	31.0	C	None
			PM	0.0	A	19.1	B	19.1	19.3	C	19.3	20.1	C	20.1	21.4	C	21.4	25.6	C	None
7	Corfman Road / Heber Road	TWSC	AM	12.2	B	14.2	B	2.0	14.4	B	2.2	14.4	B	2.2	14.9	B	2.7	16.3	C	None
			PM	12.1	B	14.9	B	2.8	15.1	C	3.0	15.5	C	3.4	16.0	C	3.9	18.7	C	None
8	Farnsworth Road / Danenberg Drive	TWSC	AM	9.5	A	9.7	A	0.2	9.7	A	0.2	9.7	A	0.2	9.8	A	0.3	12.0	B	None
			PM	10.5	B	10.6	B	0.1	10.7	B	0.2	10.7	B	0.2	10.7	B	0.2	16.1	C	None
9	Farnsworth Road / McCabe Road	Signal[6]	AM	13.0	B	23.4	C	10.4	23.6	C	10.6	23.7	C	10.7	24.4	C	11.4	25.8	C	None
			PM	14.0	B	24.2	C	10.2	24.4	C	10.4	24.7	C	10.7	25.1	C	11.1	26.1	C	None
10	Appaloosa Road / McCabe Road	TWSC	AM	9.7	A	10.9	B	1.2	11.0	B	1.3	11.0	B	1.3	11.2	B	1.5	13.8	B	None
			PM	9.9	A	11.1	B	1.2	11.2	B	1.3	11.4	B	1.5	11.8	B	1.9	14.9	B	None
11	Dogwood Avenue / I-8 Westbound Ramps	TWSC	AM	19.2	C	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
			PM	58.6	**F**	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
12	Dogwood Avenue / I-8 Eastbound Ramps	TWSC	AM	23.0	C	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
			PM	22.8	C	76.2	**F**	53.4	90.7	**F**	67.9	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
13	Dogwood Avenue / McCabe Road – North	TWSC	AM	11.7	B	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
			PM	13.7	B	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
14	Dogwood Avenue / McCabe Road – South	AWSC	AM	21.5	C	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
			PM	19.0	B	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
15	Dogwood Avenue / Main Entry Parkway - East	Signal[6]	AM	0.1	A	24.3	C	24.2	25.2	C	25.1	25.8	C	25.7	30.6	C	30.5	27.2	C	None
			PM	0.1	A	23.8	C	23.7	24.5	C	24.4	26.1	C	26.0	28.7	C	28.6	30.1	C	None
16	Dogwood Avenue / Black Hills Road	TWSC	AM	14.1	B	27.0	**D**	12.9	28.7	**D**	14.6	29.5	**D**	15.4	34.8	**D**	20.7	>100	**F**	**Direct**
			PM	18.1	C	27.0	**D**	8.9	28.7	**D**	10.6	31.2	**D**	13.1	35.2	**D**	17.1	>100	**F**	**Direct**
17	Dogwood Avenue / Correll Road	TWSC	AM	17.2	C	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
			PM	14.4	B	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
18	Dogwood Avenue / SR-86	AWSC	AM	16.7	C	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
			PM	17.6	C	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
19	Dogwood Avenue / Fawcett Road	TWSC	AM	11.8	B	17.8	C	6.0	19.0	C	7.2	19.3	C	7.5	21.4	C	9.6	>100	**F**	**Cumulative**
			PM	14.3	B	25.4	**D**	11.1	27.4	**D**	13.1	31.4	**D**	17.1	40.8	**E**	26.5	>100	**F**	**Direct**
20	Dogwood Avenue / Willoughby Road	TWSC	AM	12.3	B	25.1	**D**	12.8	26.7	**D**	14.4	27.3	**D**	15.0	32.9	**D**	20.6	>100	**F**	**Direct**
			PM	15.3	C	30.0	**D**	14.7	32.4	**D**	17.1	37.0	**D**	21.7	44.5	**E**	29.2	>100	**F**	**Direct**
21	Pitzer Road / Correll Road	AWSC	AM	6.8	A	7.0	A	0.2	7.0	A	0.2	7.0	A	0.2	7.0	A	0.2	7.4	A	None
			PM	6.8	A	7.0	A	0.2	7.0	A	0.2	7.0	A	0.2	7.0	A	0.2	7.4	A	None
22	Pitzer Road / SR-86	TWSC	AM	11.4	B	18.9	C	7.5	19.7	C	8.3	20.0	C	8.6	22.1	C	10.7	48.8	**E**	**Cumulative**
			PM	12.9	B	21.2	C	8.3	22.3	C	9.4	24.0	C	11.1	26.5	**D**	13.6	>100	**F**	**Direct**
23	SR-111 / McCabe Road	TWSC	AM	28.4	**D**	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
			PM	18.0	C	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	>10.0	>100	**F**	**Direct**
24	4th Street / Main Street	Signal	AM	25.4	C	26.3	C	0.9	26.3	C	0.9	26.4	C	1.0	26.4	C	1.0	28.6	C	None
			PM	26.6	C	27.1	C	0.5	27.2	C	0.6	27.2	C	0.6	27.3	C	0.7	34.2	C	None
25	4th Street / Ross Road	Signal	AM	24.7	C	23.2	C	0.0	23.1	C	0.0	23.1	C	0.0	23.3	C	0.0	24.4	C	None
			PM	21.0	C	20.6	C	0.0	20.7	C	0.0	20.7	C	0.0	20.6	C	0.0	25.2	C	None
26	SR-86 / I-8 Westbound Ramps	Signal	AM	18.1	B	20.5	C	2.4	20.7	C	2.6	20.8	C	2.7	21.3	C	3.2	98.4	**F**	**Cumulative**

Intersection	Control Type	Peak Hour	Existing		Existing + Project Phase I			Existing + Project Phases I & II			Existing + Project Phases I, II, & III			Existing + Total Project (Phases I, II, III, & IV)			Existing + Total Project + Cumulative Projects		Type of Impact
			Delay[1]	LOS[2]	Delay	LOS	Δ[3]	Delay	LOS	Δ	Delay	LOS	Δ	Delay	LOS	Δ	Delay	LOS	
		PM	18.0	B	20.7	C	2.7	21.0	C	3.0	21.6	C	3.6	22.4	C	4.4	>100	**F**	**Cumulative**
27 SR-86 / I-8 Eastbound Ramps	Signal	AM	19.2	B	20.0	C	0.8	20.1	C	0.9	20.8	C	1.6	21.2	C	2.0	69.9	**E**	**Cumulative**
		PM	21.3	C	25.1	C	3.8	25.9	C	4.6	27.0	C	5.7	28.8	C	7.5	>100	**F**	**Cumulative**
28 SR-86 / Danenberg Drive	Signal	AM	13.3	B	6.9	A	0.0	6.7	A	0.0	6.7	A	0.0	6.4	A	0.0	18.9	B	None
		PM	18.4	B	15.1	B	0.0	15.1	B	0.0	15.1	B	0.0	15.0	B	0.0	>100	**F**	None
29 Dogwood Avenue / Evan Hewes Highway	Signal	AM	25.5	C	25.4	C	0.0	25.3	C	0.0	25.3	C	0.0	25.4	C	0.0	25.1	C	None
		PM	26.8	C	27.1	C	0.3	27.2	C	0.4	27.2	C	0.4	27.1	C	0.3	27.5	C	None
30 Dogwood Avenue / Ross Avenue	Signal	AM	29.4	C	29.4	C	0.0	29.4	C	0.0	29.4	C	0.0	29.8	C	0.4	31.3	C	None
		PM	29.6	C	30.4	C	0.8	30.6	C	1.0	30.8	C	1.2	30.9	C	1.3	34.1	C	None
31 Dogwood Avenue / Danenberg Drive	Signal	AM	17.7	B	12.3	B	0.0	12.1	B	0.0	12.1	B	0.0	12.0	B	0.0	17.3	B	None
		PM	26.2	C	24.6	C	0.0	24.5	B	0.0	24.3	C	0.0	24.1	C	0.0	34.1	C	None
32 Dogwood Avenue / SR-98	Signal	AM	8.7	A	15.1	B	6.4	15.4	B	6.7	15.4	B	6.7	15.5	B	6.8	21.7	C	None
		PM	17.2	B	19.4	B	2.2	19.3	B	2.1	19.4	B	2.2	19.5	B	2.3	45.8	**D**	**Cumulative**
33 Pitzer Road / McCabe Road	Signal	AM	22.5	C	18.4	B	0.0	18.4	B	0.0	18.5	B	0.0	19.3	B	0.0	21.3	C	None
		PM	22.2	C	18.8	B	0.0	19.0	B	0.0	19.1	B	0.0	19.0	B	0.0	21.7	C	None
34 SR-111 / SR-86	Signal	AM	12.5	B	21.0	C	8.5	21.4	C	8.9	21.6	C	9.1	22.6	C	10.1	>100	**F**	**Cumulative**
		PM	17.1	B	26.2	C	9.1	27.2	C	10.1	28.6	C	11.5	30.4	C	13.3	>100	**F**	**Cumulative**

Notes: [1] Average delay expressed in seconds per vehicle. [2] level of service. [3] change in delay. [4] all-way stop controlled intersection. [5] two-way stop controlled intersection – minor street worst-case approach delay is reported. [6] intersection signalized as part of the proposed project. [7] theoretical negative project "increases" (that can result with the HCM method) reported as 0.0.

Source: PMC, 2010

TABLE 4.14-13
NEAR-TERM STREET SEGMENT OPERATIONS

Street Segment	Capacity (LOS E)[1]	Existing			Existing + Project Phase I				Existing + Project Phases I & II				Existing + Project Phases I, II, & III				Existing + Total Project (Phases I, II, III, & IV)				Existing + Total Project + Cumulative Projects			Type of Impact
		ADT[2]	LOS[3]	V/C[4]	ADT	LOS	V/C	Δ[5]	ADT	LOS	V/C	Δ	ADT	LOS	V/C	Δ	ADT	LOS	V/C	Δ	ADT	LOS	V/C	
SR-86																								
Main Street to Ross Road	34,200	27,570	**D**	0.81	31,053	**E**	0.91	0.10	31,550	**E**	0.92	0.12	32,199	**E**	0.94	0.14	32,884	**E**	0.96	0.16	43,603	**F**	1.27	**Direct**
Ross Road to I-8	34,200	30,170	**D**	0.88	34,769	**F**	1.02	0.13	35,426	**F**	1.04	0.15	36,283	**F**	1.06	0.18	37,187	**F**	1.09	0.21	49,866	**F**	1.46	**Direct**
I-8 to Danenberg Drive	34,200	22,470	B	0.66	29,949	**D**	0.88	0.22	31,018	**E**	0.91	0.25	32,410	**E**	0.95	0.29	33,882	**E**	0.99	0.33	62,498	**F**	1.83	**Direct**
Danenberg Drive to McCabe Road	16,200	22,470	**F**	1.39	29,936	**F**	1.85	0.46	31,003	**F**	1.91	0.53	32,394	**F**	2.00	0.61	33,862	**F**	2.09	0.70	57,656	**F**	3.56	**Direct**
McCabe Road to Heber Road	16,200	7,530	**D**	0.46	8,427	**D**	0.52	0.06	8,556	**D**	0.53	0.06	8,723	**D**	0.54	0.07	8,899	**D**	0.55	0.08	17,431	**F**	1.08	**Direct**
Corfman Road to Dogwood Avenue	16,200	6,570	C	0.41	12,501	**E**	0.77	0.37	13,349	**E**	0.82	0.42	14,453	**E**	0.89	0.49	15,620	**E**	0.96	0.56	22,922	**F**	1.41	**Direct**
Dogwood Avenue to Pitzer Road	16,200	7,550	**D**	0.47	10,531	**D**	0.65	0.18	10,957	**E**	0.68	0.21	11,513	**E**	0.71	0.24	12,099	**E**	0.75	0.28	17,763	**F**	1.10	**Direct**
Pitzer Road to SR-111	16,200	7,320	**D**	0.45	10,054	**D**	0.62	0.17	10,445	**D**	0.64	0.19	10,954	**E**	0.68	0.22	11,492	**E**	0.71	0.26	16,770	**F**	1.04	**Direct**
Dogwood Avenue																								
Evan Hewes Highway to Ross Road	16,200	12,900	**E**	0.80	14,885	**E**	0.92	0.12	15,169	**E**	0.94	0.14	15,539	**E**	0.96	0.16	15,930	**E**	0.98	0.19	19,269	**F**	1.19	**Direct**
Ross Road to I-8	16,200	13,550	**E**	0.84	16,658	**F**	1.03	0.19	17,102	**F**	1.06	0.22	17,681	**F**	1.09	0.26	18,293	**F**	1.13	0.29	22,468	**F**	1.39	**Direct**
I-8 to Danenberg Drive	34,200	18,180	B	0.53	23,394	C	0.68	0.15	24,139	C	0.71	0.17	25,111	C	0.73	0.20	26,136	C	0.76	0.23	31,397	**E**	0.92	**Cumulative**
Danenberg Drive to McCabe Road	34,200	10,850	A	0.32	18,348	B	0.54	0.22	19,419	B	0.57	0.25	20,816	B	0.61	0.29	22,291	B	0.65	0.33	28,846	**D**	0.84	**Cumulative**
McCabe Road to SR-86	16,200	11,660	**E**	0.72	17,261	**F**	1.07	0.35	18,062	**F**	1.11	0.40	19,105	**F**	1.18	0.46	20,207	**F**	1.25	0.53	30,231	**F**	1.87	**Direct**
SR-86 to Fawcett Road	16,200	8,490	**D**	0.52	11,471	**E**	0.71	0.18	11,897	**E**	0.73	0.21	12,453	**E**	0.77	0.24	13,039	**E**	0.80	0.28	23,074	**F**	1.42	**Direct**
Fawcett Road to Willoughby Road	16,200	7,990	**D**	0.49	10,724	**D**	0.66	0.17	11,115	**E**	0.69	0.19	11,624	**E**	0.72	0.22	12,162	**E**	0.75	0.26	21,823	**F**	1.35	**Direct**
Willoughby Road to Cole Road	16,200	8,700	**D**	0.54	10,565	**D**	0.65	0.12	10,831	**D**	0.67	0.13	11,179	**E**	0.69	0.15	11,546	**E**	0.71	0.18	19,080	**F**	1.18	**Direct**
Cole Road to SR-98	16,200	10,020	**D**	0.62	11,885	**E**	0.73	0.12	12,151	**E**	0.75	0.13	12,499	**E**	0.77	0.15	12,866	**E**	0.79	0.18	20,657	**F**	1.28	**Direct**
Danenberg Drive																								
SR-86 to Dogwood Avenue	16,200	4,020	B	0.25	4,344	C	0.27	0.02	4,390	C	0.27	0.02	4,450	C	0.27	0.03	4,514	C	0.28	0.03	10,603	**D**	0.65	**Cumulative**
Farnsworth Road																								
Dannenberg Drive to McCabe Road	16,200	950	A	0.06	1,128	A	0.07	0.01	1,153	A	0.07	0.01	1,186	A	0.07	0.01	1,221	A	0.08	0.02	1,870	A	0.12	None
Pitzer Road																								
McCabe Road to SR-86	16,200	1,530	A	0.09	1,530	A	0.09	0.00	1,530	A	0.09	0.00	1,530	A	0.09	0.00	1,530	A	0.09	0.00	2,892	B	0.18	None
McCabe Road																								
Austin Road to La Brucherie Road	16,200	910	A	0.06	2,401	B	0.15	0.09	2,614	B	0.16	0.11	2,891	B	0.18	0.12	3,185	B	0.20	0.14	8,969	**D**	0.55	**Cumulative**
La Brucherie to SR-86	16,200	3,400	B	0.21	6,381	C	0.39	0.18	6,807	C	0.42	0.21	7,363	**D**	0.45	0.24	7,949	**D**	0.49	0.28	31,369	**F**	1.94	**Direct**
SR-86 to Dogwood Avenue	16,200	3,310	B	0.20	7,382	**D**	0.46	0.25	7,964	**D**	0.49	0.29	8,723	**D**	0.54	0.33	9,524	**D**	0.59	0.38	16,465	**F**	1.02	**Direct**
Dogwood Avenue to Pitzer Road	16,200	190	A	0.01	2,797	B	0.17	0.16	3,170	B	0.20	0.18	3,655	B	0.23	0.21	4,168	C	0.26	0.25	6,750	C	0.42	None
Pitzer Road to SR-111	34,200	50	A	0.00	2,289	A	0.07	0.07	2,609	A	0.08	0.07	3,026	A	0.09	0.09	3,467	A	0.10	0.10	5,644	A	0.17	None
Correll Road																								
Dogwood Avenue to Pitzer Road	16,200	1,280	A	0.08	1,527	A	0.09	0.02	1,563	A	0.10	0.02	1,609	A	0.10	0.02	1,657	A	0.10	0.02	2,361	B	0.15	None

Notes: 1 Capacities based on County of Imperial Roadway Classification Table. 2 average daily traffic volumes. 3 level of service. 4 volume-to-capacity ratio. 5 change in volume-to-capacity ratio.
Source: PMC, 2010

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TABLE 4.14-14
NEAR-TERM FREEWAY MAINLINE OPERATIONS
INTERSTATE 8

Freeway Segment	Dir.	# of Lanes	Hourly Capacity[1]	ADT[2]	Peak Hour Volume[3]		V/C[4]		LOS[5]	
					AM	PM	AM	PM	AM	PM
Existing + Project Phase I Traffic										
Imperial Avenue to SR-86	EB	2	4,400	37,390	2,247	2,590	0.51	0.59	B	B
	WB	2	4,400		1,884	2,233	0.43	0.51	B	B
SR-86 to Dogwood Avenue	EB	2	4,400	40,080	2,410	2,769	0.55	0.63	B	B
	WB	2	4,400		1,910	2,336	0.43	0.53	B	B
Dogwood Avenue to SR-111	EB	2	4,400	37,310	2,255	2,575	0.51	0.59	B	B
	WB	2	4,400		1,714	2,122	0.39	0.48	A	B
Existing + Project Phases I & II Traffic										
Imperial Avenue to SR-86	EB	2	4,400	37,620	2,252	2,606	0.51	0.59	B	B
	WB	2	4,400		1,904	2,246	0.43	0.51	B	B
SR-86 to Dogwood Avenue	EB	2	4,400	40,220	2,417	2,779	0.55	0.63	B	C
	WB	2	4,400		1,918	2,340	0.44	0.53	B	B
Dogwood Avenue to SR-111	EB	2	4,400	37,400	2,265	2,581	0.51	0.59	B	B
	WB	2	4,400		1,716	2,127	0.39	0.48	A	B
Existing + Project Phases I, II, & III Traffic										
Imperial Avenue to SR-86	EB	2	4,400	37,800	2,257	2,618	0.51	0.60	B	B
	WB	2	4,400		1,910	2,268	0.43	0.52	B	B
SR-86 to Dogwood Avenue	EB	2	4,400	40,410	2,420	2,792	0.55	0.63	B	C
	WB	2	4,400		1,922	2,352	0.44	0.53	B	B
Dogwood Avenue to SR-111	EB	2	4,400	37,570	2,267	2,593	0.52	0.59	B	B
	WB	2	4,400		1,718	2,133	0.39	0.48	A	B
Existing + Total Project (Phases I, II, III, & IV) Traffic										
Imperial Avenue to SR-86	EB	2	4,400	37,970	2,616	2,630	0.59	0.60	B	B
	WB	2	4,400		2,305	2,313	0.52	0.53	B	B
SR-86 to Dogwood Avenue	EB	2	4,400	40,640	2,863	2,808	0.65	0.64	C	C
	WB	2	4,400		2,355	2,370	0.54	0.54	B	B
Dogwood Avenue to SR-111	EB	2	4,400	37,920	2,734	2,617	0.62	0.59	B	B
	WB	2	4,400		1,761	2,137	0.40	0.49	A	B
Existing + Total Project + Cumulative Projects Traffic										
Imperial Avenue to SR-86	EB	2	4,400	50,890	2,427	3,525	0.55	0.80	B	C
	WB	2	4,400		2,114	3,266	0.48	0.74	B	C
SR-86 to Dogwood Avenue	EB	2	4,400	54,550	2,628	3,769	0.60	0.86	B	**D**
	WB	2	4,400		2,103	3,339	0.48	0.76	B	C
Dogwood Avenue to SR-111	EB	2	4,400	54,880	2,486	3,788	0.57	0.86	B	**D**
	WB	2	4,400		1,753	2,214	0.40	0.50	A	B

Notes: [1] Capacities calculated at 2,200 vehicles per lane per hour. [2] existing 2007 ADT volumes from Caltrans grown to 2009 at 2% per year and rounded to 10. [3] peak hour volume = ((ADT)(K)(D)/truck factor). [4] V/C = ((ADT)(K)(D)/truck factor/capacity). [5] level of service.

Source: PMC, 2010

Existing Plus Proposed Project Phases I and II

Intersection Operations

Table 4.14-12 shows that with the addition of the Phases I and II proposed project traffic, all of the intersections are calculated to operate at a LOS C or better except for the following (PMC, 2010):

- Clark Road / McCabe Road (LOS D during the AM peak hour)
- Dogwood Avenue / I-8 Westbound Ramps (LOS F during the AM and PM peak hours)
- Dogwood Avenue / I-8 Eastbound Ramps (LOS F during the AM and PM peak hours)
- Dogwood Road / McCabe Road – North (LOS F during the AM and PM peak hours)
- Dogwood Road / McCabe Road – South (LOS F during the AM and PM peak hours)
- Dogwood Road / Black Hills Road (LOS D during the AM and PM peak hours)
- Dogwood Road / Correll Drive (LOS F during the AM and PM peak hours)
- Dogwood Road / SR 86 (LOS F during the AM and PM peak hours)
- Dogwood Road / Fawcett Road (LOS D during the PM peak hour)
- Dogwood Avenue / Willoughby Road (LOS D during the AM and PM peak hours)
- SR 111 / McCabe Road (LOS F during the AM and PM peak hours)

Street Segment Operations

Table 4.14-13 shows that with the addition of the Phases I and II project traffic, all of the street segments are calculated to operate at a LOS C or better except for the following (PMC, 2010):

- SR 86 (4th Street): Main Street to Ross Road (LOS E)
- SR 86 (4th Street): Ross Road to I-8 (LOS F)
- SR 86: I-8 to Danenberg Drive (LOS E)
- SR 86: Danenberg Drive to McCabe Road (LOS F)
- SR 86: McCabe Road to Heber Road (LOS D)
- SR 86: Corfman Road to Dogwood Road (LOS E)
- SR 86: Dogwood Road to Pitzer Road (LOS E)
- SR 86: Pitzer Road to SR 111 (LOS D)
- Dogwood Avenue: Evan Hewes Highway to Ross Road (LOS E)
- Dogwood Avenue: Ross Road to I-8 (LOS F)
- Dogwood Road: McCabe Road to SR 86 (LOS F)
- Dogwood Road: SR 86 to Fawcett Road (LOS E)
- Dogwood Road: Fawcett Road to Willoughby Road (LOS E)

- Dogwood Road: Willoughby Road to Cole Road (LOS D)
- Dogwood Road: Cole Road to SR 98 (LOS E)
- McCabe Road: SR 86 to Dogwood Road (LOS D)

Freeway Mainline Operations

Table 4.14-14 shows that with the addition of the Phases I and II proposed project traffic, all freeway mainline segments are calculated to operate at a LOS C or better (PMC, 2010).

Existing plus Proposed Project Phases I, II, and III

Intersection Operations

Table 4.14-12 shows that with the addition of the Phases I, II, and III proposed project traffic, all of the intersections are calculated to operate at a LOS C or better except for the following (PMC, 2010):

- La Brucherie Road / McCabe Road (LOS D during the AM peak hour)
- Clark Road / McCabe Road (LOS D during the AM peak hour)
- Dogwood Avenue / I-8 Westbound Ramps (LOS F during the AM and PM peak hours)
- Dogwood Avenue / I-8 Eastbound Ramps (LOS F during the AM and PM peak hours)
- Dogwood Road / McCabe Road – North (LOS F during the AM and PM peak hours)
- Dogwood Road / McCabe Road – South (LOS F during the AM and PM peak hours)
- Dogwood Road / Black Hills Road (LOS D during the AM and PM peak hours)
- Dogwood Road / Correll Drive (LOS F during the AM and PM peak hours)
- Dogwood Road / SR 86 (LOS F during the AM and PM peak hours)
- Dogwood Road / Fawcett Road (LOS D during the PM peak hour)
- Dogwood Road / Willoughby Road (LOS D during the AM and PM peak hours)
- SR 111 / McCabe Road (LOS F during the AM and PM peak hours)

Street Segment Operations

Table 4.14-13 shows that with the addition of the Phases I, II, and III proposed project traffic, all of the street segments are calculated to operate at a LOS C or better except for the following (PMC, 2010):

- SR 86 (4th Street): Main Street to Ross Road (LOS E)
- SR 86 (4th Street): Ross Road to I-8 (LOS F)

- SR 86: I-8 to Danenberg Drive (LOS E)
- SR 86: Danenberg Drive to McCabe Road (LOS F)
- SR 86: McCabe Road to Heber Road (LOS D)
- SR 86: Corfman Road to Dogwood Road (LOS E)
- SR 86: Dogwood Road to Pitzer Road (LOS E)
- SR 86: Pitzer Road to SR 111 (LOS E)
- Dogwood Avenue: Evan Hewes Highway to Ross Road (LOS E)
- Dogwood Avenue: Ross Road to I-8 (LOS F)
- Dogwood Road: McCabe Road to SR 86 (LOS F)
- Dogwood Road: SR 86 to Fawcett Road (LOS E)
- Dogwood Road: Fawcett Road to Willoughby Road (LOS E)
- Dogwood Road: Willoughby Road to Cole Road (LOS E)
- Dogwood Road: Cole Road to SR 98 (LOS E)
- McCabe Road: La Brucherie Road to SR 86 (LOS D)
- McCabe Road: SR 86 to Dogwood Road (LOS D)

Freeway Mainline Operations

Table 4.14-14 shows that with the addition of the Phases I, II, and III proposed project traffic, all freeway mainline segments are calculated to operate at a LOS C or better.

Existing plus Total Proposed Project (Phases I, II, III, and IV)

Intersection Operations

Table 4.14-12 shows that with the addition of the total (Phases I, II, III, and IV) proposed project traffic, all of the intersections are calculated to operate at a LOS C or better except for the following (PMC, 2010):

- La Brucherie Road / McCabe Road (LOS D during the AM peak hour)
- Clark Road / McCabe Road (LOS E during the AM peak hour)
- SR 86 / McCabe Road (LOS D during the AM and PM peak hours)
- Dogwood Avenue / I-8 Westbound Ramps (LOS F during the AM and PM peak hours)
- Dogwood Avenue / I-8 Eastbound Ramps (LOS F during the AM and PM peak hours)

- Dogwood Road / McCabe Road – North (LOS F during the AM and PM peak hours)
- Dogwood Road / McCabe Road – South (LOS F during the AM and PM peak hours)
- Dogwood Road / Black Hills Road (LOS D during the AM and PM peak hours)
- Dogwood Road / Correll Drive (LOS F during the AM and PM peak hours)
- Dogwood Road / SR 86 (LOS F during the AM and PM peak hours)
- Dogwood Road / Fawcett Road (LOS E during the PM peak hour)
- Dogwood Road / Willoughby Road (LOS D during the AM peak hour and LOS E during the PM peak hour)
- Pitzer Road / SR 86 (LOS D during the PM peak hour)
- SR 111 / McCabe Road (LOS F during the AM and PM peak hours)

Street Segment Operations

Table 4.14-13 shows that with the addition of the total (Phases I, II, III, and IV) proposed project traffic, all of the street segments are calculated to operate at a LOS C or better except for the following (PMC, 2010):

- SR 86 (4th Street): Main Street to Ross Road (LOS E)
- SR 86 (4th Street): Ross Road to I-8 (LOS F)
- SR 86: I-8 to Danenberg Drive (LOS E)
- SR 86: Danenberg Drive to McCabe Road (LOS F)
- SR 86: McCabe Road to Heber Road (LOS D)
- SR 86: Corfman Road to Dogwood Road (LOS E)
- SR 86: Dogwood Road to Pitzer Road (LOS E)
- SR 86: Pitzer Road to SR 111 (LOS E)
- Dogwood Avenue: Evan Hewes Highway to Ross Road (LOS E)
- Dogwood Avenue: Ross Road to I-8 (LOS F)
- Dogwood Road: McCabe Road to SR 86 (LOS F)
- Dogwood Road: SR 86 to Fawcett Road (LOS E)
- Dogwood Road: Fawcett Road to Willoughby Road (LOS E)
- Dogwood Road: Willoughby Road to Cole Road (LOS E)

- Dogwood Road: Cole Road to SR 98 (LOS E)
- McCabe Road: La Brucherie Road to SR 86 (LOS D)
- McCabe Road: SR 86 to Dogwood Road (LOS D)

Freeway Mainline Operations

Table 4.14-14 shows that with the addition of the total (Phases I, II, III, and IV) project traffic and the cumulative projects traffic, all freeway mainline segments are calculated to operate at a LOS C or better except for the following:

- SR-86 to Dogwood Avenue
- Dogwood Avenue to SR-111

Analysis of the project's cumulative impact on Caltrans mainline freeway operations is identical to the approach used for gauging the project's direct impact.

PROJECT IMPACTS AND MITIGATION MEASURES

Increase in Project-Related Traffic

Impact 4.14.1 Buildout of the proposed project would result in increased traffic volumes, which are expected to result in increased delays and deterioration in levels of service at area intersections. This is considered to be a **potentially significant impact.**

As noted in **Table 4.14-12** and summarized below, buildout of the proposed project would result in significant direct impacts in each phase of the proposed project. It is important to note that once an impact is identified in one phase, it is not subsequently listed in futures phases as the impact would continue to be significant.

Proposed Project Phase I Intersection Impacts

- Clark Road / McCabe Road
- Dogwood Avenue / I-8 Westbound Ramps
- Dogwood Avenue / I-8 Eastbound Ramps
- Dogwood Avenue / McCabe Road – North
- Dogwood Avenue / McCabe Road – South
- Dogwood Avenue / Black Hills Road
- Dogwood Avenue / Correll Road
- Dogwood Avenue / SR-86
- Dogwood Avenue / Fawcett Road

- Dogwood Avenue / Willoughby Road
- SR-111 / McCabe Road

Proposed Project Phases I and II Additional Intersection Impacts

No additional significant direct impacts were identified as resulting from implementation of Phases I and II of the proposed project.

Proposed Project Phases I, II, and III Additional Intersection Impacts

- La Brucherie Road / McCabe Road

Total Proposed Project (Phases I, II, III, and IV) Additional Intersection Impacts

- SR-86 / McCabe Road
- Pitzer Road / SR-86

Mitigation Measures

In order to fully mitigate the project's direct impacts, the following mitigation measures are recommended. Many of the recommended mitigation measures consist of fair share contributions. The following formula should be used to calculate the fair share percentage while the applicant and County of Imperial should agree on the fair share amounts prior to final project approvals.

$$\frac{\text{Project Traffic}}{\text{Build-out Traffic} - \text{Existing Traffic}}$$

MM 4.14.1 In order to fully mitigate the project's direct impacts for Phase I, the following mitigation measures are recommended.

- **Clark Road / McCabe Road**. Contribute a fair share towards signalization of this intersection.
- **Dogwood Avenue / I-8 Westbound Ramps**. Contribute a fair share towards the improvements at the Dogwood Avenue / I-8 interchange consisting of a 6-lane bridge with loop on-ramps, in accordance with the Caltrans Project Study Report.
- **Dogwood Avenue / I-8 Eastbound Ramps**. Contribute a fair share towards the improvements at the Dogwood Avenue / I-8 interchange consisting of a 6-lane bridge with loop on-ramps, in accordance with the Caltrans Project Study Report.
- **Dogwood Avenue / McCabe Road – North**. Contribute a fair share towards signalization of this intersection and provision of one additional northbound through lane and one additional southbound through lane.
- **Dogwood Avenue / McCabe Road – South**. Contribute a fair share towards signalization of this intersection and provision of one additional northbound through lane and one additional southbound through lane.

- **Dogwood Avenue / Black Hills Road**. Contribute a fair share towards the provision of two additional northbound and two additional southbound through lanes.

- **Dogwood Avenue / Correll Road**. Contribute a fair share towards signalization of this intersection.

- **Dogwood Avenue / SR-86**. Contribute a fair share towards signalization of this intersection and provision of the following improvements.

  - Northbound: one left-turn lane, two through lanes, and one right-turn lane
  - Southbound: one left-turn lane, two through lanes, and one right-turn lane
  - Eastbound: one left-turn lane, one through lane, and one right-turn lane
  - Westbound: one left-turn lane, one through lane, and one right-turn lane

- **Dogwood Avenue / Fawcett Road**. Contribute a fair share towards signalization of this intersection and provision of dedicated northbound and southbound left-turn lanes.

- **Dogwood Avenue / Willoughby Road**. Contribute a fair share towards signalization of this intersection and provision of dedicated northbound and southbound left-turn lanes.

- **SR-111 / McCabe Road**. Contribute a fair share towards signalization of this intersection.

Timing/Implementation: *Prior to construction activities of Phase I.*

Enforcement/Monitoring: *County of Imperial Planning Department and Development Services and Department of Building and Public Works.*

MM 4.14.1b For Phase I, II and III:

- **La Brucherie Road / McCabe Road.** Contribute a fair share towards signalization of this intersection and the provision of one northbound right-turn lane, one westbound left-turn lane, and one westbound right-turn lane.

Timing/Implementation: *Prior to construction activities of Phase III.*

Enforcement/Monitoring: *County of Imperial Planning Department and Development Services and Department of Building and Public Works.*

MM 4.14.1c For Phase I, II III and IV:

- **SR-86 / McCabe Road**. Contribute a fair share towards provision of the following improvements.

- Northbound: one left-turn lane, two through lanes, and one right-turn lane
- Southbound: one left-turn lane, two through lanes, and one right-turn lane
- Eastbound: one left-turn lane, one through lane, and one right-turn lane
- Westbound: one left-turn lane, one through lane, and one right-turn lane

- **Pitzer Road / SR-86**. Contribute a fair share towards signalization of this intersection

Timing/Implementation: *Prior to construction activities of Phase IV.*

Enforcement/Monitoring: *County of Imperial Planning Department and Development Services and Department of Building and Public Works.*

Significance After Mitigation

Mitigation Measure 4.14.1a through **Mitigation Measure 4.14.1c**, which requires the project Master Developer or subsequent builders to contribute to the fair-share contribution for the intersection improvements identified, would reduce direct project impacts to area intersections. This impact is considered to be **less than significant.**

Impact 4.14.2 Buildout of the proposed project would result in increased traffic volumes, which are expected to result in increased delays and deterioration in levels of service at area street segments. This is considered to be a **potentially significant** impact.

As noted in **Table 4.14-13** and summarized below, buildout of the proposed project would result in significant direct impacts in each phase of the proposed project. It is important to note that once an impact is identified, it is not subsequently listed in futures phases as the impact would continue to be significant (PMC, 2010).

Proposed Project Phase I Street Segment Impacts

- SR-86 (4th Street): Main Street to Ross Road
- SR-86 (4th Street): Ross Road to I-8
- SR-86: McCabe Road to Heber Road
- SR-86: Corfman Road to Dogwood Avenue
- SR-86: Dogwood Avenue to Pitzer Road
- SR-86: Pitzer Road to SR-111
- Dogwood Avenue: Evan Hewes Highway to Ross Road
- Dogwood Avenue: Ross Road to I-8

- Dogwood Avenue: McCabe Road to SR-86
- Dogwood Avenue: SR-86 to Fawcett Road
- Dogwood Avenue: Fawcett Road to Willoughby Road
- Dogwood Avenue: Willoughby Road to Cole Road
- Dogwood Avenue: Cole Road to SR-98
- McCabe Road: SR-86 to Dogwood Avenue

Proposed Project Phases I and II Additional Street Segment Impacts

No additional significant direct impacts were identified as resulting from implementation of Phases I and II of the proposed project.

Proposed Project Phases I, II, and III Additional Street Segment Impacts

- McCabe Road: La Brucherie Road to SR 86

Total Project (Phases I, II, III, and IV) Additional Street Segment Impacts

No additional significant direct impacts were identified as resulting from implementation of the total (Phases I, II, III, and IV) proposed project.

In order to fully mitigate the project's direct impacts, the following mitigation measures are recommended. Many of the recommended mitigation measures consist of fair share contributions. The following formula should be used to calculate the fair share percentage while the applicant and County of Imperial should agree on the fair share amounts prior to final project approvals.

$$\frac{\text{Project Traffic}}{\text{Build-out Traffic} - \text{Existing Traffic}}$$

MM 4.14.2a In order to fully mitigate the project's direct impacts for Phase I, the following mitigation measures are recommended:

- **SR-86 (4th Street): Main Street to Ross Road**. Contribute a fair share toward the future widening of SR-86 (4th Street) between Main Street and Ross Road to a 6-lane arterial.
- **SR-86 (4th Street): Ross Road to I-8**. Contribute a fair share toward the future widening of SR-86 (4th Street) between Ross Road and I-8 to a 6-lane arterial.
- **SR-86: McCabe Road to Heber Road**. Contribute a fair share toward the future widening of SR-86 between McCabe Road and Heber Road to a 6-lane prime arterial for all portions not abutting the project site. For all portions abutting the project site, the project Master Developer or subsequent builders shall provide for the widening of SR-86.

- **SR-86: Corfman Road to Dogwood Avenue**. Contribute a fair share toward the future widening of SR-86 between Corfman Road and Dogwood Avenue to a 6-lane prime arterial for all portions not abutting the project site. For all portions abutting the project site, the project Master Developer or subsequent builders shall provide for the widening of SR-86.

- **SR-86: Dogwood Avenue to Pitzer Road**. Contribute a fair share toward the future widening of SR-86 between Dogwood Avenue and Pitzer Road to a 6-lane prime arterial.

- **SR-86: Pitzer Road to SR-111**. Contribute a fair share toward the future widening of SR-86 between Pitzer Road and SR-111 to a 6-lane prime arterial.

- **Dogwood Avenue: Evan Hewes Highway to Ross Road**. Contribute a fair share toward the future widening of Dogwood Avenue between Evan Hewes Highway and Ross Road to a 6-lane arterial.

- **Dogwood Avenue: Ross Road to I-8**. Contribute a fair share toward the future widening of Dogwood Avenue between Ross Road and I-8 to a 6-lane arterial.

- **Dogwood Avenue: McCabe Road to SR-86**. Contribute a fair share toward the future widening of Dogwood Avenue between McCabe Road and SR-86 to a 6-lane prime arterial.

- **Dogwood Avenue: SR-86 to Fawcett Road**. Contribute a fair share toward the future widening of Dogwood Avenue between SR-86 and Fawcett Road to a 6-lane prime arterial.

- **Dogwood Avenue: Fawcett Road to Willoughby Road**. Contribute a fair share toward the future widening of Dogwood Avenue between Fawcett Road and Willoughby Road to a 6-lane prime arterial.

- **Dogwood Avenue: Willoughby Road to Cole Road**. Contribute a fair share toward the future widening of Dogwood Avenue between Willoughby Road and Cole Road to a 6-lane prime arterial.

- **Dogwood Avenue: Cole Road to SR-98**. Contribute a fair share toward the future widening of Dogwood Avenue between Cole Road and SR-98 to a 6-lane prime arterial.

- **McCabe Road: SR-86 to Dogwood Avenue**. Contribute a fair share toward the future widening of McCabe Road between SR-86 and Dogwood Avenue to a 6-lane prime arterial.

Timing/Implementation: *Prior to construction activities of Phase I.*

Enforcement/Monitoring: *County of Imperial Planning Department and Development Services and Department of Building and Public Works.*

MM 4.14.2b In order to fully mitigate the project's direct impacts for Phase I, II and II, the following mitigation measures are recommended:

- **McCabe Road: La Brucherie Road to SR-86.** Contribute a fair share toward the future widening of McCabe Road between La Brucherie Road and SR-86 to a 6-lane prime arterial.

Timing/Implementation: *Prior to construction activities of Phase III.*

Enforcement/Monitoring: *County of Imperial Planning Department and Development Services and Department of Building and Public Works.*

Significance After Mitigation

Mitigation Measure 4.14.2a and **Mitigation Measure 4.14.2b**, which requires the project Master Developer or subsequent builders to contribute to the fair-share contribution for the roadway segment improvements identified above, would reduce direct project impacts to area intersections. This impact is considered to be **less than significant.**

Change Air Traffic Patterns

Impact 4.14.3 The proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. This is considered a **less than significant** impact.

The proposed project is not located near an existing airport. The two closest primary public use airports to the project site are the Imperial County Airport and the Calexico International Airport. The Imperial County Airport is located in the City of Imperial approximately 7 miles from the project site on SR 86. The Calexico International Airport is located in the City of Calexico approximately 8 miles from the project site near the U.S.-Mexico Border, west of SR 111. While the proposed project would increase population and employment, which may increase demand for air travel, the proposed project does not contain any elements which would significantly change air travel patterns. No changes or increases in the timing or frequency of commercial flights are anticipated to occur as a result of implementation of the proposed project. As a result, no impacts to air traffic patterns or airport functions will result as part of the proposed project.

Because the proposed project cost would exceed $500,000, the project must undergo review by the Imperial County Airport Land Use Commission (ALUC), which must verify whether the proposed project is consistent with the Airport Land Use Compatibility Plan. The proposed project was reviewed by the ALUC on

In addition, future proposed development projects within the McCabe Ranch II Specific Plan area may be subject to additional review by the ALUC if the project exceeds $500,000 in cost or otherwise triggers review through specific project features.

As a result, the proposed project's impact on air traffic patterns is considered to be a **less than significant** impact.

Mitigation Measures

None required.

Substantially Increase Hazards Due to a Design Feature or Incompatible Uses

Impact 4.14.4 The proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). This is considered a **less than significant** impact.

Buildout of the proposed project would result in construction of new roadways and intersections consistent with the standards established in the County of Imperial General Plan. The project site is located on relatively flat farmland and none of the proposed project major roadways within the Specific Plan are anticipated to include sharp curves or result in dangerous intersections.

The proposed Specific Plan which requires all future development proposals to submit project plans and specifications to the County of Imperial Department of Planning and Development Services, as well as to the County of Imperial Department of Public Works. These future development proposals would undergo departmental review for consistency with the County's standards prior to issuance of applicable grading, building, or occupancy permits, as determined on a project-specific basis by the County.

Buildout of the proposed project would result in the conversion of farmland to residential, commercial, educational, and recreational uses. Although a number of locations in the proposed project vicinity have similarly converted farmland to non-farming uses, operating farmland continues to be present in the vicinity of the proposed project. However, because it is anticipated the mix of uses in the vicinity of the proposed project will not include existing incompatible uses, buildout of the proposed project is not anticipated to substantially increase hazards due to the introduction new incompatible uses.

The proposed project may also result in incompatible uses, specifically in relation to the Union Pacific Railroad. However, none of the proposed project roadways would bisect the railroad line and disrupt or delay any rail traffic. A more detailed analysis will be conducted at the individual project level in subsequent environmental review documents.

The proposed project would not result in design features or incompatible uses that would result in a substantial increase in hazards and is therefore a **less than significant** impact.

Mitigation Measures

None required.

Result in Inadequate Emergency Access

Impact 4.14.5 Buildout of the proposed project would result in the construction of new roadways and intersections that could change emergency access. This impact is considered **potentially significant**.

The project site is bounded by McCabe Road to the north, Dogwood Road on the east, SR 86 on the west, and the western extension of Correll Road to the south. A total of seven vehicular access points are proposed, two along SR 86 from the west, two along McCabe Road from the north, and three along Dogwood Road from the east.

McCabe Road is classified as a Prime Arterial requiring 136-foot right-of-way. Dogwood Road is classified as a Modified Prime Arterial (with planned transit) requiring 164-foot right-of-way and is also designated within the County Bicycle Master Plan portion of the County Circulation and Scenic Highways Element as a bicycle route. Correll Road is classified as a Minor Arterial requiring 102-foot right-of-way. SR 86 is classified as a State Highway, with a recommended 2050 classification as a Prime Arterial. The proposed project identifies sufficient right-of-way to meet the designated classifications with the exception of SR 86, for which it does not provide sufficient specifics to determine if the proposed project provides sufficient right-of-way widths to match the recommended future classification. However, Mitigation Measure 4.14.2b, identified above for Impact 4.14.2, would result in the widening of SR 86 consistent with the Prime Arterial functional classification.

Mitigation Measures

MM 4.14.5a The proposed project, and all subsequent projects, would be subject to review by the Imperial County Sheriff's Office, the Imperial County Fire Department, and other applicable agencies regarding adequate emergency access.

MM 4.14.5b The proposed project would incorporate adequate emergency access locations as required by the County Fire Department. Prior to final site plan approval, the County will coordinate with the County Fire Department to design adequate circulation and access into the final site plan.

Timing/Implementation: *Prior to the recordation of the final map.*

Enforcement/Monitoring: *County of Imperial Planning Department and Development Services and Imperial County Sheriff's Office, the Imperial County Fire Department, and other applicable agencies*

Significance after Mitigation

Mitigation Measure 4.14.5a and **Mitigation Measure 4.14.5b** which require review by the County Sheriff's Office and Fire Department, would reduce potential impacts from inadequate emergency access impacts from implementation of the McCabe Ranch II Specific Plan to a minimum. In addition, during the construction phases of project area buildout, **MM 4.12.1a**(see Section 4.12, Public Services) requires the preparation of a traffic control plan. This impact is considered to be **less than significant.**

Result in Inadequate Parking Capacity

Impact 4.14.6 Buildout of the proposed project will increase demand for on-site parking facilities. This is a **potentially significant** impact on parking capacity.

Approval of the Specific Plan and amendment of the Land Use Ordinance will modify the off-street parking requirements for the residential uses included in the proposed project. **Table 4.14-15** identifies the specific cases in which the off-street parking requirements contained in the County of Imperial Code (Title 9 Land Use Code, Chapter 2 Off-Street Parking) exceed the proposed residential parking requirements included in the proposed project.

TABLE 4.14-15
COMPARISON OF RESIDENTIAL PARKING REQUIREMENTS BY NUMBER OF BEDROOMS

Number of Bedrooms	Code Parking Requirement[1]	Specific Plan Proposed Parking Requirement[2]
Low and Medium Density, Single-Family Residential		
4-bedroom units	2.5 parking spaces per unit	2.0 parking spaces per unit
6-bedroom units	3.5 parking spaces per unit	3.0 parking spaces per unit
8-bedroom units	4.5 parking spaces per unit	4.0 parking spaces per unit
9 or more bedrooms per unit	5.0 parking spaces per unit plus 0.5 parking space for each bedroom in excess of 9 bedrooms per unit	4.5 parking spaces per unit plus 0.5 parking space for each bedroom in excess of 9 bedrooms per unit
High Density Residential		
1-bedroom or studio units	2.0 parking spaces per unit	1.0 covered parking spaces plus 0.5 uncovered parking spaces
4 or more bedrooms per unit	2.5 parking spaces per unit plus 0.5 parking spaces for each bedroom in excess of 4 bedrooms per unit	2.0 covered parking spaces plus 0.25 uncovered parking spaces per unit

Notes: [1] Source is Title 9 Land Use Code, Chapter 2 Off-Street Parking. [2] Source: McCabe Ranch II Specific Plan.

Because the exact composition of residential units (by number of bedrooms and density) that will be built and the associated off-street parking spaces provided as a result of the proposed project are unknown, the effect of the proposed project on parking capacity is also unknown. However, as is illustrated in **Table 4.14-15**, the proposed lower off-street parking requirements are generally consistent with Land Use Ordinance requirements.

Mitigation Measures

MM 4.14.6 Prior to the approval of any subsequent projects within the McCabe Ranch II Specific Plan area, subsequent project-level planning and/or environmental review shall evaluate the subsequent project's impact on parking capacity and identify mitigation measures, as appropriate.

Timing/Implementation: *Prior to the recordation of the final map.*

Enforcement/Monitoring: *County of Imperial Planning Department and Development Services and Imperial County Sheriff's Office, the Imperial County Fire Department, and other applicable agencies*

Significance after Mitigation

Mitigation Measure 4.14.6 requires that prior to approval of subsequent projects within the McCabe Ranch II Specific Plan area, subsequent project-level planning and/or environmental review will evaluate the subsequent project's impact on parking capacity and identify mitigation measures. This policy would reduce potential parking impacts from implementation of the McCabe Ranch II Specific Plan area to a minimum. This impact is considered to be **less than significant.**

Conflict with Adopted Policies, Plans, or Programs Supporting Alternative Transportation

Impact 4.14.7 Buildout of the proposed project will result in the construction of new roadways and bicycle and pedestrian facilities consistent with adopted policies, plans, and programs for alternative transportation. This is a **less than significant** impact.

The proposed project would include sufficient right-of-way to implement planned transit improvements and the Class II bicycle lane envisioned for Dogwood Road, in addition to providing sufficient right-of-way for pedestrian and bicycle improvements along McCabe Road and Correll Road. Within the project site, the proposed project would result in bicycle and pedestrian facilities connecting to the County's system. Additionally, the proposed project identifies potential transit stop locations along the east-west main entry parkway for possible future transit service. The proposed project would not conflict with adopted plans, policies, or programs that support non-motorized transportation or other alternative modes of transportation. As a result, the project is not expected to conflict with policies regarding alternative transportation and any impacts are considered to be **less than significant.**

Mitigation Measures

None required.

4.14.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

There are other planned projects in the vicinity of the proposed project that could add traffic to the roadways surrounding the project site under cumulative conditions. Based on a review of projects in the City of El Centro, the City of Calexico, and the County of Imperial, it was determined that nine near-term cumulative development projects should be included in theanalysis of traffic impacts. The following table, **TABLE 4.14-16,** provides a brief description of these cumulative projects (PMC, 2010).

TABLE 4.14-16
CUMULATIVE PROJECT LIST

Name of Project	Use	Project Description
8th Street	Mixed Use	24 acres – 82 dwelling units; industrial
Calexico Mega Park	Commercial	157 acres
Citrus Grove Estates	Residential	47 acres – 120 dwelling units
Countryside South	Mixed Use	39 acres – 143 dwelling units; school
County Center II	Commercial / Government	10 acres
Desert Village # 6	Mixed Use	55 acres – 235 dwelling units; 7.3 commercial
El Portal	Mixed Use	153 acres – 720 dwelling units; school
Hallwood/Calexico Place III & Casino	Commercial	232 acres for casino
Heber Meadows	Residential	219
Heber Multi-Family Apartments	Residential	58 acres – 736 dwelling units; school
Imperial Center	Commercial	80 acres
La Estrella Subdivision	Residential	150 acres – 771 dwelling units; open space; school
La Jolla Palms / Hearthstone / Pacific Century Homes	Mixed Use	160 acres – 1,057 dwelling units; commercial
La Quinta and Candlewood	Commercial	3.55 acres –93,136 square feet commercial
Las Aldeas	Mixed Use	680 acres – 2,641 dwelling units; commercial; industrial; schools

Name of Project	Use	Project Description
Las Flores	Residential	42 acres – 158 dwelling units
Las Palmas	Residential	324 acres – 788 dwelling units
Linda Vista	Mixed Use	80 acres –dwelling units; commercial; school
Los Lagos Planned Community	Mixed Use	500 acres – 1,900 dwelling units; commercial; open space; schools
Lotus Ranch	Residential	213 acres – 658 dwelling units
Miller Burson	Mixed Use	160 acres – 570 dwelling units; school
Mosaic	Mixed Use	184 acres – 1,156 dwelling units; commercial; open space
Rancho Verde	Residential	36 acres – 65 dwelling units
Riverview Condominiums	Mixed Use	24 acres – 340 dwelling units; 4 lots of commercial uses
Rosswood	Residential	40 acres – 148 dwelling units
Santa Fe Subdivision	Mixed Use	251 acres – 593 dwelling units; commercial; industrial
The Commons	Commercial	84 acres – 700,000 square feet commercial
The Plaza	Commercial	38 acres – 340,000 square feet commercial
Victoria Ranch SPA	Mixed Use	320 acres – 1,296 dwelling units; commercial; school
Villas at Imperial Valley Mall	Residential	20 acres – 328 dwelling units
Willow Bend (East)	Residential	38 acres – 122 dwelling units
Willow Bend (West)	Residential	36 acres – 94 dwelling units

Summary of Cumulative Project Trips

Table 4.14-17 provides a summary of the cumulative projects trip generation. **Figure 4.14-12 (a,b,c,d,e)** depicts the combined cumulative projects traffic volumes. **Figure 4.14-13 (a,b,c,d,e)** depicts the existing plus project plus cumulative projects traffic volumes.

TABLE 4.14-17
CUMULATIVE PROJECTS TRIP GENERATION SUMMARY

Project	Daily Trips	AM Peak Hour		PM Peak Hour	
		In	Out	In	Out
8th Street	2,758	245	77	85	275
Calexico Mega Park	146,832	2,148	1,374	6,155	6,668
Citrus Grove Estates	1,148	23	68	76	45
Countryside South	2,143	165	194	167	146
County Center II	9,352	137	87	392	425
Desert Village # 6	9,076	144	196	436	398
El Portal	7,664	274	518	534	361
Hallwood/Calexico Place III & Casino	216,974	3,175	2,030	9,095	9,853
Heber Meadows	2,096	41	123	139	82
Heber Multi-Family Apartments	5,720	214	414	372	252
Imperial Center	74,819	1,095	700	3,136	3,398
La Estrella Subdivision	8,152	283	547	566	381
La Jolla Palms / Hearthstone / Pacific Century Homes	10,115	198	595	673	395
La Quinta and Candlewood	3,999	59	37	168	182
Las Aldeas	62,307	1,164	1,938	3,276	2,726
Las Flores	1,512	30	89	101	59
Las Palmas	7,541	148	443	501	294
Linda Vista	6,638	233	250	362	348
Los Lagos Planned Community	121,671	2,125	2,249	5,633	5,524
Lotus Ranch	6,297	123	370	419	246
Miller Burson	6,229	245	434	438	305

Project	Daily Trips	AM Peak Hour		PM Peak Hour	
		In	Out	In	Out
Mosaic	12,059	231	660	777	477
Rancho Verde	622	12	37	41	24
Riverview Condominiums	3,254	64	191	216	127
Rosswood	1,416	28	83	94	55
Santa Fe Subdivision	5,675	111	334	377	222
The Commons	15,029	220	141	630	683
The Plaza	14,600	214	137	612	663
Victoria Ranch SPA	13,177	382	842	900	577
Villas at Imperial Valley Mall	3,139	62	185	209	123
Willow Bend (East)	1,168	23	69	78	46
Willow Bend (West)	900	18	53	60	35

Source: PMC, 2010

Analysis of Near-Term Scenarios

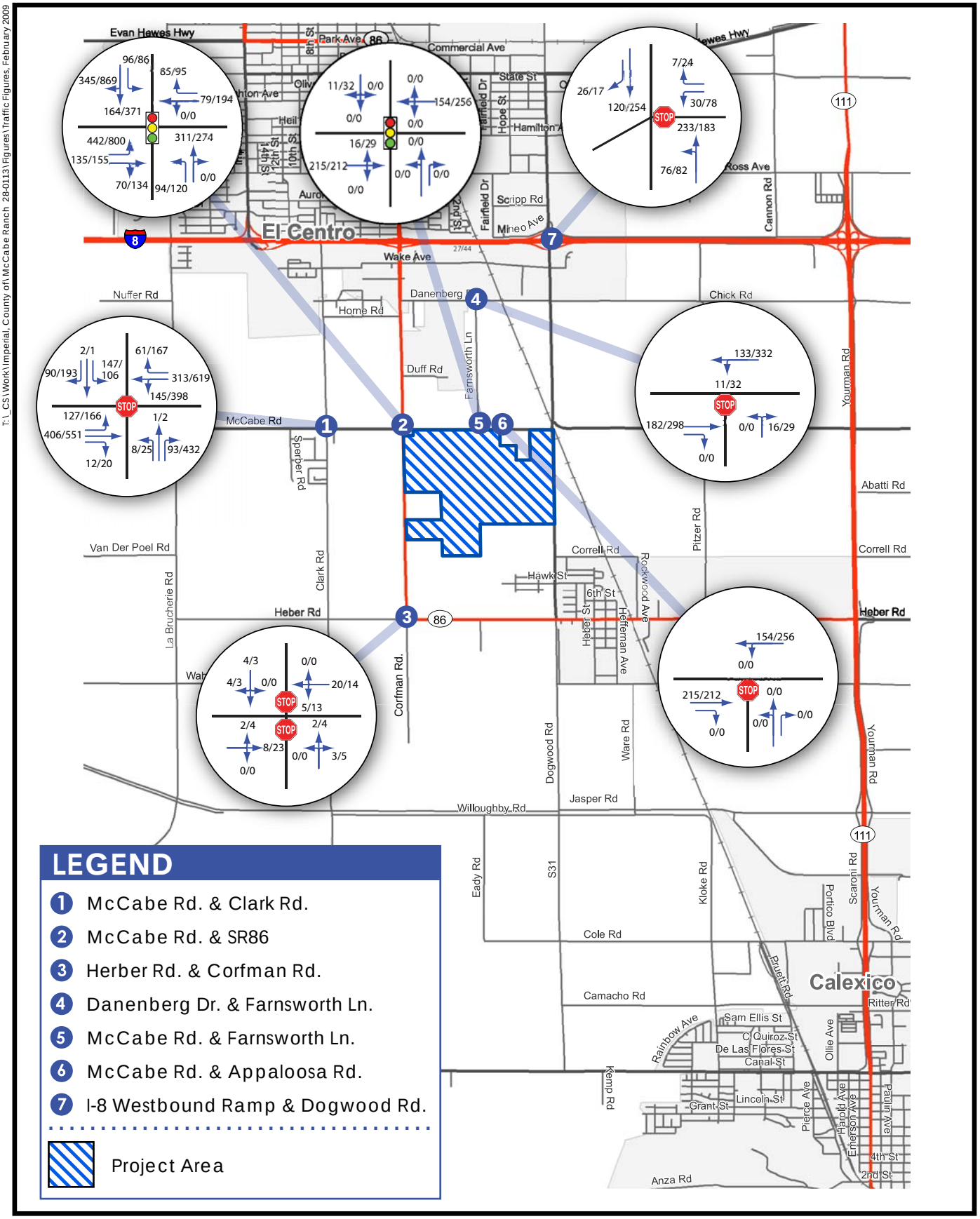
The existing plus total project plus cumulative projects analysis is analyzed in relation to the existing plus total project scenario. This analysis includes the results for the intersection, street segment, and freeway mainline operations.

Existing plus Total Proposed Project (Phases I, II, III, and IV) plus Cumulative Projects

Intersection Operations – Project + Cumulative

Table 4.14-18 shows that with the addition of the total (Phases I, II, III, and IV) proposed project traffic and the cumulative projects traffic, all of the intersections are calculated to operate at a LOS C or better except for the following (PMC, 2010):

- Austin Road / McCabe Road (LOS F during the AM peak hour and LOS E during the PM peak hour)
- La Brucherie Road / McCabe Road (LOS F during and peak hour)
- Clark Road / McCabe Road (LOS F during the AM and PM peak hours)
- SR 86 / McCabe Road (LOS F during the AM and PM peak hours)
- SR 86 / Main Entry Parkway – West (LOS F during the AM and LOS E PM peak hours)
- Dogwood Avenue / I-8 Westbound Ramps (LOS F during the AM and PM peak hours)
- Dogwood Avenue / I-8 Eastbound Ramps (LOS F during the AM and PM peak hours)



No Scale

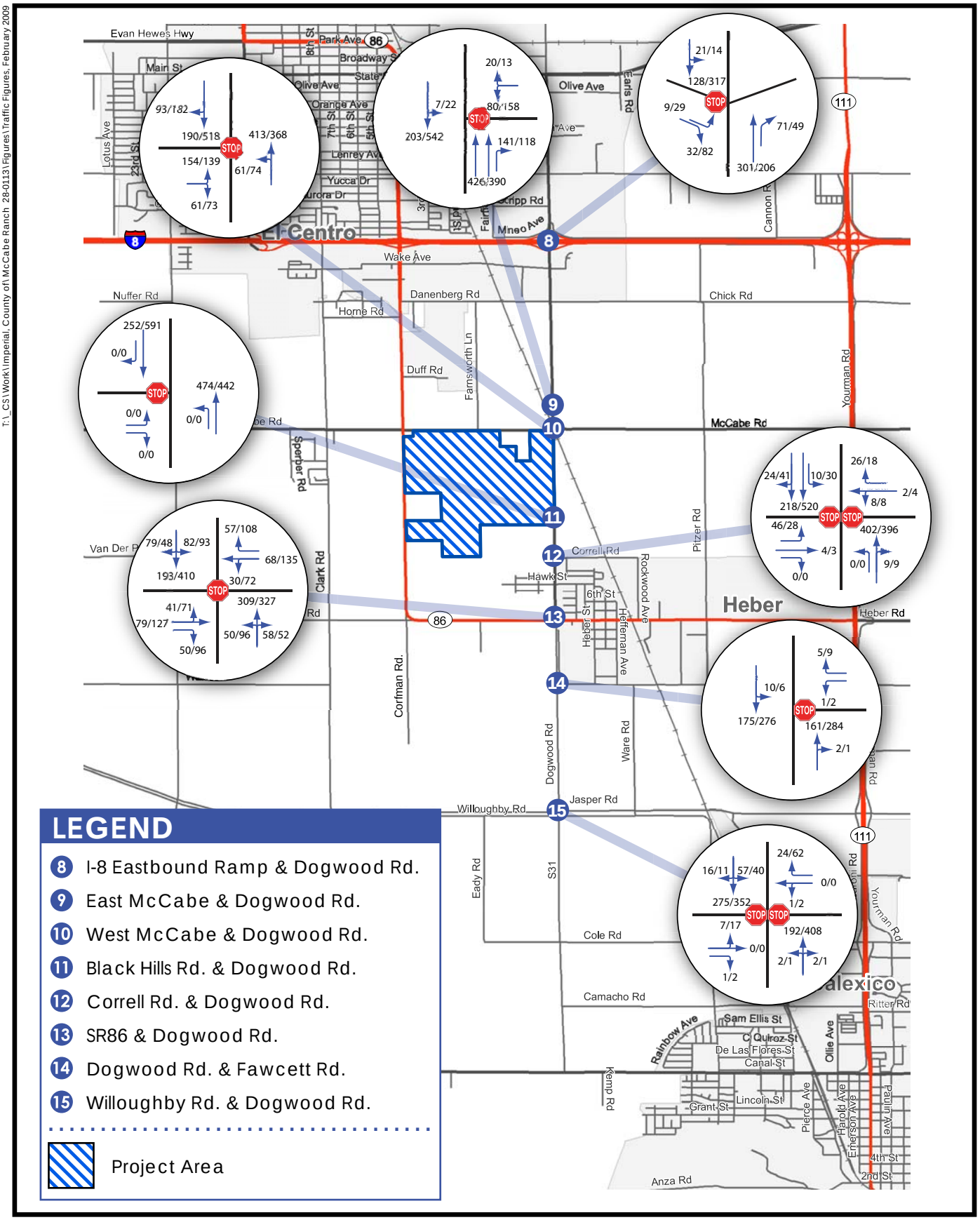
N

Figure 4.14-12a

Cummulative Projects AM/PM Peak Hour Traffic Volumes

PMC

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



LEGEND

8. I-8 Eastbound Ramp & Dogwood Rd.
9. East McCabe & Dogwood Rd.
10. West McCabe & Dogwood Rd.
11. Black Hills Rd. & Dogwood Rd.
12. Correll Rd. & Dogwood Rd.
13. SR86 & Dogwood Rd.
14. Dogwood Rd. & Fawcett Rd.
15. Willoughby Rd. & Dogwood Rd.

Project Area

No Scale

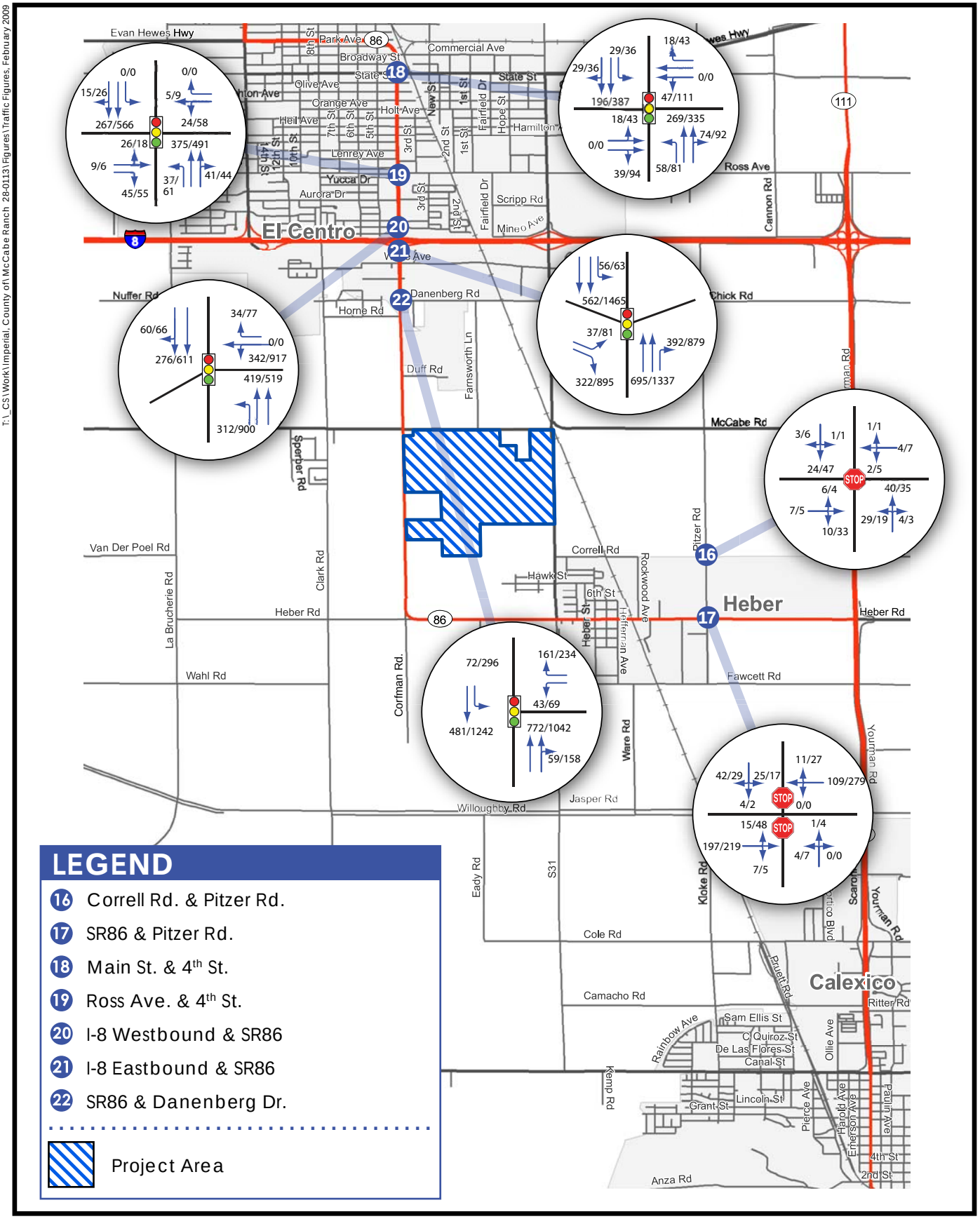
N

Figure 4.14-12b

Cumulative Projects AM/PM Peak Hour Traffic Volumes

PMC

T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009



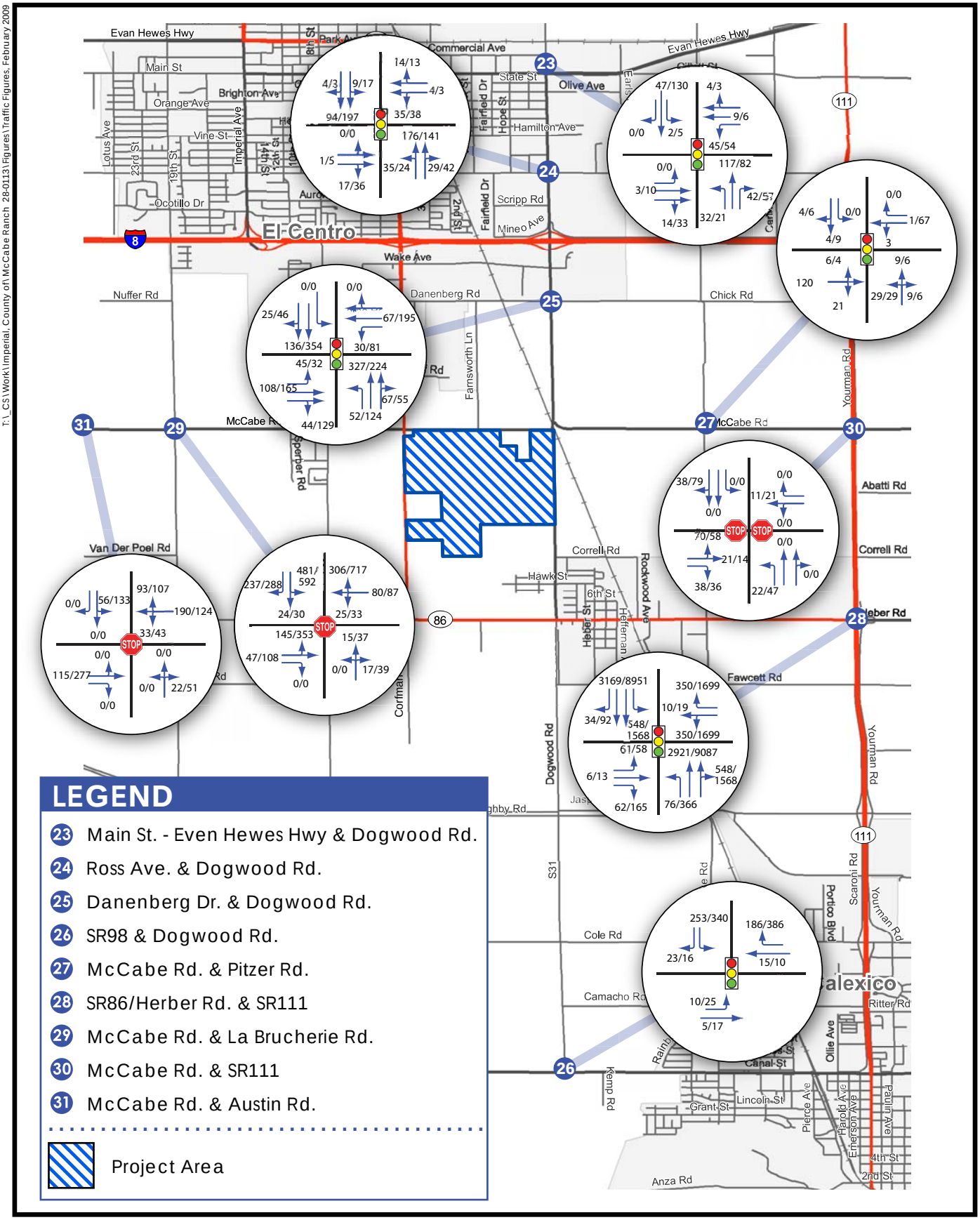
No Scale

N

Figure 4.14-12c

Cumulative Projects AM/PM Peak Traffic Volumes

PMC



LEGEND

23 Main St. - Even Hewes Hwy & Dogwood Rd.
24 Ross Ave. & Dogwood Rd.
25 Danenberg Dr. & Dogwood Rd.
26 SR98 & Dogwood Rd.
27 McCabe Rd. & Pitzer Rd.
28 SR86/Herber Rd. & SR111
29 McCabe Rd. & La Brucherie Rd.
30 McCabe Rd. & SR111
31 McCabe Rd. & Austin Rd.

Project Area

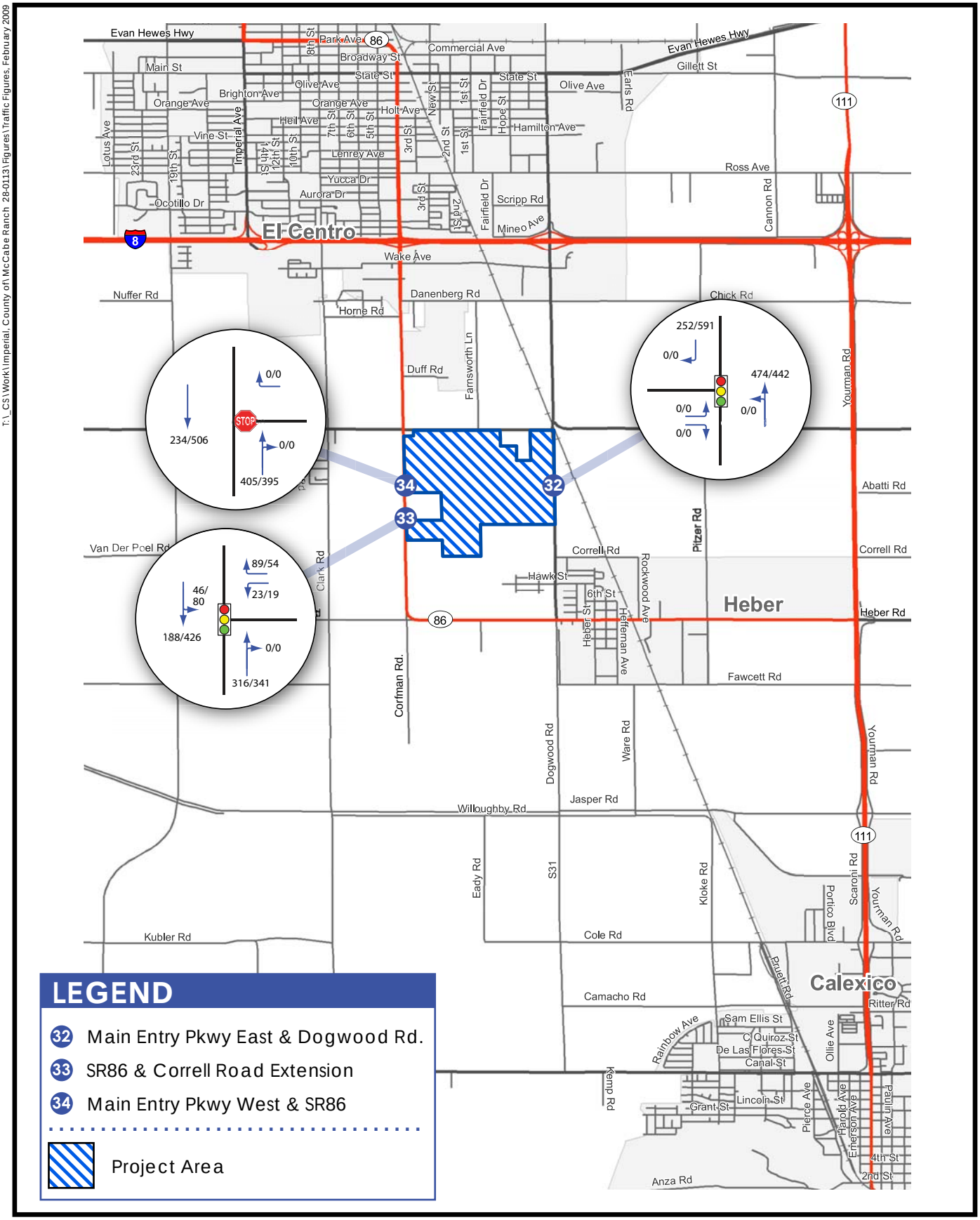
No Scale

N

Figure 4.14-12d

Cumulative Projects AM/PM Peak Traffic Volumes

PMC

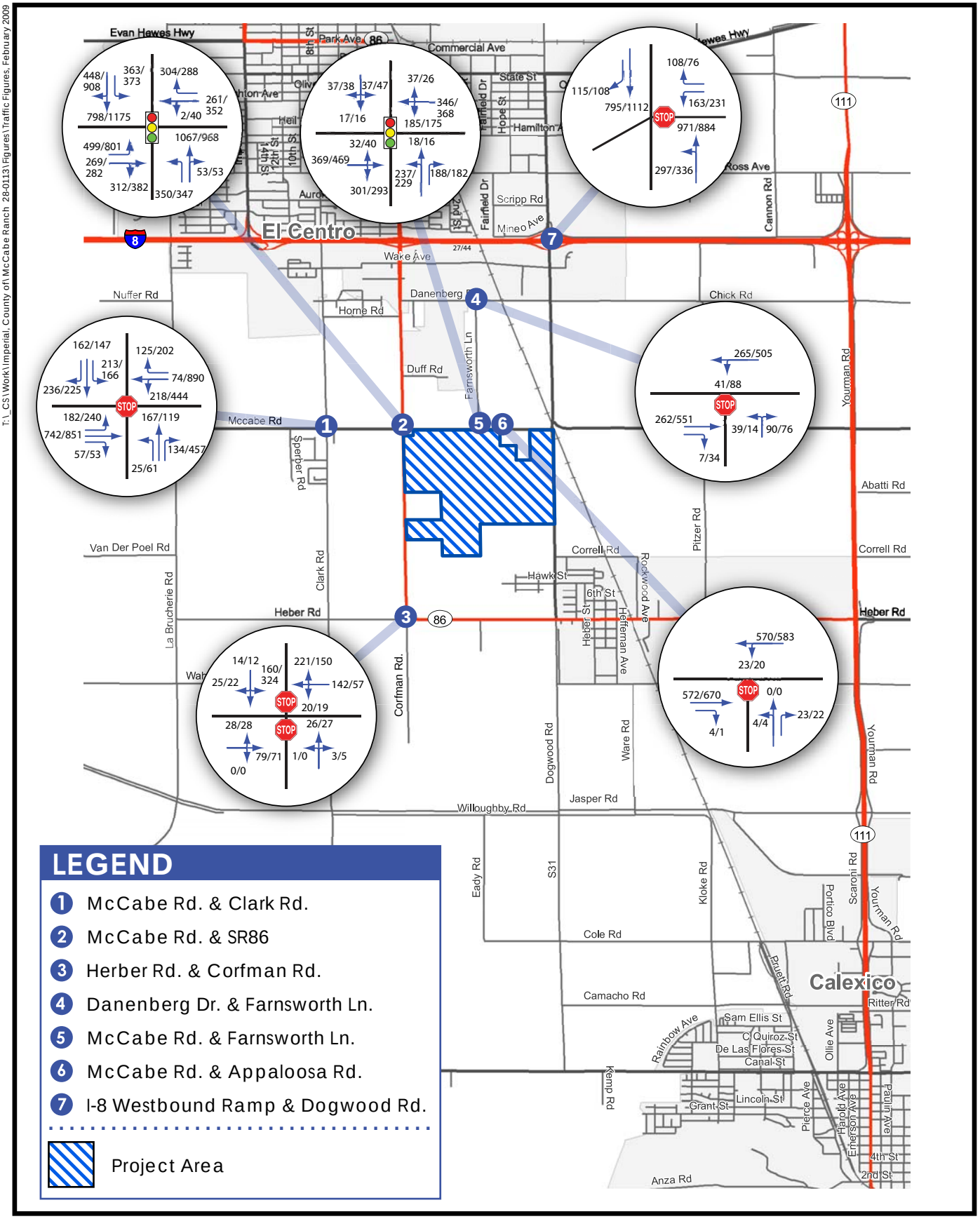


No Scale

N

Figure 4.14-12e

Cumulative Projects AM/PM Peak Traffic Volumes



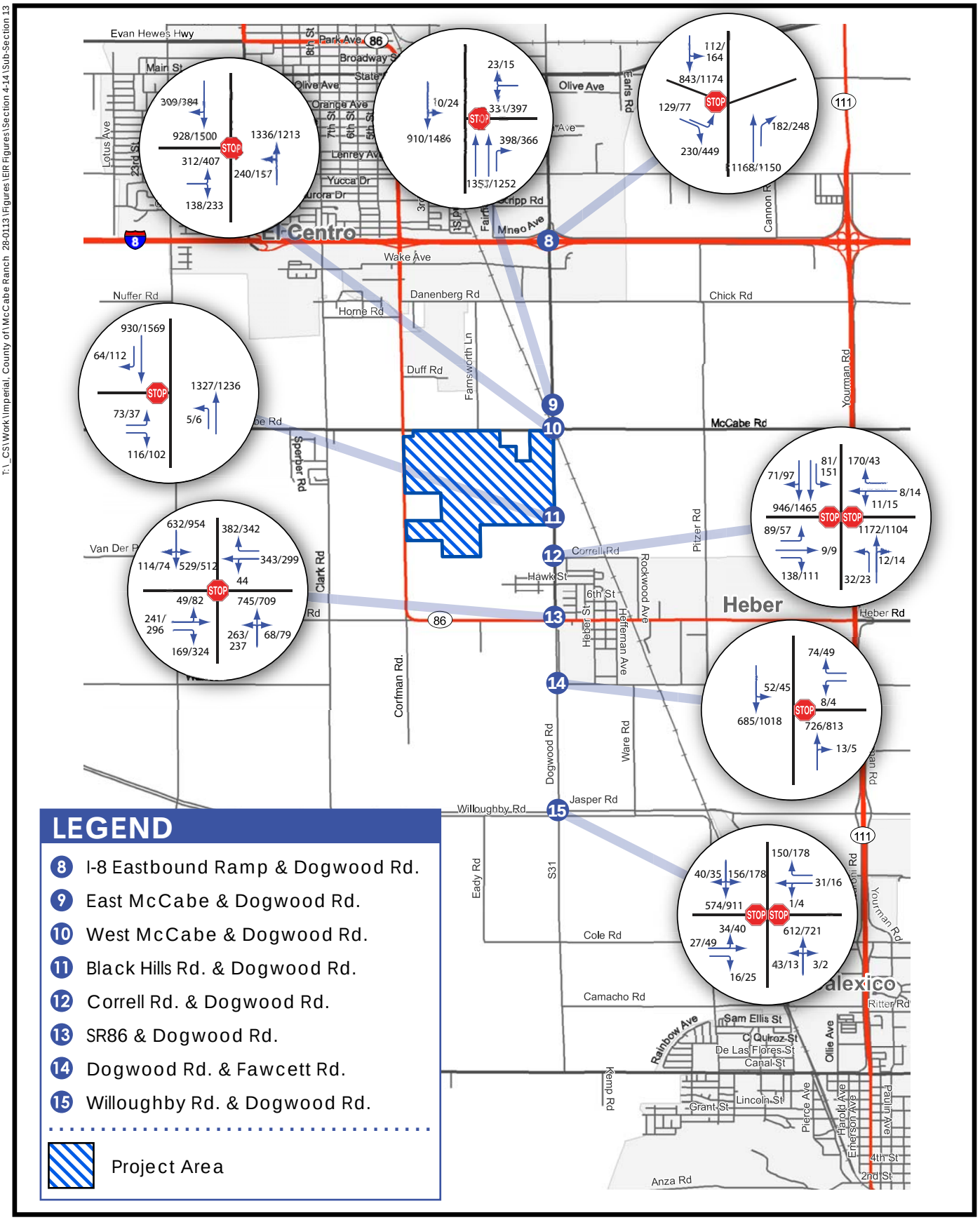
T:_CS\Work\Imperial, County of\McCabe Ranch 28-0113\Figures\Traffic Figures, February 2009

No Scale

N

Figure 4.14-13a

Existing Total Projects plus Cumulative Projects AM/PM Peak Hour Traffic Volumes



LEGEND

8. I-8 Eastbound Ramp & Dogwood Rd.
9. East McCabe & Dogwood Rd.
10. West McCabe & Dogwood Rd.
11. Black Hills Rd. & Dogwood Rd.
12. Correll Rd. & Dogwood Rd.
13. SR86 & Dogwood Rd.
14. Dogwood Rd. & Fawcett Rd.
15. Willoughby Rd. & Dogwood Rd.

Project Area

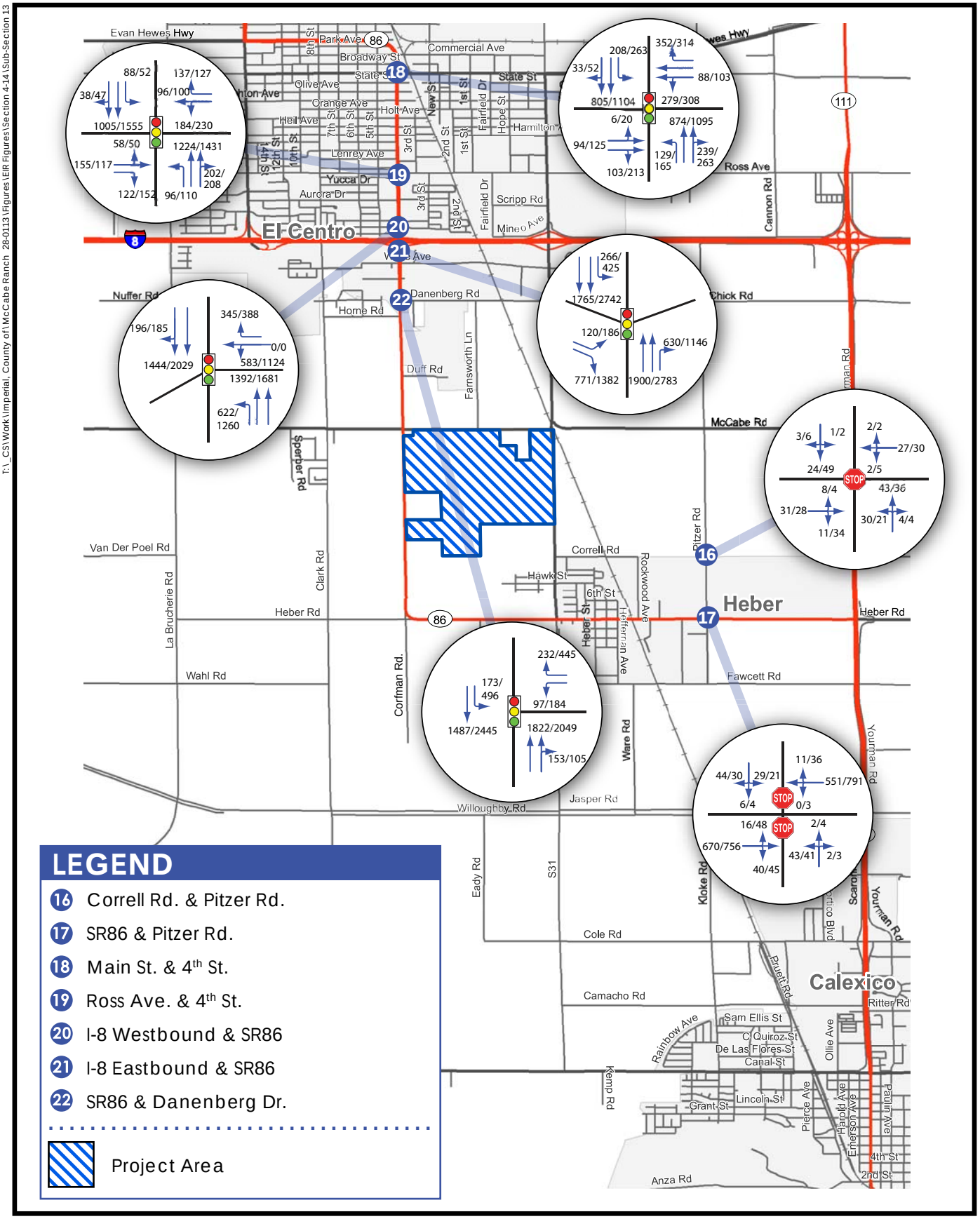
No Scale

N

Figure 4.14-13b

Existing Total Projects plus Cumulative Projects AM/PM Peak Hour Traffic Volumes

PMC



No Scale

N

Figure 4.14-13c

Existing Total Projects plus Cumulative Projects AM/PM Peak Hour Traffic Volumes

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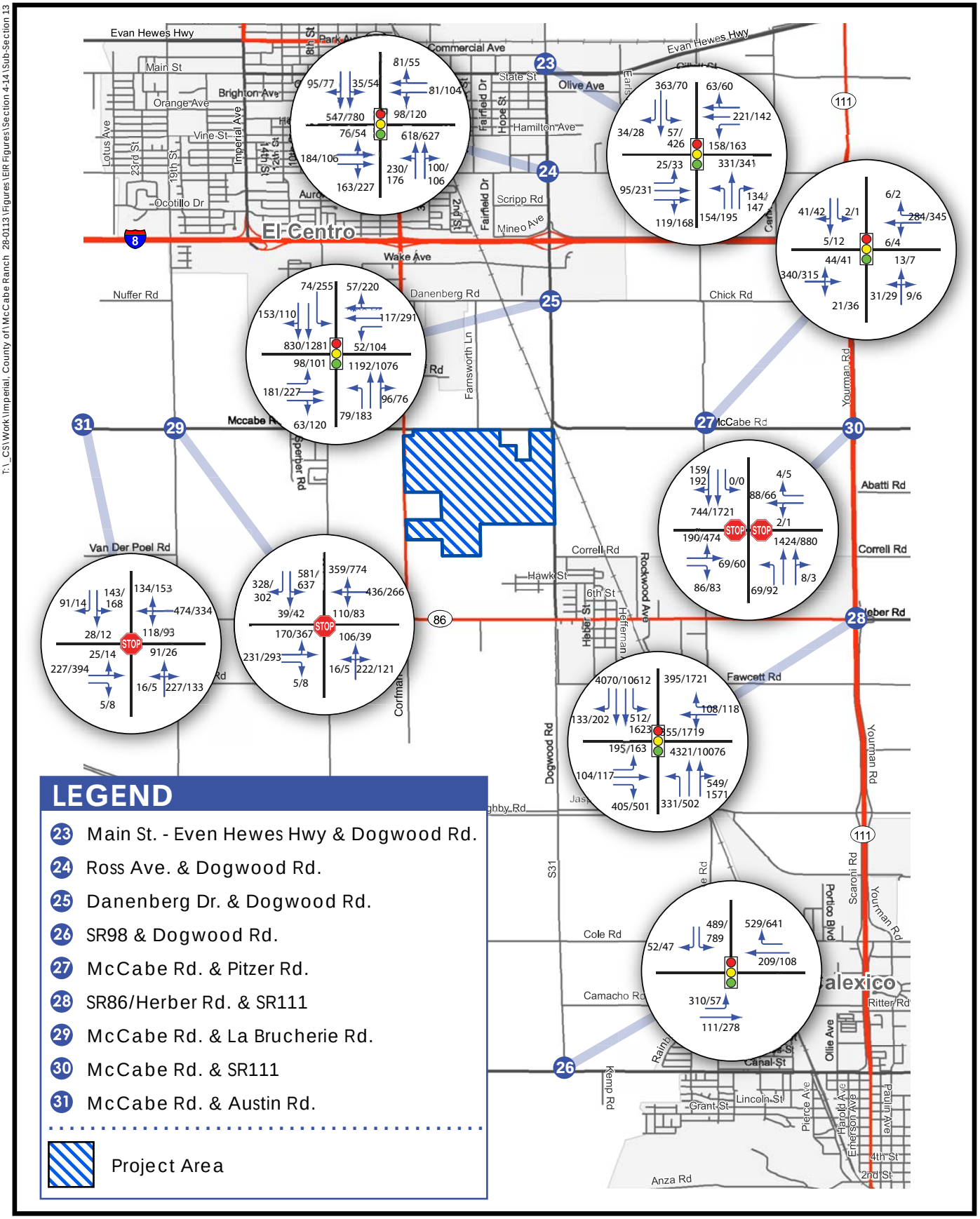


No Scale

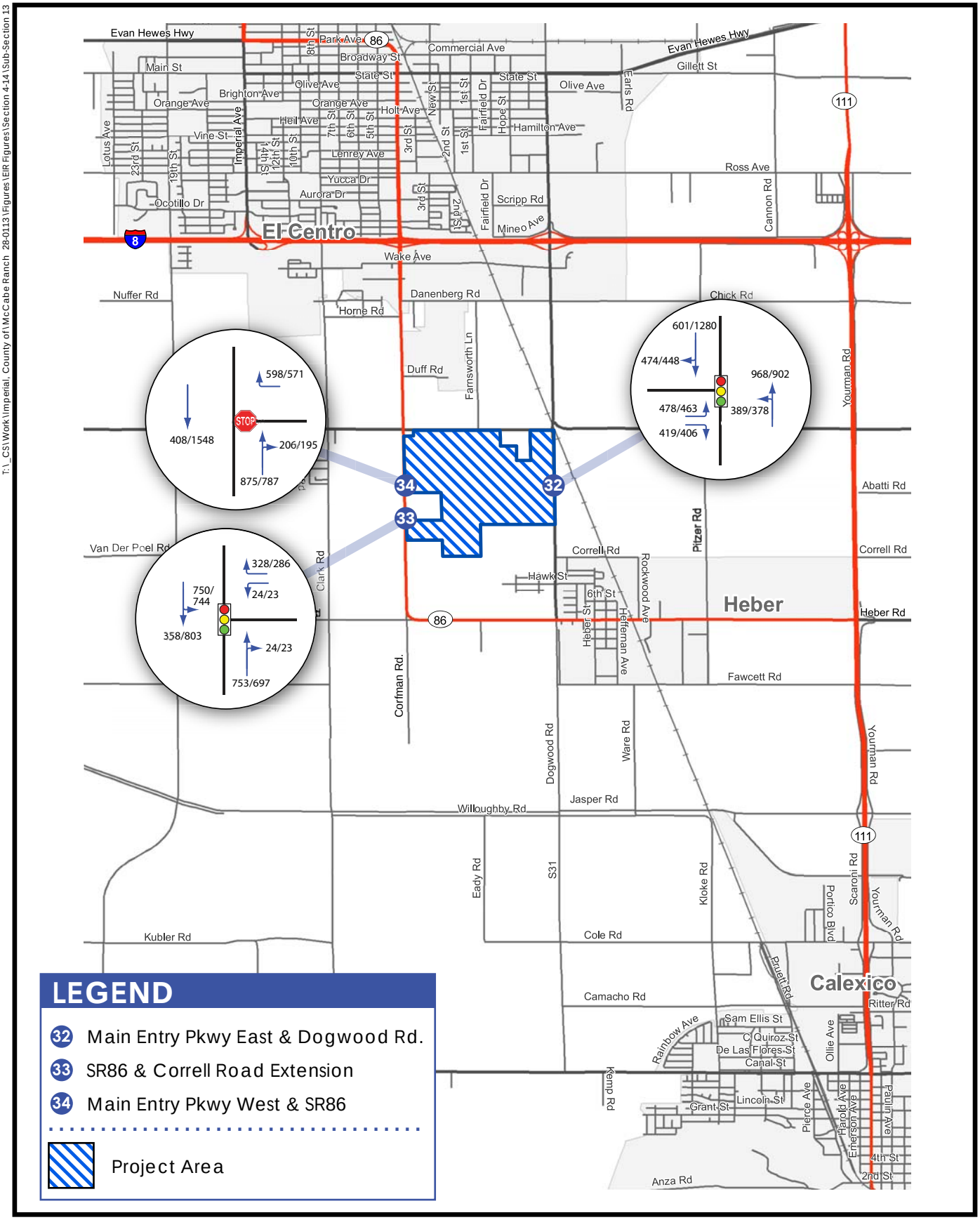
N

Figure 4.14-13d

Existing Total Projects plus

Cumulative Projects AM/PM Peak Hour Traffic Volumes

PMC



No Scale

N

Figure 4.14-13e

Existing Total Projects plus

Cumulative Projects AM/PM Peak Hour Traffic Volumes

PMC

- Dogwood Road / McCabe Road – North (LOS F during the AM and PM peak hours)
- Dogwood Road / McCabe Road – South (LOS F during the AM and PM peak hours)
- Dogwood Road / Black Hills Road (LOS F during the AM and PM peak hours)
- Dogwood Road / Correll Drive (LOS F during the AM and PM peak hours)
- Dogwood Road / SR 86 (LOS F during the AM and PM peak hours)
- Dogwood Road / Fawcett Road (LOS F during the AM and PM peak hours)
- Dogwood Road / Willoughby Road (LOS F during the AM and PM peak hours)
- Pitzer Road / SR 86 (LOS E during the AM peak hour and LOS F PM peak hour)
- SR 111 / McCabe Road (LOS F during the AM and PM peak hours)
- SR 86 / I-8 Westbound Ramps (LOS F during the AM and PM peak hours)
- SR 86 / I-8 Eastbound Ramps (LOS E during the AM and LOS F PM peak hours)
- SR 111 / SR 86 (LOS F during the AM and PM peak hours)

TABLE 4.14-17
NEAR-TERM INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing + Total Project + Cumulative Projects		Type of Impact
			Delay	LOS	
1 Austin Road / McCabe Road	AWSC[4]	AM	>100	**F**	**Cumulative**
		PM	47.6	**E**	None
2 La Brucherie Road / McCabe Road	AWSC	AM	>100	**F**	**Direct**
		PM	>100	**F**	**Cumulative**
3 Clark Road / McCabe Road	AWSC	AM	>100	**F**	**Direct**
		PM	>100	**F**	**Cumulative**
4 SR-86 / McCabe Road	TWSC[5]/ Signal	AM	>100	**F**	**Direct**
		PM	>100	**F**	**Direct**
5 SR-86 / Main Entry Parkway – West	TWSC	AM	54.3	**F**	**Cumulative**
		PM	39.1	**E**	**Cumulative**
6 SR-86 / Correll Road Extension	Signal[6]	AM	31.0	C	None
		PM	25.6	C	None
7 Corfman Road / Heber Road	TWSC	AM	16.3	C	None
		PM	18.7	C	None
8 Farnsworth Road / Danenberg Drive	TWSC	AM	12.0	B	None
		PM	16.1	C	None
9 Farnsworth Road / McCabe Road	Signal[6]	AM	25.8	C	None
		PM	26.1	C	None
10 Appaloosa Road / McCabe Road	TWSC	AM	13.8	B	None
		PM	14.9	B	None
11 Dogwood Avenue / I-8 Westbound Ramps	TWSC	AM	>100	**F**	**Direct**
		PM	>100	**F**	**Direct**
12 Dogwood Avenue / I-8 Eastbound Ramps	TWSC	AM	>100	**F**	**Direct**
		PM	>100	**F**	**Direct**

	Intersection	Control Type	Peak Hour	Existing + Total Project + Cumulative Projects		Type of Impact
				Delay	LOS	
13	Dogwood Avenue / McCabe Road – North	TWSC	AM	>100	**F**	**Direct**
			PM	>100	**F**	**Direct**
14	Dogwood Avenue / McCabe Road – South	AWSC	AM	>100	**F**	**Direct**
			PM	>100	**F**	**Direct**
15	Dogwood Avenue / Main Entry Parkway – East	Signal[6]	AM	27.2	C	None
			PM	30.1	C	None
16	Dogwood Avenue / Black Hills Road	TWSC	AM	>100	**F**	**Direct**
			PM	>100	**F**	**Direct**
17	Dogwood Avenue / Correll Road	TWSC	AM	>100	**F**	**Direct**
			PM	>100	**F**	**Direct**
18	Dogwood Avenue / SR-86	AWSC	AM	>100	**F**	**Direct**
			PM	>100	**F**	**Direct**
19	Dogwood Avenue / Fawcett Road	TWSC	AM	>100	**F**	**Cumulative**
			PM	>100	**F**	**Direct**
20	Dogwood Avenue / Willoughby Road	TWSC	AM	>100	**F**	**Direct**
			PM	>100	**F**	**Direct**
21	Pitzer Road / Correll Road	AWSC	AM	7.4	A	None
			PM	7.4	A	None
22	Pitzer Road / SR-86	TWSC	AM	48.8	**E**	**Cumulative**
			PM	>100	**F**	**Direct**
23	SR-111 / McCabe Road	TWSC	AM	>100	**F**	**Direct**
			PM	>100	**F**	**Direct**
24	4th Street / Main Street	Signal	AM	28.6	C	None
			PM	34.2	C	None
25	4th Street / Ross Road	Signal	AM	24.4	C	None
			PM	25.2	C	None
26	SR-86 / I-8 Westbound Ramps	Signal	AM	98.4	**F**	**Cumulative**
			PM	>100	**F**	**Cumulative**
27	SR-86 / I-8 Eastbound Ramps	Signal	AM	69.9	**E**	**Cumulative**
			PM	>100	**F**	**Cumulative**
28	SR-86 / Danenberg Drive	Signal	AM	18.9	B	None
			PM	>100	**F**	None
29	Dogwood Avenue / Evan Hewes Highway	Signal	AM	25.1	C	None
			PM	27.5	C	None
30	Dogwood Avenue / Ross Avenue	Signal	AM	31.3	C	None
			PM	34.1	C	None
31	Dogwood Avenue / Danenberg Drive	Signal	AM	17.3	B	None
			PM	34.1	C	None
32	Dogwood Avenue / SR-98	Signal	AM	21.7	C	None
			PM	45.8	**D**	**Cumulative**
33	Pitzer Road / McCabe Road	Signal	AM	21.3	C	None
			PM	21.7	C	None
34	SR-111 / SR-86	Signal	AM	>100	**F**	**Cumulative**
			PM	>100	**F**	**Cumulative**

Notes: [1] Average delay expressed in seconds per vehicle. [2] level of service. [3] change in delay. [4] all-way stop controlled intersection. [5] two-way stop controlled intersection – minor street worst-case approach delay is reported. [6] intersection signalized as part of the proposed project. [7] theoretical negative project "increases" (that can result with the HCM method) reported as 0.0.

Source: PMC, 2010

Street Segment Operations – Project + Cumulative

Table 4.14-19 shows that with the addition of the total (Phases I, II, III, and IV) proposed project traffic and the cumulative projects traffic, all of the street segments are calculated to operate at a LOS C or better except for the following (PMC, 2010):

- SR 86 (4th Street): Main Street to Ross Road (LOS F)
- SR 86 (4th Street): Ross Road to I-8 (LOS F)
- SR 86: I-8 to Danenberg Drive (LOS F)
- SR 86: Danenberg Drive to McCabe Road (LOS F)
- SR 86: McCabe Road to Heber Road (LOS F)
- SR 86: Corfman Road to Dogwood Road (LOS F)
- SR 86: Dogwood Road to Pitzer Road (LOS F)
- SR 86: Pitzer Road to SR 111 (LOS F)
- Dogwood Avenue: Evan Hewes Highway to Ross Road (LOS F)
- Dogwood Avenue: Ross Road to I-8 (LOS F)
- Dogwood Avenue: I-8 to Danenberg Drive (LOS E)
- Dogwood Avenue: Danenberg Drive to McCabe Road (LOS D)
- Dogwood Road: McCabe Road to SR 86 (LOS F)
- Dogwood Road: SR 86 to Fawcett Road (LOS F)
- Dogwood Road: Fawcett Road to Willoughby Road (LOS F)
- Dogwood Road: Willoughby Road to Cole Road (LOS F)
- Dogwood Road: Cole Road to SR 98 (LOS F)
- Danenberg Drive: SR 86 to Dogwood Avenue (LOS D)
- McCabe Road: Austin Road to La Brucherie Road (LOS D)
- McCabe Road: La Brucherie Road to SR 86 (LOS F)
- McCabe Road: SR 86 to Dogwood Road (LOS F)

TABLE 4.14-18
NEAR-TERM STREET SEGMENT OPERATIONS

Street Segment	Capacity (LOS E)[1]	Existing			Existing + Total Project + Cumulative Projects			Type of Impact
		ADT[2]	LOS[3]	V/C[4]	ADT	LOS	V/C	
Main Street to Ross Road	34,200	27,570	**D**	0.81	43,603	**F**	1.27	**Direct**
Ross Road to I-8	34,200	30,170	**D**	0.88	49,866	**F**	1.46	**Direct**
I-8 to Danenberg Drive	34,200	22,470	B	0.66	62,498	**F**	1.83	**Direct**
Danenberg Drive to McCabe Road	16,200	22,470	**F**	1.39	57,656	**F**	3.56	**Direct**
McCabe Road to Heber Road	16,200	7,530	**D**	0.46	17,431	**F**	1.08	**Direct**
Corfman Road to Dogwood Avenue	16,200	6,570	C	0.41	22,922	**F**	1.41	**Direct**
Dogwood Avenue to Pitzer Road	16,200	7,550	**D**	0.47	17,763	**F**	1.10	**Direct**
Pitzer Road to SR-111	16,200	7,320	**D**	0.45	16,770	**F**	1.04	**Direct**
Evan Hewes Highway to Ross Road	16,200	12,900	**E**	0.80	19,269	**F**	1.19	**Direct**
Ross Road to I-8	16,200	13,550	**E**	0.84	22,468	**F**	1.39	**Direct**
I-8 to Danenberg Drive	34,200	18,180	B	0.53	31,397	**E**	0.92	**Cumulative**
Danenberg Drive to McCabe Road	34,200	10,850	A	0.32	28,846	**D**	0.84	**Cumulative**
McCabe Road to SR-86	16,200	11,660	**E**	0.72	30,231	**F**	1.87	**Direct**
SR-86 to Fawcett Road	16,200	8,490	**D**	0.52	23,074	**F**	1.42	**Direct**
Fawcett Road to Willoughby Road	16,200	7,990	**D**	0.49	21,823	**F**	1.35	**Direct**
Willoughby Road to Cole Road	16,200	8,700	**D**	0.54	19,080	**F**	1.18	**Direct**
Cole Road to SR-98	16,200	10,020	**D**	0.62	20,657	**F**	1.28	**Direct**
SR-86 to Dogwood Avenue	16,200	4,020	B	0.25	10,603	**D**	0.65	**Cumulative**
Dannenberg Drive to McCabe Road	16,200	950	A	0.06	1,870	A	0.12	None
McCabe Road to SR-86	16,200	1,530	A	0.09	2,892	B	0.18	None
Austin Road to La Brucherie Road	16,200	910	A	0.06	8,969	**D**	0.55	**Cumulative**
La Brucherie to SR-86	16,200	3,400	B	0.21	31,369	**F**	1.94	**Direct**
SR-86 to Dogwood Avenue	16,200	3,310	B	0.20	16,465	**F**	1.02	**Direct**
Dogwood Avenue to Pitzer Road	16,200	190	A	0.01	6,750	C	0.42	None
Pitzer Road to SR-111	34,200	50	A	0.00	5,644	A	0.17	None
Dogwood Avenue to Pitzer Road	16,200	1,280	A	0.08	2,361	B	0.15	None

Notes: 1 Capacities based on County of Imperial Roadway Classification Table. 2 average daily traffic volumes. 3 level of service. 4 volume- to- capacity ratio. 5 change in volume- to- capacity ratio.

Source: PMC, 2010

Freeway Mainline Operations

Table 4.14-20 shows that with the addition of the total (Phases I, II, III, and IV) proposed project traffic and the cumulative projects traffic, all freeway mainline segments are calculated to operate at a LOS C or better. Because buildout of the proposed project and the cumulative projects would not degrade freeway mainline operations and therefore would not result in direct or cumulative impacts, no further discussion of freeway mainline analysis operations are addressed in this Draft EIR (PMC, 2010).

TABLE 4.14-20
NEAR-TERM FREEWAY MAINLINE OPERATIONS INTERSTATE 8

Freeway Segment	Dir.	# of Lanes	Hourly Capacity[1]	ADT[2]	Peak Hour Volume[3]		V/C[4]		LOS[5]	
					AM	PM	AM	PM	AM	PM
Existing + Total Project + Cumulative Projects Traffic										
Imperial Avenue to SR-86	EB	2	4,400	50,890	2,427	3,525	0.55	0.80	B	C
	WB	2	4,400		2,114	3,266	0.48	0.74	B	C
SR-86 to Dogwood Avenue	EB	2	4,400	54,550	2,628	3,769	0.60	0.86	B	**D**
	WB	2	4,400		2,103	3,339	0.48	0.76	B	C
Dogwood Avenue to SR-111	EB	2	4,400	54,880	2,486	3,788	0.57	0.86	B	**D**
	WB	2	4,400		1,753	2,214	0.40	0.50	A	B

Notes: [1] Capacities calculated at 2,200 vehicles per lane per hour. [2] existing 2007 ADT volumes from Caltrans grown to 2009 at 2% per year and rounded to 10. [3] peak hour volume = ((ADT)(K)(D)/truck factor). [4] V/C = ((ADT)(K)(D)/truck factor/capacity). [5] level of service.

Source: PMC, 2010

Analysis of Long-Term Scenarios

The long-term street segment volumes were obtained from the City of El Centro Traffic Circulation Element, February 2009, and the Imperial County Circulation Element Update, January 2008. **Table 4.14-21** shows that all street segments are calculated to operate at LOS C or better under future conditions. Because this long-term analysis does not indicate a long-term deficiency and therefore a long-term significant impact, no further discussion of long-term impacts are included in this Draft EIR (PMC, 2010).

TABLE 4.14-21
LONG-TERM STREET SEGMENT OPERATIONS

Street Segment	Ultimate Classification	Capacity (LOS E)[1]	ADT[2]	LOS[3]
SR-86				
Main Street to Ross Road	6-Lane Arterial	54,000	Not reported	Not reported
Ross Road to I-8	6-Lane Arterial	54,000	Not reported	Not reported
I-8 to Danenberg Drive	Prime Arterial	57,000	32,000	B
Danenberg Drive to McCabe Road	Prime Arterial	57,000	32,000	B
McCabe Road to Heber Road	Prime Arterial	57,000	33,500	B
Corfman Road to Dogwood Avenue	Prime Arterial	57,000	33,500	B
Dogwood Avenue to Pitzer Road	Prime Arterial	57,000	33,500	B
Pitzer Road to SR-111	Prime Arterial	57,000	33,500	B
Dogwood Avenue				
Evan Hewes Highway to Ross Road	6-Lane Arterial	54,000	Not reported	Not reported
Ross Road to I-8	6-Lane Arterial	54,000	Not reported	Not reported
I-8 to Danenberg Drive	Prime Arterial	57,000	Not reported	Not reported
Danenberg Drive to McCabe Road	Prime Arterial	57,000	Not reported	Not reported
McCabe Road to SR-86	Prime Arterial	57,000	Not reported	Not reported
SR-86 to Fawcett Road	Prime Arterial	57,000	Not reported	Not reported
Fawcett Road to Willoughby Road	Prime Arterial	57,000	Not reported	Not reported
Willoughby Road to Cole Road	Prime Arterial	57,000	Not reported	Not reported
Cole Road to SR-98	Prime Arterial	57,000	Not reported	Not reported
Danenberg Drive				
SR-86 to Dogwood Avenue	4-Lane Arterial	27,000	Not reported	Not reported

Street Segment	Ultimate Classification	Capacity (LOS E)[1]	ADT[2]	LOS[3]
Farnsworth Road				
Dannenberg Drive to McCabe Road	4-Lane Arterial	27,000	Not reported	Not reported
Pitzer Road				
McCabe Road to SR-86	Major Collector	34,200	Not reported	Not reported
McCabe Road				
Austin Road to La Brucherie Road	Prime Arterial	57,000	Not reported	Not reported
La Brucherie to SR-86	Prime Arterial	57,000	28,500	B
SR-86 to Dogwood Avenue	Prime Arterial	57,000	28,500	B
Dogwood Avenue to Pitzer Road	Prime Arterial	57,000	28,500	B
Pitzer Road to SR-111	Prime Arterial	57,000	28,500	B
Correll Road				
Dogwood Avenue to Pitzer Road	Minor Arterial	37,000	Not reported	Not reported

Notes: [1] Capacities based on City of El Centro Level of Service Threshold Volumes by Roadway Type and County of Imperial Roadway Classification Table. [2] average daily traffic volumes. [3] level of service.

Source: PMC, 2010

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Increase in Project-Related Traffic

Intersection Operations – Cumulative Condition

Impact 4.14.8 Buildout of the proposed project in the cumulative setting would result in increased traffic volumes, which are expected to result in increased delays and deterioration in levels of service at area intersections. This is considered to be a **potentially cumulatively considerable** impact.

As noted in **Table 4.14-18** and summarized below, buildout of the proposed project in the cumulative setting would result in significant cumulative impacts at the following intersections (PMC, 2010):

- Austin Road / McCabe Road
- Clark Road / McCabe Road
- SR-86 / Main Entry Parkway - West
- Dogwood Avenue / Main Entry Parkway – East
- Dogwood Avenue / Fawcett Road
- Pitzer Road / SR-86
- SR-86 / I-8 Westbound Ramps
- SR-86 / I-8 Eastbound Ramps
- Dogwood Avenue / SR-98
- SR-11 / SR-86

Mitigation Measures

MM 4.14.8 Prior to the construction of Phase IV of the proposed project, the project developers shall :

- **Austin Road / McCabe Road**. Contribute a fair share towards the provision of a dedicated westbound right-turn lane.
- **Clark Road / McCabe Road**. Contribute a fair share towards signalization of this intersection.
- **SR-86 / Main Entry Parkway – West.** Project applicant shall provide a channelized westbound right-turn and acceleration lane to northbound SR-86.
- **Dogwood Avenue / Main Entry Parkway – East**. Contribute a fair share towards the provision of one additional northbound through lane and one additional southbound through-turn lane.
- **Dogwood Avenue / Fawcett Road**. Contribute a fair share towards signalization of this intersection and provision of dedicated northbound and southbound left-turn lanes.
- **Pitzer Road / SR-86**. Contribute a fair share towards signalization of this intersection.
- **SR-86 / I-8 Westbound Ramps**. Contribute a fair share toward the provision of one additional northbound and one additional southbound through lane and one additional northbound left-turn lane.
- **SR-86 / I-8 Eastbound Ramps**. Contribute a fair share toward the provision of one additional northbound and one additional southbound through lane and one additional southbound left-turn lane.
- **Dogwood Avenue / SR-98**. Contribute a fair share toward the provision of a channelized westbound right-turn lane.
- **SR-11 / SR-86**. Contribute a fair share toward the provide of a grade separated interchange.

Timing/Implementation: Prior to the construction of Phase IV of the project

Enforcement/Monitoring: County of Imperial Planning Department and Development Services and County of Imperial Building Department and Public Works

Significance after Mitigation

Mitigation Measure 4.14.8 requires subsequent projects within the McCabe Ranch II Specific Plan area to provide their fair share of intersection improvements, would reduce potential cumulative intersection operation impacts from implementation of the McCabe Ranch II Specific Plan to a minimum. This impact is considered to be **less than cumulatively considerable.**

Street Segments – Cumulative Condition

Impact 4.14.9 Buildout of the proposed project in the cumulative setting would result in increased traffic volumes, which are expected to result in increased delays and deterioration in levels of service at area street segments. This is considered to be a **potentially cumulatively considerable** impact.

As noted in **Table 4.14-19** and summarized below, buildout of the proposed project in the cumulative setting would result in significant cumulative impacts at the following street segments (PMC, 2010):

- Dogwood Avenue: I-8 to Danenberg Drive
- Dogwood Avenue: Danenberg Drive to McCabe Road
- Danenberg Drive: SR-86 to Dogwood Avenue

Mitigation Measures

MM 4.14.9 Prior to the construction of Phase IV of the proposed project, the project developers shall :

- **Dogwood Avenue: I-8 to Danenberg Drive**. Contribute a fair share toward the future widening of Dogwood Avenue between I-8 and Danenberg Drive to a 6-lane prime arterial.
- **Dogwood Avenue: Danenberg Drive to McCabe Road**. Contribute a fair share toward the future widening of Dogwood Avenue between Danenberg Drive and Dogwood Avenue to a 6-lane prime arterial.
- **Danenberg Drive: SR-86 to Dogwood Avenue**. Contribute a fair share toward the future widening of Danenberg Drive between SR-86 and Dogwood Avenue to a 4-lane arterial.

Timing/Implementation: *Prior to the construction of Phase IV of the project*

Enforcement/Monitoring: *County of Imperial Planning Department and Development Services and County of Imperial Building Department and Public Works*

Significance after Mitigation

The **Mitigation Measure 4.14.9** requires subsequent projects within the McCabe Ranch II Specific Plan area to provide their fair share of roadway improvements, would reduce potential cumulative intersection operation impacts from implementation of the McCabe Ranch II Specific Plan Area to a minimum. This impact is considered to be **less than cumulatively considerable.**

Freeway Mainlines

Impact 4.14.10 Buildout of the proposed project in the cumulative setting would result in increased traffic volumes, which are expected to result in impacts to freeway mainline segments. This is considered to be a **potentially cumulatively considerable** impact.

As noted in **Table 4.14-20** and summarized below, buildout of the proposed project in the cumulative setting would result in significant cumulative impacts on the following mainline freeway segments(PMC, 2010):

- SR-86 to Dogwood Avenue
- Dogwood Avenue to SR-111

Mitigation Measures

MM 4.14-10 The project Master Developer or subsequent builders shall pay fair share contributions toward capital roadway improvements for eastbound directions for I-8 segments of SR-86 to Dogwood Avenue and eastbound directions for I-8 segments of Dogwood Avenue to SR-11 that will mitigate long-term impacts on the roadway network.

Timing/Implementation: *Prior to the construction of the project*

Enforcement/Monitoring: *County of Imperial Planning Department and Development Services*

Significance after Mitigation

In the long-term scenario two mainline freeway segments were found to have impacts that require mitigation. For the long-term these fair share contributions will be required prior to construction of Phase IV. As a result, these impacts will be **less than cumulatively considerable with mitigation.**

REFERENCES

City of El Centro General Plan Circulation Element.2004

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