4.14 TRANSPORTATION/CIRCULATION

This section addresses the project's impacts on traffic and the surrounding roadway network associated with construction and operation of the projects. The following discussion describes the existing environmental setting in the surrounding area, the existing Federal, State, and local regulations regarding traffic, and an analysis of the potential impacts of the proposed projects. The *Traffic Impact Analysis for Mount Signal Solar Farm I (June 2011), Traffic Impact Analysis for Calexico Solar Farm I (Phases A & B) (July 2011), and Traffic Impact Analysis for Calexico Solar Farm II (Phases A & B) (April 2011)*, all completed by Linscott, Law and Greenspan (LLG), were used in this traffic analysis and are included in Appendix J.

4.14.1 Environmental Setting

The project study area is located within the County of Imperial on privately owned, undeveloped agricultural land collectively encompassing 4,228 acres approximately six miles west of Calexico, California.

4.14.1.1 Regulatory Setting

This section identifies and summarizes Federal, State, and local laws, policies, and regulations that are applicable to the projects.

State

California Department of Transportation

The California Department of Transportation (Caltrans) manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. Specifically, Caltrans is responsible for the design, construction, maintenance, and operation of the California State Highway System. Within the project study area, Caltrans is responsible for maintaining and managing SR 98. Specific thresholds for assessing project related impacts on State highways are further discussed in Section 4.14.2.1.2 of this chapter.

Regional Plans

2008 Regional Transportation Plan: Making the Connections

Making the Connections is the 2008 Regional Transportation Plan (RTP) for the six counties in Southern California: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The RTP focuses on improving the balance between land use and the current as well as future transportation systems. The Southern California Association of Governments (SCAG) is required to develop, maintain and update the RTP on a three-year cycle.

The 2008 RTP presents the transportation vision for this region through the year 2035 and provides a long-term investment framework for addressing the region's transportation and related challenges. The Plan is the culmination of a multi-year effort focusing on maintaining and improving the transportation system through a balanced approach that considers system preservation, system operation and management, improved coordination between land-use decisions and transportation investments, and strategic expansion of the system to accommodate future growth. Consistency with the RTP is addressed in Section 4.10, Land Use/Planning.

Local

County of Imperial Circulation and Scenic Highways Element

The Circulation and Scenic Highways Element identifies the location and extent of transportation routes and facilities. It is intended to meet the transportation needs of local residents and businesses, and as a source for regional coordination. The inclusion of Scenic Highways provides a means of protecting and enhancing scenic resources within highway corridors in Imperial County. The purpose of the Circulation and Scenic Highways Element is to provide a comprehensive document which contains the latest knowledge about the transportation needs of the County and the various modes available to meet these needs. Additionally, the purpose of this Element is to provide a means of protecting and enhancing scenic resources within both rural and urban scenic highway corridors.

County of Imperial Bicycle Master Plan Update

In 1999, the County of Imperial adopted a comprehensive Bicycle Master Plan to plan for and develop bicycle facilities within the unincorporated areas of Imperial Valley. At that time, no other city in Imperial Valley had previously prepared or adopted a similar comprehensive bikeway plan. Since then, each of the seven cities in the Valley has adopted or will be adopting a Bicycle Master Plan for their community in the near future. This document is an update to the adopted Countywide Bicycle Master Plan prepared to accomplish the following:

1. Incorporate the connecting proposed bicycle routes from each city to the corresponding route in the County to ensure continuity with the regional plan.

2. Provide updated information and analysis of the needs of bicyclists that will aid in singular or multi-agency grant applications for funding bicycle improvements.

3. Compare the Imperial County Master Plan to California Department of Transportation's requirements and augment the Master Plan as necessary to meet those objectives.

The County of Imperial's General Plan, Circulation Element and Open Space Element, provide a solid planning basis for the Bicycle Master Plan. In spite of the fact that there are a limited number of bicycle facilities in Imperial County and no comprehensive bicycle system, there is a growing interest in cycling and numerous cyclists bike on a regular basis for both recreation and commuting to work and school which is evident by the bicycle groups that regularly cycle 20-30 miles weekly.

4.14.1.2 Existing Conditions

This section presents the significance criteria used for considering project-related land used compatibility impacts and consistency with applicable planning documents, the methodology employed for the evaluation, and mitigation requirements, if necessary.

Existing Circulation Network

The following roadway classifications are derived from the County of Imperial General Plan Circulation and Scenic Highways Element:

Expressway. The main function of this classification is to provide regional and intra-county travel services. Features include high design standards with six travel lanes; wide landscaped medians; highly restricted access; provisions for public transit lands, including but not limited to, bus lanes, train lanes, or other mass transit type means; and no parking. Minimum right-of-way (ROW) is 210 feet consisting of three travel lanes per direction, a 56-foot median, and shoulders along both sides of the travel way. The ROW width is exclusive of necessary adjacent easements such as for the Imperial Irrigation District (IID)

facilities as these vary. The minimum intersection spacing is one (1) mile. (Note: ROWs may be greater if the road segment also serves as a corridor for public utilities).

Prime Arterial. The main function of this classification is to provide regional, sub regional, and intra-county travel services. Features include high design standards with four to six travel lanes, raised and landscaped medians, highly restricted access, which in most cases will be a one (1) mile minimum, provisions for public transit lanes, including but not limited to bus lanes, train lanes, or other mass transit type means and no parking. The absolute minimum ROW without public transit lanes is 136 feet. ROW dimensions are specified in the STANDARDS for specific road segments. Please refer to the appropriate standards section. (ROWs may be greater if the road segment also serves as a corridor for public utilities).

Minor Arterial. These roadways provide intra-county and sub regional service. Access and parking may be allowed, but closely restricted in such a manner as to ensure proper function of this roadway. Typical standards include the provision for four and six travel lanes with raised landscaped medians for added safety and efficiency by providing protected left turn lanes at selected locations. Some may also contain provisions for public transit lanes or other mass transit type means. Minimum ROW is 102 feet for four lanes and 126 feet for six lanes.

Major Collector (Collector). These roadways are designed to provide intra-county travel as a link between the long haul facilities and the collector/local facilities. Although it frequently provides direct access to abutting properties, that is not its primary purpose. Typical design features include provision for four travel lanes without a raised median and some may also contain provisions for public transit lanes or other mass transit type means. Minimum ROW is 84 feet. Parking is generally not permitted.

Minor Local Collector (Local Collector). This is designed to connect local streets with adjacent Collectors or the arterial street system. Design standards include provision for two travel lanes and parking, except in specific locations where parking is removed to provide a turn lane at intersections. Local Collector streets frequently provide direct access to abutting properties, although that should be avoided where feasible. Minimum ROW is 70 feet.

Residential Street. This street type includes residential cul-de-sac and loop streets and is designed to provide direct access to abutting properties and to give access from neighborhoods to the Local Street and Collector Street system. This classification should be discontinuous in alignment such that through trips are discouraged. Typical design standards include provision for two travel lanes, parking on both sides, and direct driveway access. Minimum ROW is 60 feet.

Following is a brief description of the street segments within the vicinity of the project study area. Figures 4.14-1a and 4.14-1b illustrate the existing conditions, including lane geometry, for the key intersections in the project study area:

State Route 98 (SR 98) is classified as a State Highway/Expressway in the Imperial County General Plan Circulation Element and Scenic Highways. Within the project area, SR 98 is constructed as a two-lane undivided east-west roadway, providing one lane of travel per direction. Bike lanes are provided. No bus stops are provided, and parking is not permitted along either side of the roadway.

McCabe Road is classified as a Major Collector in the Imperial County General Plan Circulation and Scenic Highways Element west of La Brucherie Road and as a Minor Arterial east of la Brucherie Road up to SR 111. Within the project study area, McCabe Road is constructed as a two-lane undivided east-west roadway, providing one lane of travel per direction. No bike lanes or bus stops are provided, and parking is not permitted along either side of the roadway. There is no speed limit posted in the vicinity of the project sites.

La Brucherie Road is classified as a Major Collector in the Imperial County General Plan Circulation and Scenic Highways Element between the El Centro City Limits and Kubler Road. Within the project study area, La Brucherie Road is constructed as a two-lane undivided north-south roadway, providing one lane

of travel per direction. No bike lanes or bus stops are provided, and parking is not permitted along either side of the roadway. There is no speed limit posted in the vicinity of the project study area.

Ferrell Road is classified as a Major Collector in the Imperial County General Plan Circulation and Scenic Highways Element between Kubler Road and SR 98. Within the project study area, Ferrell Road is constructed as a two-lane undivided north-south roadway, providing one lane of travel per direction. No bike lanes or bus stops are provided, and parking is not permitted along either side of the roadway. There is no speed limit posted in the vicinity of the project sites.

Brockman Road (S30) is classified as a Major Collector in the Imperial County General Plan Circulation and Scenic Highways Element. Within the project study area, Brockman Road is constructed as a two-lane undivided north-south roadway, providing one lane of travel per direction. No bike lanes or bus stops are provided, and parking is not permitted along either side of the roadway. There is no speed limit posted in the vicinity of the project sites.

South Clark Road is classified as a Minor Arterial in the Imperial County General Plan Circulation Element. Within the project study area, South Clark Road is constructed as a two-lane undivided north-south roadway, providing one lane of travel per direction. No bike lanes or bus stops are provided, and parking is not permitted along either side of the roadway. There is no speed limit posted in the vicinity of the project sites.

Weed Road is an unclassified roadway in the Imperial County General Plan Circulation Element. Within the project study area Weed Road is a paved roadway south of SR 98 and constructed as a two-lane undivided north-south roadway, providing one lane of travel per direction. North of SR 98 Weed Road is a dirt road. No bike lanes or bus stops are provided, and parking is not permitted along either side of the roadway. There is no speed limit posted in the vicinity of the project study area.

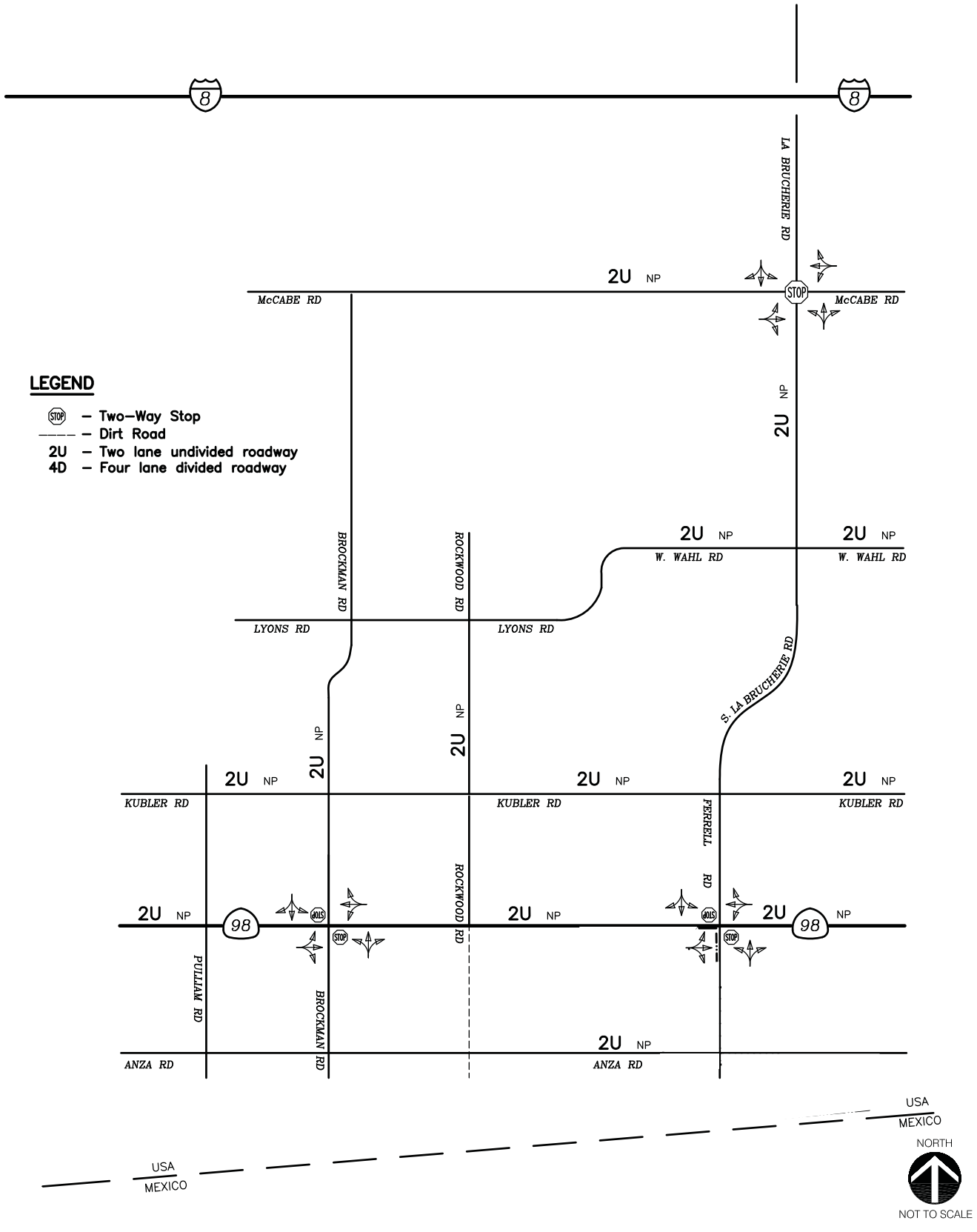
Level of Service

Level of Service (LOS) is a professional industry standard by which the operating conditions of a given roadway segment or intersection are measured. LOS ranges from A through F, where LOS A represents the best operating conditions and LOS F represents the worst operating conditions. LOS A facilities are characterized as having free flowing traffic conditions with no restrictions on maneuvering or operating speeds; traffic volumes are low and travel speeds are high. LOS F facilities are characterized as having forced flow with many stoppages and low operating needs. Additionally, with the growth of Imperial County, transportation management and systems management will be necessary to preserve and increase roadway “capacity.” LOS standards are used to assess the performance of a street or highway system and the capacity of a roadway. Table 4.14-1 illustrates the description for each LOS category.

Unsignalized Intersections

For unsignalized intersections, LOS is determined by the computed or measured control delay and is defined for each minor movement. LOS is not defined for the intersection as a whole. Table 4.14-1 depicts the criteria, which are based on the average control delay for any particular minor street movement.

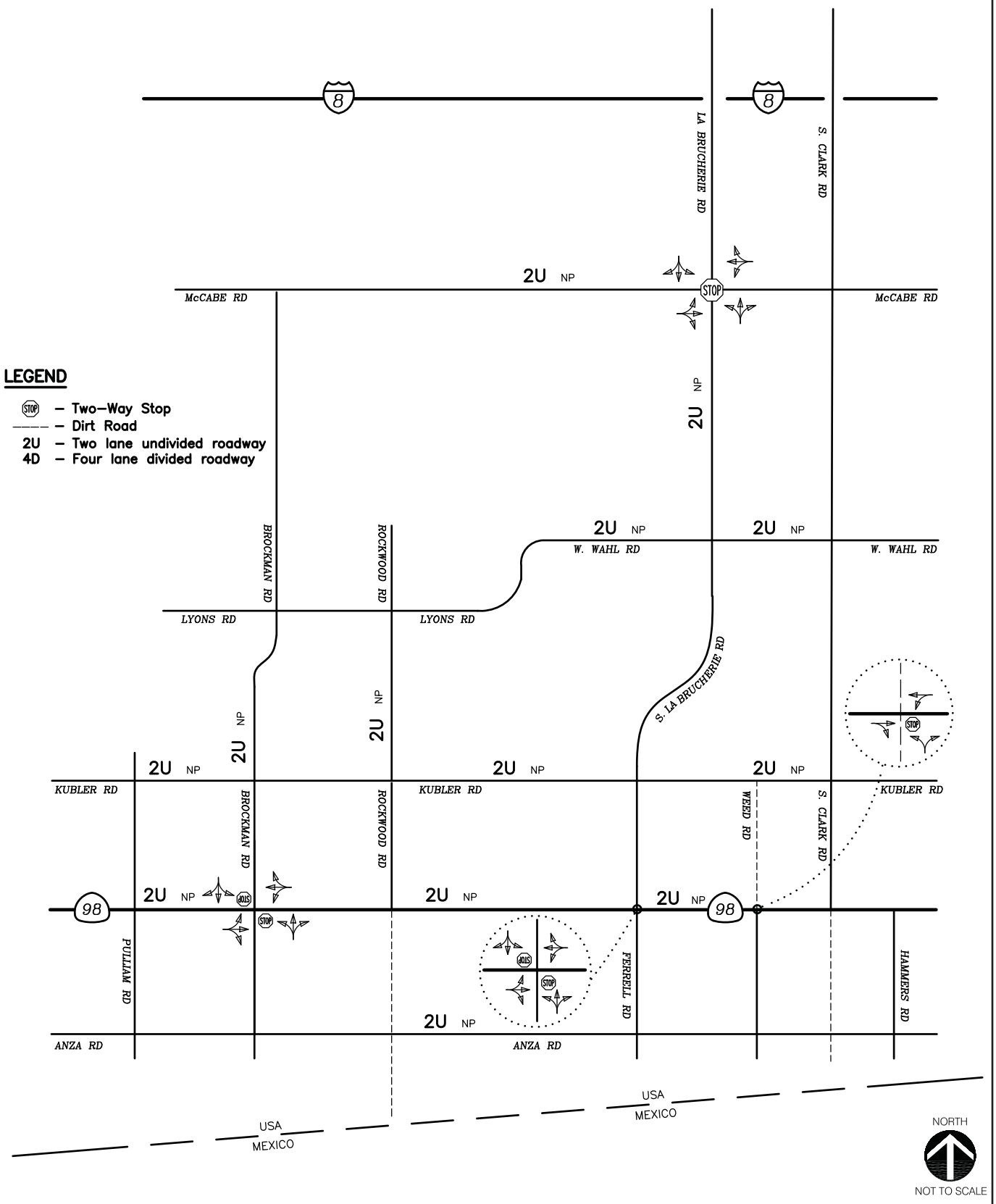
LOS F exists when there are insignificant gaps of suitable size to allow a side street demand to safely cross through a major street traffic stream. This LOS is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches. The method, however, is based on a constant critical gap size; that is, the critical gap remains constant no matter how long the side-street motorist waits.



Source: Linscott Law & Greenspan Engineers,(2011)

Existing Conditions

FIGURE 4.14-1a



Source: Linscott Law & Greenspan Engineers,(2011)

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Existing Conditions

FIGURE 4.14-1b

TABLE 4.14-1. INTERSECTION LOS DESCRIPTIONS AND LOS THRESHOLDS FOR UNSIGNALIZED INTERSECTIONS

LOS	Description	Average Control Delay Per Vehicle (Seconds/Vehicle)	Expected Delay to Minor Street Traffic
A	Occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0.0 ≤ 10.0	Little or no delay
B	Generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	10.1 to 15.0	Short traffic delays
C	Generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. Then number of vehicles stopping is significant at this level, although many still pass though the intersection without stopping.	15.1 to 25.0	Average traffic delays
D	Generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	25.1to 35.0	Long traffic delays
E	Considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	35.1 to 50.0	Very long traffic delays
F	Considered to be unacceptable to most drivers. This condition often occurs with over saturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high volume-to-capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	≥50.0	Severe congestion

Source: LLG 2011

LOS F may also appear in the form of side-street vehicles selecting smaller-than-usual gaps. In such cases, safety may be a problem, and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior, which are more difficult to observe in the field than queuing.

Study Intersections

Four study intersections were identified for traffic analysis because they are locations where the greatest concentrations of project traffic and thus, the most likely locations for potential traffic impacts from the projects to occur. It should be noted that there are no roadways or intersections within the OTF within BLM land portion of the projects. The construction of the OTF will generate minimal traffic, as each tower is constructed. Additionally, operation of the OTF will generate only limited ADT. The intersections identified for analysis are listed below; all intersections are stop-controlled (unsignalized). Table 4.14-3 identifies the specific stop-control intersection type associated with each intersection within the vicinity of the project study area.

- La Brucherie Road/McCabe Road
- SR 98/Ferrell Road
- SR 98/Brockman Road
- SR 98/Weed Road

Existing Intersection Traffic Volumes

A traffic analysis was conducted for the roadways in the vicinity of the project study area. The project trip generation consists of two phases–trips during construction and post-construction operational/ maintenance trips. AM and PM peak hour intersection turning movement volume counts were conducted by LLG Engineers in October 2010. The following intersections and segments are expected to carry the majority of the construction traffic:

MSSF1

- La Brucherie Road/McCabe Road
- SR 98/Brockman Road
- SR 98/Ferrell Road

CSF1(A)(B)

- La Brucherie Road/McCabe Road
- SR 98/Brockman Road
- SR 98/Ferrell Road

CSF2(A)(B)

- La Brucherie Road/ McCabe Road
- SR 98/Brockman Road
- SR 98/Ferrell Road
- SR 98/Weed Road

Segment Volumes

Average Daily Traffic (ADT) volume counts were conducted by LLG in October 2010. Information was also obtained from Caltrans 2009 traffic volume data.

Figure 4.14-2 and Table 4.14-2 include the segment ADT volumes and the peak hour intersection turning movement volumes at all the project study area segments.

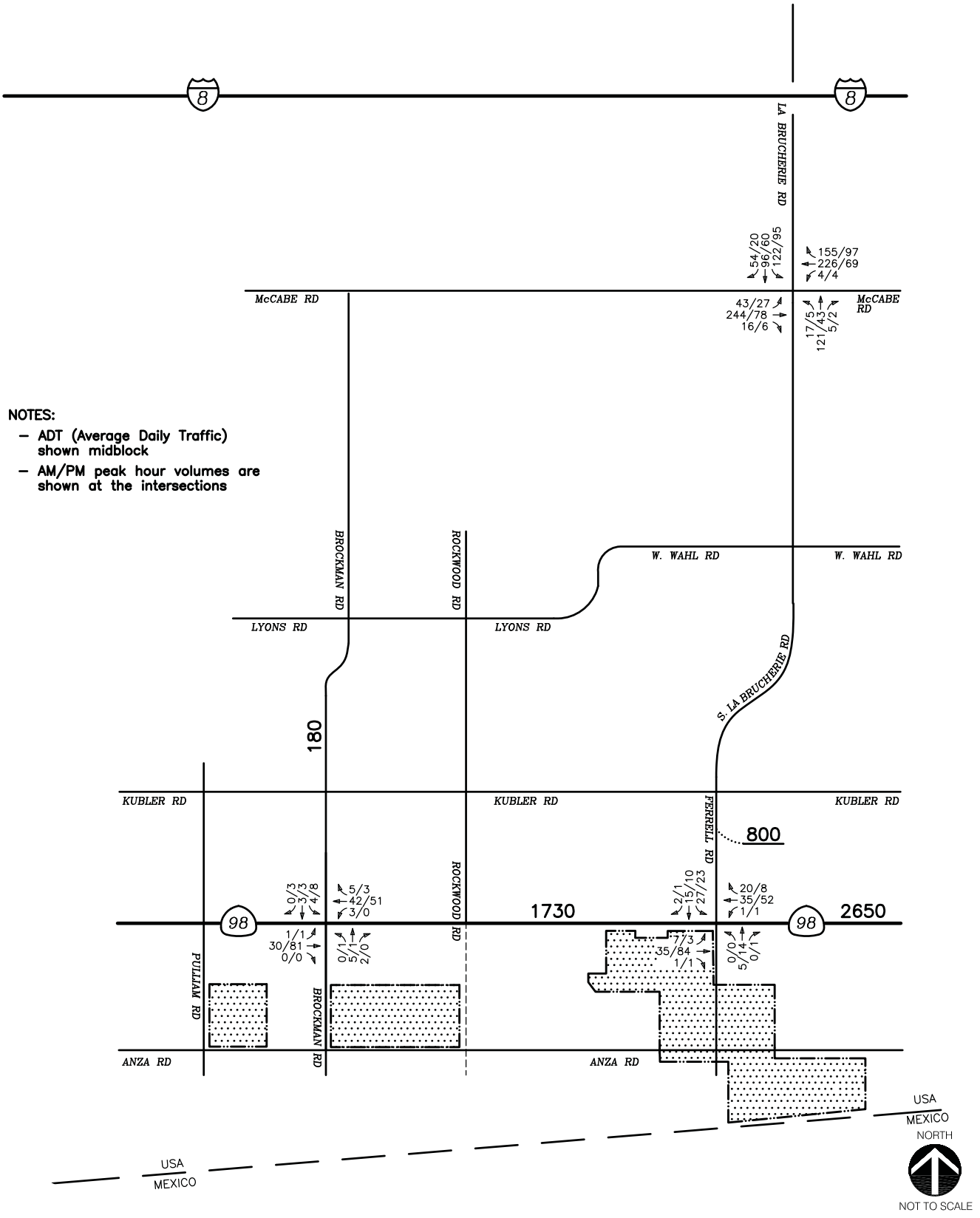
Appendix J of this EIR for the *Traffic Impact Analysis for Mount Signal Solar Farm I, Traffic Impact Analysis for Calexico Solar Farm I (Phases A & B)(July 2011), and Traffic Impact Analysis for Calexico Solar Farm II (Phases A & B)(April 2011)* contain the manual intersection and segment count sheets and Caltrans 2009 traffic volumes for each project component.

Peak Hour Intersection Levels of Service

The project study area is located in a rural setting and all intersections are unsignalized. As illustrated in Table 4.14-3, all project study area intersections are calculated to currently operate at a level of service (LOS) C or better during both the AM and PM peak hours. LOS standard ranges are further described in Section 4.14.1.3, Methodology, within this chapter.

Street Segments

Street segments were analyzed based upon the comparison of ADT to the County of Imperial Roadway Classifications, LOS, and ADT table (Table 4.14-4 below). Table 4.14-4 provides segment capacities for different street classifications, based on traffic volumes and roadway characteristics. Segment analysis is a comparison of ADT volumes and an approximate daily capacity on the subject roadway.



Source: Linscott Law & Greenspan Engineers,(2011)

Existing Traffic Volumes: AM/PM Peak Hours and ADT

FIGURE 4.14-2

TABLE 4.14-2. EXISTING TRAFFIC VOLUMES

Street Segment		Source	Date	ADT[1] Volumes		
				MSSF1	CSF1(A)(B)	CSF2(A)(B)
Brockman Road	Lyons Road to Kubler Road	LLG	2010	180	180	180
Ferrell Road	Kubler Road to SR 98	LLG	2010	800	800	800
SR 98	Rockwood Road to Ferrell Road	LLG	2010	1,730	N/A	N/A
	East of Ferrell Road	Caltrans	2009	2,650	N/A	N/A
SR 98	Pulliam Road to Brockman Road	Caltrans	2009	N/A	2,350	N/A
	Brockman Road to Ferrell Road	LLG	2010	N/A	1,730	N/A
	East of Ferrell Road	Caltrans	2009	N/A	2,650	N/A
SR 98	Rockwood Road to Ferrell Road	LLG	2010	N/A	N/A	1,730
	Ferrell Road to Weed Road	Caltrans	2009	N/A	N/A	2,650
	East of Weed Road	Caltrans	2009	N/A	N/A	2,650

Source: LLG 2011.
Notes: [1] Average Daily Traffic

TABLE 4.14-3. EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing MSSF1		Existing CSF1(A)(B)		Existing CSF2(A)(B)	
			Delay[1]	LOS[2]	Delay	LOS	Delay	LOS
La Brucherie Road/McCabe Road	AWSC[3]	AM	16.5	C	16.5	C	16.5	C
		PM	8.7	A	8.7	A	8.7	A
SR 98/Ferrell Road	MSSC[4]	AM	9.7	A	9.7	A	9.7	A
		PM	10.0	A	10.0	A	10.0	A
SR 98/Brockman Road	MSSC	AM	9.3	A	9.3	A	9.3	A
		PM	9.6	A	9.6	A	9.6	A
SR 98/Weed Road	MSSC	AM	N/A	N/A	N/A	N/A	8.9	A
		PM	N/A	N/A	N/A	N/A	9.2	A

Source: LLG 2011.
Notes: [1]Delay per vehicle in seconds
[2]LOS - Level of service
[3]AWSC - All-Way STOP Controlled intersection
[4]MSSC - Minor street STOP Controlled intersection. Minor street left-turn delay is reported

TABLE 4.14-4. IMPERIAL COUNTY STANDARD STREET CLASSIFICATION AVERAGE DAILY VEHICLE TRIPS

Road		LOS W/ADT*				
Class	X-Section	A	B	C	D	E
Expressway	128/210	30,000	42,000	60,000	70,000	80,000
Prime Arterial	106/136	22,200	37,000	44,600	50,000	57,000
Minor Arterial	82/102	14,800	24,700	29,600	33,400	37,000
Collector	64/84	13,700	22,800	27,400	30,800	34,200
Local Collector	40/70	1,900	4,100	7,100	10,900	16,200
Residential Street	40/60	*	*	<1,500	*	*
Residential Cul-de-Sac/Loop Street	40/60	*	*	<1,500	*	*
Industrial Collector	76/96	5,000	10,000	14,000	17,000	20,000
Industrial Local Street	44/64	2,500	5,000	7,000	8,500	10,000

Source: LLG 2011.
Note: *Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

Alternative/Public Transportation

Fixed Route Transportation

Imperial Valley Transit (IVT) is an inter-city fixed route bus system, subsidized by the Imperial Valley Association of Governments (IVAG), administered by the County Department of Public Works and operated by a public transit bus service. The service is wheelchair accessible and Americans with Disabilities Act (ADA) compliant. Existing ridership averages approximately 23,000 passengers a month.

Service is provided from 6:00am until 11:00pm weekdays, and 6:00am to 6:00pm on Saturdays, within the areas classified as the Primary Zone; a north-south axis throughout Brawley, Imperial Valley College (IVC), Imperial, El Centro, Heber and Calexico, and from 6:00am until 6:45pm in the Secondary Zones; outlying cities and communities of Niland, Calipatria, Westmorland, Seeley, and Holtville. The outlying Remote Zone community of Ocotillo is served once a week on Thursdays, by request one day ahead. Remote Zone communities east and west of the Salton Sea, including Desert Shores, Salton City, Salton Sea Beach, and the far eastern portion of the County, including Winterhaven, are served once a week, via Lifeline.

According to the California Department of Transportation's (Caltrans) SR 98 Transportation Concept Summary, needs identified for SR 98 within San Diego and Imperial Counties include the need to: improve roadway safety and cross-border efficiency for trade and goods movement between the City of Calexico, California and the Municipality of Mexicali, Baja California, Mexico; and improve roadway capacity to better accommodate traffic flow and safety concerns for the high volume of cars and trucks on the existing highway. Additionally, to further facilitate adequate east-west access for interregional, intraregional and international travel, an expansion or restructure of transit services is recommended. The project study area is not within the Fixed Route Transportation system and therefore, would not receive regular bus service to the project study area or within the vicinity of the project study area.

Bicycle Facilities

Although none of the roadway segments within proximity of the project study area are designated a bikeway classification, as defined in the Caltrans *Highway Design Manual*, according to the SR 98 Transportation Concept Summary, bicycle travel is permissible on all segments of SR 98 in Imperial County. The *Highway Design Manual* classifies bikeways into three types:

- Class I Bike Path – Provides for bicycle travel on a right-of-way completely separated from the street
- Class II Bike Lane – Provides a striped lane for one-way travel within the street
- Class III Bike Routes – Provides routes that are signed but not striped

Additionally, the County of Imperial Bicycle Master Plan Update recommends the implementation of a 252-mile system of bicycle lanes, routes and pathways that will link to schools, shopping, employment and future expanding residential areas. Three Class II bicycle routes are proposed to traverse through the project study area: routes 1, 2, and 5. Route 1 (Ross Road/La Brucherie/Drew Road) will begin at the western edge of the City of El Centro along Ross Road proceeding to Sunbeam Lake, a distance of 6.5 miles. At Drew Road the bicycle land would proceed south to Anza Road a distance of ten miles. At Anza Road and Drew Road, the route would proceed easterly towards the City of Calexico along Anza Road to La Brucherie Road, a distances of four miles. The route would turn north and continue to the City of El Centro, a distance of eight miles. Route 2 (McCabe Road/Brockman/La Brucherie Road) would include an 18.4-mile Class II Bike Route beginning at La Brucherie Road and McCabe Road, south of Interstate 8. This bicycle lane would proceed westerly along McCabe Road a distance of 3.6 miles to Brockman Road. At Brockman Road, the bicycle route would head southerly towards the Mexican border, a distance of six miles. At Anza Road, the route would continue easterly for 3.6 miles, then north on

La Brucherie to the point of origin for 4.4 miles. Route 5 (El Centro/ Barbara Road/ Calexico/ Dogwood Road) would begin at the border of El Centro, proceed easterly along Evan Hewes Highway to Barbara Worth Road, a distance of six miles. At Barbara Worth Road, the route would head south for 7.6 miles intersecting at Cole Road where it would connect through Calexico a distance of 6.4 miles. At Dogwood Road, the route would head north to El Centro a total of 7.9 miles. Within the project study area, all three routes run along Anza Road, however, not simultaneously. Route five ultimately terminates at Ferrell Road. Route 2 continues westerly along Anza Road and also proceeds north on Ferrell Road and Brockman Road. Route 2 terminates its western route at Brockman Road. Route 1 continues along Anza Road from Brockman Road ultimately proceeding north along Pulliam Road.

Daily Street Segment Levels of Service

As previously described, the project study area is located in a rural setting and all segments are two-lane facilities. As illustrated in Table 4.14-5, all project study area segments are calculated to currently operate at LOS B or better.

4.14.2 Impacts and Mitigation Measures

4.14.2.1 Thresholds of Significance

Based on CEQA Guidelines Appendix G, project impacts related to transportation/circulation are considered significant if any of the following occur:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- 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;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access; or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

4.14.2.1.1 County of Imperial

The County of Imperial does not have published significance criteria. However, the County General Plan does state that the LOS goal for intersections and roadway segments is to operate at LOS C or better. Therefore, if an intersection or segment degrades from LOS C or better to LOS D or worse with the addition of project traffic, the impact is considered significant. If the location operates at LOS D or worse with and without project traffic, the impact is considered significant if the project causes the intersection delta to increase by more than two (2) seconds, or the volume to capacity (V/C) ratio to increase by more than 0.02. V/C ratios provide a quantitative description of traffic conditions for signalized intersections. These amounts are consistent with those used in the City of El Centro and County of Imperial in numerous traffic studies.

TABLE 4.14-5. EXISTING STREET SEGMENT OPERATIONS

Street Segment		Functional Roadway Classification [1]	Capacity (LOS E) [2]	ADT [3]	LOS [4]	V/C [5]	ADT	LOS	V/C	ADT	LOS	V/C
				MSSF1			CSF1(A)(B)			CSF2(A)(B)		
Brockman Road	Lyons Road to Kubler Road	2-lane Local Collector	16,200	180	A	0.01	180	A	0.01	180	A	0.01
Ferrell Road	Kubler Road to SR 98	2-lane Local Collector	16,200	800	A	0.05	180	A	0.05	800	A	0.05
SR 98	Rockwood Road to Ferrell Road	2-lane Local Collector	16,200	1,730	A	0.11	N/A	N/A	N/A	1,730	A	0.11
	East of Ferrell Road	2-lane Local Collector	16,200	2,650	B	0.16	2,650	B	0.16	N/A	N/A	N/A
	Pulliam Road to Brockman Road	2-Lane Local Collector	16,200	N/A	N/A	N/A	2,250	B	0.15	N/A	N/A	N/A
	Brockman Road to Ferrell Road	2-Lane Local Collector	16,200	N/A	N/A	N/A	1,730	A	0.11	N/A	N/A	N/A
	Ferrell Road to Weed Road	2-Lane Local Collector	16,200	N/A	N/A	N/A	N/A	N/A	N/A	2,650	B	0.16
	East of Weed Road	2-Lane Local Collector	16,200	N/A	N/A	N/A	N/A	N/A	N/A	2,650	B	0.16

Source: LLG 2011

Notes: [1] County of Imperial Valley roadway classification

[2] Roadway capacity corresponding to Level of Service E from Imperial County Standard Street Classification, Average Daily Vehicle Trips table.

[3] Average Daily Traffic volumes

[4] Level of Service

[5] Volume / Capacity ratio.

4.14.2.1.2 Caltrans

A project is considered to have a significant impact on Caltrans facilities if the new project traffic has decreased the operations of surrounding roadways by a defined threshold. The defined thresholds for Caltrans maintained roadway segments and intersections are defined in Table 4.14-6. If the project exceeds the thresholds addressed in the table below, then the project may be considered to have a significant project impact for. A feasible mitigation measure will need to be identified to return the impact within the thresholds (pre-project + allowable increase) or the impact will be considered significant and unmitigated when affecting any state highway facilities (Caltrans 2002).

TABLE 4.14-6. TRAFFIC IMPACT SIGNIFICANT THRESHOLDS

	Allowable Increase Due to Project Impacts[b]					
	Freeways		Roadway Segments		Intersections	Ramp Metering
LOS[1] with Project[a]	V/C[2]	Speed[3] (mph)	V/C	Speed (mph)	Delay[4] (seconds)	Delay (minutes)
D,E, & F (or ramp meter delays above 15 minutes)	0.01	1	0.02	1	2	2[c]

Source: LLG 2011.

Notes: [a] All level of service measurements are based upon HCM procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume basis (using Table 4.14-6 or a similar LOS chart for each jurisdiction). The acceptable LOS for freeways, roadways, and intersections is generally "D" ("C" for undeveloped or not densely developed locations per jurisdiction definitions). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

[b] If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are deemed to be significant. These impact changes may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible mitigations (within the Traffic Impact Study [TIS] report) that will maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see note a above), or if the project adds a significant amount of peak hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating significant impact changes.

[c] The allowable increase in delay at a ramp meter with more than 15 minutes of delay and freeway LOS E is 2 minutes and at LOS F is 1 minute.

1. LOS = Level of Service
2. V/C= Volume to Capacity Ratio
3. Speed = Arterial speed measured in miles per hour

Delay= Average stopped delay per vehicle measured in seconds for intersections, or minutes for ramp meters.

4.14.2.2 Methodology

4.14.2.2.1 MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B)

This analysis evaluates the potential for the projects, as described in Chapter 3, Project Description, to impact the roadway system in the project study area and to determine the effects of the construction and operation phases for the projects on the existing circulation system. Quantitative analyses have been completed for key off-site intersections and roadway segments in the vicinity of the project study area affected by project traffic. Based on the extent of these interactions, this analysis considers whether these conditions would result in an exceedance of one or more of the applied significance criteria as identified in Section 4.14.2.1, Thresholds of Significance.

As indicated in the environmental setting, three separate Traffic Impact Analyses have been prepared which cover the MSSF1, CSF1(A) and (B), and CSF2(A) and (B) site locations. The information obtained from these sources was reviewed and summarized to present the existing conditions and to identify potential environmental impacts, based on the significance criteria presented in this section. Impacts associated with transportation/circulation that could result from project construction and operational activities were evaluated qualitatively based on-site conditions; expected construction practices; materials, locations, and duration of project construction and related activities; and a field visit. It is

anticipated that each phase of construction would involve an average of 300 construction workers per day. Conceptual site plans for the projects were also used to evaluate potential impacts. These conceptual exhibits are provided in Figures 3.0-4 through 3.0-6 and 3.0-9 through 3.0-13.

Existing roadway volumes and network (Year 2010) have been completed with the assumption that construction of the proposed project for MSSF1 is scheduled for 2012, construction for both phases of CSF1(A and B) are scheduled for 2013, and construction for both phases of CSF2(A and B) are scheduled for 2014. As a result, existing volumes have been increased by a 5% growth factor to account for any cumulative project development that may occur between 2010 and 2012, 2010 and 2013, and 2010 and 2014, respectively. In addition, conservative traffic volume assignments for several alternative energy projects proposed in Imperial County have been included in the baseline condition. The following scenarios were used to determine impacts during construction:

MSSF1

- Existing (Year 2010) – refers to current conditions and includes existing traffic counts and existing lane configurations at intersections.
- Baseline without Construction Project (Year 2012) – refers to future conditions which are expected to occur in the year 2012 without implementation of the proposed project
- Baseline + Construction Project (Year 2012) – refers to future conditions which are expected to occur in the year 2012 if the proposed project is implemented and built-out (total project traffic added onto the year 2012 forecasted traffic volumes).

CSF1(A)(B)

- Existing (Year 2010) – refers to current conditions and includes existing traffic counts and existing lane configurations at intersections.
- Baseline without Construction Project (Year 2013) – refers to future conditions which are expected to occur in the year 2013 without implementation of the proposed project.
- Baseline + Construction Project (Year 2013) – refers to future conditions which are expected to occur in the year 2013 if the proposed project is implemented and built-out (total project traffic added onto the year 2013 forecasted traffic volumes).

CSF2(A)(B)

- Existing (Year 2010) – refers to current conditions and includes existing traffic counts and existing lane configurations at intersections.
- Baseline without Construction Project (Year 2014) – refers to future conditions which are expected to occur in the year 2014 without implementation of the proposed project.
- Baseline + Construction Project (Year 2014) – refers to future conditions which are expected to occur in the year 2014 if the proposed project is implemented and built-out (total project traffic added onto the year 2014 forecasted traffic volumes).

Construction Year Impacts

To assess construction year impacts for the project study area, a baseline condition representing ambient traffic growth in the area was established. Project construction is anticipated to start in 2012 for MSSF1, 2013 for both phases for CSF1, and 2014 for both phases for CSF2. To account for potential cumulative project traffic increases that may occur between 2010 (existing) and the time of construction, a 5% growth factor was applied to all existing 2010 traffic volumes throughout the project study area. This 5% growth would conservatively represent the amount of traffic that may utilize the street system in the project vicinity proposed from future unapproved development projects planned in Imperial County, as well as several other alternative energy projects proposed for the Imperial Valley. While it is most likely that these

projects will be constructed sequentially over the course of the next few years, for purposes of being conservative, half of all construction traffic for all identified projects within the project vicinity were assigned to the street system in addition to the 5% cumulative growth rate applied for the development projects. Figure 4.14-4 shows the Baseline without Construction Project traffic volumes for MSSF1 project study area, Figure 4.14-5 shows the Baseline without Construction Project traffic volumes for CSF1 project study area, and Figure 4.14-6 shows the Baseline without Construction Project traffic for the CSF2 project study area.

4.14.2.2.2 MSSF1

Project Trip Generation

Project traffic generation was determined for two phases using methodology developed for a similar solar project in the project study area. It is anticipated that an average of up to 300 workers per day would be required for each phase of construction. The two phases for the proposed project are: construction, and operations with maintenance. The construction phase is expected to commence in the second quarter of 2012, with opening year planned for the end of the year 2012. Trip generation for each phase is based on-site-specific trip generating characteristic provided by the applicant.

The trip generation for the MSSF1 is based on trip generation calculations completed for similar projects in the project study area. Assumptions about construction and maintenance and operations traffic characteristics for similar sites were increased accordingly to reflect the anticipated traffic activity associated with development and operations of the proposed project site.

Based on these calculations, a maximum of 462 ADT, during construction, could be generated by passenger vehicles, with 150 inbound trips during the AM peak hour and 150 outbound trips during the PM peak hour. Also, a maximum of 30 ADT could be generated by trucks, with six inbound and six outbound trips during the AM and PM peak hours, respectively. A passenger car equivalence factor (PCE) of 2.0 is applied to these trips for the purposes of the analysis to account for the reduced performance characteristics (stopping, starting, maneuvering, etc.) of heavy vehicles in the traffic flow.

Table 4.14-7 shows that the construction traffic is substantially greater than the O&M traffic. This validates the analysis that construction impacts would represent the worst-case potential traffic impacts of the project. The total construction traffic analyzed is 522 ADT, with 162 inbound trips during the AM peak hour, and 162 outbound trips during the PM peak hour.

Project Trip Distribution

Regional trip distribution for construction truck traffic was estimated based on information from the applicant that material deliveries will be from the Los Angeles area. Figure 4.14-3 shows the distribution of truck traffic, which is primarily oriented along La Brucherie Road and SR 98 in the project study area.

It is anticipated that the majority of construction workers will be from the local population centers of Calipatria, El Centro, and Calexico. Figure 4.14-7 shows the distribution of construction employee passenger car traffic north, west and east of the site. The majority of employee traffic (95%) is anticipated to be to/from north and east of the site, from the local labor pool utilizing Interstate 8 and SR 98 as their primary routes to work.

For the purposes of this analysis, 100% of the construction traffic was assumed to use the SR 98/Ferrell Road intersection (Figure 4.14-3). This provides a worst-case analysis because it focuses the highest intensity of the construction phase traffic at one location. It should be noted that additional access to some parcels may be possible via roadways west of the project (e.g., Rockwood Road, Brockman Road, Pulliam Road); however, no new impacts would be expected given the minimal nature of this traffic relative to the worst-case analysis presented in the traffic study.

Project Trip Assignment

The trip generation summaries shown in Table 4.14-7 were multiplied by the related truck and employee distribution percentages shown on Figures 4.14-3 and 4.14-7, respectively. The construction truck traffic assignment is shown on Figure 4.14-8. Similarly, Figure 4.14-9 shows the employee vehicle traffic assignment. Figure 4.14-10 depicts the total construction traffic generated.

TABLE 4.14-7. PROJECT TRIP GENERATION – MSSF1

Trip Type	Daily Total (ADT) [1]	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Construction							
Vehicles	462	150	0	*150*	0	150	*150*
Trucks	30	6	0	*6*	0	6	*6*
Total (w/PCE [2])	*522*	*162*	*0*	*162*	*0*	*162*	*162*
Operations and Maintenance (O&M)							
Vehicles	40	8	2	*10*	2	8	*10*
Trucks	0	0	0	*0*	0	0	*0*
Total (w/PCE)	*40*	*8*	*2*	*10*	*2*	*8*	*10*

Source: LLG 2011.
Notes: [1] ADT = Average Daily Traffic (24-hour total bi-directional traffic on a roadway segment)
[2] PCE = Passenger Car Equivalent, used to reflect the additional impacts of heavy vehicles in the technical analyses.

4.14.2.2.3 CSF1(A)(B)

Project Trip Generation

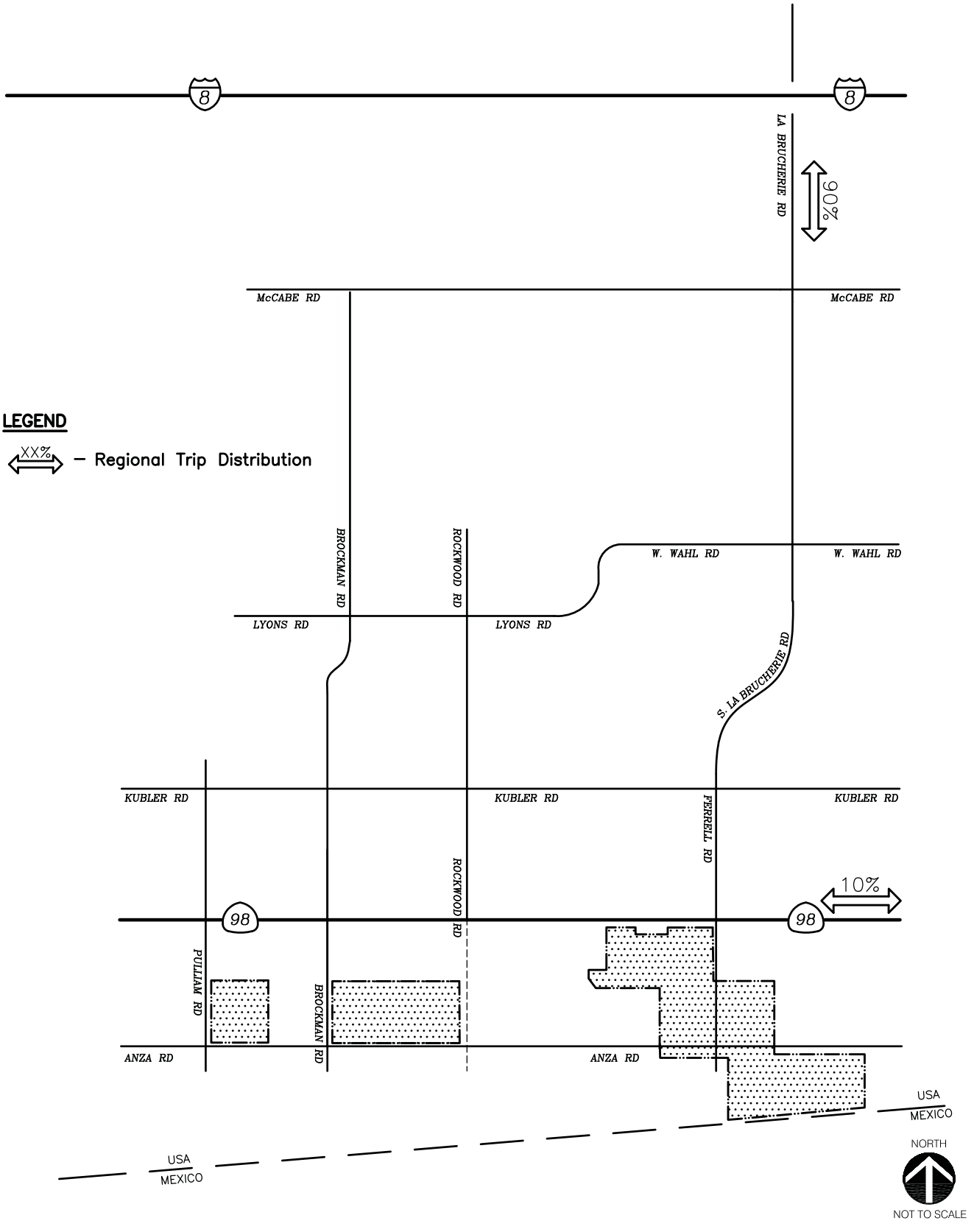
Project traffic generation was determined for Phase A and Phase B using the methodology developed for a similar solar project in the project study area. Each phase of the project consists of two parts: Construction, and O&M. The construction stage is expected to commence in 2013, with opening year planned for 2013 or 2014 (depending on the phase). Trip generation is based on-site-specific trip generating characteristics provided by the applicant.

The trip generation for the CSF1 is based on trip generation calculations completed for similar projects in the project study area. Assumptions about construction and maintenance and operations traffic characteristics for similar sites were increased accordingly to reflect the anticipated traffic activity associated with development and operations of the proposed project site.

Based on these calculations, Phase A of construction (100 MW) would generate 231 ADT by passenger vehicles, with 75 inbound trips during the AM peak hour and 75 outbound trips during the PM peak hour. It would also generate 15 ADT by trucks, with 3 inbound and 3 outbound trips during the AM and PM peak hours, respectively. A passenger car equivalence factor (PCE) of 2.0 is applied to these trips for the purposes of the analysis to account for the reduced performance characteristics (stopping, starting, maneuvering, etc) of heavy vehicles in the traffic flow.

Phase B of construction (100 MW) would generate an equal number of ADT and AM and PM peak hour trips as Phase A.

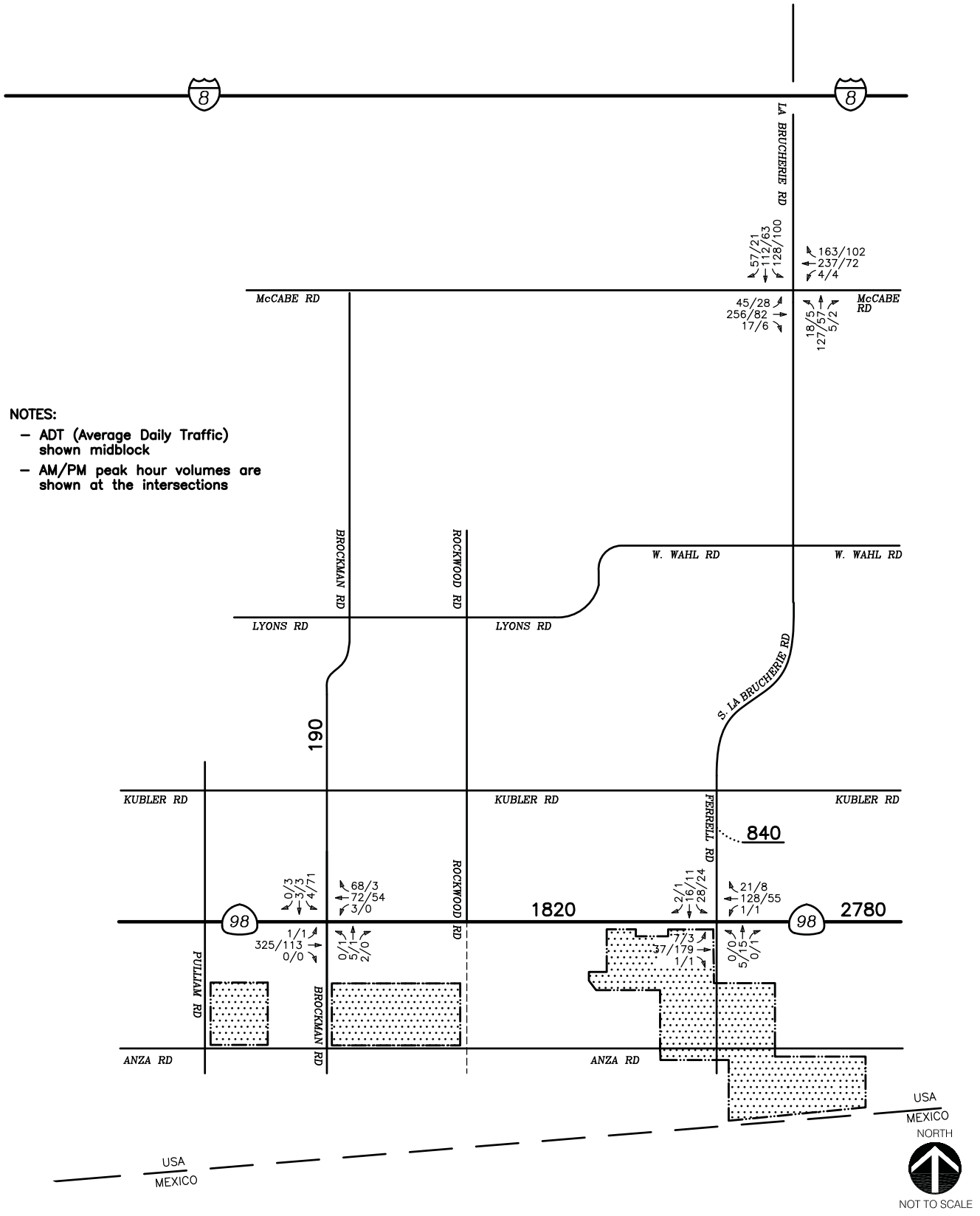
The total construction (Phases A & B) would generate a maximum of 462 ADT by passenger vehicles, with 150 inbound trips during the AM peak hour and 150 outbound trips during the PM peak hour. Also, a maximum of 30 ADT could be generated by trucks, with 6 inbound and 6 outbound trips during the AM and PM peak hours, respectively. As previously mentioned, for purposes of being conservative, the total construction traffic (Phases A & B) is assumed in the analysis.



Source: Linscott Law & Greenspan Engineers,(2011)

MSSF1 Construction Project Distribution: Truck Trips

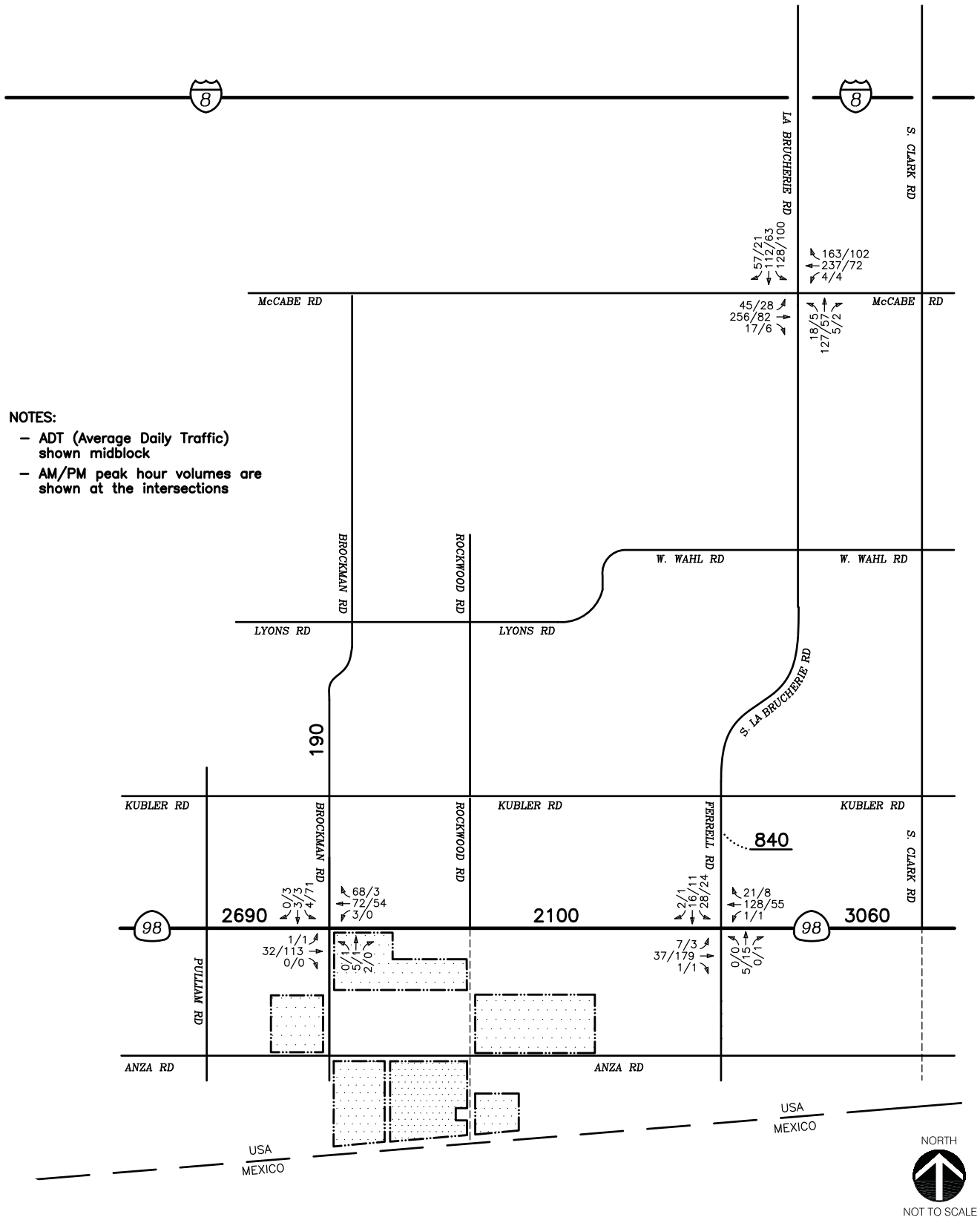
FIGURE 4.14-3



Source: Linscott Law & Greenspan Engineers,(2011)

MSSF1 Baseline Traffic Volumes: AM/PM Peak Hours and ADT

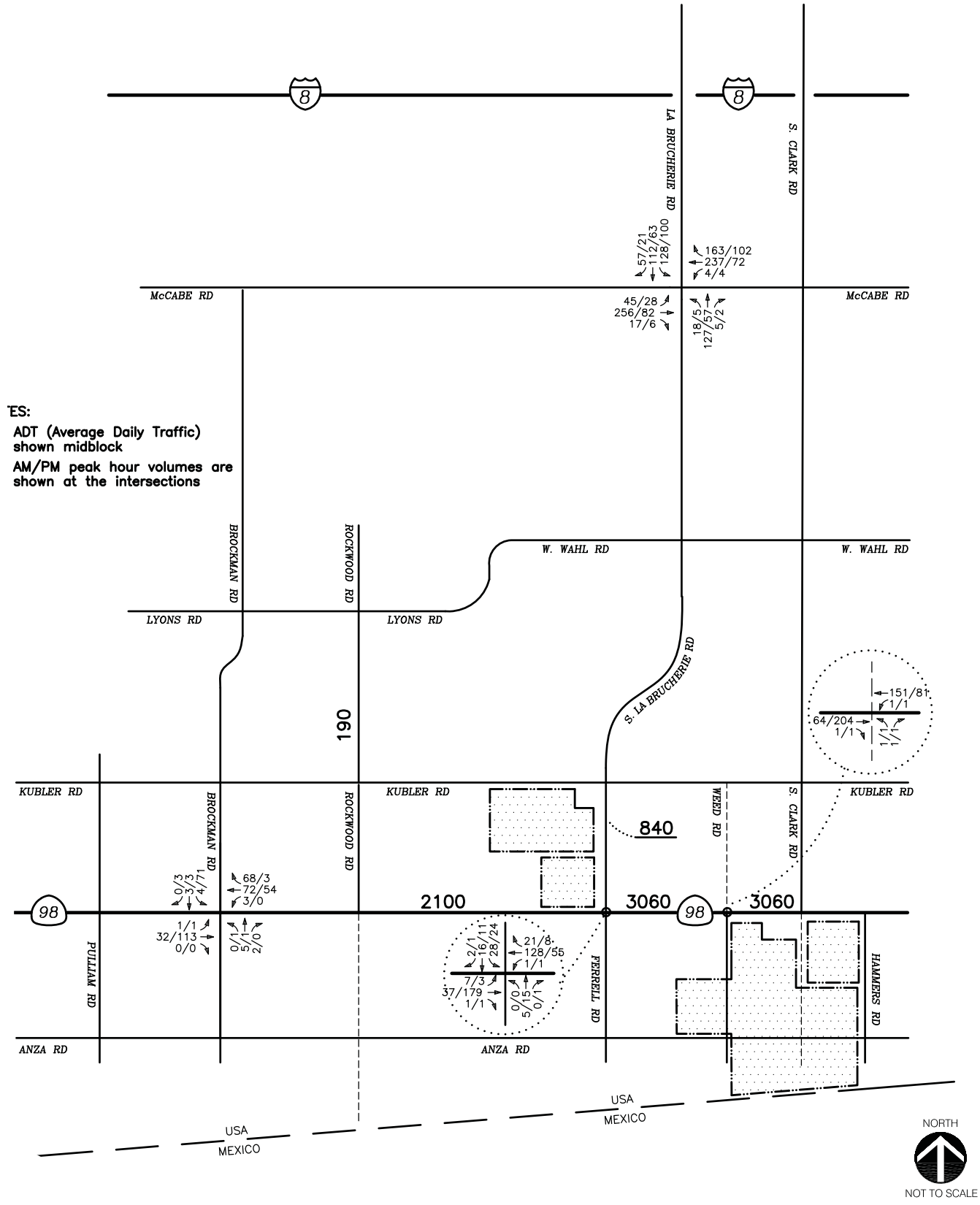
FIGURE 4.14-4



Source: Linscott Law & Greenspan Engineers,(2011)

CSF1 Baseline Traffic Volumes: AM/PM Peak Hours and ADT

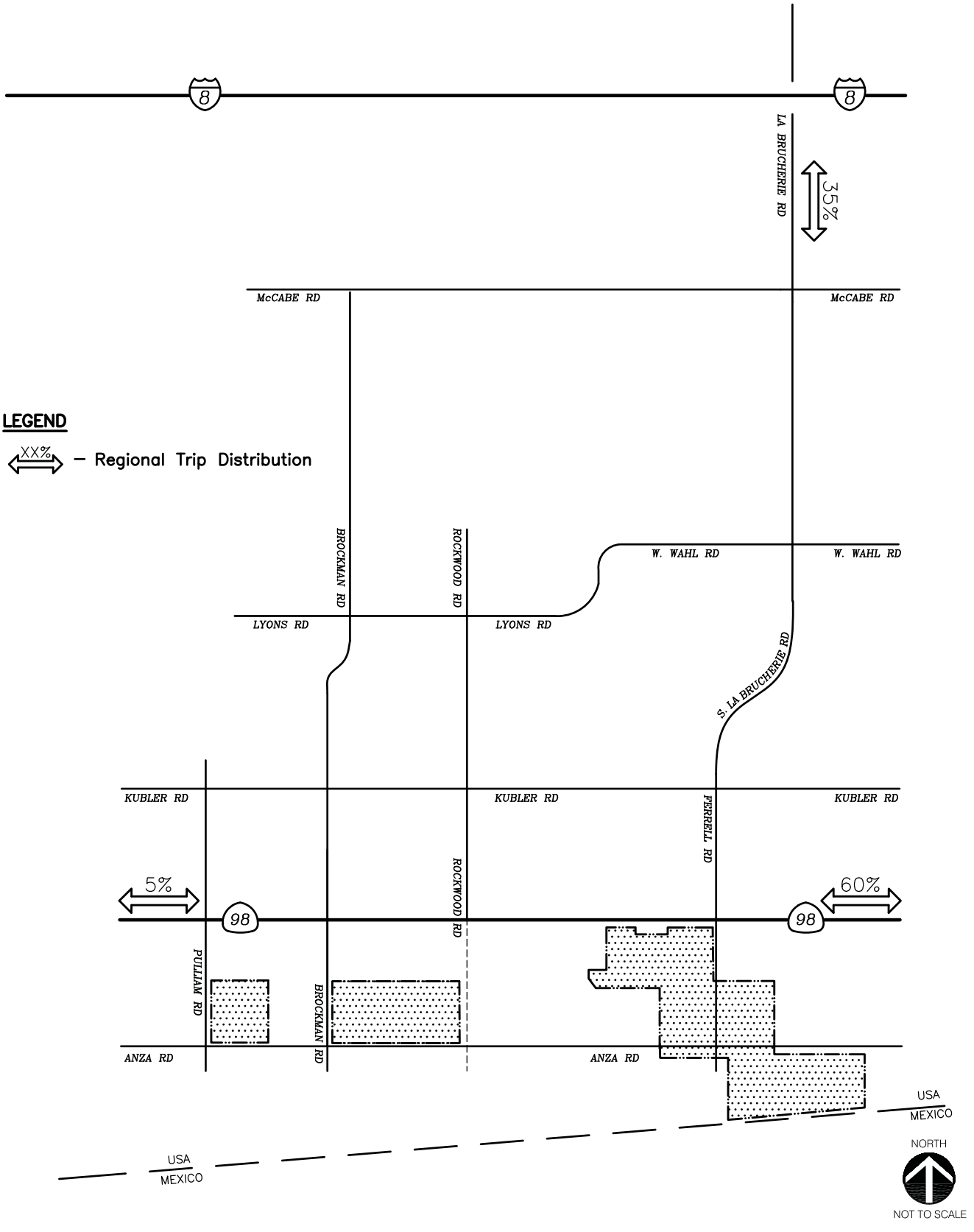
FIGURE 4.14-5



Source: Linscott Law & Greenspan Engineers,(2011)

CSF2 Baseline Traffic Volumes: AM/PM Peak Hours and ADT

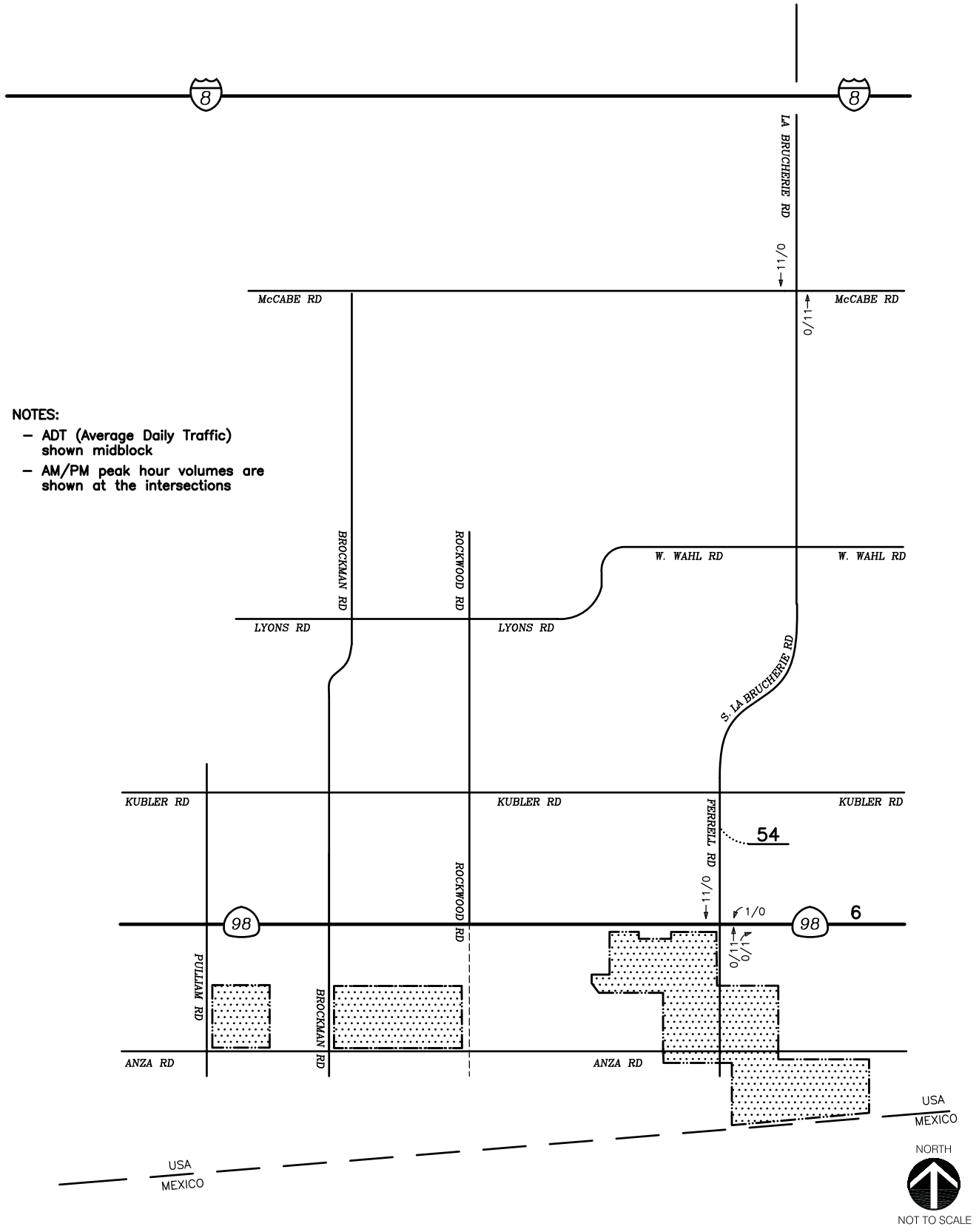
FIGURE 4.14-6



Source: Linscott Law & Greenspan Engineers,(2011)

MSSF1 Construction Project Distribution: Employee Trips

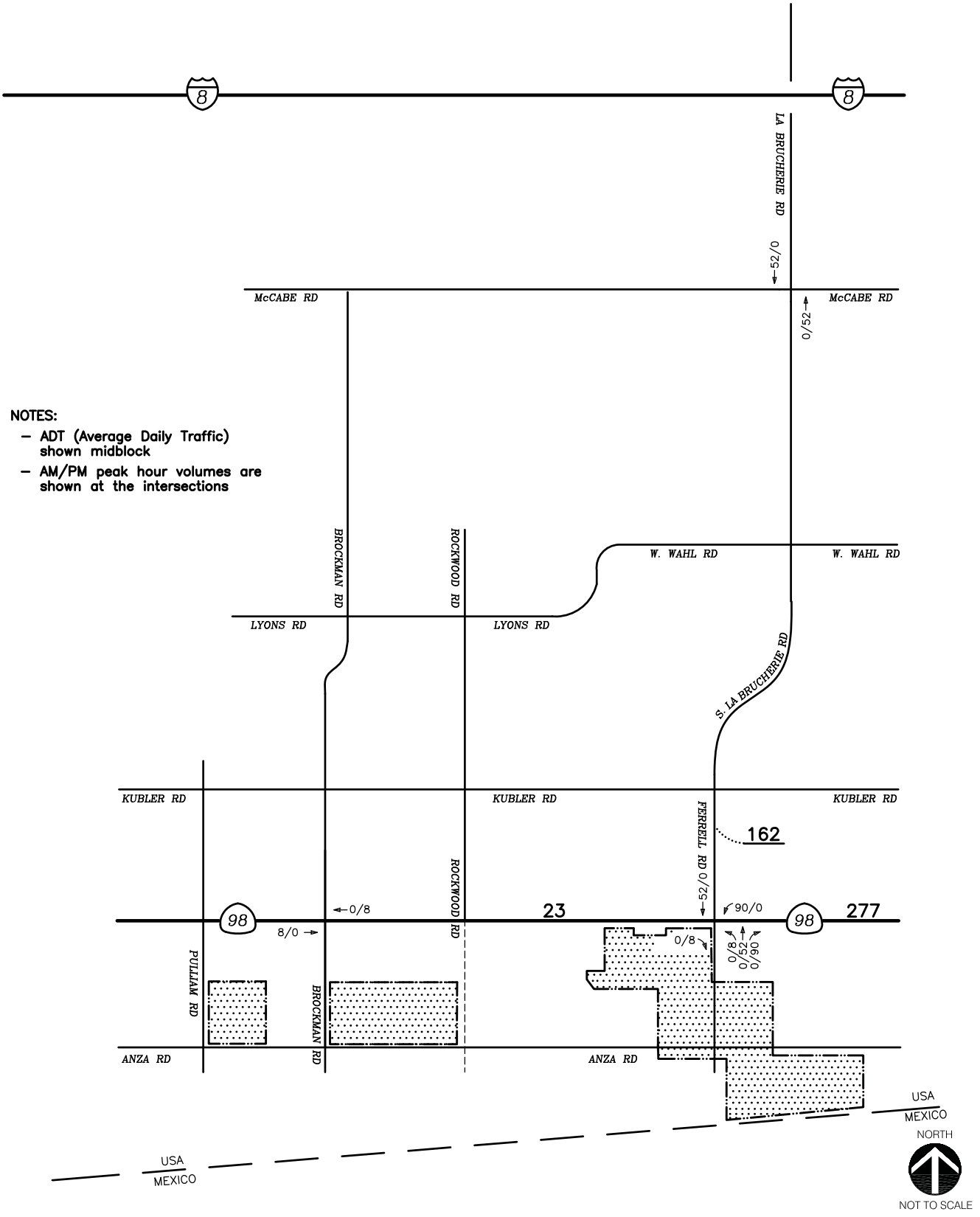
FIGURE 4.14-7



Source: Linscott Law & Greenspan Engineers,(2011)

MSSF1 Construction Project Traffic Volumes: Truck Trips, AM/PM Peak and ADT

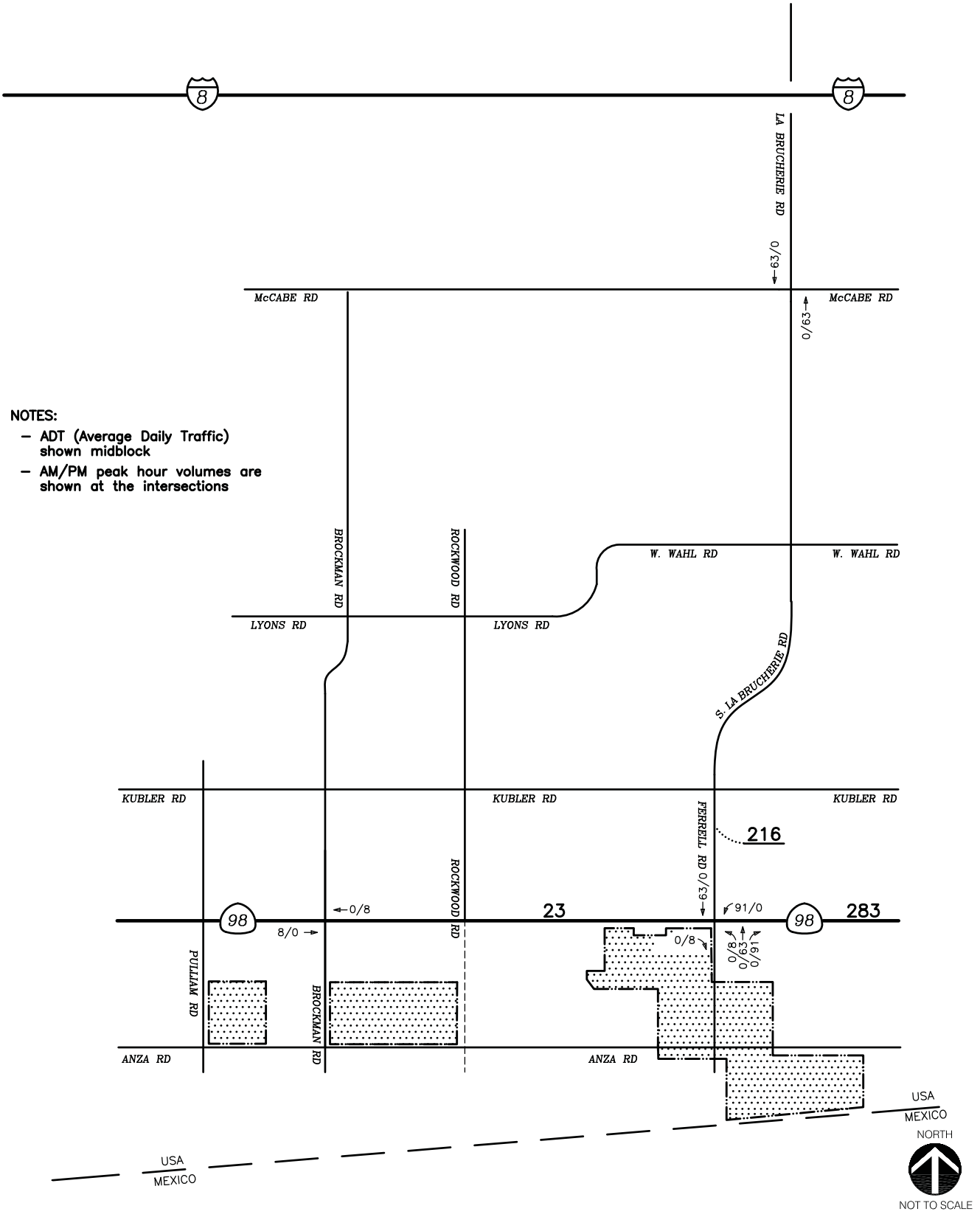
FIGURE 4.14-8



Source: Linscott Law & Greenspan Engineers,(2011)

MSSF1 Construction Project Traffic Volumes: Employee Trips, AM/PM Peak and ADT

FIGURE 4.14-9



Source: Linscott Law & Greenspan Engineers,(2011)

MSSF1 Construction Project Traffic Volumes: Total Trips, AM/PM Peak and ADT

FIGURE 4.14-10

Table 4.14-8 shows that the construction traffic is substantially greater than the O&M traffic. This supports the analysis of the construction impacts as representing the worst-case potential traffic impacts of the project. The total construction traffic analyzed in this report is the total of Phases A & B of 522 ADT, with 162 inbound/0 outbound trips during the AM peak hour, and 0 inbound/162 outbound trips during the PM peak hour.

TABLE 4.14-8. PROJECT TRIP GENERATION-CSF1(A)(B)

Trip Type	Daily Total (ADT) [1]	AM Peak Hour			PM Peak Hour		
		In	Out	*Total*	In	Out	*Total*
PHASE A							
Construction							
Vehicles	231	75	0	75	0	75	75
Trucks	15	3	0	3	0	3	3
Total (w/PCE [2])	*246*	*78*	*0*	*78*	*0*	*78*	*78*
Operations and Maintenance (O&M)							
Vehicles [2]	40	8	2	*10*	2	8	*10*
PHASE B							
Construction							
Vehicles	231	75	0	75	0	75	75
Trucks	15	3	0	3	0	3	3
Total (w/PCE[3])	*246*	*78*	*0*	*78*	*0*	*78*	*78*
Operations and Maintenance (O&M)							
Vehicles	40	8	2	*10*	2	8	*10*
TOTAL PROJECT (PHASES A & B)							
Total Construction							
Vehicles	462	150	0	150	0	150	150
Trucks	30	6	0	6	0	6	6
Total (w/PCE)	*522*	*162*	*0*	*162*	*0*	*162*	*162*
Shared Operations and Maintenance (O&M)4							
Vehicles	80	16	4	20	4	16	20

Source: 8minutenergy Renewables, LLC, and Fehr & Peers 2010.

Notes: [1] ADT = Average Daily Traffic (24-hour total bi-directional traffic on a roadway segment)

[2.] Only passenger vehicles are generated during the operations and maintenance stages.

[3.] PCE = Passenger Car Equivalent, used to reflect the additional impacts of heavy vehicles in the technical analyses.

[4.] Shared O&M may require up to 7 on-site staff members during normal business hours, plus one security guard during each shift.

Project Trip Distribution

Regional trip distribution for construction truck traffic was estimated based on information from the applicant that material deliveries will be from the Los Angeles area. Figure 4.14-11 shows the distribution of truck traffic, which is primarily oriented along La Brucherie Road and SR 98 in the project study area. It is anticipated that the majority of construction workers will be from the local population centers of Calipatria, El Centro, and Calexico. Figure 4.14-12 shows the distribution of construction employee passenger car traffic north, west and east of the site. The majority of employee traffic (95%) is anticipated to be to/from north and east of the site, from the local labor pool utilizing Interstate 8 and SR 98 as their primary routes to work.

For the purposes of this analysis, 100% of the construction traffic was assumed to use the SR 98/ Brockman Road intersection. This provides a worst-case analysis since it focuses the highest intensity of the construction traffic at one location. It should be noted that other access to some parcels may be possible via roadways in proximity to the project (e.g., Rockwood Road and Anza Road); however, no new impacts would be expected given the partial nature of this traffic relative to the worst-case analysis presented in this analysis.

Project Trip Assignment

The trip generation summaries for the total construction shown in Table 4.14-10 were multiplied by the related truck and employee distribution percentages shown on Figures 4.14-11 and 4.14-12, respectively. The total construction truck traffic assignment is shown on Figure 4.14-13. Similarly, Figure 4.14-14 shows the total employee vehicle traffic assignment. Figure 4.14-15 depicts the total construction traffic assignment for both Phases A & B.

4.14.2.2.4 CSF2(A)(B)

Project Trip Generation

Project traffic generation was determined for Phase A and Phase B using the methodology developed for a similar solar project in the project study area. Each phase of the project consists of two parts: Construction, and O&M. The construction stage is expected to commence and be completed in 2014. Trip generation is based on-site-specific trip generating characteristics provided by the applicant.

The trip generation for the CSF2 is based on trip generation calculations completed for similar projects in the project study area. Assumptions about construction and maintenance and operations traffic characteristics for similar sites were increased accordingly to reflect the anticipated traffic activity associated with development and operations of the proposed project site.

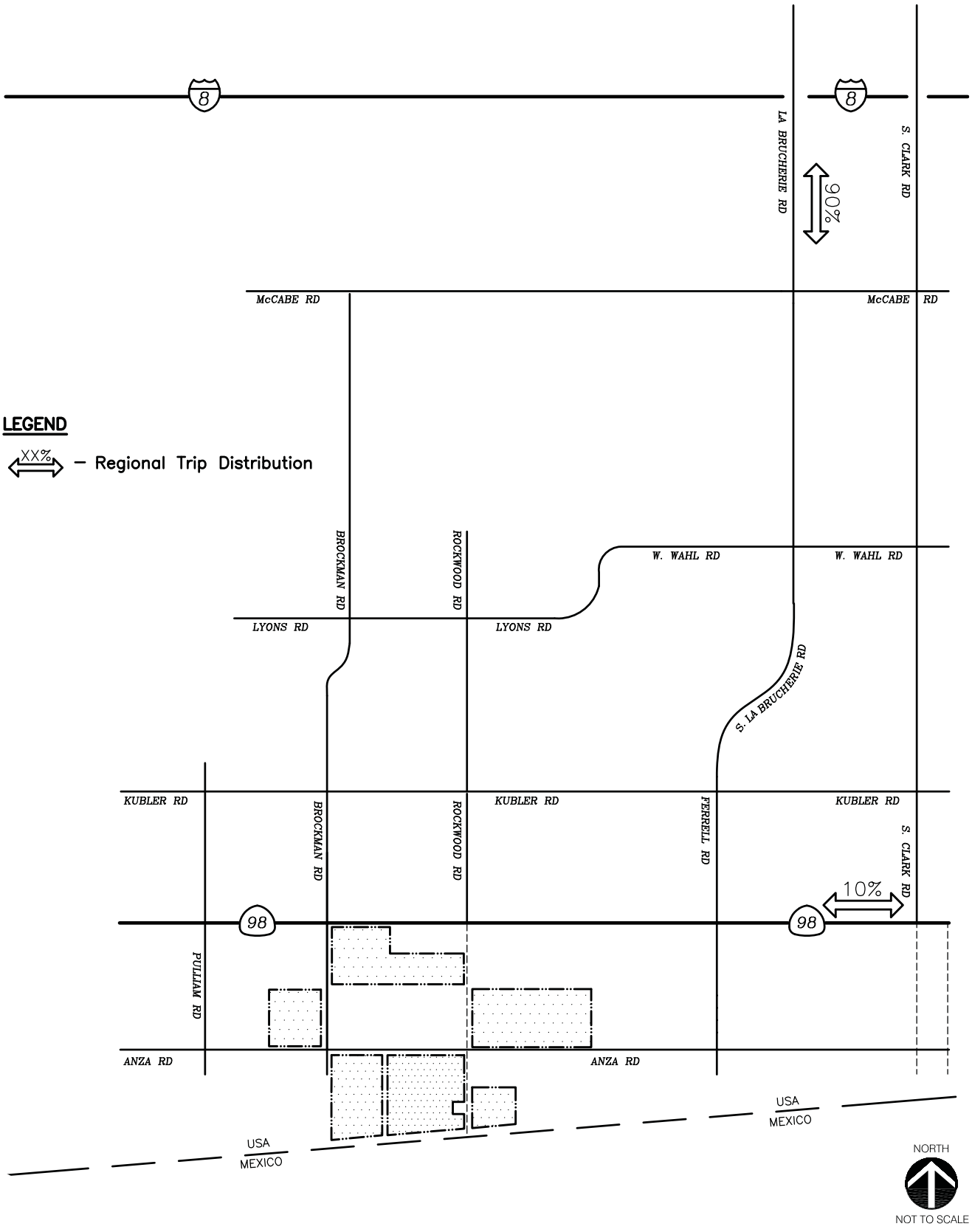
Based on these calculations, Phase A of construction (100 MW) would generate 231 ADT by passenger vehicles, with 75 inbound trips during the AM peak hour and 75 outbound trips during the PM peak hour. It would also generate 15 ADT by trucks, with three inbound and three outbound trips during the AM and PM peak hours, respectively. A passenger car equivalence factor (PCE) of 2.0 is applied to these trips for the purposes of the analysis to account for the reduced performance characteristics (stopping, starting, maneuvering, etc) of heavy vehicles in the traffic flow.

Phase B of construction (100 MW) would generate an equal number of ADT and AM and PM peak hour trips as Phase A.

The total construction (Phases A & B) would generate a maximum of 462 ADT by passenger vehicles, with 150 inbound trips during the AM peak hour and 150 outbound trips during the PM peak hour. Also, a maximum of 30 ADT could be generated by trucks, with six inbound and six outbound trips during the AM and PM peak hours, respectively.

As previously mentioned, for purposes of being conservative, the total construction traffic (Phase A & B) is assumed in the analysis.

Table 4.14-9 shows that the construction traffic is substantially greater than the O&M traffic, which validates the assertion that analysis of the construction impacts would represent the worst-case potential traffic impacts of the project. The total construction traffic analyzed in this report is the total of Phases A & B of 522 average daily trips (ADT), with 162 inbound/0 outbound trips during the AM peak hour, and 0 inbound/162 outbound trips during the PM peak hour.



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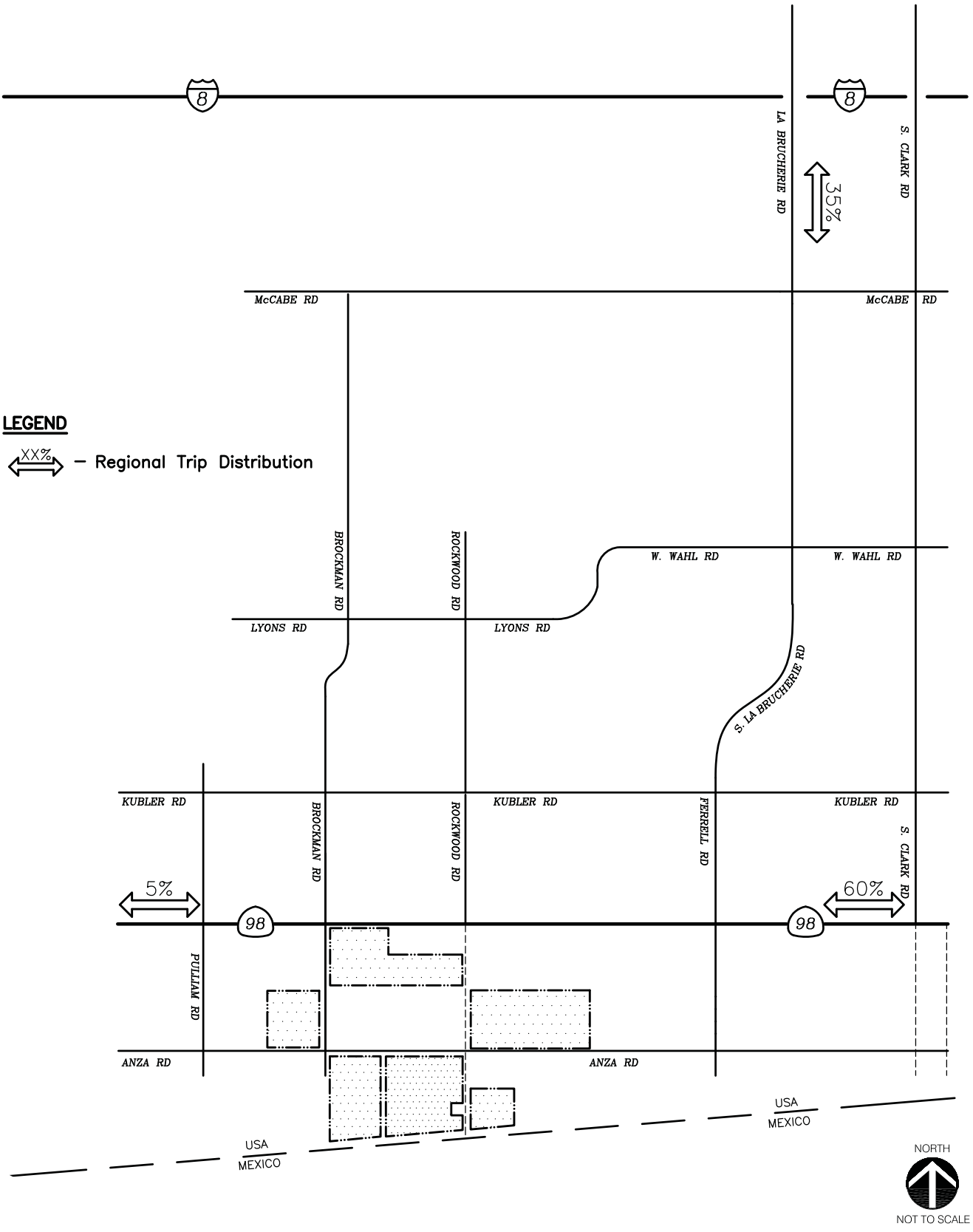
Source: Linscott Law & Greenspan Engineers,(2011)

CSF1 Construction Project Distribution: Truck Trips

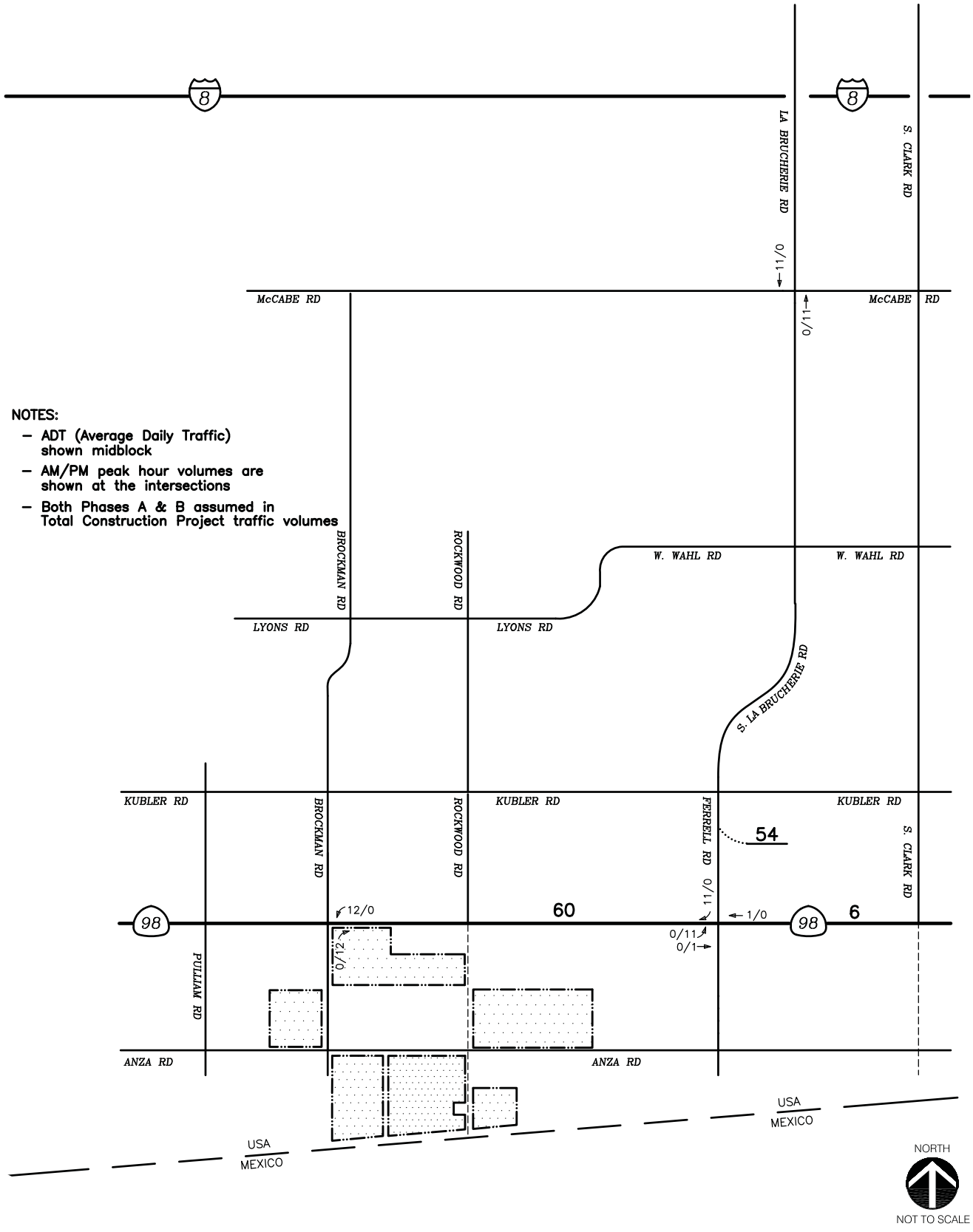
FIGURE 4.14-11



Source: Linscott Law & Greenspan Engineers,(2011)

CSF1 Construction Project Distribution: Employee Trips

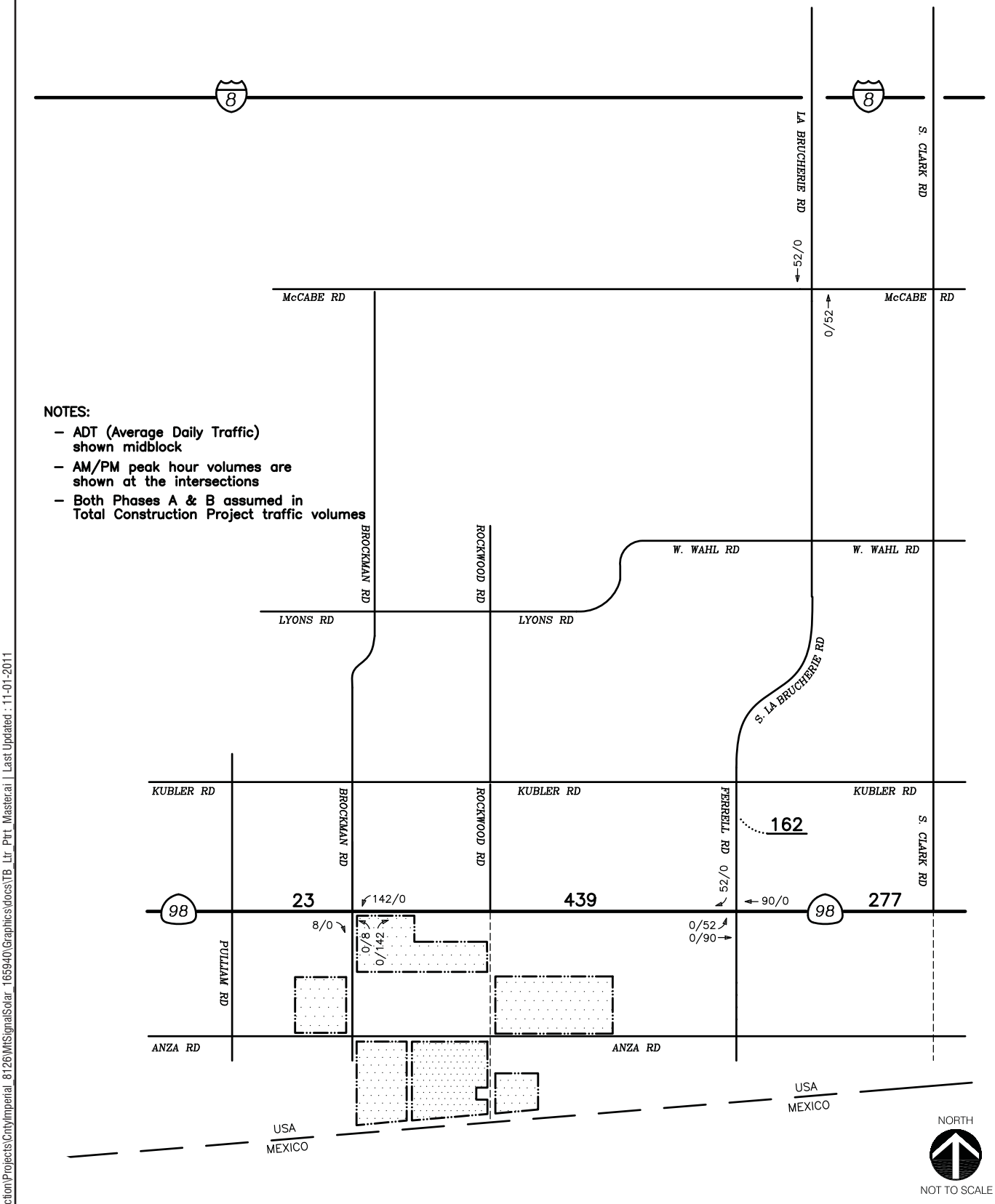
FIGURE 4.14-12



Source: Linscott Law & Greenspan Engineers,(2011)

CSF1 Construction Project Traffic Volumes: Truck Trips, AM/PM Peak and ADT

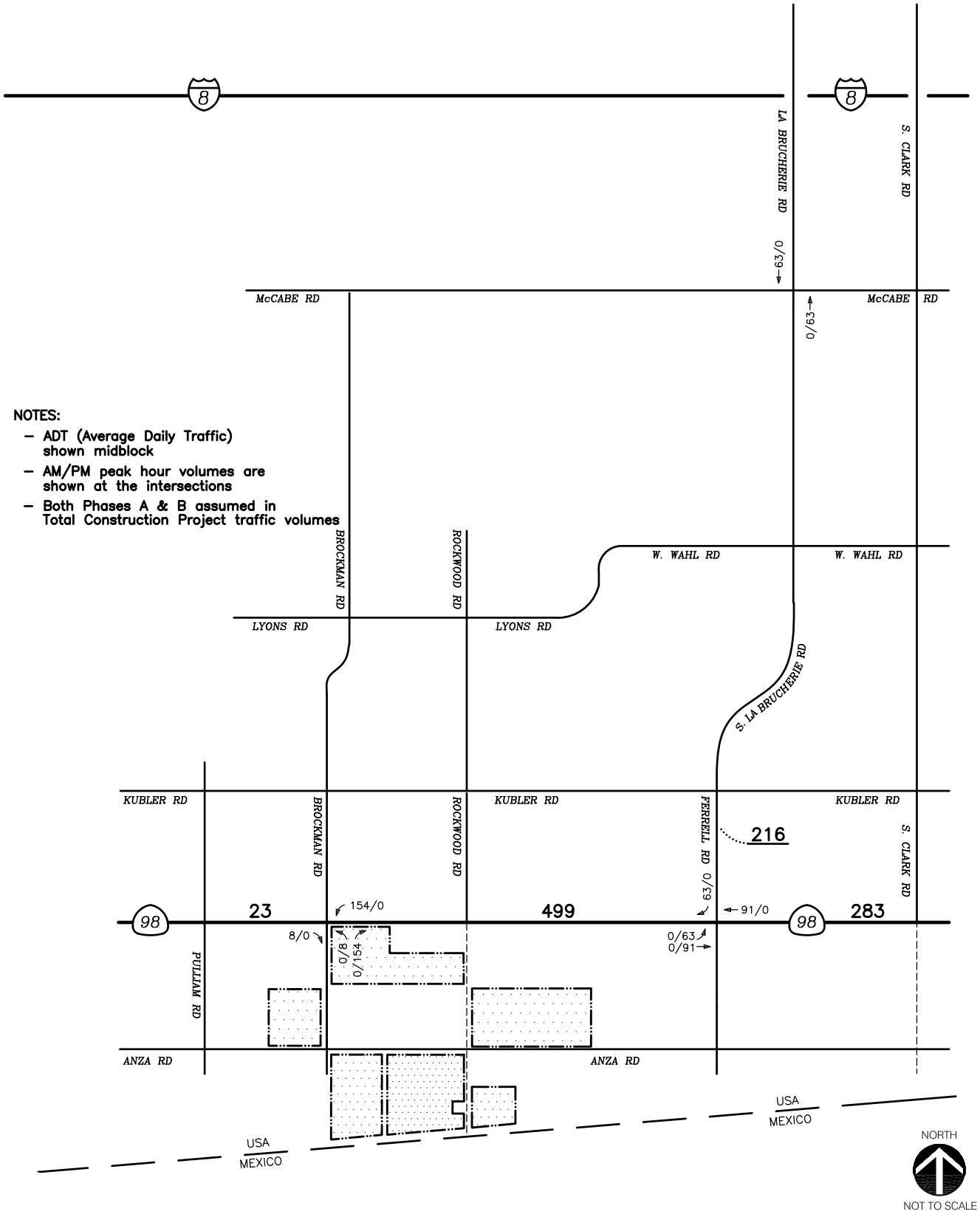
FIGURE 4.14-13



Source: Linscott Law & Greenspan Engineers,(2011)

CSF1 Construction Project Traffic Volumes: Employee Trips, AM/PM Peak and ADT

FIGURE 4.14-14



Source: Linscott Law & Greenspan Engineers,(2011)

CSF1 Construction Project Traffic Volumes: Total Trips, AM/PM Peak and ADT

FIGURE 4.14-15

TABLE 4.14-9. PROJECT TRIP GENERATION - CSF2(A)(B)

Trip Type	Daily Total (ADT) [1]	AM Peak Hour			PM Peak Hour		
		In	Out	*Total*	In	Out	*Total*
PHASE A							
Construction							
Vehicles	231	75	0	75	0	75	75
Trucks	15	3	0	3	0	3	3
Total (w/PCE [2])	*246*	*78*	*0*	*78*	*0*	*78*	*78*
Operations and Maintenance (O&M)							
Vehicles [3]	40	8	2	10	2	8	10
PHASE B							
Construction							
Vehicles	231	75	0	75	0	75	75
Trucks	15	3	0	3	0	3	3
Total (w/PCE[2])	*246*	*78*	*0*	*78*	*0*	*78*	*78*
Operations and Maintenance (O&M)							
Vehicles	40	8	2	10	2	8	10
TOTAL PROJECT (PHASES A & B)							
Total Construction							
Vehicles	462	150	0	*150*	0	150	*150*
Trucks	30	6	0	*6*	0	6	*6*
Total (w/PCE2[b])	*522*	*162*	*0*	*162*	*0*	*162*	*162*
Shared Operations and Maintenance (O&M) [4]							
Vehicles	80	16	4	20	4	16	20

Source: LLC 2011.

Notes: 1. ADT = Average Daily Traffic (24-hour total bi-directional traffic on a roadway segment)
2. PCE = Passenger Car Equivalent, used to reflect the additional impacts of heavy vehicles in the technical analyses.
3. Only passenger vehicles are generated during the operations and maintenance stages.
4. Shared O&M may require up to 7 on-site staff members during normal business hours, plus one security guard during each shift.

Project Trip Distribution

Regional trip distribution for construction truck traffic was estimated based on information from the applicant that material deliveries will be from the Los Angeles area. Figure 4.14-16 shows the distribution of truck traffic, which is primarily oriented along La Brucherie Road and SR 98 in the project study area.

It is anticipated that the majority of construction workers will be from the local population centers of Calipatria, El Centro, and Calexico. Figure 4.14-17 shows the distribution of construction employee passenger car traffic north, west and east of the site. The majority of employee traffic (95%) is anticipated to be to/from north and east of the site, from the local labor pool utilizing Interstate 8 and SR 98 as their primary routes to work.

For the purposes of this analysis, 100% of the construction traffic was assumed to use the SR 98/ Weed Road intersection. This provides a worst-case analysis since it focuses the highest intensity of the construction traffic at one location. Weed Road is a dirt road north of SR 98; therefore, the majority of the traffic oriented to/from the northerly direction is assumed to travel to/from Ferrell Road. It should be noted that other access to some parcels may be possible via roadways in proximity to the project (e.g., Anza Road, Hammers Road and Ferrell Road); however, no new impacts would be expected given the partial nature of this traffic relative to the worst-case analysis presented in this study.

Project Trip Assignment

The trip generation summaries for the total construction shown in Table 4.14-9 were multiplied by the related truck and employee distribution percentages shown on Figures 4.14-16 and 4.14-17, respectively. The total construction truck traffic assignment is shown on Figure 4.14-18. Similarly, Figure 4.14-19 shows the total employee vehicle traffic assignment. Figure 4.14-20 depicts the total construction traffic assignment for both Phases A & B.

4.14.2.3 Impact Analysis

IMPACT 4.14-1	Possible Conflict with Applicable Plan, Ordinance, or Policy. The development of the project study area with the proposed project would not cause a substantial increase in traffic affecting the efficiency of the circulation system; this includes all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, such as highways and freeways, pedestrian and bicycle paths, and mass transit.

MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF

Currently, there is no regular bus service to the general area and project related construction and operations and maintenance phases would not impact mass transit. During the construction phase of the projects (MSSF1, CSF1(A), CSF1(B), CSF2(A), and CSF2(B), and including the OTF), bicycle routes may be affected on SR 98. However, SR 98 does not currently have a designated bikeway classification, as defined by the Caltrans Highway Design Manual, and therefore these projects would not conflict with any bike plans. Future operations and maintenance of the project study area could potentially impact proposed Bike II class designated routes along Brockman, Ferrell, Pulliam and Anza Roads. The projects, however, do not propose modifications be made to existing roadways serving future designated bikeway routes. Instead, the perimeter of the projects will be fenced-in along the project boundaries and would not interfere with potential future designated bike routes. Therefore, the MSSF1, CSF1(A), CSF1(B), CSF2(A), and CSF2(B) projects (and including the OTF) would not impact potential future designated bike routes traversing through the project study area and impacts to this issue area are identified as **less than significant**.

Mitigation Measure(s)

No mitigation measures are required.

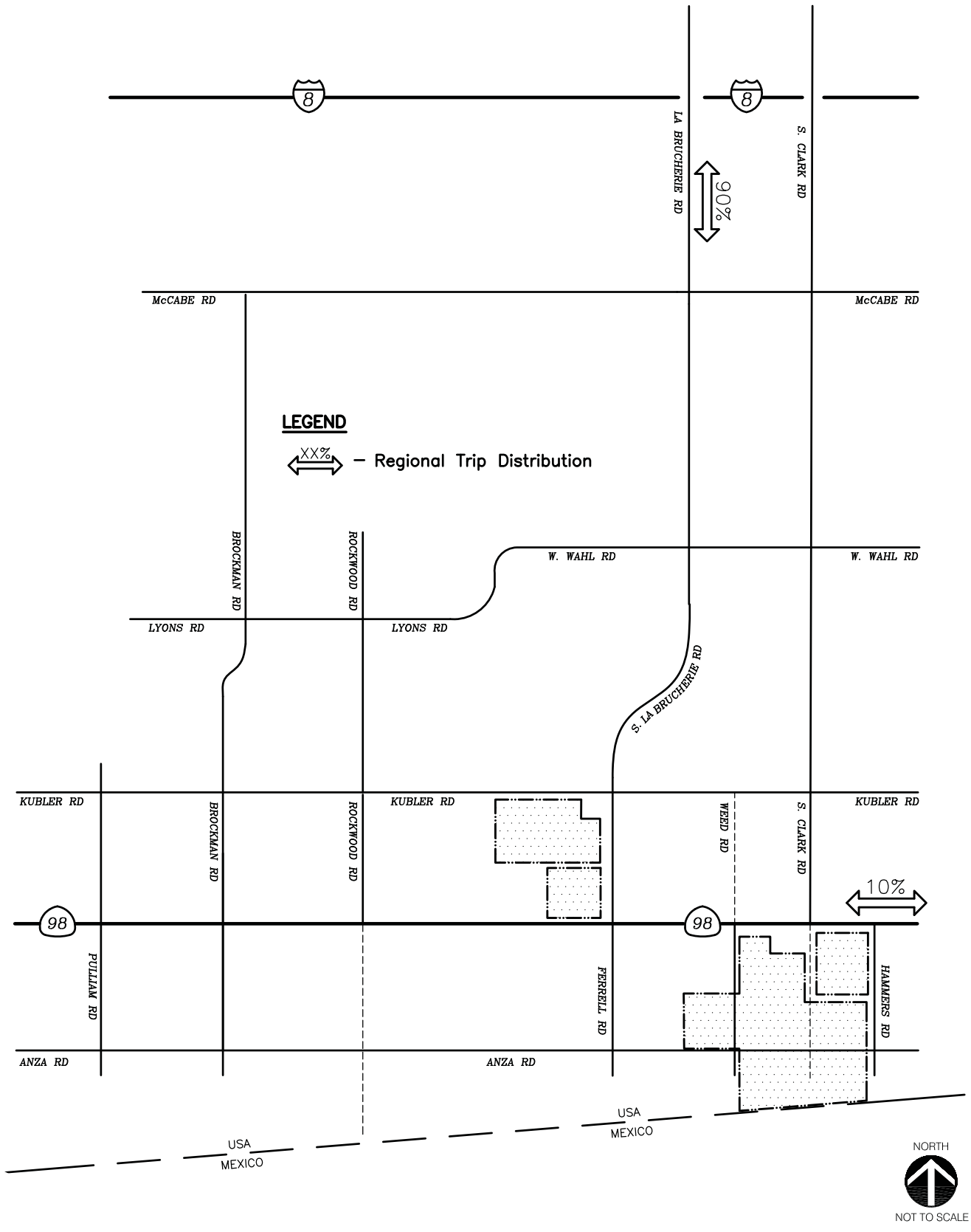
IMPACT 4.14-2	Possible Conflict with Applicable Congestion Management Program. The construction and/or operation of the proposed project within the project study area would not exceed a level of service standard established by the County Congestion Management Agency for designated roads or highways.

MSSF1, OTF

Baseline without Construction Project

Intersection Operations

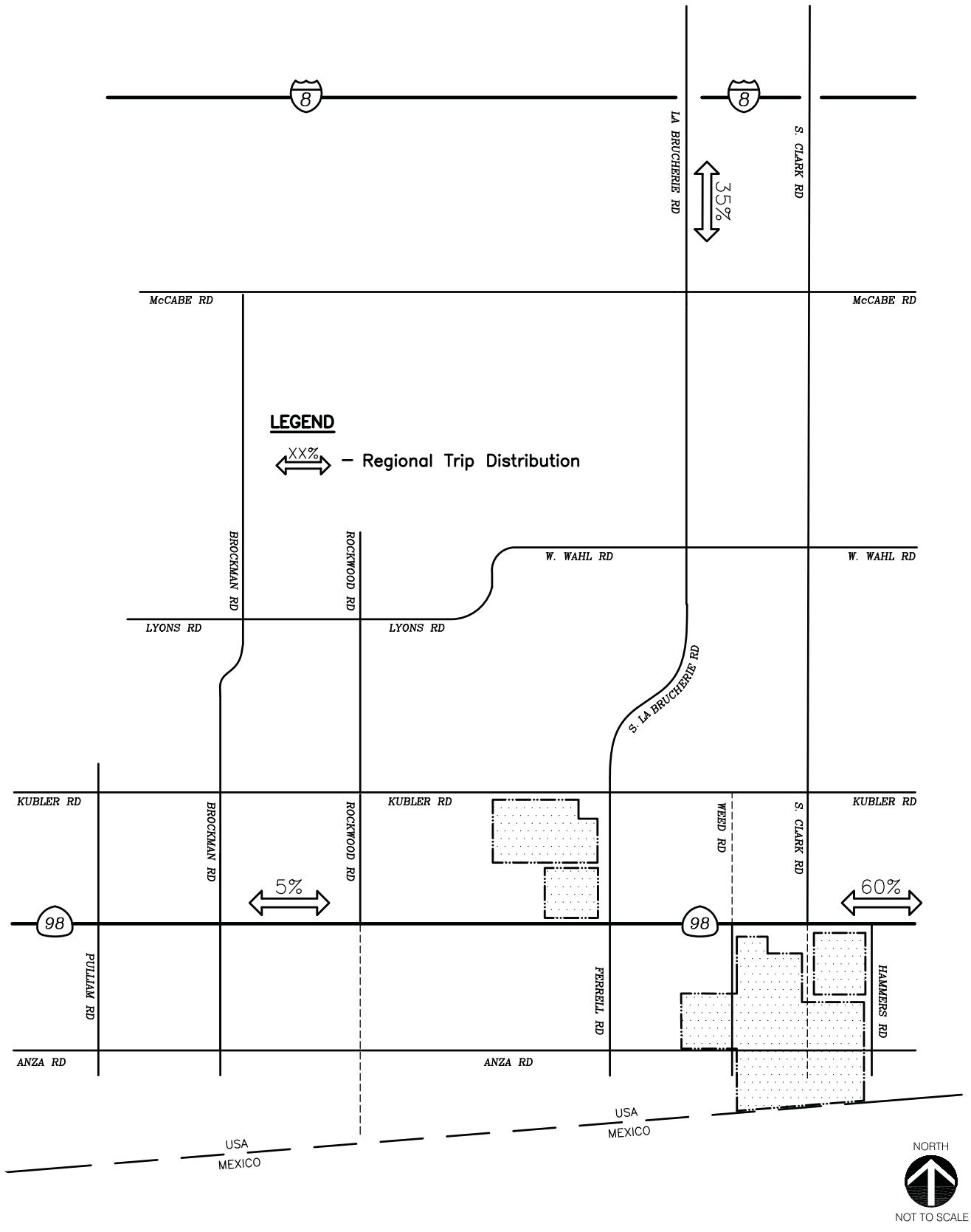
Table 4.14-10 summarizes the intersection operations throughout MSSF1 given the projected Baseline without Construction Project traffic volumes. This table shows that all of the unsignalized intersections in the project study area are forecasted to operate at LOS C or better during the AM and PM peak hours.



Source: Linscott Law & Greenspan Engineers,(2011)

CSF2 Construction Project Distribution: Truck Trips

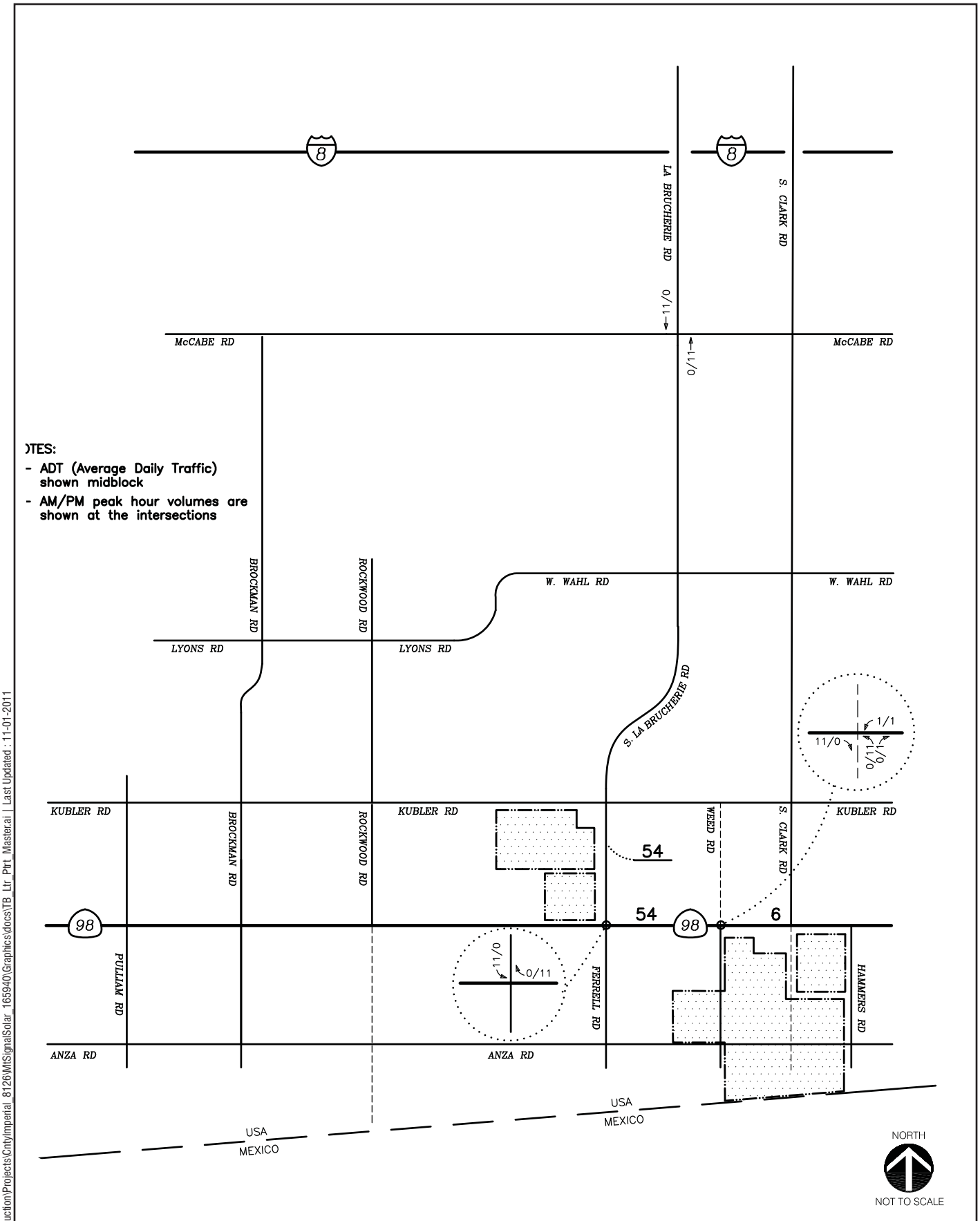
FIGURE 4.14-16



Source: Linscott Law & Greenspan Engineers,(2011)

CSF2 Construction Project Distribution: Employee Trips

FIGURE 4.14-17



Source: Linscott Law & Greenspan Engineers,(2011)

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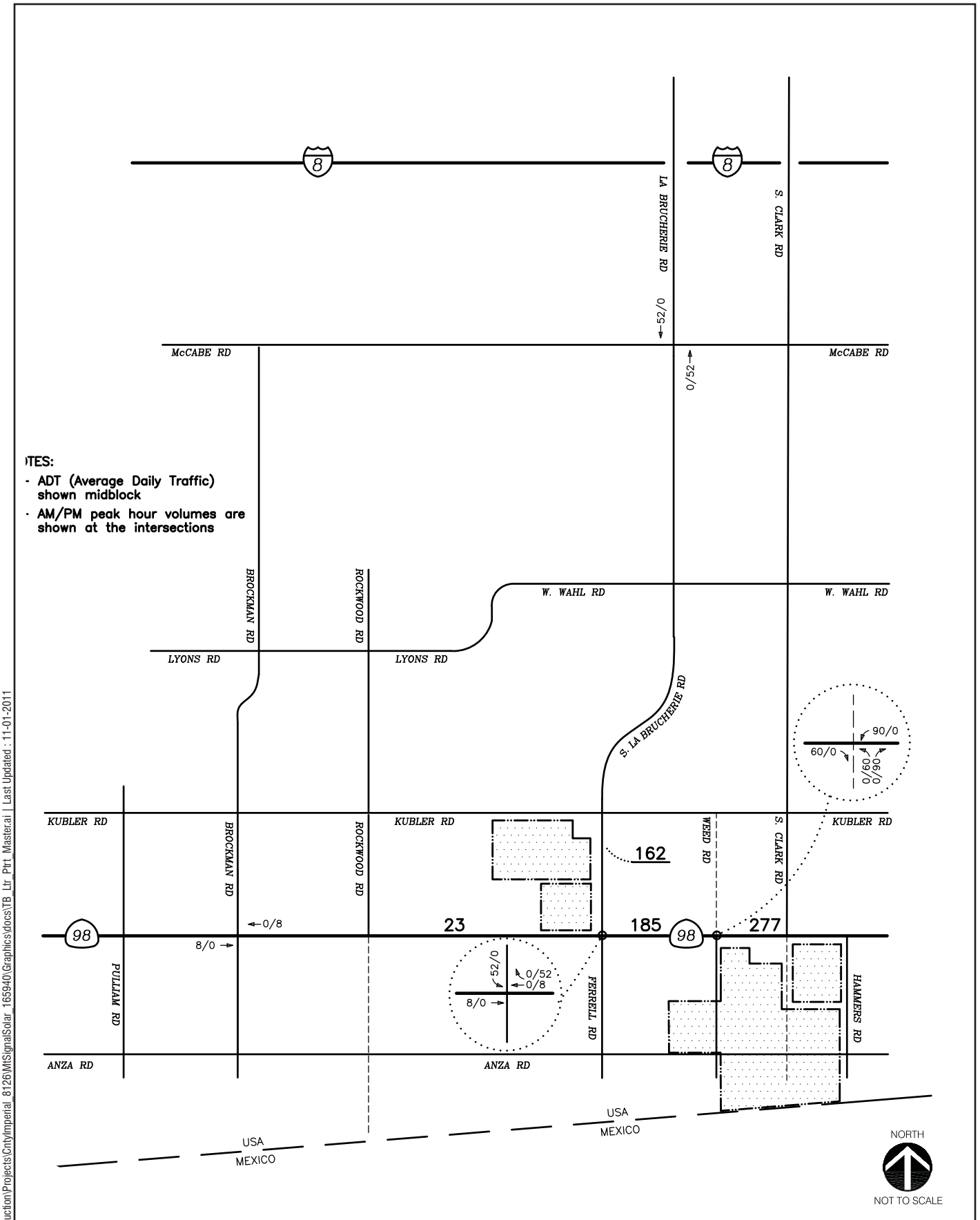
CSF2 Construction Project Traffic Volumes: Truck Trips, AM/PM Peak and ADT

FIGURE 4.14-18



Source: Linscott Law & Greenspan Engineers,(2011)

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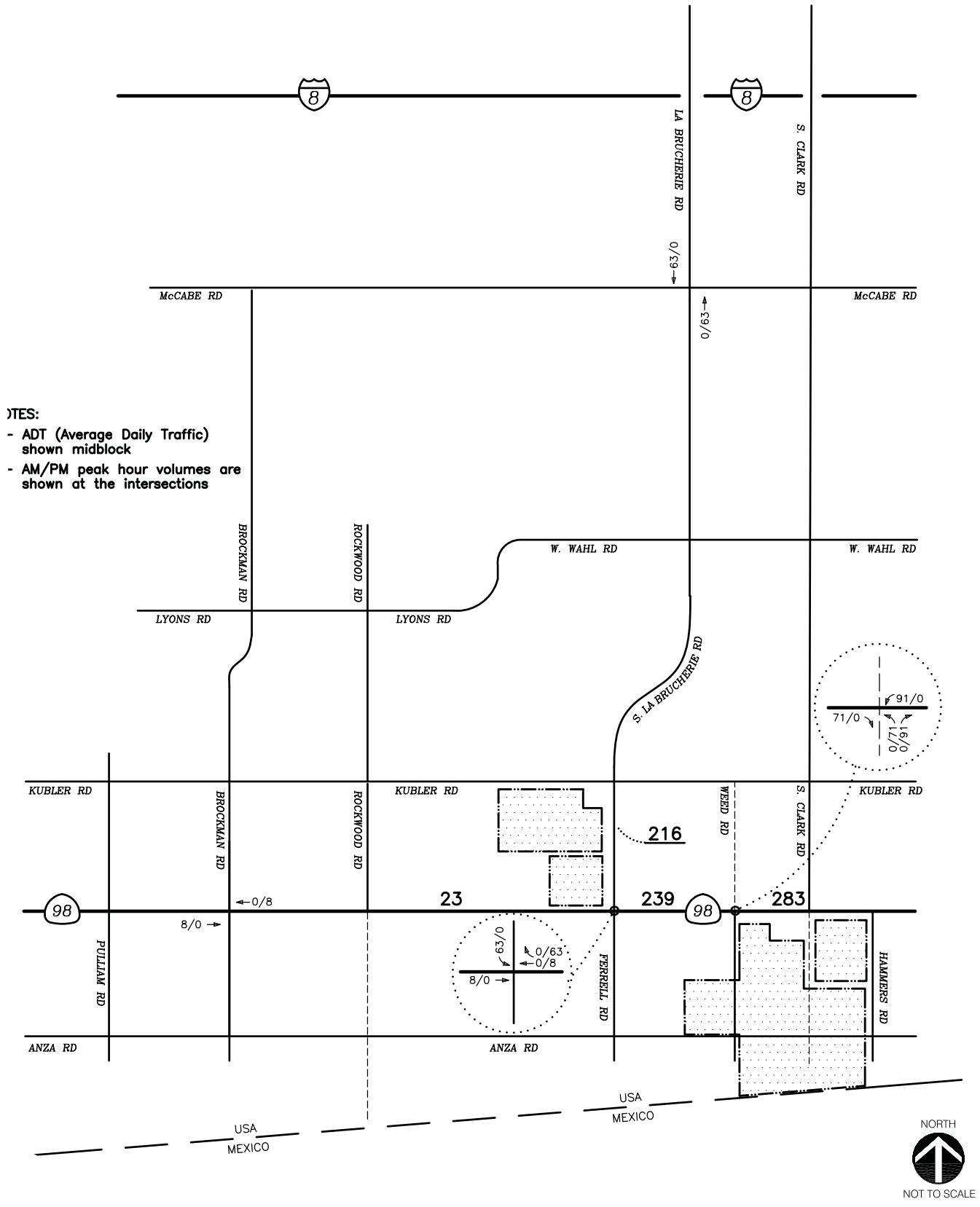
CSF2 Construction Project Traffic Volumes: Employee Trips, AM/PM Peak and ADT

FIGURE 4.14-19



Source: Linscott Law & Greenspan Engineers,(2011)

CSF2 Construction Project Traffic Volumes: Total Trips, AM/PM Peak and ADT

FIGURE 4.14-20

TABLE 4.14-10. CONSTRUCTION YEAR INTERSECTION OPERATIONS – MSSF1

Intersection	Control Type	Peak Hour	Baseline Without Construction Project Traffic		Baseline With Construction Project Traffic		
			Delay [1]	LOS [2]	Delay	LOS	Δ [3] Delay
La Brucherie Road/ McCabe Road	AWSC [4]	AM	19.2	C	23.3	C	4.1
		PM	8.9	A	9.2	A	0.3
SR 98/ Ferrell Road	MSSC [5]	AM	10.4	B	14.4	B	4.0
		PM	10.8	B	12.4	B	1.6
SR 98/ Brockman Road	MSSC	AM	9.7	A	9.8	A	0.1
		PM	10.2	B	10.2	B	0.0

Source: LLG 2011.

Notes:
1. Average delay expressed in seconds per vehicle.
2. Level of Service.
3. Δ denotes an increase in delay due to project.
4. AWSC - All-Way STOP Controlled intersection.
5. MWSC – Minor Street Stop Controlled intersection. Minor street left turn delay is reported.

UNSIGNALIZED	
Delay	LOS
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

Segment Analysis

Table 4.14-11 summarizes the street segment operations throughout MSSF1 given the projected Baseline without Construction Project traffic volumes. This table shows that all of the street segments in the project study area are forecasted to operate at LOS B or better.

Baseline with Construction Project

The total construction project traffic was added to the baseline without construction project traffic, and the potential impacts associated with the proposed project were calculated by comparing the results. The following is a summary of the intersection and segment analyses. Figure 4.14-21 shows the Baseline + Construction Project traffic volumes in the project study area.

Intersection Analysis

Table 4.14-10 also summarizes the Baseline + Construction Project peak hour intersection operations. As seen in Table 4.14-10 all project study area intersections are calculated to continue to operate at LOS C or better with the addition of the construction project traffic. The increase in delay due to the construction traffic varies between 0.0 and 3.7 seconds at these intersections.

Segment Analysis

Table 4.14-11 also summarizes the street segment operations throughout the project study area given the projected Baseline + Construction Project traffic volumes. This table shows that all project study area segments are calculated to continue to operate at LOS B or better with the addition of the construction project traffic. The increase in V/C due to the construction traffic varies between 0.0 and 0.02 at these segments.

TABLE 4.14-11. CONSTRUCTION YEAR STREET SEGMENT OPERATIONS – MSSF1

Street Segment	Functional Roadway Classification	Existing Capacity (LOS E)[1]	Baseline Without Construction Project Traffic			Baseline With Construction Project Traffic			Δ[5]
			ADT[2]	V/C[3]	LOS[4]	ADT	V/C	LOS	
Brockman Road									
Lyons Road to Kubler Road	2-Ln Local Collector	16,200	190	0.01	A	190	0.01	A	0.00
Ferrell Road									
Kubler Road to SR 98	2-Ln Local Collector	16,200	840	0.05	A	1,056	0.07	A	0.02
SR 98									
Rockwood Road to Ferrell Road	2-Ln Local Collector	16,200	2,100	0.13	B	2,123	0.13	B	0.00
East of Ferrell Road	2-Ln Local Collector	16,200	3,060	0.19	B	3,343	0.21	B	0.02

Source: LLG 2011.

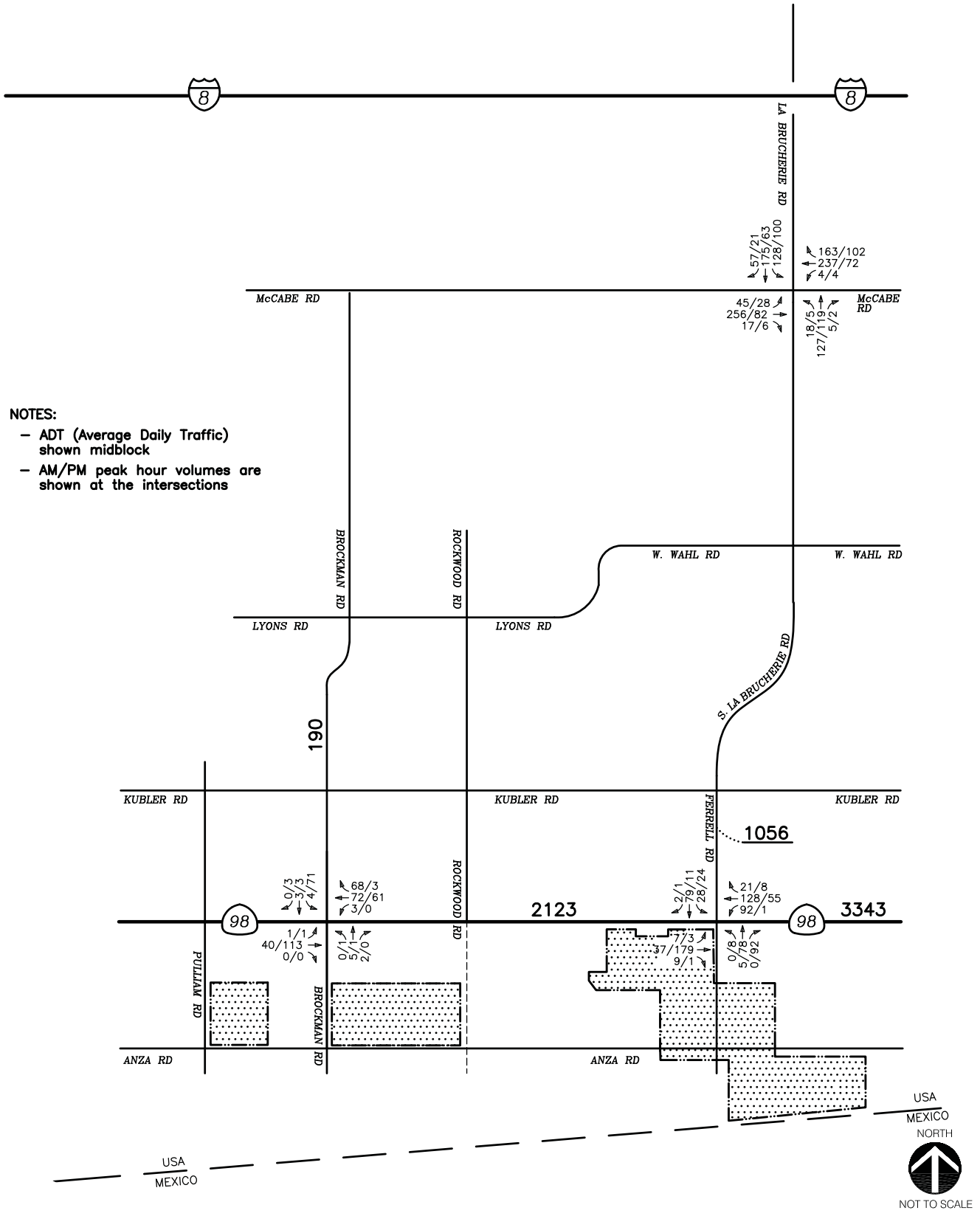
Notes:
1. Roadway capacity corresponding to Level of Service E from Imperial County Standard Street Classification, Average Daily Vehicle Trips table.
2. Average Daily Traffic volumes
3. Volume / Capacity ratio.
4. Level of Service
5. Increase in V/C due to construction traffic.

Construction Impacts Summary

The project is located in an agricultural area and is not subject to traffic congestion. Existing ADT volumes for roadways within the project area result in street segment operations of LOS B or better. The MSSF1 traffic study determined an additional 522 ADT (see Table 4.14-8) would be added due to construction traffic. During construction, segment operations throughout the project will continue to operate at an LOS B or better with an increase in V/C between 0.0 and 0.02 seconds and intersection operations will continue to operate at an LOS C or better, with an increase in delay between 0.0 and 3.7 at the intersections. The aforementioned increase in V/C and delay are both considered **less than significant**. The proposed project does not reduce the current LOS for any of the identified street segment or intersection operations during construction.

Operations Impacts Summary

During operations and long term maintenance phases, it is anticipated that the project would only generate 40 ADT with 10 maximum total peak hour volumes during either peak hour. The ADT levels would remain far below the counties existing segment capacity levels (LOS E) of 16,000 ADT. Therefore, the project would not result in a substantial increase in traffic (see Table 4.14-7). Therefore, impacts to this issue area are identified as **less than significant**.



Source: Linscott Law & Greenspan Engineers,(2011)

MSSF1 Baseline Traffic Volumes (with Construction) : AM/PM Peak Hours and ADT

FIGURE 4.14-21

CSF1(A), CSF1(B)

Baseline without Construction Project

Intersection Operations

Table 4.14-12 summarizes the intersection operations throughout the project study area given the projected Baseline without Construction Project traffic volumes. This table shows that all of the unsignalized intersections in the project study area are forecasted to operate at LOS C or better during the AM and PM peak hours.

TABLE 4.14-12. CONSTRUCTION YEAR INTERSECTION OPERATIONS-CSF1(A)(B)

Intersection	Control Type	Peak Hour	Baseline Without Construction Project Traffic		Baseline With Total Construction Project Traffic		
			Delay [1]	LOS [2]	Delay	LOS	Δ [3] Delay
La Brucherie Road/ McCabe Road	AWSC [4]	AM	19.2	C	23.3	C	4.1
		PM	8.9	A	9.2	A	0.3
SR 98/ Ferrell Road	MSSC [5]	AM	10.4	B	11.1	B	0.7
		PM	10.8	B	13.7	B	2.9
SR 98/ Brockman Road	MSSC	AM	9.7	A	13.6	B	3.9
		PM	10.2	B	12.3	B	2.1

Source: LLG 2010.

Notes:
1. Average delay expressed in seconds per vehicle.
2. Level of Service.
3. Δ denotes an increase in delay due to project.
4. AWSC - All-Way STOP Controlled intersection.
5. MWSC – Minor Street Stop Controlled intersection. Minor street left turn delay is reported.

UNSIGNALIZED	
Delay	LOS
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

Segment Analysis

Table 4.14-13 summarizes the street segment operations throughout the project study area given the projected Baseline without Construction Project traffic volumes. This table shows that all of the street segments in the project study area are forecasted to operate at LOS B or better.

Baseline with Construction Project

The total construction project traffic for both Phases A & B was added to the Baseline Without Construction Project traffic, and the potential impacts associated with the proposed project were calculated by comparing the results. The following is a summary of the intersection and segment analyses. Figure 4.14-22 shows the Baseline with Total Construction Project traffic volumes in the project study area.

Intersection Analysis

Table 4.14-12 also summarizes the Baseline with Total Construction Project peak hour intersection operations. As seen in Table 4.14-12, all project study area intersections are calculated to continue to operate at LOS C or better with the addition of Phases A & B of the construction project traffic. The increase in delay due to the construction traffic varies between 0.3 and 4.1 seconds at these intersections.

A copy of both the Baseline without Construction Project and Baseline with Total Construction Project peak hour intersection analysis worksheets is available in Appendix D of the Traffic Impact Analysis for CSF1, which is included in Appendix J of this EIR.

Segment Analysis

Table 4.14-13 also summarizes the street segment operations throughout the project study area given the projected Baseline with Total Construction Project traffic volumes. This table shows that all project study area segments are calculated to continue to operate at LOS B or better with the addition of Phases A & B of construction project traffic. The increase in V/C due to the construction traffic varies between 0.0 and 0.03 at these segments.

TABLE 4.14-13. CONSTRUCTION YEAR STREET SEGMENT OPERATIONS-CSF1(A)(B)

Street Segment	Functional Roadway Classification	Existing Capacity (LOS E)[1]	Baseline Without Construction Project Traffic			Baseline With Total Construction Project Traffic			Δ[5]
			ADT[2]	V/C[3]	LOS[4]	ADT	V/C	LOS	
Brockman Road									
Lyons Road to Kubler Road	2-Ln Local Collector	16,200	190	0.01	A	190	0.01	A	0.00
Ferrell Road									
Kubler Road to SR 98	2-Ln Local Collector	16,200	840	0.05	A	1,056	0.07	A	0.02
SR 98									
Pulliam Road to Brockman Road	2-Ln Local Collector	16,200	2,690	0.17	B	2,713	0.17	B	0.00
Brockman Road to Ferrell Road	2-Ln Local Collector	16,200	2,100	0.13	B	2,599	0.16	B	0.03
East of Ferrell Road	2-Ln Local Collector	16,200	3,060	0.19	B	3,343	0.21	B	0.02

Source: LLG 2011.

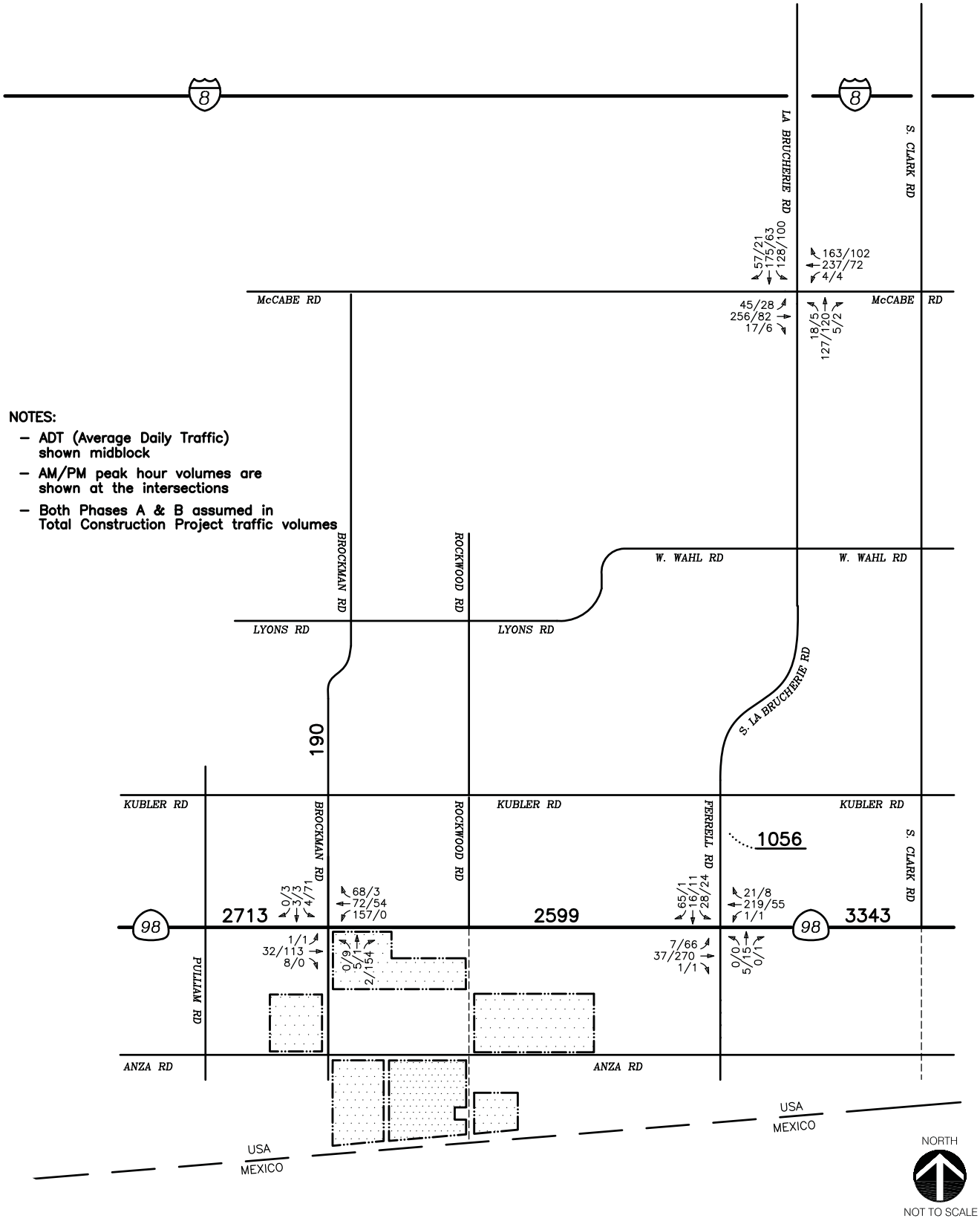
Notes:
1. Roadway capacity corresponding to Level of Service E from Imperial County Standard Street Classification, Average Daily Vehicle Trips table.
2. Average Daily Traffic volumes
3. Volume/Capacity ratio.
4. Level of Service
5. Increase in V/C due to construction traffic.

Construction Impacts Summary

The project is located in an agricultural area and is not subject to traffic congestion. Existing ADT volumes for roadways within the project area result in street segment operations of LOS B or better. The CSF1(A)(B) traffic study determined an additional 522 ADT (see Table 4.14-8) would be added due to construction traffic. During construction, segment operations throughout the project will continue to operate at an LOS B or better with an increase in V/C between 0.0 and 0.03 seconds and intersection operations will continue to operate at an LOS C or better, with an increase in delay between 0.3 and 4.1 at the intersections. The aforementioned increase in V/C and delay are both considered **less than significant**. The proposed project does not reduce the current LOS for any of the identified street segment or intersection operations during construction.

Operations Impacts Summary

During operations and long term maintenance phases, it is anticipated that the project would only generate 40 ADT with 10 (see Table 4.14-8) maximum total peak hour volumes during either peak hour. The ADT levels would remain far below the counties existing segment capacity levels (LOS E) of 16,000 ADT. Therefore, the project would not result in a substantial increase in traffic. Therefore, impacts to this issue area are identified as **less than significant**.



Source: Linscott Law & Greenspan Engineers,(2011)

CSF1 Baseline Traffic Volumes (with Construction) : AM/PM Peak Hours and ADT

FIGURE 4.14-22

CSF2(A), CSF2(B)

Baseline Without Construction Project

Intersection Operations

Table 4.14-14 summarizes the intersection operations throughout the project study area given the projected Baseline without Construction Project traffic volumes. This table shows that all of the unsignalized intersections in the project study area are forecasted to operate at LOS C or better during the AM and PM peak hours.

TABLE 4.14-14. CONSTRUCTION YEAR INTERSECTION OPERATIONS–CSF2(A)(B)

Intersection	Control Type	Peak Hour	Baseline Without Construction Project Traffic		Baseline With Total Construction Project Traffic		Δ[3]
			Delay [1]	LOS [2]	Delay	LOS	Delay
La Brucherie Road/ McCabe Road	AWSC [4]	AM	19.2	C	23.3	C	4.1
		PM	8.9	A	9.2	A	0.3
SR 98/Ferrell Road	MSSC [5]	AM	10.4	B	10.9	B	0.5
		PM	10.8	B	11.3	B	0.5
SR 98/Brockman Road	MSSC	AM	9.7	A	9.8	A	0.1
		PM	10.2	B	10.2	B	0.0
SR 98/Weed Road	MSSC	AM	9.2	A	10.4	B	1.2
		PM	9.8	A	11.2	B	1.4

Source: LLG 2011.

Notes:
1. Average delay expressed in seconds per vehicle.
2. Level of Service.
3. Δ denotes an increase in delay due to project.
4. AWSC - All-Way STOP Controlled intersection.
5. MWSC – Minor Street Stop Controlled intersection. Minor street left turn delay is reported.

UNSIGNALIZED	
Delay	LOS
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

Segment Analysis

Table 4.14-15 summarizes the street segment operations throughout the project study area given the projected *Baseline Without Construction Project* traffic volumes. This table shows that all of the street segments in the project study area are forecasted to operate at LOS B or better.

Baseline with Construction Project

The total construction project traffic for both Phases A & B was added to the Baseline Without Construction Project traffic, and the potential impacts associated with the proposed project were calculated by comparing the results. The following is a summary of the intersection and segment analyses. Figure 4.14-23 shows the Baseline with Total Construction Project traffic volumes in the project study area.

Intersection Analysis

Table 4.14-14 also summarizes the Baseline With Total Construction Project peak hour intersection operations. As seen in Table 4.14-14 all project study area intersections are calculated to continue to operate at LOS C or better with the addition of Phases A & B of the construction project traffic. The increase in delay due to the construction traffic varies between 0.0 and 4.1 seconds at these intersections.

TABLE 4.14-15. CONSTRUCTION YEAR STREET SEGMENT OPERATIONS-CSF2(A)(B)

Street Segment	Functional Roadway Classification	Existing Capacity (LOS E)[1]	Baseline Without Construction Project Traffic			Baseline With Total Construction Project Traffic			Δ[5]
			ADT[2]	V/C[3]	LOS[4]	ADT	V/C	LOS	
Brockman Road									
Lyons Road to Kubler Road	2-Ln Local Collector	16,200	190	0.01	A	190	A	0.01	0.00
Ferrell Road									
Kubler Road to SR 98	2-Ln Local Collector	16,200	840	0.05	A	1,056	A	0.07	0.02
SR 98									
Rockwood Road to Ferrell Road	2-Ln Local Collector	16,200	2,100	0.13	B	2,123	B	0.13	0.00
Ferrell Road to Weed Road	2-Ln Local Collector	16,200	3,060	0.19	B	3,299	B	0.20	0.01
East of Weed Road	2-Ln Local Collector	16,200	3,060	0.19	B	3,343	B	0.21	0.02

Source: LLG 2011.

Notes:
1. Roadway capacity corresponding to Level of Service E from Imperial County Standard Street Classification, Average Daily Vehicle Trips table.
2. Average Daily Traffic volumes
3. Volume/Capacity ratio.
4. Level of Service
5. Increase in V/C due to construction traffic.

Segment Analysis

Table 4.14-15 also summarizes the street segment operations throughout the project study area given the projected Baseline with Total Construction Project traffic volumes. This table shows that all project study area segments are calculated to continue to operate at LOS B or better with the addition of Phases A & B of construction project traffic. The increase in V/C due to the construction traffic varies between 0.0 and 0.02 at these segments.

Construction Impacts Summary

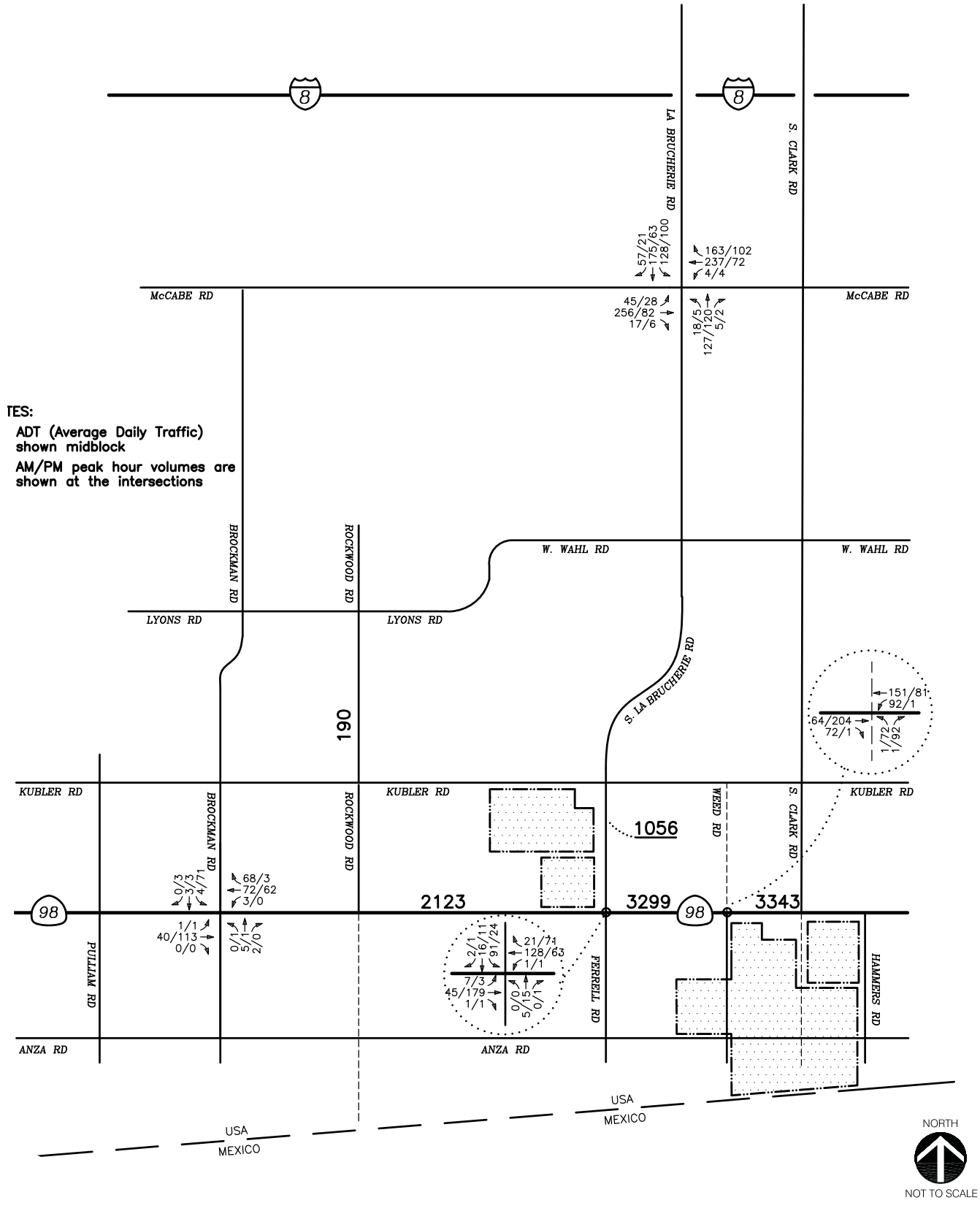
The project is located in an agricultural area and is not subject to traffic congestion. Existing ADT volumes for roadways within the project area result in street segment operations of LOS B or better. The CSF2(A)(B) traffic study determined an additional 522 ADT (see Table 4.14-9) would be added due to construction traffic. During construction, segment operations throughout the project will continue to operate at an LOS B or better with an increase in V/C between 0.0 and 0.02 seconds and intersection operations will continue to operate at an LOS C or better, with an increase in delay between 0.0 and 4.1 at the intersections. The aforementioned increase in V/C and delay are both considered **less than significant**. The proposed project does not reduce the current LOS for any of the identified street segment or intersection operations during construction.

Operations Impacts Summary

During operations and long term maintenance phases, it is anticipated that the project would only generate 40 ADT with 10 maximum total peak hour volumes during either peak hour (see Table 4.14-9). The ADT levels would remain far below the counties existing segment capacity levels (LOS E) of 16,000 ADT. Therefore, the project would not result in a substantial increase in traffic. Therefore, impacts to this issue area are identified as **less than significant**.

Mitigation Measure(s)

No mitigation measures are required.



Source: Linscott Law & Greenspan Engineers,(2011)

CSF2 Baseline Traffic Volumes (with Construction) : AM/PM Peak Hours and ADT

FIGURE 4.14-23

IMPACT 4.14-3	Possible Modification in Air Traffic Patterns or Traffic Levels. Development of the proposed project within the project study area would not result in changes to air traffic patterns or roadway traffic resulting in safety issues.

MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF (Private and BLM land)

The proposed project includes solar panels that may be elevated up to 15 feet above ground, but would not be at a height that would interfere with air traffic patterns. Additionally, the proposed project does not include changes to the existing roadways. The proposed solar PV panels will be arranged in continuous rows of up to approximately 500 feet in length and arrays will be grouped together to form 500-foot by 500-foot grids. Additional 20-foot wide, all weather access roads will be implemented into the project design and located within each 500-foot "grids" to provide emergency units vehicle access and to allow access to the inverter modules. Additionally, a 20-foot wide all-weather gravel road with additional clearance area in the corners of the project sites will exist between the perimeter fence and solar panels allowing easy facility access and maneuverability for emergency unit vehicles. These access roads would not increase hazards due to design features or incompatible uses. Therefore, **a less than significant impact** is identified for this issue area.

Although the project study area is not located within an Airport Compatibility Land Use Plan (ALUCP) or within a "sphere of influence" for Calexico International Airport, a consistency determination will be required due to the height of the proposed transmission towers. Also, two private aerial application businesses are located in the proximity to the project site, which include small aircraft operations. To meet Airport Land Use Compatibility requirements for the established height limit of 120 feet within the A-2, A 2-R, and A-3 zones the project study area is located within, approval of a Variance for these projects would be required. Approval by the County would allow the transmission towers will be built at 140 feet in height. Section 4.10, "Land Use/Planning" provides a detailed discussion regarding the route of the proposed OTF both within private and BLM land, and potential conflicts with the ALUCP. Implementation of mitigation to that section would ensure that impacts related to air traffic patterns are **less than significant.**

Mitigation Measure(s)

No mitigation measures are required.

IMPACT 4.14-4	Possible Safety Hazard. Design features related to the project study area would not result in hazards or incompatible land uses.

MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF (Private and BLM land)

As discussed under impact 4.14-3, the project does not include changes to existing roadways. 20-foot wide, all weather access roads will be implemented into the project design and located within each 500-foot "grids" to provide emergency units vehicle access and to allow access to the inverter modules. Additionally, a 20-foot wide all weather gravel road with additional clearance area in the corners of the project sites will exist between the perimeter fence and solar panels allowing easy facility access and maneuverability for emergency unit vehicles. These access roads would not increase hazards due to design features or incompatible uses and a **less than significant** impact is identified.

The route of the proposed OTF my traverse Caltrans owned facilities and therefore, may require the submittal of an encroachment permit. The use of Caltrans owned facilities for other than normal transportation purposes may require written authorization from the Department of Transportation. As the responsible Department for protecting the public's investment in the State highway system, Caltrans reviews all requests from utility companies, developers, volunteers, nonprofit organizations, etc., desiring

to conduct various activities within the right of way. With the issuance of the required Caltrans encroachment permit, the OTF would have **less than significant** impacts related to safety hazards on Caltrans facilities.

Mitigation Measure(s)

No mitigation measures are required.

IMPACT 4.14-5	Possible Safety Hazard. Development of the project study area with the proposed project would not result in inadequate emergency access.

MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF (Private and BLM land)

20-foot wide, all weather access roads will be implemented into the project design for each project. These roads would be located within each 500-foot "grids" to provide emergency units vehicle access and to allow access to the inverter modules. Additionally, a 20-foot wide all weather gravel road with additional clearance area in the corners of the project sites will exist between the perimeter fence and solar panels allowing easy facility access and maneuverability for emergency unit vehicles. Additionally, the County will require the project applicant to submit a street improvement plan for the project. This plan will be required to provide emergency access points and safe vehicular travel. Therefore, a **less than impact** is identified for this issue area.

Mitigation Measure(s)

No mitigation measures are required.

IMPACT 4.14-6	Possible Conflict with Adopted Policies, Plans or Programs. Development of the project study area with the proposed project would not result in a decrease in performance or safety of adopted policies, plans programs for public transit, bicycle, or pedestrian facilities.

MSSF1, CSF1(A), CSF1(B), CSF2(A), CSF2(B), OTF (Private and BLM land)

As stated previously, there currently is no regular bus service to the general area and project related construction and operations and maintenance phases would not impact mass transit. During the construction phase of each of the projects, bicycle routes may be affected on SR 98. However, SR 98 does not currently have a designated bikeway classification, as defined by the Caltrans Highway Design Manual, and therefore the projects would not conflict with any bike plans. Future operations and maintenance of the project study area could potentially impact proposed Bike II class designated routes along Brockman, Ferrell, Pulliam and Anza Roads. The projects, however, do not propose modifications be made to existing roadways serving future designated bikeway routes. Instead, the perimeter of each of the projects will be fenced-in along the project boundaries and would not interfere with potential future designated bike routes. Therefore, the projects would not impact potential future designated bike routes traversing through the project study area and impacts to this issue area are identified as **less than significant**.

Mitigation Measure(s)

No mitigation measures are required.

4.14.3 Residual Impacts

Implementation of the proposed projects would not result in significant impacts the construction and operation of the project study area would not result direct impacts to intersections, roadway segments, and freeway segments.

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