APPENDIX D

Traffic Impact Analysis

LINSCOTT LAW & GREENSPAN engineers

TRAFFIC IMPACT ANALYSIS

CALEXICO SOLAR FARM I

County of Imperial, California
July 8, 2011

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Prepared by:
Cara Leone
Transportation Planner II

Under the Supervision of:
Chris Mendiara
Associate Principal

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
858.300.8810 F
www.llgengineers.com

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1.0 INTRODUCTION

The following traffic impact analysis has been prepared to determine the potential impacts to the local circulations system due to truck and employee traffic related to construction of the proposed Calexico Solar Farm I project in the County of Imperial, California. Once constructed, the project will generate a minimal amount of traffic related to operations and maintenance. Therefore, the focus of this analysis is on the potential traffic impacts related to construction. This report includes the following sections:

- Project Description
- Existing Conditions
- Analysis Approach and Methodology
- Significance Criteria
- Analysis of Existing Condition
- Trip Generation / Distribution / Assignment
- Analysis of Construction Year Conditions
- Post-Construction Operations
- Project Access
- Significance of Impacts and Mitigation Measures

Figure 1–1 depicts the project vicinity. ***Figure 1–2*** depicts the project area map.

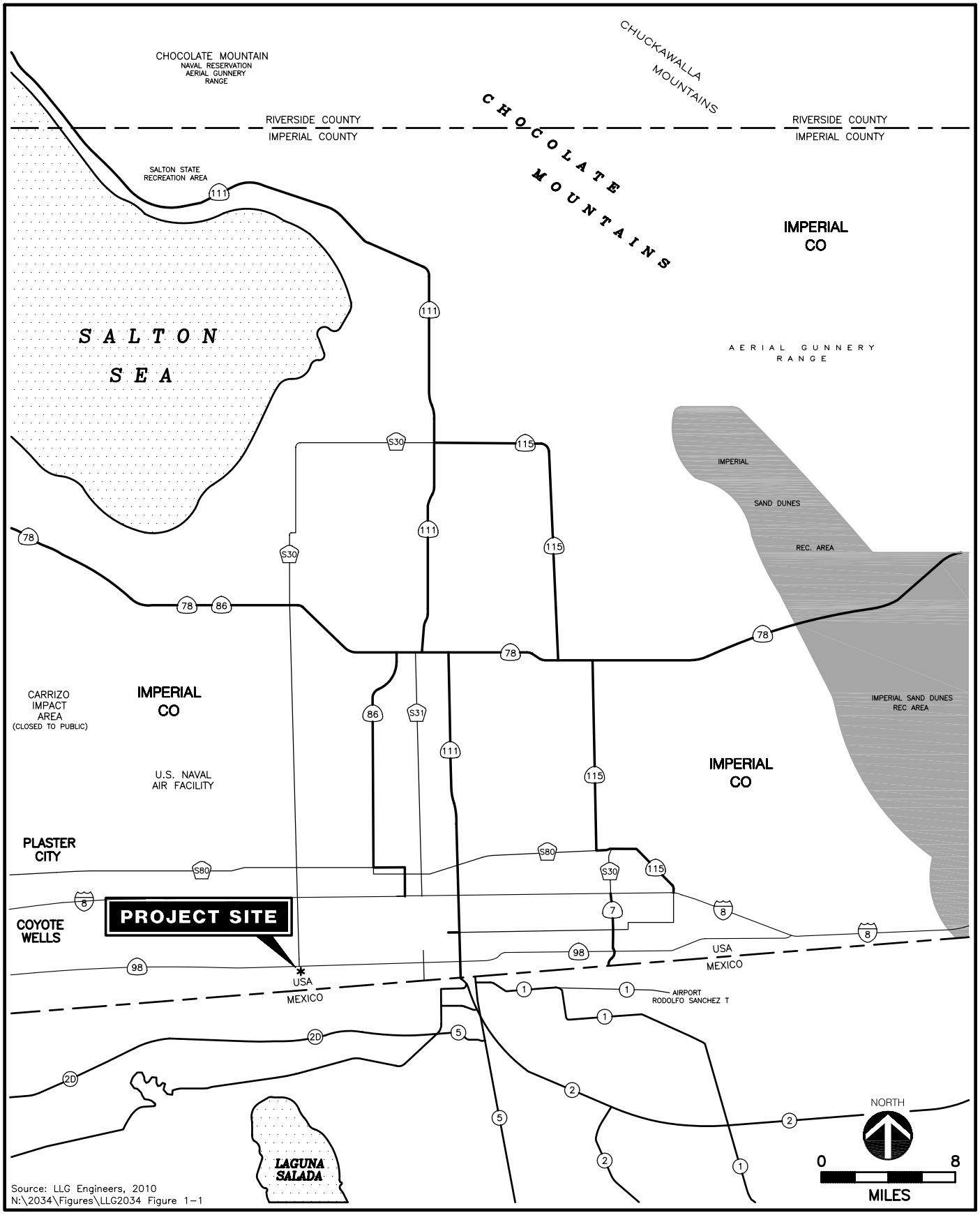

Figure 1-1

Vicinity Map

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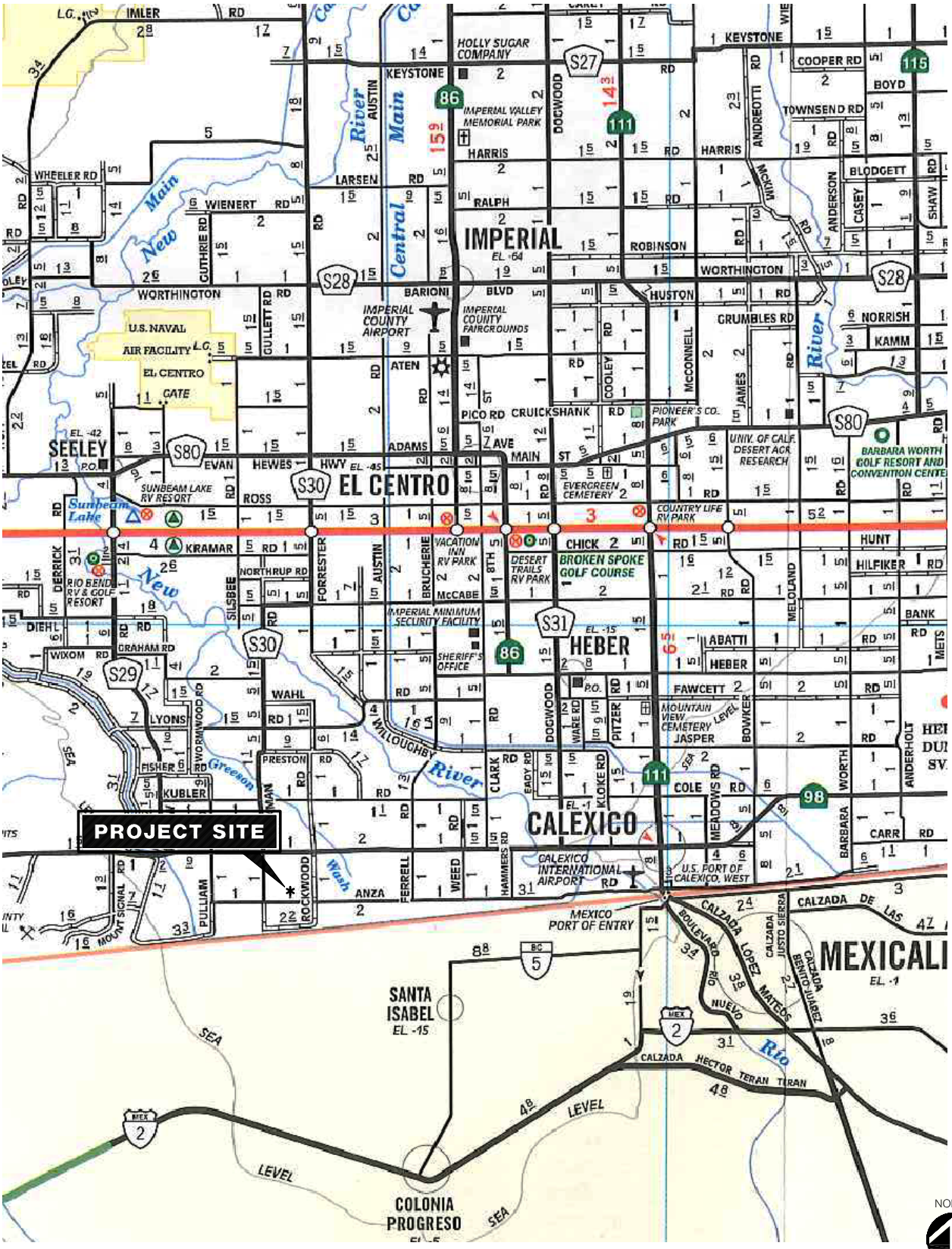

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NORTH

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Figure 1-2

Project Area Map

2.0 PROJECT DESCRIPTION

2.1 Project Location

The project is comprised of six parcels totaling 1,333 acres situated about 5 miles west of the City of Calexico in Imperial County, California. The six parcels are all located generally south of SR 98 and north of the United States/Mexico International Border. The current use is irrigated agriculture.

2.2 Project Description

The proposed Calexico Solar Farm I project would construct a 200 megawatt (MW) photovoltaic plant on disturbed farm land in Imperial County. The project is planned to be developed in two sequential phases: *Phase A* and *Phase B*, each planned to generate 100 MW. However, each phase may produce up to 200 MW if the other phase either does not get built at all or does not get built for its full 100 MW share. The total output of both phases combined will not exceed a total of 200 MW in any scenario. The project proposes the two phases to be constructed sequentially, however the traffic generated by the parallel construction of both phases was assumed in the analysis for the purpose of being conservative.

The phased construction is anticipated to begin in the third quarter of 2013, and is expected to take about 6-9 months. Construction traffic will consist of both truck traffic and employee traffic, and will comprise the majority of traffic associated with development and operation of the project.

Primary access to the site for each phase of construction will be provided as paved, public road access via SR 98 and Brockman Road. For the purposes of this analysis, all traffic was assumed to use a single access point at the SR 98/Brockman Road intersection. This provides the most conservative analysis since it assumes the highest concentration of traffic at one location.

Each phase will have its own post-construction Operations and Maintenance (O&M) comprised of 3 on-site staff members during normal business hours, plus one security guard on-site during each of three daily shifts: 1st watch, 2nd watch and 3rd watch. Alternatively, the two sites may share O&M personnel which could require up to 7 on-site staff members during normal business hours (total for both phases combined), plus one security guard during each of the three daily shifts. Operations and maintenance traffic will be a small percentage of the short-term traffic associated with the project's construction.

3.0 EXISTING CONDITIONS

3.1 Existing Street Network

Following is a brief description of the street segments within the project area. ***Figure 3–1*** illustrates the existing conditions, including the lane geometry, for the key intersections in the study area.

SR 98 is classified as a State Highway/Expressway on the Imperial County General Plan Circulation Element. 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. The posted speed limit is 40 mph.

McCabe Road is classified as a Major Collector on the Imperial County General Plan Circulation Element west of La Brucherie Road and as a Minor Arterial east of La Brucherie Road up to SR 111. Within the project 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 is posted in the vicinity of the project site.

La Brucherie Road is classified as a Major Collector on the Imperial County General Plan Circulation Element between the El Centro City Limits and Kubler Road. Within the project 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 is posted in the vicinity of the project site.

Ferrell Road is classified as a Major Collector on the Imperial County General Plan Circulation Element between Kubler Road and SR 98. Within the project 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 is posted in the vicinity of the project site.

Brockman Road (S30) is classified as a Major Collector on the Imperial County General Plan Circulation Element. Within the project 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 is posted in the vicinity of the project site.

3.2 Existing Traffic Volumes

3.2.1 *Peak Hour Intersection Turning Movement Volumes*

LLG engineers commissioned AM and PM peak hour intersection turning movement volume counts in October 2010 at the following locations:

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

Figure 3–2 depicts the peak hour intersection turning movement volumes at all the study area intersections.

3.2.2 Segment Volumes

Daily traffic (ADT) volume counts were commissioned by LLG in October 2010 and obtained from Caltrans 2009 traffic volume data.

Figure 3–2 depicts the segment ADT volumes at all the study area segments. ***Table 3–1*** summarizes the segment ADT volumes on all the study area segments.

Appendix A contains the manual intersection and segment count sheets and Caltrans 2009 traffic volumes.

TABLE 3–1
EXISTING TRAFFIC VOLUMES

Street Segment	Source	Date	ADT [a]
Brockman Road			
Lyons Road to Kubler Road	LLG	2010	180
Ferrell Road			
Kubler Road to SR 98	LLG	2010	800
SR 98			
Pulliam Road to Brockman Road	Caltrans	2009	2,350
Brockman Road to Ferrell Road	LLG	2010	1,730
East of Ferrell Road	Caltrans	2009	2,650

Footnotes:
a. Average Daily Traffic Volume.

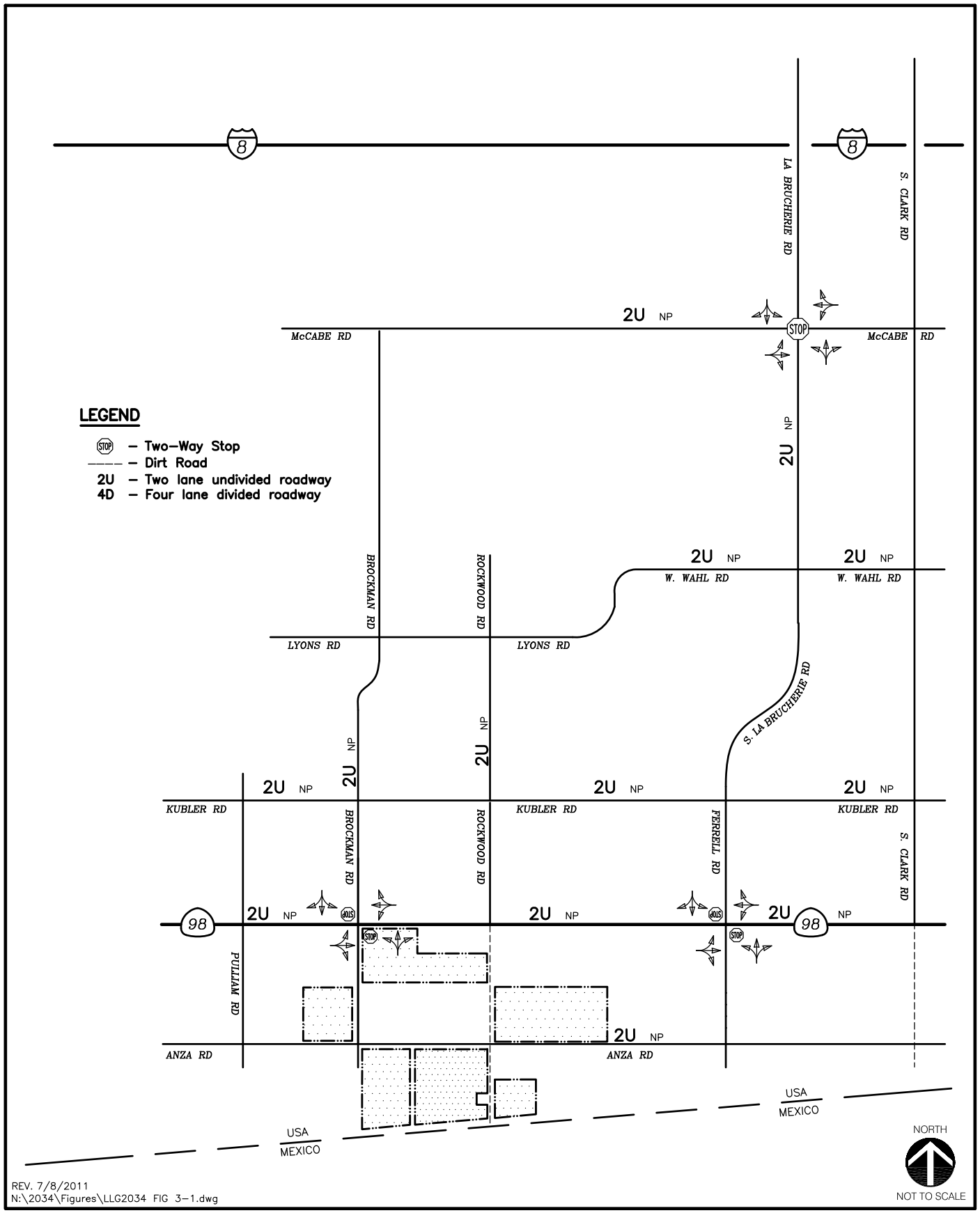

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Figure 3-1

Existing Conditions Diagram

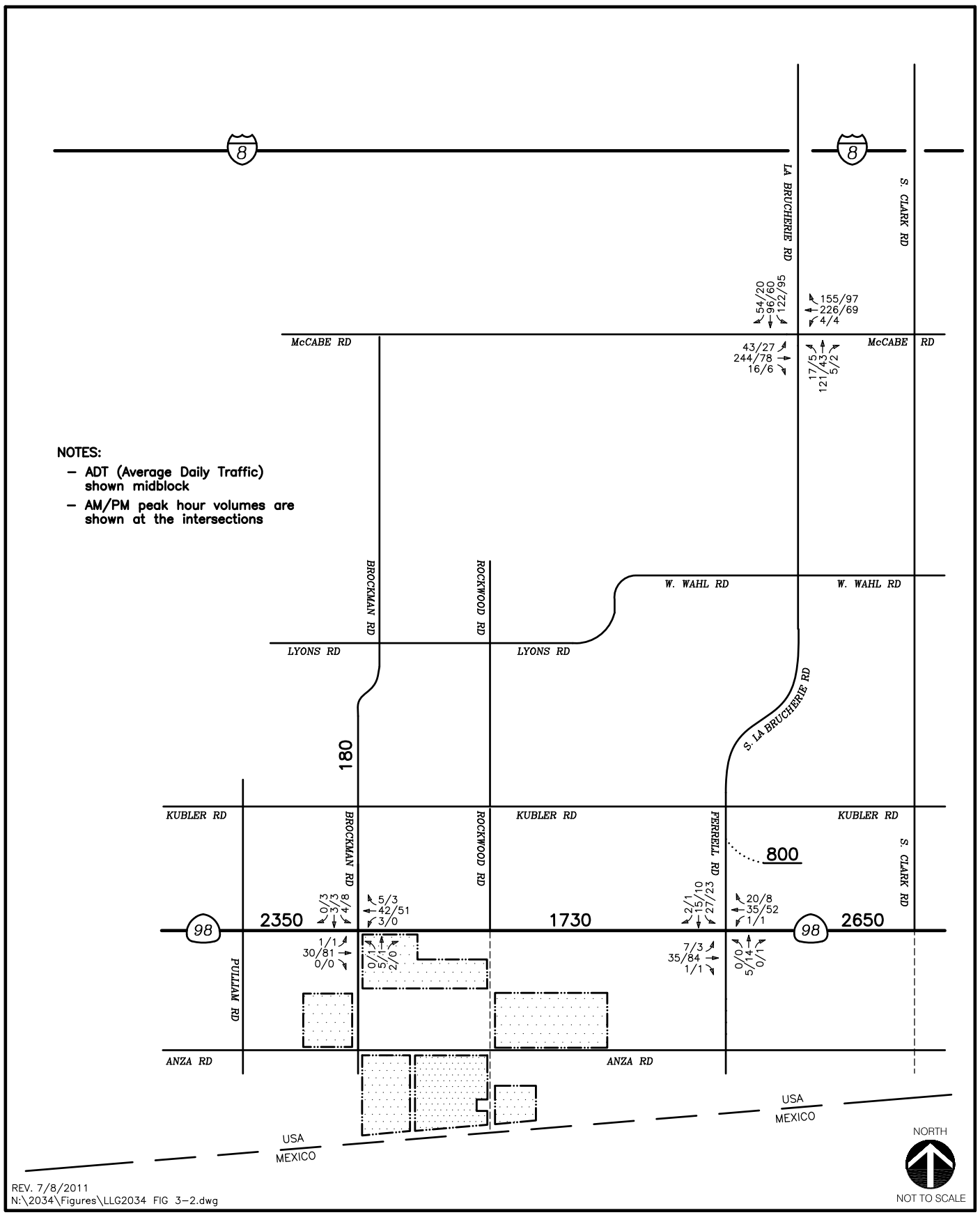

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Figure 3-2

Existing Traffic Volumes AM/PM Peak Hours & ADT

CALEXICO SOLAR FARM I

4.0 ANALYSIS APPROACH AND METHODOLOGY

This report analyzes the effects of the construction portion of the development of the proposed project, based on the limited traffic contribution of the project during the subsequent Operations and Maintenance phase (see *Section 7.0* for more information related to project trip generation). For the purpose of being conservative, the parallel construction of both project phases is assumed in the quantitative analyses completed for key off-site intersections and roadway segments in the study area affected by construction project traffic.

Analyses of the existing roadway volumes and network (Year 2010) have been completed for reference. Since construction of both phases of the proposed project are scheduled for 2013, existing volumes have been increased by a 5% growth factor to account for any cumulative project development that may occur between 2010 (date of traffic counts) and 2013. In addition, conservative traffic volume assignments for several alternative energy projects proposed in Imperial County have been included in the *Baseline Without Construction Project* condition. *Section 8.0* discusses the *Baseline Without Construction Project* condition in further detail. Analyses have been prepared for the following scenarios:

- *Existing* (Year 2010)
- *Baseline Without Construction Project* (Year 2013)
- *Baseline With Total Construction Project* (Year 2013)

Given the very limited traffic associated with the alternatively proposed *Shared Operations and Maintenance* of the project (80 ADT), no long-term cumulative analyses would be deemed necessary.

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

Table 4–1 summaries the description for each level of service.

4.1 Unsignalized Intersections

For unsignalized intersections, level of service is determined by the computed or measured control delay and is defined for each minor movement. Level of service is not defined for the intersection as a whole. ***Table 4–2*** depicts the criteria, which are based on the Average control delay for any particular minor movement.

Level of Service F exists when there are insufficient gaps of suitable size to allow a side street demand to safely cross through a major street traffic stream. This level of service 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.

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.

TABLE 4–1
INTERSECTION LEVEL OF SERVICE DESCRIPTIONS

Level of Service	Description
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.
B	Generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.
C	Generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
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.
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.
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.

TABLE 4–2
LEVEL OF SERVICE THRESHOLDS FOR UNSIGNALIZED INTERSECTIONS

Average Control Delay Per Vehicle (Seconds/Vehicle)	Level of Service	Expected Delay to Minor Street Traffic
0.0 ≤ 10.0	A	Little or no delay
10.1 to 15.0	B	Short traffic delays
15.1 to 25.0	C	Average traffic delays
25.1 to 35.0	D	Long traffic delays
35.1 to 50.0	E	Very long traffic delays
≥ 50.0	F	Severe congestion

4.2 Street Segments

Street segments were analyzed based upon the comparison of ADT to the County of Imperial *Roadway Classifications, Levels of Service (LOS) and Average Daily Traffic (ADT)* table (see ***Table 4–3*** below). *Table 4–3* 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.

TABLE 4–3
IMPERIAL COUNTY STANDARD STREET CLASSIFICATION AVERAGE DAILY VEHICLE TRIPS

Road		Level of Service 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
Major Collector (Collector)	64 / 84	13,700	22,800	27,400	30,800	34,200
Minor Collector (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

* 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.

5.0 SIGNIFICANCE CRITERIA

5.1 County of Imperial

The County of Imperial does not have published significance criteria. However, the County General Plan does state that the level of service (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 V/C ratio to increase by more than 0.02. These amounts are consistent with those used in the City of El Centro and the County of Imperial in numerous traffic studies.

5.2 Caltrans

A project is considered to have a significant impact if the new project traffic has decreased the operations of surrounding roadways by a defined threshold. The defined thresholds for roadway segments and intersections are defined in ***Table 5–1*** below. If the project exceeds the thresholds in *Table 5–1,* then the project may be considered to have a significant project impact. 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.

TABLE 5–1
TRAFFIC IMPACT SIGNIFICANT THRESHOLDS

Level of Service with Project [a]	Allowable Increase Due to Project Impacts [b]					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay (min.)
D, E & F (*or ramp meter delays above 15 minutes*)	0.01	1	0.02	1	2	2[c]

Footnotes:

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 2 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.

General Notes:

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

6.0 ANALYSIS OF EXISTING CONDITIONS

6.1 Peak Hour Intersection Levels of Service

The project study area is located in a rural setting and all intersections are unsignalized. As seen in ***Table 6–1,*** all study area intersections are calculated to currently operate at LOS C or better during both the AM and PM peak hours.

Appendix B contains the *Existing* peak hour intersection analysis worksheets.

TABLE 6–1
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing	
			Delay [a]	LOS [b]
La Brucherie Road/ McCabe Road	AWSC [c]	AM	16.5	C
		PM	8.7	A
SR 98/ Ferrell Road	MSSC [d]	AM	9.7	A
		PM	10.0	A
SR 98/ Brockman Road	MSSC	AM	9.3	A
		PM	9.6	A

Footnotes:

a. Delay per vehicle in seconds
b. LOS - Level of service
c. AWSC - All-Way STOP Controlled intersection.
d. MSSC - 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

6.2 Daily Street Segment Levels of Service

As described above, the project study area is located in a rural setting and all segments are two-lane facilities. As seen in ***Table 6–2***, all study area segments are calculated to currently operate at LOS B or better.

TABLE 6–2
EXISTING STREET SEGMENT OPERATIONS

Street Segment	Functional Roadway Classification [a]	Capacity (LOS E) [b]	ADT [c]	LOS [d]	V/C [e]
Brockman Road					
Lyons Road to Kubler Road	2-Ln Local Collector	16,200	180	A	0.01
Ferrell Road					
Kubler Road to SR 98	2-Ln Local Collector	16,200	800	A	0.05
SR 98					
Pulliam Road to Brockman Road	2-Ln Local Collector	16,200	2,350	B	0.15
Brockman Road to Ferrell Road	2-Ln Local Collector	16,200	1,730	A	0.11
East of Ferrell Road	2-Ln Local Collector	16,200	2,650	B	0.16

Footnotes:

a. County of Imperial roadway classification
b. Roadway capacity corresponding to Level of Service E from Imperial County Standard Street Classification, Average Daily Vehicle Trips table.
c. Average Daily Traffic volumes
d. Volume / Capacity ratio.
e. Level of Service

7.0 TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

7.1 Trip Generation

Project traffic generation was determined for *Phase A* and *Phase B* using the methodology developed for a similar solar project in the study area. Each phase of the project consists of two parts: *Construction*, and *Operations and Maintenance (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. For the O&M stage, the following personnel would be expected:

Phase A

- 3 on-site staff daily during normal business hours
- 1 security guard daily, 24-hours a day (3 shifts)

Phase B

- 3 on-site staff daily during normal business hours
- 1 security guard daily, 24-hours a day (3 shifts)

Shared Operations & Maintenance

- 7 on-site staff daily during normal business hours
- 1 security guard daily, 24-hours a day (3 shifts)

The trip generation for the Calexico Solar Farm I project is based on trip generation calculations completed for similar projects in the 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 (*Phase A & B*) is assumed in the analysis.

Table 7–1 shows a summary of the construction traffic and O&M traffic.

TABLE 7–1
PROJECT TRIP GENERATION

Trip Type	Daily Total (ADT) [a]	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 [b])	***246***	***78***	***0***	***78***	***0***	***78***	***78***
Operations and Maintenance (O&M)							
Vehicles [c]	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[b])	***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) [d]							
Vehicles	80	16	4	20	4	16	20

General Notes:

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

Footnotes:

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

Table 7–1 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 ADT, with 162 inbound/0 outbound trips during the AM peak hour, and 0 inbound/162 outbound trips during the PM peak hour.

7.2 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 7–1*** shows the distribution of truck traffic, which is primarily oriented along La Brucherie Road and SR 98 in the 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 7–2*** 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 I-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 close 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 study.

7.3 Trip Assignment

The trip generation summaries for the total construction shown in *Table 7–1* were multiplied by the related truck and employee distribution percentages shown on *Figures 7–1* and *7–2*, respectively. The total construction truck traffic assignment is shown on ***Figure 7–3. Figure 7–4*** shows the total employee vehicle traffic assignment. ***Figure 7–5*** depicts the total construction traffic assignment for both *Phases A & B.*

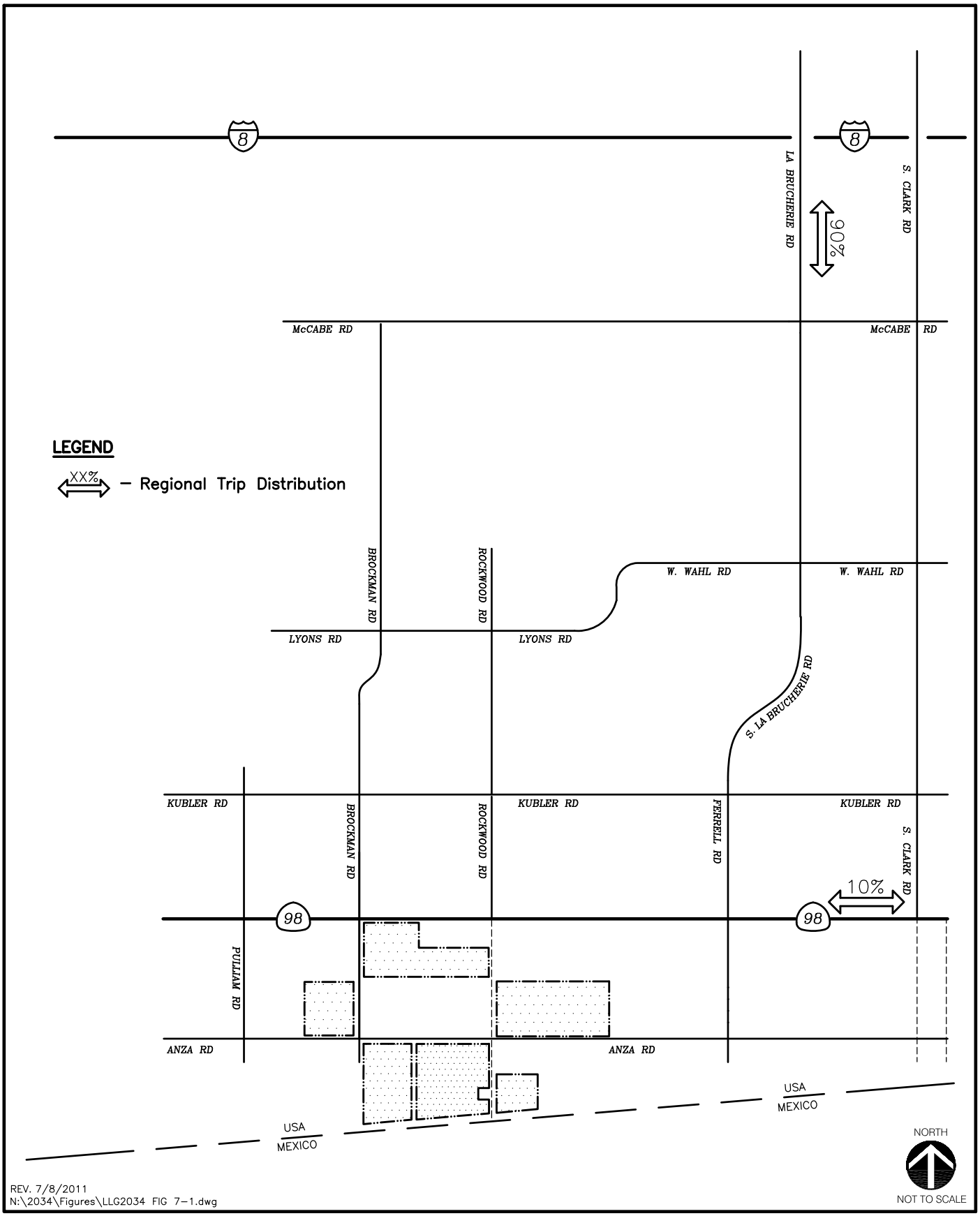

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Figure 7-1

Total Construction Project Distribution Truck Trips

CALEXICO SOLAR FARM I

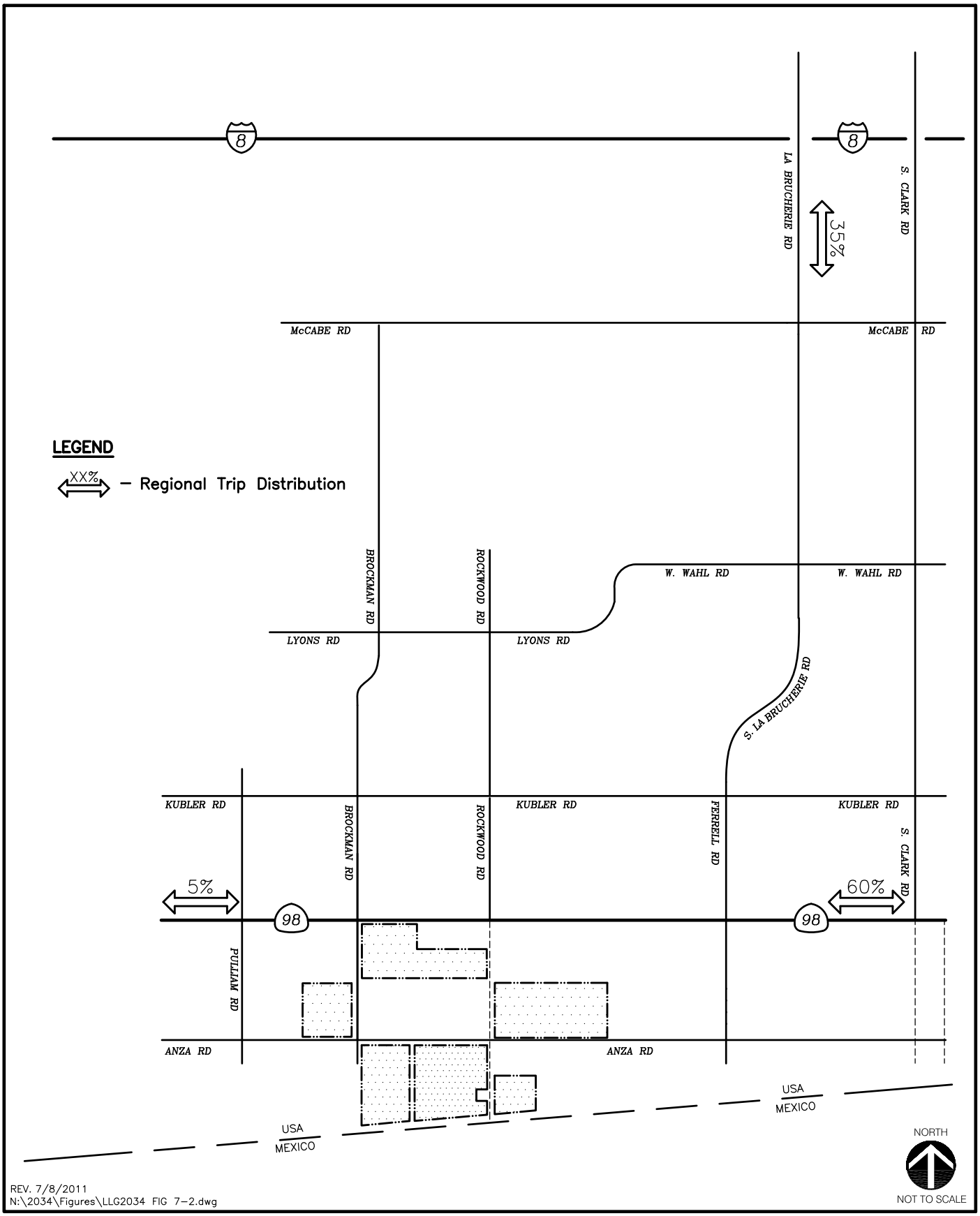

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Figure 7-2

Total Construction Project Distribution Employee Trips

CALEXICO SOLAR FARM I

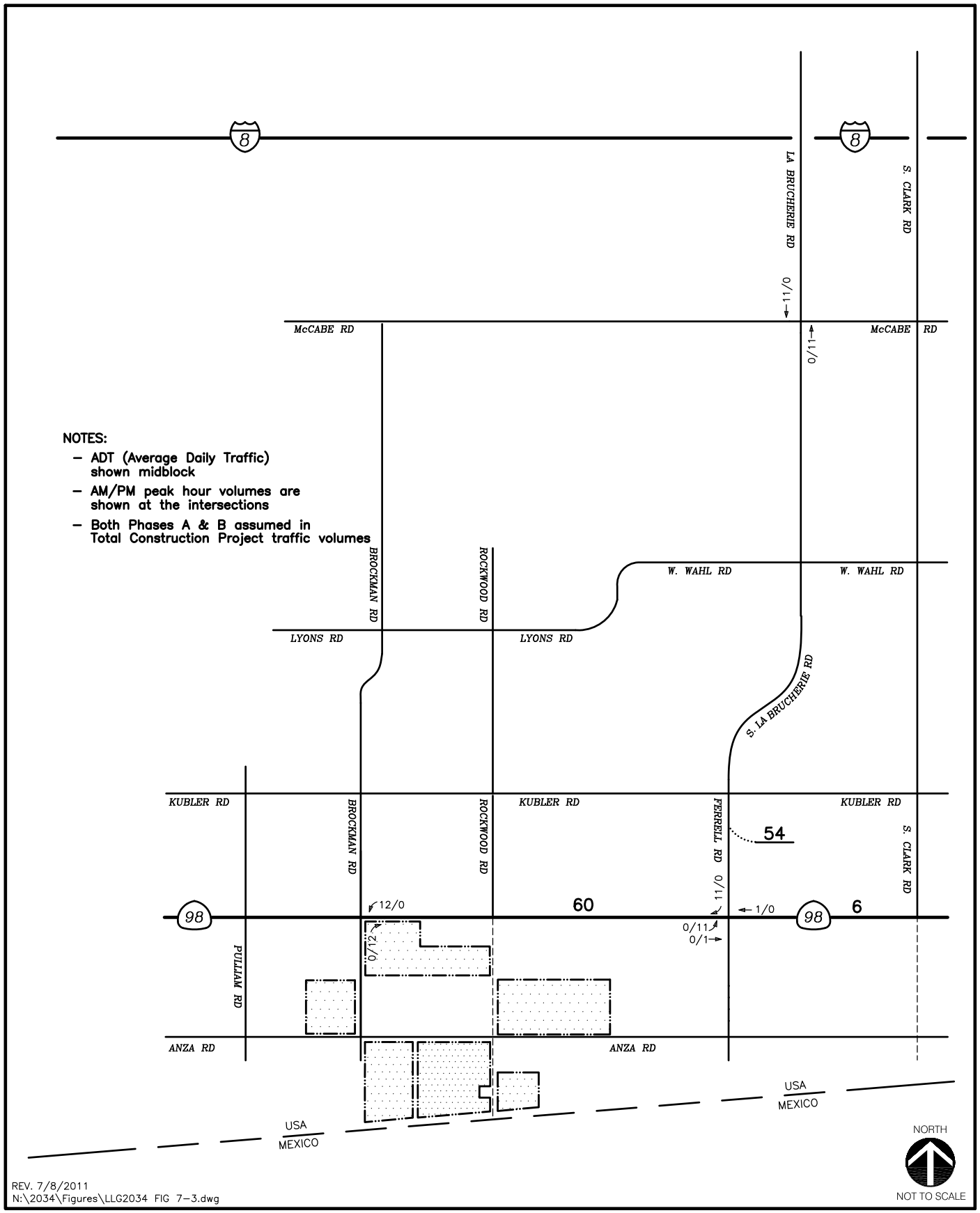

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Figure 7-3

Total Construction Project Traffic Volumes Truck Trips AM/PM Peak Hours & ADT

CALEXICO SOLAR FARM I

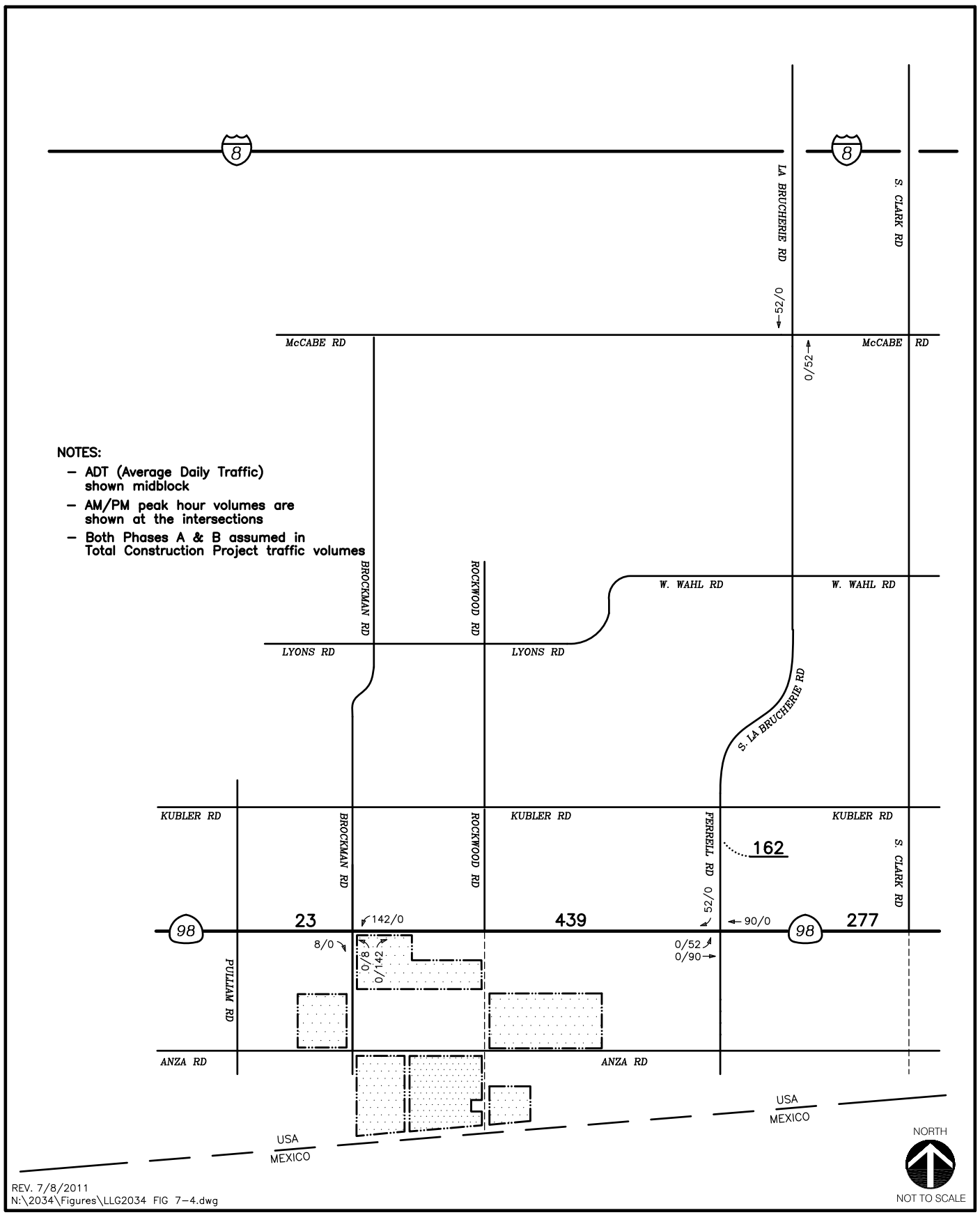

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Figure 7-4

Total Construction Project Traffic Vlumes Employee Trips AM/PM Peak Hours & ADT

CALEXICO SOLAR FARM I

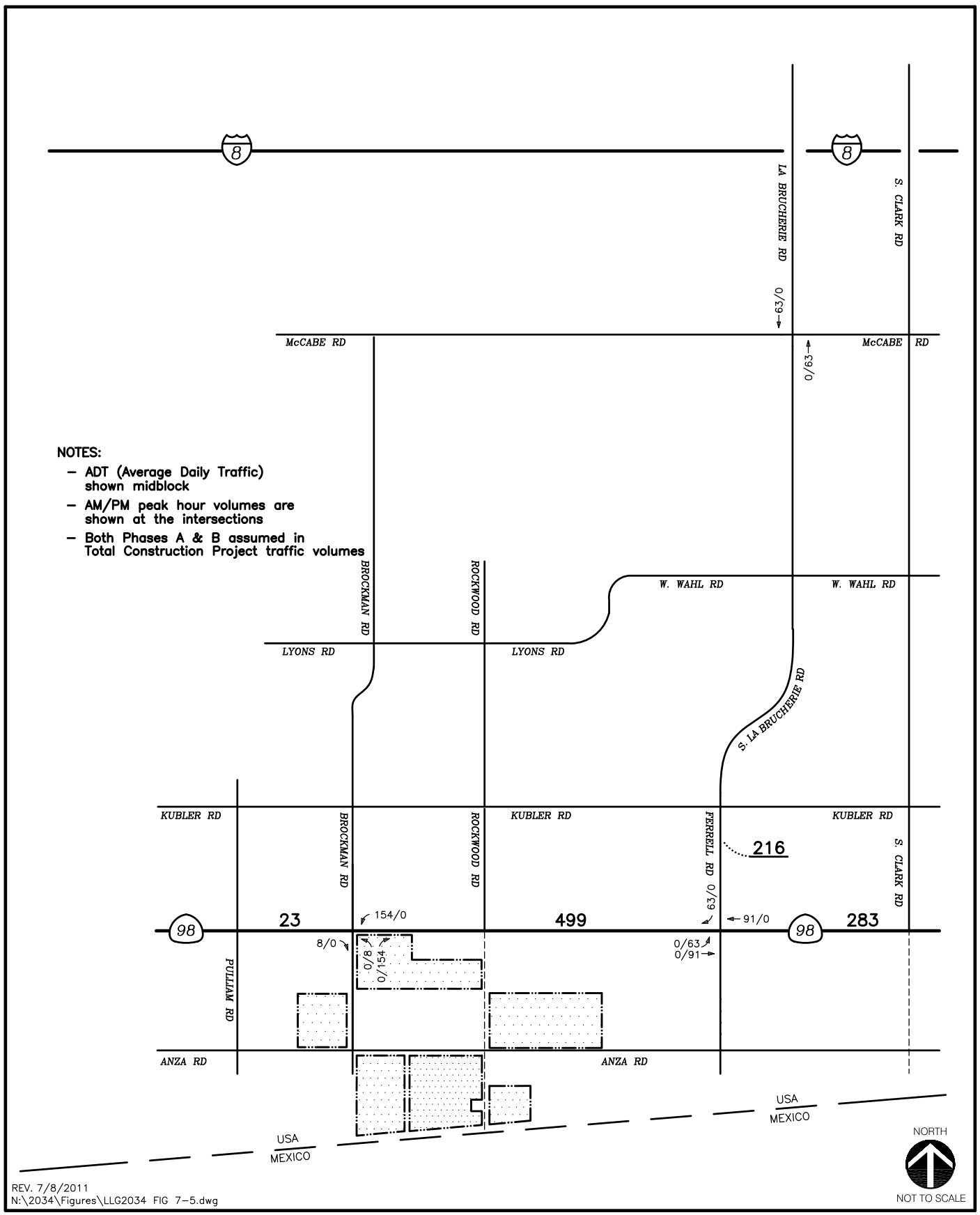

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Figure 7-5
Total Construction Project Traffic Vlumes
Total Trips
AM/PM Peak Hours & ADT

CALEXICO SOLAR FARM I

8.0 CONSTRUCTION YEAR ANALYSIS

Both phases of project construction are anticipated to start in 2013. Therefore, a baseline condition representing ambient traffic growth in the area was established. To account for potential cumulative project traffic increases that may occur between 2010 (existing) and the construction timeframe, a 5% growth factor was applied to all existing 2010 traffic volumes throughout the 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, such as Brookfield 101 Ranch, Alder/Scaroni, Mosiac Specific Plan, and others. In addition, several alternative energy projects are 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 8–1*** shows the *Baseline Without Construction Project* traffic volumes in the study area.

Appendix C contains the cumulative traffic data information.

8.1 Baseline Without Construction Project Analysis

8.1.1 *Intersection Operations*

Table 8–1 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 study area are forecasted to operate at LOS C or better during the AM and PM peak hours.

8.1.2 *Segment Analysis*

Table 8–2 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 study area are forecasted to operate at LOS B or better.

8.2 Baseline With Total Construction Project Analysis

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 8–2*** shows the *Baseline With Total Construction Project* traffic volumes in the study area.

8.2.1 *Intersection Analysis*

Table 8–1 also summarizes the *Baseline With Total Construction Project* peak hour intersection operations. As seen in *Table 8–1*, all 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, which is considered ***not significant***.

Appendix D contains the both the *Baseline Without Construction Project* and *Baseline With Total Construction Project* peak hour intersection analysis worksheets.

8.2.2 *Segment Analysis*

Table 8–2 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 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, which is considered ***not significant***.

TABLE 8–1
CONSTRUCTION YEAR INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Baseline Without Construction Project Traffic		Baseline With Total Construction Project Traffic		Δ [c] Delay
			Delay [a]	LOS [b]	Delay	LOS	
La Brucherie Road/ McCabe Road	AWSC [d]	AM	19.2	C	23.3	C	4.1
		PM	8.9	A	9.2	A	0.3
SR 98/ Ferrell Road	MSSC [e]	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

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

UNSIGNALIZED

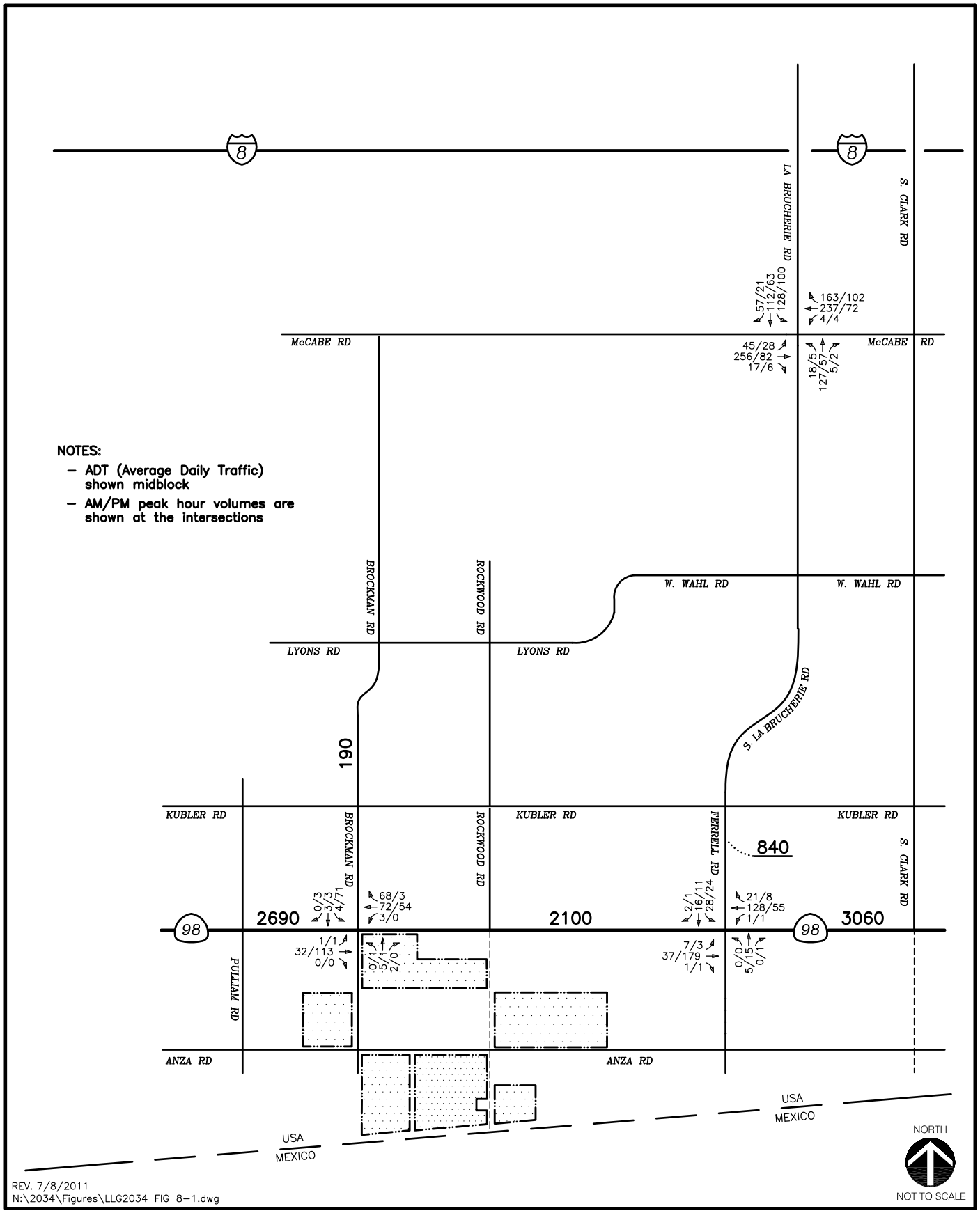
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

TABLE 8–2
CONSTRUCTION YEAR STREET SEGMENT OPERATIONS

Street Segment	Functional Roadway Classification	Existing Capacity (LOS E)[a]	Baseline Without Construction Project Traffic			Baseline With Total Construction Project Traffic			Δ[e]
			ADT[b]	V/C[c]	LOS[d]	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

Footnotes:

a. Roadway capacity corresponding to Level of Service E from Imperial County Standard Street Classification, Average Daily Vehicle Trips table.
b. Average Daily Traffic volumes
c. Volume / Capacity ratio.
d. Level of Service
e. Increase in V/C due to construction traffic.



REV. 7/8/2011
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Figure 8-1

Baseline Without Construction Project Traffic Volumes AM/PM Peak Hours & ADT

CALEXICO SOLAR FARM I

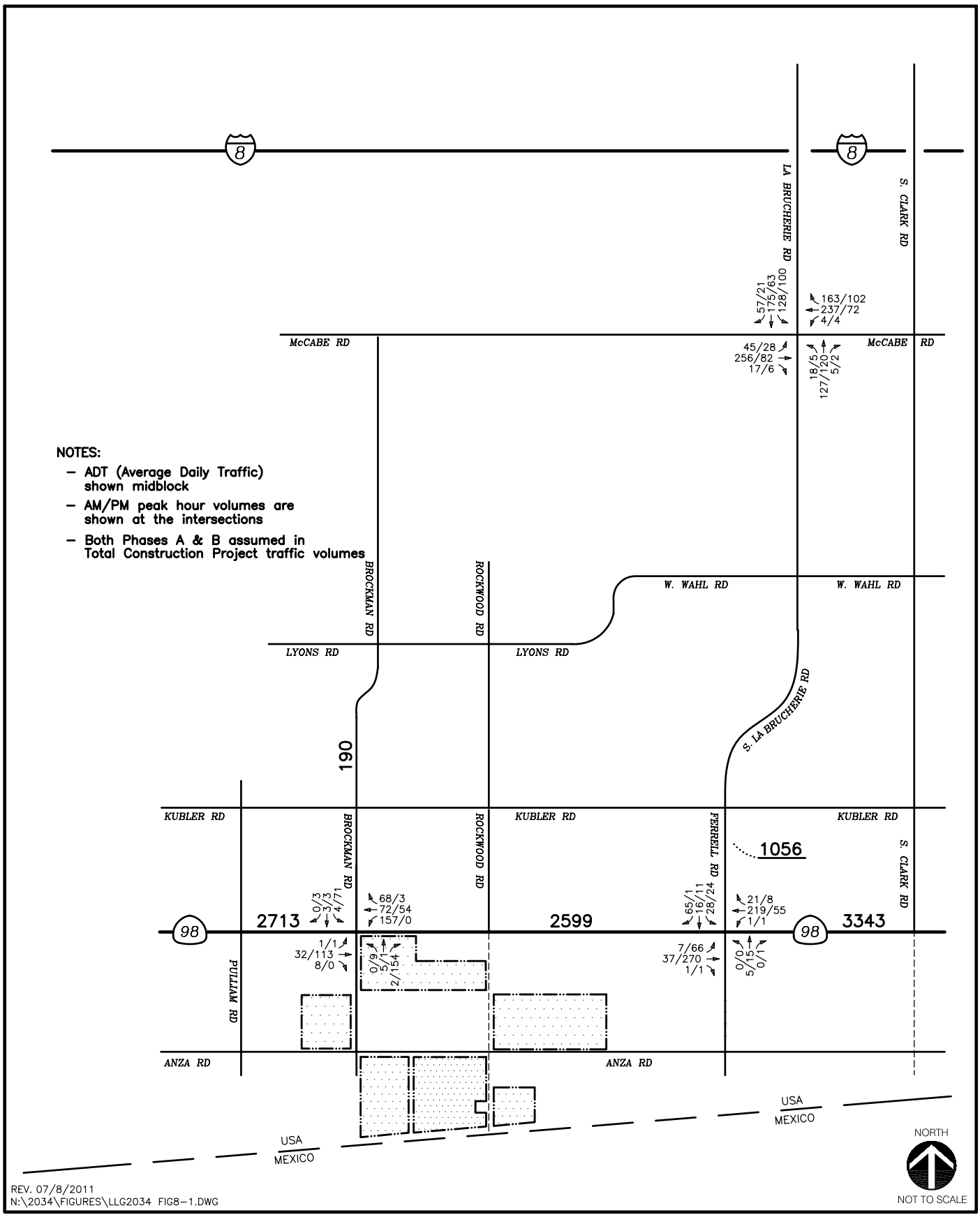

Figure 8-2

Baseline With Total Construction Project Traffic Volumes AM/PM Peak Hours & ADT

CALEXICO SOLAR FARM I

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9.0 POST-CONSTRUCTION OPERATIONAL TRAFFIC

The Operations and Maintenance of the plant subsequent to the construction of the total project will generate, at most, 80 ADT with 20 maximum total peak hour volumes during either peak hour under the shared O&M scenario. This increase is substantially less than the trips generated by the construction traffic, which were demonstrated to cause no significant impacts. Therefore, it is anticipated that the post-construction intersection and segment operations will continue to operate at acceptable levels of service. No impacts associated with Operations and Maintenance would be expected.

10.0 PROJECT ACCESS

The project site is comprised of six parcels located along the southern side of SR 98 within a short distance of Pulliam Road to the west and Rockwood Road to the east. Paved access to the sites is available via Brockman Road, SR 98 and Anza Road. Rockwood Road is not paved.

Project access was assumed via the existing SR 98/Brockman Road intersection, providing a worst-case analysis for the purposes of this report. Based on the capacity analyses performed making these assumptions, LOS B or better operations would occur, indicating sufficient gaps in traffic along SR 98 to allow for construction trips to turn to/from the side street. Adequate operations would also occur at the adjacent SR 98 intersections, where project traffic is assumed to pass-through.

11.0 SIGNIFICANCE OF IMPACTS AND MITIGATION MEASURES

The capacity analyses performed for the key roadway segments and unsignalized intersections indicate that no significant impacts would occur during the total construction of *Phases A & B* of the proposed project, which is shown to generate more traffic than the subsequent maintenance and operations stages. Therefore, no significant impacts would be associated with maintenance and operations, either. No mitigation measures are required.

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TECHNICAL APPENDICES

CALEXICO SOLAR FARM I

County of Imperial, California
July 8, 2011

LLG Ref. 3-11-2034

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
858.300.8810 F
www.llgengineers.com

APPENDICES

APPENDIX	
A.	Intersection Manual Count Sheets & Caltrans 2009 Traffic Volumes
B.	Peak Hour Intersection Analysis Worksheets – *Existing*
C.	Cumulative Traffic Data Information
D.	Peak Hour Intersection Analysis Worksheets – *Baseline Without Construction Traffic* and *Baseline With Total Construction Traffic*

APPENDIX A

INTERSECTION AND SEGMENT MANUAL COUNT SHEETS

True Count

3401 First Ave. #123
San Diego, CA, 92103

File Name : 1079.01.S LA BRUCHERIE RD.W MCCABE RD
Site Code : 00000000
Start Date : 10/7/2010
Page No : 1

Groups Printed- Vehicles

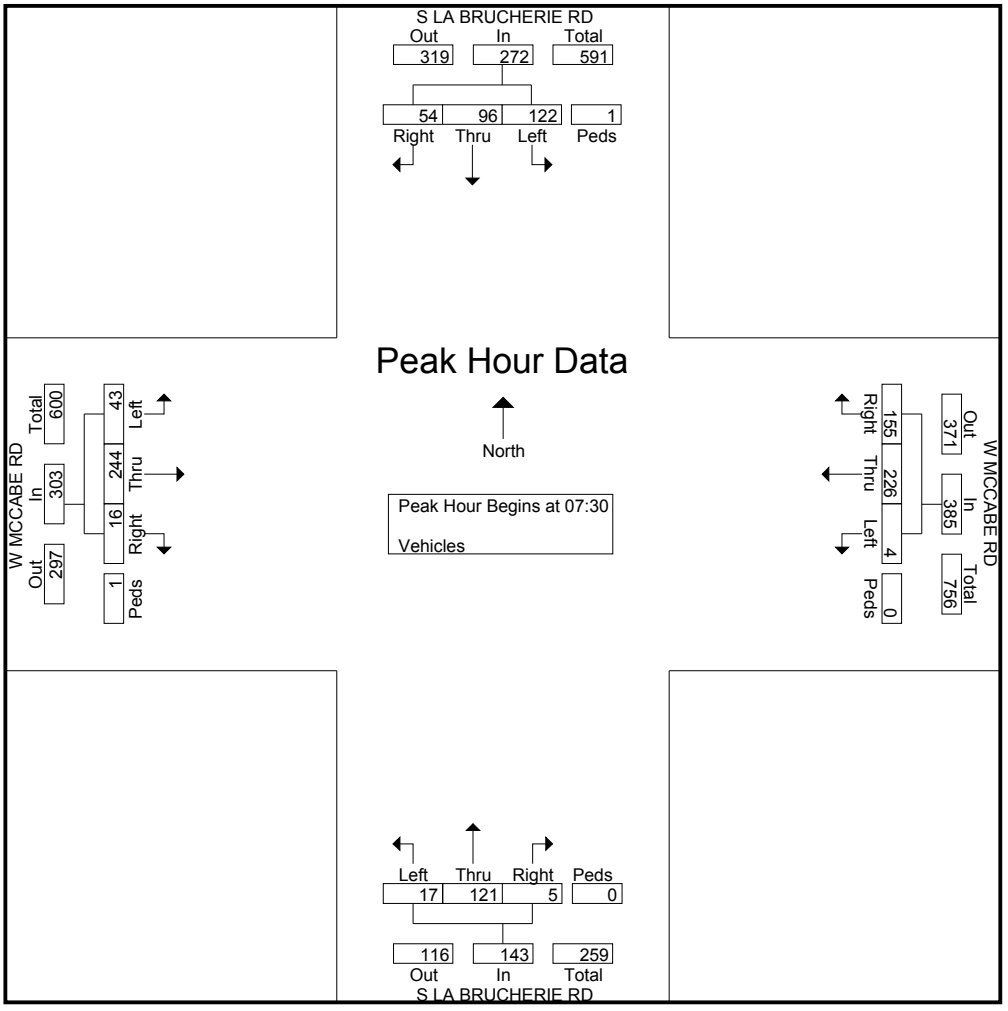
	S LA BRUCHERIE RD Southbound				W MCCABE RD Westbound				S LA BRUCHERIE RD Northbound				W MCCABE RD Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	8	12	2	0	0	10	12	0	3	8	2	0	5	8	2	0	72
07:15	18	14	5	0	0	30	24	0	4	15	4	0	3	20	5	0	142
07:30	24	28	9	0	1	38	62	0	10	43	1	0	5	36	3	0	260
07:45	49	27	18	1	1	51	65	0	2	51	0	0	7	56	6	1	335
Total	99	81	34	1	2	129	163	0	19	117	7	0	20	120	16	1	809
08:00	43	30	22	0	0	96	13	0	5	15	3	0	18	72	7	0	324
08:15	6	11	5	0	2	41	15	0	0	12	1	0	13	80	0	0	186
08:30	9	5	4	0	1	4	13	0	1	6	1	0	6	15	1	0	66
08:45	7	6	3	0	0	15	32	0	2	14	0	0	1	10	3	0	93
Total	65	52	34	0	3	156	73	0	8	47	5	0	38	177	11	0	669
*** BREAK ***																	
16:00	28	15	5	0	1	31	33	0	3	14	1	0	15	44	4	0	194
16:15	23	14	3	0	1	15	20	0	1	11	1	0	3	18	1	0	111
16:30	24	12	6	0	0	14	25	0	1	7	0	0	1	12	1	0	103
16:45	20	19	6	0	2	9	19	0	0	11	0	0	8	4	0	0	98
Total	95	60	20	0	4	69	97	0	5	43	2	0	27	78	6	0	506
17:00	24	15	3	0	1	29	41	1	0	11	0	0	2	7	2	0	136
17:15	26	25	6	0	0	15	30	0	3	15	4	0	3	10	3	0	140
17:30	14	13	3	1	3	17	32	0	1	15	0	2	0	9	2	1	113
17:45	18	11	0	0	0	11	29	0	1	9	1	0	1	15	0	0	96
Total	82	64	12	1	4	72	132	1	5	50	5	2	6	41	7	1	485
Grand Total	341	257	100	2	13	426	465	1	37	257	19	2	91	416	40	2	2469
Apprch %	48.7	36.7	14.3	0.3	1.4	47.1	51.4	0.1	11.7	81.6	6	0.6	16.6	75.8	7.3	0.4	
Total %	13.8	10.4	4.1	0.1	0.5	17.3	18.8	0	1.5	10.4	0.8	0.1	3.7	16.8	1.6	0.1	

True Count

3401 First Ave. #123
San Diego, CA, 92103

File Name : 1079.01.S LA BRUCHERIE RD.W MCCABE RD
Site Code : 00000000
Start Date : 10/7/2010
Page No : 2

	S LA BRUCHERIE RD Southbound					W MCCABE RD Westbound					S LA BRUCHERIE RD Northbound					W MCCABE RD Eastbound					
Start Time	**Left**	**Thru**	**Right**	**Peds**	**App. Total**	**Left**	**Thru**	**Right**	**Peds**	**App. Total**	**Left**	**Thru**	**Right**	**Peds**	**App. Total**	**Left**	**Thru**	**Right**	**Peds**	**App. Total**	**Int. Total**
Peak Hour Analysis From 07:00 to 11:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	24	28	9	0	61	1	38	62	0	101	**10**	43	1	0	**54**	5	36	3	0	44	260
07:45	**49**	27	18	**1**	**95**	1	51	**65**	0	**117**	2	**51**	0	0	53	7	56	6	**1**	70	**335**
08:00	43	**30**	**22**	0	95	0	**96**	13	0	109	5	15	**3**	0	23	**18**	72	**7**	0	**97**	324
08:15	6	11	5	0	22	**2**	41	15	0	58	0	12	1	0	13	13	**80**	0	0	93	186
Total Volume	122	96	54	1	273	4	226	155	0	385	17	121	5	0	143	43	244	16	1	304	1105
% App. Total	44.7	35.2	19.8	0.4		1	58.7	40.3	0		11.9	84.6	3.5	0		14.1	80.3	5.3	0.3		
PHF	.622	.800	.614	.250	.718	.500	.589	.596	.000	.823	.425	.593	.417	.000	.662	.597	.763	.571	.250	.784	.825

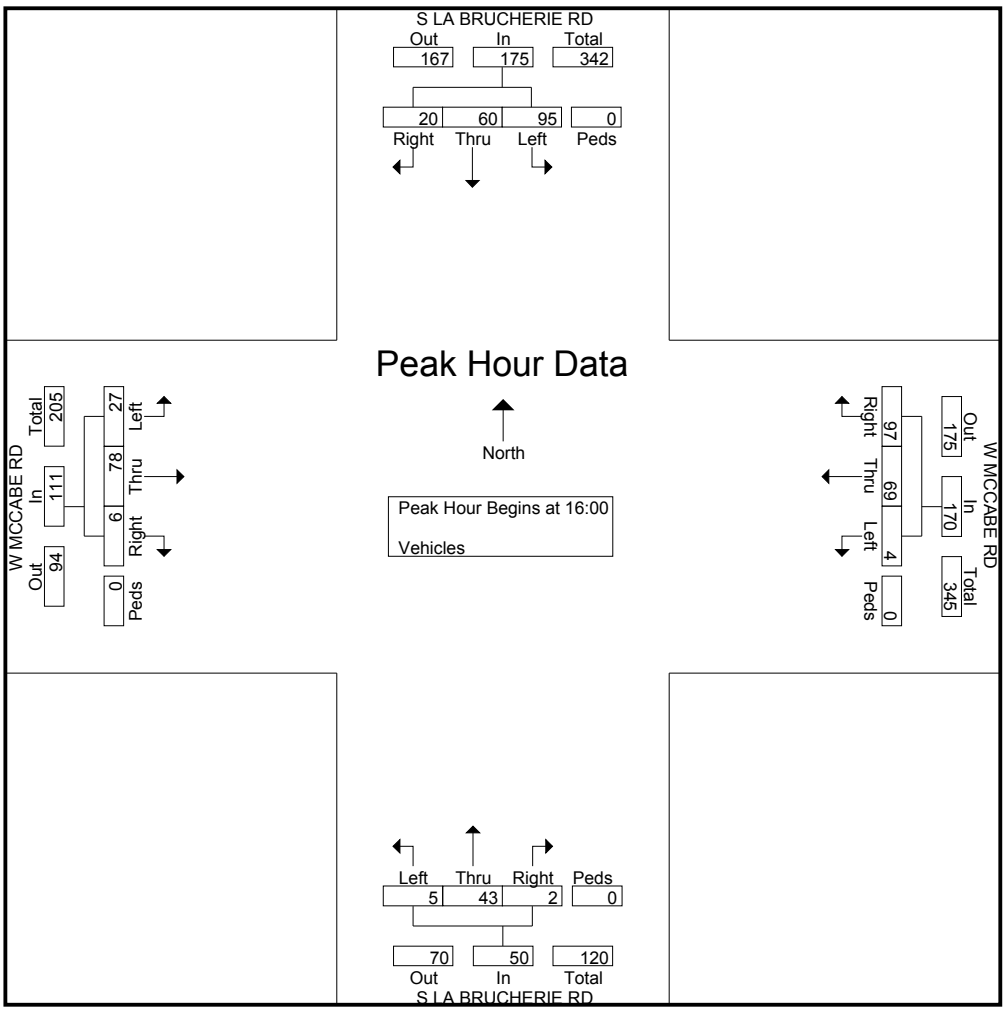


True Count

3401 First Ave. #123
San Diego, CA, 92103

File Name : 1079.01.S LA BRUCHERIE RD.W MCCABE RD
Site Code : 00000000
Start Date : 10/7/2010
Page No : 3

	S LA BRUCHERIE RD Southbound					W MCCABE RD Westbound					S LA BRUCHERIE RD Northbound					W MCCABE RD Eastbound					
Start Time	**Left**	**Thru**	**Right**	**Peds**	**App. Total**	**Left**	**Thru**	**Right**	**Peds**	**App. Total**	**Left**	**Thru**	**Right**	**Peds**	**App. Total**	**Left**	**Thru**	**Right**	**Peds**	**App. Total**	**Int. Total**
Peak Hour Analysis From 12:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	**28**	15	5	0	**48**	1	**31**	**33**	0	**65**	**3**	**14**	**1**	0	**18**	**15**	**44**	**4**	0	**63**	**194**
16:15	23	14	3	0	40	1	15	20	0	36	1	11	1	0	13	3	18	1	0	22	111
16:30	24	12	**6**	0	42	0	14	25	0	39	1	7	0	0	8	1	12	1	0	14	103
16:45	20	**19**	6	0	45	**2**	9	19	0	30	0	11	0	0	11	8	4	0	0	12	98
Total Volume	95	60	20	0	175	4	69	97	0	170	5	43	2	0	50	27	78	6	0	111	506
% App. Total	54.3	34.3	11.4	0		2.4	40.6	57.1	0		10	86	4	0		24.3	70.3	5.4	0		
PHF	.848	.789	.833	.000	.911	.500	.556	.735	.000	.654	.417	.768	.500	.000	.694	.450	.443	.375	.000	.440	.652



True Count

3401 First Ave. #123
San Diego, CA, 92103

File Name : 1079.02.BROCKMAN RD.SR-98
Site Code : 00000000
Start Date : 10/7/2010
Page No : 1

Groups Printed- Vehicles

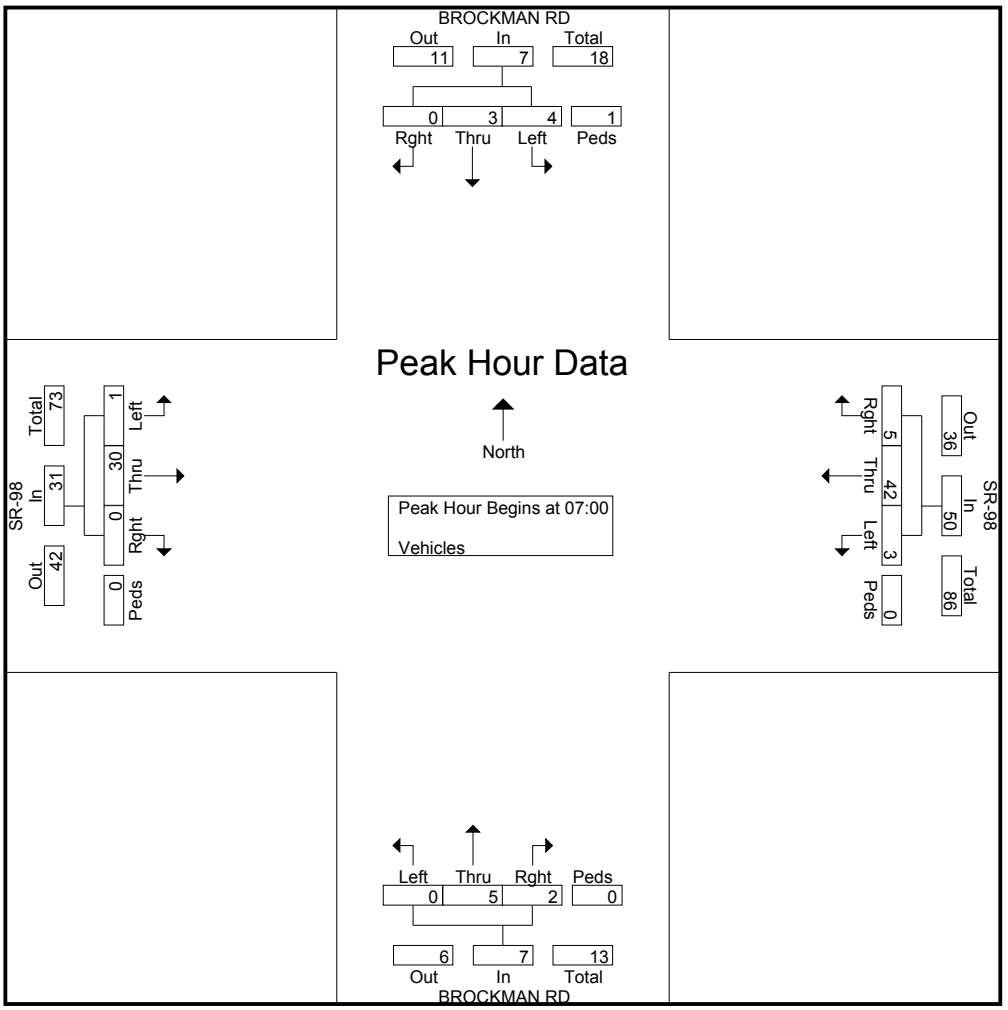
	BROCKMAN RD Southbound				SR-98 Westbound				BROCKMAN RD Northbound				SR-98 Eastbound				
Start Time	Left	Thru	Rght	Peds	Left	Thru	Rght	Peds	Left	Thru	Rght	Peds	Left	Thru	Rght	Peds	Int. Total
07:00	1	1	0	1	0	9	2	0	0	1	0	0	0	2	0	0	17
07:15	2	0	0	0	3	15	2	0	0	0	1	0	0	6	0	0	29
07:30	1	1	0	0	0	10	1	0	0	3	0	0	1	11	0	0	28
07:45	0	1	0	0	0	8	0	0	0	1	1	0	0	11	0	0	22
Total	4	3	0	1	3	42	5	0	0	5	2	0	1	30	0	0	96
08:00	1	0	0	0	0	6	0	0	0	0	0	0	0	9	0	0	16
08:15	1	0	2	0	0	5	0	0	0	0	0	0	0	5	0	0	13
08:30	0	0	1	0	0	19	2	0	0	0	0	0	0	10	0	0	32
08:45	1	1	0	0	1	13	3	0	0	0	1	0	0	11	0	0	31
Total	3	1	3	0	1	43	5	0	0	0	1	0	0	35	0	0	92
*** BREAK ***																	
16:00	2	0	1	0	0	11	0	0	0	0	1	0	0	20	0	0	35
16:15	2	0	0	0	0	10	0	0	0	0	0	0	0	19	0	0	31
16:30	1	2	0	0	0	14	0	0	0	1	0	0	0	15	0	0	33
16:45	4	0	2	0	0	18	0	0	0	0	0	0	1	21	0	0	46
Total	9	2	3	0	0	53	0	0	0	1	1	0	1	75	0	0	145
17:00	2	0	0	0	0	5	1	0	0	0	0	0	0	21	0	0	29
17:15	1	1	1	0	0	14	2	0	1	0	0	0	0	24	0	0	44
17:30	0	0	0	0	0	10	0	0	0	0	0	0	0	16	0	0	26
17:45	2	0	0	0	0	8	0	0	0	0	0	0	1	12	0	0	23
Total	5	1	1	0	0	37	3	0	1	0	0	0	1	73	0	0	122
Grand Total	21	7	7	1	4	175	13	0	1	6	4	0	3	213	0	0	455
Apprch %	58.3	19.4	19.4	2.8	2.1	91.1	6.8	0	9.1	54.5	36.4	0	1.4	98.6	0	0	
Total %	4.6	1.5	1.5	0.2	0.9	38.5	2.9	0	0.2	1.3	0.9	0	0.7	46.8	0	0	

True Count

3401 First Ave. #123
San Diego, CA, 92103

File Name : 1079.02.BROCKMAN RD.SR-98
Site Code : 00000000
Start Date : 10/7/2010
Page No : 2

	BROCKMAN RD Southbound					SR-98 Westbound					BROCKMAN RD Northbound					SR-98 Eastbound					
Start Time	**Left**	**Thru**	**Rght**	**Peds**	**App. Total**	**Left**	**Thru**	**Rght**	**Peds**	**App. Total**	**Left**	**Thru**	**Rght**	**Peds**	**App. Total**	**Left**	**Thru**	**Rght**	**Peds**	**App. Total**	**Int. Total**
Peak Hour Analysis From 07:00 to 11:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00																					
07:00	1	**1**	0	**1**	**3**	0	9	**2**	0	11	0	1	0	0	1	0	2	0	0	2	17
07:15	**2**	0	0	0	2	**3**	**15**	2	0	**20**	0	0	**1**	0	1	0	6	0	0	6	**29**
07:30	1	1	0	0	2	0	10	1	0	11	0	**3**	0	0	**3**	**1**	**11**	0	0	**12**	28
07:45	0	1	0	0	1	0	8	0	0	8	0	1	1	0	2	0	11	0	0	11	22
Total Volume	4	3	0	1	8	3	42	5	0	50	0	5	2	0	7	1	30	0	0	31	96
% App. Total	50	37.5	0	12.5		6	84	10	0		0	71.4	28.6	0		3.2	96.8	0	0		
PHF	.500	.750	.000	.250	.667	.250	.700	.625	.000	.625	.000	.417	.500	.000	.583	.250	.682	.000	.000	.646	.828

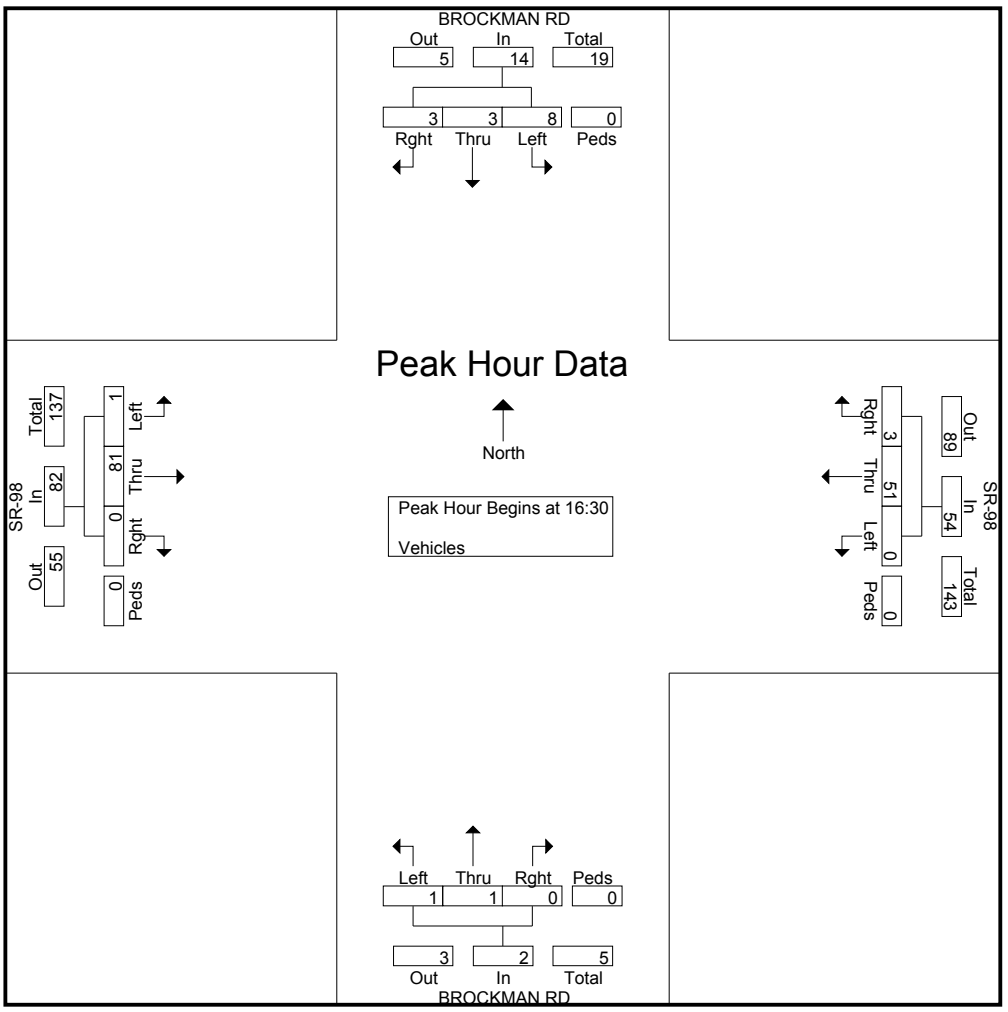


True Count

3401 First Ave. #123
San Diego, CA, 92103

File Name : 1079.02.BROCKMAN RD.SR-98
Site Code : 00000000
Start Date : 10/7/2010
Page No : 3

	BROCKMAN RD Southbound					SR-98 Westbound					BROCKMAN RD Northbound					SR-98 Eastbound					
Start Time	**Left**	**Thru**	**Rght**	**Peds**	**App. Total**	**Left**	**Thru**	**Rght**	**Peds**	**App. Total**	**Left**	**Thru**	**Rght**	**Peds**	**App. Total**	**Left**	**Thru**	**Rght**	**Peds**	**App. Total**	**Int. Total**
Peak Hour Analysis From 12:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	1	**2**	0	0	3	0	14	0	0	14	0	**1**	0	0	**1**	0	15	0	0	15	33
16:45	**4**	0	**2**	0	**6**	0	**18**	0	0	**18**	0	0	0	0	0	**1**	21	0	0	22	**46**
17:00	2	0	0	0	2	0	5	1	0	6	0	0	0	0	0	0	21	0	0	21	29
17:15	1	1	1	0	3	0	14	**2**	0	16	**1**	0	0	0	1	0	**24**	0	0	**24**	44
Total Volume	8	3	3	0	14	0	51	3	0	54	1	1	0	0	2	1	81	0	0	82	152
% App. Total	57.1	21.4	21.4	0		0	94.4	5.6	0		50	50	0	0		1.2	98.8	0	0		
PHF	.500	.375	.375	.000	.583	.000	.708	.375	.000	.750	.250	.250	.000	.000	.500	.250	.844	.000	.000	.854	.826



True Count

3401 First Ave. #123
San Diego, CA, 92103

File Name : 1079.03.FERRELL RD.SR-98
Site Code : 00000000
Start Date : 10/7/2010
Page No : 1

Groups Printed- Vehicles

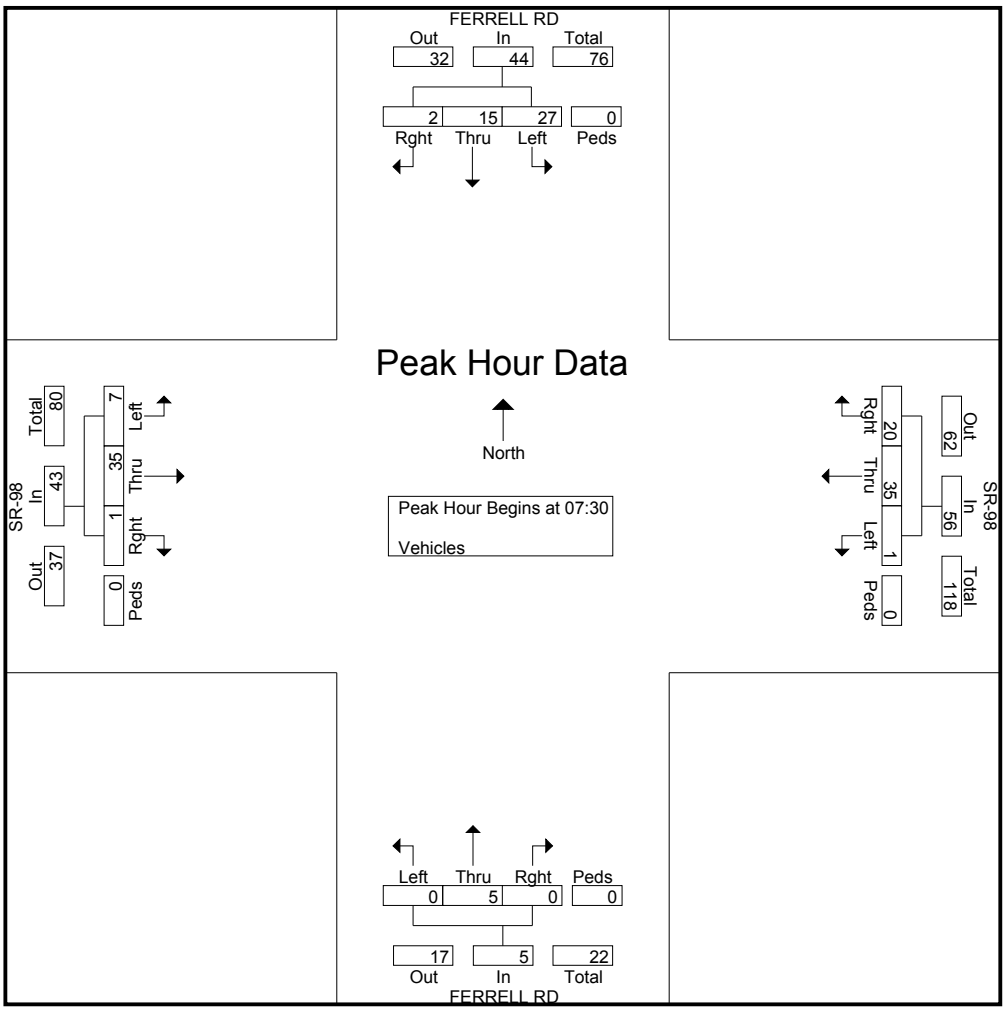
	FERRELL RD Southbound				SR-98 Westbound				FERRELL RD Northbound				SR-98 Eastbound				
Start Time	Left	Thru	Rght	Peds	Left	Thru	Rght	Peds	Left	Thru	Rght	Peds	Left	Thru	Rght	Peds	Int. Total
07:00	2	1	2	1	0	13	5	0	1	1	0	0	1	2	1	0	30
07:15	4	2	1	0	0	10	5	0	0	0	0	0	1	9	0	0	32
07:30	6	6	0	0	0	13	6	0	0	2	0	0	1	8	0	0	42
07:45	10	4	2	0	0	7	3	0	0	0	0	0	4	12	0	0	42
Total	22	13	5	1	0	43	19	0	1	3	0	0	7	31	1	0	146
08:00	4	3	0	0	1	4	4	0	0	2	0	0	2	7	0	0	27
08:15	7	2	0	0	0	11	7	0	0	1	0	0	0	8	1	0	37
08:30	3	3	1	0	0	17	2	0	0	1	1	0	0	10	1	0	39
08:45	4	0	1	0	0	15	2	0	1	3	0	0	1	13	1	0	41
Total	18	8	2	0	1	47	15	0	1	7	1	0	3	38	3	0	144
*** BREAK ***																	
16:00	5	5	0	0	0	11	1	0	0	8	0	0	0	23	0	0	53
16:15	7	0	1	0	0	11	3	0	0	3	0	0	0	21	1	0	47
16:30	6	3	0	0	1	12	0	0	0	2	1	0	0	17	0	0	42
16:45	5	2	0	0	0	18	4	0	0	1	0	0	3	23	0	0	56
Total	23	10	1	0	1	52	8	0	0	14	1	0	3	84	1	0	198
17:00	6	1	1	0	0	7	2	0	0	1	0	0	1	20	0	0	39
17:15	4	4	1	0	0	13	6	0	0	3	0	0	0	27	0	0	58
17:30	5	2	3	0	0	10	6	0	0	1	0	0	0	15	0	0	42
17:45	3	3	2	0	0	8	5	0	0	0	0	0	1	18	0	0	40
Total	18	10	7	0	0	38	19	0	0	5	0	0	2	80	0	0	179
Grand Total	81	41	15	1	2	180	61	0	2	29	2	0	15	233	5	0	667
Apprch %	58.7	29.7	10.9	0.7	0.8	74.1	25.1	0	6.1	87.9	6.1	0	5.9	92.1	2	0	
Total %	12.1	6.1	2.2	0.1	0.3	27	9.1	0	0.3	4.3	0.3	0	2.2	34.9	0.7	0	

True Count

3401 First Ave. #123
San Diego, CA, 92103

File Name : 1079.03.FERRELL RD.SR-98
Site Code : 00000000
Start Date : 10/7/2010
Page No : 2

	FERRELL RD Southbound					SR-98 Westbound					FERRELL RD Northbound					SR-98 Eastbound					
Start Time	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 11:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	6	**6**	0	0	12	0	**13**	6	0	**19**	0	**2**	0	0	**2**	1	8	0	0	9	**42**
07:45	**10**	4	**2**	0	**16**	0	7	3	0	10	0	0	0	0	0	**4**	**12**	0	0	**16**	42
08:00	4	3	0	0	7	**1**	4	4	0	9	0	2	0	0	2	2	7	0	0	9	27
08:15	7	2	0	0	9	0	11	**7**	0	18	0	1	0	0	1	0	8	**1**	0	9	37
Total Volume	27	15	2	0	44	1	35	20	0	56	0	5	0	0	5	7	35	1	0	43	148
% App. Total	61.4	34.1	4.5	0		1.8	62.5	35.7	0		0	100	0	0		16.3	81.4	2.3	0		
PHF	.675	.625	.250	.000	.688	.250	.673	.714	.000	.737	.000	.625	.000	.000	.625	.438	.729	.250	.000	.672	.881

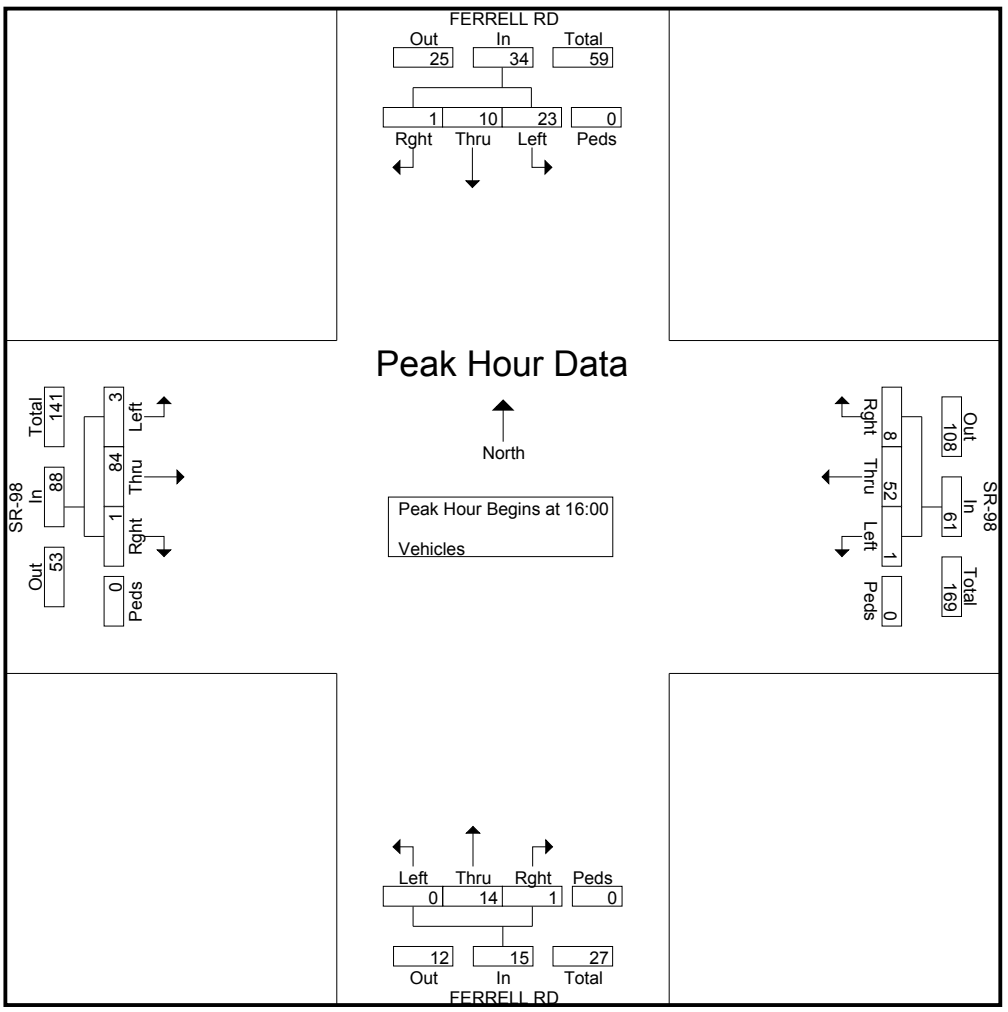


True Count

3401 First Ave. #123
San Diego, CA, 92103

File Name : 1079.03.FERRELL RD.SR-98
Site Code : 00000000
Start Date : 10/7/2010
Page No : 3

	FERRELL RD Southbound					SR-98 Westbound					FERRELL RD Northbound					SR-98 Eastbound					
Start Time	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	5	**5**	0	0	**10**	0	11	1	0	12	0	**8**	0	0	**8**	0	**23**	0	0	23	53
16:15	**7**	0	**1**	0	8	0	11	3	0	14	0	3	0	0	3	0	21	**1**	0	22	47
16:30	6	3	0	0	9	**1**	12	0	0	13	0	2	**1**	0	3	0	17	0	0	17	42
16:45	5	2	0	0	7	0	**18**	**4**	0	**22**	0	1	0	0	1	**3**	23	0	0	**26**	**56**
Total Volume	23	10	1	0	34	1	52	8	0	61	0	14	1	0	15	3	84	1	0	88	198
% App. Total	67.6	29.4	2.9	0		1.6	85.2	13.1	0		0	93.3	6.7	0		3.4	95.5	1.1	0		
PHF	.821	.500	.250	.000	.850	.250	.722	.500	.000	.693	.000	.438	.250	.000	.469	.250	.913	.250	.000	.846	.884



MetroCount Traffic Executive
Vehicle Counts

553 -- English (ENU)

Datasets:

Site: **[1079.01] SR-98 (ROCKWOOD RD-CORDA RD) EASTBOUND**
Direction: 6 - West bound A>B, East bound B>A. **Lane:** 0
Survey Duration: 20:27 Wednesday, October 06, 2010 => 11:19 Friday, October 08, 2010
File: 1079.0108Oct2010.EC0 (Regular)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: **0:00 Thursday, October 07, 2010 => 0:00 Friday, October 08, 2010**
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Direction: East (bound)
In profile: Vehicles = 979 / 1951 (50.18%)

*** Thursday, October 07, 2010 - Total=979, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
26	**16**	**5**	**7**	**9**	**11**	**32**	**38**	**41**	**54**	**36**	**60**	**50**	**43**	**42**	**69**	**85**	**80**	**66**	**78**	**36**	**43**	**27**	**25**	
11	7	1	3	1	1	4	4	8	16	7	15	**18**	11	15	12	22	22	17	19	7	14	7	2	-
7	4	0	1	2	6	8	10	8	12	10	**20**	8	10	7	21	22	25	18	24	6	13	7	8	-
3	4	1	0	3	1	12	9	10	10	10	**10**	11	15	12	13	17	15	14	17	9	11	10	7	-
5	1	3	3	3	3	8	15	15	16	9	**15**	13	7	8	23	24	18	17	18	14	5	3	8	-

AM Peak 1115 - 1215 (63), AM PHF=0.79

MetroCount Traffic Executive
Vehicle Counts

554 -- English (ENU)

Datasets:

Site:	**[1079.01] SR-98 (ROCKWOOD RD-CORDA RD) WESTBOUND**
Direction:	6 - West bound A>B, East bound B>A. **Lane:** 0
Survey Duration:	20:27 Wednesday, October 06, 2010 => 11:19 Friday, October 08, 2010
File:	1079.0108Oct2010.EC0 (Regular)
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**0:00 Thursday, October 07, 2010 => 0:00 Friday, October 08, 2010**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Direction:	West (bound)
In profile:	Vehicles = 750 / 1951 (38.44%)

*** Thursday, October 07, 2010 - Total=750, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
15	**8**	**12**	**20**	**29**	**36**	**45**	**48**	**49**	**40**	**38**	**46**	**33**	**32**	**34**	**28**	**53**	**42**	**32**	**30**	**18**	**32**	**19**	**11**	
3	0	4	5	8	10	16	9	6	**10**	11	9	10	9	5	2	11	7	8	10	4	17	7	0	-
2	2	2	4	8	7	8	20	8	**14**	9	9	8	6	9	10	11	17	10	6	4	7	5	3	-
5	2	2	7	9	4	12	11	**20**	9	9	10	5	5	6	10	15	10	6	6	3	3	4	5	-
5	4	4	4	4	15	9	8	**15**	7	9	18	10	12	14	6	16	8	8	8	7	5	3	3	-

AM Peak 0830 - 0930 (59), AM PHF=0.74

MetroCount Traffic Executive
Vehicle Counts

556 -- English (ENU)

Datasets:

Site: **[1079.02] COUNTY HWY S-30 (BROCKMAN RD-NORTH OF SR-98) SOUTHBOUND**
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 0
Survey Duration: 21:17 Wednesday, October 06, 2010 => 11:17 Friday, October 08, 2010
File: 1079.0208Oct2010.EC0 (Regular)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: **0:00 Thursday, October 07, 2010 => 0:00 Friday, October 08, 2010**
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Direction: South (bound)
In profile: Vehicles = 91 / 185 (49.19%)

*** Thursday, October 07, 2010 - Total=91, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**1**	**3**	**10**	**7**	**7**	**6**	**6**	**1**	**2**	**5**	**9**	**5**	**15**	**7**	**4**	**1**	**0**	**1**	**1**	**0**	
0	0	0	0	1	1	1	**2**	1	1	1	0	1	0	5	0	4	2	1	0	0	1	0	0	-
0	0	0	0	0	0	**4**	2	3	3	1	0	0	1	1	3	2	3	1	1	0	0	1	0	-
0	0	0	0	0	1	**3**	2	1	1	3	0	1	4	1	1	3	0	0	0	0	0	0	0	-
0	0	0	0	0	1	**2**	1	2	1	1	1	0	0	2	1	6	2	2	0	0	0	0	0	-

AM Peak 0615 - 0715 (11), AM PHF=0.69

MetroCount Traffic Executive
Vehicle Counts

555 -- English (ENU)

Datasets:

Site: **[1079.02] COUNTY HWY S-30 (BROCKMAN RD-NORTH OF SR-98) NORTHBOUND**
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 0
Survey Duration: 21:17 Wednesday, October 06, 2010 => 11:17 Friday, October 08, 2010
File: 1079.0208Oct2010.EC0 (Regular)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: **0:00 Thursday, October 07, 2010 => 0:00 Friday, October 08, 2010**
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Direction: North (bound)
In profile: Vehicles = 89 / 185 (48.11%)

*** Thursday, October 07, 2010 - Total=89, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	**0**	**3**	**2**	**8**	**8**	**5**	**9**	**4**	**5**	**3**	**3**	**5**	**7**	**5**	**4**	**3**	**4**	**2**	**2**	**3**	**1**	**2**	**0**	
0	0	1	1	1	**2**	0	1	1	2	0	2	3	1	1	1	1	0	0	1	0	0	0	0	-
0	0	0	1	1	**3**	4	4	0	2	0	1	2	0	1	2	0	3	1	0	0	0	1	0	-
1	0	1	0	**5**	2	1	2	2	1	1	0	0	5	1	0	0	0	0	1	0	0	1	0	-
0	0	1	0	**1**	1	0	2	1	0	2	0	0	1	2	1	2	1	1	0	3	1	0	0	-

AM Peak 0430 - 0530 (11), AM PHF=0.55

MetroCount Traffic Executive
Vehicle Counts

558 -- English (ENU)

Datasets:

Site: **[1079.03] FERRELL RD (LA BRUCHERIE RD-NORTH OF SR-98) SOUTHBOUND**
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 0
Survey Duration: 19:42 Wednesday, October 06, 2010 => 11:19 Friday, October 08, 2010
File: 1079.0308Oct2010.EC0 (Base)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: **0:00 Thursday, October 07, 2010 => 0:00 Friday, October 08, 2010**
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Direction: South (bound)
In profile: Vehicles = 442 / 867 (50.98%)

*** Thursday, October 07, 2010 - Total=442, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
8	**3**	**1**	**4**	**0**	**10**	**12**	**39**	**26**	**40**	**21**	**21**	**21**	**19**	**34**	**42**	**34**	**31**	**26**	**14**	**6**	**19**	**7**	**4**	
0	0	0	0	0	1	2	5	**6**	10	9	4	4	2	5	9	9	8	10	4	2	13	4	2	-
5	0	0	2	0	2	1	6	**9**	17	3	6	7	5	13	13	9	8	5	6	1	4	0	1	-
2	2	0	1	0	3	3	**11**	7	9	4	8	5	6	7	14	9	9	7	2	2	1	2	0	-
1	1	1	1	0	4	6	**17**	4	4	5	3	5	6	9	6	7	6	4	2	1	1	1	1	-

AM Peak 0730 - 0830 (43), AM PHF=0.63

MetroCount Traffic Executive
Vehicle Counts

557 -- English (ENU)

Datasets:

Site: **[1079.03] FERRELL RD (LA BRUCHERIE RD-NORTH OF SR-98) NORTHBOUND**
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 0
Survey Duration: 19:42 Wednesday, October 06, 2010 => 11:19 Friday, October 08, 2010
File: 1079.0308Oct2010.EC0 (Base)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: **0:00 Thursday, October 07, 2010 => 0:00 Friday, October 08, 2010**
Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Direction: North (bound)
In profile: Vehicles = 354 / 867 (40.83%)

*** Thursday, October 07, 2010 - Total=354, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
4	**2**	**7**	**1**	**9**	**9**	**22**	**29**	**24**	**26**	**14**	**24**	**15**	**11**	**32**	**21**	**27**	**28**	**17**	**9**	**7**	**8**	**4**	**4**	
0	1	0	0	0	0	4	8	**8**	3	5	5	3	3	4	5	11	4	4	3	2	2	0	1	-
4	0	3	1	1	0	3	5	**6**	13	2	6	5	2	8	5	5	10	6	2	2	3	1	1	-
0	1	2	0	3	3	10	**5**	5	3	5	10	4	2	6	5	3	8	5	3	2	3	2	1	-
0	0	2	0	5	6	5	**11**	5	7	2	3	3	4	14	6	8	6	2	1	1	0	1	1	-

AM Peak 0730 - 0830 (30), AM PHF=0.68

2009 Caltrans Volumes

District	Route	County	Postmile	Description	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak Hour	Ahead Peak Month	Ahead AADT
11	098	IMP	22.197	DREW RD (SUNSET BLVD)	250	2,300	2,100	240	**2,350**	2,200
11	098	IMP	27.21	FERRELL RD	240	2,350	2,200	290	2,900	**2,650**
11	098	IMP	28.74	CLARK RD	290	2,900	**2,650**	400	4,350	4,100

APPENDIX B

PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – EXISTING

Existing AM Wed Apr 6, 2011 09:50:49 Page 2-1

88FT
3-11-2034

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 La Brucherie/McCabe

Cycle (sec):	100	Critical Vol./Cap.(X):	0.688
Loss Time (sec):	0	Average Delay (sec/veh):	16.5
Optimal Cycle:	0	Level Of Service:	C

Street Name:	La Brucherie						McCabe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	17	121	5	122	96	54	43	244	16	4	226	155
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	121	5	122	96	54	43	244	16	4	226	155
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	18	132	5	133	104	59	47	265	17	4	246	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	132	5	133	104	59	47	265	17	4	246	168
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	132	5	133	104	59	47	265	17	4	246	168
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	0.85	0.03	0.45	0.35	0.20	0.14	0.81	0.05	0.01	0.59	0.40
Final Sat.:	56	396	16	238	188	106	80	453	30	6	357	245
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.33	0.56	0.56	0.56	0.59	0.59	0.59	0.69	0.69	0.69
Crit Moves:		****			****			****			****	
Delay/Veh:	12.3	12.3	12.3	15.7	15.7	15.7	16.2	16.2	16.2	19.0	19.0	19.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.3	12.3	12.3	15.7	15.7	15.7	16.2	16.2	16.2	19.0	19.0	19.0
LOS by Move:	B	B	B	C	C	C	C	C	C	C	C	C
ApproachDel:	12.3			15.7			16.2			19.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.3			15.7			16.2			19.0		
LOS by Appr:	B			C			C			C		
AllWayAvgQ:	0.3	0.3	0.3	0.9	0.9	0.9	1.1	1.1	1.1	1.7	1.7	1.7

Note: Queue reported is the number of cars per lane.

```
Existing AM                Wed Apr 6, 2011 09:50:49                   Page 3-1
--------------------------------------------------------------------------------
                                    88FT
                                  3-11-2034
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Unsignalized Method (Base Volume Alternative)
********************************************************************************
Intersection #2 SR 98/Ferrell
********************************************************************************
Average Delay (sec/veh):      3.6       Worst Case Level Of Service: A[  9.7]
********************************************************************************
Street Name:             Ferrell                          SR 98
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  1  0  0    0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    5     0    27   15     2     7   35     1     1   35    20
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    5     0    27   15     2     7   35     1     1   35    20
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92
PHF Volume:     0    5     0    29   16     2     8   38     1     1   38    22
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    5     0    29   16     2     8   38     1     1   38    22
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx  6.5 xxxxx   7.1  6.5   6.2   4.1 xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:xxxxx  4.0 xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx  116 xxxxx   108  105    49    60 xxxx xxxxx    39 xxxx xxxxx
Potent Cap.: xxxx  778 xxxxx   876  788  1025  1557 xxxx xxxxx  1584 xxxx xxxxx
Move Cap.:   xxxx  774 xxxxx   868  784  1025  1557 xxxx xxxxx  1584 xxxx xxxxx
Volume/Cap:  xxxx 0.01  xxxx  0.03 0.02  0.00  0.00 xxxx  xxxx  0.00 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx  0.0 xxxxx  xxxx xxxx xxxxx   0.0 xxxx xxxxx   0.0 xxxx xxxxx
Control Del:xxxxx  9.7 xxxxx xxxxx xxxx xxxxx   7.3 xxxx xxxxx   7.3 xxxx xxxxx
LOS by Move:    *    A     *     *    *     *     A    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  843 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx  9.5 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    A     *     *    *     *     *    *     *
ApproachDel:       9.7              9.5           xxxxxx           xxxxxx
ApproachLOS:         A                A                *                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

```
Existing AM                Wed Apr 6, 2011 09:50:49                  Page 4-1
------------------------------------------------------------------------------
                                   88FT
                                3-11-2034
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #3 SR 98/Brockman
******************************************************************************
Average Delay (sec/veh):      1.7       Worst Case Level Of Service: A[  9.3]
******************************************************************************
Street Name:             Brockman                          SR 98
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  0  1  0    0  1  0  0  0    0  1  0  0  0    0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    5     2     4    3     0     1   30     0     3   42     5
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    5     2     4    3     0     1   30     0     3   42     5
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92
PHF Volume:     0    5     2     4    3     0     1   33     0     3   46     5
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    5     2     4    3     0     1   33     0     3   46     5
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx  6.5   6.2   7.1  6.5 xxxxx   4.1 xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:xxxxx  4.0   3.3   3.5  4.0 xxxxx   2.2 xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx   92    33    93   90 xxxxx    51 xxxx xxxxx    33 xxxx xxxxx
Potent Cap.: xxxx  801  1047   895  804 xxxxx  1568 xxxx xxxxx  1592 xxxx xxxxx
Move Cap.:   xxxx  799  1047   887  802 xxxxx  1568 xxxx xxxxx  1592 xxxx xxxxx
Volume/Cap:  xxxx 0.01  0.00  0.00 0.00  xxxx  0.00 xxxx  xxxx  0.00 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.0 xxxx xxxxx   0.0 xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.3 xxxx xxxxx   7.3 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx   857   848 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx   0.0   0.0 xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx   9.2   9.3 xxxx xxxxx   7.3 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     A     A    *     *     A    *     *     *    *     *
ApproachDel:       9.2              9.3           xxxxxx           xxxxxx
ApproachLOS:         A                A                *                *
******************************************************************************
Note: Queue reported is the number of cars per lane.
******************************************************************************
```

```
Existing PM                Wed Apr 6, 2011 09:50:49                   Page 2-1
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM 4-Way Stop Method (Base Volume Alternative)
******************************************************************************
Intersection #1 La Brucherie/McCabe
******************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.259
Loss Time (sec):       0               Average Delay (sec/veh):         8.7
Optimal Cycle:         0               Level Of Service:                  A
******************************************************************************
Street Name:           La Brucherie                        McCabe
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       5   43     2    95   60    20    27   78     6     4   69    97
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    5   43     2    95   60    20    27   78     6     4   69    97
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92
PHF Volume:     5   47     2   103   65    22    29   85     7     4   75   105
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    5   47     2   103   65    22    29   85     7     4   75   105
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:    5   47     2   103   65    22    29   85     7     4   75   105
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       0.10 0.86  0.04  0.55 0.34  0.11  0.24 0.71  0.05  0.02 0.41  0.57
Final Sat.:    70  602    28   398  251    84   177  512    39    19  325   457
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.08 0.08  0.08  0.26 0.26  0.26  0.17 0.17  0.17  0.23 0.23  0.23
Crit Moves:       ****             ****             ****             ****
Delay/Veh:    8.2  8.2   8.2   9.2  9.2   9.2   8.6  8.6   8.6   8.5  8.5   8.5
Delay Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   8.2  8.2   8.2   9.2  9.2   9.2   8.6  8.6   8.6   8.5  8.5   8.5
LOS by Move:    A    A     A     A    A     A     A    A     A     A    A     A
ApproachDel:       8.2              9.2              8.6              8.5
Delay Adj:        1.00             1.00             1.00             1.00
ApprAdjDel:        8.2              9.2              8.6              8.5
LOS by Appr:         A                A                A                A
AllWayAvgQ:   0.1  0.1   0.1   0.3  0.3   0.3   0.2  0.2   0.2   0.3  0.3   0.3
******************************************************************************
Note: Queue reported is the number of cars per lane.
******************************************************************************
```

```
Existing PM               Wed Apr 6, 2011 09:50:49                  Page 3-1
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                     Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #2 SR 98/Ferrell
******************************************************************************
Average Delay (sec/veh):      2.6       Worst Case Level Of Service: A[ 10.0]
******************************************************************************
Street Name:             Ferrell                          SR 98
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  0  1  0    0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0   14     1    23   10     1     3   84     1     1   52     8
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   14     1    23   10     1     3   84     1     1   52     8
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92
PHF Volume:     0   15     1    25   11     1     3   91     1     1   57     9
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   15     1    25   11     1     3   91     1     1   57     9
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx  6.5   6.2   7.1  6.5   6.2   4.1 xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:xxxxx  4.0   3.3   3.5  4.0   3.3   2.2 xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx  166    92   170  162    61    65 xxxx xxxxx    92 xxxx xxxxx
Potent Cap.: xxxx  731   971   799  734  1010  1550 xxxx xxxxx  1515 xxxx xxxxx
Move Cap.:   xxxx  728   971   783  732  1010  1550 xxxx xxxxx  1515 xxxx xxxxx
Volume/Cap:  xxxx 0.02  0.00  0.03 0.01  0.00  0.00 xxxx  xxxx  0.00 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.0 xxxx xxxxx   0.0 xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.3 xxxx xxxxx   7.4 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx   741  xxxx  772 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx   0.1 xxxxx  0.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx  10.0 xxxxx  9.9 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     A     *    A     *     *    *     *     *    *     *
ApproachDel:      10.0              9.9           xxxxxx           xxxxxx
ApproachLOS:         A                A                *                *
******************************************************************************
Note: Queue reported is the number of cars per lane.
******************************************************************************
```

Existing PM Wed Apr 6, 2011 09:50:49 Page 4-1

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 SR 98/Brockman

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: A[9.6]

Street Name:	Brockman						SR 98					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	1	1	0	8	3	3	1	81	0	0	51	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	1	0	8	3	3	1	81	0	0	51	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	1	1	0	9	3	3	1	88	0	0	55	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	1	0	9	3	3	1	88	0	0	55	3
Critical Gap Module:												
Critical Gp:	7.1	6.5	xxxxx	7.1	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	151	149	xxxxx	148	147	57	59	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	822	746	xxxxx	825	748	1015	1558	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	816	746	xxxxx	824	747	1015	1558	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	xxxx	0.01	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	779	xxxx	xxxxx	xxxx	839	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.6	xxxx	xxxxx	xxxxx	9.4	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	9.6			9.4			xxxxxx			xxxxxx		
ApproachLOS:	A			A			*			*		

Note: Queue reported is the number of cars per lane.

APPENDIX C

CUMULATIVE TRAFFIC DATA INFORMATION

STREET SEGMENT	Total Energy Cumulatives
Brockman Road	
Lyons Rd to Kubler Rd	0
Ferrell Road	
Kubler Rd to SR 98	0
SR 98	
Pulliam Rd to Rockwood Rd	220
Rockwood Rd to Ferrell Rd	280
Ferrell Road to Weed Road	280
East of Weed Road	280
SR-111	
North of Sinclair Road	630
Peterson Road to Linsday Road	1340
SR-115	
SR-111 to Railroad Ave	520
SR- 115 (Wiest Road)	
South of SR-115/Main St	630
Sinclair Road	
East of SR 111	70

INTERSECTION	DIRECTION	TOTAL ENERGY CUMULATIVES					
		Ram	Rpm	Tam	Tpm	Lam	Lpm
La Brucherie Rd/McCabe Rd	Sb	0	0	12	0	0	0
	Wb	0	0	0	0	0	0
	Nb	0	0	0	12	0	0
	Eb	0	0	0	0	0	0
SR 98/Ferrell Rd	Sb	0	0	0	0	0	0
	Wb	0	0	91	0	0	0
	Nb	0	0	0	0	0	0
	Eb	0	0	0	91	0	0
SR 98/ Brockman Rd	Sb	0	0	0	0	0	63
	Wb	63	0	28	0	0	0
	Nb	0	0	0	0	0	0
	Eb	0	0	0	28	0	0
4. SR-98/ S. Clark Rd	Sb	0	0	0	0	0	0
	Wb	0	0	91	0	0	0
	Nb	0	0	0	0	0	0
	Eb	0	0	0	91	0	0
5. SR-98/ Weed Rd	Sb	0	0	0	0	0	0
	Wb	0	0	91	0	0	0
	Nb	0	0	0	0	0	0
	Eb	0	0	0	91	0	0

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ENERGY PROJECTS

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4/6/11

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BME Cumulatives

Traffic | More... | Map | Satellite | Earth

Salton Sea State Recreation Area
Desert Shores
Salton Sea Beach
Salton Sea State Park
Bertram
Salton Sea State Rec Area
Bombay Beach
Wister
Wister Waterfowl Management Area
Salton City
Salton Sea
Niland
Palo Verde
Cibola National Wildlife Refuge
Iris
Tortuga
Estelle
Calipatria
Fondo
Verdant
Amos
Acolita
Ocotillo Wells
Anza-Borrego Desert State Park
Anza-Borrego Desert State Wilderness
Wiest
Rockwood
Westmorland
Munyon
Mesquite
Glamis
Howley
Moss
Brawley
Orita
Citrus View
Curlew
Ruthven
Clyde
Sandia
Fuller
Perrys Corner
Imperial
Cactus
Obregon
Ogilby
Dunes
Picacho State Recreation Area
Meloland
Holtville
Date City
Plaster City
Dixieland
Edgar
Seeley
Wilsie
El Centro
Watermans Corner
Ocotillo
Coyote Wells
Heber
Bonds Corner
Mt Signal
Calexico
Araz Junction
Andrade
Algodones
Alamo
Boulevard
Boulder Park
Jacumba
La Rumorosa
El Centinela
Santa Isabel
Mexicali
Morelos
Ciudad Morelos (Cuervos)
Rancho Linch
Somerton
Gadsden
Rancho
Rancho de Mis Recuerdos
Puebla
Ejido Puebla
Sesbania
Pólvora
Bateques
Benito Juárez
Ejido Guanajuato
Ejido el Hongo
Ejido México
Manchón

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5 mi
10 km

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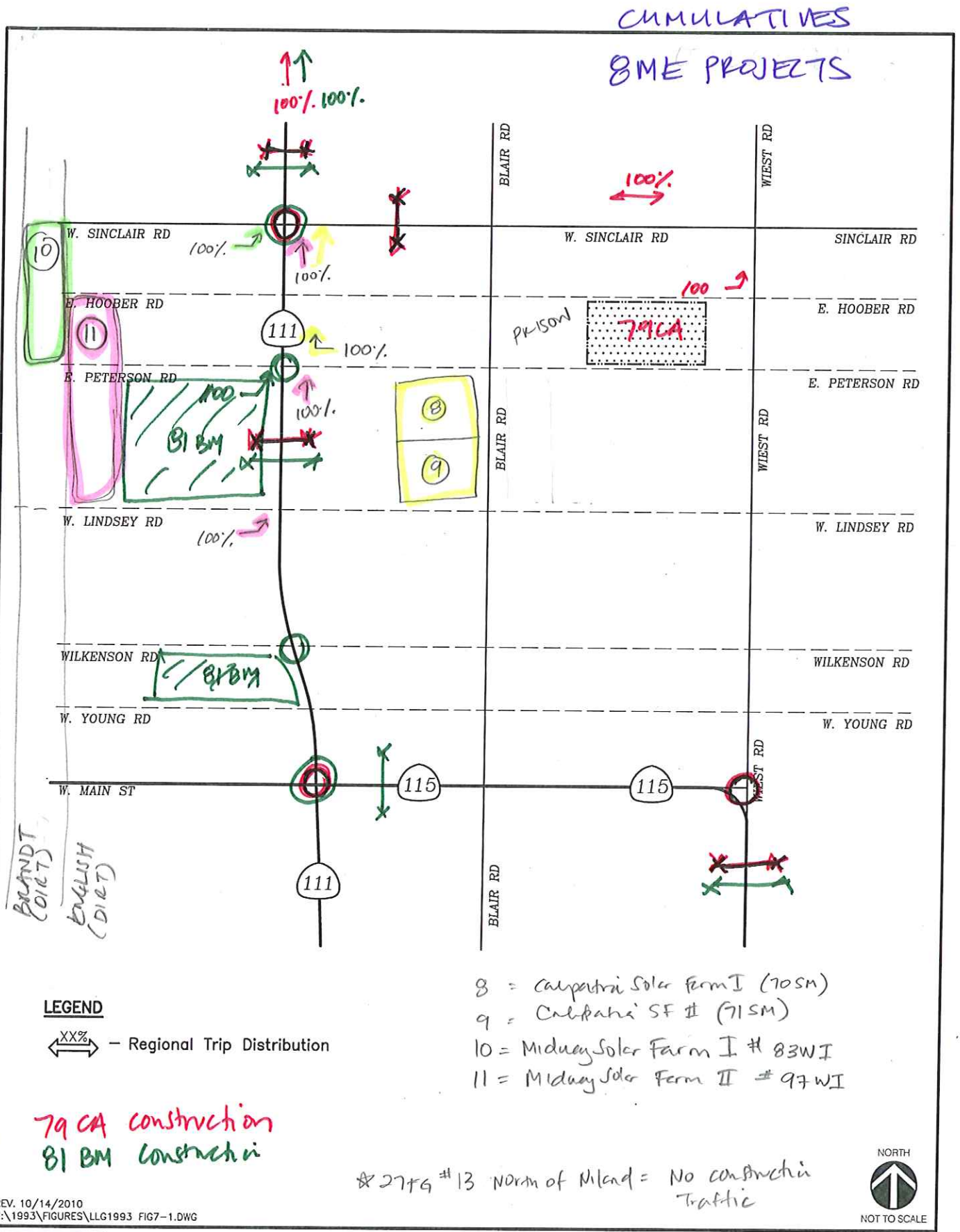

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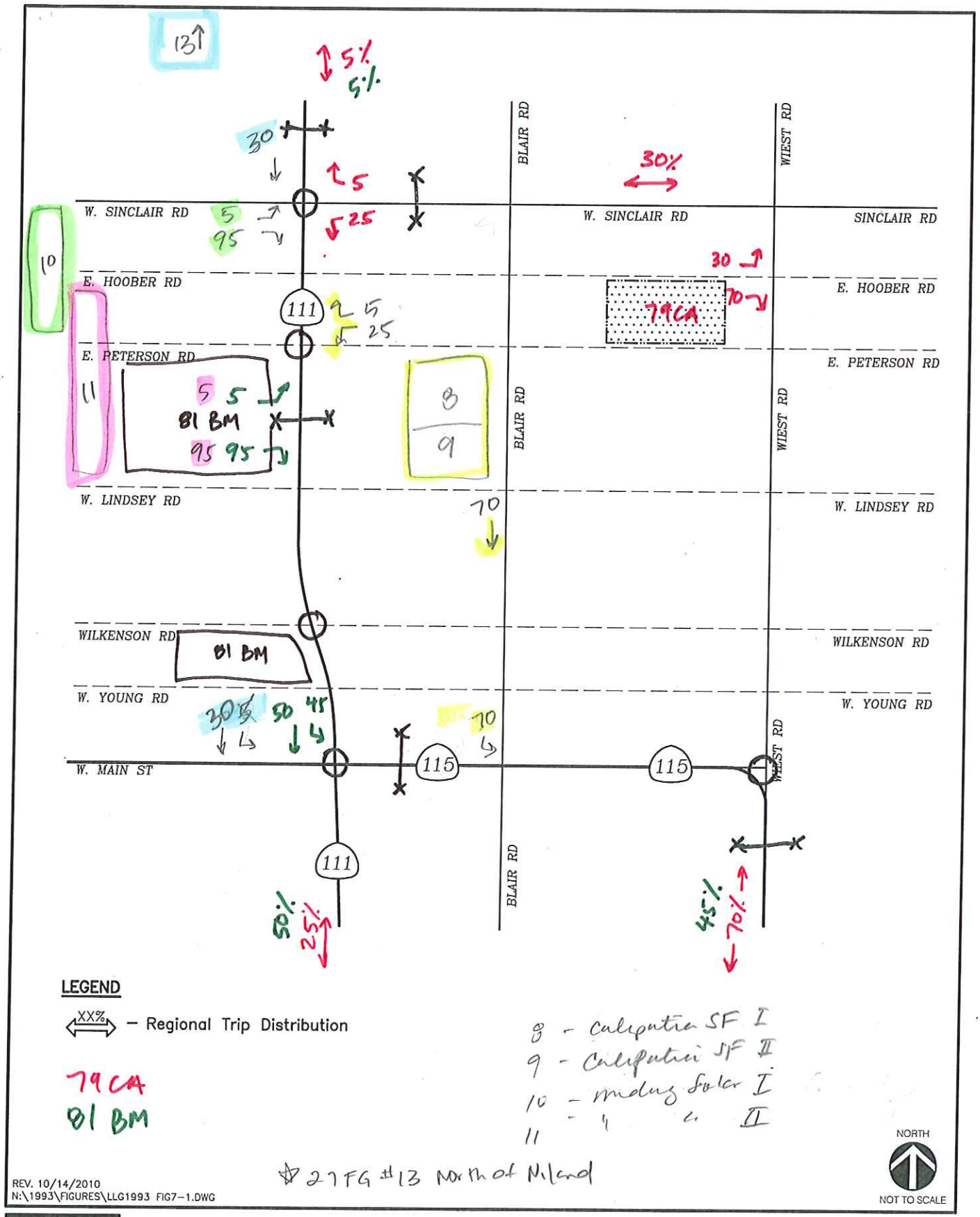
Figure 7-1

Construction Project Distribution

Truck Trips

79CA: SALTON SEA SOLAR FARM I



☆ 27FG #13 North of Niland

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Figure 7-1

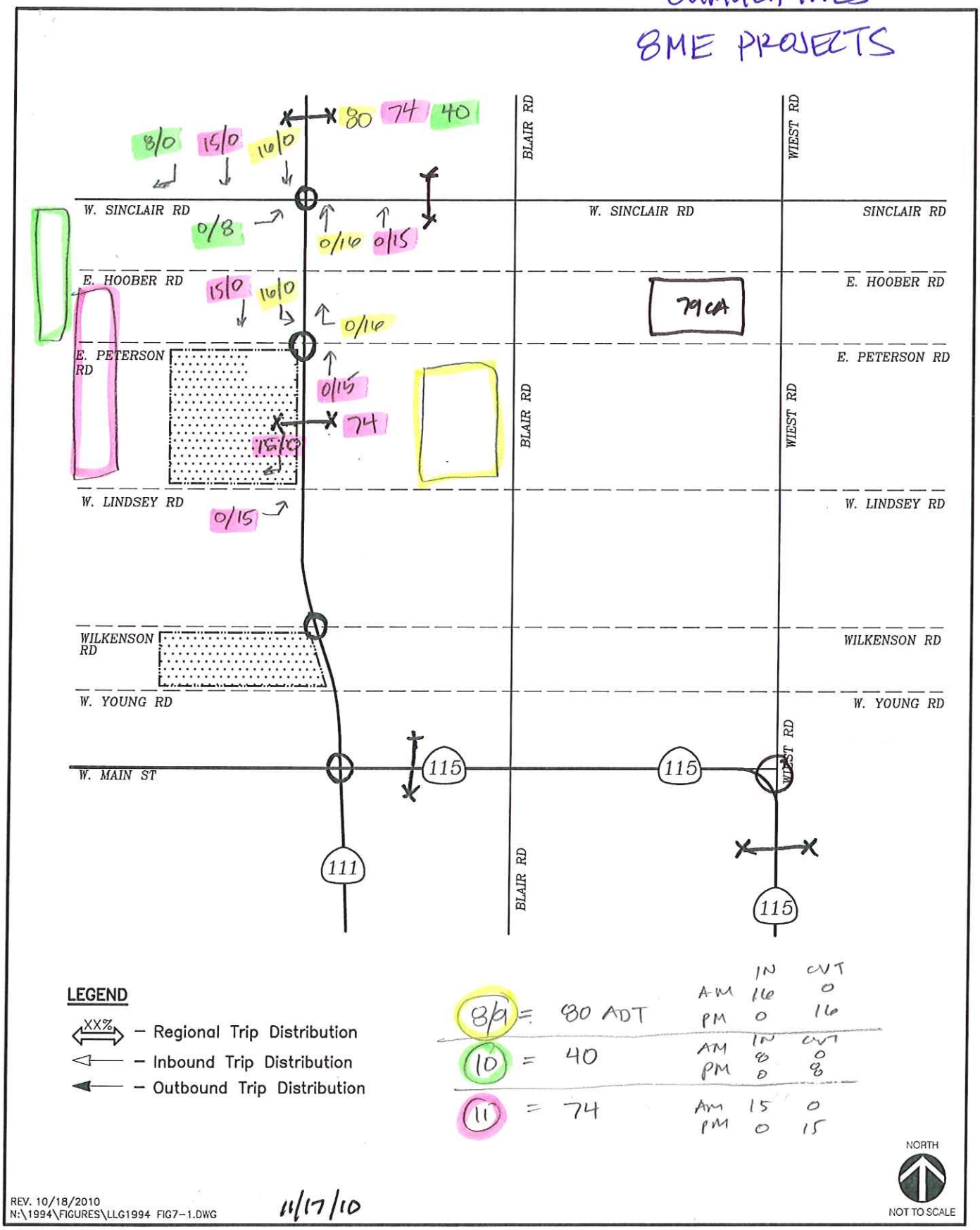
Construction Project Distribution

~~Truck~~ EMPLOYEE Trips

79CA: SALTON SEA SOLAR FARM I

CUMULATIVES

8ME PROJECTS



LEGEND

XX% — Regional Trip Distribution

— Inbound Trip Distribution

— Outbound Trip Distribution

8/9 = 80 ADT

	IN	OUT
AM	16	0
PM	0	16

10 = 40

	IN	OUT
AM	8	0
PM	0	8

11 = 74

AM	15	0
PM	0	15

NORTH

NOT TO SCALE

REV. 10/18/2010
N:\1994\FIGURES\LLG1994 FIG7-1.DWG

11/17/10

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Figure 7-1

Construction Project ~~Distribution~~ ASSIGNMENT

Truck Trips

8IBM: SALTON SEA SOLAR FARM II

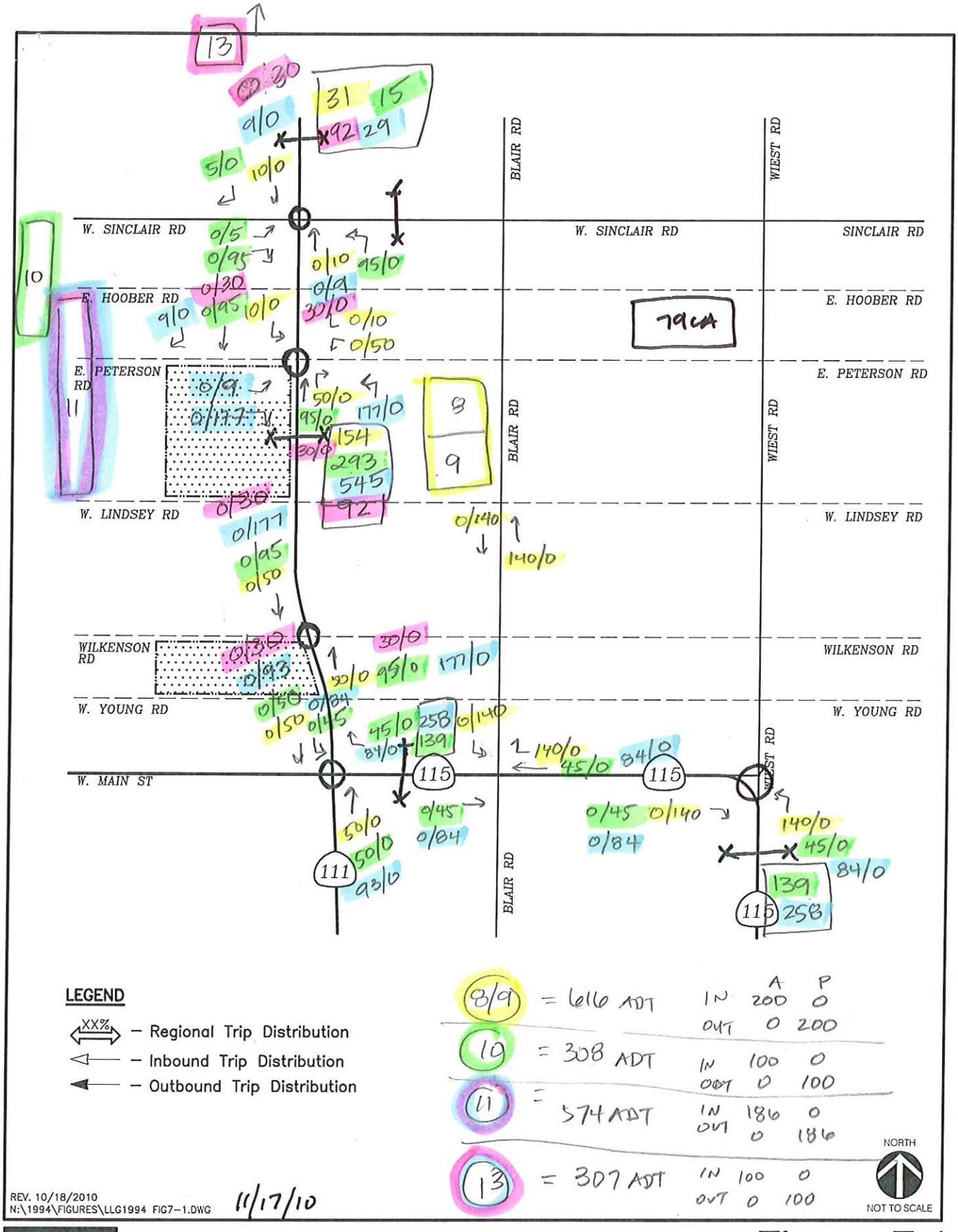

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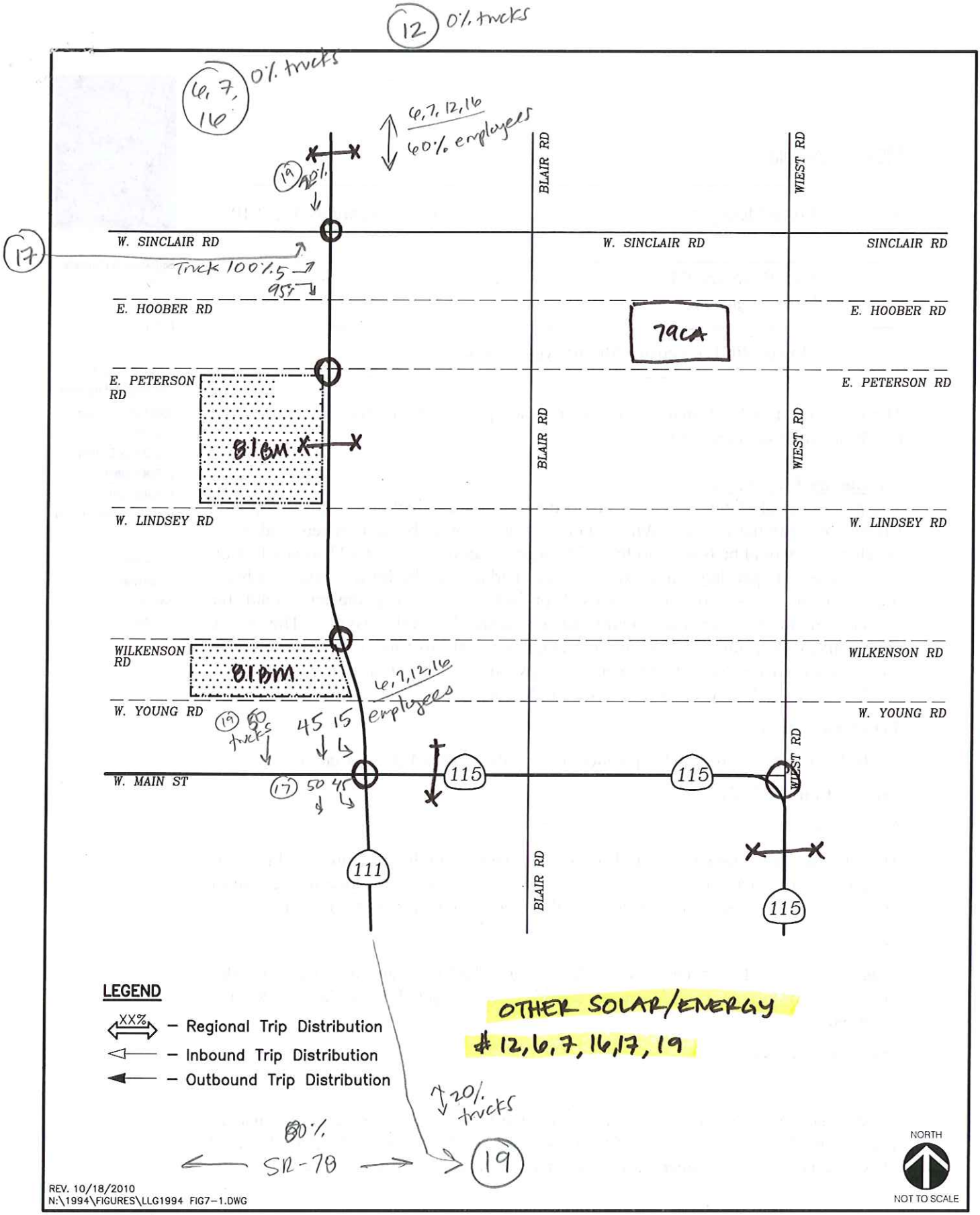
Figure 7-1

Construction Project ~~Distribution~~ ASSIGNMENT

EMPLOYEE ~~Truck~~ Trips

8IBM: SALTON SEA SOLAR FARM II



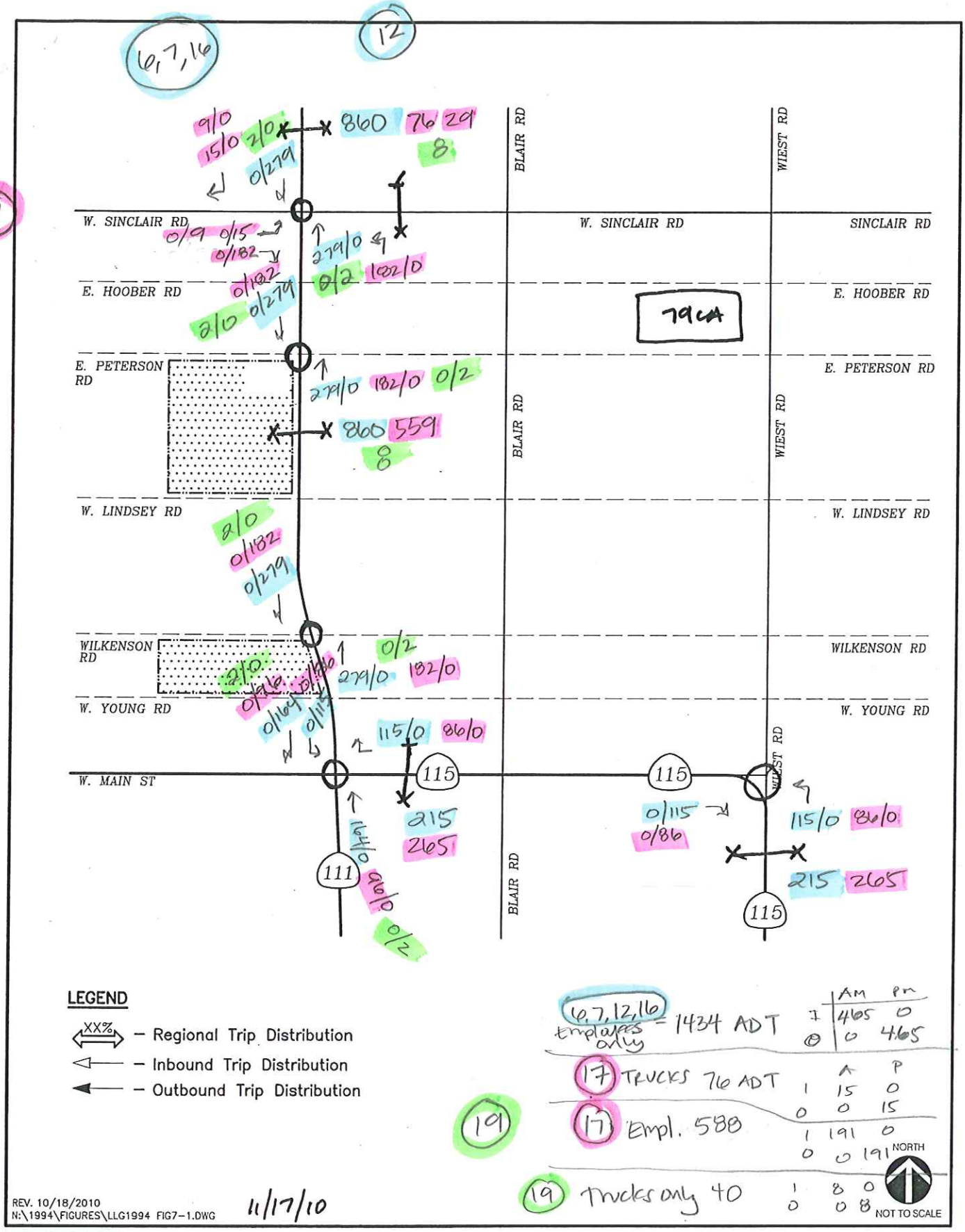
LINSCOTT LAW & GREENSPAN engineers

Figure 7-1

Construction Project Distribution

EMPLOYEES & Truck Trips

8IBM: SALTON SEA SOLAR FARM II



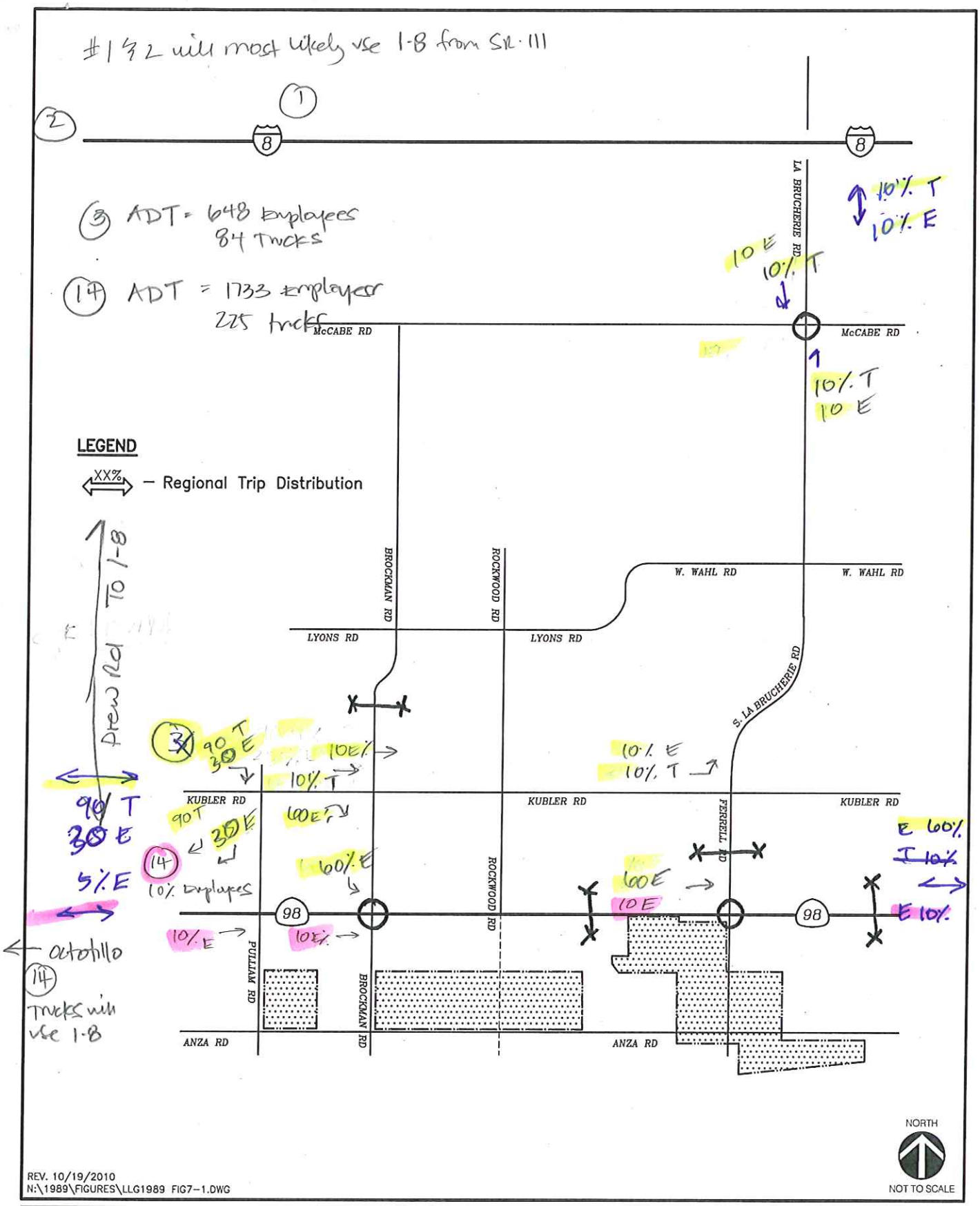
LINSCOTT LAW & GREENSPAN engineers

Figure 7-1

Construction Project Distribution

Truck Trips

8IBM: SALTON SEA SOLAR FARM II

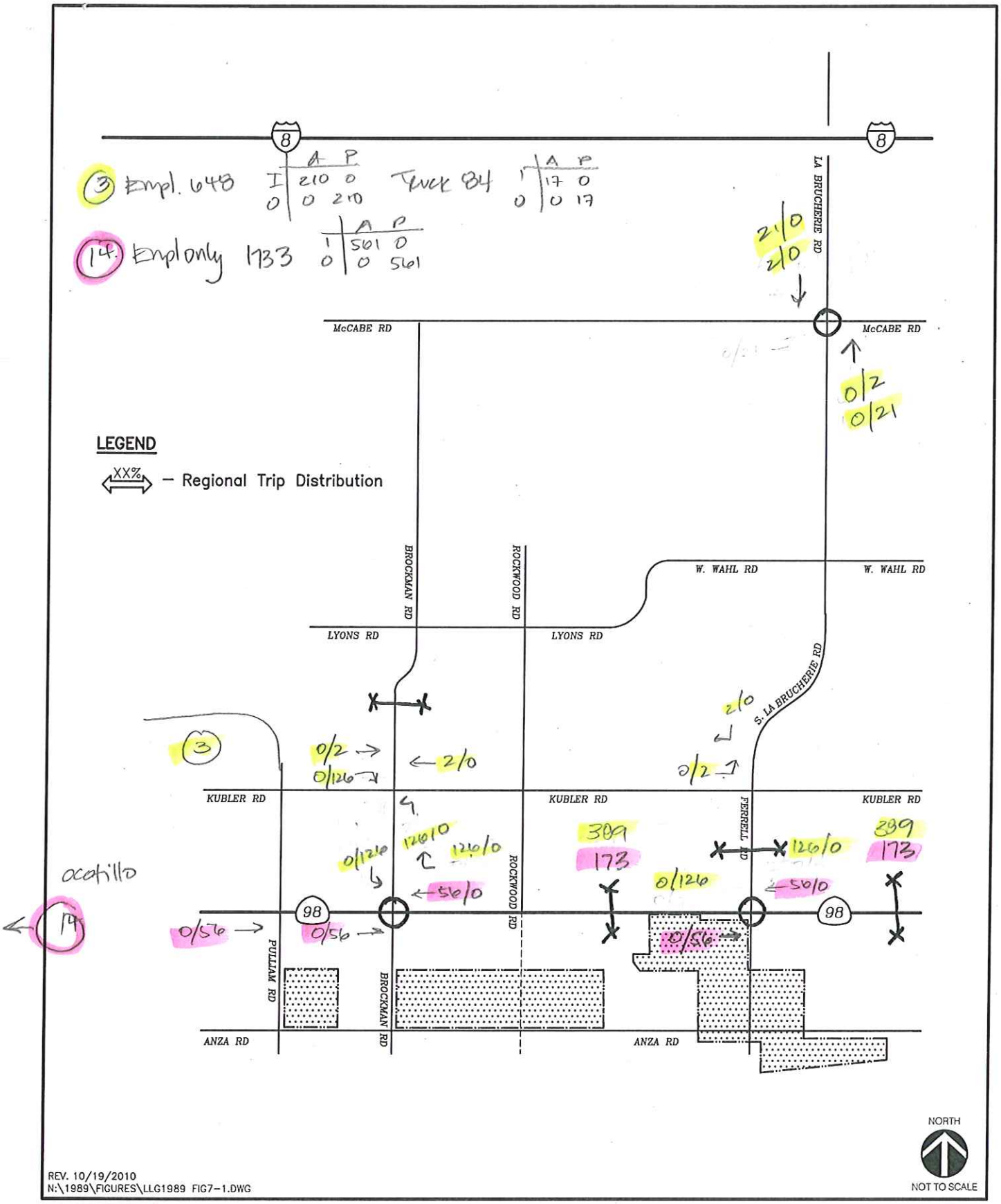


LINSCOTT LAW & GREENSPAN engineers

Figure 7-1

Construction Project Distribution Truck Trips

MOUNT SIGNAL SOLAR FARM I



REV. 10/19/2010
N:\1989\FIGURES\LLG1989 FIG7-1.DWG

LINSCOTT LAW & GREENSPAN engineers

Figure 7-1

Construction Project Distribution Truck Trips

MOUNT SIGNAL SOLAR FARM I

Imperial County

Alternative Power Projects

CUP	Project Name	Project Acres	Mega-Watts	Daily Total	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
10-0011	1. Imperial Solar South	903.00	200.00							
Construction Vehicles				462	150	0	150	0	150	150
Construction Trucks				30	6	0	6	0	6	6
Construction Trucks (w/PCE 2.0)				60	12	0	12	0	12	12
Total Construction				**522**	**162**	**0**	**162**	**0**	**162**	**162**
O&M Vehicles				**60**	**12**	**3**	**15**	**3**	**12**	**15**
10-0012	2. Imperial Solar West	1,138.00	200.00							
Construction Vehicles				462	150	0	150	0	150	150
Construction Trucks				30	6	0	6	0	6	6
Construction Trucks (w/PCE 2.0)				60	12	0	12	0	12	12
Total Construction				**522**	**162**	**0**	**162**	**0**	**162**	**162**
O&M Vehicles				**60**	**12**	**3**	**15**	**3**	**12**	**15**
10-0017	3. Centinela Solar	2,067.00	175.00							
Construction Vehicles				648	210	0	210	0	210	210
Construction Trucks				42	8	0	8	0	8	8
Construction Trucks (w/PCE 2.0)				84	17	0	17	0	17	17
Total Construction				**732**	**227**	**0**	**227**	**0**	**227**	**227**
O&M Vehicles				**84**	**17**	**4**	**21**	**4**	**17**	**21**
10-0015	4. Superstition Solar 1	5,516.00	500.00							
Construction Vehicles				1155	374	0	374	0	374	374
Construction Trucks				75	15	0	15	0	15	15
Construction Trucks (w/PCE 2.0)				150	30	0	30	0	30	30
Total Construction				**1305**	**404**	**0**	**404**	**0**	**404**	**404**
O&M Vehicles				**150**	**30**	**8**	**38**	**8**	**30**	**38**
	Calexico Solar Farm I	1,033.00	200.00							
	Calexico Solar Farm II	1,477.00	200.00							
10-0031	Mount Signal Solar	1,375.00	200.00							

Imperial County

Alternative Power Projects

CUP	Project Name	Project Acres	Mega-Watts	Daily Total	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
10-0028	5. Bethel Solar X, Inc	571.00	49.40							
Construction Vehicles				304	99	0	99	0	99	99
Construction Trucks				20	4	0	4	0	4	4
Construction Trucks (w/PCE 2.0)				40	8	0	8	0	8	8
Total Construction				**344**	**106**	**0**	**106**	**0**	**106**	**106**
O&M Vehicles				**15**	**3**	**1**	**4**	**1**	**3**	**4**
10-0032	6. Energy Source Solar I,LLC	480.00	80.00							
Construction Vehicles				493	160	0	160	0	160	160
Construction Trucks				32	6	0	6	0	6	6
Construction Trucks (w/PCE 2.0)				64	13	0	13	0	13	13
Total Construction				**557**	**172**	**0**	**172**	**0**	**172**	**172**
O&M Vehicles				**24**	**5**	**1**	**6**	**1**	**5**	**6**
10-0033	7. Energy Source Solar II,LLC	480.00	80.00							
Construction Vehicles				493	160	0	160	0	160	160
Construction Trucks				32	6	0	6	0	6	6
Construction Trucks (w/PCE 2.0)				64	13	0	13	0	13	13
Total Construction				**557**	**172**	**0**	**172**	**0**	**172**	**172**
O&M Vehicles				**24**	**5**	**1**	**6**	**1**	**5**	**6**
10-0029	Salton Sea Solar Farm I	320.00	49.90							
10-0030	Salton Sea Solar Farm II	623.00	100.00							
10-0034	8. Calipat Solar Farm I	280.00	50.00							
Construction Vehicles				308	100	0	100	0	100	100
Construction Trucks				20	4	0	4	0	4	4
Construction Trucks (w/PCE 2.0)				40	8	0	8	0	8	8
Total Construction				**348**	**108**	**0**	**108**	**0**	**108**	**108**
O&M Vehicles				**15**	**3**	**1**	**4**	**1**	**3**	**4**

Imperial County

Alternative Power Projects

CUP	Project Name	Project Acres	Mega-Watts	Daily Total	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
10-0035	9. Calipat Solar Farm II	280.00	50.00							
Construction Vehicles				308	100	0	100	0	100	100
Construction Trucks				20	4	0	4	0	4	4
Construction Trucks (w/PCE 2.0)				40	8	0	8	0	8	8
Total Construction				**348**	**108**	**0**	**108**	**0**	**108**	**108**
O&M Vehicles				**15**	**3**	**1**	**4**	**1**	**3**	**4**
~~10-0025~~	~~Frink Road Solar Power~~	~~280.00~~	~~30.04~~							
~~10-0024~~	~~Keystone Solar Power~~	~~40.00~~	~~6.06~~							
10-0036	10. Midway Solar Farm I	326.00	50.00							
Construction Vehicles				308	100	0	100	0	100	100
Construction Trucks				20	4	0	4	0	4	4
Construction Trucks (w/PCE 2.0)				40	8	0	8	0	8	8
Total Construction				**348**	**108**	**0**	**108**	**0**	**108**	**108**
O&M Vehicles				**15**	**3**	**1**	**4**	**1**	**3**	**4**
10-0037	11. Midway Solar Farm II	803.00	155.00							
Construction Vehicles				574	186	0	186	0	186	186
Construction Trucks				37	7	0	7	0	7	7
Construction Trucks (w/PCE 2.0)				74	15	0	15	0	15	15
Total Construction				**648**	**201**	**0**	**201**	**0**	**201**	**201**
O&M Vehicles				**47**	**9**	**2**	**12**	**2**	**9**	**12**
10-0014	12. IV Solar Company	123.00	23.00							
Construction Vehicles				142	46	0	46	0	46	46
Construction Trucks				9	2	0	2	0	2	2
Construction Trucks (w/PCE 2.0)				18	4	0	4	0	4	4
Total Construction				**160**	**50**	**0**	**50**	**0**	**50**	**50**
O&M Vehicles				**7**	**1**	**0**	**2**	**0**	**1**	**2**

Imperial County

Alternative Power Projects

CUP	Project Name	Project Acres	Mega-Watts	Daily Total	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
10-0005	13. Chocolate Mountain	320.00	49.90							
Construction Vehicles				307	100	0	100	0	100	100
Construction Trucks				20	4	0	4	0	4	4
Construction Trucks (w/PCE 2.0)				40	8	0	8	0	8	8
Total Construction				**347**	**108**	**0**	**108**	**0**	**108**	**108**
O&M Vehicles				**15**	**3**	**1**	**4**	**1**	**3**	**4**
		18,435.00	**2,448.30**							

CUP	Project Name	Project Acres	Mega-Watts							
10-0007	14. Ocotillo Express	15,000.00	750.00							
Construction Vehicles				1733	561	0	561	0	561	561
Construction Trucks				113	23	0	23	0	23	23
Construction Trucks (w/PCE 2.0)				225	45	0	45	0	45	45
Total Construction				**1958**	**606**	**0**	**606**	**0**	**606**	**606**
O&M Vehicles				**225**	**45**	**11**	**56**	**11**	**45**	**56**
BLM/CEC	15. IV Solar	6,140.00	709.00							
Construction Vehicles				1638	531	0	531	0	531	531
Construction Trucks				106	21	0	21	0	21	21
Construction Trucks (w/PCE 2.0)				213	43	0	43	0	43	43
Total Construction				**1850**	**573**	**0**	**573**	**0**	**573**	**573**
O&M Vehicles				**213**	**43**	**11**	**53**	**11**	**43**	**53**
		21,140.00	**1,459.00**							

Imperial County

Alternative Power Projects

CUP	Project Name	Project Acres	Mega-Watts	Daily Total	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total

CUP	Project Name	Project Acres	Mega-Watts							
G10-0002	16. Hudson Ranch II	326.26	49.90							
Construction Vehicles				307	100	0	100	0	100	100
Construction Trucks				20	4	0	4	0	4	4
Construction Trucks (w/PCE 2.0)				40	8	0	8	0	8	8
Total Construction				**347**	**108**	**0**	**108**	**0**	**108**	**108**
O&M Vehicles				**15**	**3**	**1**	**4**	**1**	**3**	**4**
10-0004	17. Black Rock Unit# 1 2 3	160.00	159.00							
Construction Vehicles				588	191	0	191	0	191	191
Construction Trucks				38	8	0	8	0	8	8
Construction Trucks (w/PCE 2.0)				76	15	0	15	0	15	15
Total Construction				**665**	**206**	**0**	**206**	**0**	**206**	**206**
O&M Vehicles				**48**	**10**	**2**	**12**	**2**	**10**	**12**
10-0002	18. Ram Power/Overlay	27,875.00	50.00							
Construction Vehicles				308	100	0	100	0	100	100
Construction Trucks				20	4	0	4	0	4	4
Construction Trucks (w/PCE 2.0)				40	8	0	8	0	8	8
Total Construction				**348**	**108**	**0**	**108**	**0**	**108**	**108**
O&M Vehicles				**15**	**3**	**1**	**4**	**1**	**3**	**4**
08-0023	19. Orni 19	32.00	49.90							
Construction Vehicles				307	100	0	100	0	100	100
Construction Trucks				20	4	0	4	0	4	4
Construction Trucks (w/PCE 2.0)				40	8	0	8	0	8	8
Total Construction				**347**	**108**	**0**	**108**	**0**	**108**	**108**
O&M Vehicles				**15**	**3**	**1**	**4**	**1**	**3**	**4**
		28,393.26	**308.80**							

Imperial County

Alternative Power Projects

CUP	Project Name	Project Acres	Mega-Watts	Daily Total	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
DG/JM/PV/S/energy project spreadsheet		67,968.26	4,216.10							

Rate Assumptions:

	ADT/MW Rate	AM/PM		
Construction Vehicles				
<= 100 MW	6.16	32.4%		
100>MW<200	3.7			
>=200 MW	2.31			
Construction Trucks				
<= 100 MW	0.4	20.0%		
100>MW<200	0.24			
>=200 MW	0.15			
O&M Vehicles			Split	
<= 100 MW	0.8	25.0%		80:20
100>MW<200	0.48			
>=200 MW	0.3			

Imperial County Planning & Development Services

Planning Project Status Report

***** As of October 29, 2010 *****

Internal Projects			Public Hearing Dates			
Project		Planner	[scheduled or projected for PC]			
Project/No.	APN		ALUC	EEC	PC	B/S
General Plans						
GP 06-0008 (Mosaic SP)	054-160-023-000	Jim		8/9/07	7/28/10	
GP 07-0005 (Procalamos RES)	059-140-007-000	Richard		5/29/08	11/24/10	
GP 07-0007 (Desert Springs Oasis)	034-300-011-000	Richard		6/26/08	TBD	
GP 07-0006 (Brookfield 101 Ranch SP)	040-190-010-000	David		4/24/08	12/8/10	
GP 07-0002 (Rancho Los Lagos SP)	040-130-010-000	David		8/23/07	12/8/10	
GP 08-0003 (Coyote Wells)	033-620-033-000	David			8/11/10	11/8/10
Specific Plans						
SP 06-0003 (Alder 70 - Scaroni)	054-290-004-000	Pat		n/a	n/a	
SP 06-0004 (Mosaic)	054-160-023-000	Jim		8/9/07	7/28/10	
SP 07-0003 (Procalamos RES)	059-140-007-000	Richard		5/29/08	11/24/10	
SP 07-0005 (Desert Springs Oasis)	034-300-001-000	Richard		6/26/08	TBD	
SP 08-0001 (Coyote Wells)	033-620-033-000	David			7/28/10	11/8/10
SP 07-0001 (Rancho Los Lago SP)	040-130-010-000	David		8/23/07	12/8/10	
SP 07-0004 (Brookfield 101 Ranch SP)	040-190-010-000	David		4/24/08	12/8/10	
Zone Changes						
ZC 06-0009 (Mosaic SP)	054-160-023-000	Jim		8/9/07	7/28/10	
ZC 06-0005 (Ramirez)	058-010-004-000	David			11/24/10	
ZC 07-0008 (Brookfield 101 Ranch SP)	040-190-010-000	David		4/24/08	12/8/10	
ZC 08-0003 (Coyote Wells)	033-620-033-000	David			n/a	11/8/10
ZC 07-0002 (Rancho Los Lagos SP)	040-130-010-000	David		8/23/07	12/8/10	
ZC 09-0002 (SunEco)	021-290-020-000	Angie				
ZC 08-0005 (J. Rodriguez)	054-260-005-000	Angie		4/7/10	10/27/10	
ZC 09-0001 (County Center II-ICOE)	054-510-001-000	Joe		n/a	n/a	
ZC 07-0009 (Desert Springs Oasis)	034-300-011-000	Richard		6/26/08	TBD	
ZC 07-0007 (Procalamos/Wesfinn)	059-140-007-000	Richard			11/24/10	
ZC 10-0002 (Ram Power)	039-110-015-000	Richard		n/a	n/a	
Environmental Impact Reports						
Alder 70 (Scaroni) EIR - [MBA]	El Centro East	Pat			n/a	
CUP 10-011 Imperial Solar Energy Center South	052-190-022-001	Pat	6/16/10	6/24/10		
CUP 10-012 Imperial Solar Energy Center West	034-360-076-001	Pat			7/14/10	8/10/10
Rancho Los Logos EIR - [MBA]	Brawley South	David		8/23/07	n/a	
Coyote Wells [PMC]	Ocotillo	David			11/8/10	
Brookfield 101 Ranch EIR [PMC]	Brawley South	David		4/24/08	n/a	
TR 00985 Wind Zero	033-620-033	David			7/14/10	11/8/10
Centinela Solar [DEIR]	Seeley	David			n/a	
Mosaic SP EIR - [BRG]	Heber	Jim		8/9/07	7/28/10	
Ocotillo Express LLC	West Ocotillo	Angie		n/a	n/a	
ORNI 19 Focused EIR	Brawley North	Angie		12/10/09	n/a	
Mesquite Regional Landfill (BRG)	Glamis area	Richard		7/12/09	11/10/10	
Procalamos RES EIR - [Recon]	Gateway	Richard		5/29/08	11/24/10	
Desert Springs Oasis [BRG]	Seeley North	Richard		6/26/08	TBD	
Tract Maps						
TR 00970 (Alder 70 -Scaroni)	054-290-004-000	Pat			n/a	
TR 00971 (Mosaic SP)	054-160-023-000	Jim		8/9/07	7/28/10	
TR 00974 (Rancho Los Lagos SP)	040-130-010-000	David		n/a	n/a	
TR 00979 (Brookfield 101 Ranch SP)	040-190-010-000	David			n/a	
TR 00980 (Desert Springs Oasis)	034-300-011-000	Richard		6/26/08	TBD	
TR 00972 (Procalamos/Westfinn Inv.)- RES	059-140-007-000	Richard		5/29/08	11/24/10	
TR 00941 (IPED, LLC)	059-210-045-000	Richard		2/28/08	Hold	

APPENDIX D

PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – CONSTRUCTION YEAR

Construction Year W/O AM Wed Apr 6, 2011 09:50:51 Page 2-1

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 La Brucherie/McCabe

Cycle (sec):	100	Critical Vol./Cap.(X):	0.750
Loss Time (sec):	0	Average Delay (sec/veh):	19.2
Optimal Cycle:	0	Level Of Service:	C

Street Name:	La Brucherie						McCabe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	18	127	5	128	112	57	45	256	17	4	237	163
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	127	5	128	112	57	45	256	17	4	237	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	20	138	5	139	122	62	49	278	18	4	258	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	138	5	139	122	62	49	278	18	4	258	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	138	5	139	122	62	49	278	18	4	258	177
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	0.85	0.03	0.43	0.38	0.19	0.14	0.81	0.05	0.01	0.59	0.40
Final Sat.:	53	372	15	222	194	99	76	434	29	6	343	236
Capacity Analysis Module:												
Vol/Sat:	0.37	0.37	0.37	0.63	0.63	0.63	0.64	0.64	0.64	0.75	0.75	0.75
Crit Moves:		****		****				****				****
Delay/Veh:	13.1	13.1	13.1	18.2	18.2	18.2	18.5	18.5	18.5	22.8	22.8	22.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.1	13.1	13.1	18.2	18.2	18.2	18.5	18.5	18.5	22.8	22.8	22.8
LOS by Move:	B	B	B	C	C	C	C	C	C	C	C	C
ApproachDel:	13.1			18.2			18.5			22.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.1			18.2			18.5			22.8		
LOS by Appr:	B			C			C			C		
AllWayAvgQ:	0.4	0.4	0.4	1.2	1.2	1.2	1.4	1.4	1.4	2.3	2.3	2.3

Note: Queue reported is the number of cars per lane.

```
Construction Year W/O AM   Wed Apr 6, 2011 09:50:51                  Page 3-1
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
*******************************************************************************
Intersection #2 SR 98/Ferrell
*******************************************************************************
Average Delay (sec/veh):      2.4       Worst Case Level Of Service: B[ 10.4]
*******************************************************************************
Street Name:             Ferrell                          SR 98
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  1  0  0    0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    5     0    28   16     2     7   37     1     1  128    21
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    5     0    28   16     2     7   37     1     1  128    21
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92
PHF Volume:     0    5     0    30   17     2     8   40     1     1  139    23
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    5     0    30   17     2     8   40     1     1  139    23
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx  6.5 xxxxx   7.1  6.5   6.2   4.1 xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:xxxxx  4.0 xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx  220 xxxxx   211  209   151   162 xxxx xxxxx    41 xxxx xxxxx
Potent Cap.: xxxx  682 xxxxx   750  691   901  1429 xxxx xxxxx  1581 xxxx xxxxx
Move Cap.:   xxxx  678 xxxxx   742  687   901  1429 xxxx xxxxx  1581 xxxx xxxxx
Volume/Cap:  xxxx 0.01  xxxx  0.04 0.03  0.00  0.01 xxxx  xxxx  0.00 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx  0.0 xxxxx  xxxx xxxx xxxxx   0.0 xxxx xxxxx   0.0 xxxx xxxxx
Control Del:xxxxx 10.4 xxxxx xxxxx xxxx xxxxx   7.5 xxxx xxxxx   7.3 xxxx xxxxx
LOS by Move:    *    B     *     *    *     *     A    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  727 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 10.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     *    *     *     *    *     *
ApproachDel:      10.4             10.3           xxxxxx           xxxxxx
ApproachLOS:         B                B                *                *
*******************************************************************************
Note: Queue reported is the number of cars per lane.
*******************************************************************************
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 SR 98/Brockman

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: A[9.7]

Street Name:	Brockman								SR 98							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 0 1 0				0 1 0 0 0				0 1 0 0 0				0 0 1! 0 0			
Volume Module:																
Base Vol:	0	5	2		4	3	0		1	32	0		3	72	68	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	5	2		4	3	0		1	32	0		3	72	68	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	0	5	2		4	3	0		1	35	0		3	78	74	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	5	2		4	3	0		1	35	0		3	78	74	
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	6.2		7.1	6.5	xxxxx		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	xxxxx	4.0	3.3		3.5	4.0	xxxxx		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	196	35		163	159	xxxxx		152	xxxx	xxxxx		35	xxxx	xxxxx	
Potent Cap.:	xxxx	703	1044		807	737	xxxxx		1441	xxxx	xxxxx		1590	xxxx	xxxxx	
Move Cap.:	xxxx	701	1044		799	735	xxxxx		1441	xxxx	xxxxx		1590	xxxx	xxxxx	
Volume/Cap:	xxxx	0.01	0.00		0.01	0.00	xxxx		0.00	xxxx	xxxx		0.00	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		7.5	xxxx	xxxxx		7.3	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	774		770	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	0.0		0.0	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	9.7		9.7	xxxx	xxxxx		7.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	A		A	*	*		A	*	*		*	*	*	
ApproachDel:	9.7				9.7				xxxxxx				xxxxxx			
ApproachLOS:	A				A				*				*			

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 La Brucherie/McCabe

Cycle (sec):	100	Critical Vol./Cap.(X):	0.277
Loss Time (sec):	0	Average Delay (sec/veh):	8.9
Optimal Cycle:	0	Level Of Service:	A

Street Name:	La Brucherie						McCabe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	57	2	100	63	21	28	82	6	4	72	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	57	2	100	63	21	28	82	6	4	72	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	62	2	109	68	23	30	89	7	4	78	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	62	2	109	68	23	30	89	7	4	78	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	62	2	109	68	23	30	89	7	4	78	111
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.08	0.89	0.03	0.55	0.34	0.11	0.24	0.71	0.05	0.02	0.40	0.58
Final Sat.:	54	614	22	392	247	82	172	504	37	18	317	449
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.10	0.28	0.28	0.28	0.18	0.18	0.18	0.25	0.25	0.25
Crit Moves:	****				****			****				****
Delay/Veh:	8.4	8.4	8.4	9.4	9.4	9.4	8.7	8.7	8.7	8.7	8.7	8.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.4	8.4	8.4	9.4	9.4	9.4	8.7	8.7	8.7	8.7	8.7	8.7
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	8.4			9.4			8.7			8.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.4			9.4			8.7			8.7		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

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                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
*******************************************************************************
Intersection #2 SR 98/Ferrell
*******************************************************************************
Average Delay (sec/veh):      2.0       Worst Case Level Of Service: B[ 10.8]
*******************************************************************************
Street Name:             Ferrell                          SR 98
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  0  1  0    0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0   15     1    24   11     1     3  179     1     1   55     8
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   15     1    24   11     1     3  179     1     1   55     8
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92  0.92 0.92  0.92
PHF Volume:     0   16     1    26   12     1     3  195     1     1   60     9
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   16     1    26   12     1     3  195     1     1   60     9
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx  6.5   6.2   7.1  6.5   6.2   4.1 xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:xxxxx  4.0   3.3   3.5  4.0   3.3   2.2 xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx  272   195   277  268    64    68 xxxx xxxxx   196 xxxx xxxxx
Potent Cap.: xxxx  638   851   680  641  1006  1545 xxxx xxxxx  1389 xxxx xxxxx
Move Cap.:   xxxx  636   851   664  639  1006  1545 xxxx xxxxx  1389 xxxx xxxxx
Volume/Cap:  xxxx 0.03  0.00  0.04 0.02  0.00  0.00 xxxx  xxxx  0.00 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.0 xxxx xxxxx   0.0 xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.3 xxxx xxxxx   7.6 xxxx xxxxx
LOS by Move:    *    *      *     *    *     *     A    *      *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx   646  xxxx  663 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx   0.1 xxxxx  0.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx  10.7 xxxxx 10.8 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     B     *    B     *     *    *      *     *    *     *
ApproachDel:      10.7             10.8           xxxxxx           xxxxxx
ApproachLOS:         B                B                *                *
*******************************************************************************
Note: Queue reported is the number of cars per lane.
*******************************************************************************
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 SR 98/Brockman

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: B[10.2]

Street Name:	Brockman								SR 98							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	1!	0 0	0	1	0	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	1	1	0		71	3	3		1	113	0		0	54	3	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1	1	0		71	3	3		1	113	0		0	54	3	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	1	1	0		77	3	3		1	123	0		0	59	3	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	1	1	0		77	3	3		1	123	0		0	59	3	
Critical Gap Module:																
Critical Gp:	7.1	6.5	xxxxx		7.1	6.5	6.2		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	xxxxx		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	189	187	xxxxx		186	185	60		62	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	776	711	xxxxx		779	713	1011		1554	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	770	711	xxxxx		778	712	1011		1554	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	0.00	0.00	xxxx		0.10	0.00	0.00		0.00	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*	*		A	*	*	*	*	*		
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	739	xxxx	xxxxx		xxxx	782	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	0.0	xxxx	xxxxx		xxxxx	0.4	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	9.9	xxxx	xxxxx		xxxxx	10.2	xxxxx		7.3	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*		*	B	*		A	*	*		*	*	*	
ApproachDel:	9.9				10.2				xxxxxx				xxxxxx			
ApproachLOS:	A				B				*				*			

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 La Brucherie/McCabe

Cycle (sec):	100	Critical Vol./Cap.(X):	0.795
Loss Time (sec):	0	Average Delay (sec/veh):	23.3
Optimal Cycle:	0	Level Of Service:	C

Street Name:	La Brucherie						McCabe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	18	127	5	128	175	57	45	256	17	4	237	163
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	127	5	128	175	57	45	256	17	4	237	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	20	138	5	139	190	62	49	278	18	4	258	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	138	5	139	190	62	49	278	18	4	258	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	138	5	139	190	62	49	278	18	4	258	177
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	0.85	0.03	0.35	0.49	0.16	0.14	0.81	0.05	0.01	0.59	0.40
Final Sat.:	50	350	14	183	250	82	72	408	27	5	324	223
Capacity Analysis Module:												
Vol/Sat:	0.39	0.39	0.39	0.76	0.76	0.76	0.68	0.68	0.68	0.80	0.80	0.80
Crit Moves:		****			****			****				****
Delay/Veh:	13.9	13.9	13.9	25.2	25.2	25.2	20.9	20.9	20.9	26.9	26.9	26.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.9	13.9	13.9	25.2	25.2	25.2	20.9	20.9	20.9	26.9	26.9	26.9
LOS by Move:	B	B	B	D	D	D	C	C	C	D	D	D
ApproachDel:	13.9			25.2			20.9			26.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.9			25.2			20.9			26.9		
LOS by Appr:	B			D			C			D		
AllWayAvgQ:	0.4	0.4	0.4	2.2	2.2	2.2	1.6	1.6	1.6	2.7	2.7	2.7

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 SR 98/Ferrell

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: B[11.1]

Street Name:	Ferrell						SR 98					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 1!	0	0	0 0 1!	0	0	0 0 1!	0	0
Volume Module:												
Base Vol:	0	5	0	28	16	65	7	37	1	1	219	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	5	0	28	16	65	7	37	1	1	219	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	5	0	30	17	71	8	40	1	1	238	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	5	0	30	17	71	8	40	1	1	238	23
Critical Gap Module:												
Critical Gp:	xxxxx	6.5	xxxxx	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	4.0	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	319	xxxxx	310	308	249	261	xxxx	xxxxx	41	xxxx	xxxxx
Potent Cap.:	xxxx	601	xxxxx	646	609	794	1315	xxxx	xxxxx	1581	xxxx	xxxxx
Move Cap.:	xxxx	597	xxxxx	638	605	794	1315	xxxx	xxxxx	1581	xxxx	xxxxx
Volume/Cap:	xxxx	0.01	xxxx	0.05	0.03	0.09	0.01	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	0.0	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	11.1	xxxxx	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	7.3	xxxx	xxxxx
LOS by Move:	*	B	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	716	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	11.1			11.0			xxxxxx			xxxxxx		
ApproachLOS:	B			B			*			*		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 SR 98/Brockman

Average Delay (sec/veh): 3.9 Worst Case Level Of Service: B[13.6]

Street Name:	Brockman								SR 98							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	1	0	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	0	5	2		4	3	0		1	32	8		157	72	68	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	5	2		4	3	0		1	32	8		157	72	68	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	0	5	2		4	3	0		1	35	9		171	78	74	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	5	2		4	3	0		1	35	9		171	78	74	
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	6.2		7.1	6.5	xxxxx		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	xxxxx	4.0	3.3		3.5	4.0	xxxxx		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	535	39		502	502	xxxxx		152	xxxx	xxxxx		43	xxxx	xxxxx	
Potent Cap.:	xxxx	455	1038		483	474	xxxxx		1441	xxxx	xxxxx		1578	xxxx	xxxxx	
Move Cap.:	xxxx	400	1038		433	417	xxxxx		1441	xxxx	xxxxx		1578	xxxx	xxxxx	
Volume/Cap:	xxxx	0.01	0.00		0.01	0.01	xxxx		0.00	xxxx	xxxx		0.11	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.4	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		7.5	xxxx	xxxxx		7.6	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	485		426	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	0.0		0.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	12.5		13.6	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	B		B	*	*		*	*	*		*	*	*	
ApproachDel:	12.5				13.6				xxxxxx				xxxxxx			
ApproachLOS:	B				B				*				*			

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 La Brucherie/McCabe

Cycle (sec):	100	Critical Vol./Cap.(X):	0.285
Loss Time (sec):	0	Average Delay (sec/veh):	9.2
Optimal Cycle:	0	Level Of Service:	A

Street Name:	La Brucherie						McCabe					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	120	2	100	63	21	28	82	6	4	72	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	120	2	100	63	21	28	82	6	4	72	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	5	130	2	109	68	23	30	89	7	4	78	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	130	2	109	68	23	30	89	7	4	78	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	130	2	109	68	23	30	89	7	4	78	111
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.94	0.02	0.55	0.34	0.11	0.24	0.71	0.05	0.02	0.40	0.58
Final Sat.:	27	652	11	382	241	80	164	480	35	17	302	428
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.20	0.28	0.28	0.28	0.19	0.19	0.19	0.26	0.26	0.26
Crit Moves:			****		****			****			****	
Delay/Veh:	9.0	9.0	9.0	9.6	9.6	9.6	9.0	9.0	9.0	9.0	9.0	9.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.0	9.0	9.0	9.6	9.6	9.6	9.0	9.0	9.0	9.0	9.0	9.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	9.0			9.6			9.0			9.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.0			9.6			9.0			9.0		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 SR 98/Ferrell

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: B[13.7]

Street Name:	Ferrell									SR 98								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1!	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	0	15		1		24	11		1		66	270		1		1	55		8	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0	15		1		24	11		1		66	270		1		1	55		8	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92		0.92	0.92		0.92	
PHF Volume:	0	16		1		26	12		1		72	293		1		1	60		9	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
FinalVolume:	0	16		1		26	12		1		72	293		1		1	60		9	
Critical Gap Module:																				
Critical Gp:	xxxxx	6.5		6.2		7.1	6.5		6.2		4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	xxxxx	4.0		3.3		3.5	4.0		3.3		2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	508		294		513	504		64		68	xxxx	xxxxx			295	xxxx	xxxxx		
Potent Cap.:	xxxx	471		750		475	473		1006		1545	xxxx	xxxxx			1278	xxxx	xxxxx		
Move Cap.:	xxxx	447		750		444	450		1006		1545	xxxx	xxxxx			1278	xxxx	xxxxx		
Volume/Cap:	xxxx	0.04		0.00		0.06	0.03		0.00		0.05	xxxx		xxxx		0.00	xxxx		xxxx	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		0.1	xxxx	xxxxx			0.0	xxxx	xxxxx		
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		7.4	xxxx	xxxxx			7.8	xxxx	xxxxx		
LOS by Move:	*	*		*		*	*		*		A	*		*		A	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		459		xxxx	453		xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx		0.1		xxxxx	0.3		xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx		13.2		xxxxx	13.7		xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*		B		*	B		*		*	*		*		*	*		*	
ApproachDel:	13.2					13.7					xxxxxx					xxxxxx				
ApproachLOS:	B					B					*					*				

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 SR 98/Brockman

Average Delay (sec/veh): 6.2 Worst Case Level Of Service: B[12.3]

Street Name:	Brockman						SR 98					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	0 1 0	0	0	0 0 0	1	0
Volume Module:												
Base Vol:	9	1	154	71	3	3	1	113	0	0	54	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	1	154	71	3	3	1	113	0	0	54	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	10	1	167	77	3	3	1	123	0	0	59	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	10	1	167	77	3	3	1	123	0	0	59	3
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	189	187	123	270	185	60	62	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	776	711	934	687	713	1011	1554	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	770	711	934	563	712	1011	1554	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.18	0.14	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	921	xxxxx	xxxx	578	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	0.5	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	9.8	xxxxx	xxxxx	12.3	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	B	*	A	*	*	*	*	*
ApproachDel:		9.8			12.3		xxxxxx			xxxxxx		
ApproachLOS:		A			B		*			*		

Note: Queue reported is the number of cars per lane.