

TRAFFIC IMPACT ANALYSIS  
**MOUNT SIGNAL SOLAR FARM I**  
County of Imperial, California  
June 10, 2011

LLG Ref. 3-10-1989-1

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## APPENDICES

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### APPENDIX

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- A. Intersection Manual Count Sheets, Fehr & Peers Traffic Volumes, & Caltrans 2009 Traffic Volumes
- B. Peak Hour Intersection Analysis Worksheets – *Existing*
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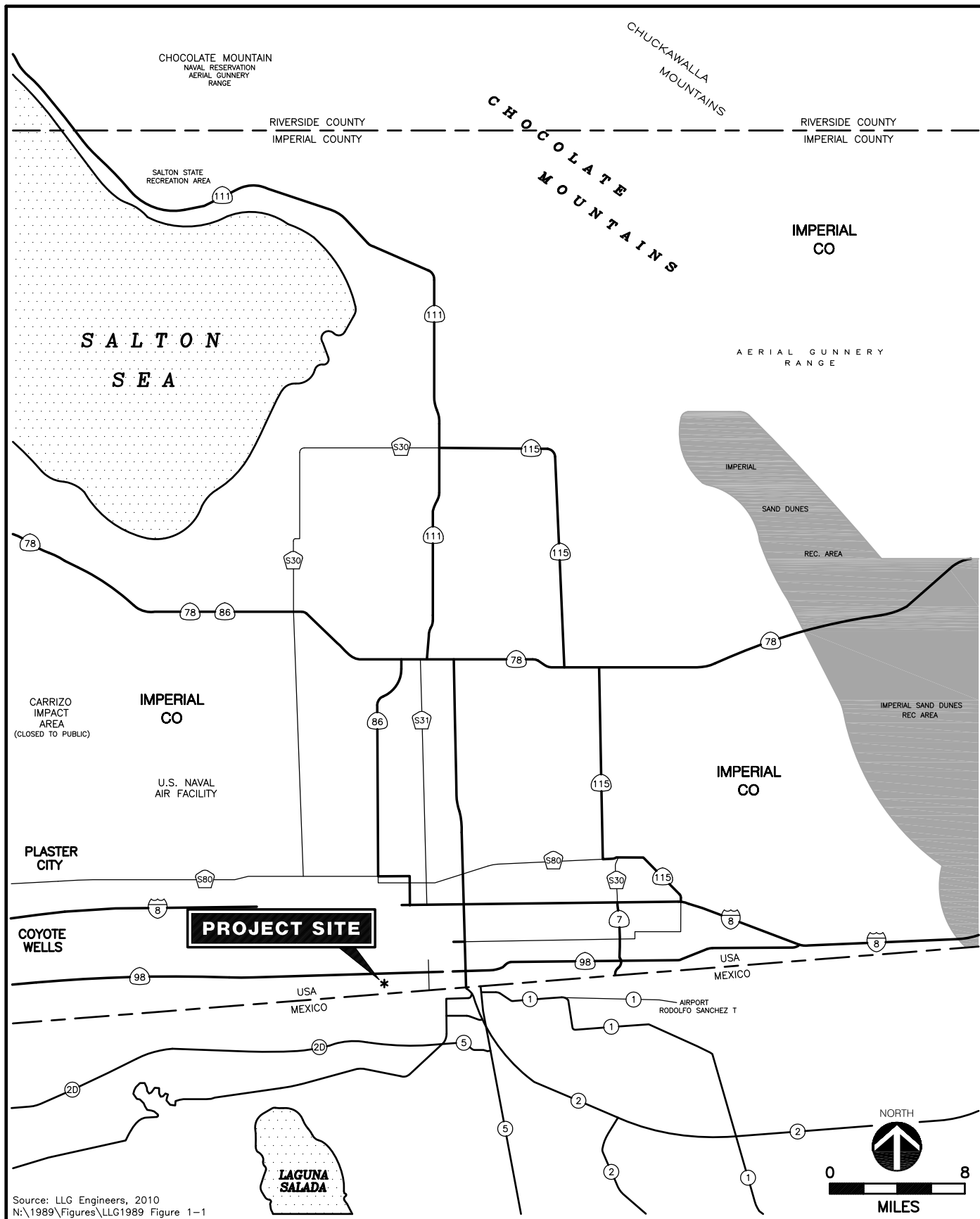
TRAFFIC IMPACT ANALYSIS  
**MOUNT SIGNAL SOLAR FARM I**  
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## 1.0 INTRODUCTION

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 Mount Signal 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:

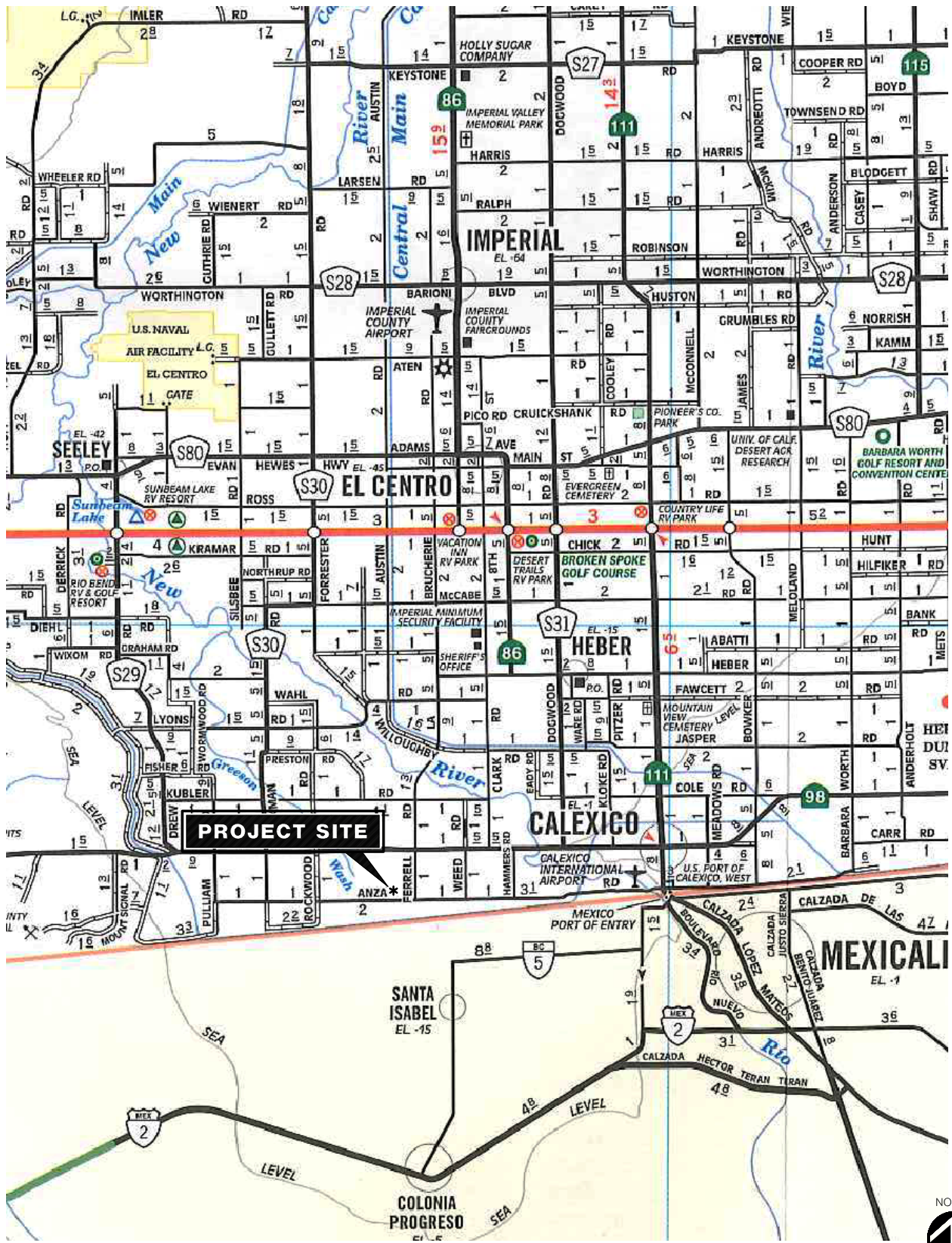
- Project Description
- Existing Conditions
- Analysis Approach and Methodology
- Significance Criteria
- Analysis of Existing Condition
- Trip Generation / Distribution / Assignment
- Analysis of Construction Year Conditions
- Post-Construction Operations
- Project Access
- Significance of Impacts and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

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



**Figure 1-1**

**Vicinity Map**



Source: AAA, 2005  
 N:\1989\Figures\LLG1989 Figure 1-2



**LINSCOTT  
 LAW &  
 GREENSPAN**  
*engineers*

**Figure 1-2**  
**Project Area Map**

## 2.0 PROJECT DESCRIPTION

The proposed Mount Signal Solar Farm I project would construct a 200 megawatt photovoltaic plant on a currently undeveloped parcel in Imperial County. The Project is comprised of eight parcels totaling 1,403 acres situated about 2.5 miles west of Calexico in Imperial County, California. The eight parcels are all located generally south of SR-98 and north of Mandrapa Road. The current use is irrigated agriculture.

Construction is anticipated to begin in the second quarter of 2012, 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 is will be provided as paved, public road access via SR-98, County Highway S30, and Ferrell Road. For the purposes of this analysis, all traffic was assumed to use a single access point at the SR 98/Ferrell Road intersection. This provides the most conservative analysis since it assumes the highest concentration of traffic at one location.

Post-construction Operations and Maintenance will be comprised of 3 on-site staff members during normal business hours, plus one security guard on-site during each of three daily shifts: 1<sup>st</sup> watch, 2<sup>nd</sup> watch and 3<sup>rd</sup> watch. Operations and maintenance traffic will be a small percentage of the short-term traffic associated with the project's construction phase.



## 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.

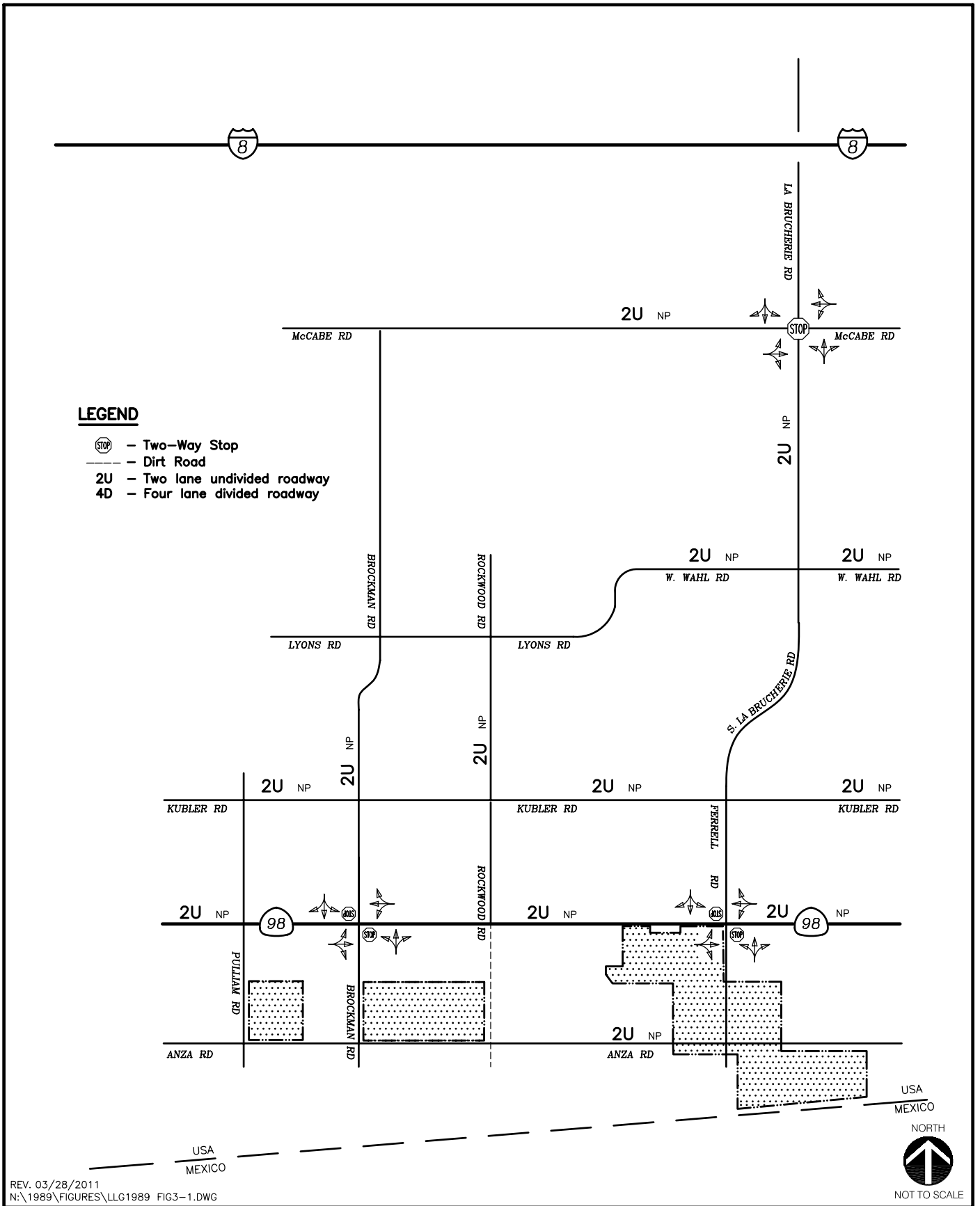
*Appendix A* contains the manual intersection and segment count sheets and Caltrans 2009 traffic volumes.

TABLE 3–1  
EXISTING TRAFFIC VOLUMES

Street Segment	Source	Date	ADT <sup>a</sup>
<b>Brockman Road</b> Lyons Road to Kubler Road	LLG	2010	180
<b>Ferrell Road</b> Kubler Road to SR 98	LLG	2010	800
<b>SR 98</b> Rockwood Road to Ferrell Road	LLG	2010	1,730
East of Ferrell Road	Caltrans	2009	2,650

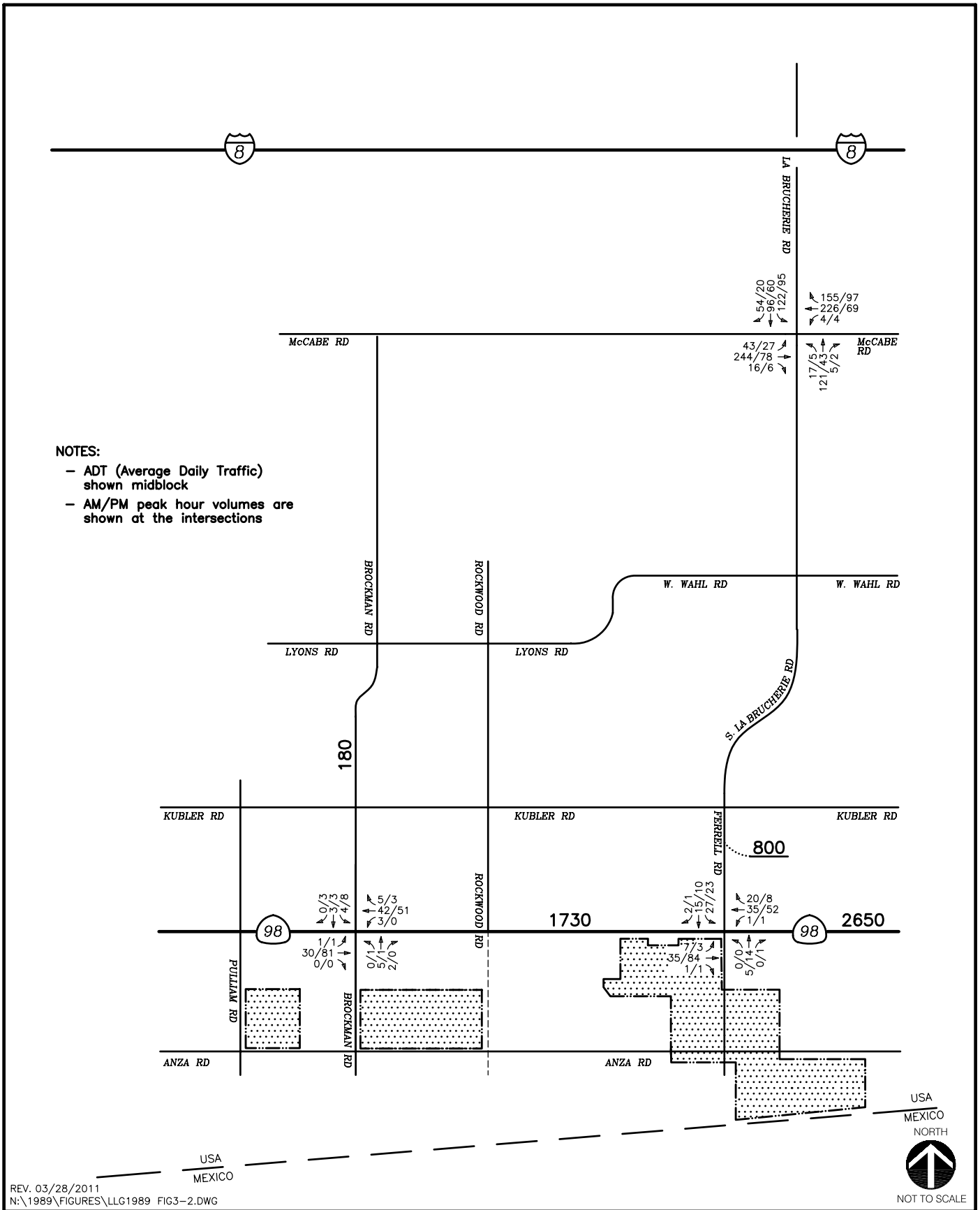
**Footnotes:**

- a. Average Daily Traffic Volume.



**Figure 3-1**

**Existing Conditions Diagram**



**Figure 3-2**

**Existing Traffic Volumes  
AM/PM Peak Hours & ADT**

MOUNT SIGNAL 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). Quantitative analyses have been 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 the proposed project is scheduled for 2012, existing volumes have been increased by a 5% growth factor to account for any cumulative project development that may occur between 2010 and 2012. In addition, conservative traffic volume assignments for several alternative energy projects proposed in Imperial County have been included in the baseline condition. *Section 8.0* discusses the baseline condition in further detail. Analyses have been prepared for the following scenarios:

- Existing (Year 2010)
- Baseline Without Construction Project (Year 2012)
- Baseline + Construction Project (Year 2012)

Given the very limited traffic associated with the Operations and Maintenance of the project (40 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** summarizes 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
Collector	64 / 84	13,700	22,800	27,400	30,800	34,200
Local Collector	40 / 70	1,900	4,100	7,100	10,900	16,200
Residential Street	40 / 60	*	*	< 1,500	*	*
Residential Cul-de-Sac / Loop Street	40/60	*	*	< 1,500	*	*
Industrial Collector	76 / 96	5,000	10,000	14,000	17,000	20,000
Industrial Local Street	44 / 64	2,500	5,000	7,000	8,500	10,000

\* 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 <sup>a</sup>	Allowable Increase Due to Project Impacts <sup>b</sup>					
	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 <sup>c</sup>

**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 <sup>a</sup>	LOS <sup>b</sup>
La Brucherie Road/ McCabe Road	AWSC <sup>c</sup>	AM	16.5	C
		PM	8.7	A
SR 98/ Ferrell Road	MSSC <sup>d</sup>	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	Capacity (LOS E) <sup>a</sup>	ADT <sup>b</sup>	LOS <sup>c</sup>	V/C <sup>d</sup>
<b>Brockman Road</b> Lyons Road to Kubler Road	2-Ln Local Collector	16,200	180	A	0.01
<b>Ferrell Road</b> Kubler Road to SR 98	2-Ln Local Collector	16,200	800	A	0.05
<b>SR 98</b> Rockwood 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 Valley 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

Project traffic generation was determined for two phases using methodology developed for a similar solar project in the study area. The two phases for the proposed project are: *Construction*, and *Operations and Maintenance (O&M)*. The construction phase is expected to commence in the second quarter of 2012, with opening year planned for the end of the year 2012. Trip generation for each phase is based on site-specific trip generating characteristic provided by the applicant. For the O&M phase, the following personnel would be expected:

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

The trip generation for the Mount Signal 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, a maximum of 462 ADT could be generated by passenger vehicles, with 150 inbound trips during the AM peak hour and 150 outbound trips during the PM peak hour. Also, a maximum of 30 ADT could be generated by trucks, with 6 inbound and 6 outbound trips during the AM and PM peak hours, respectively. A passenger car equivalence factor (PCE) of 2.0 is applied to these trips for the purposes of the analysis to account for the reduced performance characteristics (stopping, starting, maneuvering, etc) of heavy vehicles in the traffic flow.

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

TABLE 7-1  
PROJECT TRIP GENERATION

Trip Type	Daily Total (ADT) <sup>a</sup>	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
<b>Construction</b>							
Vehicles	462	150	0	150	0	150	150
Trucks	30	6	0	6	0	6	6
<b>Total (w/PCE<sup>b</sup>)</b>	<b>522</b>	<b>162</b>	<b>0</b>	<b>162</b>	<b>0</b>	<b>162</b>	<b>162</b>
<b>Operations and Maintenance (O&amp;M)</b>							
Vehicles	40	8	2	10	2	8	10
Trucks	0	0	0	0	0	0	0
<b>Total (w/PCE)</b>	<b>40</b>	<b>8</b>	<b>2</b>	<b>10</b>	<b>2</b>	<b>8</b>	<b>10</b>

**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.

**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 522 ADT, with 162 inbound/0 outbound trips during the AM peak hour, and 0 inbound/162 outbound trips during the PM peak hour.

### 7.1 Trip Distribution

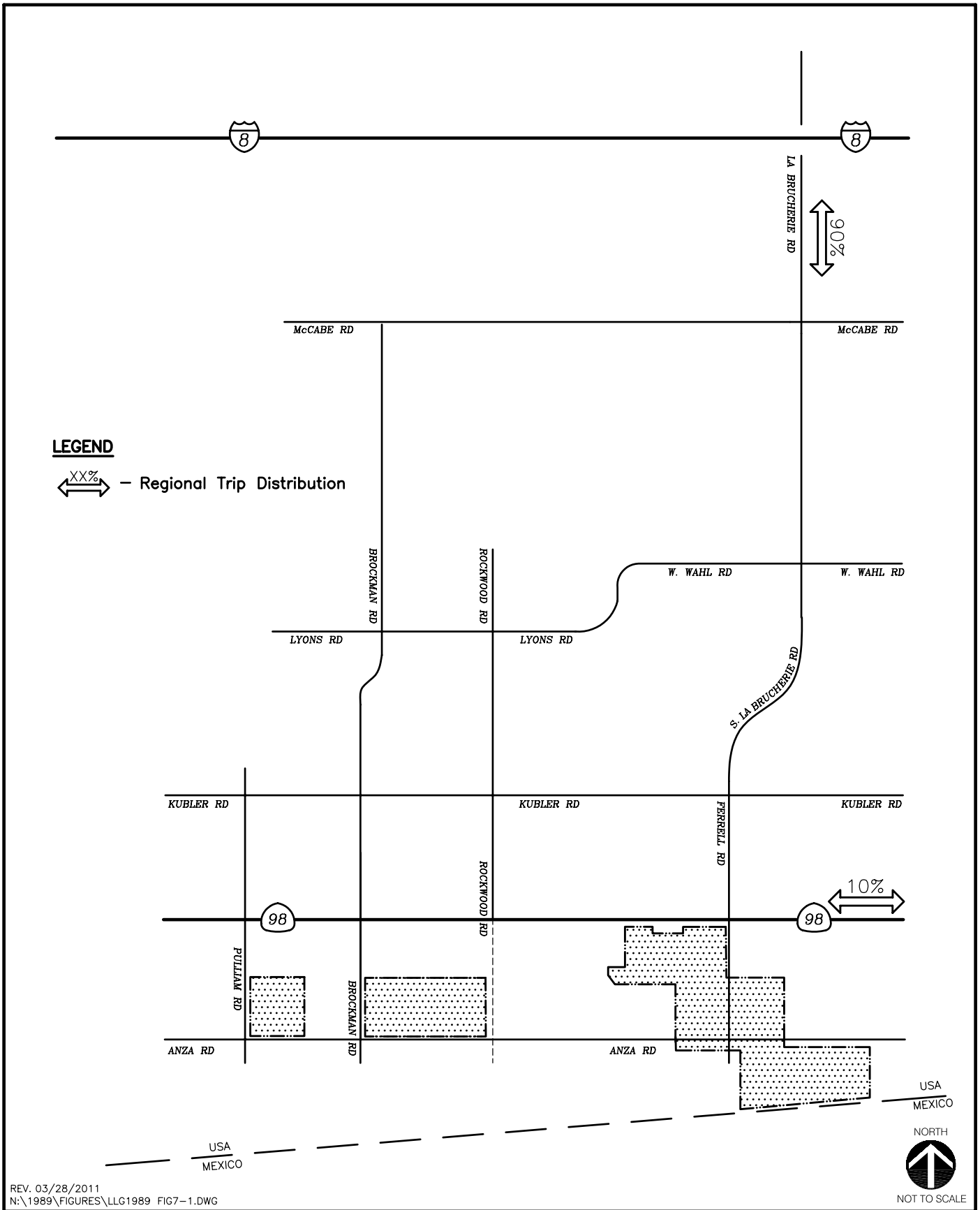
Regional trip distribution for construction truck traffic was estimated based on information from the applicant that material deliveries will be from the Los Angeles area. **Figure 7-1** shows the distribution of truck traffic, which is primarily oriented along La Brucherie Road and SR 98 in the study 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/Ferrell Road intersection. This provides a worst-case analysis since it focuses the highest intensity of the construction phase traffic at one location. It should be noted that other access to some parcels may be possible via roadways west of the project (e.g., Rockwood Road, Brockman Road, Pulliam Road); however no new impacts would be expected given the partial nature of this traffic relative to the worst-case analysis presented in this study.

## 7.2 Project Trip Assignment

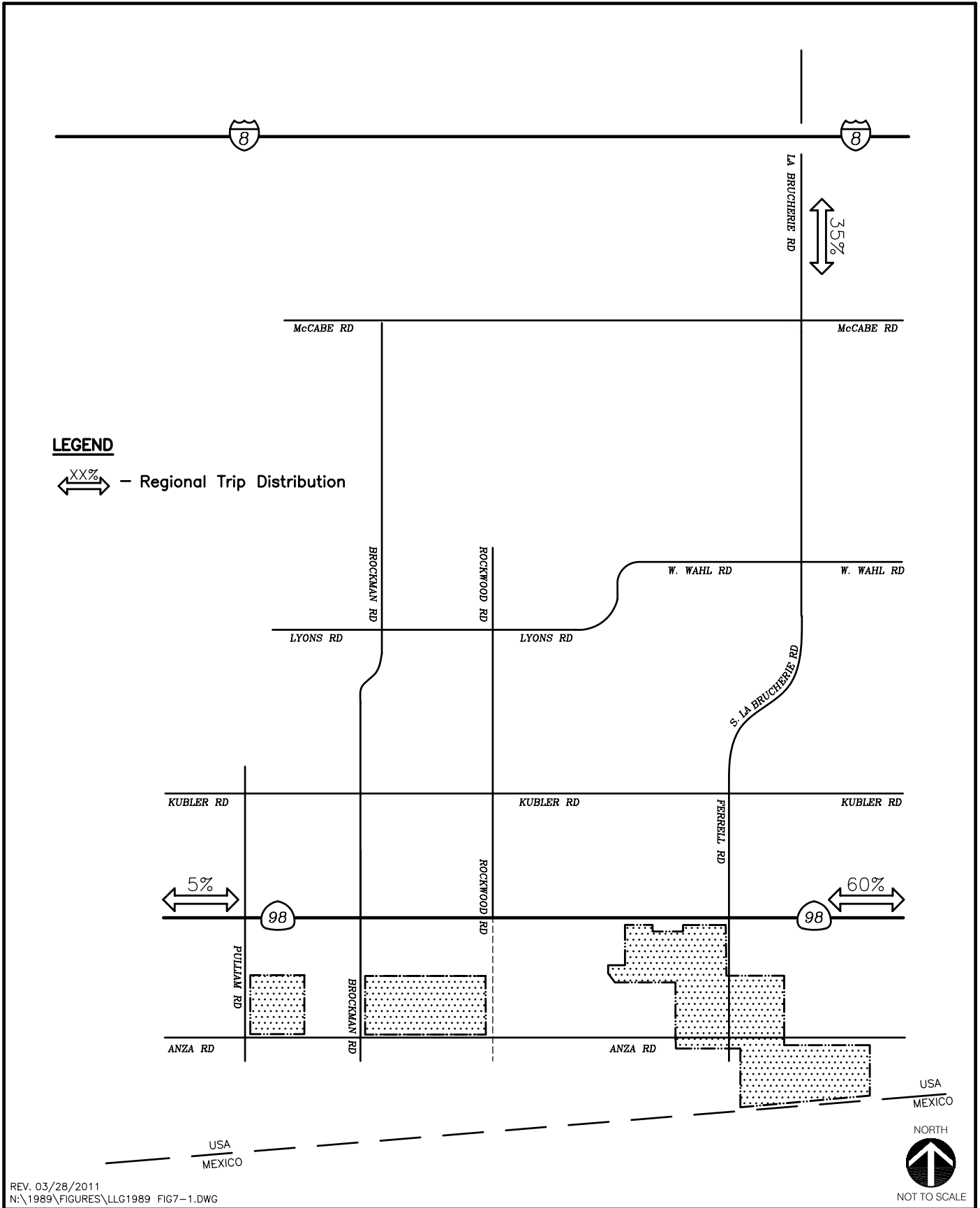
The trip generation summaries shown in *Table 7-1* were multiplied by the related truck and employee distribution percentages shown on *Figures 7-1* and *7-2*, respectively. The construction truck traffic assignment is shown on *Figure 7-3*. *Figure 7-4* shows the employee vehicle traffic assignment.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



**Figure 7-1**

**Construction Project Distribution  
Truck Trips**

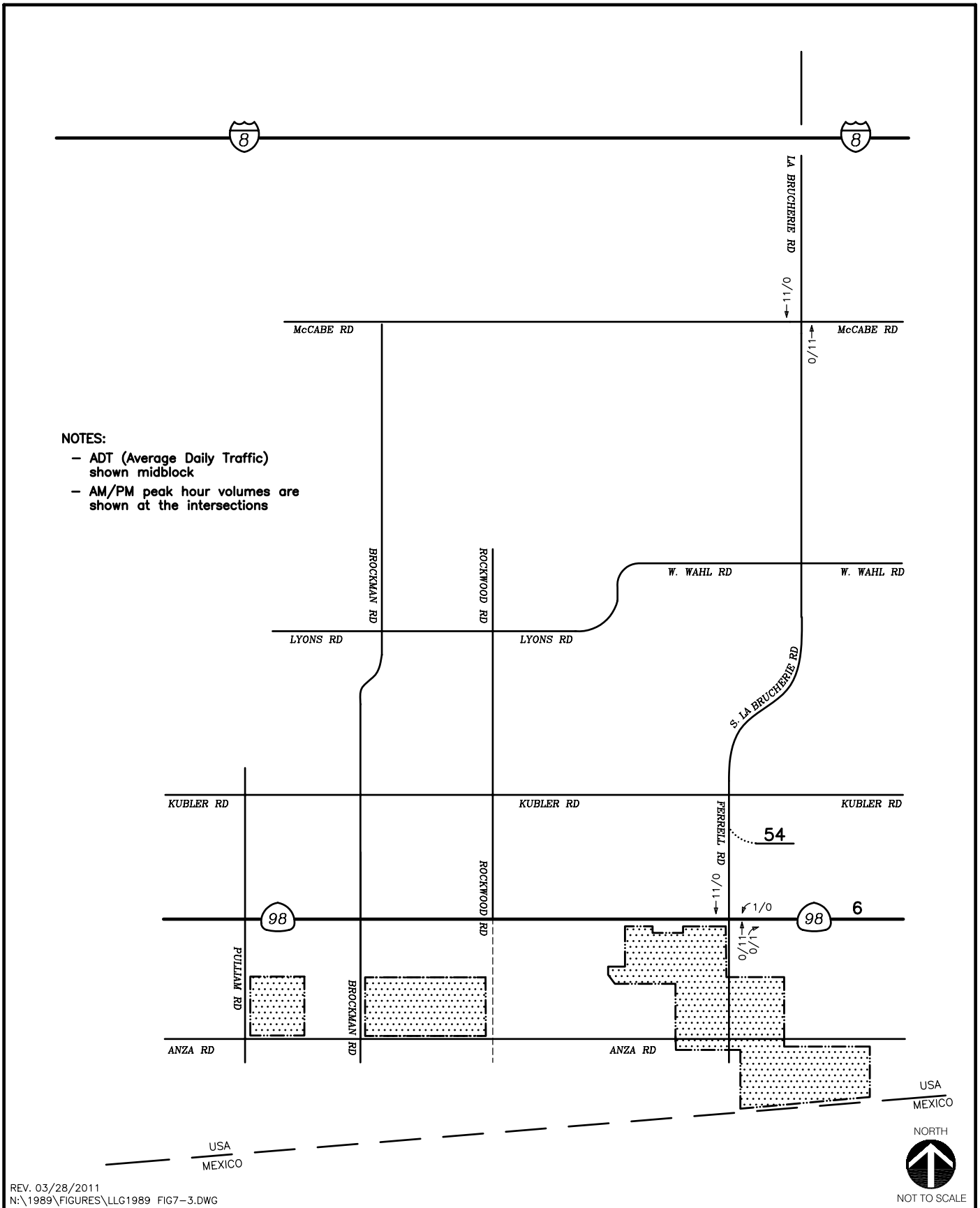
MOUNT SIGNAL SOLAR FARM I



**Figure 7-2**

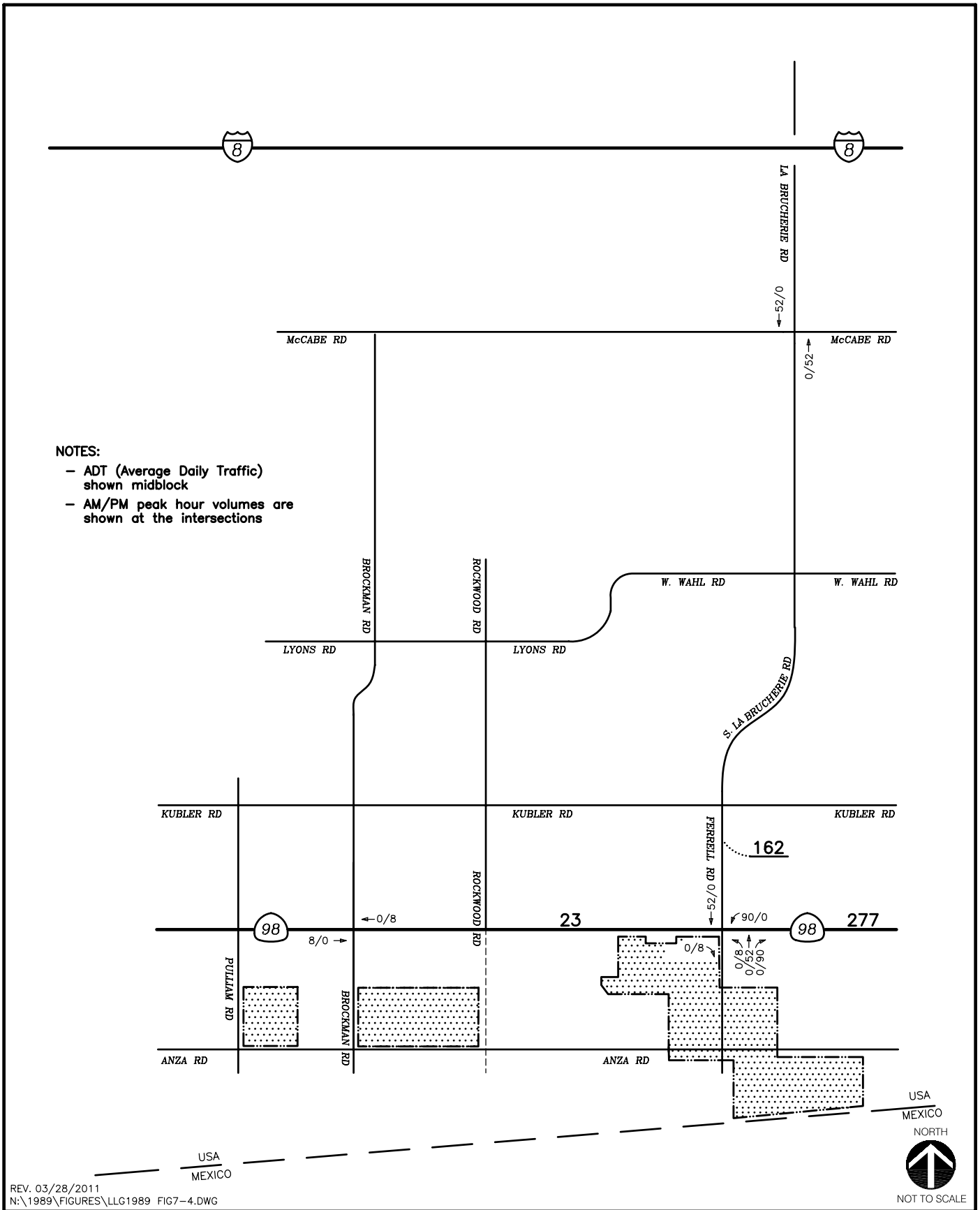
**Construction Project Distribution  
 Employee Trips**

MOUNT SIGNAL SOLAR FARM I



**Figure 7-3**  
**Construction Project Traffic Volumes**  
**Truck Trips**  
**AM/PM Peak Hours & ADT**



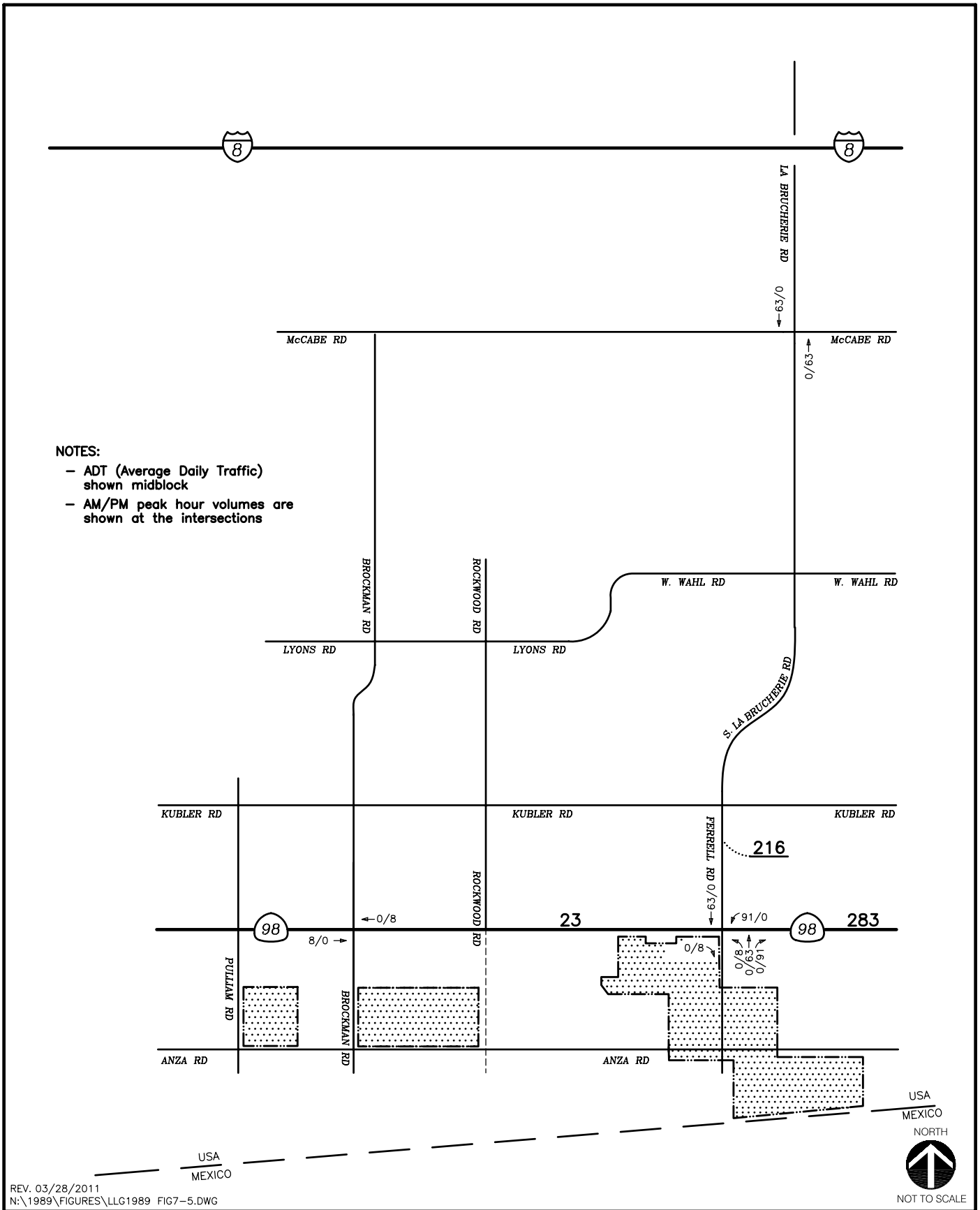


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**Figure 7-4**  
Construction Project Traffic Volumes  
Employee Trips  
AM/PM Peak Hours & ADT

MOUNT SIGNAL SOLAR FARM I



REV. 03/28/2011  
N:\1989\FIGURES\LLG1989 FIG7-5.DWG



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

MOUNT SIGNAL SOLAR FARM I

## 8.0 CONSTRUCTION YEAR ANALYSIS

Project construction is anticipated to start in 2012. 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 time of construction, 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 + Construction Project Analysis

The total construction project traffic was added to the baseline without construction project traffic, and the potential impacts associated with the proposed project were calculated by comparing the results. The following is a summary of the intersection and segment analyses. *Figure 8-2* shows the *Baseline + Construction Project* traffic volumes in the study area.

#### 8.2.1 Intersection Analysis

*Table 8-1* also summarizes the *Baseline + 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 the construction project traffic. The increase in delay due to the construction traffic varies between 0.0 and 3.7 seconds at these intersections, which is considered *not significant*.

*Appendix D* contains the both the *Baseline Without Construction Project* and *Baseline + 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 + 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 the construction project traffic. The increase in V/C due to the construction traffic varies between 0.0 and 0.02 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 Construction Project Traffic		$\Delta^c$ Delay
			Delay <sup>a</sup>	LOS <sup>b</sup>	Delay	LOS	
La Brucherie Road/ McCabe Road	AWSC <sup>d</sup>	AM	19.2	C	23.3	C	4.1
		PM	8.9	A	9.2	A	0.3
SR 98/ Ferrell Road	MSSC <sup>e</sup>	AM	10.4	B	14.4	B	4.0
		PM	10.8	B	12.4	B	1.6
SR 98/ Brockman Road	MSSC	AM	9.7	A	9.8	A	0.1
		PM	10.2	B	10.2	B	0.0

**Footnotes:**

- a. Average delay expressed in seconds per vehicle.
- b. Level of Service.
- c.  $\Delta$  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

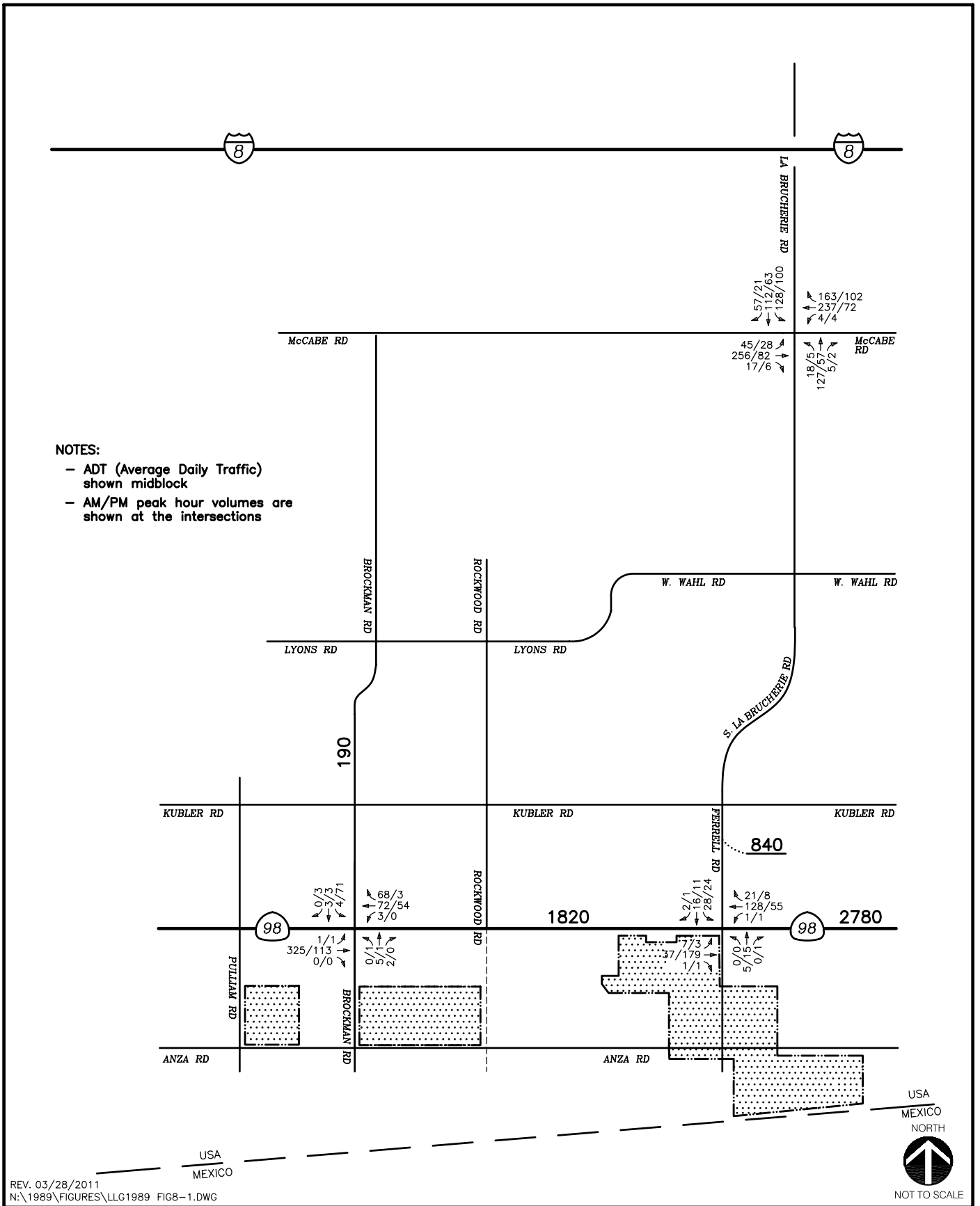
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

**TABLE 8-2**  
**CONSTRUCTION YEAR STREET SEGMENT OPERATIONS**

Street Segment	Functional Roadway Classification	Existing Capacity (LOS E) <sup>a</sup>	Baseline Without Construction Project Traffic			Baseline With Construction Project Traffic			$\Delta^e$
			ADT <sup>b</sup>	V/C <sup>c</sup>	LOS <sup>d</sup>	ADT	V/C	LOS	
<b>Brockman Road</b>									
Lyons Road to Kubler Road	2-Ln Local Collector	16,200	190	0.01	A	190	0.01	A	0.00
<b>Ferrell Road</b>									
Kubler Road to SR 98	2-Ln Local Collector	16,200	840	0.05	A	1,056	0.07	A	0.02
<b>SR 98</b>									
Rockwood Road to Ferrell Road	2-Ln Local Collector	16,200	2,100	0.13	B	2,123	0.13	B	0.00
East of Ferrell Road	2-Ln Local Collector	16,200	3,060	0.19	B	3,343	0.21	B	0.02

**Footnotes:**

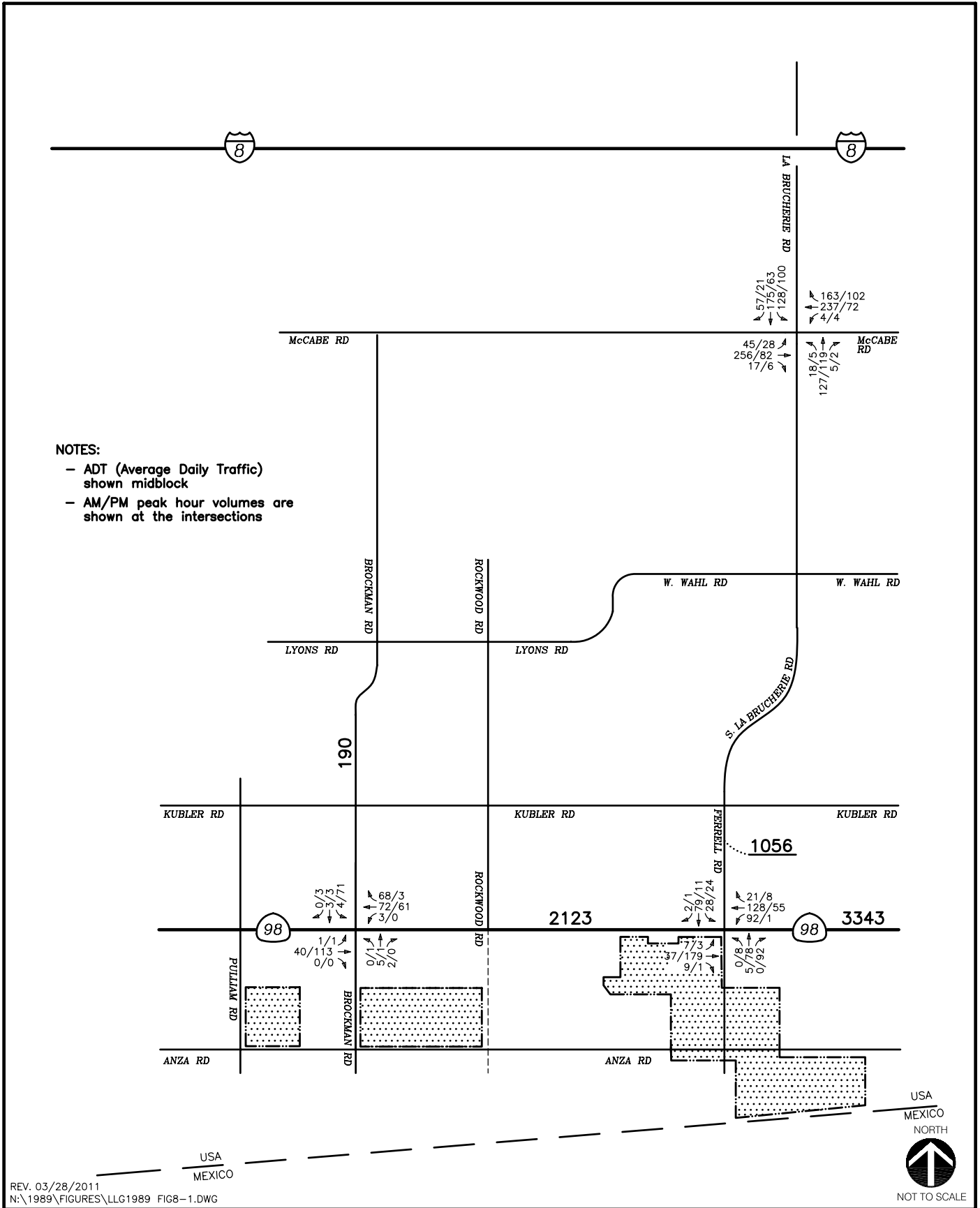
- a. Roadway capacity corresponding to Level of Service E from Imperial County Standard Street Classification, Average Daily Vehicle Trips table.
- b. Average Daily Traffic volumes
- c. Volume / Capacity ratio.
- d. Level of Service
- e. Increase in V/C due to construction traffic.



**Figure 8-1**

**Baseline Traffic Volumes  
AM/PM Peak Hours & ADT**

MOUNT SIGNAL SOLAR FARM I



REV. 03/28/2011  
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**Figure 8-2**

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

MOUNT SIGNAL SOLAR FARM I



## 9.0 POST-CONSTRUCTION OPERATIONAL TRAFFIC

The Operations and Maintenance of the plant subsequent to construction will generate 40 ADT with 10 maximum total peak hour volumes during either peak hour. 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 eight parcels located east to west along the southerly side of SR 98, between Pulliam Road to the west and Ferrell Road to the east. Paved access to the sites is available via Pulliam Road, Brockman Road and Ferrell Road. Rockwood Road is not paved.

Project access was assumed via the existing SR 98/Ferrell 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/Brockman Road and SR 98/Pulliam Road intersections, were they to be used to access the southerly parcels. Access using Rockwood Road may result in undesirable dust conditions due to the lack of pavement. Consideration should be given to using alternative access via Brockman Road for construction of the parcel between the two.

## 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 construction phase of the proposed project, which is shown to generate more traffic than the subsequent maintenance and operations phase. Therefore, no significant impacts would be associated with the maintenance and operations phase, either. No mitigation measures are required.

TECHNICAL APPENDICES  
**MOUNT SIGNAL SOLAR FARM I**  
County of Imperial, California  
June 10, 2011

LLG Ref. 3-10-1989-1

**Linscott, Law &  
Greenspan, Engineers**

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Suite 100

San Diego, CA 92111

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## APPENDICES

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### APPENDIX

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- A. Intersection Manual Count Sheets, Fehr & Peers Traffic Volumes, & Caltrans 2008 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 + 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**

Start Time	S LA BRUCHERIE RD Southbound				W MCCABE RD Westbound				S LA BRUCHERIE RD Northbound				W MCCABE RD Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
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	

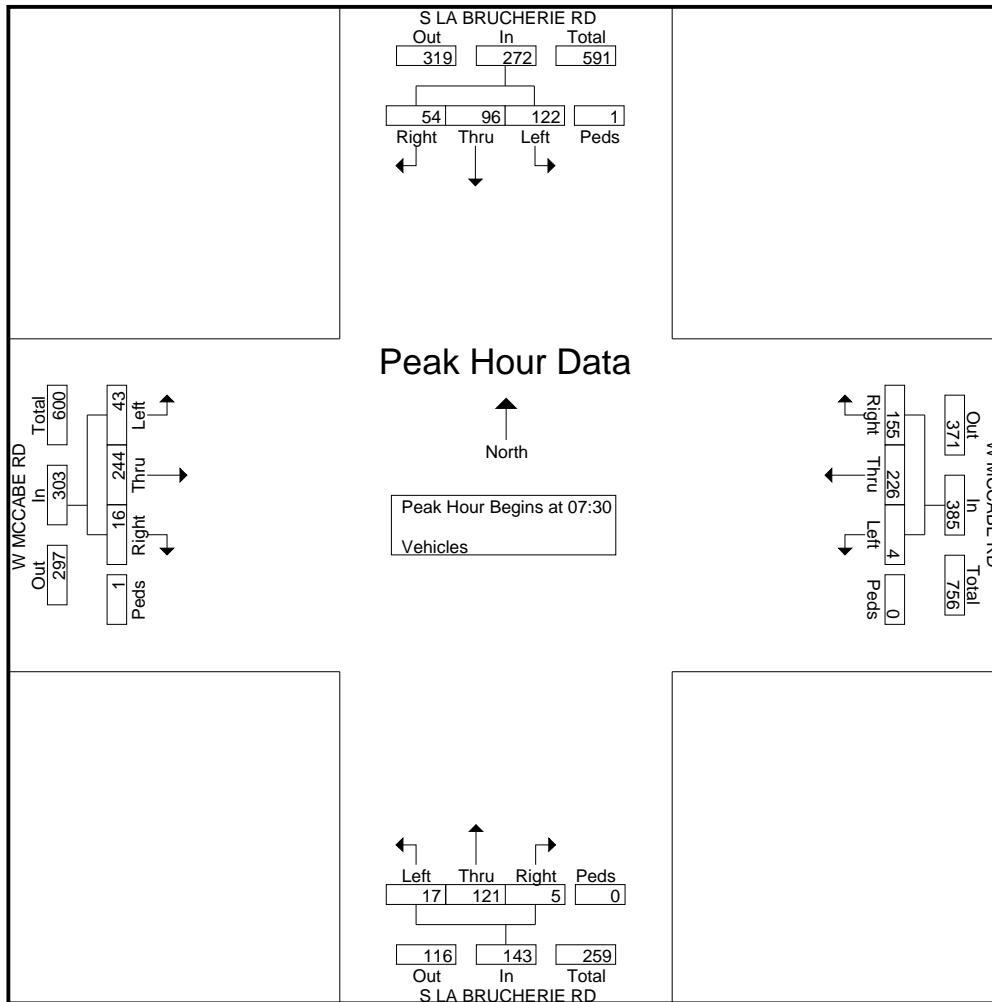


# True Count

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

Start Time	S LA BRUCHERIE RD Southbound					W MCCABE RD Westbound					S LA BRUCHERIE RD Northbound					W MCCABE RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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

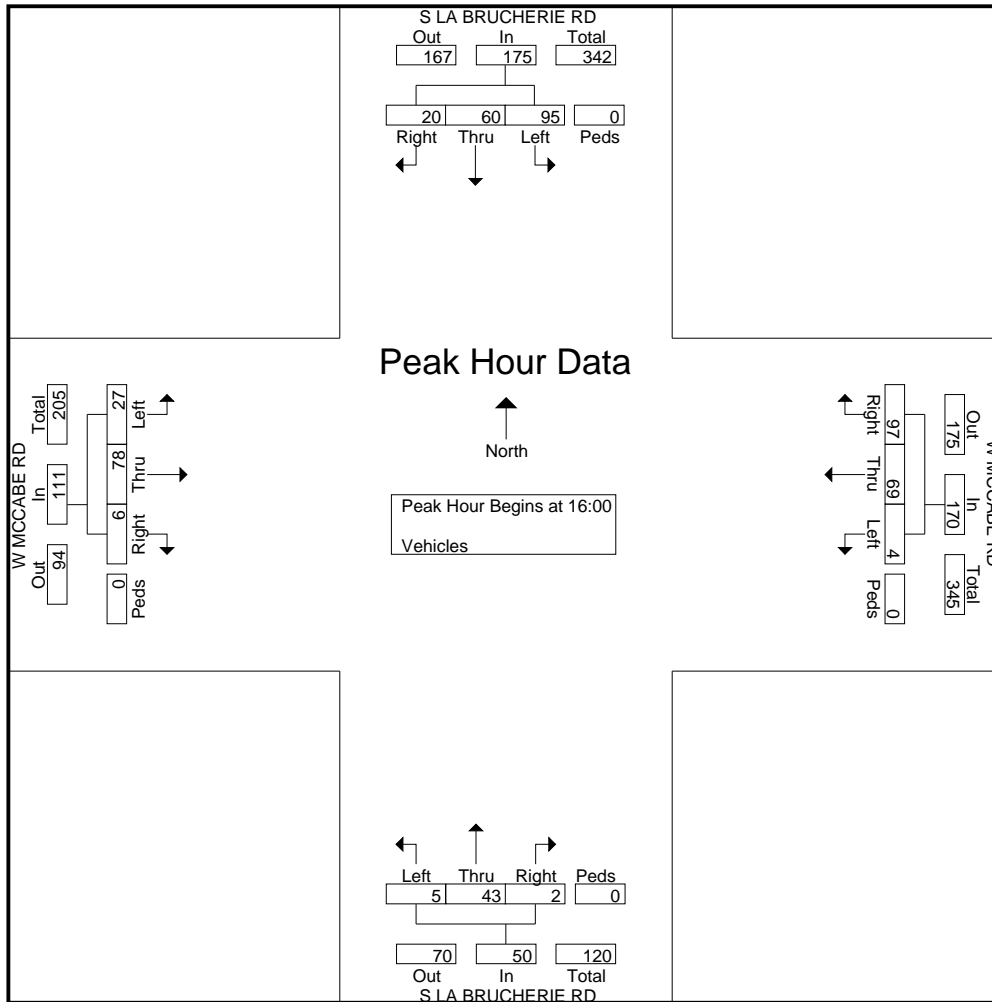


# True Count

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

Start Time	S LA BRUCHERIE RD Southbound					W MCCABE RD Westbound					S LA BRUCHERIE RD Northbound					W MCCABE RD Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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**

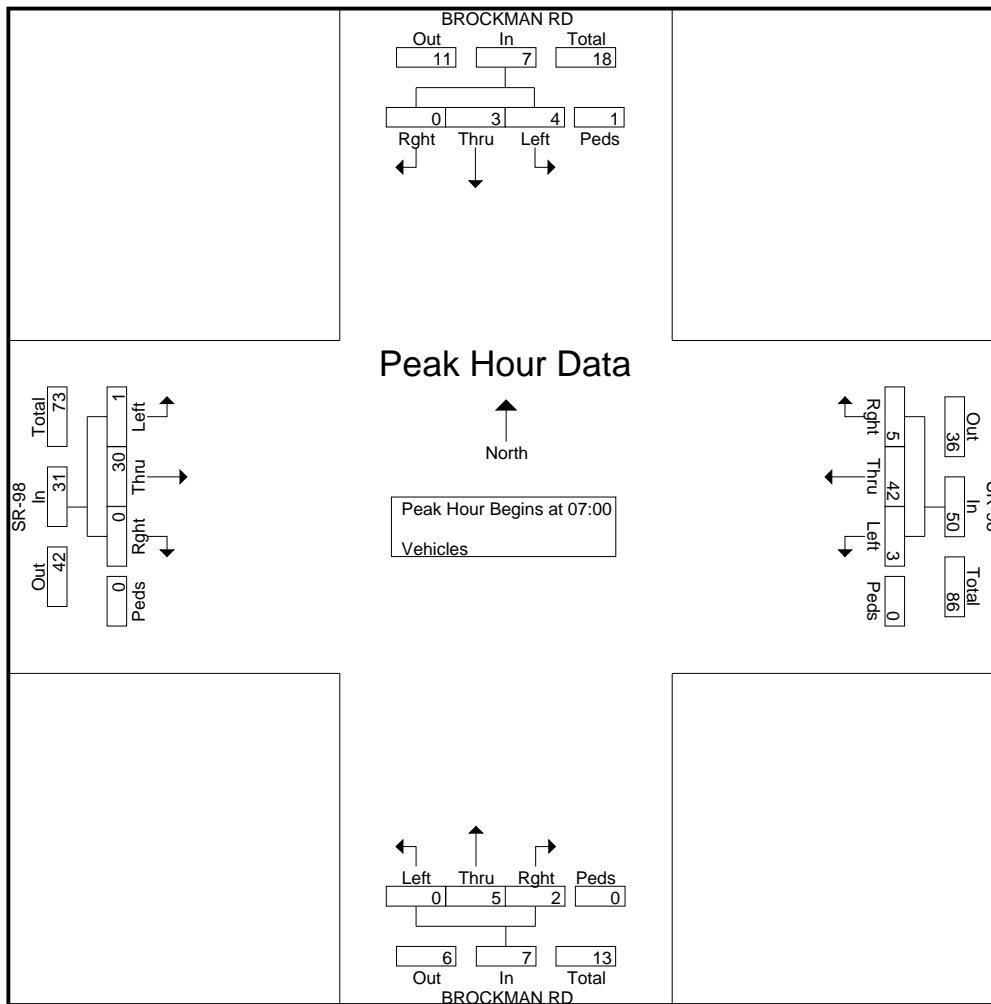
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07:15	2	0	0	0	3	15	2	0	0	0	1	0	0	6	0	0	29
07:30	1	1	0	0	0	10	1	0	0	3	0	0	1	11	0	0	28
07:45	0	1	0	0	0	8	0	0	0	1	1	0	0	11	0	0	22
Total	4	3	0	1	3	42	5	0	0	5	2	0	1	30	0	0	96
08:00	1	0	0	0	0	6	0	0	0	0	0	0	0	9	0	0	16
08:15	1	0	2	0	0	5	0	0	0	0	0	0	0	5	0	0	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

Start Time	BROCKMAN RD Southbound					SR-98 Westbound					BROCKMAN RD Northbound					SR-98 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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

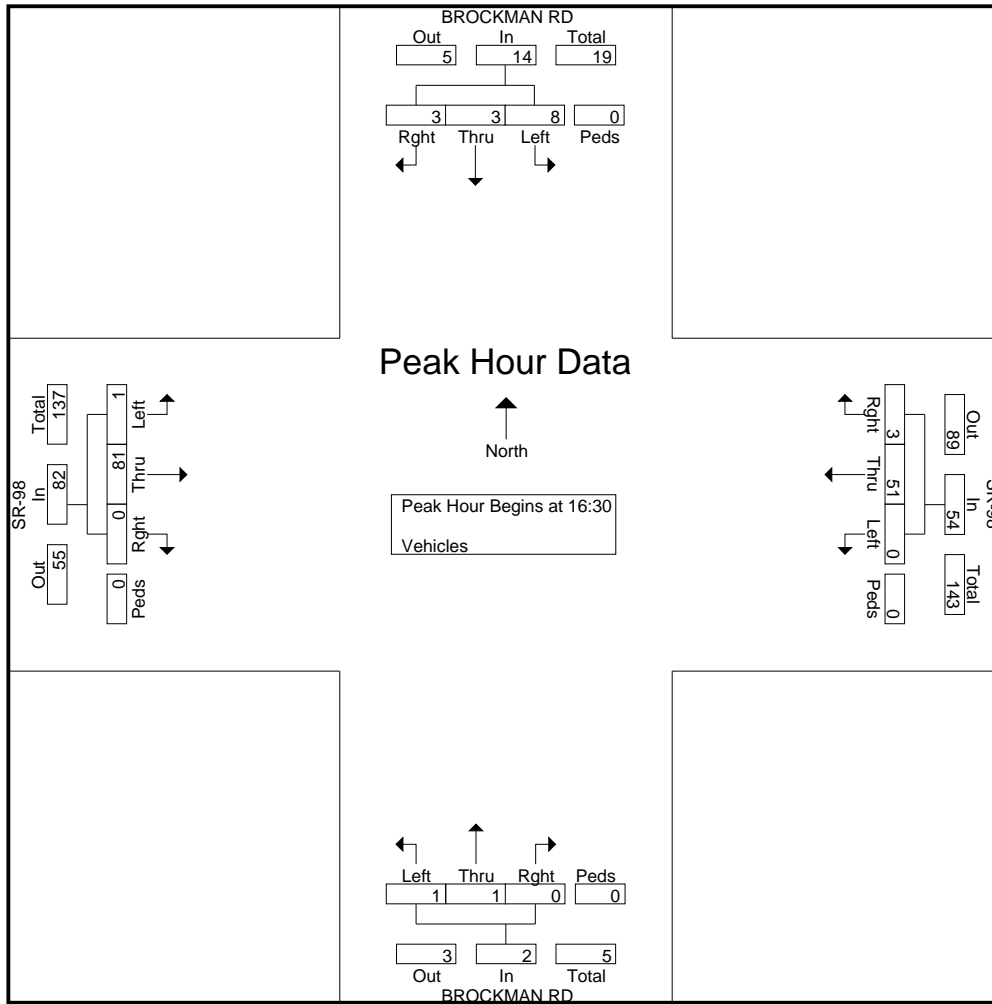


# True Count

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

Start Time	BROCKMAN RD Southbound					SR-98 Westbound					BROCKMAN RD Northbound					SR-98 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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**

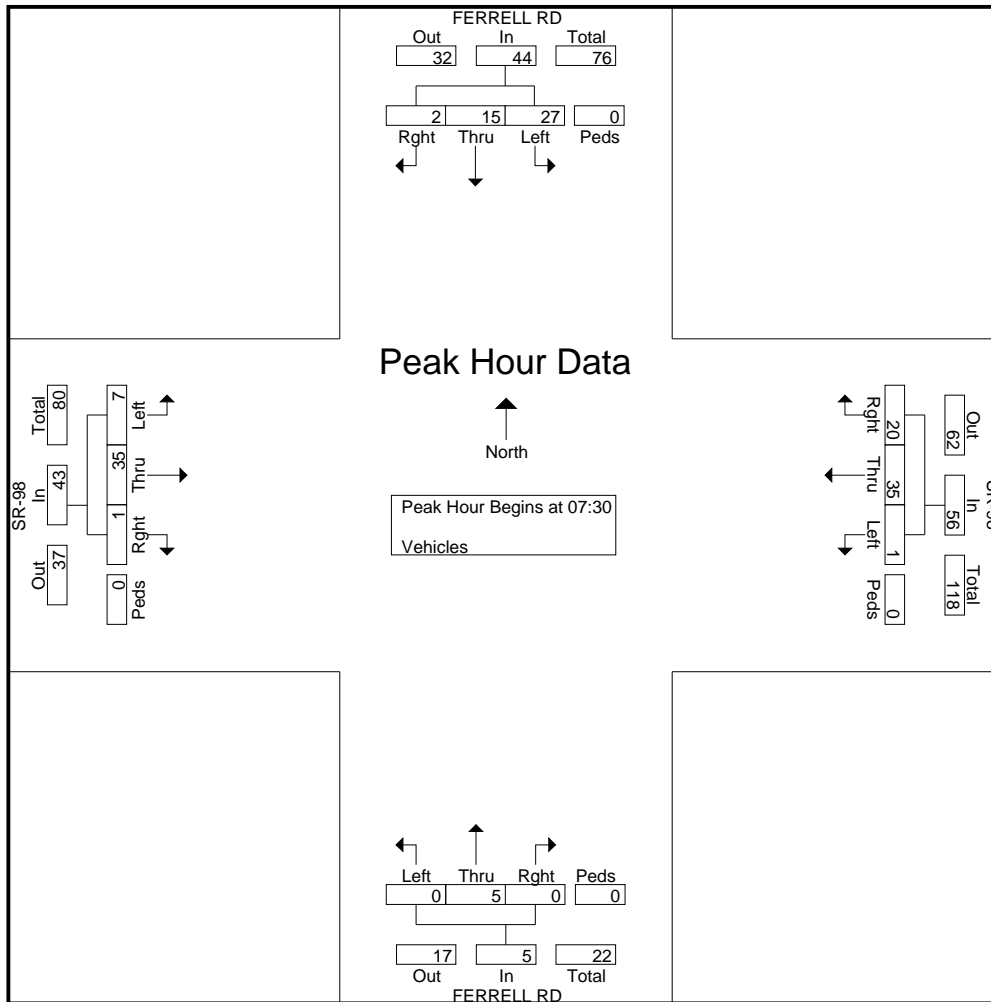
Start Time	FERRELL RD Southbound				SR-98 Westbound				FERRELL RD Northbound				SR-98 Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00	2	1	2	1	0	13	5	0	1	1	0	0	1	2	1	0	30
07:15	4	2	1	0	0	10	5	0	0	0	0	0	1	9	0	0	32
07:30	6	6	0	0	0	13	6	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

Start Time	FERRELL RD Southbound					SR-98 Westbound					FERRELL RD Northbound					SR-98 Eastbound					Int. Total
	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. 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

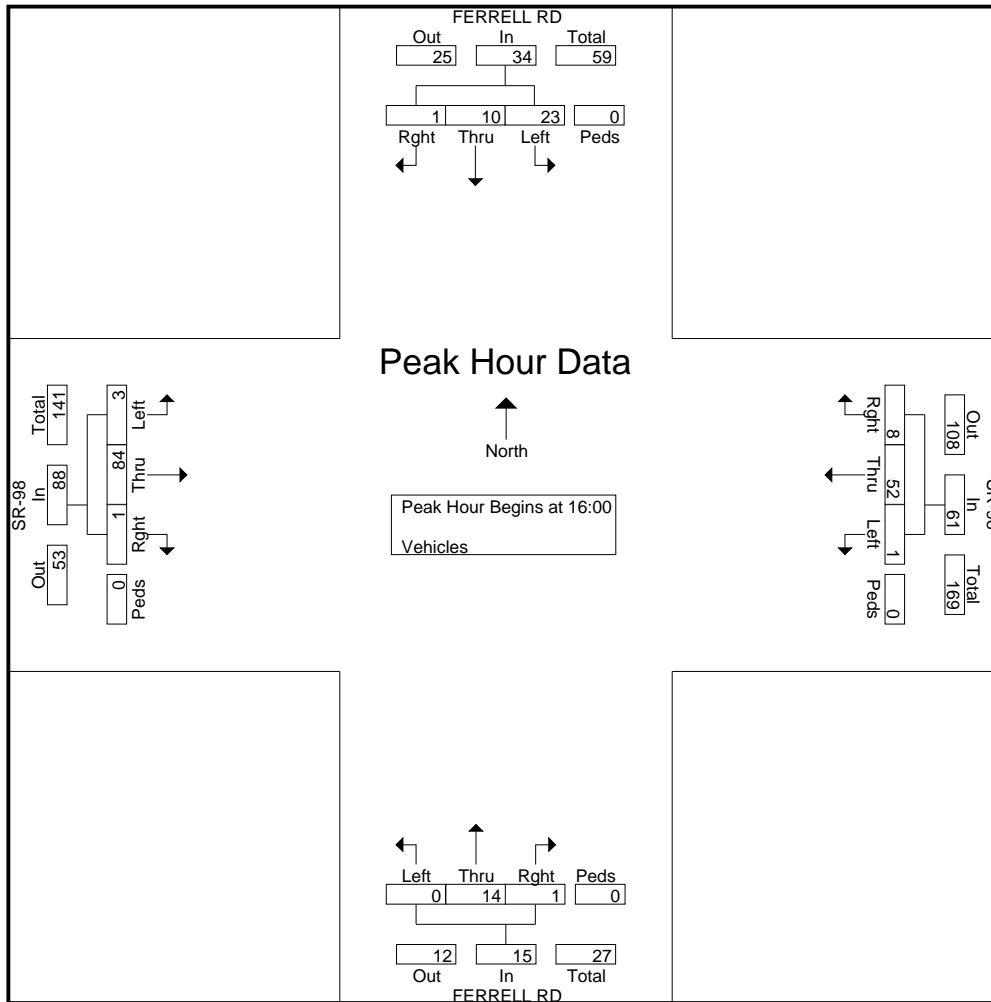


# True Count

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

Start Time	FERRELL RD Southbound					SR-98 Westbound					FERRELL RD Northbound					SR-98 Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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	
<b>4</b>	<b>2</b>	<b>7</b>	<b>1</b>	<b>9</b>	<b>9</b>	<b>22</b>	<b>29</b>	<b>24</b>	<b>26</b>	<b>14</b>	<b>24</b>	<b>15</b>	<b>11</b>	<b>32</b>	<b>21</b>	<b>27</b>	<b>28</b>	<b>17</b>	<b>9</b>	<b>7</b>	<b>8</b>	<b>4</b>	<b>4</b>	
0	1	0	0	0	0	4	8	<b>8</b>	3	5	5	3	3	4	5	11	4	4	3	2	2	0	1	-
4	0	3	1	1	0	3	5	<b>6</b>	13	2	6	5	2	8	5	5	10	6	2	2	3	1	1	-
0	1	2	0	3	3	10	<b>5</b>	5	3	5	10	4	2	6	5	3	8	5	3	2	3	2	1	-
0	0	2	0	5	6	5	<b>11</b>	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

3-10-1989

Postmile	Description	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak Hour	Ahead Peak Month	Ahead AADT
<b>Route 98</b>							
1.518	Imperial Hwy	180	1,750	1,650	200	1,950	1,850
22.197	Drew Rd (Sunset Blvd)	250	2,300	2,100	240	2,350	2,200
27.21	Ferrell Rd	240	2,350	2,200	290	2,900	2,650
28.74	Clark Rd	290	2,900	2,650	400	4,350	4,100
30.27	Dogwood Rd	400	4,350	4,100	690	9,000	8,200
<b>Route 111</b>							
32.01	Calipatria, South City Limits	870	8,200	6,600	910	8,600	6,900
32.513	Jct. Rte. 115 East	910	8,600	6,900	930	8,900	7,200
32.74	California St	930	8,900	7,200	580	5,200	4,000
36.09	Sinclair Rd	580	5,200	4,000	530	4,750	3,000
39.82	Niland Ave	530	4,750	3,000	440	4,000	3,050
<b>Route 115</b>							
31.63	Wirt Rd	100	1,050	950	100	1,050	920
34.517	East Ave	100	1,050	920	240	2,500	2,300
34.882	Industrial Ave	240	2,500	2,300	480	5,100	4,600
34.964	Railroad Ave	480	5,100	4,600	430	4,400	4,000
35.235	Calipatria, Jct. Rte. 111	430	4,400	4,000			

## APPENDIX B

### PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – EXISTING





# 82LV Mount Signal Solar Farm I

Existing AM

Tue Dec 7, 2010 10:24:29

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-----  
 82LV: Mount Signal Solar Farm I  
 -----

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
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	0	0	
Lanes:	0	0	1	0	0	0	0	0	1	0	0	0	0	0	

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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

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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

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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.  
 \*\*\*\*\*

# 82LV Mount Signal Solar Farm I

Existing AM

Tue Dec 7, 2010 10:24:29

Page 3-1

## 82LV: Mount Signal Solar Farm I

### 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

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Critical Gap Module:

Critical Gp:xxxxx 6.5 xxxxx 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx

FollowUpTim:xxxxxx 4.0 xxxxx 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

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Capacity Module:

Cnflct Vol: xxxxx 116 xxxxx 108 105 49 60 xxxx xxxxx 39 xxxx xxxxx

Potent Cap.: xxxxx 778 xxxxx 876 788 1025 1557 xxxx xxxxx 1584 xxxx xxxxx

Move Cap.: xxxxx 774 xxxxx 868 784 1025 1557 xxxx xxxxx 1584 xxxx xxxxx

Volume/Cap: xxxxx 0.01 xxxxx 0.03 0.02 0.00 0.00 xxxx xxxxx 0.00 xxxx xxxxx

-----|-----|-----|-----|

Level Of Service Module:

2Way95thQ: xxxxx 0.0 xxxxx xxxxx xxxxx xxxxx 0.0 xxxx xxxxx 0.0 xxxx xxxxx

Control Del:xxxxxx 9.7 xxxxx xxxxx xxxxx 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.: xxxxx xxxx xxxxx xxxxx 843 xxxxx xxxx xxxx xxxxx xxxxx xxxx xxxxx

SharedQueue:xxxxxx xxxx xxxxx xxxxx 0.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx

Shrd ConDel:xxxxxx xxxx xxxxx xxxxx 9.5 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx

Shared LOS: \* \* \* \* A \* \* \* \* \* \* \* \*

ApproachDel: 9.7 9.5 xxxxxxx xxxxxxx

ApproachLOS: A A xxxxxxx xxxxxxx

-----|-----|-----|-----|

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

\*\*\*\*\*

\*\*\*\*\*

# 82LV Mount Signal Solar Farm I

Existing AM

Tue Dec 7, 2010 10:24:29

Page 4-1

## 82LV: Mount Signal Solar Farm I

### 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:
Cnflct 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 xxxxx 0.00 xxxx xxxxx 0.00 xxxx xxxxx
-----|-----|-----|-----|
Level Of Service Module:
2Way95thQ: xxxx xxxxx xxxxx xxxx xxxx xxxxx 0.0 xxxx xxxxx 0.0 xxxx xxxxx
Control Del:xxxxxx 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:xxxxxx xxxx 0.0 0.0 xxxx xxxxx 0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxxx xxxx 9.2 9.3 xxxx xxxxx 7.3 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS: * * A A * * A * * * * *
ApproachDel: 9.2 9.3 xxxxxxx xxxxxxx
ApproachLOS: A A * *
*****
Note: Queue reported is the number of cars per lane.
*****

```

# 82LV Mount Signal Solar Farm I

Existing PM

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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):	0.259
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 0 1! 0 0	0	0 0 1! 0 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.  
\*\*\*\*\*

# 82LV Mount Signal Solar Farm I

Existing PM

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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): 2.6 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	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:xxxxx	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx

Capacity Module:

Cnflct Vol: xxxxx	166	92	170	162	61	65	xxxx	xxxxxx	92	xxxx	xxxxxx
Potent Cap.: xxxxx	731	971	799	734	1010	1550	xxxx	xxxxxx	1515	xxxx	xxxxxx
Move Cap.: xxxxx	728	971	783	732	1010	1550	xxxx	xxxxxx	1515	xxxx	xxxxxx
Volume/Cap: xxxxx	0.02	0.00	0.03	0.01	0.00	0.00	xxxx	xxxx	0.00	xxxx	xxxx

Level Of Service Module:

2Way95thQ: xxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.0	xxxx	xxxxxx	0.0	xxxx	xxxxxx
Control Del:xxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	7.3	xxxx	xxxxxx	7.4	xxxx	xxxxxx
LOS by Move:	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.: xxxxx	xxxx	741	xxxx	772	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:xxxxx	xxxx	0.1	xxxxxx	0.2	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:xxxxx	xxxx	10.0	xxxxxx	9.9	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	A	*	A	*	*	*	*	*	*
ApproachDel:	10.0	9.9	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx
ApproachLOS:	A	A	*	*	*	*	*	*	*	*	*

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

# 82LV Mount Signal Solar Farm I

Existing PM

Tue Dec 7, 2010 10:24:30

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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): 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	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:												
Cnflct 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			xxxxxxx			xxxxxxx		
ApproachLOS:	A			A			*			*		

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

**APPENDIX C**  
**CUMULATIVE TRAFFIC DATA INFORMATION**





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



Google maps

imperial county

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LLG BME PROJECTS

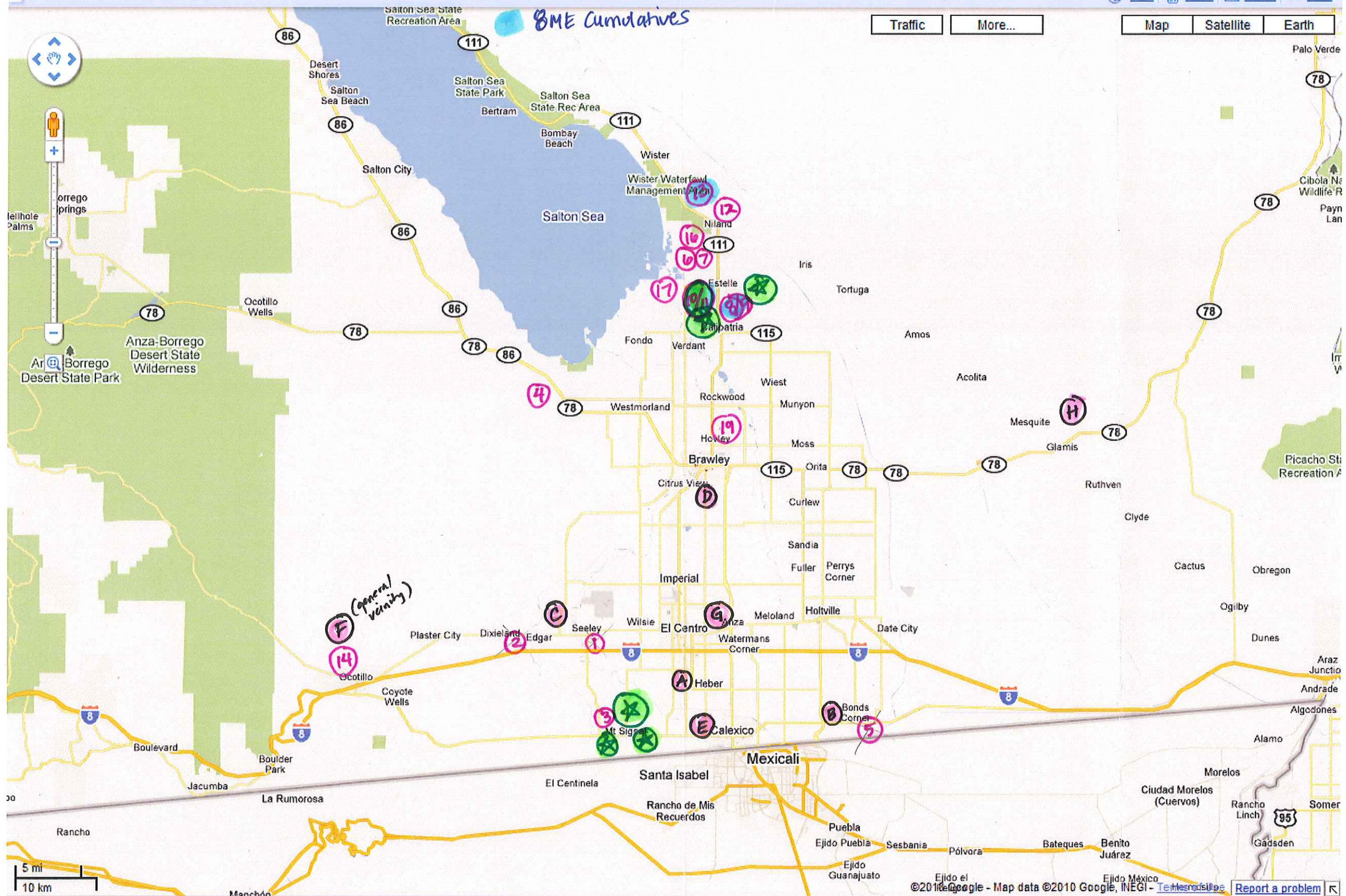
ENERGY PROJECTS  
OTHER PROJECTS

11/16/10

4/6/11

Edit Print Send Link

Traffic More... Map Satellite Earth





CUMULATIVES  
8ME PROJECTS

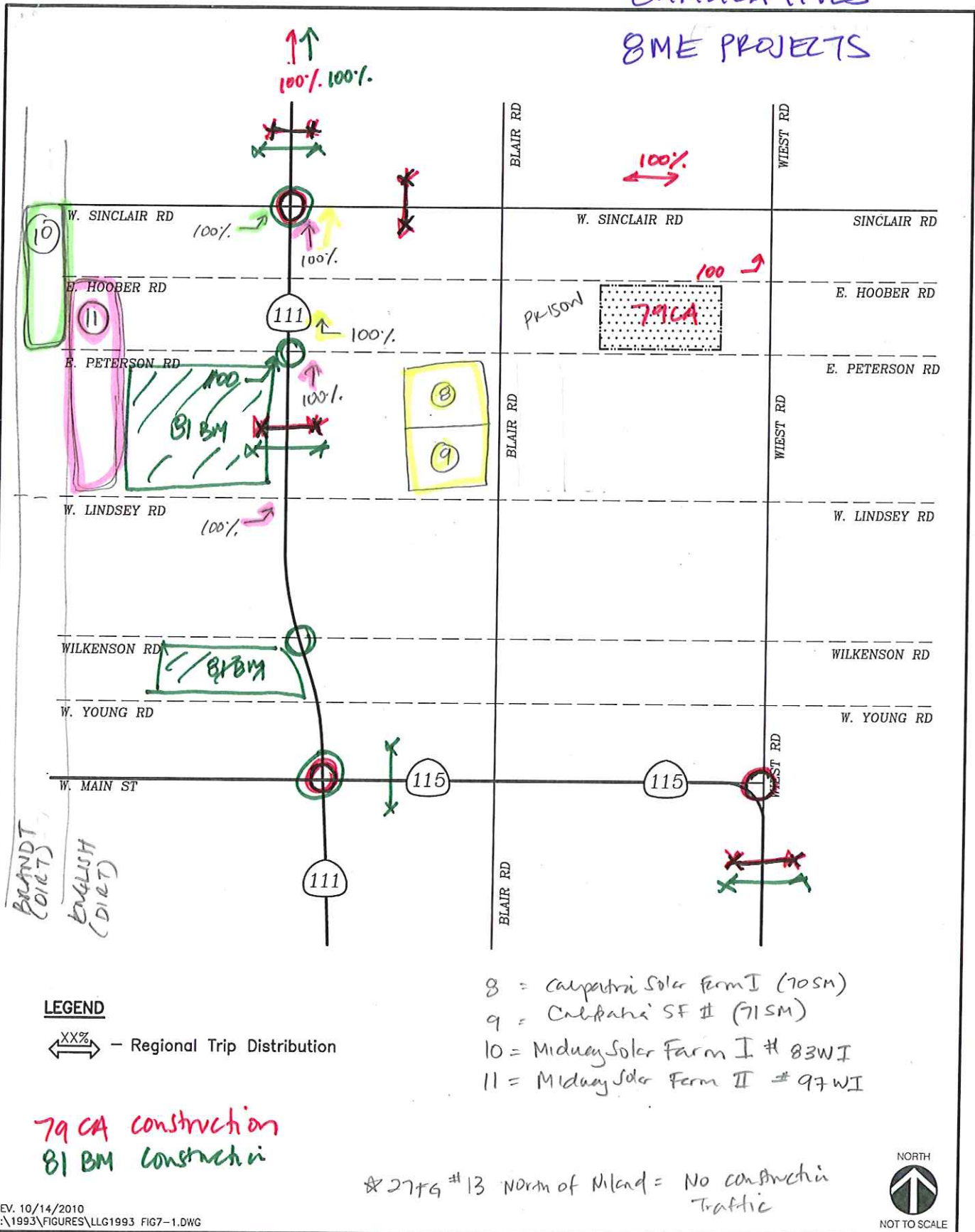
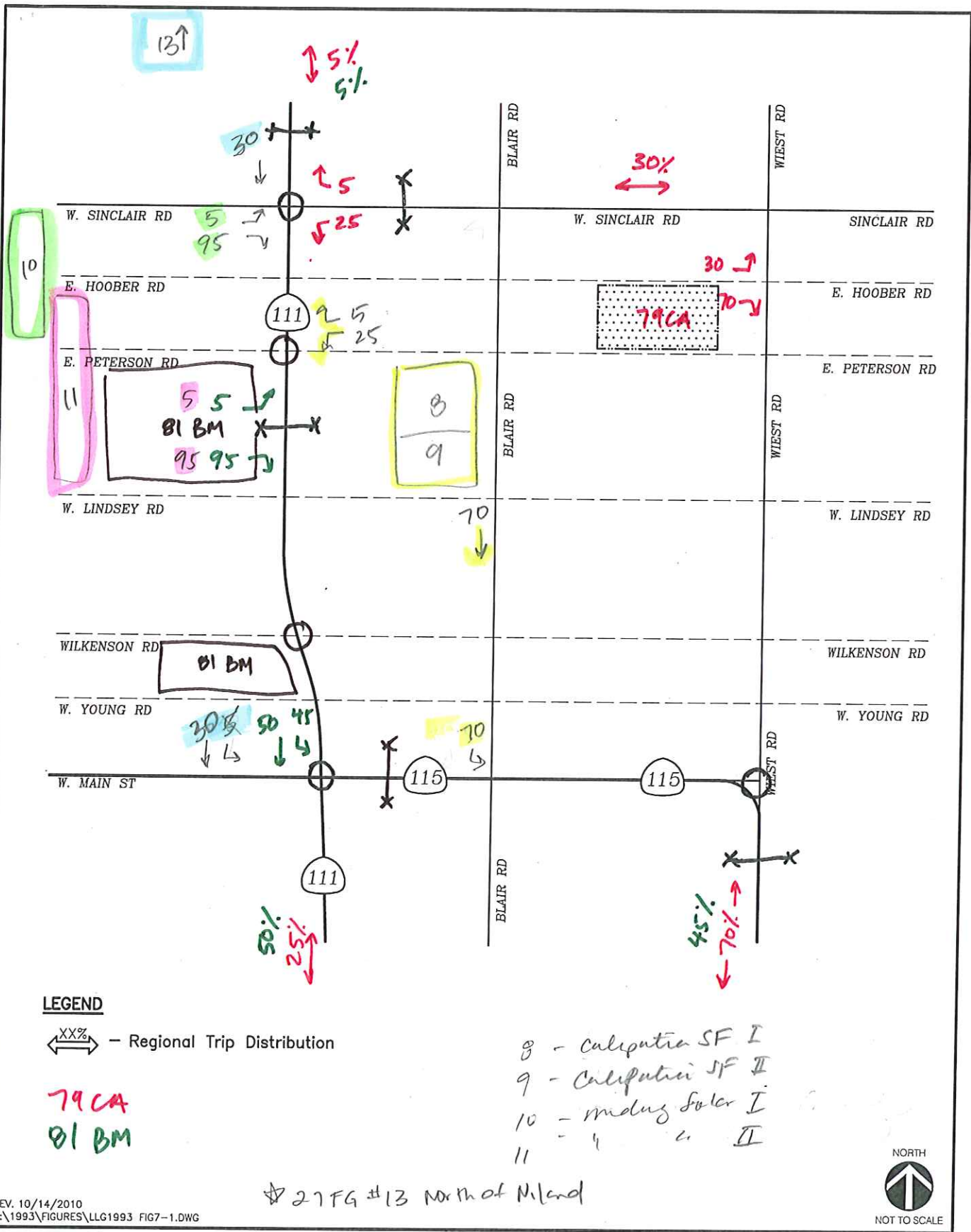


Figure 7-1

Construction Project Distribution  
Truck Trips

79CA: SALTON SEA SOLAR FARM I

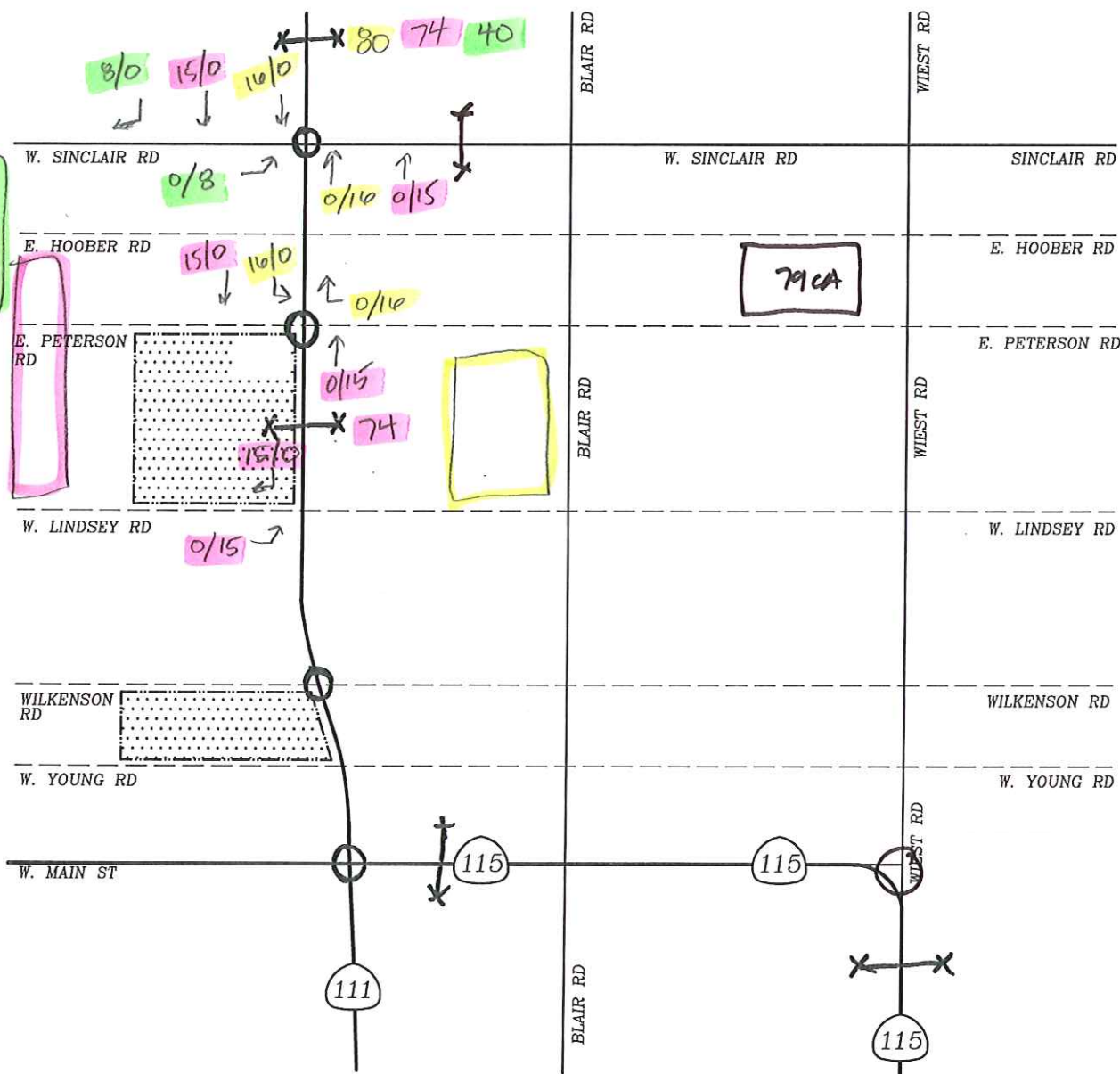


REV. 10/14/2010  
N:\1993\FIGURES\LLG1993 FIG7-1.DWG

LINSCOTT  
LAW &  
GREENSPAN  
engineers

Figure 7-1  
Construction Project Distribution  
EMPLOYEE Truck Trips  
79CA: SALTON SEA SOLAR FARM I

# CUMULATIVES 8ME PROJECTS



**LEGEND**

- $\leftrightarrow$  XX% - Regional Trip Distribution
- $\leftarrow$  - Inbound Trip Distribution
- $\rightarrow$  - Outbound Trip Distribution

8/0 = 80 ADT	AM	IN	CVT
	PM	16	0
10 = 40	AM	8	0
	PM	0	8
11 = 74	AM	15	0
	PM	0	15

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

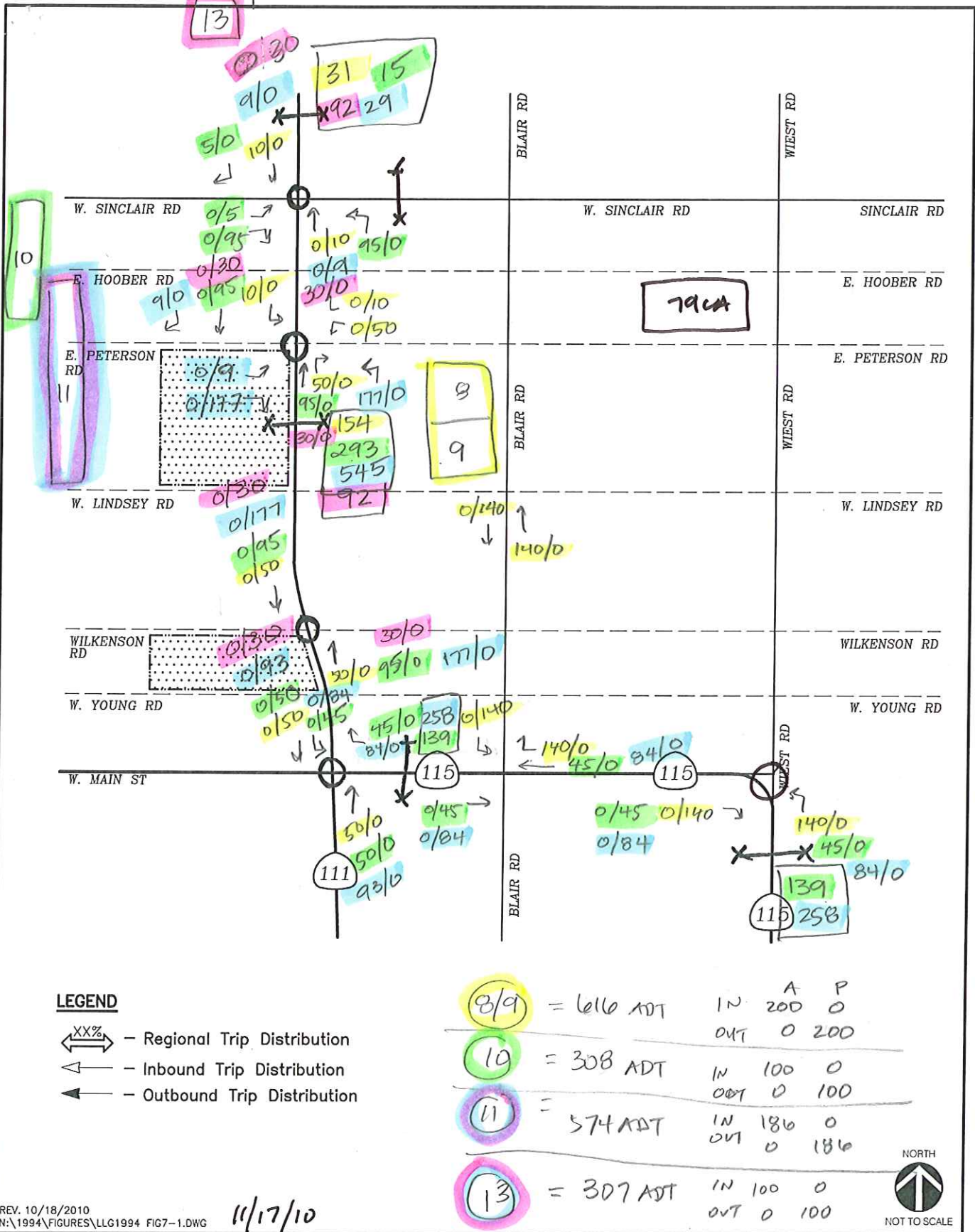
11/17/10



**LINSCOTT  
LAW &  
GREENSPAN**  
engineers

**Figure 7-1**  
*ASSIGNMENT*  
**Construction Project Distribution**  
**Truck Trips**





LINSCOTT  
LAW &  
GREENSPAN  
engineers

Figure 7-1  
ASSIGNMENT  
Construction Project Distribution  
EMPLOYEE Truck Trips

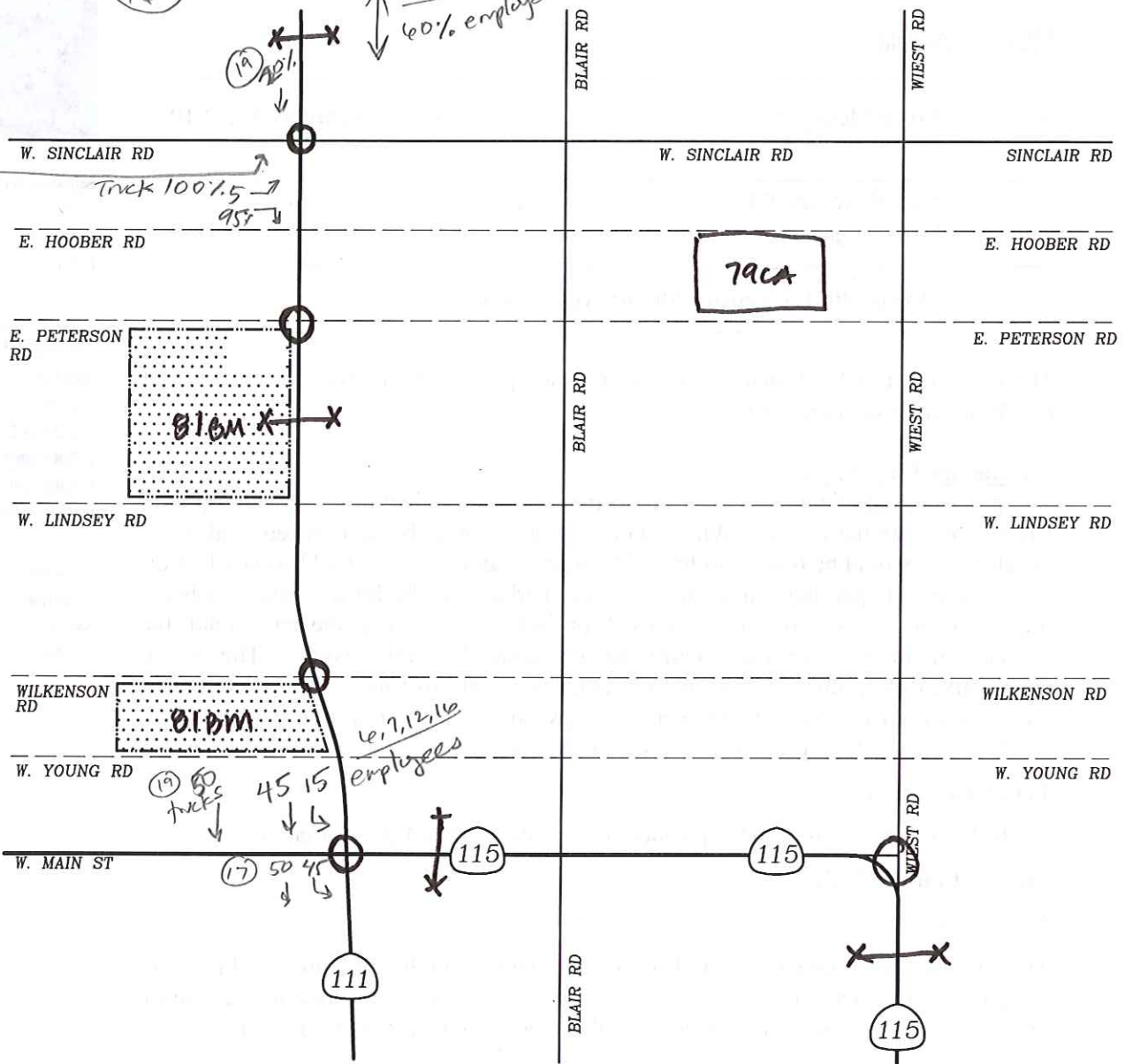


12 0% trucks

6, 7, 16 0% trucks

6, 7, 12, 16 60% employees

17



**LEGEND**

- ↔ XX% - Regional Trip Distribution
- ← - Inbound Trip Distribution
- - Outbound Trip Distribution

**OTHER SOLAR/ENERGY**  
# 12, 6, 7, 16, 17, 19

80%  
← SR-78 →

20% trucks  
↓

19



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

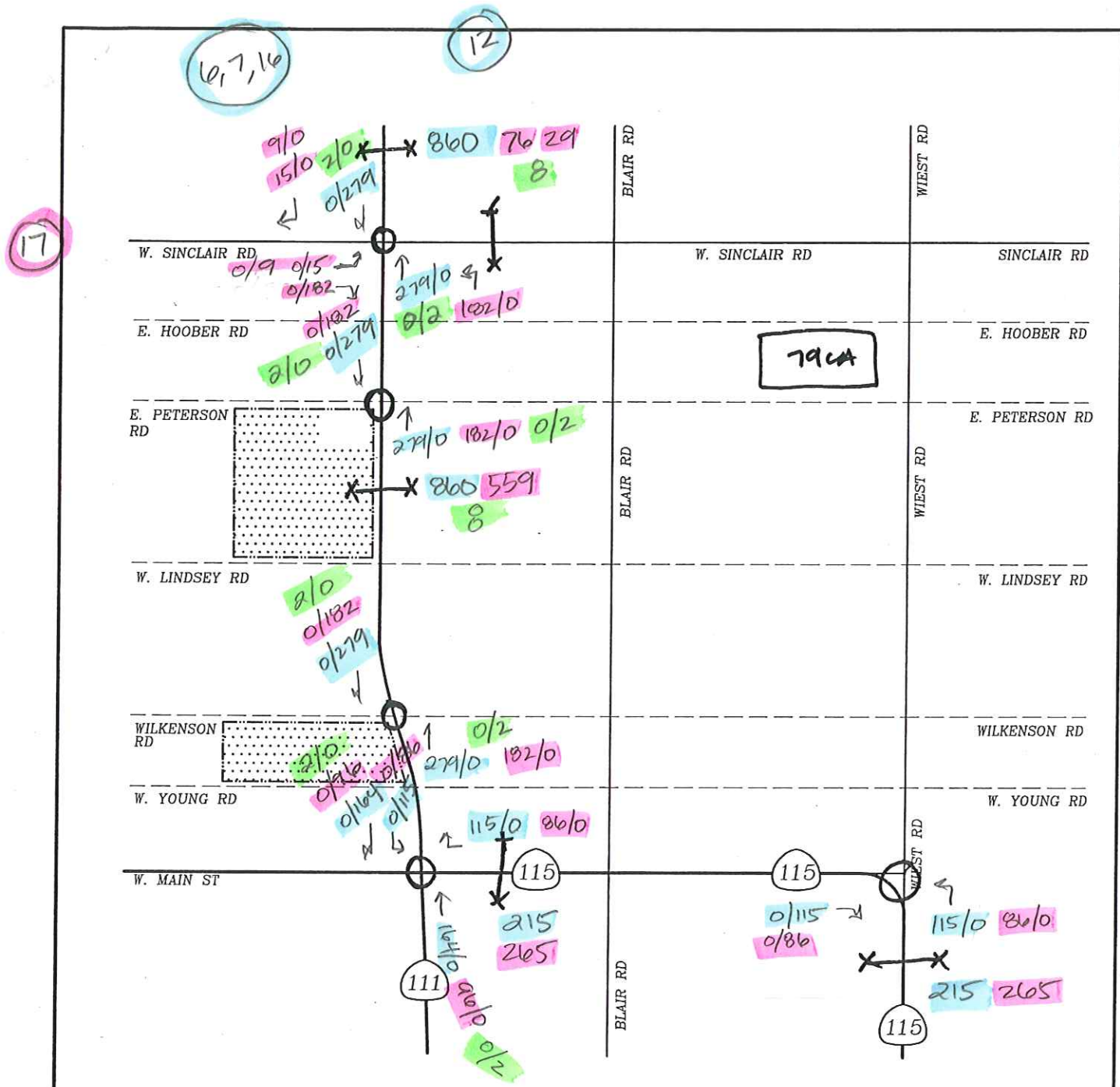
**LINSCOTT  
LAW &  
GREENSPAN**  
→  
engineers

**Figure 7-1**

**Construction Project Distribution**

**EMPLOYEES & Truck Trips**

81BM: SALTON SEA SOLAR FARM II



**LEGEND**

- $\longleftrightarrow$  - Regional Trip Distribution
- $\longleftarrow$  - Inbound Trip Distribution
- $\longrightarrow$  - Outbound Trip Distribution

6,7,12,16 employees only = 1434 ADT

	Am	Pm
①	465	0
②	0	465

---

①7 TRUCKS 76 ADT

	A	P
1	15	0
0	0	15

---

①7 Empl. 588

	A	P
1	191	0
0	0	191

---

①9 Trucks only 40

	A	P
1	8	0
0	0	8

NORTH  
↑  
NOT TO SCALE

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

11/17/10

**LINSCOTT  
LAW &  
GREENSPAN**  
engineers

**Figure 7-1**  
*ASSIGNMENT*  
**Construction Project Distribution**  
*EMPLOYEE 1/3* **Truck Trips**

#1 & 2 will most likely use I-8 from SR-111

(2)

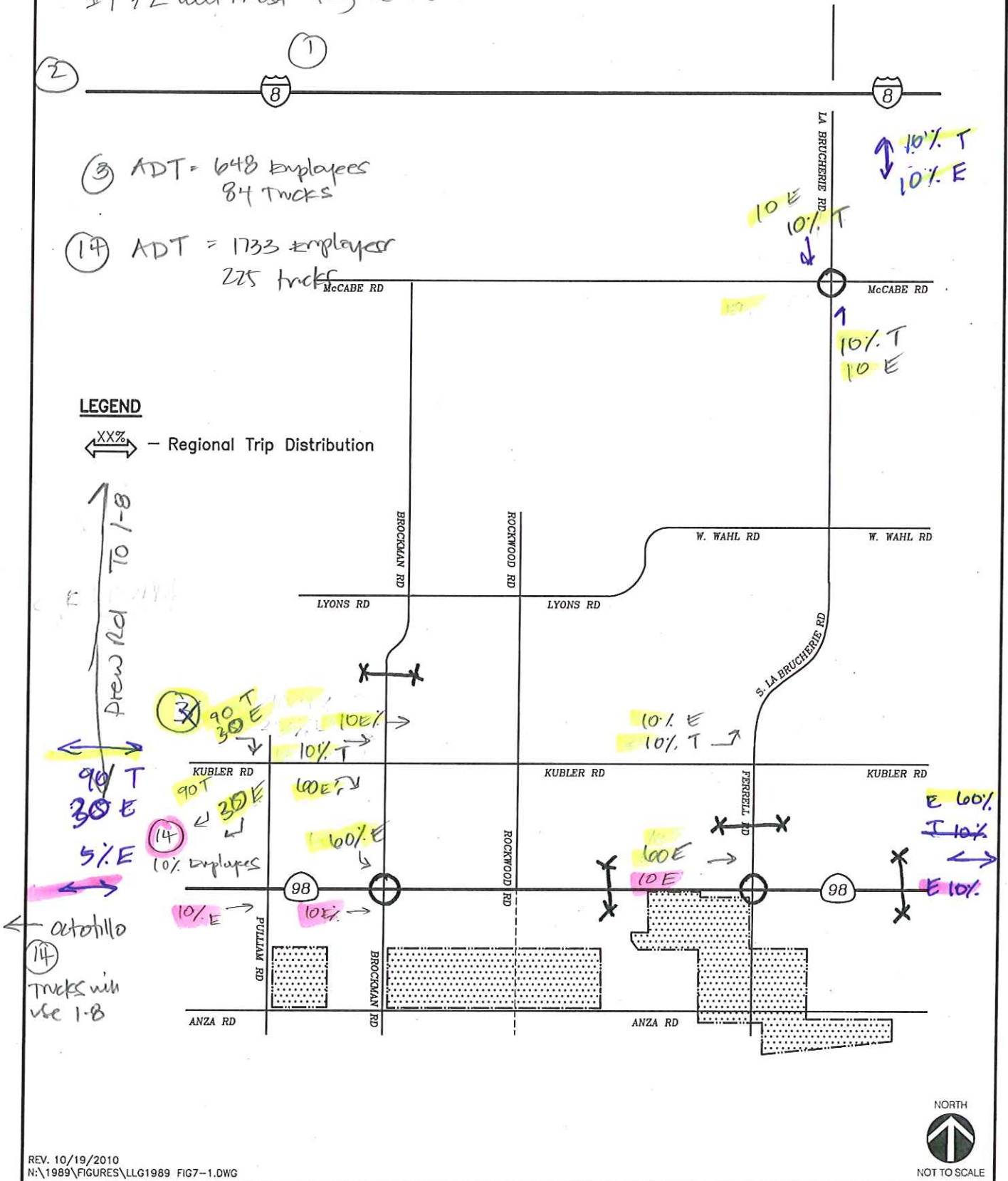
(1)

(3) ADT = 648 employees  
84 Trucks

(14) ADT = 1733 employees  
225 Trucks

**LEGEND**

XX% - Regional Trip Distribution



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



Figure 7-1

Construction Project Distribution  
Truck Trips

MOUNT SIGNAL SOLAR FARM I

LINSCOTT  
LAW &  
GREENSPAN  
engineers



(3) Empl. 648 

	A	P
I	210	0
O	0	210

 Truck 84 

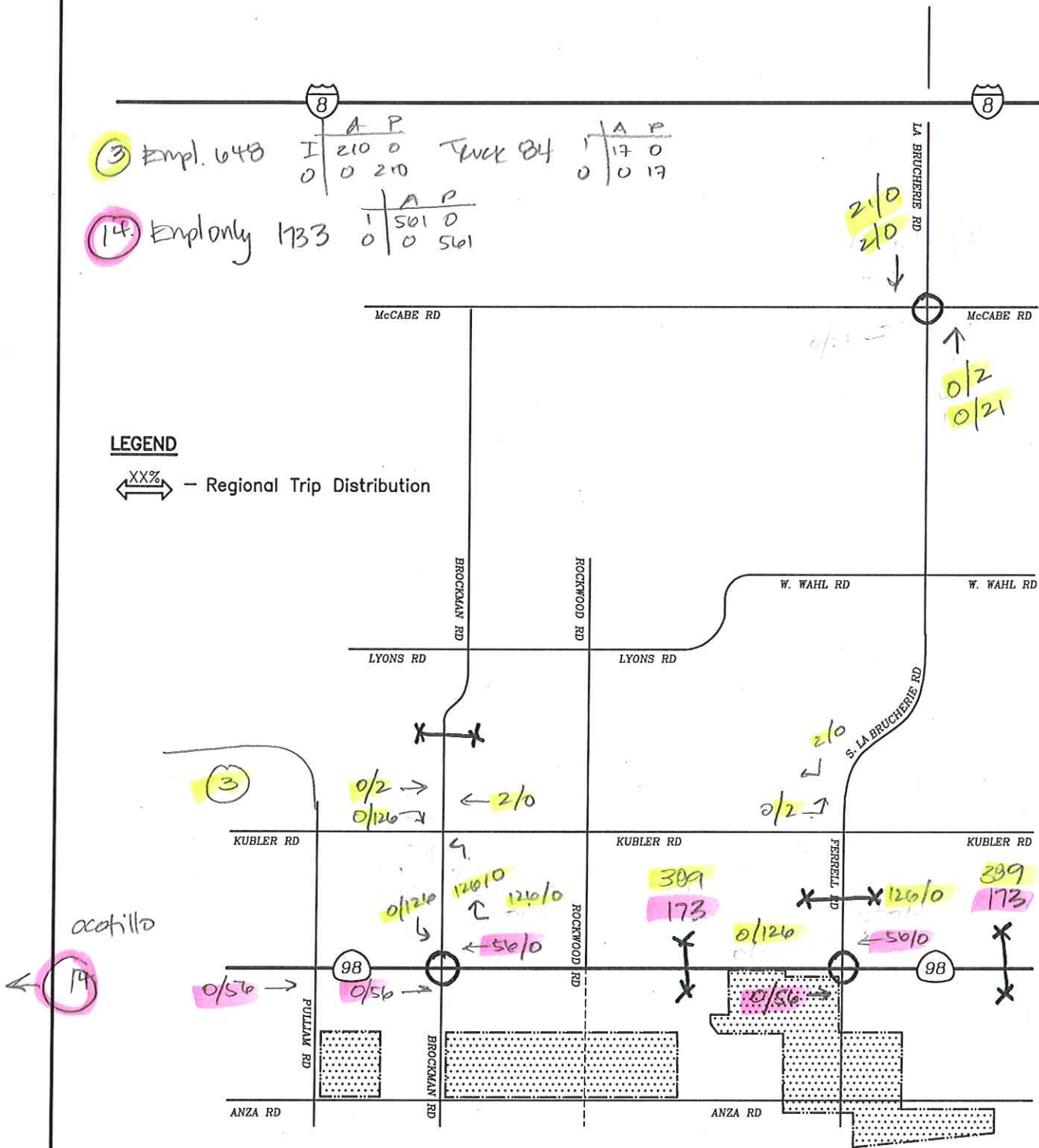
	A	P
I	17	0
O	0	17

(14) Empl only 1733 

	A	P
I	501	0
O	0	501

**LEGEND**

 - Regional Trip Distribution



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
<b>Total Construction</b>				<b>522</b>	<b>162</b>	<b>0</b>	<b>162</b>	<b>0</b>	<b>162</b>	<b>162</b>
<b>O&amp;M Vehicles</b>				<b>60</b>	<b>12</b>	<b>3</b>	<b>15</b>	<b>3</b>	<b>12</b>	<b>15</b>
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
<b>Total Construction</b>				<b>522</b>	<b>162</b>	<b>0</b>	<b>162</b>	<b>0</b>	<b>162</b>	<b>162</b>
<b>O&amp;M Vehicles</b>				<b>60</b>	<b>12</b>	<b>3</b>	<b>15</b>	<b>3</b>	<b>12</b>	<b>15</b>
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
<b>Total Construction</b>				<b>732</b>	<b>227</b>	<b>0</b>	<b>227</b>	<b>0</b>	<b>227</b>	<b>227</b>
<b>O&amp;M Vehicles</b>				<b>84</b>	<b>17</b>	<b>4</b>	<b>21</b>	<b>4</b>	<b>17</b>	<b>21</b>
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
<b>Total Construction</b>				<b>1305</b>	<b>404</b>	<b>0</b>	<b>404</b>	<b>0</b>	<b>404</b>	<b>404</b>
<b>O&amp;M Vehicles</b>				<b>150</b>	<b>30</b>	<b>8</b>	<b>38</b>	<b>8</b>	<b>30</b>	<b>38</b>
	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
<b>Total Construction</b>				<b>344</b>	<b>106</b>	<b>0</b>	<b>106</b>	<b>0</b>	<b>106</b>	<b>106</b>
<b>O&amp;M Vehicles</b>				<b>15</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>4</b>
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
<b>Total Construction</b>				<b>557</b>	<b>172</b>	<b>0</b>	<b>172</b>	<b>0</b>	<b>172</b>	<b>172</b>
<b>O&amp;M Vehicles</b>				<b>24</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>5</b>	<b>6</b>
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
<b>Total Construction</b>				<b>557</b>	<b>172</b>	<b>0</b>	<b>172</b>	<b>0</b>	<b>172</b>	<b>172</b>
<b>O&amp;M Vehicles</b>				<b>24</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>5</b>	<b>6</b>
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
<b>Total Construction</b>				<b>348</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>108</b>
<b>O&amp;M Vehicles</b>				<b>15</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>4</b>

## 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
<b>Total Construction</b>				<b>348</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>108</b>
<b>O&amp;M Vehicles</b>				<b>15</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>4</b>
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
<b>Total Construction</b>				<b>348</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>108</b>
<b>O&amp;M Vehicles</b>				<b>15</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>4</b>
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
<b>Total Construction</b>				<b>648</b>	<b>201</b>	<b>0</b>	<b>201</b>	<b>0</b>	<b>201</b>	<b>201</b>
<b>O&amp;M Vehicles</b>				<b>47</b>	<b>9</b>	<b>2</b>	<b>12</b>	<b>2</b>	<b>9</b>	<b>12</b>
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
<b>Total Construction</b>				<b>160</b>	<b>50</b>	<b>0</b>	<b>50</b>	<b>0</b>	<b>50</b>	<b>50</b>
<b>O&amp;M Vehicles</b>				<b>7</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>2</b>

## 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
<b>Total Construction</b>				<b>347</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>108</b>
<b>O&amp;M Vehicles</b>				<b>15</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>4</b>
		<b>18,435.00</b>	<b>2,448.30</b>							

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
<b>Total Construction</b>				<b>1958</b>	<b>606</b>	<b>0</b>	<b>606</b>	<b>0</b>	<b>606</b>	<b>606</b>
<b>O&amp;M Vehicles</b>				<b>225</b>	<b>45</b>	<b>11</b>	<b>56</b>	<b>11</b>	<b>45</b>	<b>56</b>
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
<b>Total Construction</b>				<b>1850</b>	<b>573</b>	<b>0</b>	<b>573</b>	<b>0</b>	<b>573</b>	<b>573</b>
<b>O&amp;M Vehicles</b>				<b>213</b>	<b>43</b>	<b>11</b>	<b>53</b>	<b>11</b>	<b>43</b>	<b>53</b>
		<b>21,140.00</b>	<b>1,459.00</b>							



## 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
<b>Total Construction</b>				<b>347</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>108</b>
<b>O&amp;M Vehicles</b>				<b>15</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>4</b>
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
<b>Total Construction</b>				<b>665</b>	<b>206</b>	<b>0</b>	<b>206</b>	<b>0</b>	<b>206</b>	<b>206</b>
<b>O&amp;M Vehicles</b>				<b>48</b>	<b>10</b>	<b>2</b>	<b>12</b>	<b>2</b>	<b>10</b>	<b>12</b>
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
<b>Total Construction</b>				<b>348</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>108</b>
<b>O&amp;M Vehicles</b>				<b>15</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>4</b>
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
<b>Total Construction</b>				<b>347</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>108</b>	<b>108</b>
<b>O&amp;M Vehicles</b>				<b>15</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>4</b>

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



**APPENDIX D**  
**PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS –**  
**CONSTRUCTION YEAR**



# 82LV Mount Signal Solar Farm I

Construction Year W/O AM Tue Dec 7, 2010 10:24:31

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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):	0.750
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
Lanes:	0	0	1	0	0	0	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		22.8		22.8	
Delay Adj:	1.00		1.00		1.00		1.00		1.00		1.00	
ApprAdjDel:	13.1		18.2		18.5		22.8		22.8		22.8	
LOS by Appr:	B		C		C		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.  
\*\*\*\*\*

# 82LV Mount Signal Solar Farm I

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	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 Gap:xxxxx	6.5	xxxxxx	7.1	6.5	6.2	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:xxxxx	4.0	xxxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	xxxx	220	xxxxxx	211	209	151	162	xxxx	xxxxxx	41	xxxx	xxxxxx
Potent Cap.:	xxxx	682	xxxxxx	750	691	901	1429	xxxx	xxxxxx	1581	xxxx	xxxxxx
Move Cap.:	xxxx	678	xxxxxx	742	687	901	1429	xxxx	xxxxxx	1581	xxxx	xxxxxx
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	xxxxxx	xxxx	xxxx	xxxxxx	0.0	xxxx	xxxxxx	0.0	xxxx	xxxxxx
Control Del:xxxxx	10.4	xxxxxx	xxxxxx	xxxx	xxxxxx	7.5	xxxx	xxxxxx	7.3	xxxx	xxxxxx	
LOS by Move:	*	B	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	727	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:xxxxx	xxxx	xxxxxx	xxxxxx	xxxxxx	0.2	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:xxxxx	xxxx	xxxxxx	xxxxxx	xxxxxx	10.3	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	10.4			10.3			xxxxxxx			xxxxxxx		
ApproachLOS:	B			B			*			*		

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

# 82LV Mount Signal Solar Farm I

Construction Year W/O AM Tue Dec 7, 2010 10:24:31

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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	1	0	0	1	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 Gap:	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:												
Cnflct 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	xxxxxxx			xxxxxxx		
ApproachLOS:	A			A			*			*		

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



# 82LV Mount Signal Solar Farm I

Construction Year W/O PM Tue Dec 7, 2010 10:24:33

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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 0 1! 0 0	0	0 0 1! 0 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.  
\*\*\*\*\*

# 82LV Mount Signal Solar Farm I

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	1	0	0	0	1	0	0	0	1	0	0	0	1	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 Gap:	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:

Cnflct 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			xxxxxxx			xxxxxxx		
ApproachLOS:	B			B			*			*		

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

# 82LV Mount Signal Solar Farm I

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	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	3.5	4.0	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	189	187	xxxxx	186	185	60	62	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	776	711	xxxxx	779	713	1011	1554	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	770	711	xxxxx	778	712	1011	1554	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
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	xxxxxx	xxxx	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx			
Control Del:	xxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	7.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx			
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	739	xxxx	xxxxxx	xxxx	782	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx			
SharedQueue:	0.0	xxxx	xxxxxx	xxxxxx	0.4	xxxxxx	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx			
Shrd ConDel:	9.9	xxxx	xxxxxx	xxxxxx	10.2	xxxxxx	7.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx			
Shared LOS:	A	*	*	*	B	*	A	*	*	*	*	*			
ApproachDel:	9.9					10.2	xxxxxxx			xxxxxxx					
ApproachLOS:	A			B			*	*			*				

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

# 82LV Mount Signal Solar Farm I

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  
\*\*\*\*\*

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	0	1	0	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.  
\*\*\*\*\*

# 82LV Mount Signal Solar Farm I

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

\*\*\*\*\*  
Intersection #2 SR 98/Ferrell  
\*\*\*\*\*

Average Delay (sec/veh): 5.8 Worst Case Level Of Service: B[ 14.4]  
\*\*\*\*\*

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	0	1	0	0	0	0	1	0	0

Volume Module:

Base Vol:	0	5	0	28	79	2	7	37	9	92	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	79	2	7	37	9	92	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	86	2	8	40	10	100	139	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	5	0	30	86	2	8	40	10	100	139	23

Critical Gap Module:

Critical Gp:xxxxx	6.5	xxxxx	7.1	6.5	6.2	4.1	xxxxx	xxxxx	4.1	xxxxx	xxxxx
FollowUpTim:xxxxx	4.0	xxxxx	3.5	4.0	3.3	2.2	xxxxx	xxxxx	2.2	xxxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxxx	422	xxxxx	414	416	151	162	xxxxx	xxxxx	50	xxxxx	xxxxx
Potent Cap.:	xxxxx	526	xxxxx	553	530	901	1429	xxxxx	xxxxx	1570	xxxxx	xxxxx
Move Cap.:	xxxxx	488	xxxxx	518	492	901	1429	xxxxx	xxxxx	1570	xxxxx	xxxxx
Volume/Cap:	xxxxx	0.01	xxxxx	0.06	0.17	0.00	0.01	xxxxx	xxxxx	0.06	xxxxx	xxxxx

Level Of Service Module:

2Way95thQ:	xxxxx	0.0	xxxxx	xxxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	0.2	xxxxx	xxxxx
Control Del:xxxxx	12.5	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	7.5	xxxxx	xxxxx	7.4	xxxxx	xxxxx
LOS by Move:	*	B	*	*	*	*	A	*	*	A	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxxx	xxxxx	xxxxx	xxxxx	503	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
SharedQueue:xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shrd ConDel:xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	14.4	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	12.5			14.4			xxxxxxx			xxxxxxx		
ApproachLOS:	B			B			*			*		

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

# 82LV Mount Signal Solar Farm I

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

\*\*\*\*\*  
Intersection #3 SR 98/Brockman  
\*\*\*\*\*

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A[ 9.8]  
\*\*\*\*\*

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	1	0	0	0	0	1	0	0

Volume Module:

Base Vol:	0	5	2	4	3	0	1	39	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	39	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	42	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	42	0	3	78	74

Critical Gap Module:

Critical Gap:	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:

Cnflct Vol:	xxxx	203	42	170	166	xxxxx	152	xxxx	xxxxx	42	xxxx	xxxxx
Potent Cap.:	xxxx	697	1034	798	730	xxxxx	1441	xxxx	xxxxx	1580	xxxx	xxxxx
Move Cap.:	xxxx	695	1034	790	728	xxxxx	1441	xxxx	xxxxx	1580	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	766	762	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	9.8	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	A	A	*	*	A	*	*	*	*	*
ApproachDel:	9.7					9.8	xxxxxxx			xxxxxxx		
ApproachLOS:	A					A	*				*	*

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Note: Queue reported is the number of cars per lane.  
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# 82LV Mount Signal Solar Farm I

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

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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
Movement:	L - T - R	L - T - R
	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign
Rights:	Include	Include
Min. Green:	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0

Volume Module:												
Base Vol:	5	119	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	119	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	129	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	129	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
Final Volume:	5	129	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	651	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	9.0	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
ApprAdjDel:	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 Appr:	A	A	A	A	A	A	A	A	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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# 82LV Mount Signal Solar Farm I

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

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Intersection #2 SR 98/Ferrell  
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Average Delay (sec/veh): 5.5 Worst Case Level Of Service: B[ 12.4]  
\*\*\*\*\*

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:	8	78	92	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:	8	78	92	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:	9	85	100	26	12	1	3	195	1	1	60	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	85	100	26	12	1	3	195	1	1	60	9

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	274	272	195	360	268	64	68	xxxx	xxxxxx	196	xxxx	xxxxxx
Potent Cap.:	682	638	851	599	641	1006	1545	xxxx	xxxxxx	1389	xxxx	xxxxxx
Move Cap.:	670	636	851	474	639	1006	1545	xxxx	xxxxxx	1389	xxxx	xxxxxx
Volume/Cap:	0.01	0.13	0.12	0.06	0.02	0.00	0.00	xxxx	xxxx	0.00	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.0	xxxx	xxxxxx	0.0	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	7.3	xxxx	xxxxxx	7.6	xxxx	xxxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR	- RT	LT - LTR	- RT	LT - LTR	- RT	LT - LTR	- RT	LT - LTR	- RT	LT - LTR	- RT
Shared Cap.:	xxxx	734	xxxxxx	xxxx	523	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	1.1	xxxxxx	xxxxxx	0.2	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	11.7	xxxxxx	xxxxxx	12.4	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	B	*	*	B	*	*	*	*	*	*	*
ApproachDel:	11.7	12.4	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx
ApproachLOS:	B	B	*	*	*	*	*	*	*	*	*	*

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Note: Queue reported is the number of cars per lane.  
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# 82LV Mount Signal Solar Farm I

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

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Intersection #3 SR 98/Brockman  
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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	0

Volume Module:

Base Vol:	1	1	0	71	3	3	1	113	0	0	61	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	61	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	66	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	66	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:

Cnflct Vol:	196	195	xxxxx	193	193	68	70	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	767	704	xxxxx	770	706	1001	1544	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	762	704	xxxxx	769	705	1001	1544	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.:	732	xxxx	xxxxx	xxxx	773	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			xxxxxxx			xxxxxxx		
ApproachLOS:	A			B			*			*		

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