APPENDIX 1:
PERSONNEL QUALIFICATIONS

PRINCIPAL INVESTIGATOR/HISTORIAN
Bai "Tom" Tang, M.A.

Education

1988-1993	Graduate Program in Public History/Historic Preservation, UC Riverside.
1987	M.A., American History, Yale University, New Haven, Connecticut.
1982	B.A., History, Northwestern University, Xi'an, China.
2000	"Introduction to Section 106 Review," presented by the Advisory Council on Historic Preservation and the University of Nevada, Reno.
1994	"Assessing the Significance of Historic Archaeological Sites," presented by the Historic Preservation Program, University of Nevada, Reno.

Professional Experience

2002-	Principal Investigator, CRM TECH, Riverside, California.
1993-2002	Project Historian/Architectural Historian, CRM TECH, Riverside, California.
1993-1997	Project Historian, Greenwood and Associates, Pacific Palisades, California.
1991-1993	Project Historian, Archaeological Research Unit, UC Riverside.
1990	Intern Researcher, California State Office of Historic Preservation, Sacramento.
1990-1992	Teaching Assistant, History of Modern World, UC Riverside.
1988-1993	Research Assistant, American Social History, UC Riverside.
1985-1988	Research Assistant, Modern Chinese History, Yale University.
1985-1986	Teaching Assistant, Modern Chinese History, Yale University.
1982-1985	Lecturer, History, Xi'an Foreign Languages Institute, Xi'an, China.

Honors and Awards

1988-1990	University of California Graduate Fellowship, UC Riverside.
1985-1987	Yale University Fellowship, Yale University Graduate School.
1980, 1981	President's Honor List, Northwestern University, Xi'an, China.

Cultural Resources Management Reports

Preliminary Analyses and Recommendations Regarding California's Cultural Resources Inventory System (With Special Reference to Condition 14 of NPS 1990 Program Review Report). California State Office of Historic Preservation working paper, Sacramento, September 1990.

Numerous cultural resources management reports with the Archaeological Research Unit, Greenwood and Associates, and CRM TECH, since October 1991.

Membership

California Preservation Foundation.

PRINCIPAL INVESTIGATOR/ARCHAEOLOGIST
Michael Hogan, Ph.D., RPA*

Education

1991	Ph.D., Anthropology, University of California, Riverside.
1981	B.S., Anthropology, University of California, Riverside; with honors.
1980-1981	Education Abroad Program, Lima, Peru.

2002	Section 106—National Historic Preservation Act: Federal Law at the Local Level. UCLA Extension Course #888.
2002	"Recognizing Historic Artifacts," workshop presented by Richard Norwood, Historical Archaeologist.
2002	"Wending Your Way through the Regulatory Maze," symposium presented by the Association of Environmental Professionals.
1992	"Southern California Ceramics Workshop," presented by Jerry Schaefer.
1992	"Historic Artifact Workshop," presented by Anne Duffield-Stoll.

Professional Experience

2002-	Principal Investigator, CRM TECH, Riverside, California.
1999-2002	Project Archaeologist/Field Director, CRM TECH, Riverside.
1996-1998	Project Director and Ethnographer, Statistical Research, Inc., Redlands.
1992-1998	Assistant Research Anthropologist, University of California, Riverside
1992-1995	Project Director, Archaeological Research Unit, U. C. Riverside.
1993-1994	Adjunct Professor, Riverside Community College, Mt. San Jacinto College, UC Riverside, Chapman University, and San Bernardino Valley College.
1991-1992	Crew Chief, Archaeological Research Unit, U. C. Riverside.
1984-1998	Archaeological Technician, Field Director, and Project Director for various southern California cultural resources management firms.

Research Interests

Cultural Resource Management, Southern Californian Archaeology, Settlement and Exchange Patterns, Specialization and Stratification, Culture Change, Native American Culture, Cultural Diversity.

Cultural Resources Management Reports

Author and co-author of, contributor to, and principal investigator for numerous cultural resources management study reports since 1986.

Memberships

* Register of Professional Archaeologists.
Society for American Archaeology.
Society for California Archaeology.
Pacific Coast Archaeological Society.
Coachella Valley Archaeological Society.

PROJECT HISTORIAN/REPORT WRITER
Casey Tibbet, B.A.

Education

2003-	Graduate Program in Historic Resources Management, University of California, Riverside (M.A. expected in 2005).
2002	Museum Research and Interpretation, Program in Historic Resources Management, University of California, Riverside.
1987	B.A., Political Science, University of California, Riverside.

Professional Experience

2003-	Project Historian, CRM TECH, Riverside.
1990-2003	Associate Planner, Planning Department, City of Riverside.
2002	Organization and review of five historic surveys for various neighborhoods in the City of Riverside.
2002	Update and re-organization of the Wood Streets Neighborhood Conservation Area survey.
1999-2003	Section 106 and environmental reviews per NEPA for the City of Riverside Community Development Block Grant (CDBG) Program and other federally funded projects.
1990-2003	Application of CEQA to public and private development projects in the City of Riverside and surrounding areas, and review of related archaeological, biological, and historic surveys.

PROJECT ARCHAEOLOGIST/FIELD DIRECTOR
Daniel Ballester, B.A.

Education

1998	B.A., Anthropology, California State University, San Bernardino.
1997	Archaeological Field School, University of Las Vegas and University of California, Riverside.
1994	University of Puerto Rico, Rio Piedras, Puerto Rico.
2002	"Historic Archaeology Workshop," presented by Richard Norwood, Base Archaeologist, Edwards Air Force Base; presented at CRM TECH, Riverside.

Professional Experience

1999-	Project Archaeologist, CRM TECH, Riverside.
1998-1999	Field Crew, K.E.A. Environmental, San Diego. • Two and a half months of excavations on Topomai village site, Marine Corp Air Station, Camp Pendleton.
1998	Field Crew, A.S.M. Affiliates, Encinitas. • Two weeks of excavations on a site on Red Beach, Camp Pendleton, and two weeks of survey in Camp Pendleton, Otay Mesa, and Encinitas.
1998	Field Crew, Archaeological Research Unit, University of California, Riverside. • Two weeks of survey in Anza Borrego Desert State Park and Eureka Valley, Death Valley National Park.

PROJECT ARCHAEOLOGIST
Adrián Sánchez Moreno, B.A.

Education

1999	B.A., Anthropology (with emphasis in Archaeology), University of San Diego.
2002	"Historic Archaeology Workshop," presented by Richard Norwood, Base Archaeologist, Edwards Air Force Base; presented at CRM TECH, Riverside.

Professional Experience

2000-	Project Archaeologist, CRM TECH, Riverside.
1999	Field Crew, excavation on Marine Corps Air Station, Camp Pendleton. K.E.A. Environmental, San Diego.
1999	Field Crew, excavation at Freedmen's Cemetery site in Alexandria, Virginia. URS Greiner Woodward & Clyde.
1999	Field Crew, survey and excavation in Guerrero Negro, Mexico. • Including identification of osteological specimens.
1999	Field Crew, excavation at Lake Chapala, Baja California, Mexico. • Excavation and cataloguing of lithic artifacts from the oldest known site in Baja California.
1998	Field Crew, petroglyph survey in San Pedro Atacama, Chile. • Focusing on identification of possible habitation and petroglyph sites.

APPENDIX F-1

TRAFFIC STUDY (2,000-UNIT + SCHOOL VERSION)

URBAN
CROSSROADS

STONERIDGE TRAFFIC IMPACT ANALYSIS (REVISED)

City of Desert Hot Springs California

URBAN CROSSROADS, INC.
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STONERIDGE
TRAFFIC IMPACT ANALYSIS (REVISED)
CITY OF DESERT HOT SPRINGS, CALIFORNIA

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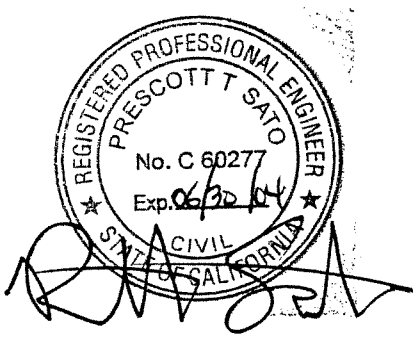

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STONERIDGE
TRAFFIC IMPACT ANALYSIS (REVISED)
CITY OF DESERT HOT SPRINGS, CALIFORNIA

1.0 INTRODUCTION AND SUMMARY

A. Purpose of Report and Study Objectives

The purpose of this traffic impact analysis is to evaluate the development of the Stoneridge Residential Development from a traffic circulation standpoint. The proposed development is located north of Pierson Boulevard and west of Karen Avenue (Proposed) in the City of Desert Hot Springs.

Study objectives include (1) documentation of existing traffic conditions in the vicinity of the site; (2) evaluation of cumulative traffic conditions without the project for years 2004, 2005, 2006, 2007 and 2008; (3) evaluation of cumulative traffic conditions with the project for years 2004, 2005, 2006, 2007 and 2008; and (4) determination of on-site and off-site improvements and system management actions needed to achieve City of Desert Hot Springs level of service requirements.

B. Executive Summary

1. Site Location and Study Area

The project site is located north of Pierson Boulevard and west of Karen Avenue (Proposed) in the City of Desert Hot Springs. Exhibit 1-A illustrates the site location and traffic analysis study area.

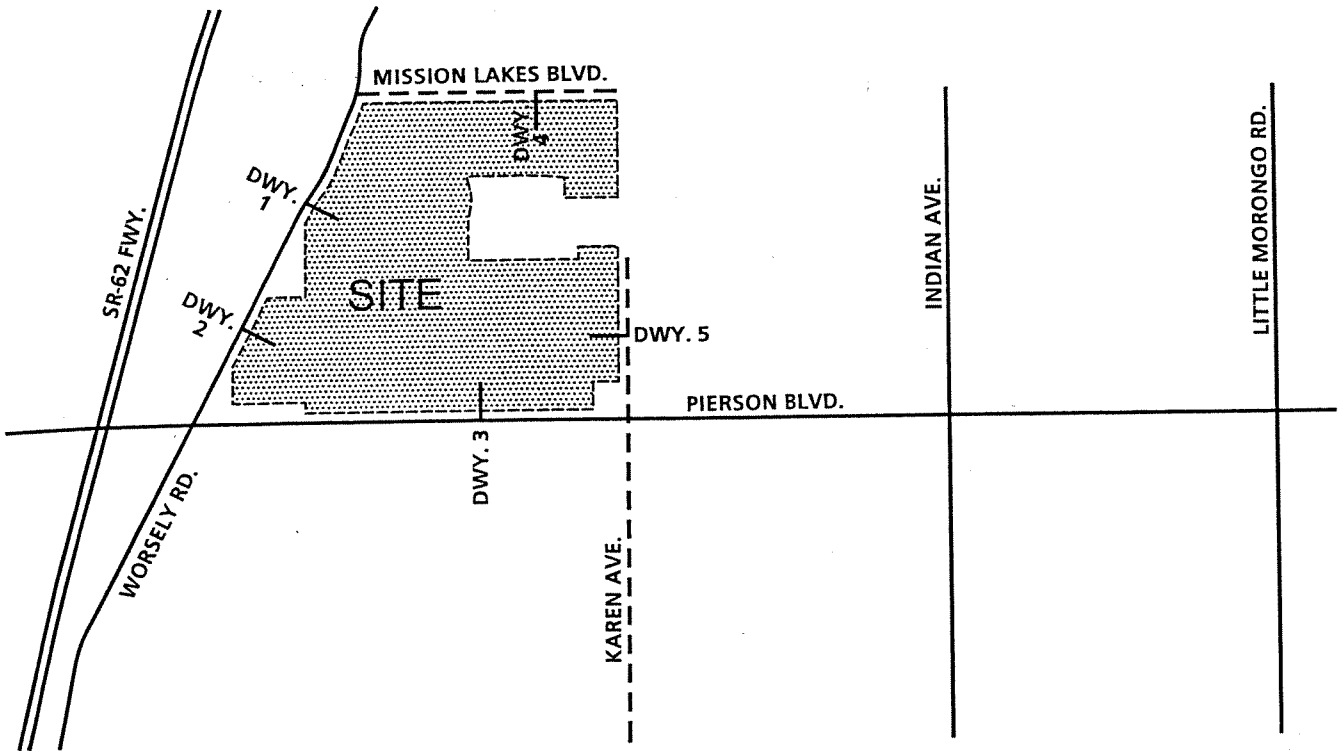
The study area includes the following intersections:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

EXHIBIT 1-A

LOCATION MAP



N

Worsley Road (NS) at:

- Driveway 1 (EW) – Future Intersection
- Driveway 2 (EW) – Future Intersection
- Pierson Boulevard (EW)

Driveway 3 (NS) at:

- Pierson Boulevard (EW) – Future Intersection

Driveway 4 (NS) at:

- Mission Lakes Boulevard (EW) – Future Intersection

Karen Avenue (NS) at:

- Driveway 5 (EW) – Future Intersection
- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

2. Development Description

The proposed land use consists of developing 1,993 detached single-family residential dwelling units and a 1,100 student elementary school. The project will be built in five phases during a 5-year span (2004-2008).

3. Principal Findings

a. Required Level of Service: The City has established a Level of Service "D" at all intersections.

b. Level of Service for Cumulative (2004) With Project Conditions: For Cumulative (2004) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals at the following intersections:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

It should be noted that these traffic signals are anticipated to be warranted with or without the proposed project.

c. Level of Service for Cumulative (2005) With Project Conditions: For Cumulative (2005) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of <u>additional</u> traffic signals at the following intersections:

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

It should be noted that these traffic signals are anticipated to be warranted with the proposed project.

d. Level of Service for Cumulative (2006) With Project Conditions: For Cumulative (2006) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the improvements listed on Table 5-6 and the installation of an additional traffic signal at the following intersection:

Worsley Road (NS) at:

- Pierson Boulevard (EW)

It should be noted that this traffic signal is anticipated to be warranted with the proposed project.

e. Level of Service for Cumulative (2007) With Project Conditions: For Cumulative (2007) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the improvements listed on Table 5-8. No additional traffic signals are warranted for Cumulative (2007) With Project conditions.

f. Level of Service for Cumulative (2008) With Project Conditions: For Cumulative (2008) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the improvements listed on Table 5-10. No additional traffic signals are warranted for Cumulative (2008) With Project conditions.

The proposed development is projected to generate a net total of approximately 20,196 trip-ends per day with 1,813 vehicles per hour during the AM peak hour and 2,300 vehicles per hour during the PM peak hour.

Other developments that are approved or being processed concurrently in the study area includes the following:

- Rancho Royale/Snellenberger Group
- Rancho Morongo Group
- Little Morongo Annenburg
- Century Crowell Homes

For Cumulative (2004) Without Project traffic conditions, the following traffic signals are projected to be warranted (see Appendix "C"):

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For Cumulative (2005) With Project traffic conditions, additional traffic signals are projected to be warranted at the following study area intersections (see Appendix "C"):

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

For Cumulative (2006) With Project traffic conditions, an additional traffic signal is projected to be warranted at the following study area intersection (see Appendix "C"):

Worsley Road (NS) at:

- Pierson Boulevard (EW)

4. Off-Site Improvements

For Cumulative (2004) With Project traffic conditions, the following intersection and traffic signal improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

For Cumulative (2005) With Project traffic conditions, additional intersection and traffic signal improvements are recommended:

Karen Avenue (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

For Cumulative (2006) With Project conditions, the following additional intersection improvements are recommended:

Worsley Road (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Westbound left turn lane

For Cumulative (2007) With Project traffic conditions, additional intersection and traffic signal improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Northbound right turn overlap phasing
  - Eastbound left turn lane
  - Eastbound right turn lane
  - Eastbound right turn overlap phasing
  - Westbound left turn lane

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Northbound left turn lane
  - Eastbound left turn lane
  - Westbound left turn lane

For Cumulative (2008) With Project conditions, the following additional intersection improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Second westbound left turn lane

Worsley Road (NS) at:

- Pierson Boulevard (EW)
  - Eastbound left turn lane

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Convert northbound right turn lane into a thru-right lane
  - Second eastbound through lane
  - Second westbound through lane

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)
  - Eastbound left turn lane
  - Westbound left turn lane
  - Second Westbound through lane

5. <u>On-Site Recommendations</u>

Site-specific circulation and access recommendations are depicted on Exhibit 6-A and are described below:

- Construct Pierson Boulevard at its ultimate half-section width as a major arterial from the westerly project boundary to the easterly project boundary in conjunction with development.

- Construct Karen Avenue at its ultimate half-section width as a collector (34 foot part width) from Mission Lakes Boulevard to Pierson Boulevard in conjunction with development.

- Construct Worsley Road at its ultimate half-section width as a major collector from Mission Lakes Boulevard to the southerly project boundary in conjunction with development.

- Construct Mission Lakes Boulevard at its ultimate half-section width as a major collector from Worsley Road to Karen Avenue in conjunction with development.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project site.

Stop controls should be provided at the project access points where they intersect with the public roadway system

Construct a traffic signal at the following intersection in conjunction with development when warranted:

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

A 150 foot (minimum) eastbound left turn pocket should be provided along Pierson Boulevard at the intersections of Worsley Road, the Southerly Driveway and Karen Avenue.

A 150 foot (minimum) northbound left turn pocket should be provided along Karen Avenue at the intersection of the easterly driveway.

Sight distance at the project entrance should be reviewed with respect to standard Caltrans and City of Desert Hot Springs sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

The project shall also participate in funding of off-site improvements which are needed to serve cumulative future conditions through payment of appropriate fees (City Fees and TUMF). The TUMF includes a network of regional facilities and endeavors to spread the cost on a regional basis through participation of the County and individual cities. It provides a key funding source for General Plan improvements in this area.

2.0 PROPOSED DEVELOPMENT

A. Location

The project site is located north of Pierson Boulevard and west of Karen Avenue (Proposed).

B. Land Use and Intensity

The project site is proposed to be developed with 1,993 detached single-family residential dwelling units and a 1,100 student elementary school. The project will be built in five phases during a 5-year span (2004-2008).

C. Site Plan

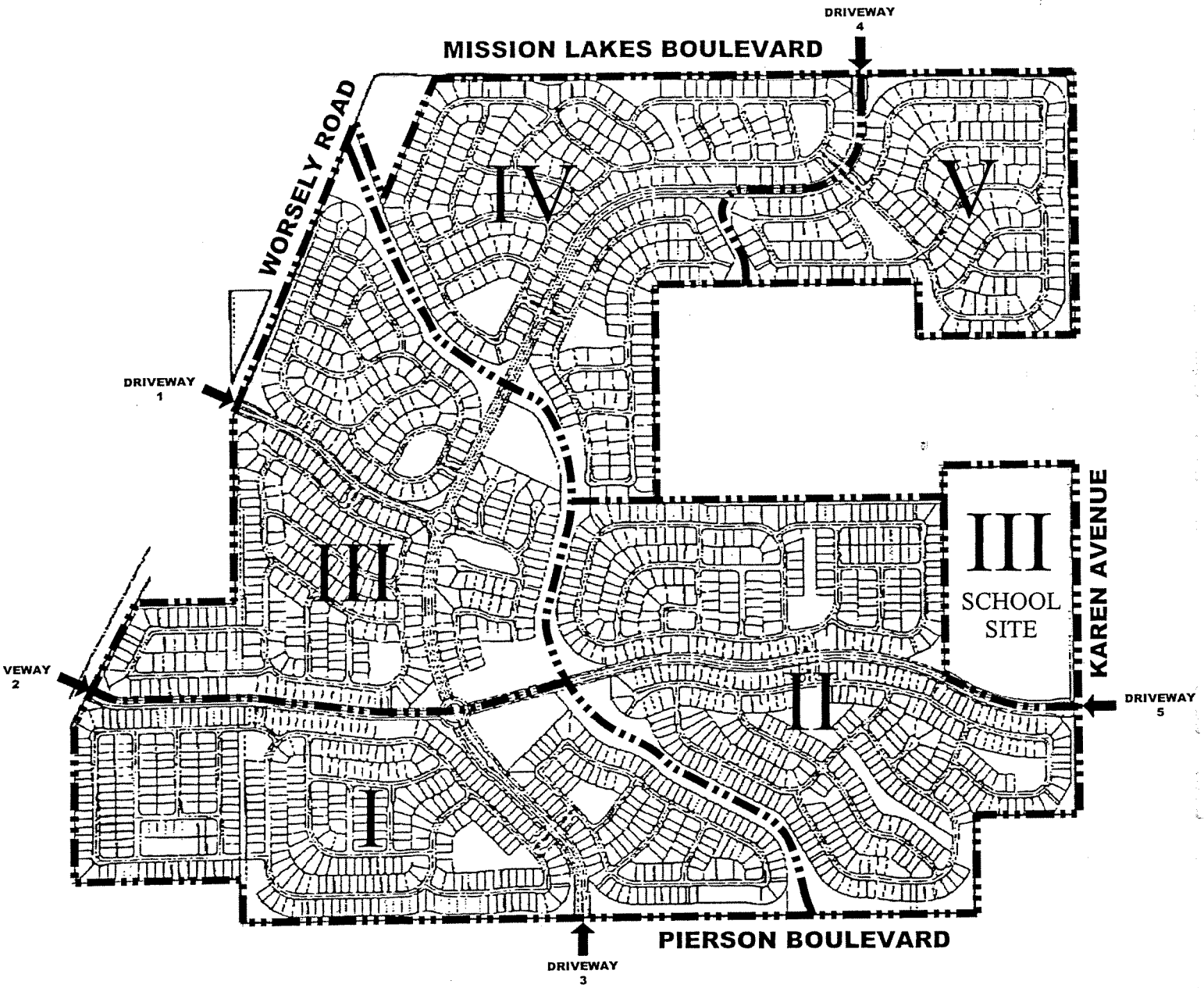
Exhibit 2-A illustrates the proposed site plan divided into five phases. The proposed project has been divided into five traffic analysis zones (TAZ) in order to load traffic from the appropriate driveway locations. Each phase of development is represented by the boundaries of the TAZ's. Exhibit 2-A shows the boundaries of the TAZ's and the location of the project driveways. These access locations that will serve these TAZ's are described as follows:

TAZ 1: This 370 unit residential development will have two full access driveway. Driveway 3 will be located along Pierson Boulevard and Driveway 2 will be located along Worsley Road.

TAZ 2: This 633 unit residential development will utilize two full access driveways. Driveway 5 will be located along Karen Avenue and the Driveway 3 will be located along Pierson Boulevard.

TAZ 3: This 400 unit residential development will utilize three full access driveways. Driveways 1 and 2 will be located along Worsley Road and Driveway 3 will be located along Pierson Boulevard. The 1,100 student elementary school will have one full access driveway. Driveway 5 will be located along Karen Avenue.

EXHIBIT 2-A
SITE PLAN



LEGEND:

I = TRAFFIC ANALYSIS ZONE (TAZ)/DEVELOPMENT PHASE

N

URBAN CROSSROADS

TAZ 4: This 380 unit residential development will utilize three full access driveways. Driveway 4 is anticipated to provide full access to Mission Lakes Boulevard, Driveway 1 will have access to Worsley Road and Driveway 3 will have access to Pierson Boulevard.

TAZ 5: This 210 unit residential development will utilize full access (Driveway 4) to Mission Lakes Boulevard.

D. Phasing and Timing

For purposes of this analysis, the project is anticipated to be completed in five phases. Phase I will be completed by Year 2004. Phase II is projected to be developed by Year 2005. The completion of Phase III will be by Year 2006. Year 2007 is the anticipated completion date for Phase IV. Phase V will be constructed by Year 2008.

3.0 AREA CONDITIONS

A. Study Area

1. Area of Significant Traffic Impact

The study area includes the following existing intersections:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Worsley Road (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

B. Study Area Land Use

1. Existing Land Uses

The site is currently vacant. Adjacent uses include the following:

North – Vacant
South – Vacant
East – Vacant
West – Vacant

2. Approved Future Development

Other developments that are approved or being processed concurrently in the study area includes the following:

- Rancho Royale/Snellenberger Group
- Rancho Morongo Group
- Little Morongo Annenburg
- Century Crowell Homes

C. Site Accessibility

1. Area Roadway System

Exhibit 3-A identifies the existing roadway conditions for study area roadways. The number of through traffic lanes for existing roadways and the existing intersection controls are identified.

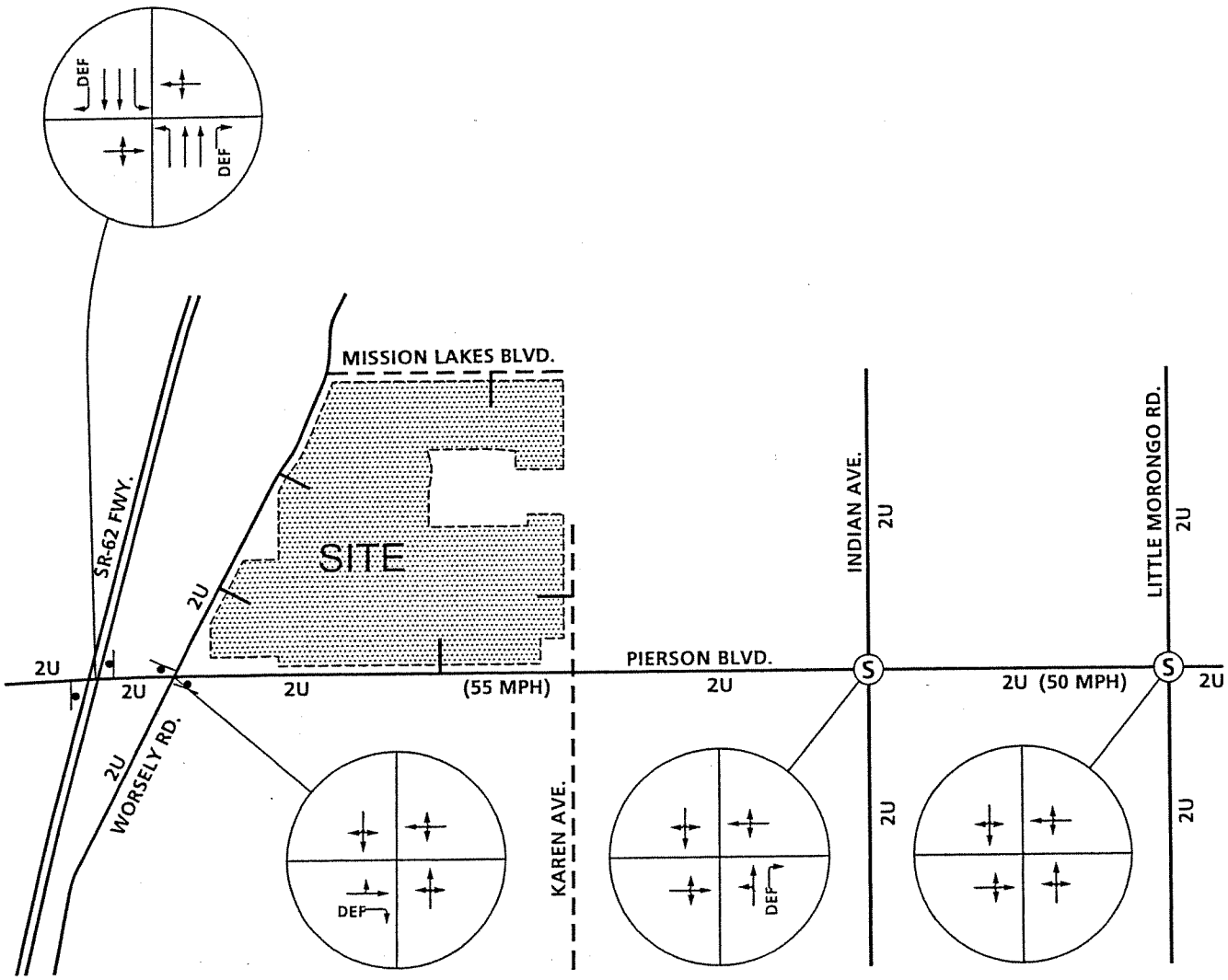
Exhibit 3-B shows the City of Desert Hot Springs General Plan Circulation Element and Exhibit 3-C illustrates the City of Desert Hot Springs arterial street cross-sections. Exhibits 3-D and 3-E illustrate the Riverside County General Plan Circulation Element and arterial street cross-sections, respectively.

2. Traffic Volumes and Conditions

Existing average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 3-F. It should be noted that based on recommendations by the staff at the City of Desert Hot Springs, an increase of 30 percent has been applied to the existing counts that were conducted in August and an increase of 15 percent has been applied to

EXHIBIT 3-A

EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



LEGEND:

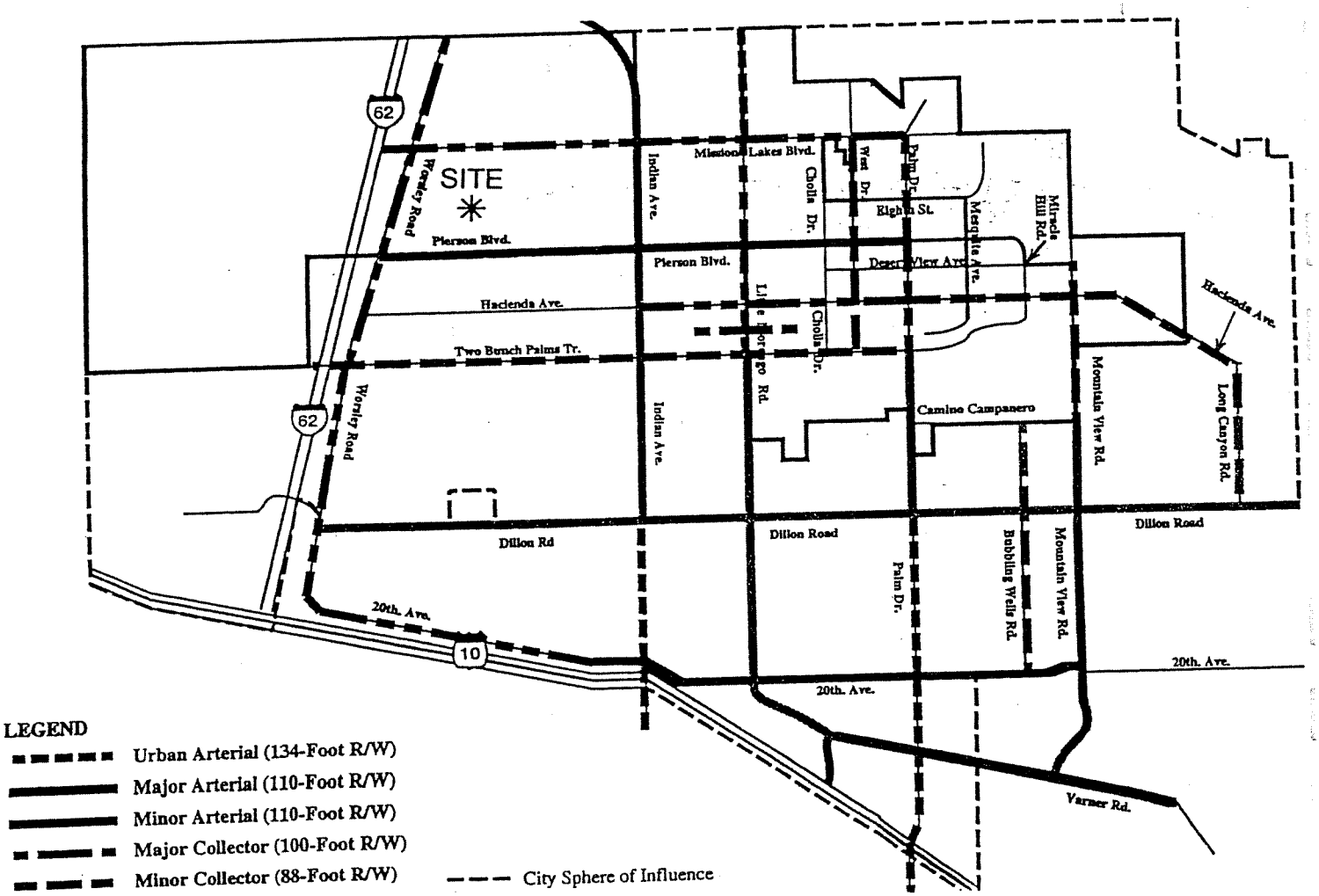
- (S) = ALL WAY STOP
- = STOP SIGN
- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED
- DEF = DEFACTO RIGHT TURN
- = FUTURE ROADWAY

N

URBAN CROSSROADS

EXHIBIT 3-B

CITY OF DESERT HOT SPRINGS GENERAL PLAN CIRCULATION ELEMENT



LEGEND

- Urban Arterial (134-Foot R/W)
- Major Arterial (110-Foot R/W)
- Minor Arterial (110-Foot R/W)
- Major Collector (100-Foot R/W)
- Minor Collector (88-Foot R/W)
- City Sphere of Influence

N

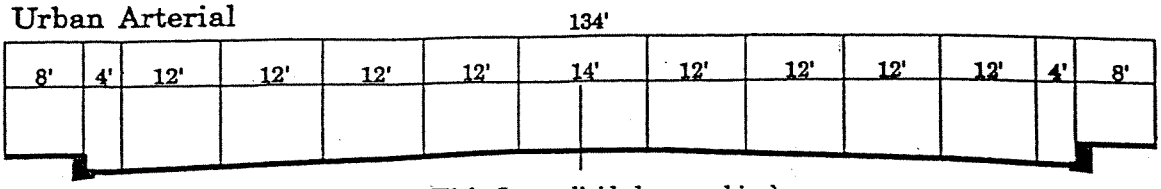
SOURCE: CITY OF DESERT HOT SPRINGS

URBAN CROSSROADS

EXHIBIT 3-C

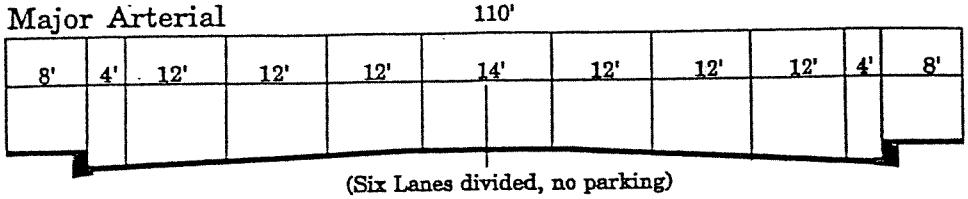
CITY OF DESERT HOT SPRINGS GENERAL PLAN ROADWAY CROSS-SECTIONS

Urban Arterial



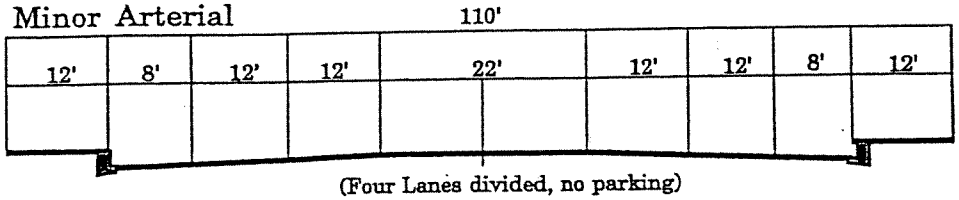
(Eight Lanes divided, no parking)

Major Arterial



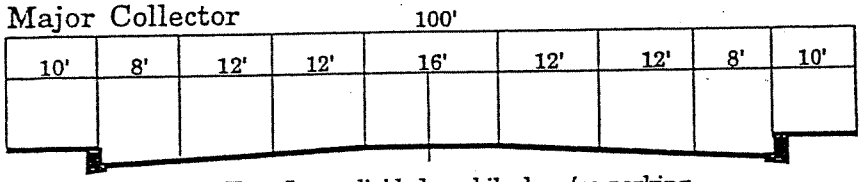
(Six Lanes divided, no parking)

Minor Arterial



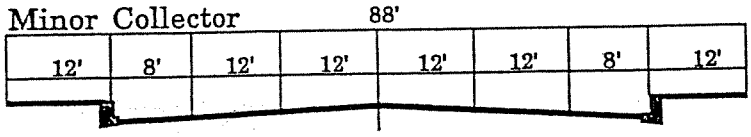
(Four Lanes divided, no parking)

Major Collector



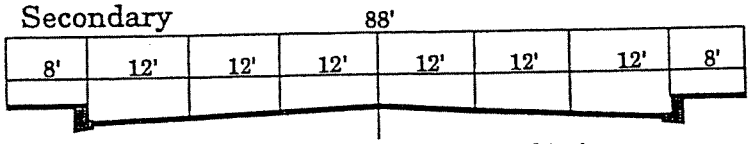
(Four Lanes divided, no bike lane/no parking

Minor Collector



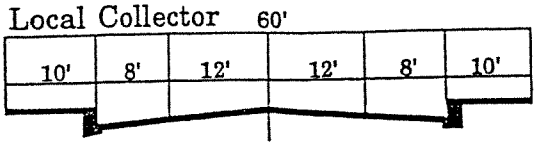
(Four Lanes undivided, w/parking)

Secondary



(Four Lanes undivided, w/parking)

Local Collector

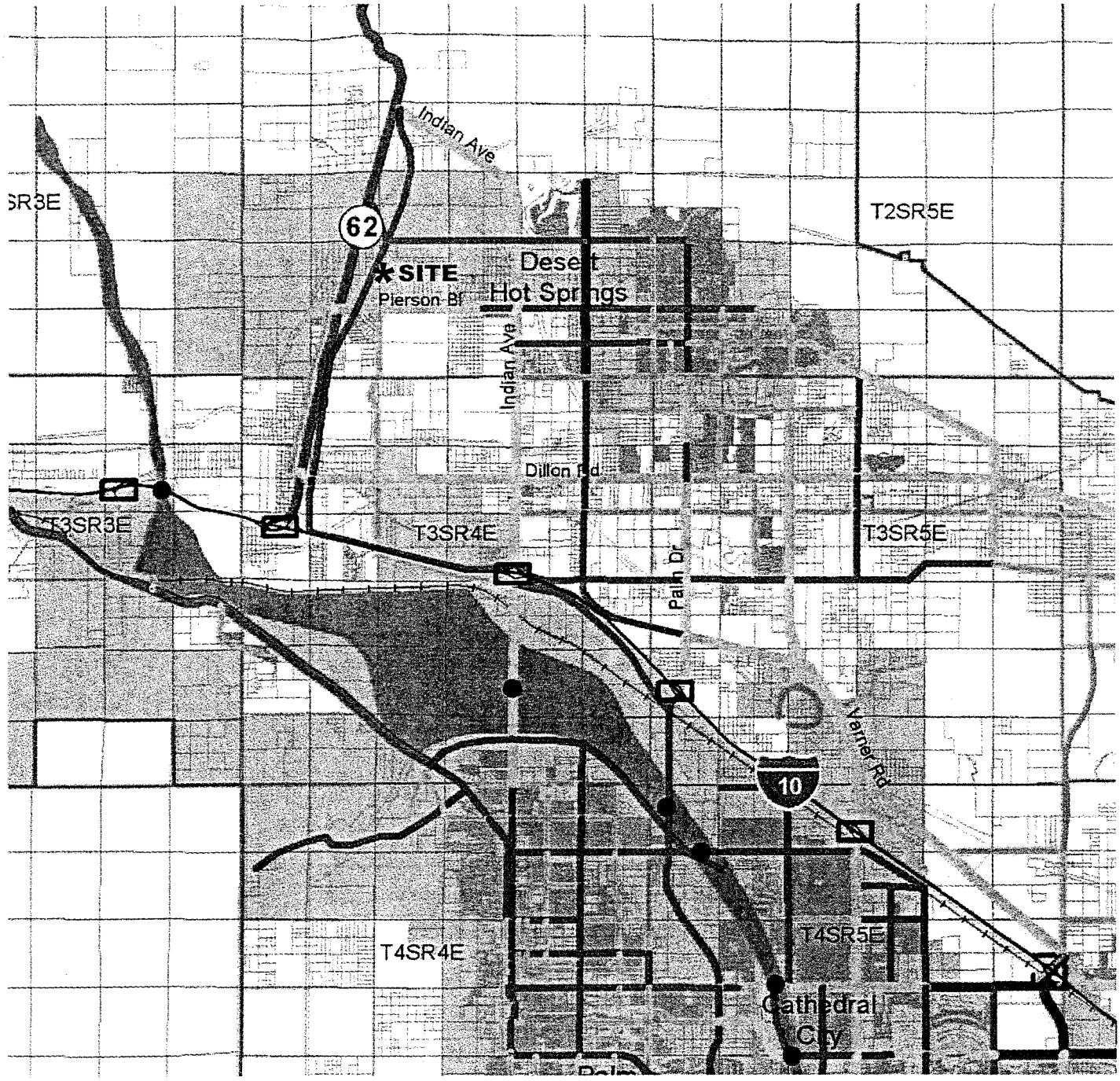


(Two Lanes w/parking)

SOURCE: CITY OF DESERT HOT SPRINGS

EXHIBIT 3-D

RIVERSIDE COUNTY GENERAL PLAN CIRCULATION ELEMENT



Expressway (184' ROW)
Urban Arterial (152' ROW)
Arterial (128' ROW)
Major (118' ROW)
Secondary (100' ROW)
Collector (74' ROW)
Mountain Arterial (110' ROW)
Freeway
Railroad

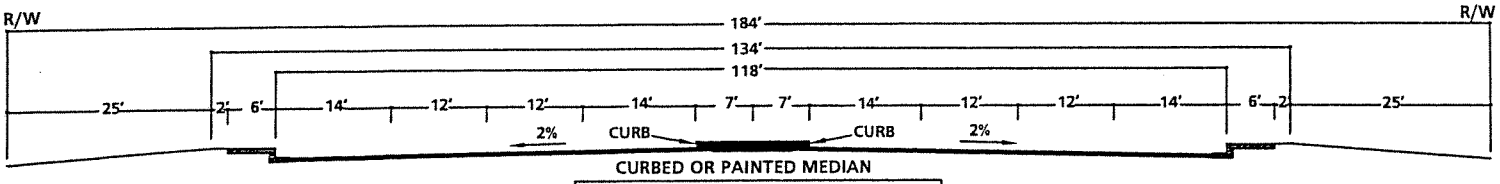
Existing Interchanges
Proposed Interchanges
Bridges
Water
City
Area Plan Boundary

N

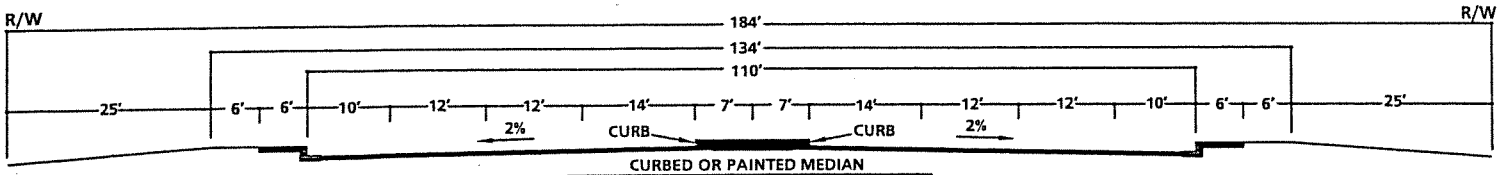
URBAN CROSSROADS

EXHIBIT 3-E

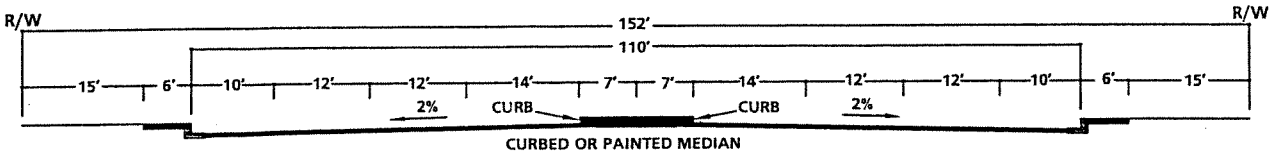
RIVERSIDE COUNTY GENERAL PLAN ROADWAY CROSS-SECTIONS



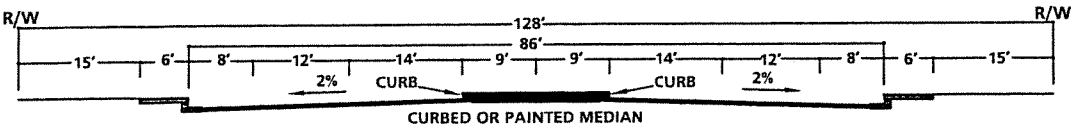
EXPRESSWAY CORRIDOR - 8 LANES



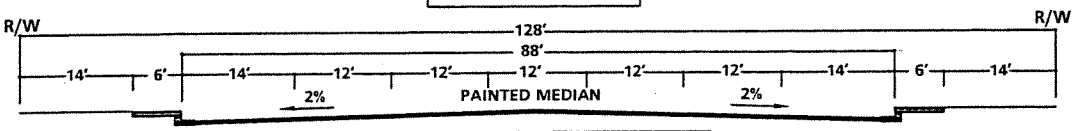
EXPRESSWAY CORRIDOR - 6 LANES



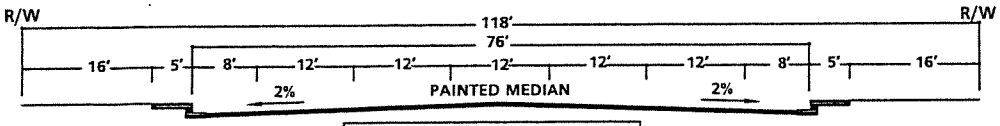
URBAN ARTERIAL HIGHWAY



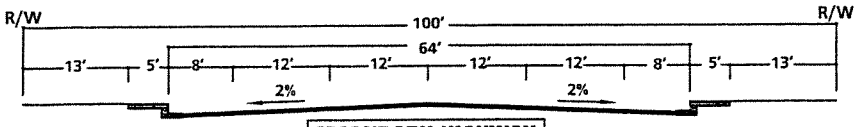
ARTERIAL HIGHWAY



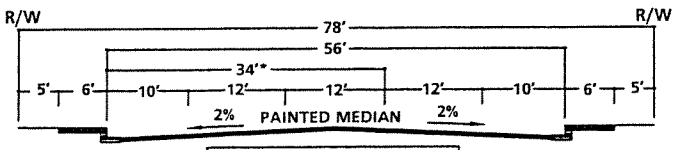
AUGMENTED MAJOR - 6 LANES



MAJOR HIGHWAY - 4 LANES

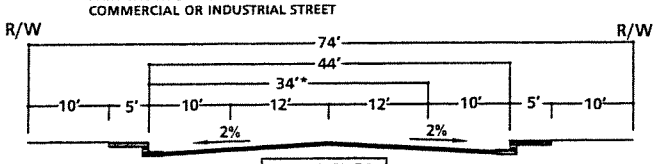


SECONDARY HIGHWAY



INDUSTRIAL COLLECTOR

* PART WIDTH STREET SECTION FOR AN INTERIOR COMMERCIAL OR INDUSTRIAL STREET



COLLECTOR

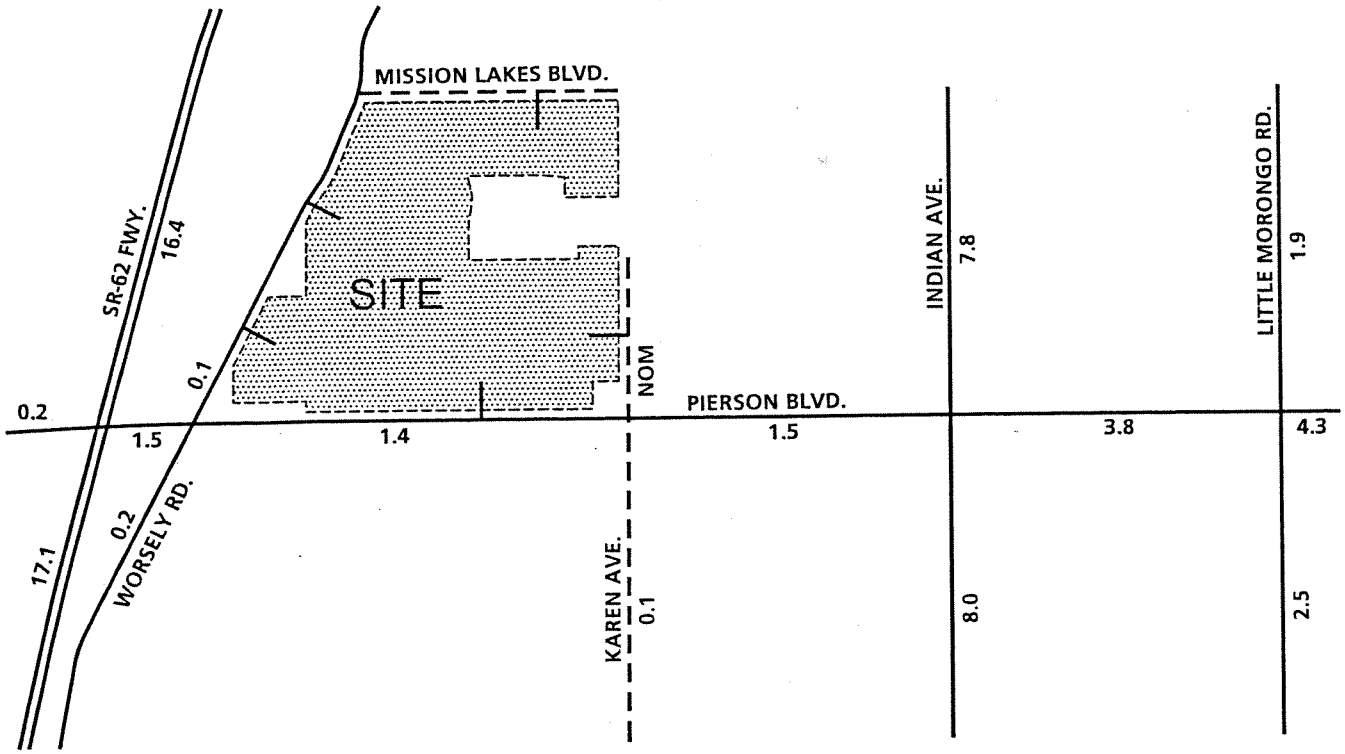
* PART WIDTH STREET SECTION FOR ALL COLLECTOR STREET - 34' IMPROVEMENTS ON 48' R/W

SOURCE: RIVERSIDE COUNTY

URBAN CROSSROADS

EXHIBIT 3-F

EXISTING AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

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URBAN CROSSROADS

the existing counts that were conducted in October to account for volume discrepancies between summer and winter season in the area. Existing ADT volumes were based on manual traffic counts from Coachella Valley Association of Governments (CVAG), empirical 24-hour daily tube counts and empirical traffic counts factored up from peak hour counts made for Urban Crossroads, Inc. using the following formula for each intersection leg:

PM Peak Hour (Approach Volume + Exit Volume) x 12 = Leg Volume.

The current technical guide to the evaluation of traffic operations is the 2000 Highway Capacity Manual (HCM) (Transportation Research Board Special Report 209). The HCM defines level of service as a qualitative measure which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate LOS (Level of Service) conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted.

The definitions of level of service for uninterrupted flow (flow unrestrained by the existence of traffic control devices) are:

- LOS "A" represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.

- LOS "B" is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.

- LOS "C" is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.

- LOS "D" represents high-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.

- LOS "E" represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.

- LOS "F" is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations.

The definitions of level of service for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control.

The level of service is typically dependent on the quality of traffic flow at the intersections along a roadway. The HCM methodology expresses the level of service at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control. The levels of service determined in this study are determined using the HCM methodology.

For signalized intersections, average total delay per vehicle for the overall intersection is used to determine level of service. Levels of service at the signalized study area intersection have been evaluated using an HCM intersection analysis program.

The study area intersections which are currently stop sign controlled with stop control on the minor street only have been analyzed using the unsignalized intersection methodology of the HCM. For these intersections,

the calculation of level of service is dependent on the occurrence of gaps occurring in the traffic flow of the main street. Using data collected describing the intersection configuration and traffic volumes at the study area location, the level of service has been calculated. The level of service criteria for this type of intersection analysis is based on measured or computed control delay per vehicle. The Level of Service is defined/computed for each minor movement. Level of Service is not defined for the intersection as a whole. For this reason the level of service is reported only for the worst minor street movement(s).

The levels of service are defined for the various analysis methodologies as follows:

LEVEL OF SERVICE	AVERAGE TOTAL DELAY PER VEHICLE (SECONDS)	
	SIGNALIZED	UNSIGNALIZED
A	0 to 10.00	0 to 10.00
B	10.01 to 20.00	10.01 to 15.00
C	20.01 to 35.00	15.01 to 25.00
D	35.01 to 55.00	25.01 to 35.00
E	55.01 to 80.00	35.01 to 50.00
F	80.01 and up	50.01 and up

Existing peak hour traffic operations have been evaluated for the study area intersections. The results of this analysis are summarized in Table 3-1, along with the existing intersection geometrics and traffic control devices at the analysis locations. Existing intersection level of service calculations are based upon manual AM and PM peak hour turning movement counts made in August and October 2003 (see Exhibits 3-G and 3-H). Traffic count worksheets are included in Appendix "A". It should be noted that based on recommendations by the staff at the City of

TABLE 3-1

INTERSECTION ANALYSIS FOR EXISTING CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at: • Pierson Blvd. (EW)	CSS	1	2	1	1	2	1	0	1	0	0	1	0	24.4	32.8	C	D
Worsley Rd. (NS) at: • Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	9.7	9.4	A	A
Karen Ave. (NS) at: • Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	8.9	7.3	A	A
Indian Ave. (NS) at: • Pierson Blvd. (EW)	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	10.1	12.9	B	B
Little Morongo Rd. (NS) at: • Pierson Blvd. (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.2	8.7	A	A

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop

4 – = Delay High, Intersection Unstable, Level of Service "F".

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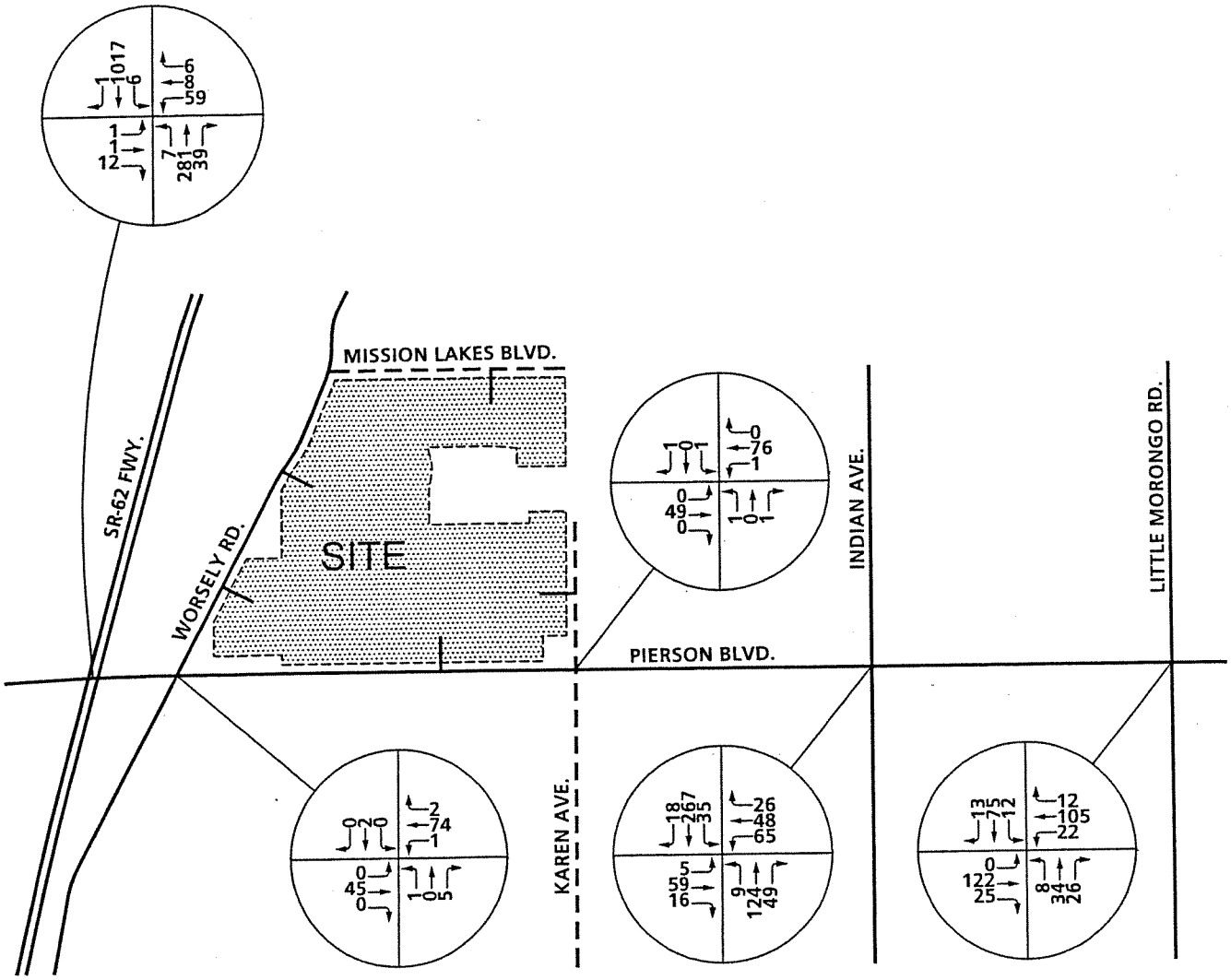
EXHIBIT 3-G

EXISTING AM PEAK HOUR INTERSECTION VOLUMES



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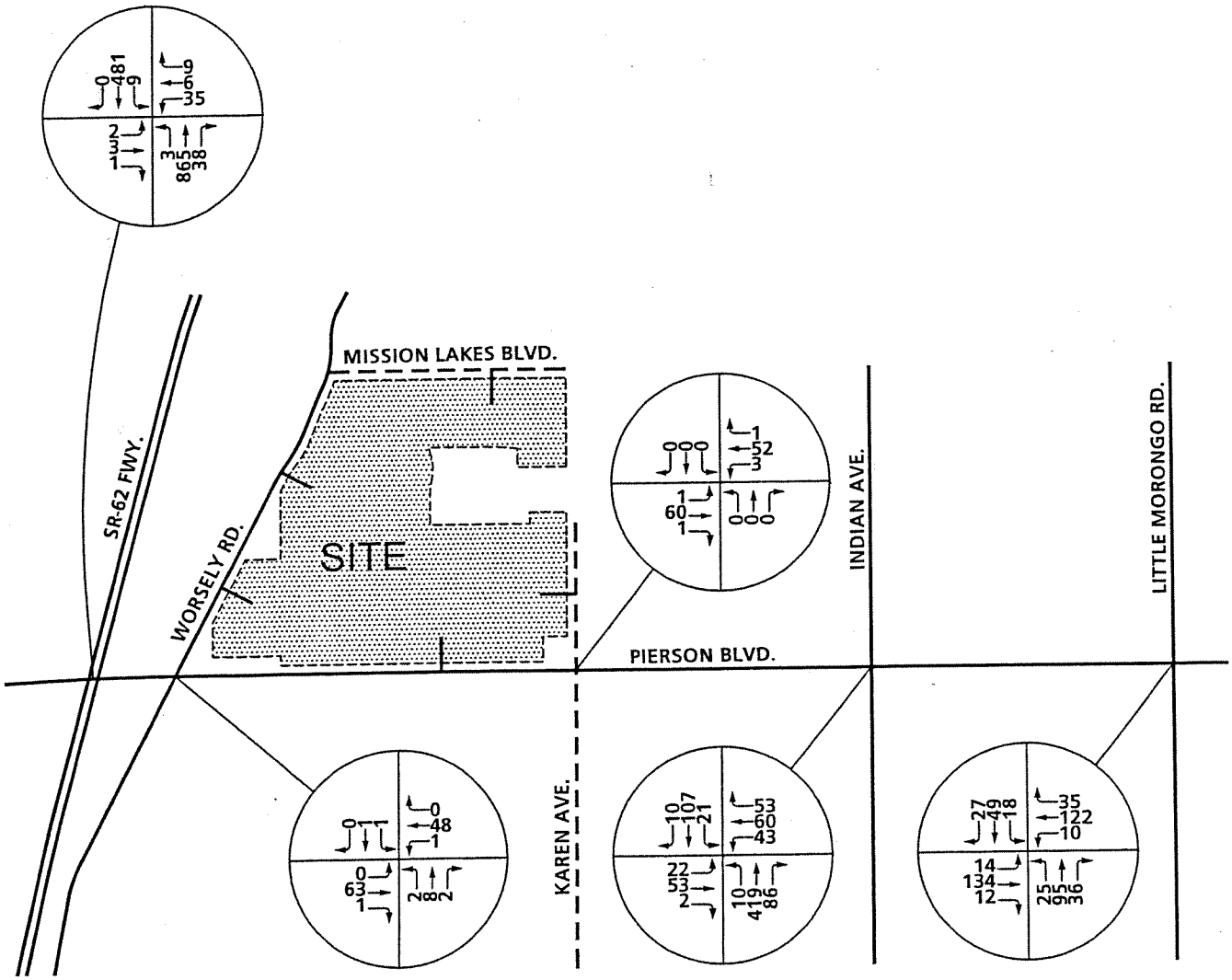
URBAN CROSSROADS

EXHIBIT 3-H

EXISTING PM PEAK HOUR INTERSECTION VOLUMES



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URBAN CROSSROADS

Desert Hot Springs, an increase of 30 percent has been applied to the existing counts and an increase of 15 percent has been applied to the existing counts that were conducted in October to account for increased activity during the winter season in the area.

Based on the existing traffic volumes and intersection geometrics, the study area intersections are currently operating at acceptable levels of service.

Existing HCM calculation worksheets are provided in Appendix "B".

4.0 PROJECTED TRAFFIC

A. Site Traffic

1. Trip Generation

Trip generation represents the amount of traffic which is attracted and produced by a development. The traffic generation for the project is based upon the specific land uses which have been planned for this development. The proposed land use consists of developing 1,993 detached single-family residential dwelling units and a 1,100 student elementary school. The proposed project has been divided into five separate Phases which are represented by traffic analysis zones (TAZ) based on the location of the development and utilization of the access points. Exhibit 2-A, presented previously, illustrates the boundaries for each Phase.

The derived trip generation rates for the proposed expansion are shown in Table 4-1. The trip generation rates are based upon the Institute of Transportation Engineers, Trip Generation (6th Edition).

For each phase, both daily and peak hour trip generation for the Stoneridge Residential Development are shown in Table 4-2. The proposed project is anticipated to generate approximately 20,196 trip-ends per day with 1,813 vehicles per hour during the AM peak hour and 2,300 vehicles per hour during the PM peak hour.

2. Trip Distribution

Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is heavily influenced by the geographical location of the site, the location of commercial, employment and the proximity to the regional freeway system. The directional orientation of

TABLE 4-1

TRIP GENERATION RATES[1]

LAND USE	ITE CODE	QUANTITY	UNITS[2]	PEAK HOUR TRIP RATES AM IN	AM OUT	PM IN	PM OUT	DAILY
Project Trip Rates:								
Single-Family Detached	210	1993	DU	0.19	0.56	0.65	0.36	9.57
Elementary School	520	1100	STU	0.17	0.12	0.12	0.14	1.02
Other Development Trip Rates:								
Single-Family Detached	210	Varies	DU	0.19	0.56	0.65	0.36	9.57
Residential Condo / Townhouse	230	130	DU	0.07	0.37	0.36	0.18	5.86
Apartments	220	323	DU	0.08	0.43	0.42	0.20	6.63
Commercial	820	109.5	TSF	0.94	0.60	2.92	3.17	65.99
Elderly Housing Detached	251	424	DU	0.08	0.13	0.15	0.08	3.30
Golf Course	430	36	HOLES	1.75	0.47	1.21	1.53	35.74

---

[1] Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 6th Edition, 1997.

[2] DU = Dwelling Units
STU = Students
TSF = Thousand Square Feet
HOLES = Number of holes in a golf course

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TABLE 4-2

TRIP GENERATION SUMMARY

LAND USE	QUANTITY	UNITS[1]	PEAK HOUR AM IN	PEAK HOUR AM OUT	PEAK HOUR PM IN	PEAK HOUR PM OUT	DAILY
YEAR 2004 CONDITIONS							
SFDR[2] (PHASE I)	370	DU	70	207	241	133	3,541
YEAR 2005 CONDITIONS							
SFDR (PHASE I)	370	DU	70	207	241	133	3,541
SFDR (PHASE II)	633	DU	120	354	411	228	6,058
TOTAL (YEAR 2005: PHASES I-II)			**190**	**561**	**652**	**361**	**9,599**
YEAR 2006 CONDITIONS							
SFDR (PHASE I)	370	DU	70	207	241	133	3,541
SFDR (PHASE II)	633	DU	120	354	411	228	6,058
SFDR (PHASE III)	400	DU	76	224	260	144	3,828
Elementary School (PHASE III)	1,100	STU	187	132	132	154	1,122
TOTAL (YEAR 2006: PHASES I-III)			**453**	**917**	**1044**	**659**	**14,549**
YEAR 2007 CONDITIONS							
SFDR (PHASE I)	370	DU	70	207	241	133	3,541
SFDR (PHASE II)	633	DU	120	354	411	228	6,058
SFDR (PHASE III)	400	DU	76	224	260	144	3,828
Elementary School (PHASE III)	1,100	STU	187	132	132	154	1,122
SFDR (PHASE IV)	380	DU	72	213	247	137	3,637
TOTAL (YEAR 2007: PHASES I - IV)			**525**	**1130**	**1291**	**796**	**18,186**
YEAR 2008 CONDITIONS							
SFDR (PHASE I)	370	DU	70	207	241	133	3,541
SFDR (PHASE II)	633	DU	120	354	411	228	6,058
SFDR (PHASE III)	400	DU	76	224	260	144	3,828
Elementary School (PHASE III)	1,100	STU	187	132	132	154	1,122
SFDR (PHASE IV)	380	DU	72	213	247	137	3,637
SFDR (PHASE V)	210	DU	40	118	137	76	2,010
TOTAL (YEAR 2008: ALL PHASES)			**565**	**1248**	**1428**	**872**	**20,196**

[1] DU = Dwelling Units
STU = Students

[2] SFDR = Single-Family Detached Residential

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traffic was determined by evaluating existing and proposed land uses and highways within the community and existing traffic volumes.

Trip distribution for this study has been based upon near-term conditions, based upon those highway facilities which are either in place or will be completed over the next few years, which represents the opening occupancy time-frame for the proposed development. The trip distribution patterns for each phase of the project are graphically depicted on Exhibits 4-A through 4-F, respectively.

3. Modal Split

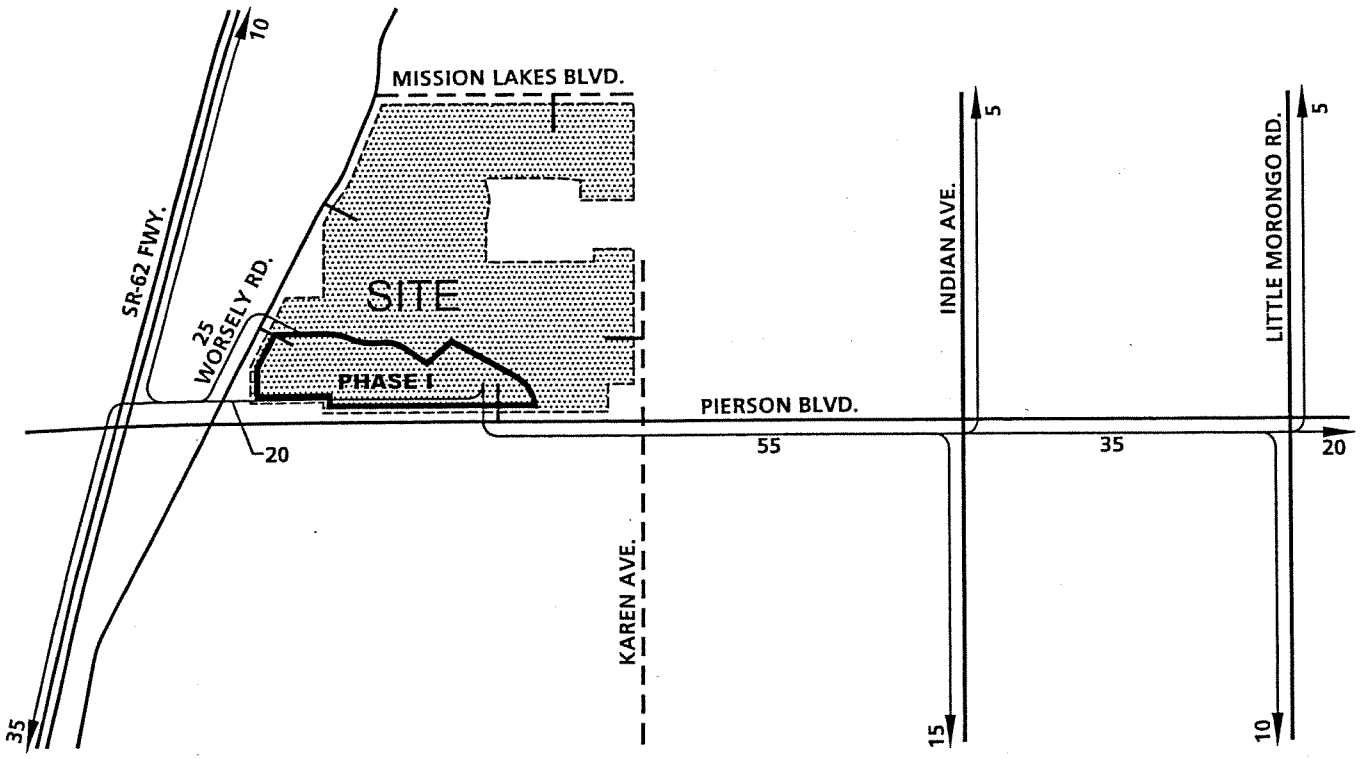
The traffic reducing potential of public transit has not been considered in this report. Essentially the traffic projections are "conservative" in that public transit might be able to reduce the traffic volumes.

4. Trip Assignment

The assignment of traffic from the site to the adjoining roadway system has been based upon the site's trip generation, trip distributions, proposed arterial highway and local street systems, which would be in place by the time of initial occupancy of the site. Based on the identified project traffic generation and distributions, project ADT volumes for Phases I, II, III, IV, and V are shown on Exhibits 4-G, 4-H, 4-I, 4-J, and 4-K, respectively. For Phase I, project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-L and 4-M, respectively. For Phase II, project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-N and 4-O, respectively. For Phase III, project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-P and 4-Q, respectively. For Phase IV, project AM and PM

EXHIBIT 4-A

PROJECT (PHASE I) TRIP DISTRIBUTION



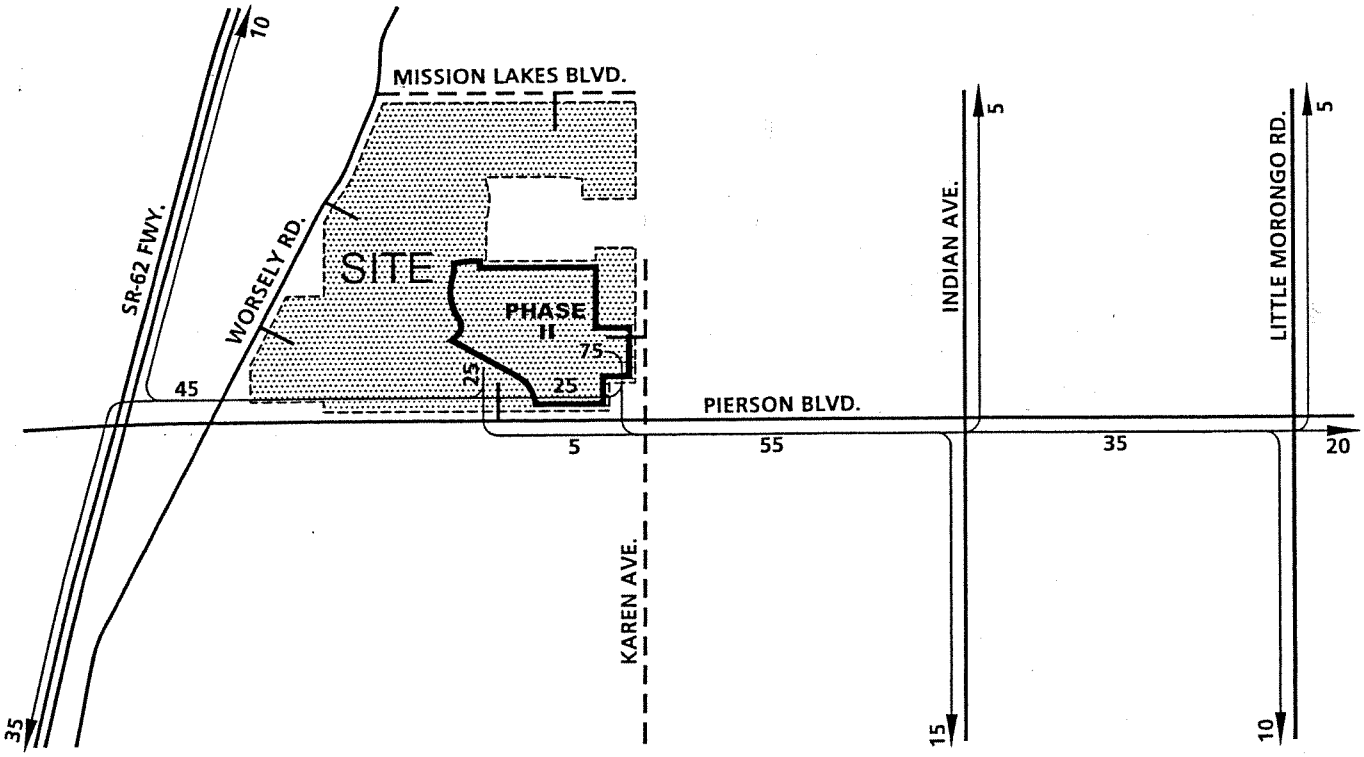
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 4-B

PROJECT (PHASE II) TRIP DISTRIBUTION



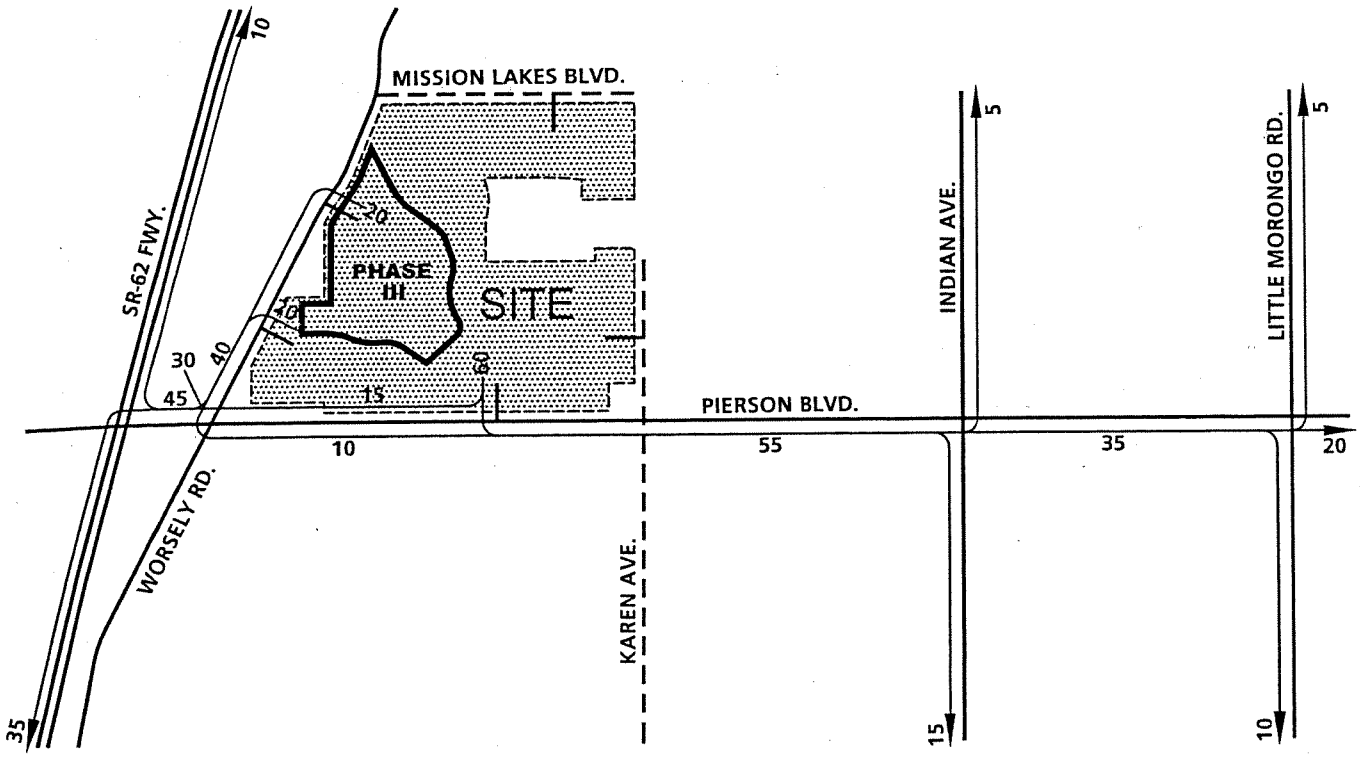
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 4-C

PROJECT (PHASE III) RESIDENTIAL TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

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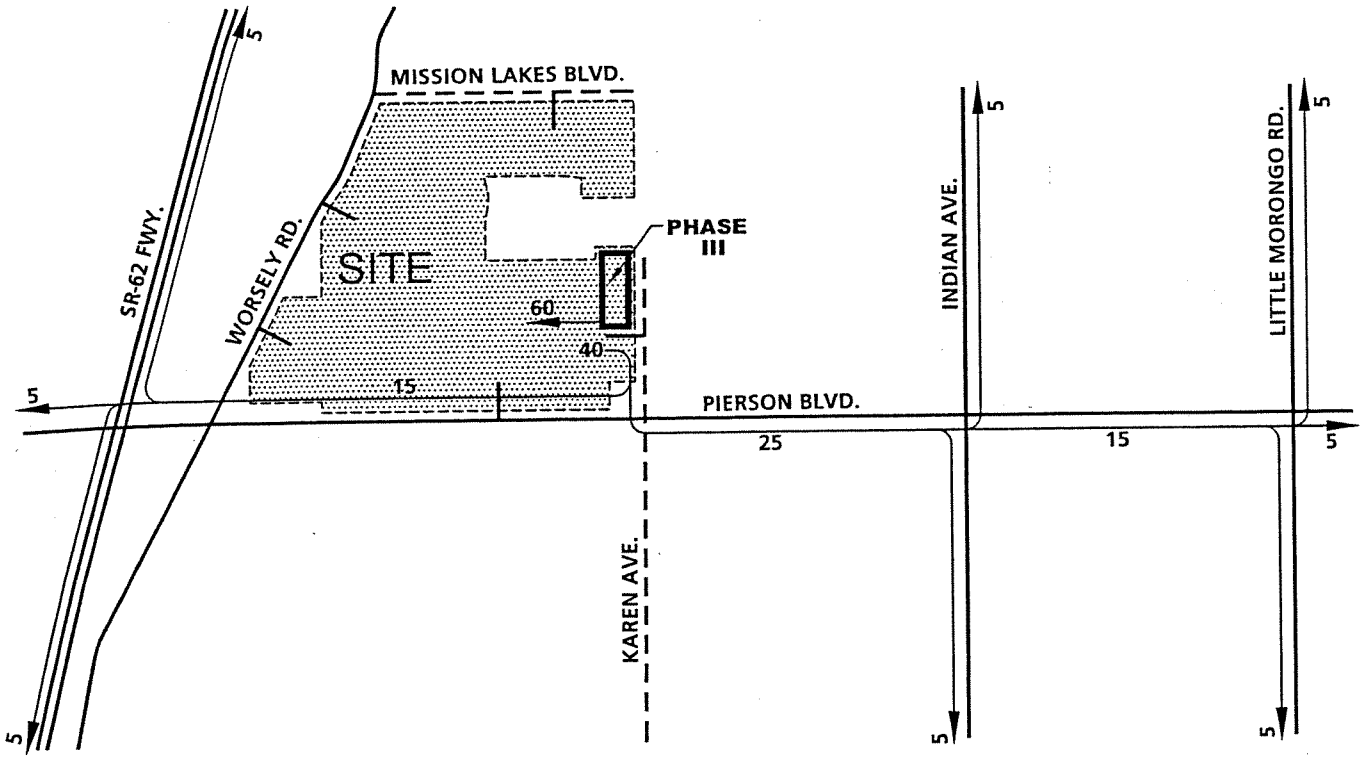
EXHIBIT 4-D

PROJECT (PHASE III) ELEMENTARY SCHOOL TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

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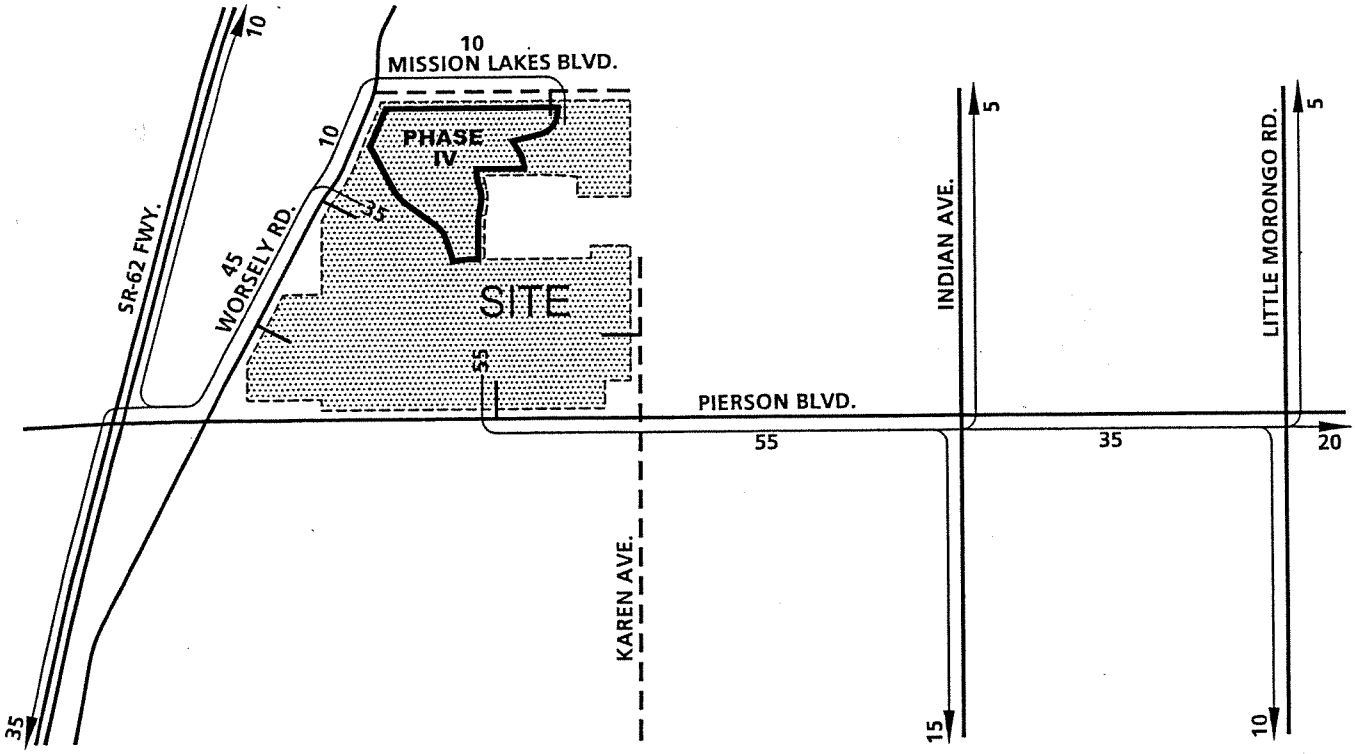
URBAN CROSSROADS

EXHIBIT 4-E

PROJECT (PHASE IV) TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

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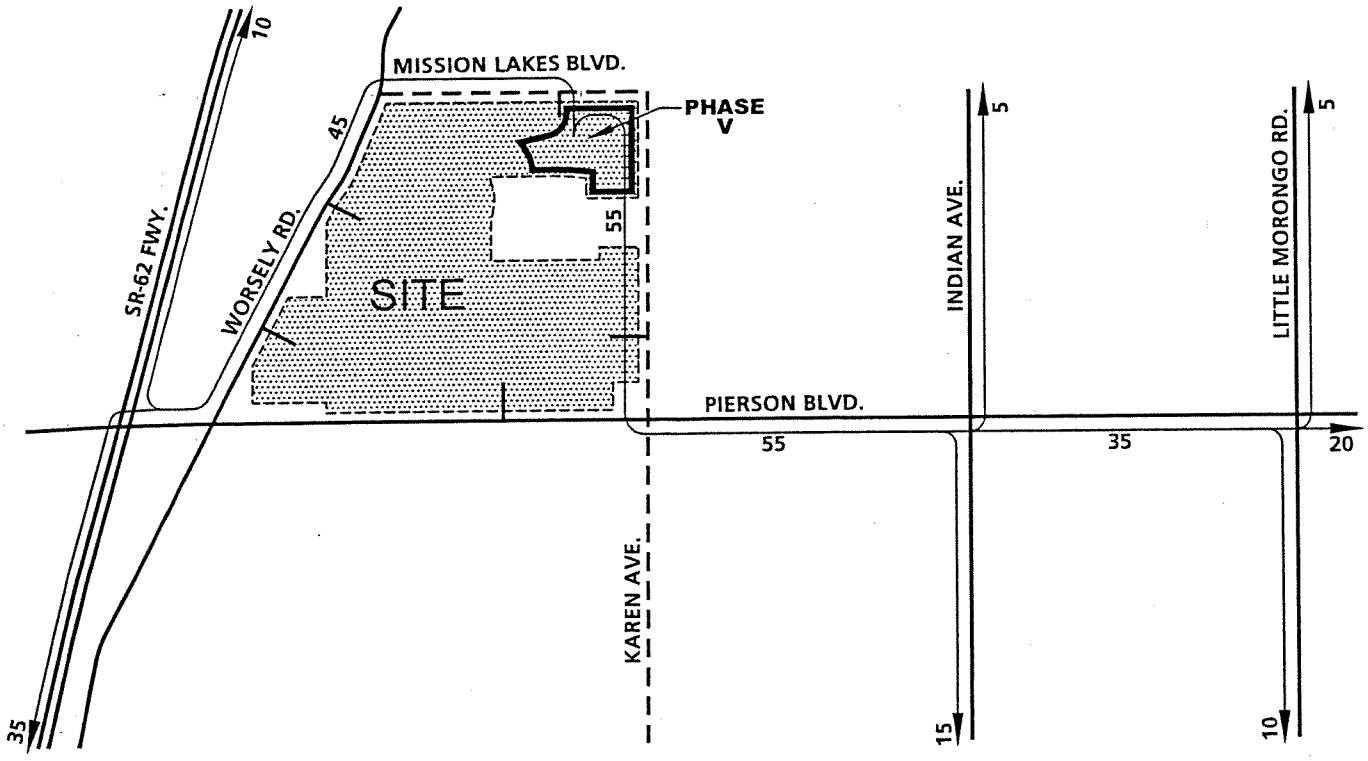
EXHIBIT 4-F

PROJECT (PHASE V) TRIP DISTRIBUTION



LEGEND:

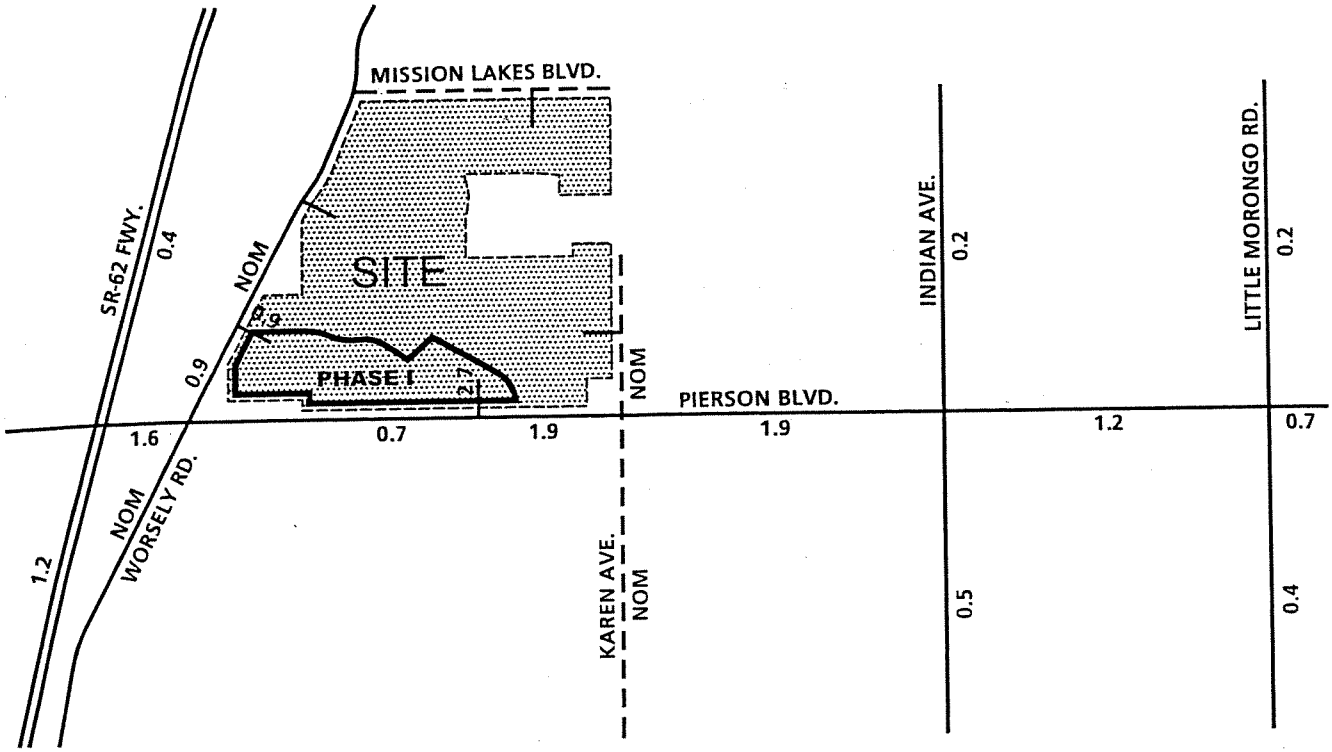
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 4-G

PROJECT (PHASE I) AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

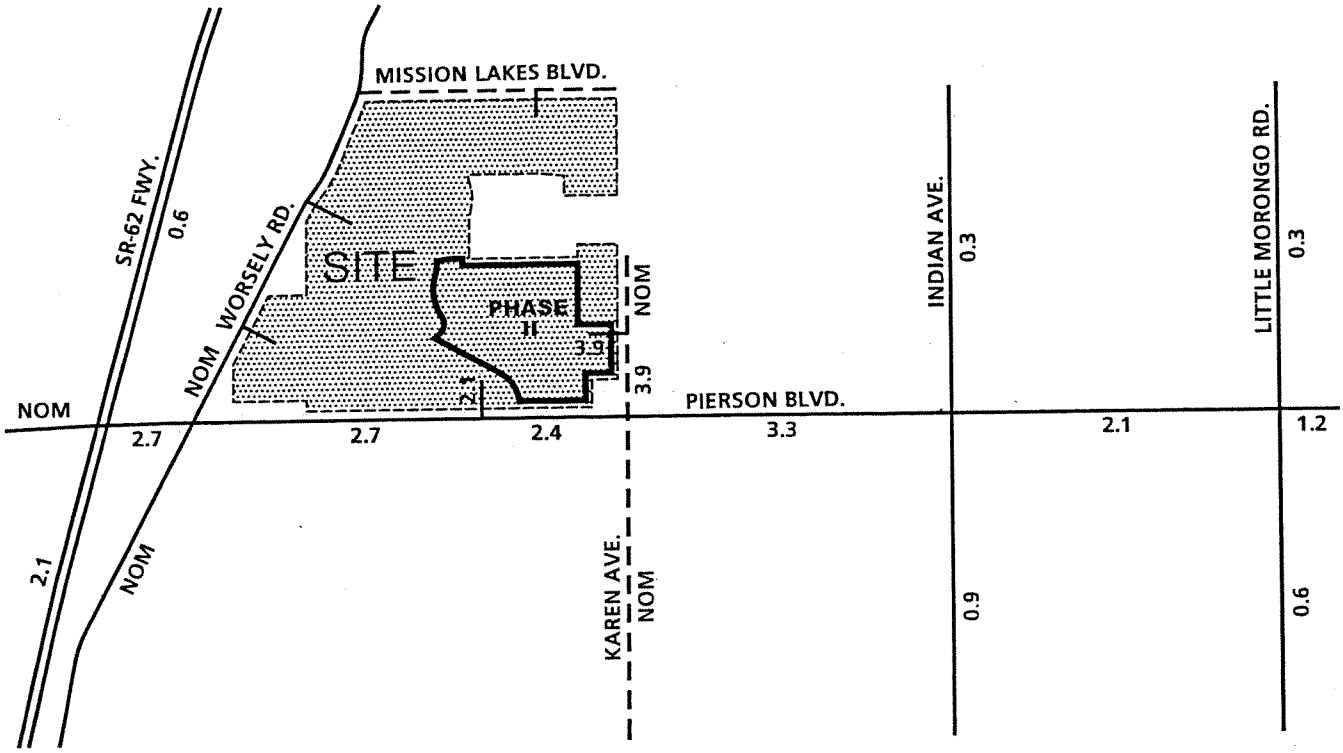
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

EXHIBIT 4-H

PROJECT (PHASE II) AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

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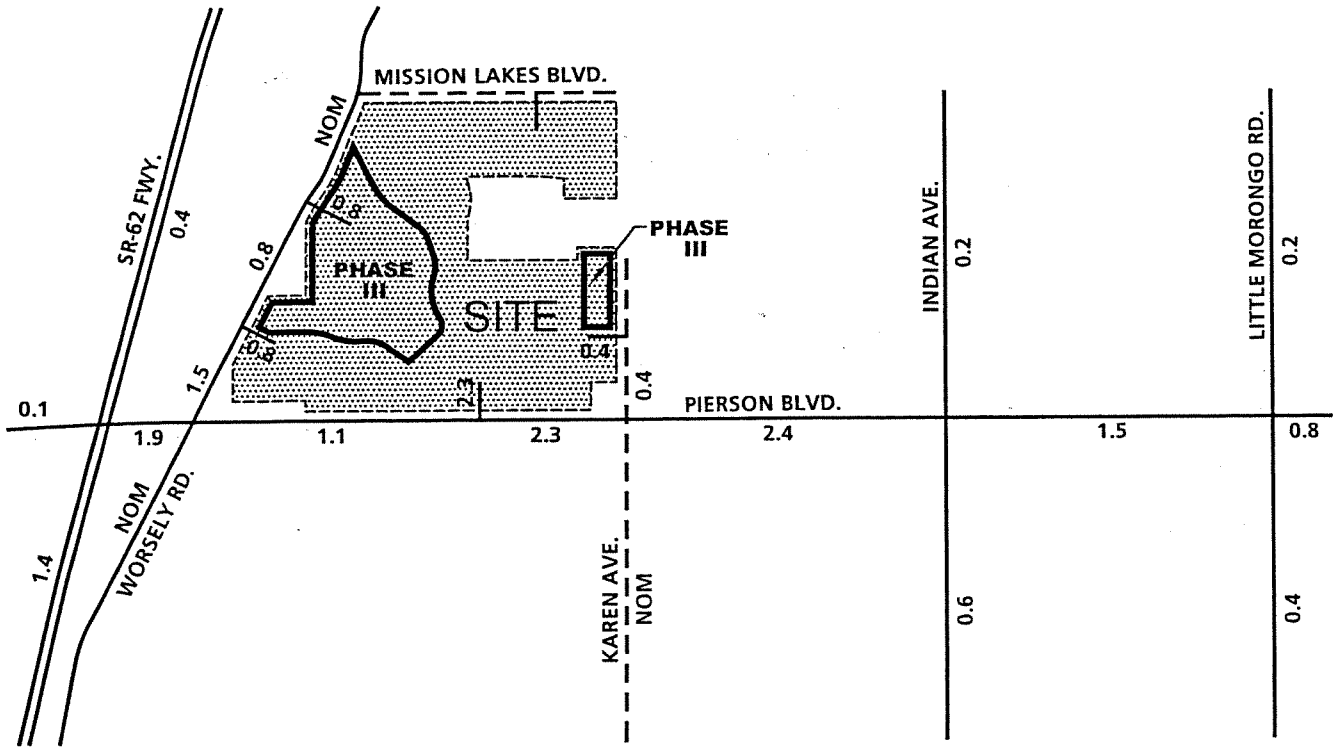
URBAN CROSSROADS

EXHIBIT 4-I

PROJECT (PHASE III) AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

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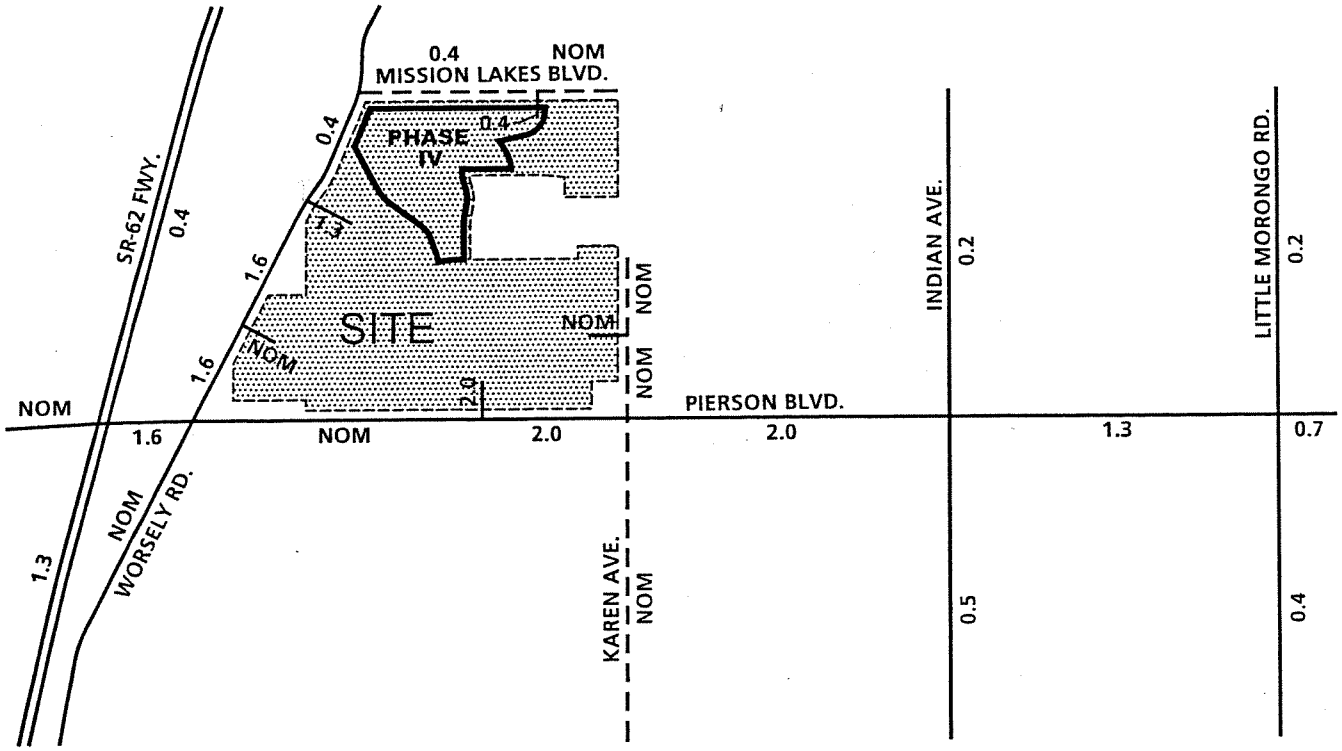
URBAN CROSSROADS

EXHIBIT 4-J

PROJECT (PHASE IV) AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

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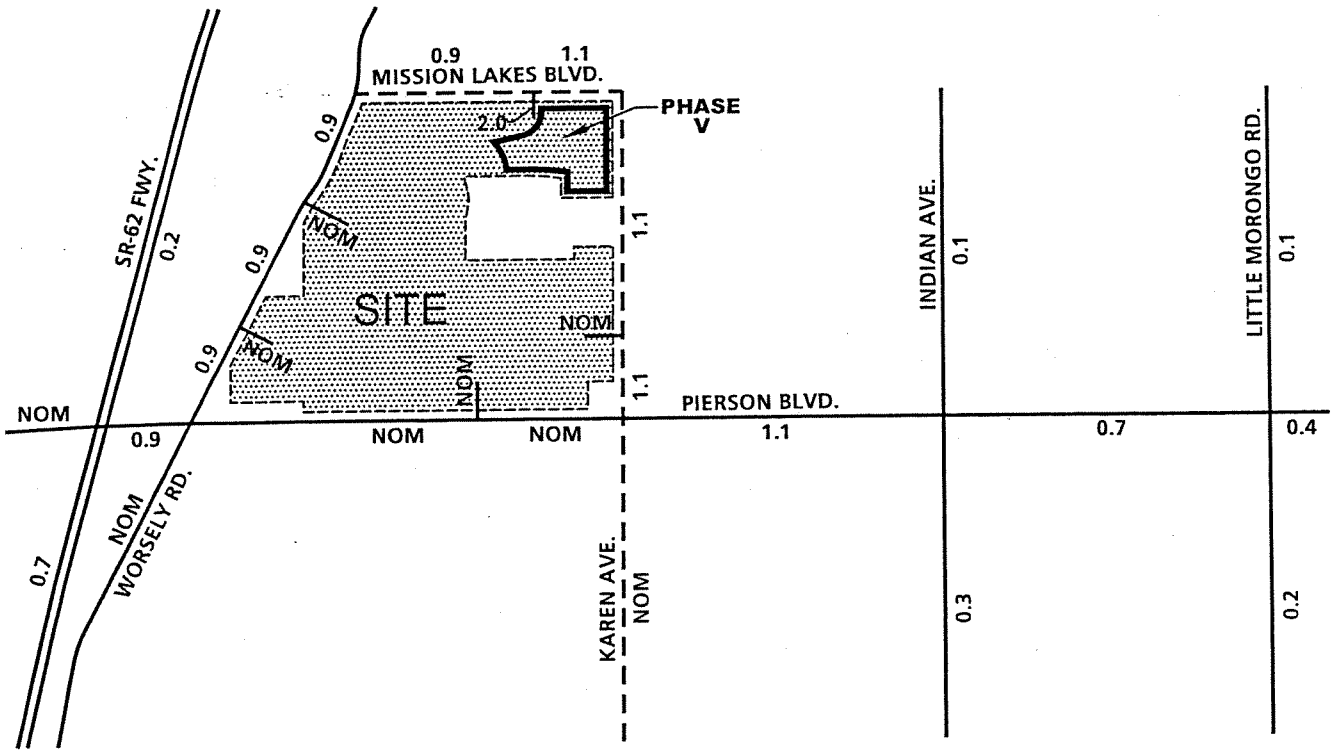
URBAN CROSSROADS

EXHIBIT 4-K

PROJECT (PHASE V) AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

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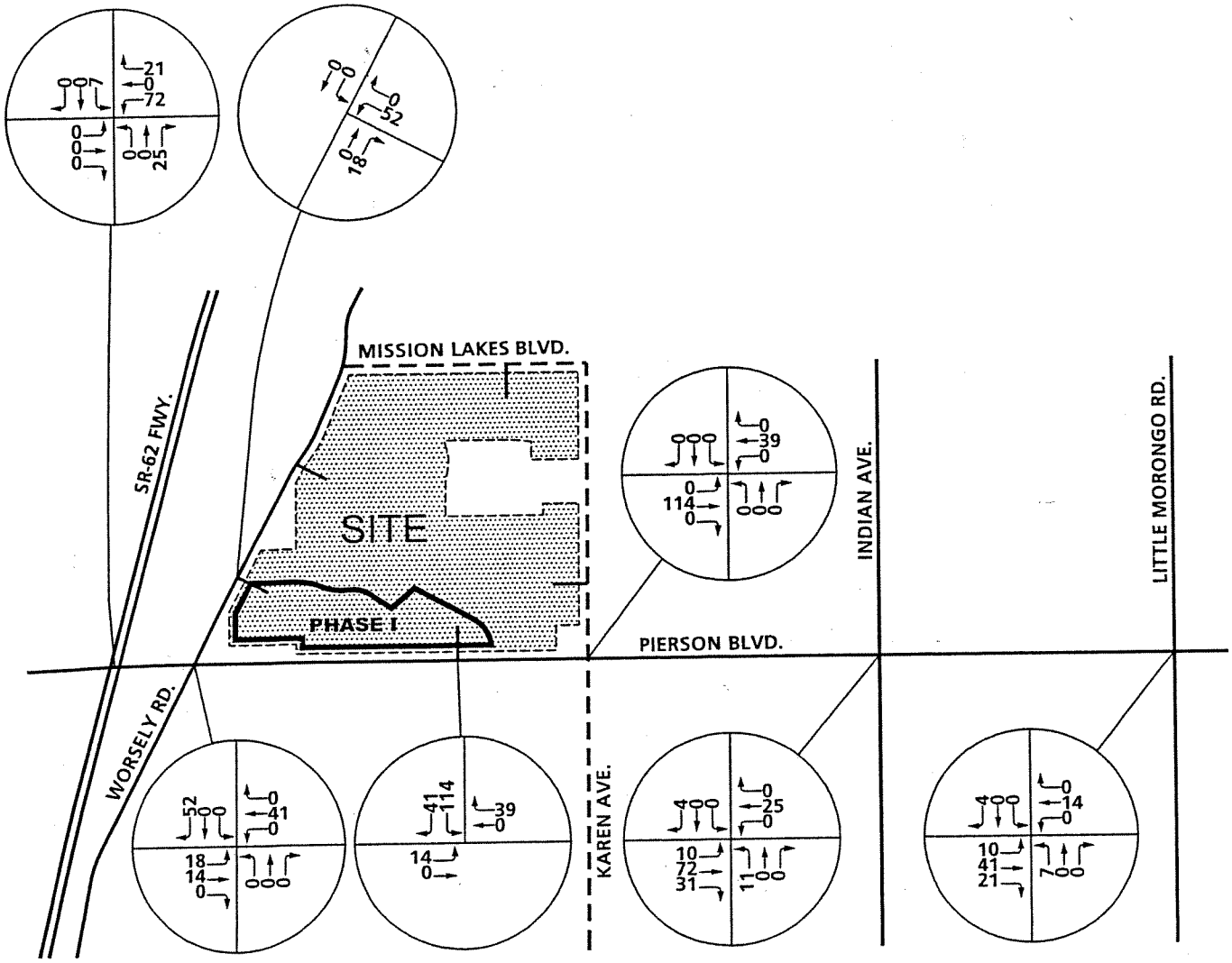
URBAN CROSSROADS

EXHIBIT 4-L

PROJECT (PHASE I) AM PEAK HOUR INTERSECTION VOLUMES



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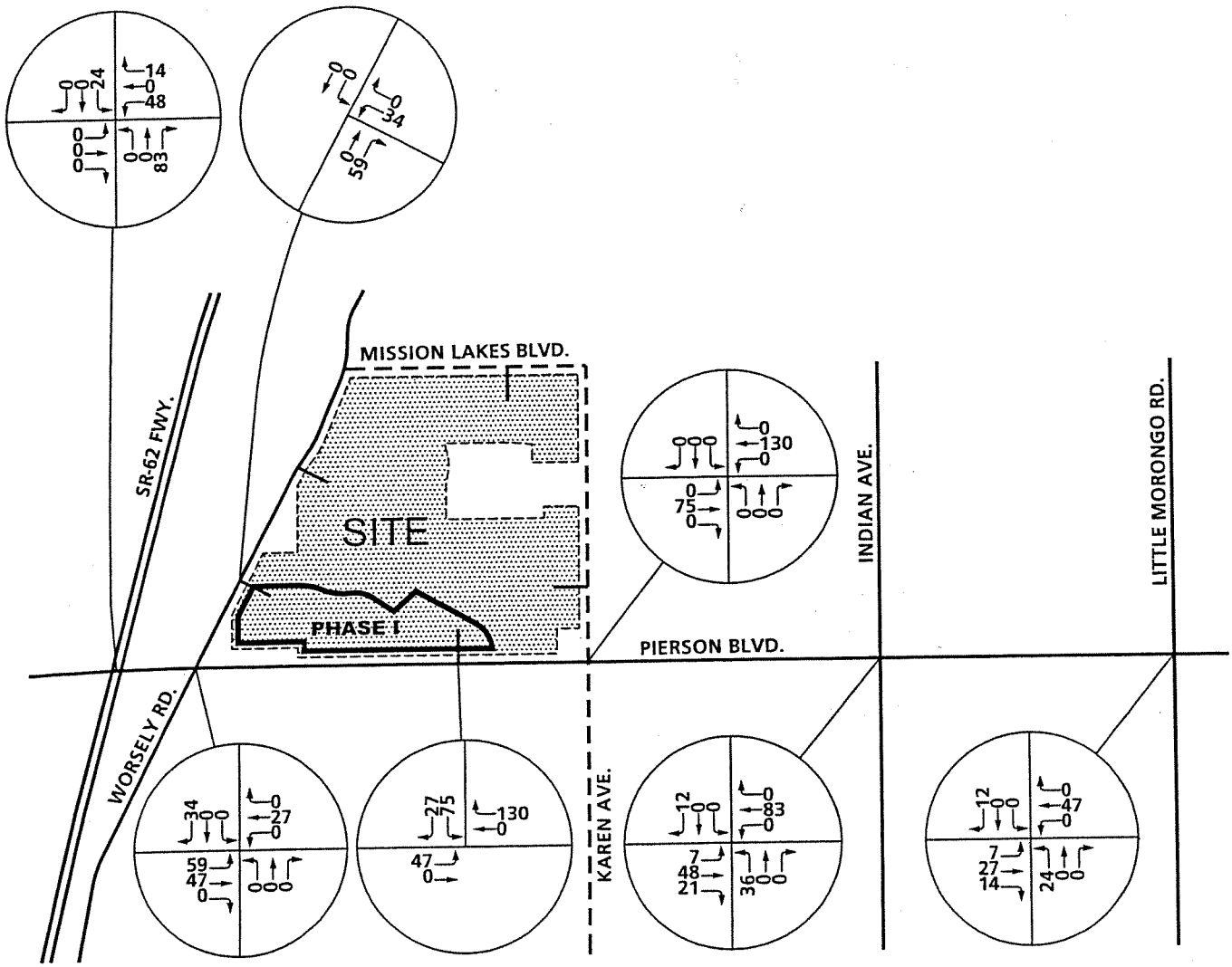
URBAN CROSSROADS

EXHIBIT 4-M

PROJECT (PHASE I) PM PEAK HOUR INTERSECTION VOLUMES



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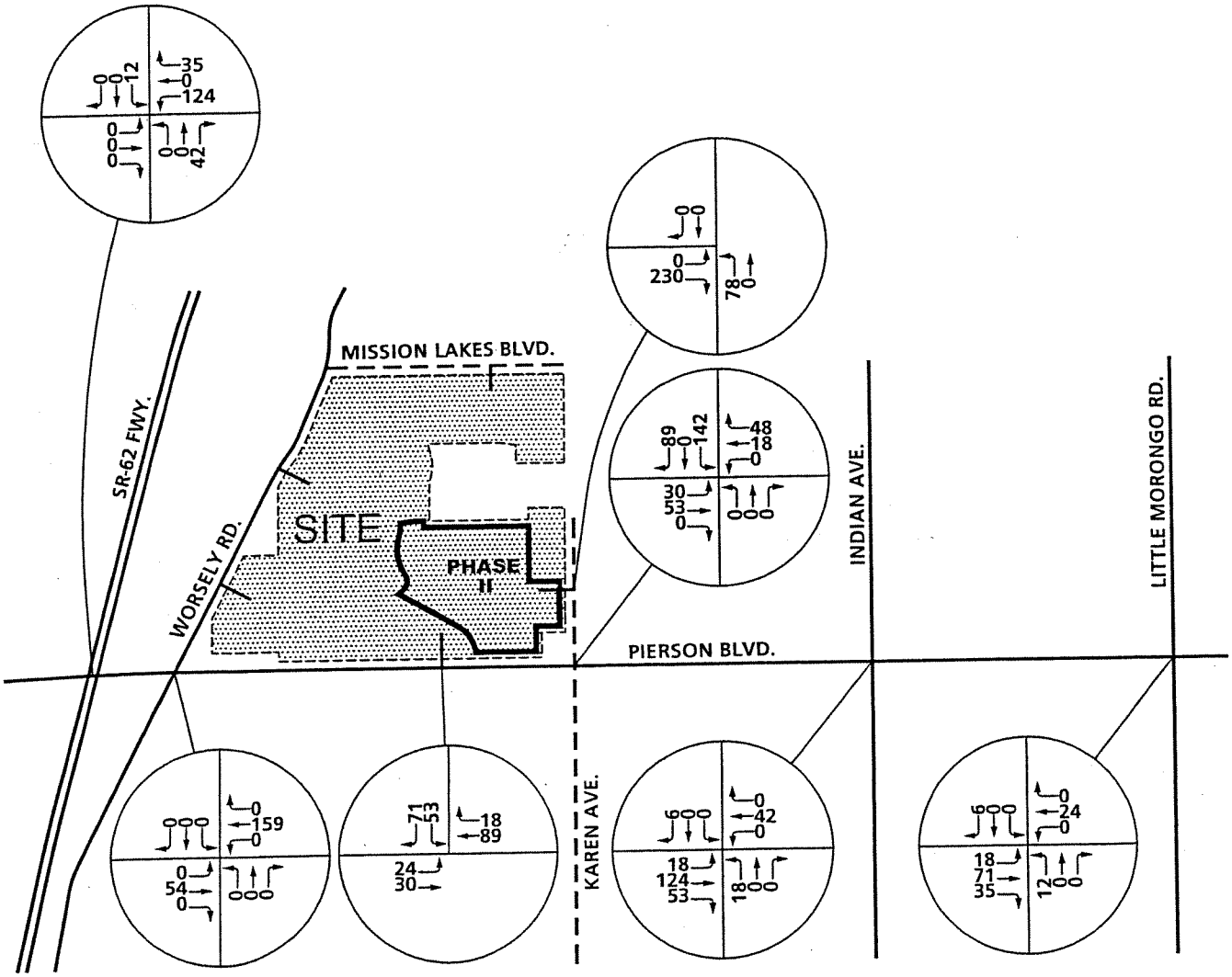
URBAN CROSSROADS

EXHIBIT 4-N

PROJECT (PHASE II) AM PEAK HOUR INTERSECTION VOLUMES



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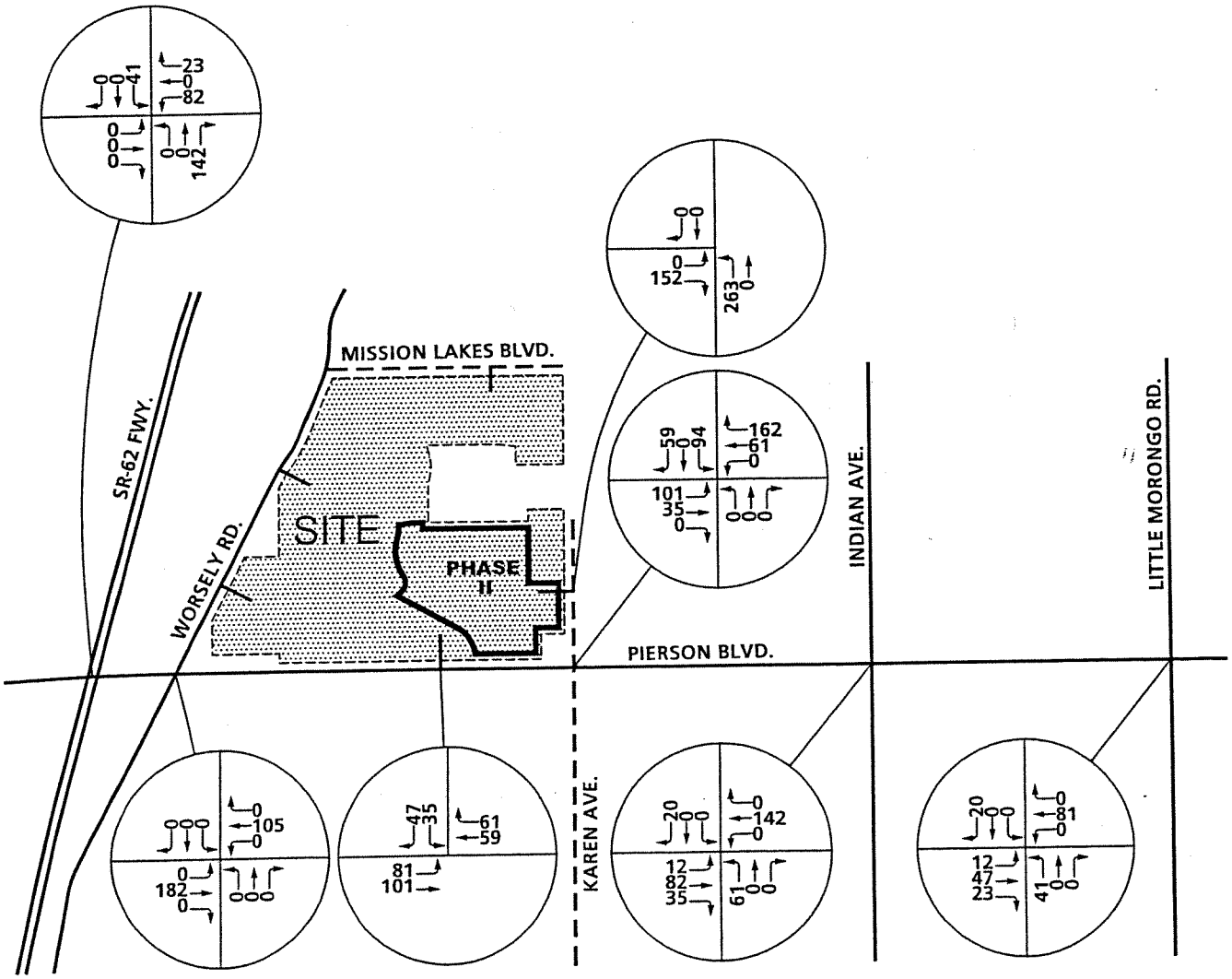
STONERIDGE PROJECT, City of Desert Hot Springs, California - 01552:62

URBAN CROSSROADS

EXHIBIT 4-O

PROJECT (PHASE II) PM PEAK HOUR INTERSECTION VOLUMES



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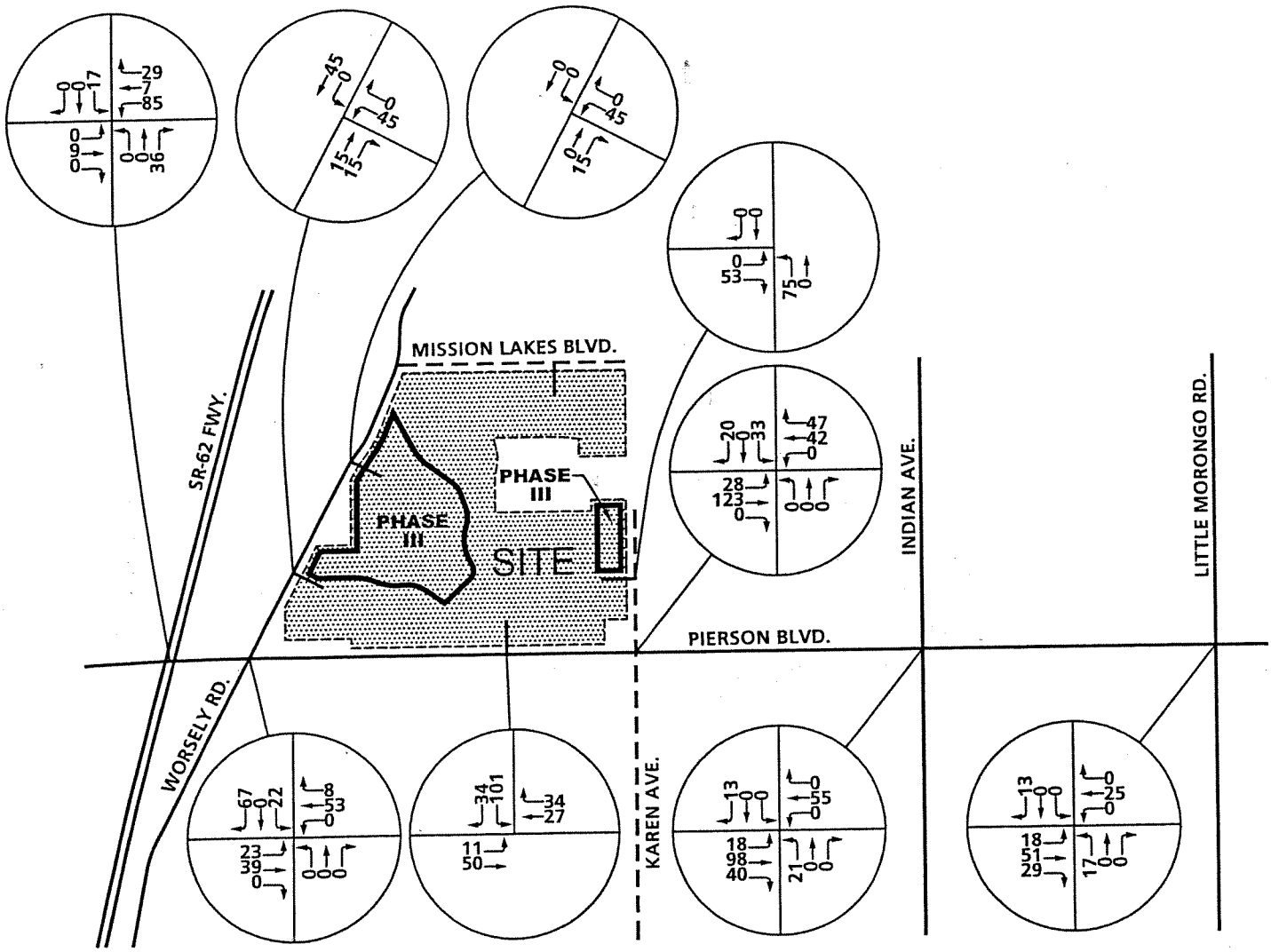
STONERIDGE PROJECT, City of Desert Hot Springs, California - 01552:63

URBAN CROSSROADS

EXHIBIT 4-P

PROJECT (PHASE III) AM PEAK HOUR INTERSECTION VOLUMES



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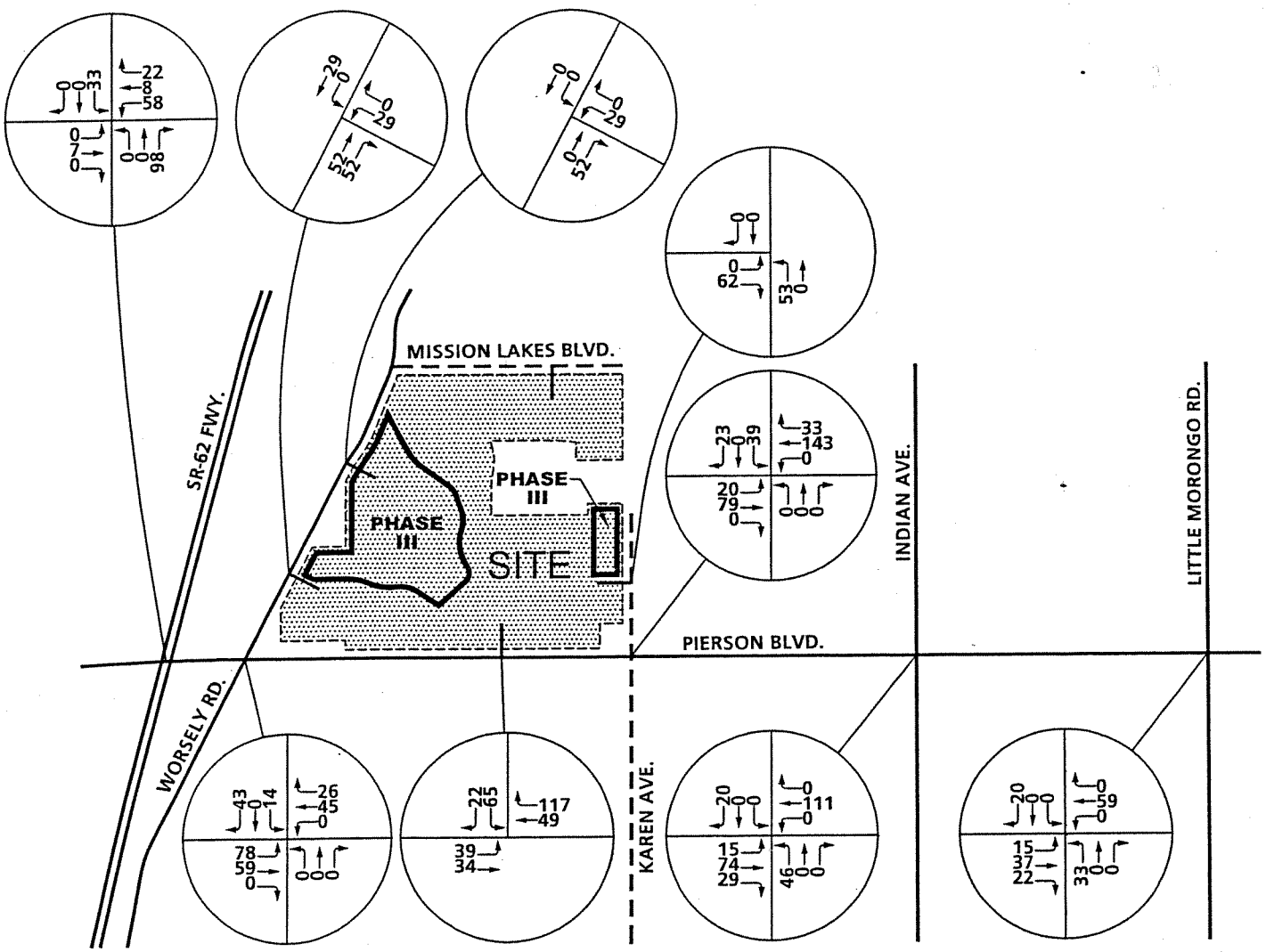
URBAN CROSSROADS

EXHIBIT 4-Q

PROJECT (PHASE III) PM PEAK HOUR INTERSECTION VOLUMES



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URBAN CROSSROADS

peak hour intersection turning movement volumes are shown on Exhibits 4-R and 4-S, respectively. For Phase V, project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-T and 4-U, respectively.

B. Other Development Traffic

1. Method of Projection

To assess future traffic conditions, cumulative traffic is combined with existing traffic and areawide growth. These cumulative projects are illustrated on Exhibit 4-V.

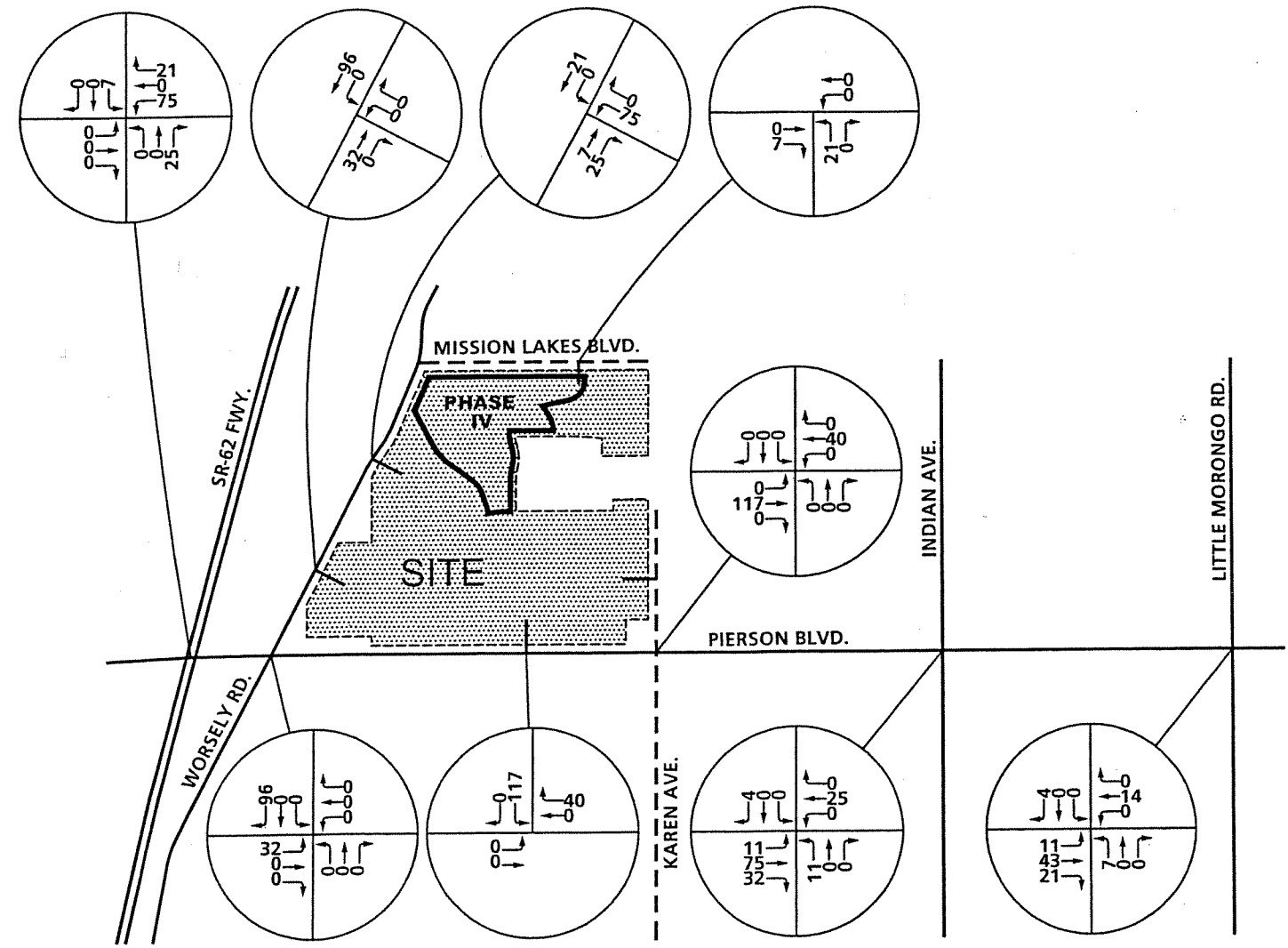
2. Non-Site Traffic for Study Area

Table 4-1 (previously illustrated) summarizes the trip rates used for the proposed land uses for the nearby developments known by Urban Crossroads, Inc. at the time this study was prepared and provided by the City of Desert Hot Springs Transportation Department staff.

Tables 4-3 to 4-7 show the daily and peak hour vehicle trips generated by the surrounding developments being processed concurrently in the study area for Year 2004, 2005, 2006, 2007 and 2008, respectively. The trip generation estimates included in these tables are based on the assumption that the developments will be constructed in equal increments (i.e. 20% per year). Exhibits 4-W to 4-Z contain the directional distribution and assignment of the other development traffic. Based on the identified trip distributions for the cumulative developments on arterial highways throughout the study area, other development ADT volumes are shown on Exhibit 4-AA. The cumulative developments' AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-BB and 4-CC, respectively.

EXHIBIT 4-R

PROJECT (PHASE IV) AM PEAK HOUR INTERSECTION VOLUMES



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URBAN CROSSROADS

EXHIBIT 4-S

PROJECT (PHASE IV) PM PEAK HOUR INTERSECTION VOLUMES

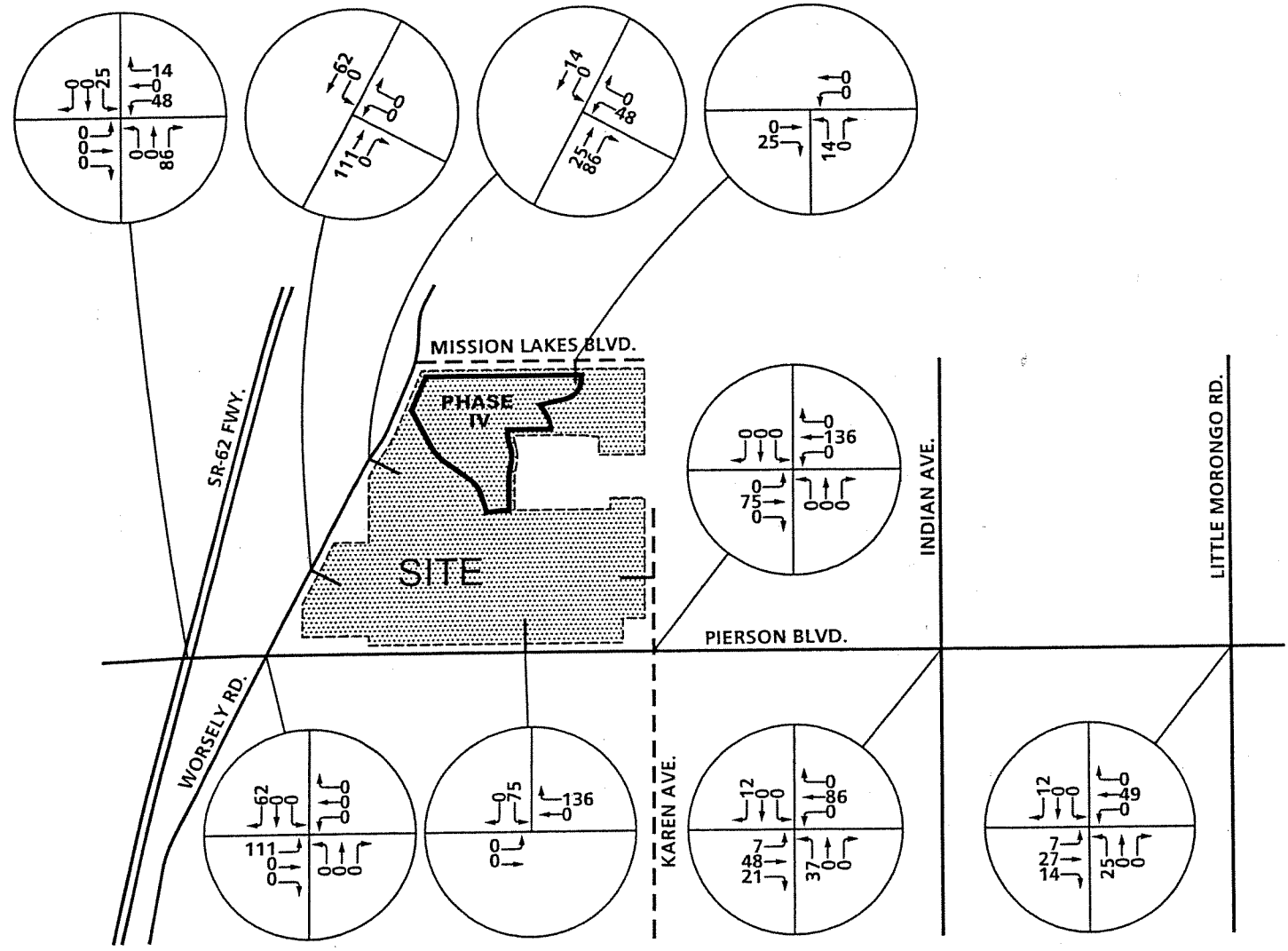
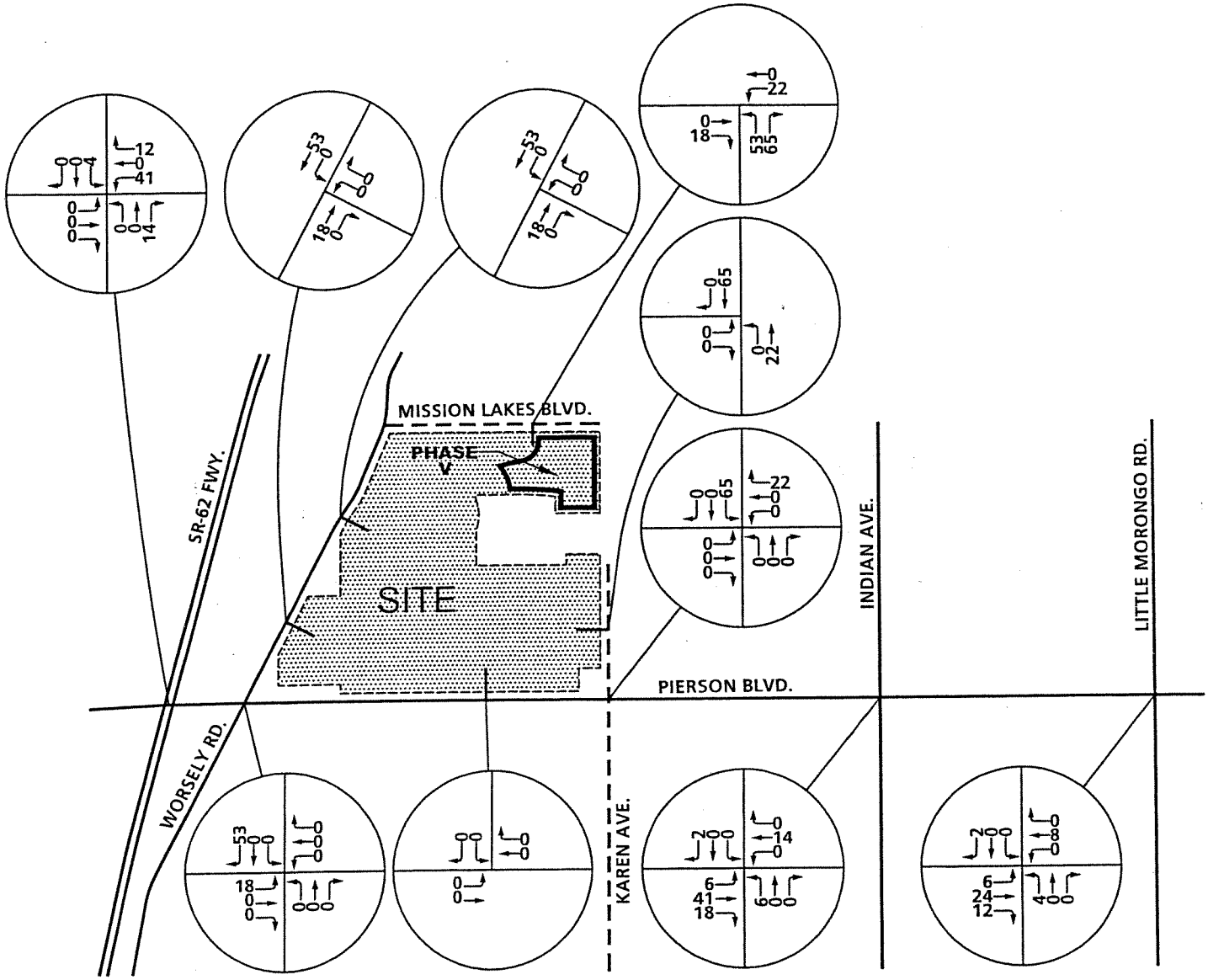


EXHIBIT 4-T

PROJECT (PHASE V) AM PEAK HOUR INTERSECTION VOLUMES



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URBAN CROSSROADS

EXHIBIT 4-U

PROJECT (PHASE V) PM PEAK HOUR INTERSECTION VOLUMES

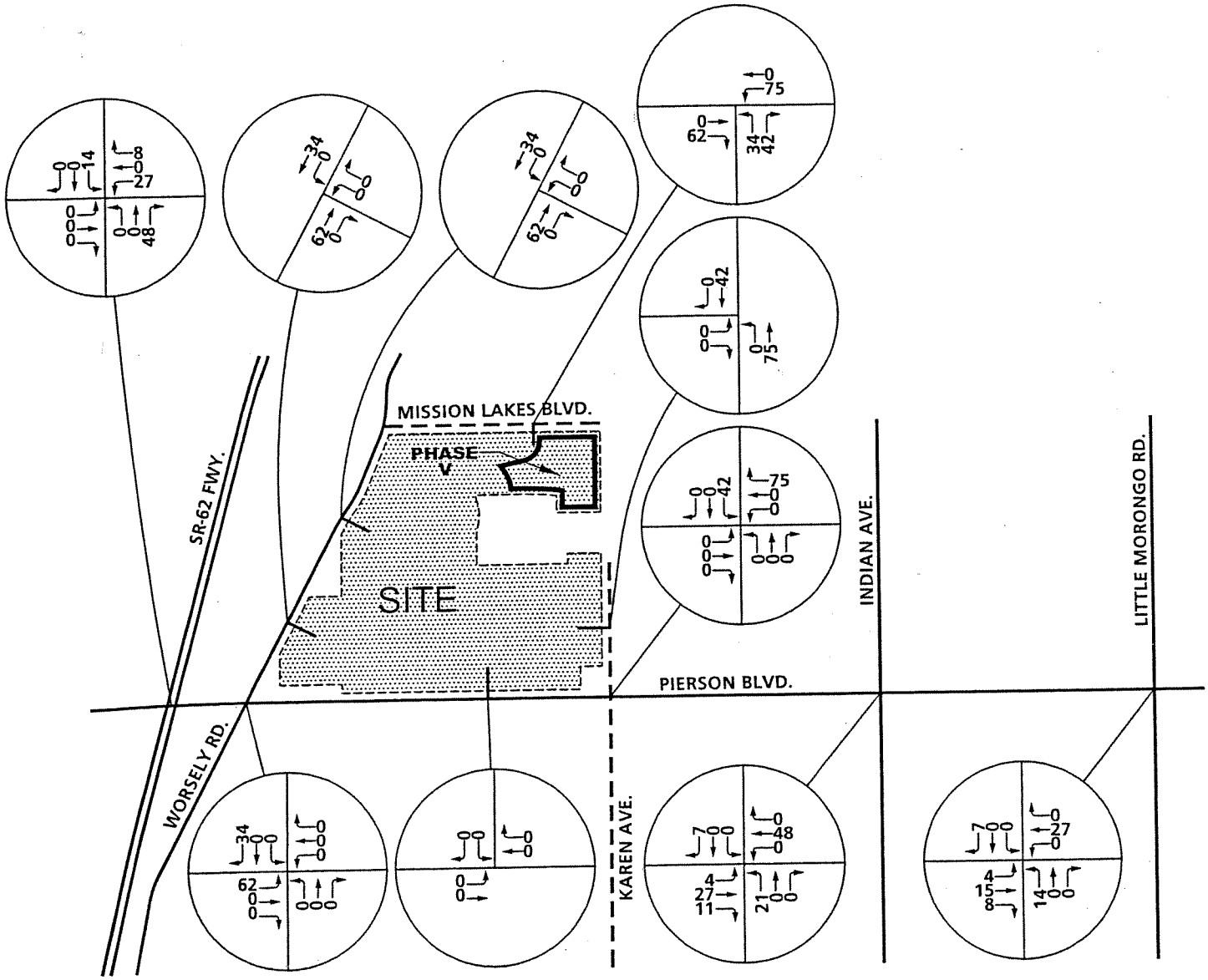
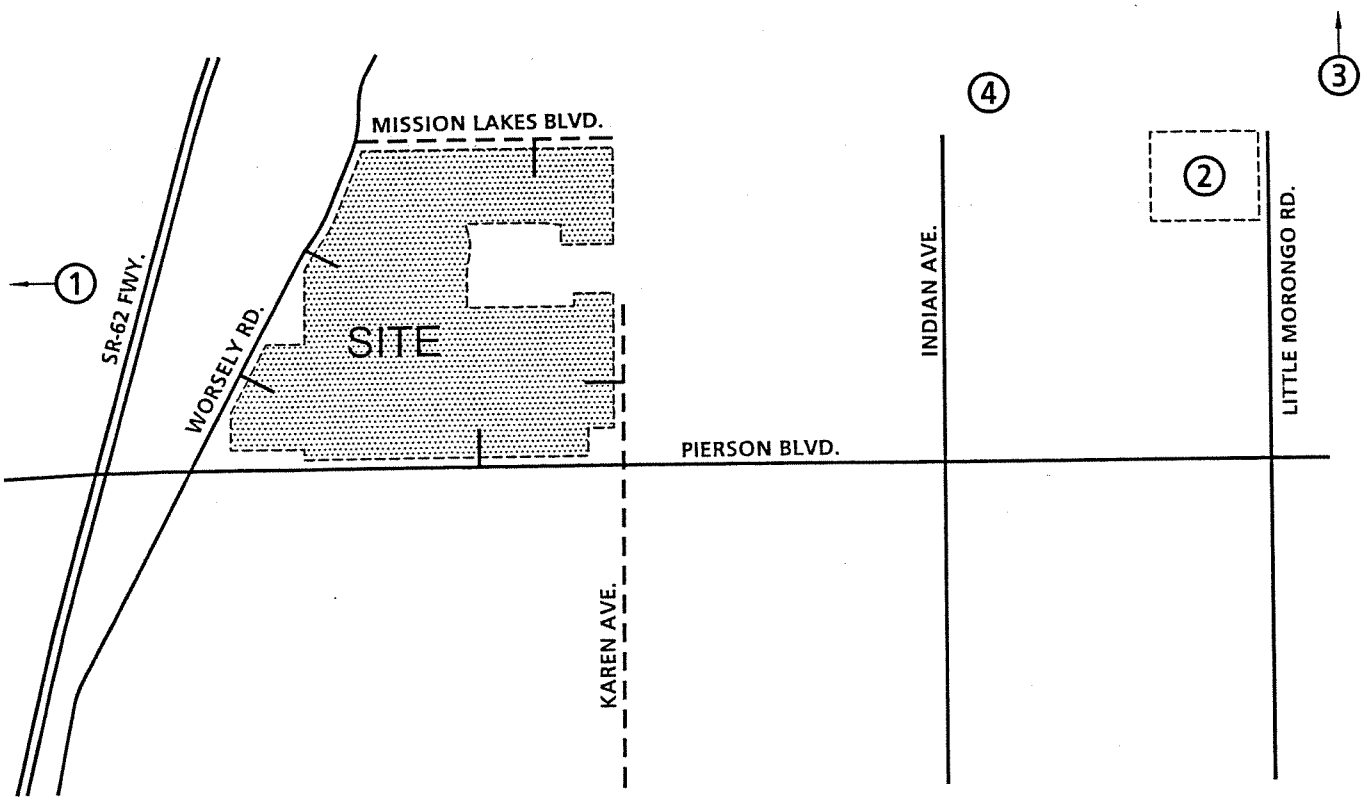


EXHIBIT 4-V

OTHER DEVELOPMENT LOCATION MAP



LEGEND:

1 = RANCHO ROYALE/SNELLENBERGER GROUP

2 = RANCHO MORONGO GROUP

3 = LITTLE MORONGO ANNENBURG

4 = CENTURY CROWELL HOMES

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URBAN CROSSROADS

TABLE 4-3

YEAR 2004 OTHER DEVELOPMENT LAND USE AND TRIP GENERATION

PROJECT					PEAK HOUR				DAILY
					AM		PM		
#	NAME	LAND USE	QUANTITY	UNITS[1]	IN	OUT	IN	OUT	
1	Rancho Royale / Snellenberger Group (20%)	SFDR[2]	429	DU	82	240	279	154	4,106
		Apartments	268	DU	21	115	113	54	1,777
		Golf Course	7	HOLES	12	3	8	11	250
		Subtotal (Entire Rancho Royale)			115	358	400	219	6,133
2	Rancho Morongo Group (20%)	SFDR	58	DU	11	32	38	21	555
		Residential Condo	26	DU	2	10	9	5	152
		Apartments	65	DU	5	28	27	13	431
		Commercial	22.0	TSF	21	13	64	70	1,452
		- "Pass-By" Trips (25%)(Commercial Only)			-5	-3	-16	-18	-363
		Subtotal (Entire Rancho Morongo Group)			34	80	122	91	2,227
3	Little Morongo Annenburg (20%)	Elderly Housing Detached	85	DU	7	11	13	7	281
4	Century Crowell Homes (20%)	SFDR	73	DU	14	41	47	26	699
TOTAL					**170**	**490**	**582**	**343**	**9,340**

[1] DU = Dwelling Units
TSF = Thousand Square Feet
HOLES = Number of Holes in a golf course.

[2] SFDR = Single Family Detached Residential

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TABLE 4-4

YEAR 2005 OTHER DEVELOPMENT LAND USE AND TRIP GENERATION

PROJECT					PEAK HOUR				DAILY
					AM		PM		
#	NAME	LAND USE	QUANTITY	UNITS[1]	IN	OUT	IN	OUT	
1	Rancho Royale / Snellenberger Group (40%)	SFDR[2]	858	DU	163	480	558	309	8,211
		Apartments	537	DU	43	231	226	107	3,560
		Golf Course	14	HOLES	25	7	17	21	500
		Subtotal (Entire Rancho Royale)			231	718	801	437	12,271
2	Rancho Morongo Group (40%)	SFDR	117	DU	22	66	76	42	1,120
		Residential Condo	52	DU	4	19	19	9	305
		Apartments	129	DU	10	55	54	26	855
		Commercial	44.0	TSF	41	26	128	139	2,904
		- "Pass-By" Trips (25%)(Commercial Only)			-10	-7	-32	-35	-726
		Subtotal (Entire Rancho Morongo Group)			67	159	245	181	4,458
3	Little Morongo Annenburg (40%)	Elderly Housing Detached	170	DU	14	22	26	14	561
4	Century Crowell Homes (40%)	SFDR	146	DU	28	82	95	53	1,397
TOTAL					**340**	**981**	**1,167**	**685**	**18,687**

[1] DU = Dwelling Units
TSF = Thousand Square Feet
HOLES = Number of Holes in a golf course.

[2] SFDR = Single Family Detached Residential

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TABLE 4-5

YEAR 2006 OTHER DEVELOPMENT LAND USE AND TRIP GENERATION

PROJECT					PEAK HOUR				DAILY
					AM		PM		
#	NAME	LAND USE	QUANTITY	UNITS[1]	IN	OUT	IN	OUT	
1	Rancho Royale / Snellenberger Group (60%)	SFDR[2]	1,287	DU	245	721	837	463	12,317
		Apartments	805	DU	64	346	338	161	5,337
		Golf Course	22	HOLES	39	10	27	34	786
		Subtotal (Entire Rancho Royale)			348	1,077	1,202	658	18,440
2	Rancho Morongo Group (60%)	SFDR	175	DU	33	98	114	63	1,675
		Residential Condo	78	DU	5	29	28	14	457
		Apartments	194	DU	16	83	81	39	1,286
		Commercial	66.0	TSF	62	40	193	209	4,355
		- "Pass-By" Trips (25%)(Commercial Only)			-16	-10	-48	-52	-1,089
		Subtotal (Entire Rancho Morongo Group)			100	240	368	273	6,684
3	Little Morongo Annenburg (60%)	Elderly Housing Detached	254	DU	20	33	38	20	838
4	Century Crowell Homes (60%)	SFDR	218	DU	41	122	142	78	2,086
TOTAL					**509**	**1,472**	**1,750**	**1,029**	**28,048**

[1] DU = Dwelling Units
TSF = Thousand Square Feet
HOLES = Number of Holes in a golf course.

[2] SFDR = Single Family Detached Residential

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TABLE 4-6

YEAR 2007 OTHER DEVELOPMENT LAND USE AND TRIP GENERATION

PROJECT					PEAK HOUR				DAILY
					AM		PM		
#	NAME	LAND USE	QUANTITY	UNITS[1]	IN	OUT	IN	OUT	
1	Rancho Royale / Snellenberger Group (80%)	SFDR[2]	1,716	DU	326	961	1,115	618	16,422
		Apartments	1,074	DU	86	462	451	215	7,121
		Golf Course	29	HOLES	51	14	35	44	1,036
		Subtotal (Entire Rancho Royale)			463	1,437	1,601	877	24,579
2	Rancho Morongo Group (80%)	SFDR	234	DU	44	131	152	84	2,239
		Residential Condo	104	DU	7	38	37	19	609
		Apartments	258	DU	21	111	108	52	1,711
		Commercial	88.0	TSF	83	53	257	279	5,807
		- "Pass-By" Trips (25%)(Commercial Only)			-21	-13	-64	-70	-1,452
		Subtotal (Entire Rancho Morongo Group)			134	320	490	364	8,914
3	Little Morongo Annenburg (80%)	Elderly Housing Detached	339	DU	27	44	51	27	1,119
4	Century Crowell Homes (80%)	SFDR	291	DU	55	163	189	105	2,785
TOTAL					**679**	**1,964**	**2,331**	**1,373**	**37,397**

[1] DU = Dwelling Units
TSF = Thousand Square Feet
HOLES = Number of Holes in a golf course.

[2] SFDR = Single Family Detached Residential

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TABLE 4-7

YEAR 2008 OTHER DEVELOPMENT LAND USE AND TRIP GENERATION

PROJECT					PEAK HOUR				
					AM		PM		
#	NAME	LAND USE	QUANTITY	UNITS[1]	IN	OUT	IN	OUT	DAILY
1	Rancho Royale / Snellenberger Group	SFDR[2]	2,145	DU	408	1,201	1,394	772	20,528
		Apartments	1,342	DU	107	577	564	268	8,897
		Golf Course	36	HOLES	63	17	44	55	1,287
		Subtotal (Entire Rancho Royale)			578	1,795	2,002	1,095	30,712
2	Rancho Morongo Group	SFDR	292	DU	55	164	190	105	2,794
		Residential Condo	130	DU	9	48	47	23	762
		Apartments	323	DU	26	139	136	65	2,141
		Commercial	109.5	TSF	103	66	320	347	7,226
		- "Pass-By" Trips (25%)(Commercial Only)			-26	-17	-80	-87	-1,807
		Subtotal (Entire Rancho Morongo Group)			167	400	613	453	11,116
3	Little Morongo Annenburg	Elderly Housing Detached	424	DU	34	55	64	34	1,399
4	Century Crowell Homes	SFDR	364	DU	69	204	237	131	3,483
TOTAL					**848**	**2,454**	**2,916**	**1,713**	**46,710**

[1] DU = Dwelling Units
TSF = Thousand Square Feet
HOLES = Number of Holes in a golf course.

[2] SFDR = Single Family Detached Residential

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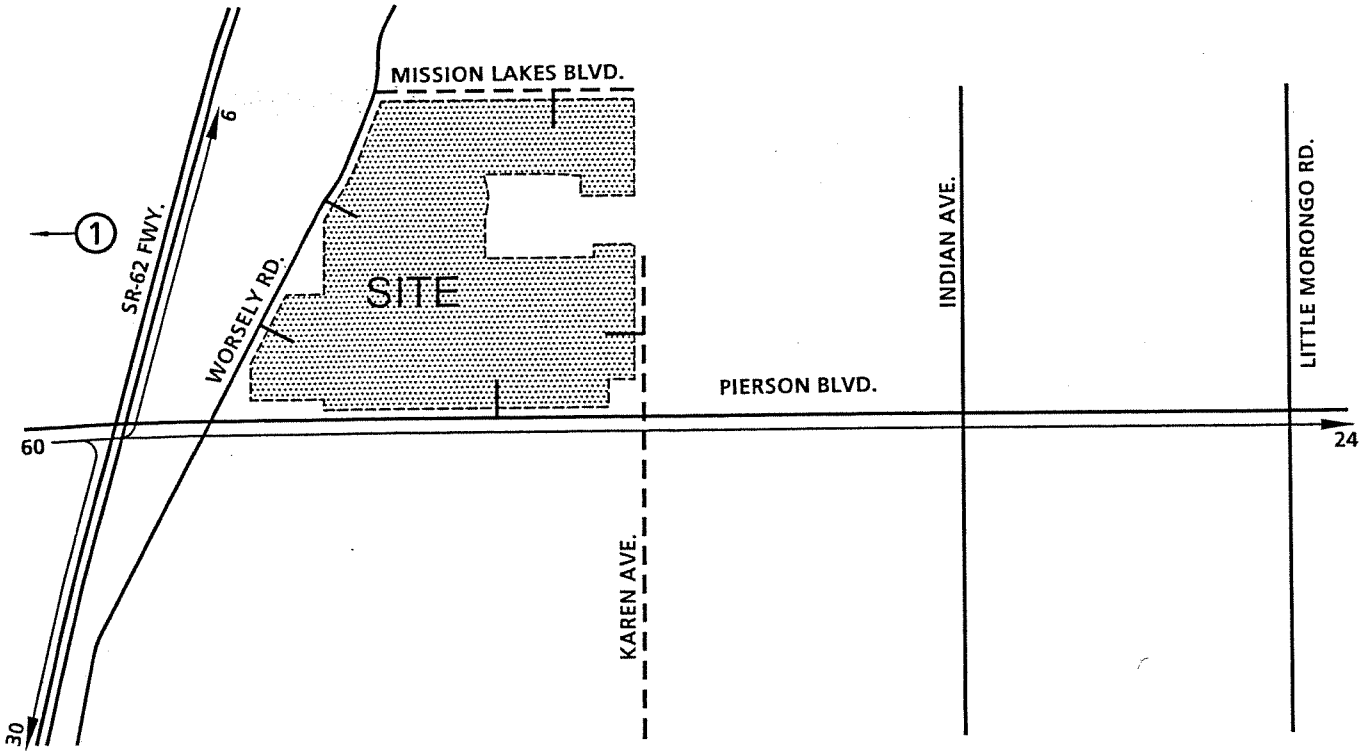
EXHIBIT 4-W

RANCHO ROYALE/SNELLENBERGER GROUP TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

(1) = RANCHO ROYALE/SNELLENBERGER GROUP

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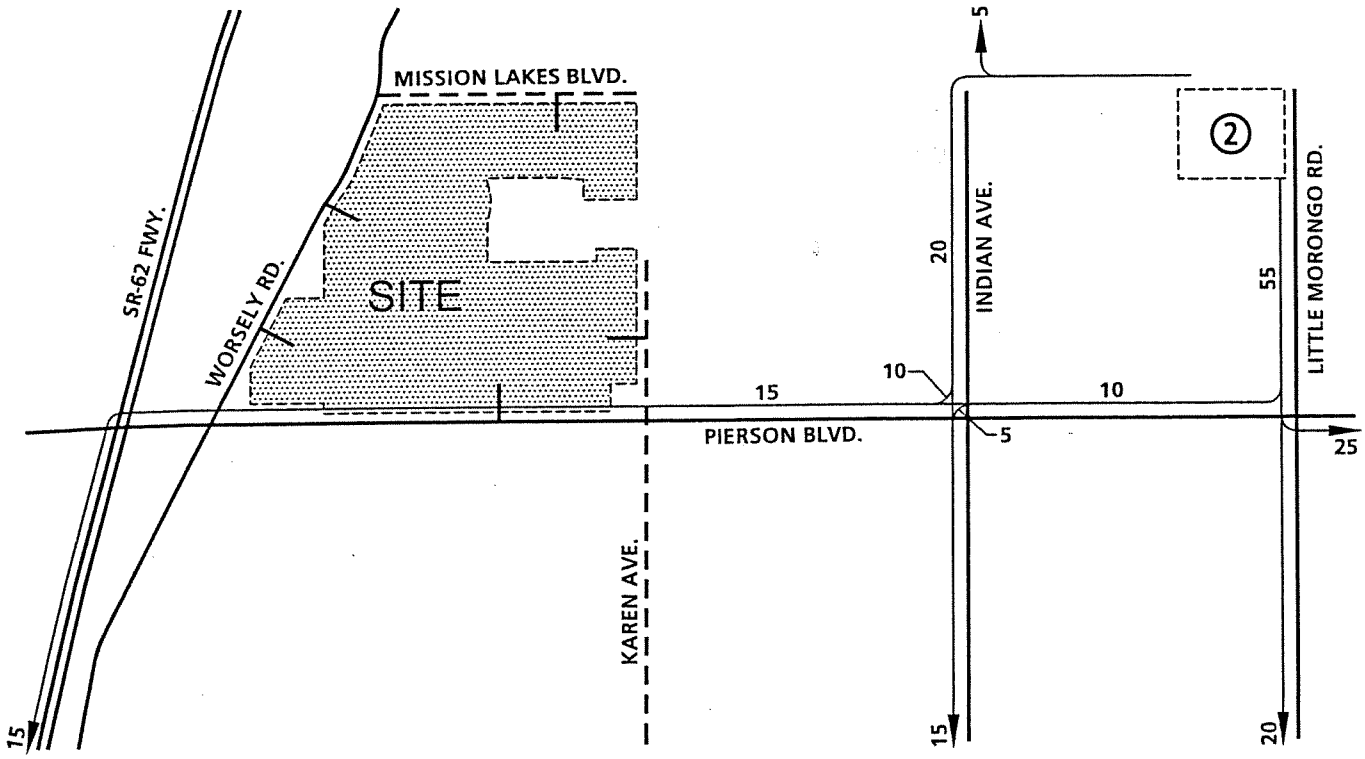
EXHIBIT 4-X

RANCHO MORONGO GROUP TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

(2) = RANCHO MORONGO GROUP

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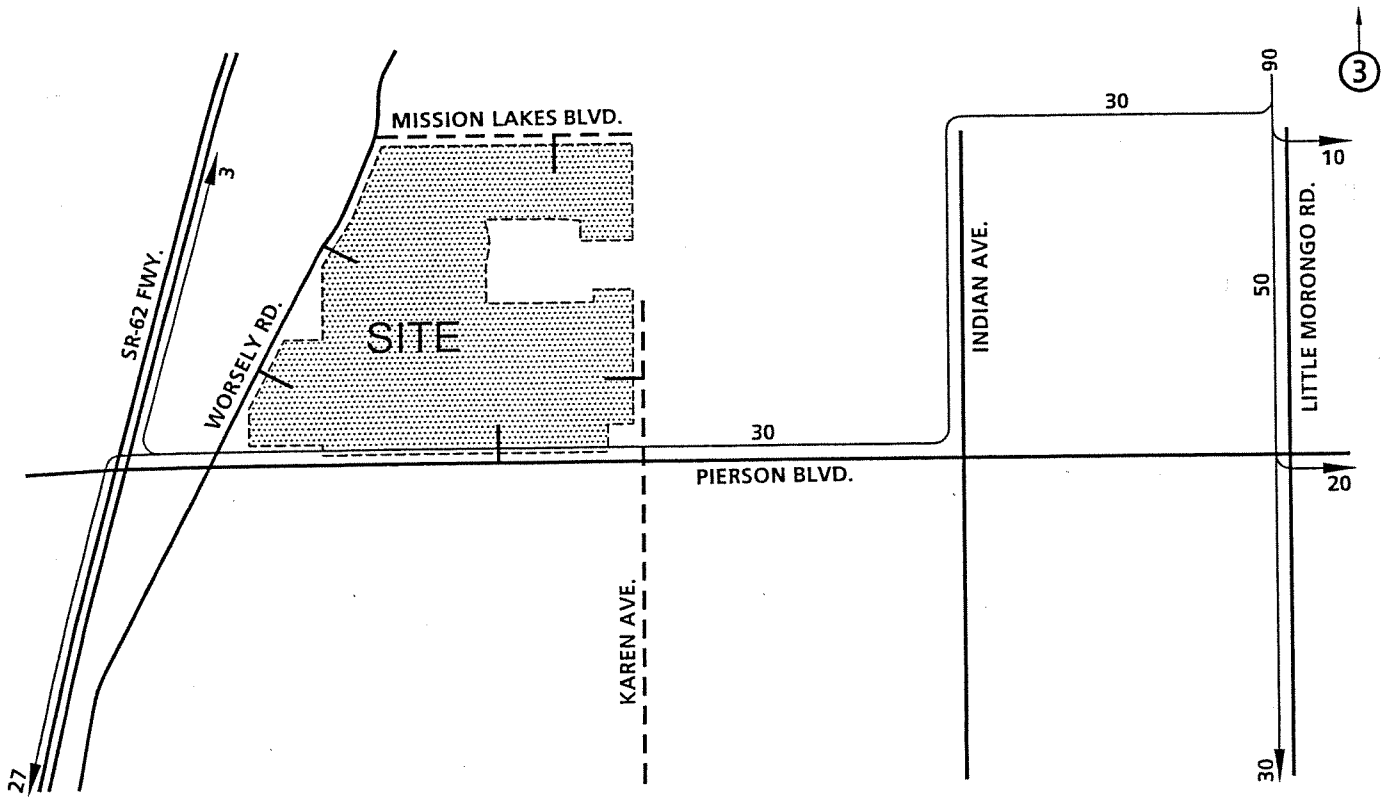
URBAN CROSSROADS

EXHIBIT 4-Y

LITTLE MORONGO GROUP TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

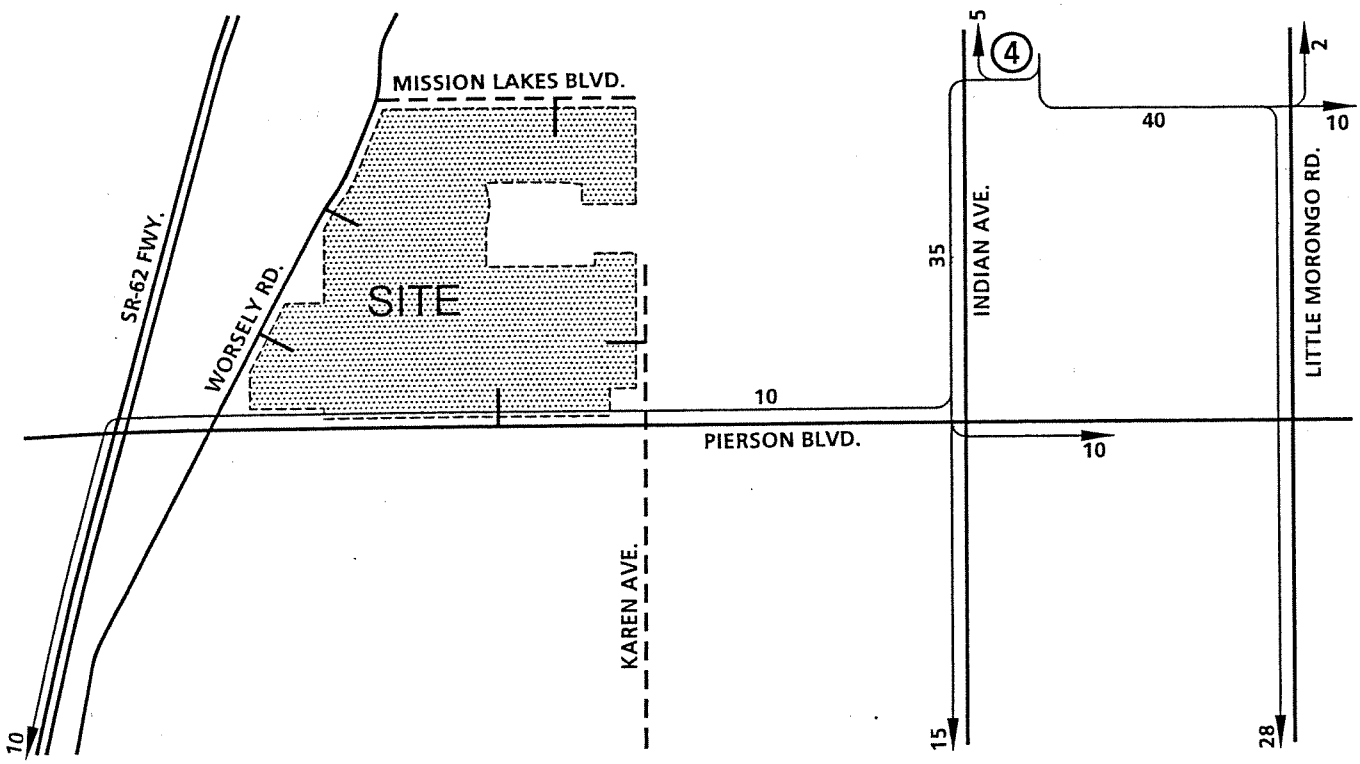
(3) = LITTLE MORONGO GROUP

N

URBAN CROSSROADS

EXHIBIT 4-Z

CENTURY CROWELL HOMES TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

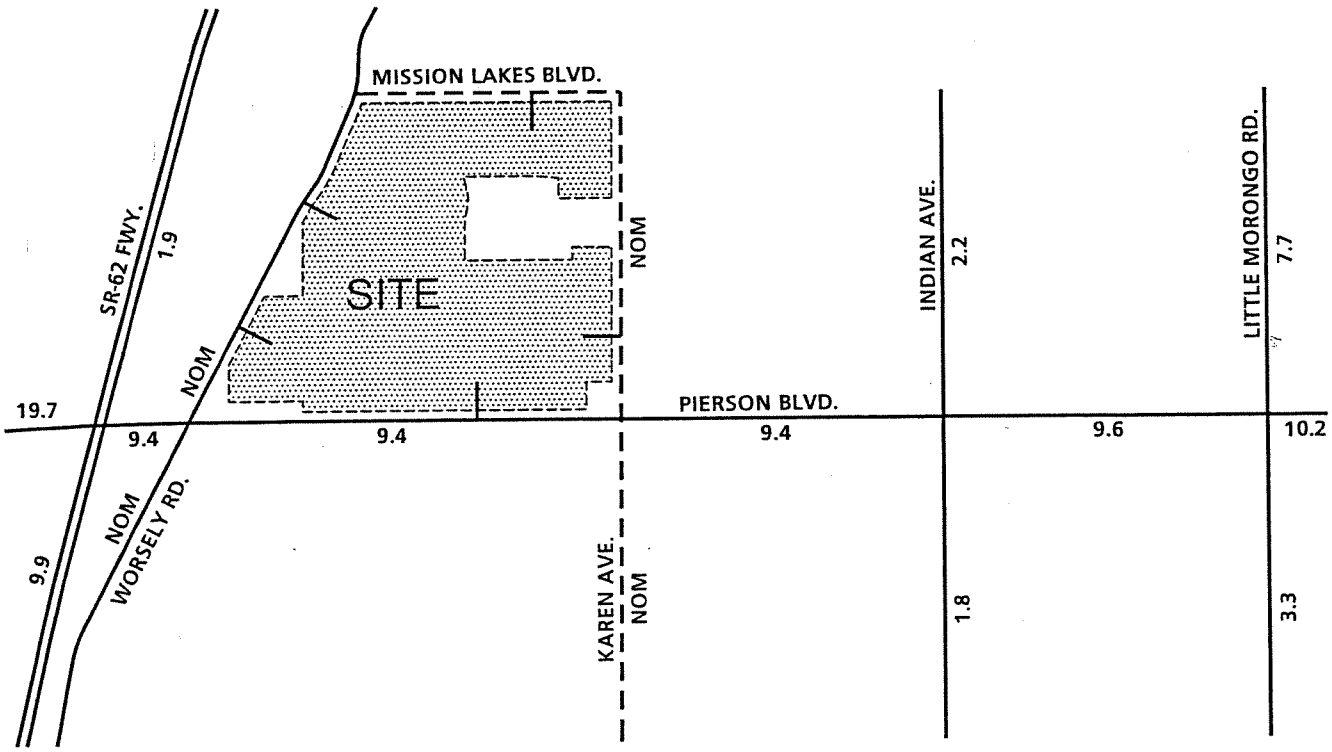
4 = CENTURY CROWELL HOMES

N

URBAN CROSSROADS

EXHIBIT 4-AA

OTHER DEVELOPMENT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

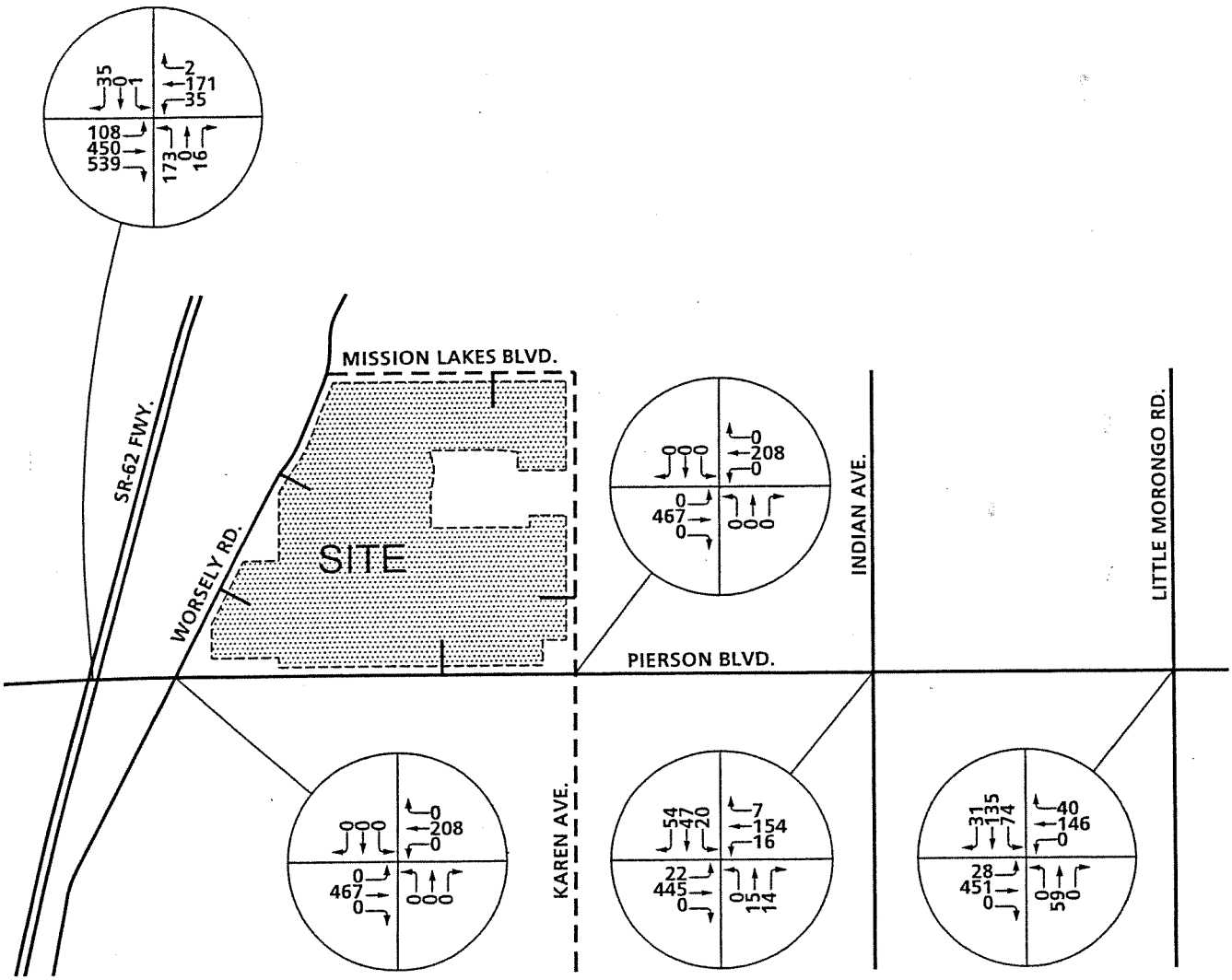
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

EXHIBIT 4-BB

OTHER DEVELOPMENT AM PEAK HOUR INTERSECTION VOLUMES



N

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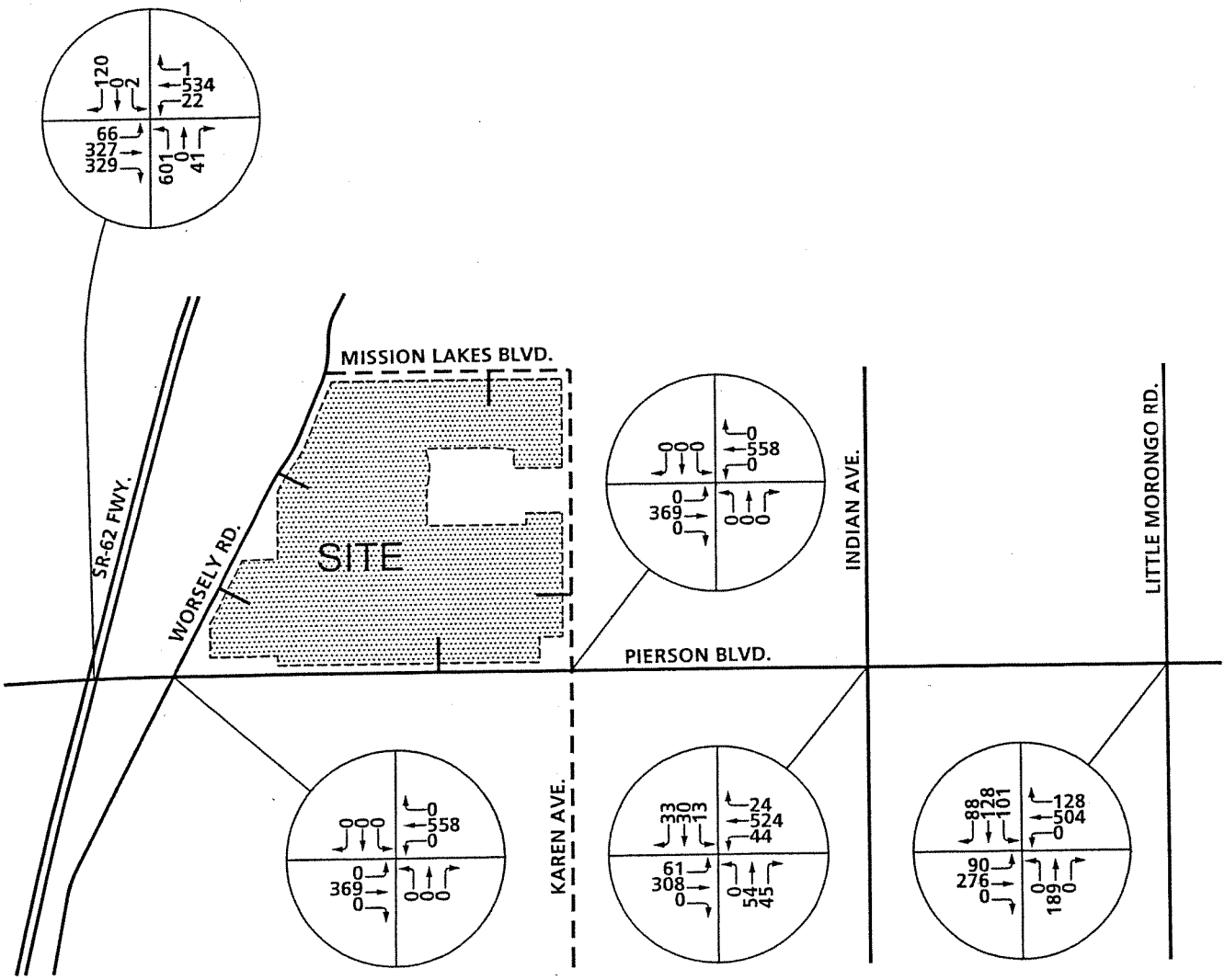
URBAN CROSSROADS

EXHIBIT 4-CC

OTHER DEVELOPMENT PM PEAK HOUR INTERSECTION VOLUMES



N

URBAN CROSSROADS

3. Through Traffic

To account for areawide growth on roadways, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes. The areawide growth rate was obtained based on discussions with the City staff. The remaining growth is anticipated to be accounted for by the development of cumulative projects in the study area.

Areawide growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the project and cumulative development.

C. Total Traffic for Year 2004

For Cumulative (2004) Without Project Conditions, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes over a one year period plus the portion of the total cumulative development traffic that is anticipated to occur by this timeframe (approximately 20 percent). Exhibit 4-DD shows the ADT volumes which can be expected for Cumulative (2004) Without Project traffic conditions.

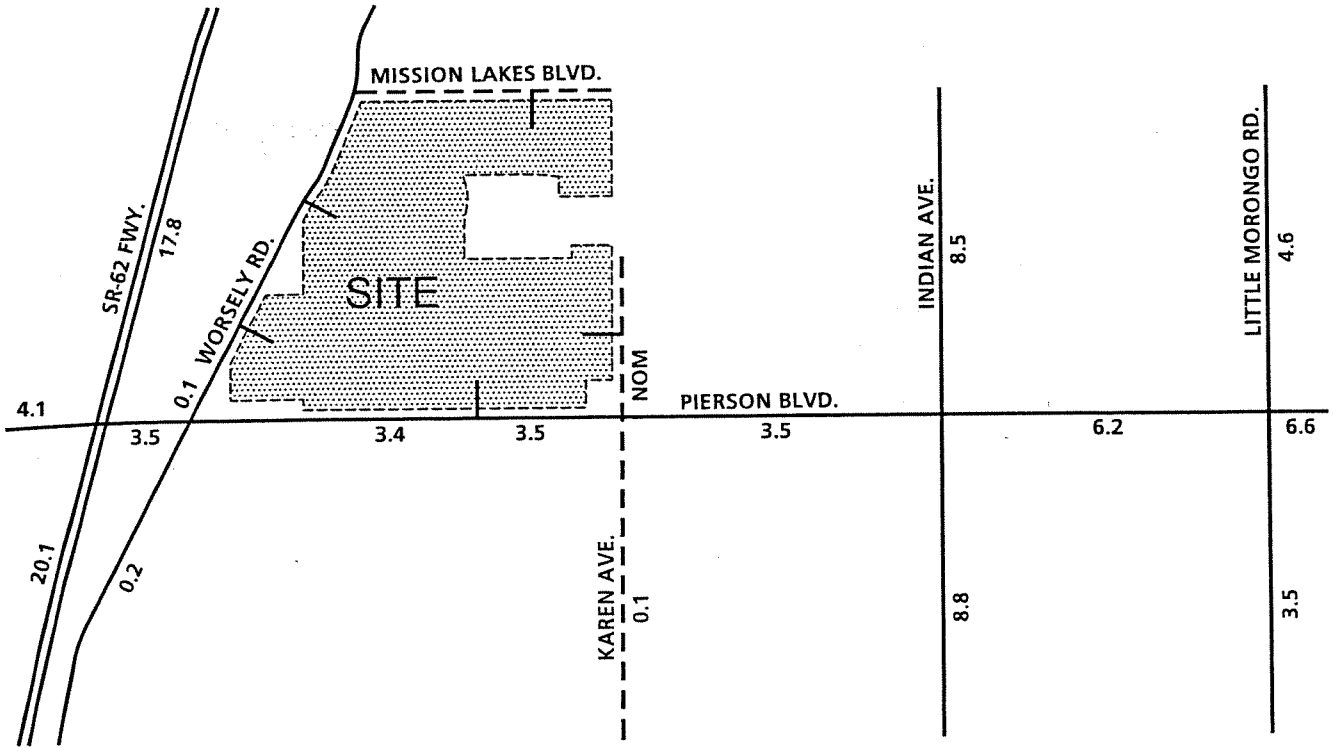
For Cumulative (2004) With Project Conditions, Phase I traffic volumes were added to Cumulative (2004) Without Project volumes. Exhibit 4-EE shows the ADT volumes which can be expected for Cumulative (2004) With Project traffic conditions.

D. Total Traffic for Year 2005

For Cumulative (2005) Without Project Conditions, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes over a two year period plus 40 percent of the total cumulative

EXHIBIT 4-DD

CUMULATIVE (2004) CONDITIONS WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

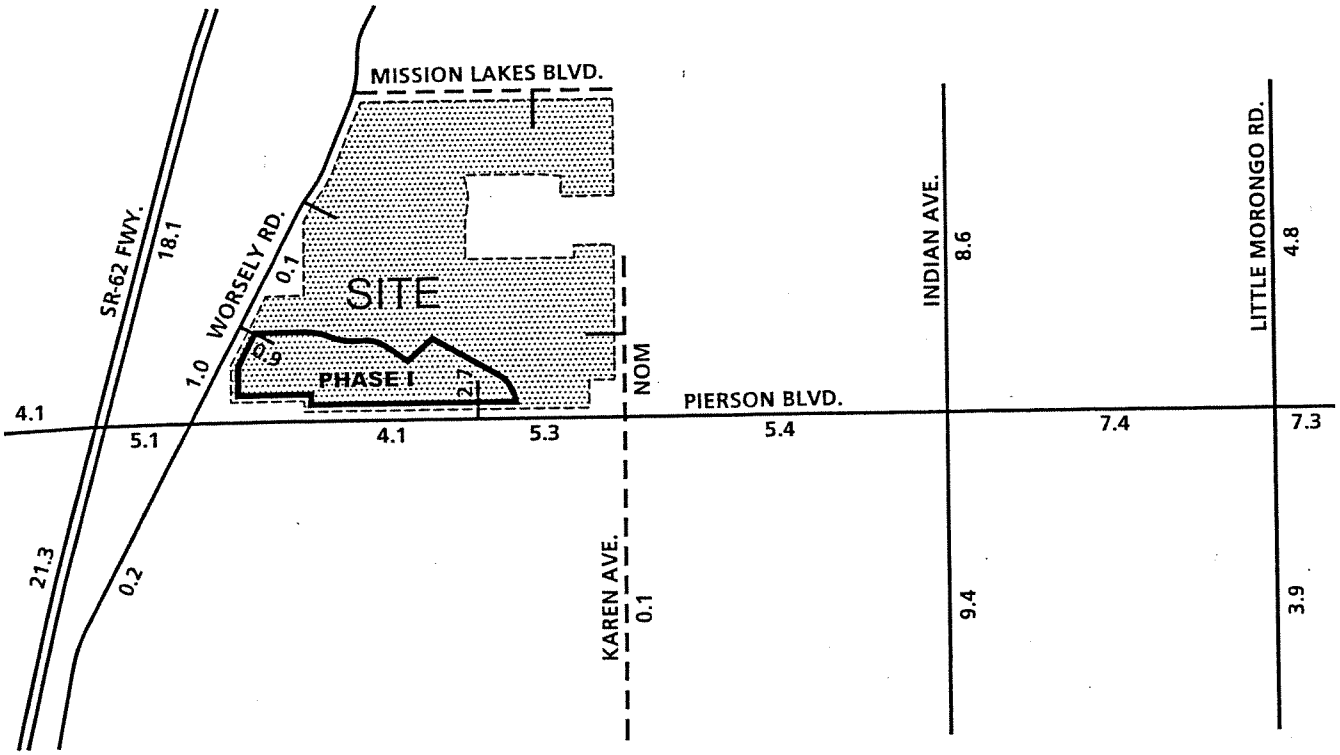
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

EXHIBIT 4-EE

CUMULATIVE (2004) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

development traffic. Exhibit 4-FF shows the ADT volumes which can be expected for Cumulative (2005) Without Project traffic conditions.

For Cumulative (2005) With Project Conditions, Phases I and II traffic volumes were added to Cumulative (2005) Without Project volumes. Exhibit 4-GG shows the ADT volumes which can be expected for Cumulative (2005) With Project traffic conditions.

E. Total Traffic for Year 2006

For Cumulative (2006) Without Project Conditions, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes over a three year period plus 60 percent of the total cumulative development traffic. Exhibit 4-HH shows the ADT volumes which can be expected for Cumulative (2006) Without Project traffic conditions.

For Cumulative (2006) With Project Conditions, Phases I,II and III traffic volumes were added to Cumulative (2006) Without Project volumes. Exhibit 4-II shows the ADT volumes which can be expected for Cumulative (2006) With Project traffic conditions.

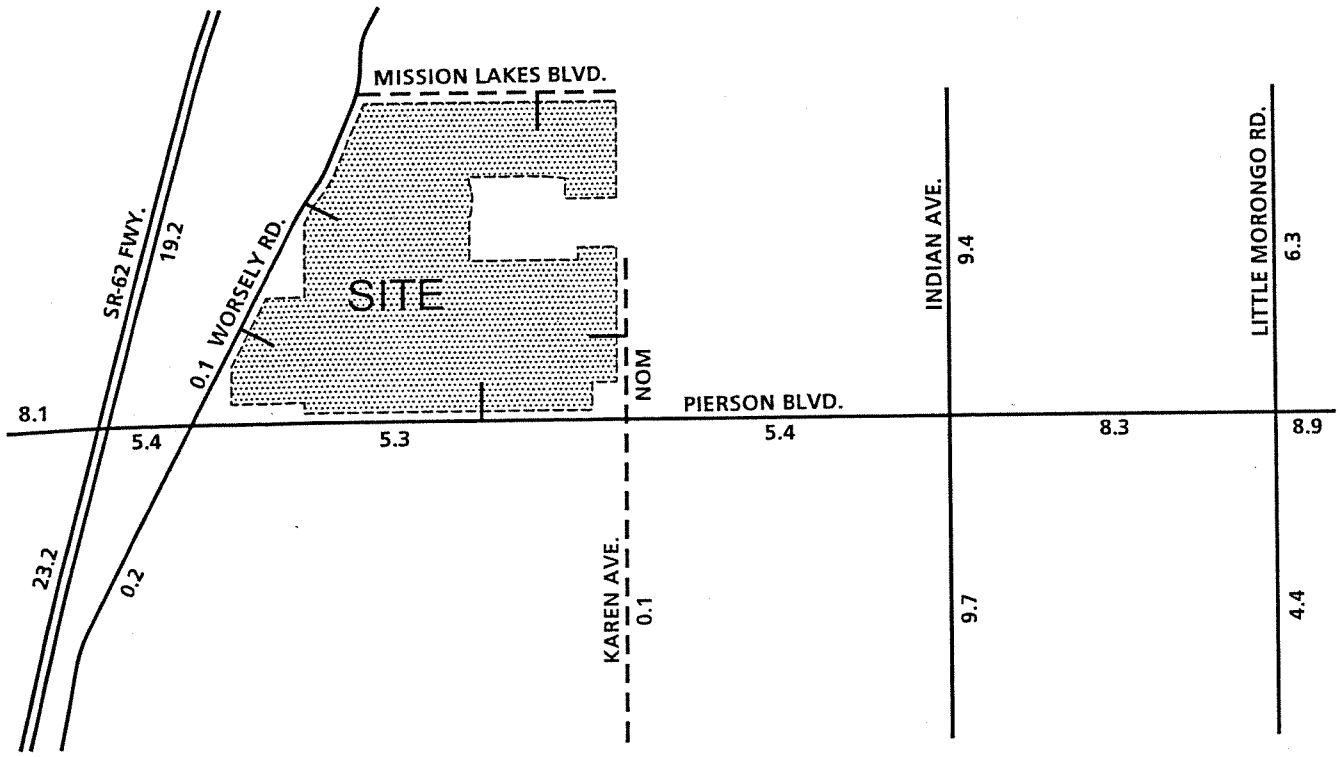
F. Total Traffic for Year 2007

For Cumulative (2007) Without Project Conditions, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes over a four year period plus 80 percent of the total cumulative development traffic. Exhibit 4-JJ shows the ADT volumes which can be expected for Cumulative (2007) Without Project traffic conditions.

For Cumulative (2007) With Project Conditions, Phases I, II, III, and IV traffic volumes were added to Cumulative (2007) Without Project volumes. Exhibit 4-KK shows the ADT volumes which can be expected for Cumulative (2007) With Project traffic conditions.

EXHIBIT 4-FF

CUMULATIVE (2005) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

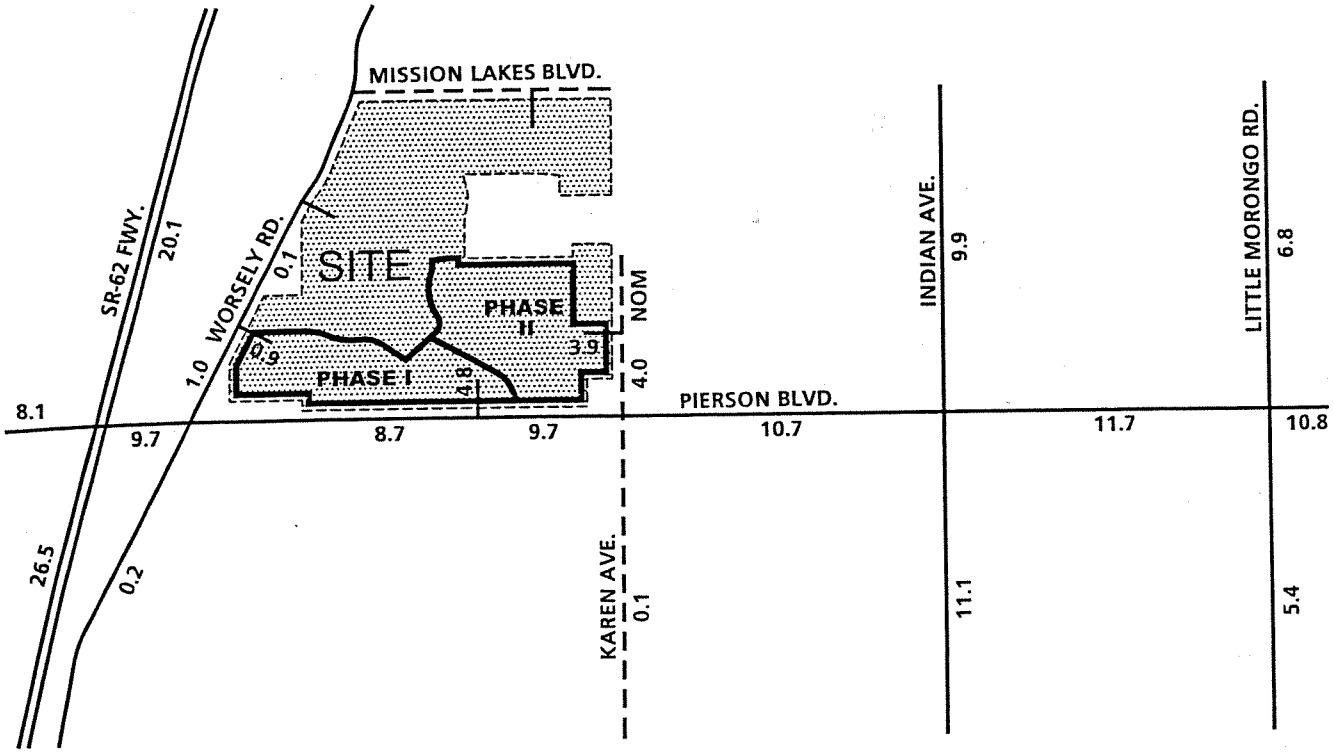
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

EXHIBIT 4-GG

CUMULATIVE (2005) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

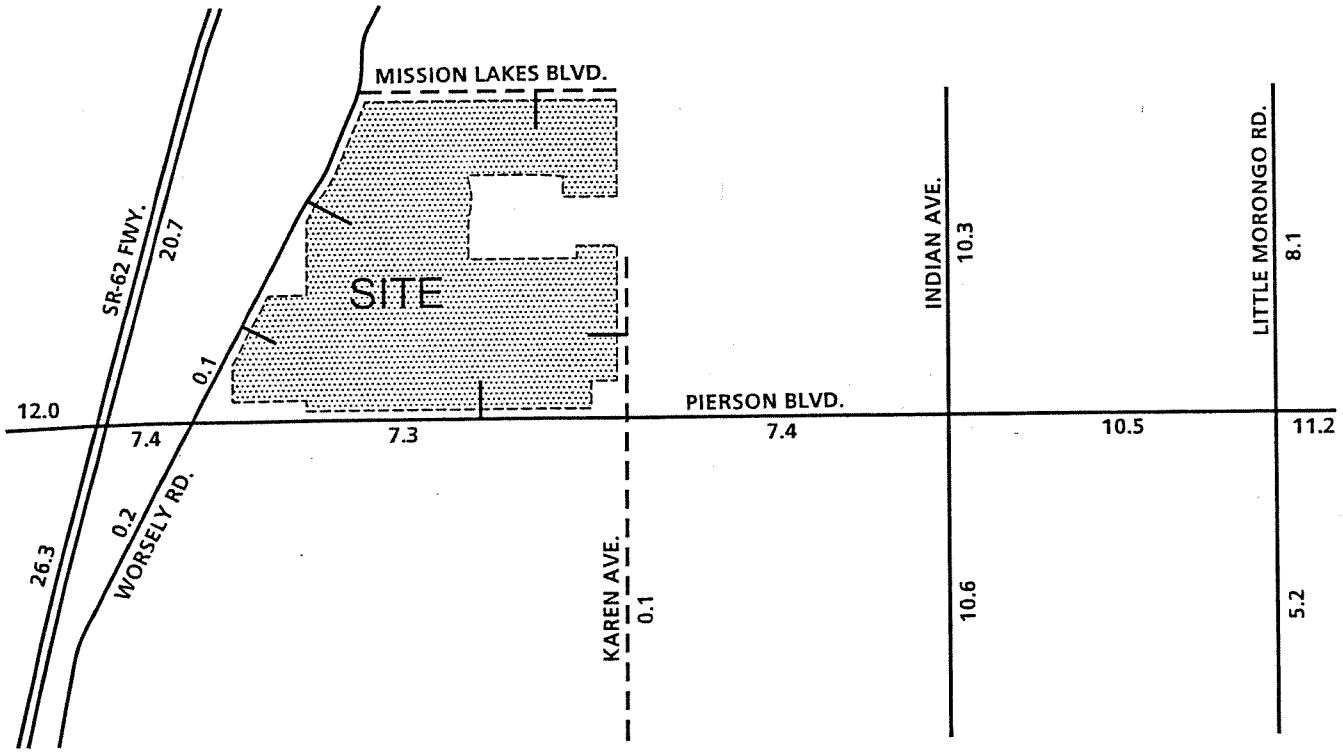
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

EXHIBIT 4-HH

CUMULATIVE (2006) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

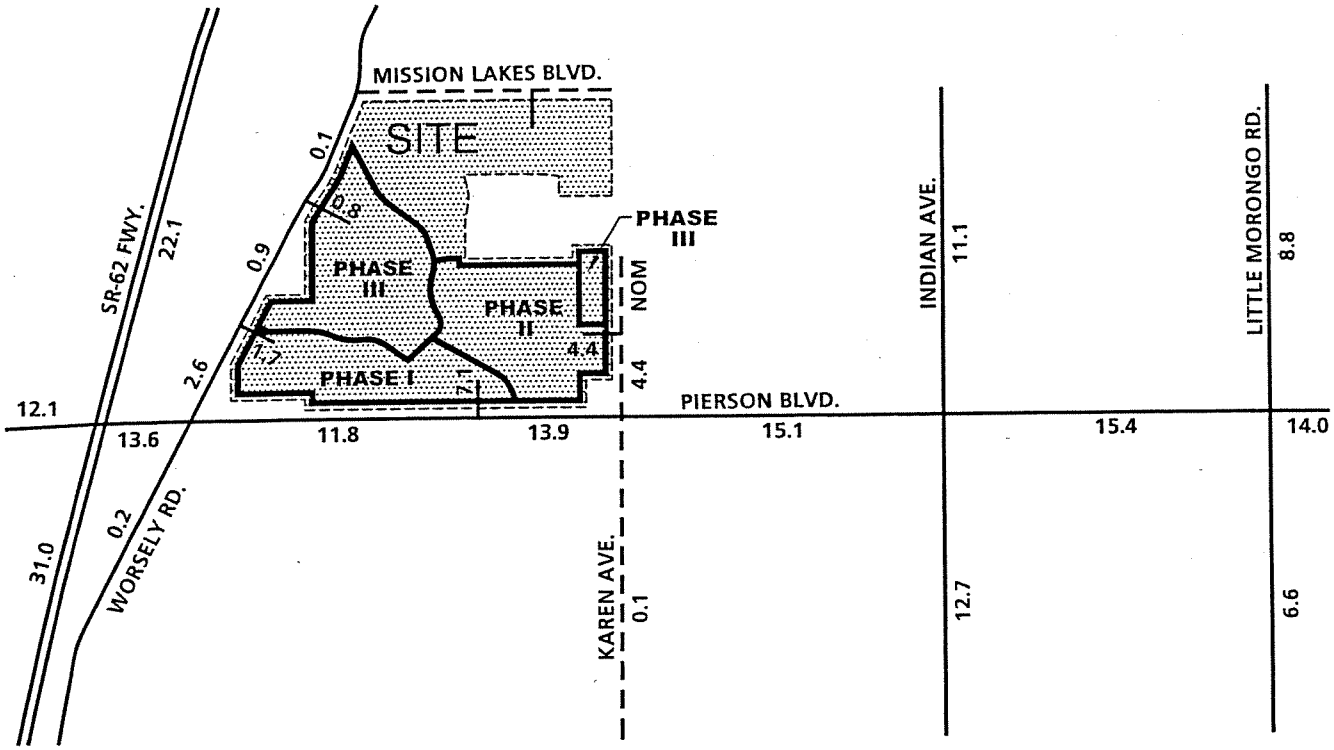
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

EXHIBIT 4-II

CUMULATIVE (2006) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

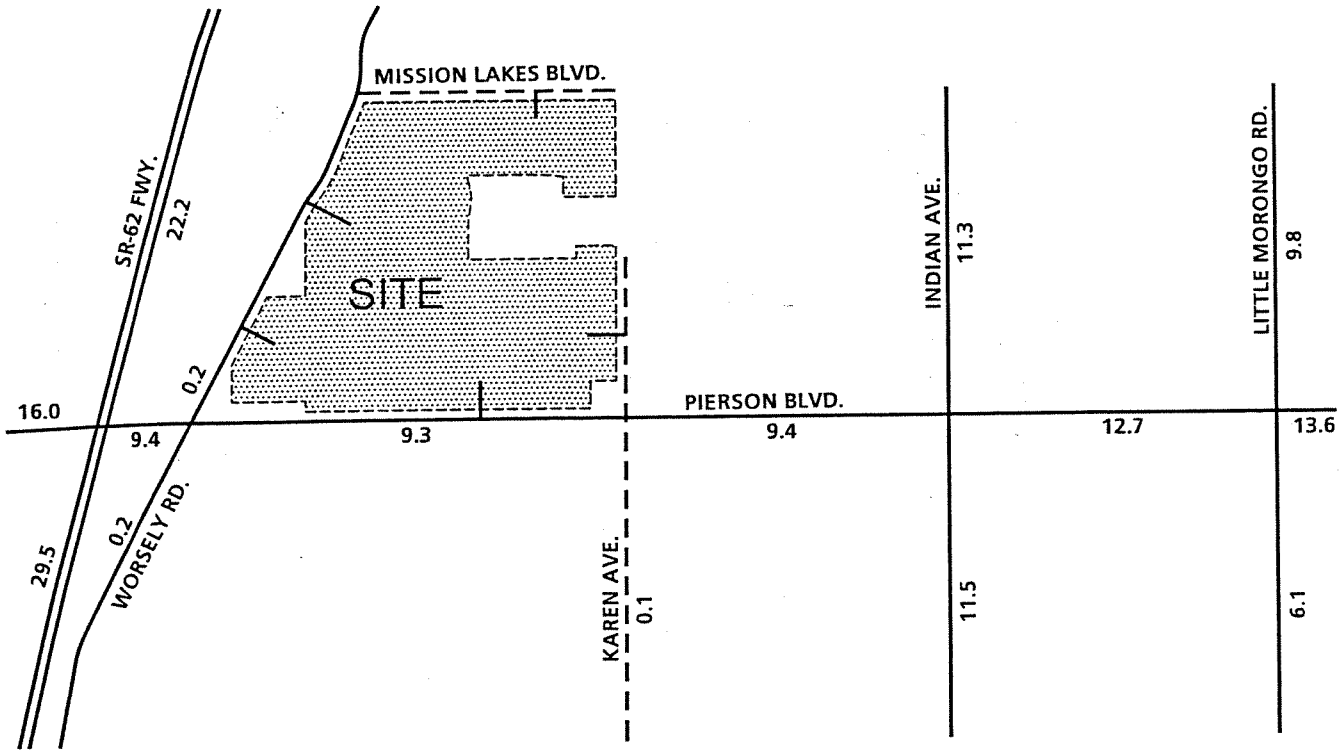
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

EXHIBIT 4-JJ

CUMULATIVE (2007) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

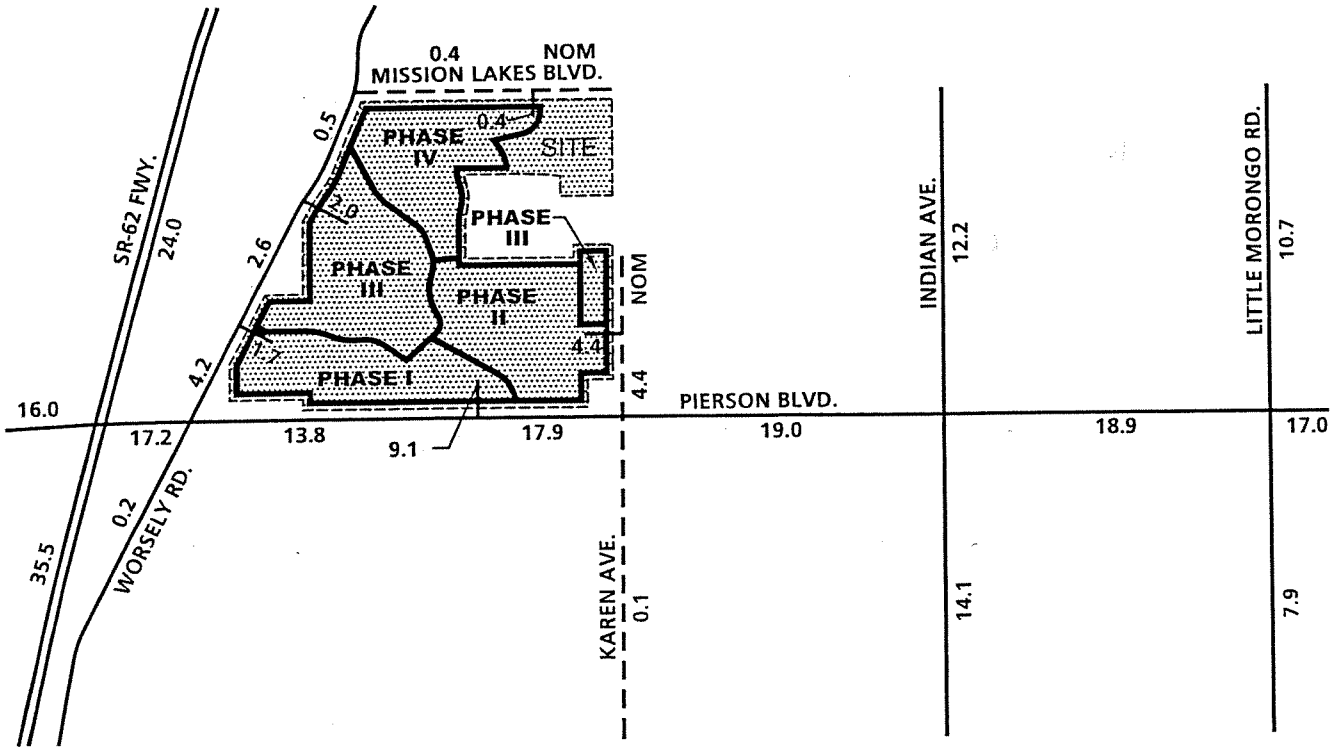
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

EXHIBIT 4-KK

CUMULATIVE (2007) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

G. Total Traffic for Year 2008

For Cumulative (2008) Without Project Conditions, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes over a five year period plus the entire cumulative development traffic. Exhibit 4-LL shows the ADT volumes which can be expected for Cumulative (2008) Without Project traffic conditions.

For Cumulative (2008) With Project Conditions, the traffic volumes from all five Phases of the project were added to Cumulative (2008) Without Project volumes. Exhibit 4-MM shows the ADT volumes which can be expected for Cumulative (2008) With Project traffic conditions.

H. Traffic Signal Warrants

For Cumulative (2004) Without Project traffic conditions, the following traffic signals are projected to be warranted (see Appendix "C"):

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

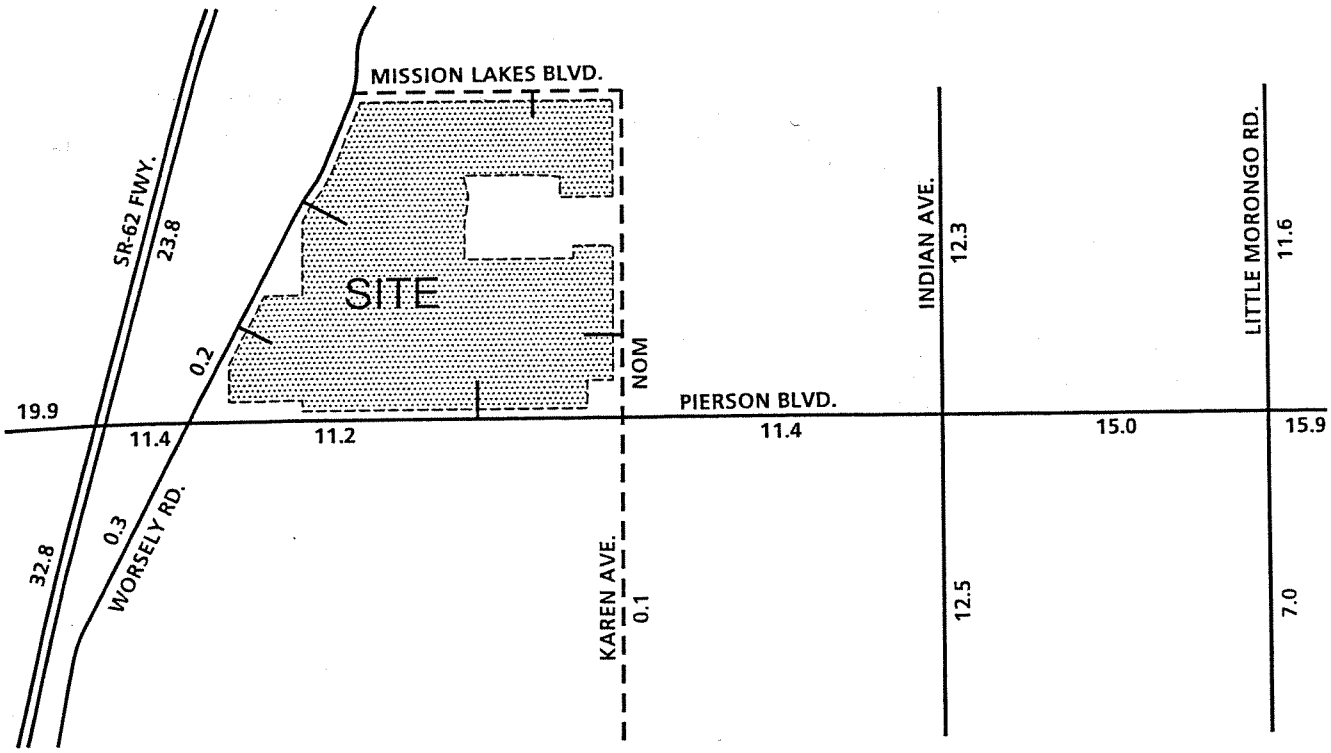
Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For Cumulative (2005) With Project traffic conditions, additional traffic signals are projected to be warranted at the following study area intersections (see Appendix "C"):

EXHIBIT 4-LL

CUMULATIVE (2008) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

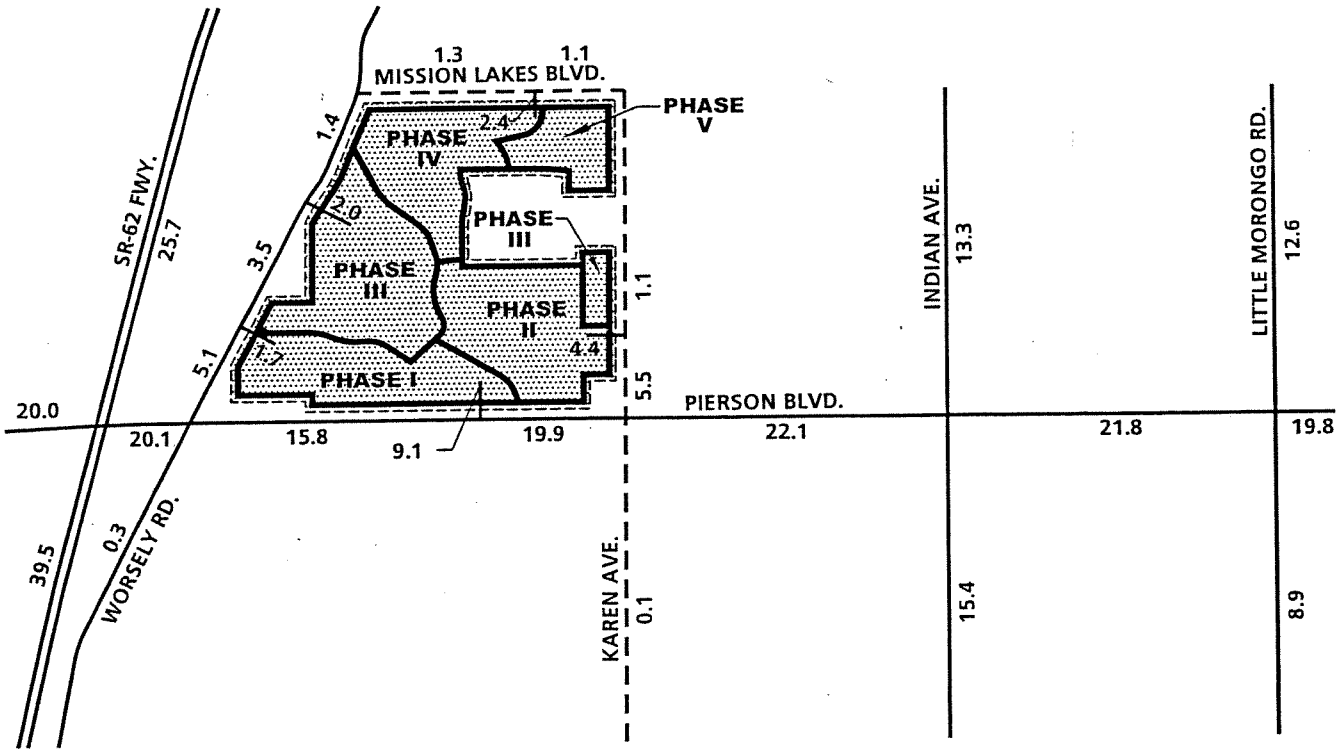
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

EXHIBIT 4-MM

CUMULATIVE (2008) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

N

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

For Cumulative (2006) With Project traffic conditions, an additional traffic signal is projected to be warranted at the following study area intersection (see Appendix "C"):

Worsley Road (NS) at:

- Pierson Boulevard (EW)

5.0 TRAFFIC ANALYSIS

A. Site Access

The proposed project has been divided into five phases which are each represented by traffic analysis zones (TAZ) in order to load traffic from the appropriate driveway locations. Exhibit 2-A (presented previously) shows the boundaries of each phase and the location of the project driveways. These access locations that will serve these TAZ's are described as follows:

TAZ 1: This 370 unit residential development will have two full access driveway. Driveway 3 will be located along Pierson Boulevard and Driveway 2 will be located along Worsley Road.

TAZ 2: This 633 unit residential development will utilize two full access driveways. Driveway 5 will be located along Karen Avenue and the Driveway 3 will be located along Pierson Boulevard.

TAZ 3: This 400 unit residential development will utilize three full access driveways. Driveways 1 and 2 will be located along Worsley Road and Driveway 3 will be located along Pierson Boulevard. The 1,100 student elementary school will have one full access driveway. Driveway 5 will be located along Karen Avenue.

TAZ 4: This 380 unit residential development will utilize three full access driveways. Driveway 4 is anticipated to provide full access to Mission Lakes Boulevard, Driveway 1 will have access to Worsley Road and Driveway 3 will have access to Pierson Boulevard.

TAZ 5: This 210 unit residential development will utilize full access (Driveway 4) to Mission Lakes Boulevard.

B. Capacity and Level of Service and Improvement Analysis

1. Level of Service for Cumulative (2004) Conditions Without Project

Cumulative (2004) without project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-1. Table 5-1 shows HCM calculations based on the geometrics at the intersections. Cumulative (2004) without project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-A and 5-B, respectively.

For cumulative (2004) without project traffic conditions, the following study area intersection is projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

For cumulative (2004) without project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-1. Cumulative (2004) Without Project HCM calculation worksheets are provided in Appendix "D". Traffic signal warrant worksheets for cumulative growth conditions are presented in Appendix "C"

2. Level of Service for Cumulative (2004) Conditions With Project

Cumulative (2004) with project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-2. Table 5-2 shows HCM calculations based on the geometrics at the intersections. Cumulative (2004) with project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-C and 5-D, respectively.

TABLE 5-1

INTERSECTION ANALYSIS FOR CUMULATIVE (2004) WITHOUT PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—	F	F
- with improvements	TS	1	2	1	1	2	1	0	1	0	0	1	0	14.1	13.0	B	B
Worsley Rd. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	10.6	10.8	B	B
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	9.6	7.5	A	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	12.0	18.4	B	C
- with improvements	TS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	9.5	9.9	A	A
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	9.4	11.2	A	B
- with improvements	TS	0	1	0	0	1	0	0	1	0	0	1	0	8.9	9.6	A	A

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

4 -- = Delay High, Intersection Unstable, Level of Service "F".

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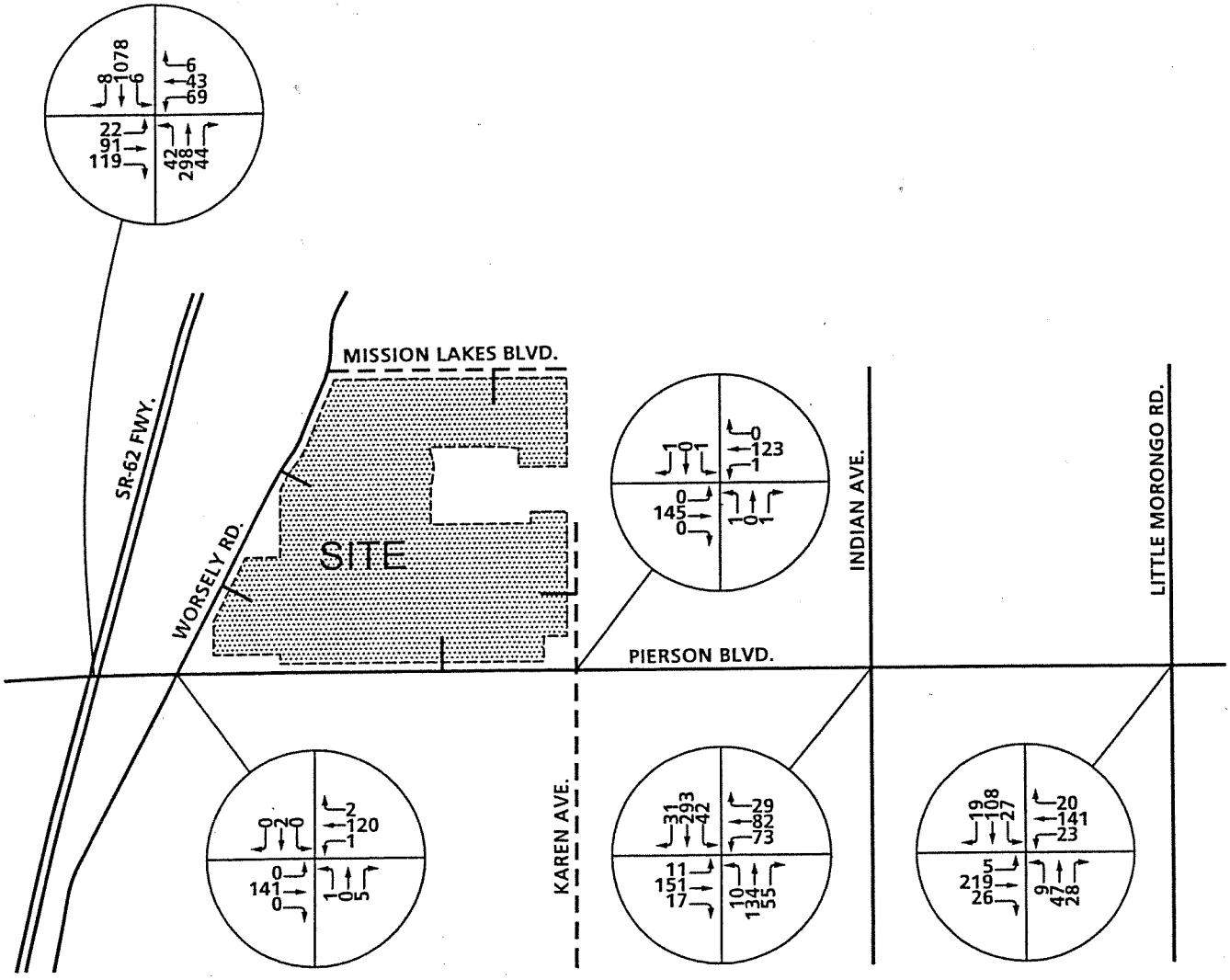
EXHIBIT 5-A

CUMULATIVE (2004) CONDITIONS WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES



N

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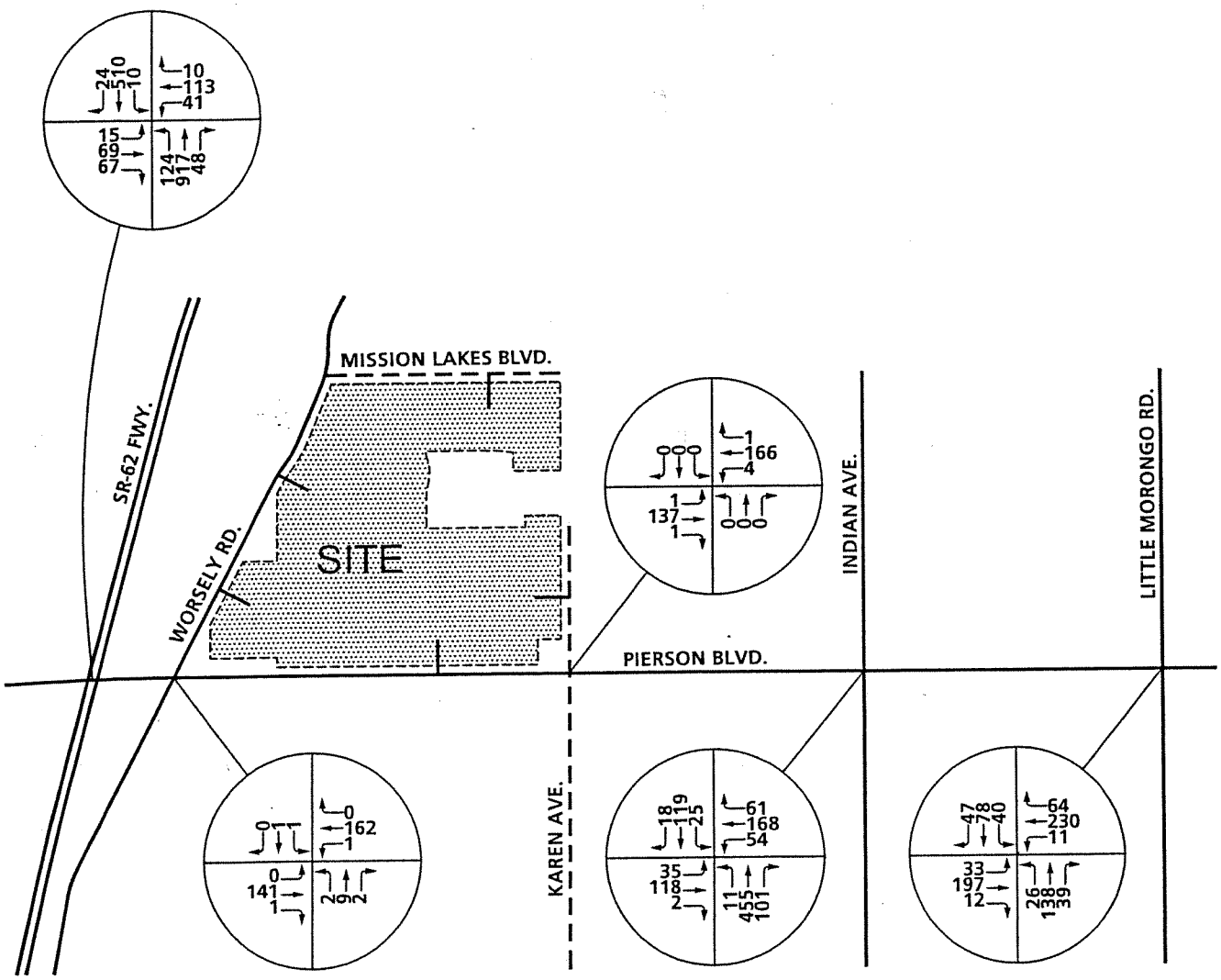
URBAN CROSSROADS

EXHIBIT 5-B

CUMULATIVE (2004) CONDITIONS WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



N

TABLE 5-2

INTERSECTION ANALYSIS FOR CUMULATIVE (2004) WITH PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—	F	F
- with improvements	**TS**	1	2	1	1	2	1	0	1	0	0	1	0	16.1	14.4	B	B
Worsley Rd. (NS) at:																	
• Driveway 2 (EW)	**CSS**	0	**1**	0	0	**1**	0	0	0	0	0	**1**	0	8.8	8.8	A	A
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	9.6	12.5	A	B
Driveway 3 (NS) at:																	
• Pierson Blvd. (EW)	**CSS**	0	0	0	0	**1**	0	**1**	1	0	0	1	0	11.3	12.3	B	B
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	10.6	7.8	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	14.0	30.7	B	D
- with improvements	**TS**	0.5	0.5	1	0	1	0	0	1	0	0	1	0	10.3	10.9	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	10.2	13.0	B	B
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	8.6	9.8	A	A

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

4 — = Delay High, Intersection Unstable, Level of Service "F".

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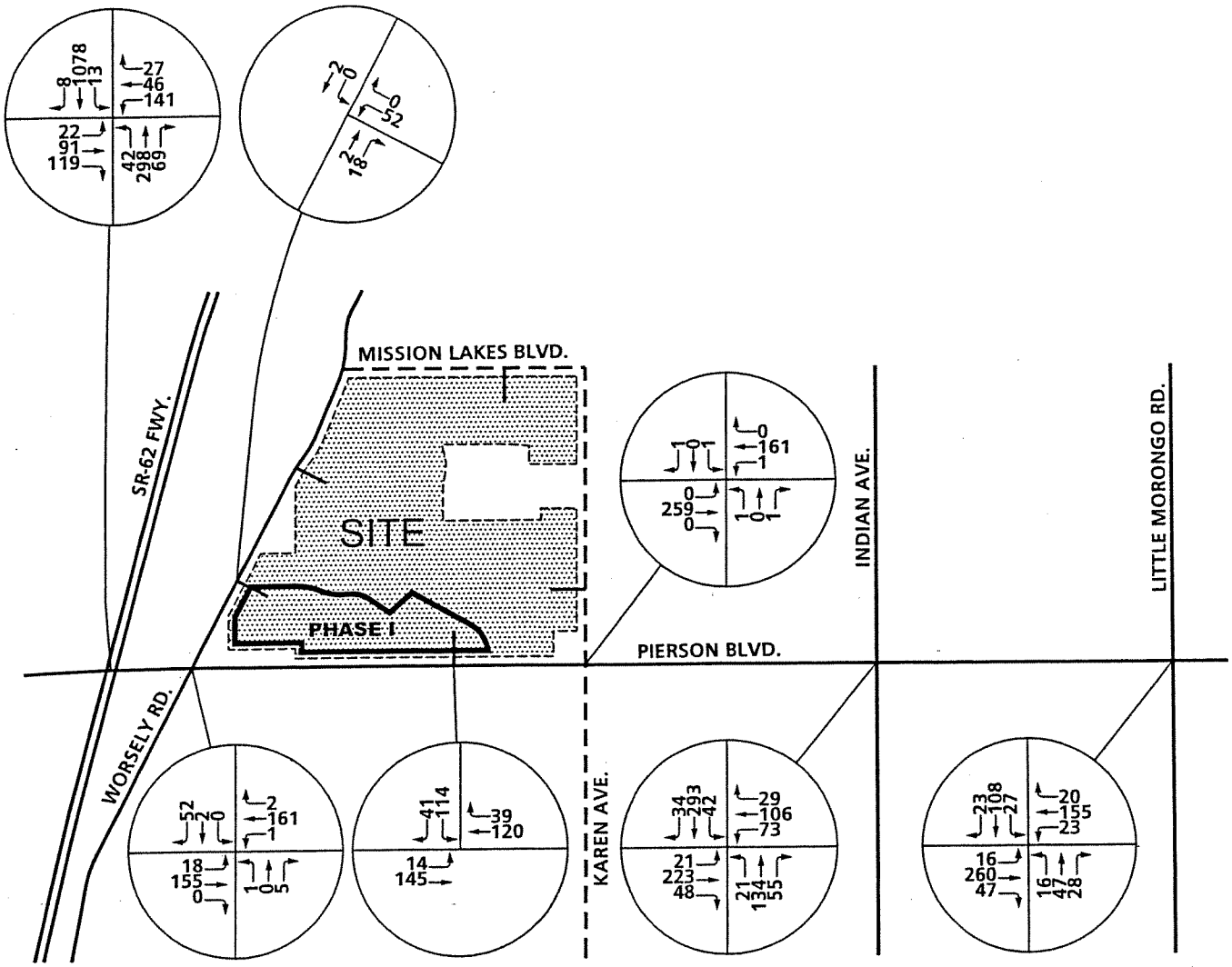
EXHIBIT 5-C

CUMULATIVE (2004) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES



N

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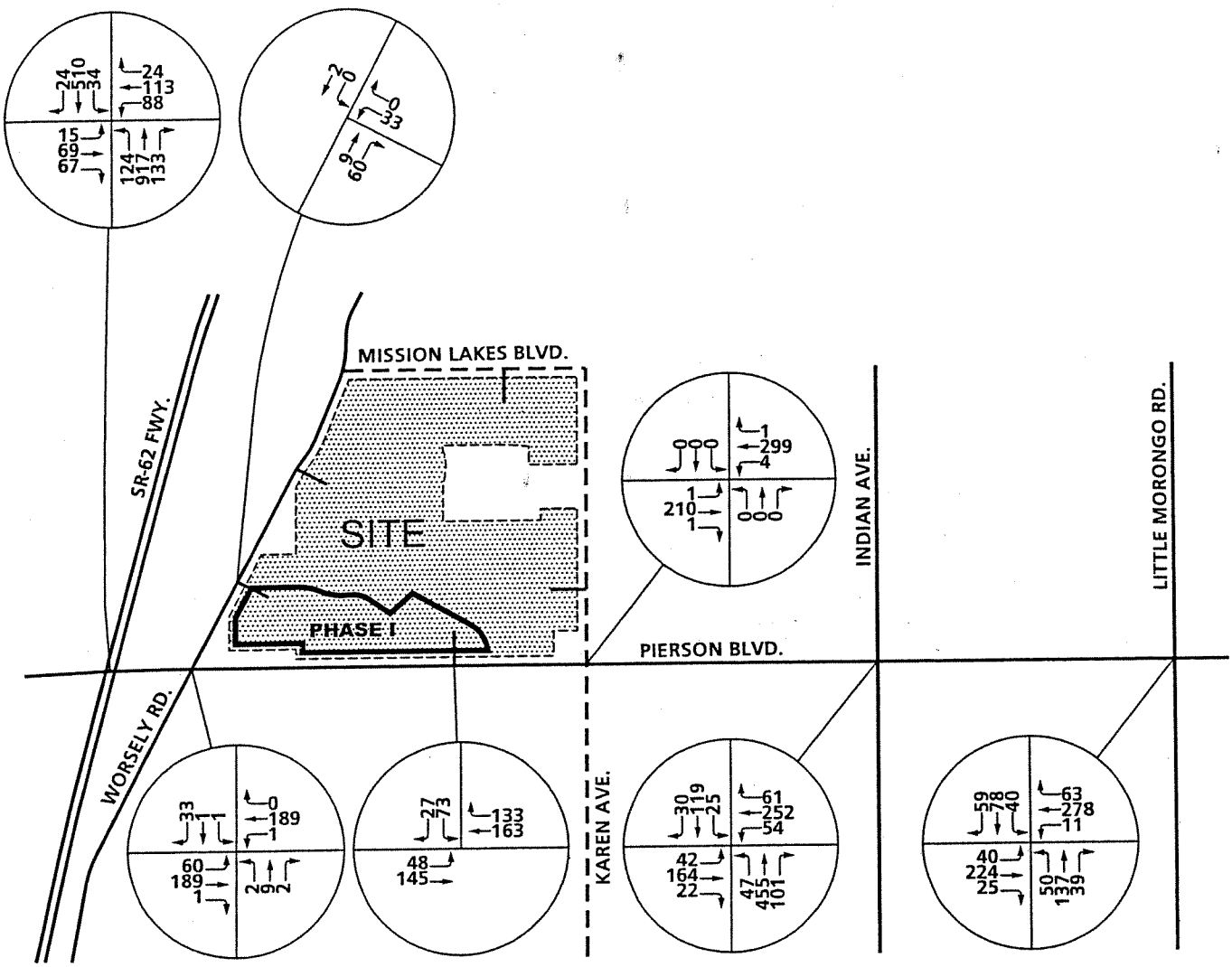
URBAN CROSSROADS

EXHIBIT 5-D

CUMULATIVE (2004) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



N

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URBAN CROSSROADS

For cumulative (2004) with project traffic conditions, the following study area intersection is projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

For cumulative (2004) with project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-2. Cumulative (2004) With Project HCM calculation worksheets are provided in Appendix "E".

3. Level of Service for Cumulative (2005) Conditions Without Project

Cumulative (2005) without project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-3. Table 5-3 shows HCM calculations based on the geometrics at the intersections. Cumulative (2005) without project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-E and 5-F, respectively.

For cumulative (2005) without project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

For cumulative (2005) without project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the

TABLE 5-3

INTERSECTION ANALYSIS FOR CUMULATIVE (2005) WITHOUT PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	---[4]	---	F	F
- with improvements	TS	1	2	1	1	2	1	0	1	0	0	1	0	19.9	16.1	B	B
Worsley Rd. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	11.7	12.6	B	B
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	10.5	7.8	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	15.4	35.9	C	E
- with improvements	TS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	10.4	11.2	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	11.5	18.5	B	C
- with improvements	TS	0	1	0	0	1	0	0	1	0	0	1	0	9.2	10.1	A	B

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

4 -- = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-E

CUMULATIVE (2005) WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

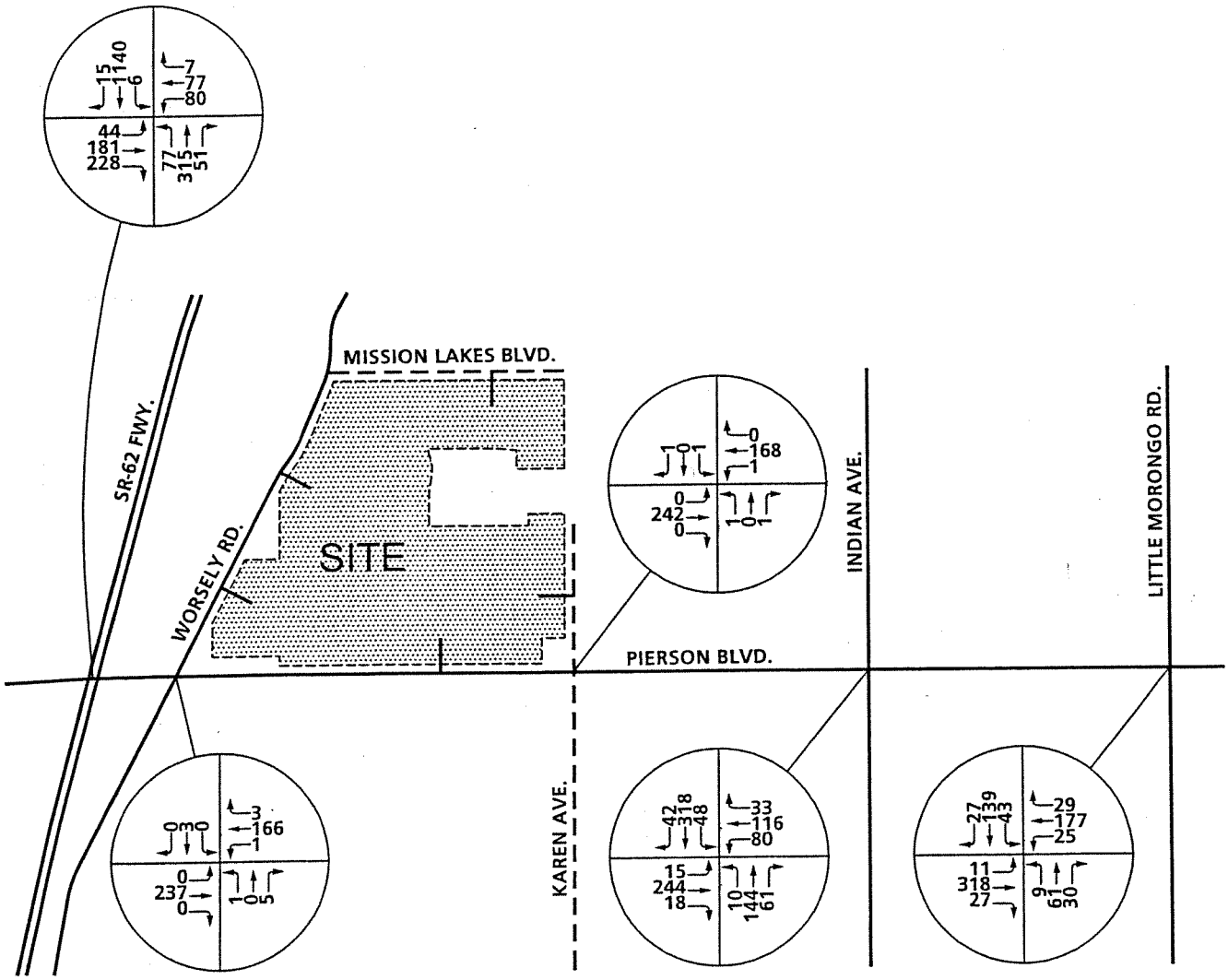

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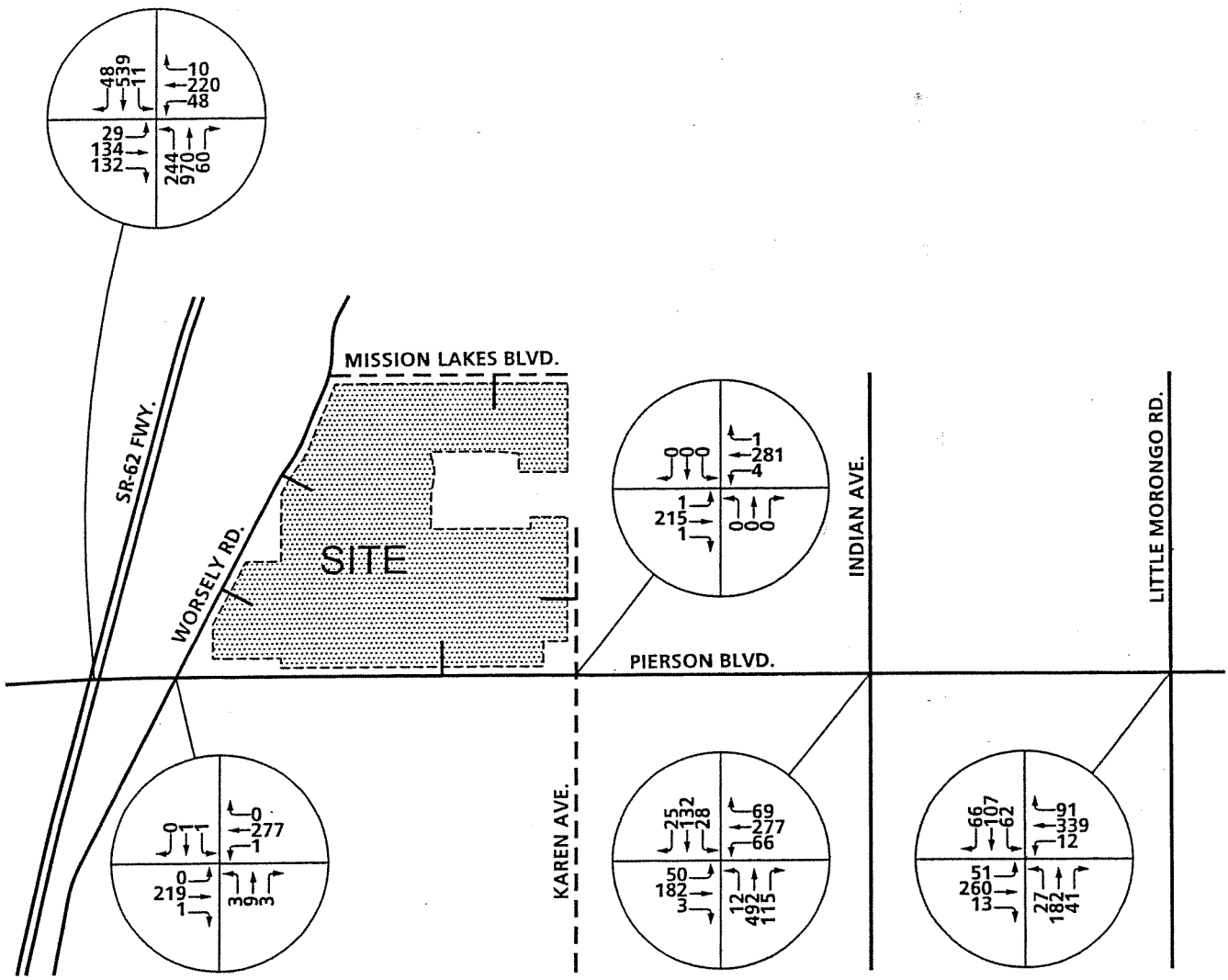
EXHIBIT 5-F

CUMULATIVE (2005) WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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improvements listed in Table 5-3. Cumulative (2005) Without Project HCM calculation worksheets are provided in Appendix "F".

4. Level of Service for Cumulative (2005) Conditions With Project

Cumulative (2005) with project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-4. Table 5-4 shows HCM calculations based on the geometrics at the intersections. Cumulative (2005) with project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-G and 5-H, respectively.

For cumulative (2005) with project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For cumulative (2005) with project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-4. Cumulative (2005) With Project HCM calculation worksheets are provided in Appendix "G".

TABLE 5-4

INTERSECTION ANALYSIS FOR CUMULATIVE (2005) WITH PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	1	2	1	1	2	1	0	1	0	0	1	0	39.3	20.7	D	C
Worsley Rd. (NS) at:																	
• Driveway 2 (EW)	CSS	0	1	0	0	0	0	0	0	0	0	1	0	8.8	8.8	A	A
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	11.3	19.7	B	C
Driveway 3 (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	0	0	0	1	0	1	1	0	0	1	0	19.2	29.7	C	D
- with improvements	TS	0	0	0	0	1	0	1	1	0	0	1	0	10.1	6.4	B	A
Karen Ave. (NS) at:																	
• Driveway 5 (EW)	CSS	0	1	0	0	1	0	0	1	0	0	0	0	0.0	0.0	A	A
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	22.5	31.4	C	D
- with improvements	TS	0	1	0	0	1	0	0	1	0	0	1	0	13.2	6.0	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	11.8	15.4	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	19.4	—[4]	C	F
- with improvements	TS	0	1	0	0	1	0	0	1	0	0	1	0	8.8	11.1	A	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] — = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-G

CUMULATIVE (2005) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

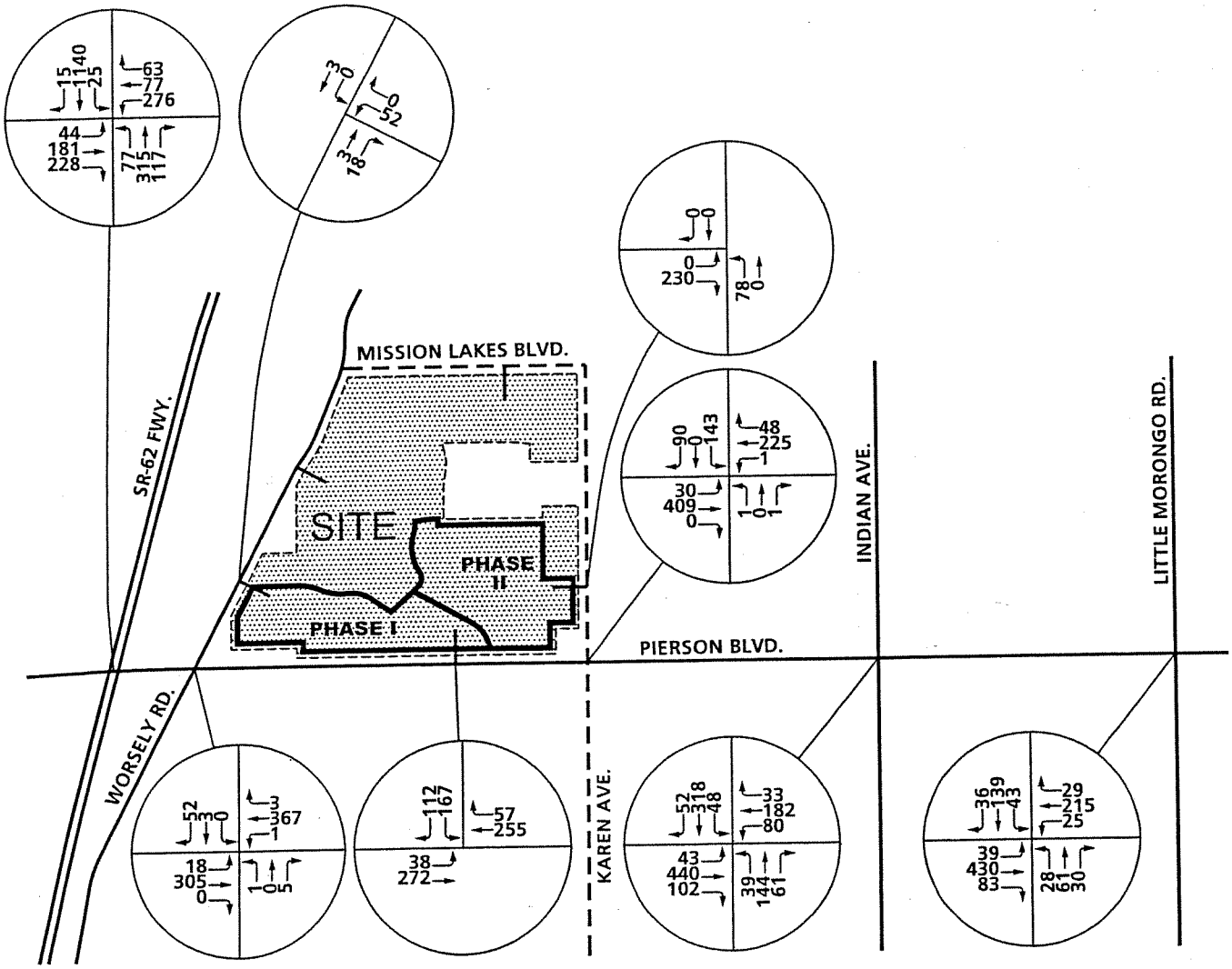

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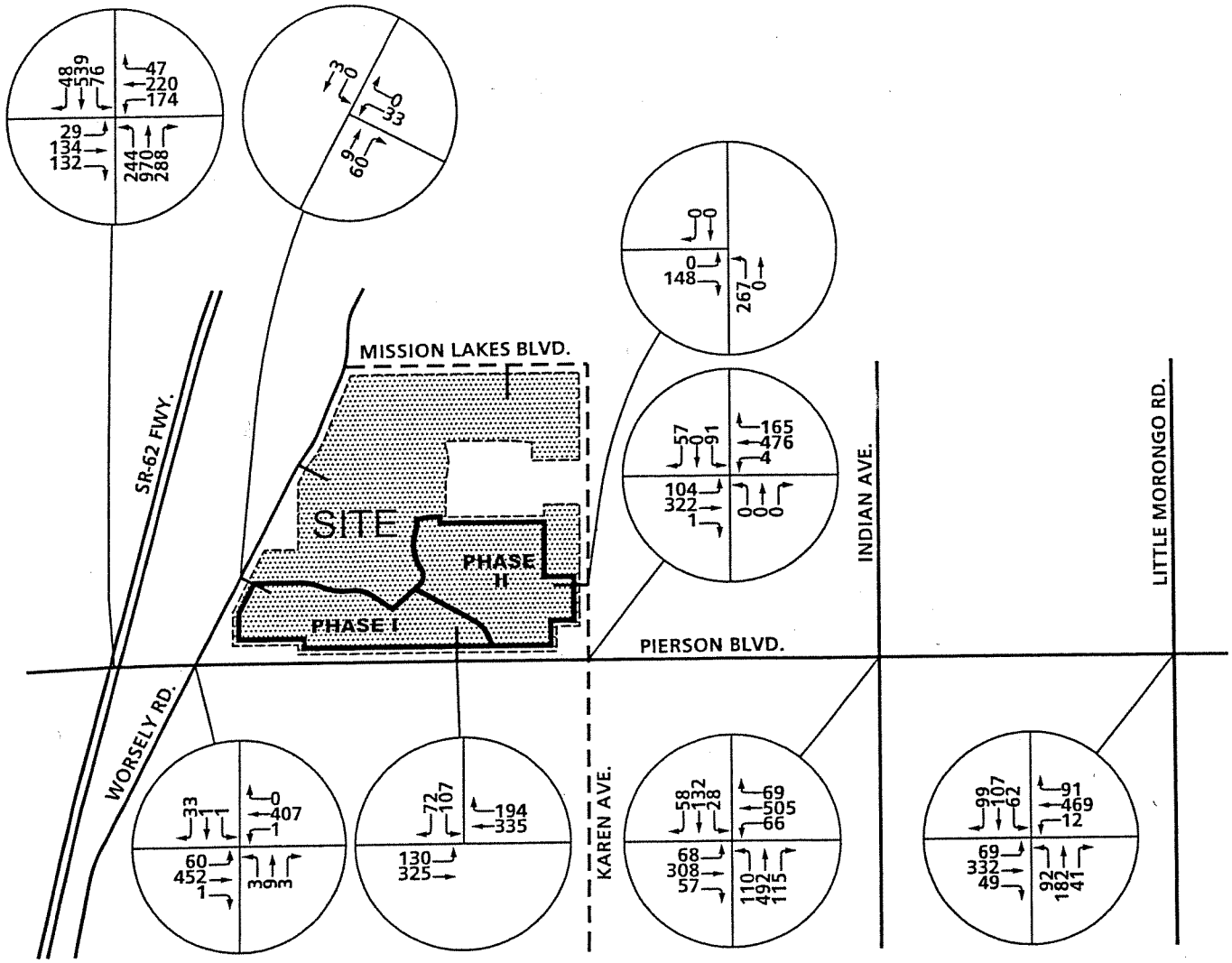
EXHIBIT 5-H

CUMULATIVE (2005) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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5. Level of Service for Cumulative (2006) Conditions Without Project

Cumulative (2006) without project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-5. Table 5-5 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2006) without project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-I and 5-J, respectively.

For cumulative (2006) without project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For cumulative (2006) without project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-5. Cumulative (2006) Without Project HCM calculation worksheets are provided in Appendix "H".

TABLE 5-5

INTERSECTION ANALYSIS FOR CUMULATIVE (2006) WITHOUT PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—	F	F
- with improvements	TS	1	2	1	1	2	1	0	1	0	0	1	0	33.8	24.7	C	C
Worsley Rd. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	13.1	15.1	B	C
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	11.6	8.1	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	24.5	81.5	C	F
- with improvements	TS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	11.1	12.6	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	16.0	66.8	C	F
- with improvements	TS	0	1	0	0	1	0	0	1	0	0	1	0	9.7	11.1	A	B

---

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

4 — = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-I

CUMULATIVE (2006) CONDITIONS WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

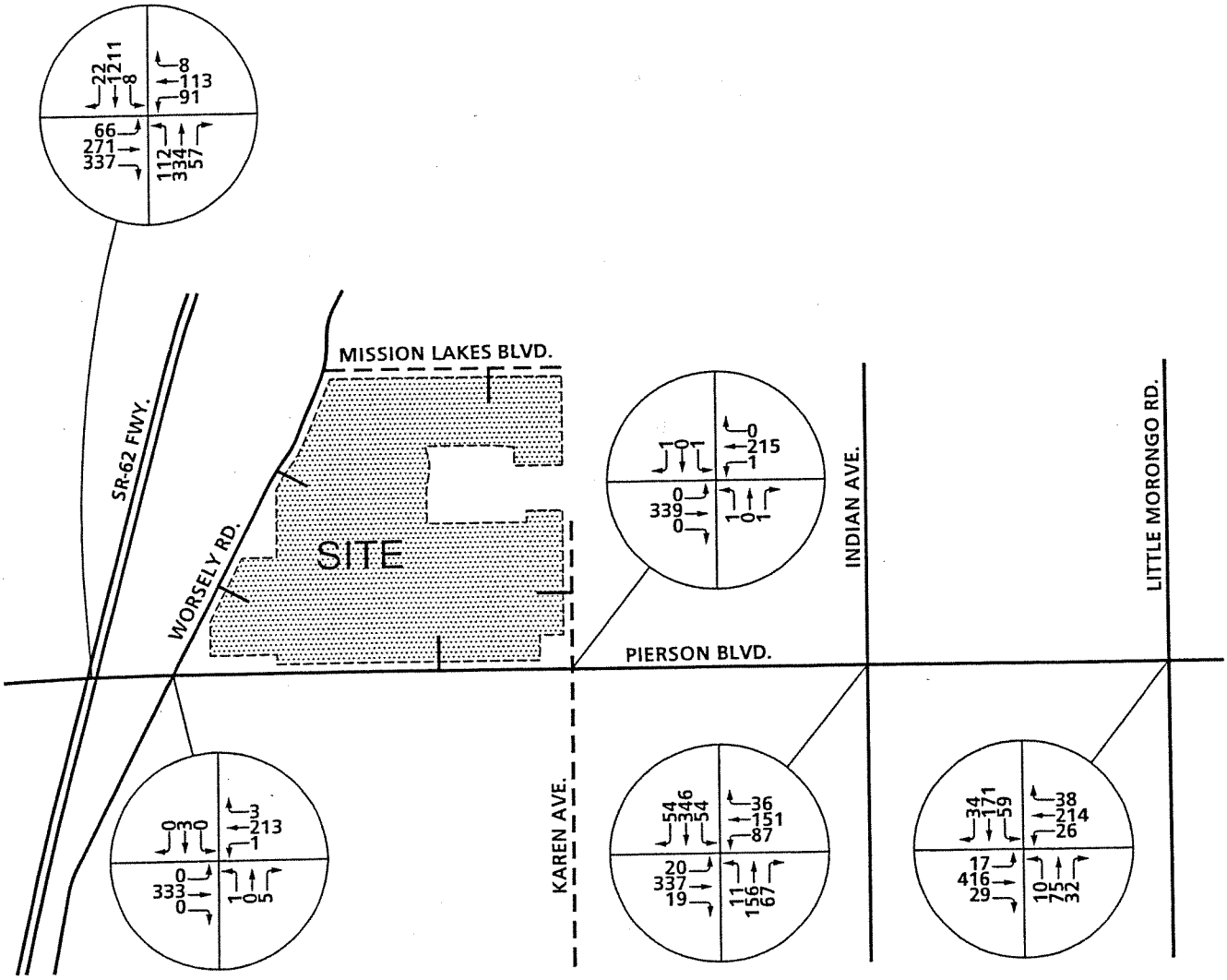

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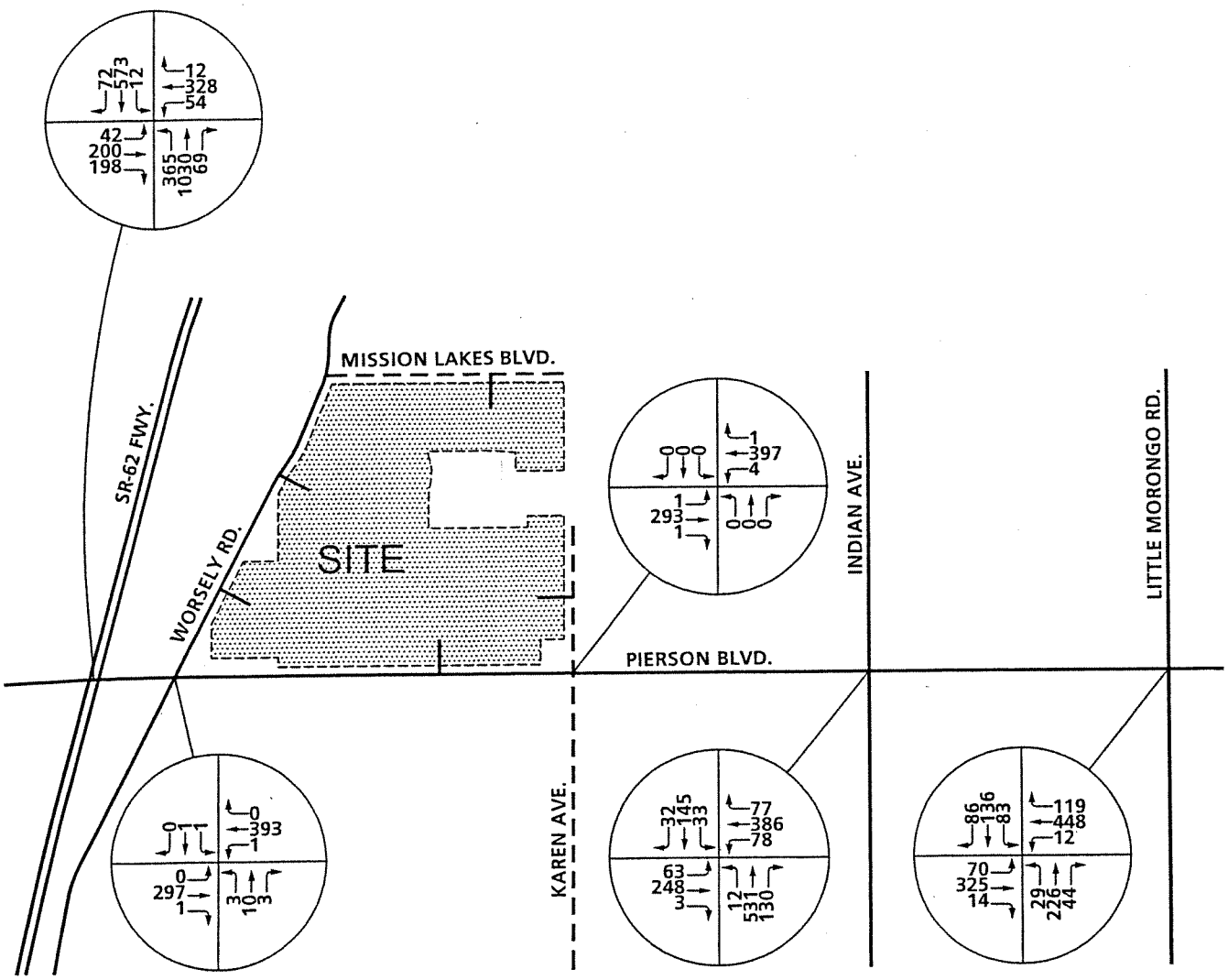
EXHIBIT 5-J

CUMULATIVE (2006) CONDITIONS WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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6. Level of Service for Cumulative (2006) Conditions With Project

Cumulative (2006) with project conditions intersection Level of Service for the existing network with cumulative projects and areawide growth are shown in Table 5-6. Table 5-6 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2006) with project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-K and 5-L, respectively.

For cumulative (2006) with project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Worsley Road (NS) at:

- Pierson Boulevard (EW)

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For cumulative (2006) with project traffic conditions, all of the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the

TABLE 5-6

INTERSECTION ANALYSIS FOR CUMULATIVE (2006) WITH PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	1	2	1	1	2	1	0	1	0	1	1	0	31.8	23.9	C	C
Worsley Rd. (NS) at:																	
• Driveway 1 (EW)	CSS	0	1	0	0	1	0	0	0	0	0	1	0	8.7	8.8	A	A
• Driveway 2 (EW)	CSS	0	1	0	0	1	0	0	0	0	0	1	0	9.3	9.6	A	A
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	16.4	39.9	C	E
- with improvements	TS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	10.4	14.5	B	B
Driveway 3 (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	0	0	0	1	0	1	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	0	0	0	0	1	0	1	1	0	0	1	0	11.5	8.1	B	A
Karen Ave. (NS) at:																	
• Driveway 5 (EW)	CSS	0	1	0	0	1	0	0	1	0	0	0	0	0.0	0.0	A	A
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	0	1	0	0	1	0	0	1	0	0	1	0	16.3	8.7	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	15.4	18.2	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	0	1	0	0	1	0	0	1	0	0	1	0	10.4	15.3	B	B

---

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

4 — = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-K

CUMULATIVE (2006) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

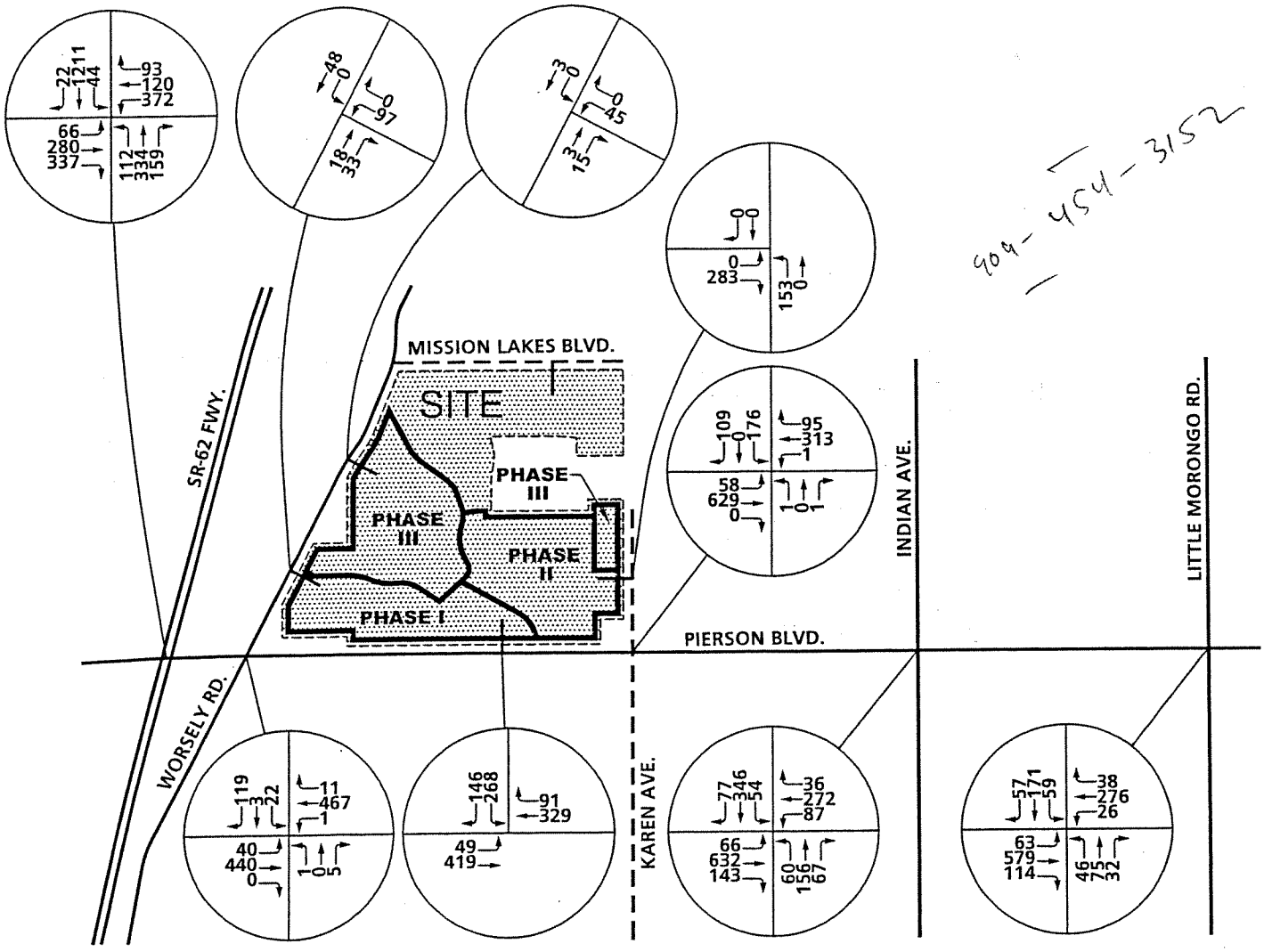

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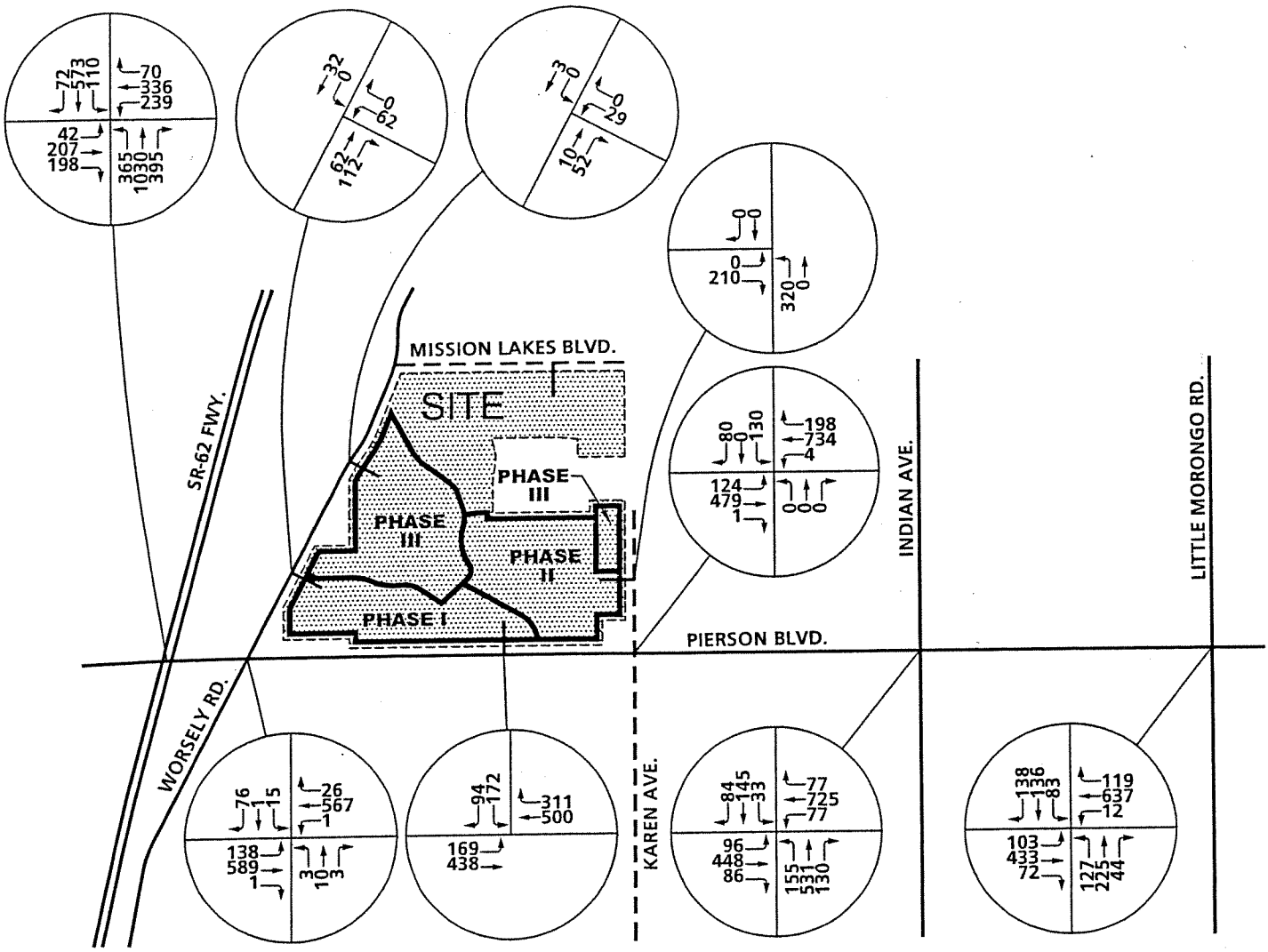
EXHIBIT 5-L

CUMULATIVE (2006) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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improvements listed in Table 5-6. Cumulative (2006) With Project HCM calculation worksheets are provided in Appendix "I".

7. Level of Service for Cumulative (2007) Conditions Without Project

Cumulative (2007) without project conditions intersection level of service for the existing network with cumulative projects and areawide growth are shown in Table 5-7. Table 5-7 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2007) without project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-M and 5-N, respectively.

For cumulative (2007) without project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For cumulative (2007) without project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-7. Cumulative (2007) Without Project HCM calculation worksheets are provided in Appendix "J".

TABLE 5-7

INTERSECTION ANALYSIS FOR CUMULATIVE (2007) WITHOUT PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—	F	F
- with improvements	**TS**	1	2	1	1	2	1	**1**	1	0	0	1	0	47.9	31.4	D	C
Worsley Rd. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	14.9	18.5	B	C
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	13.0	8.4	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	56.9	—	F	F
- with improvements	**TS**	0.5	0.5	1	0	1	0	0	1	0	0	1	0	12.0	14.8	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	31.4	—	D	F
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	10.3	13.3	B	B

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1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

4 — = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-M

CUMULATIVE (2007) WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

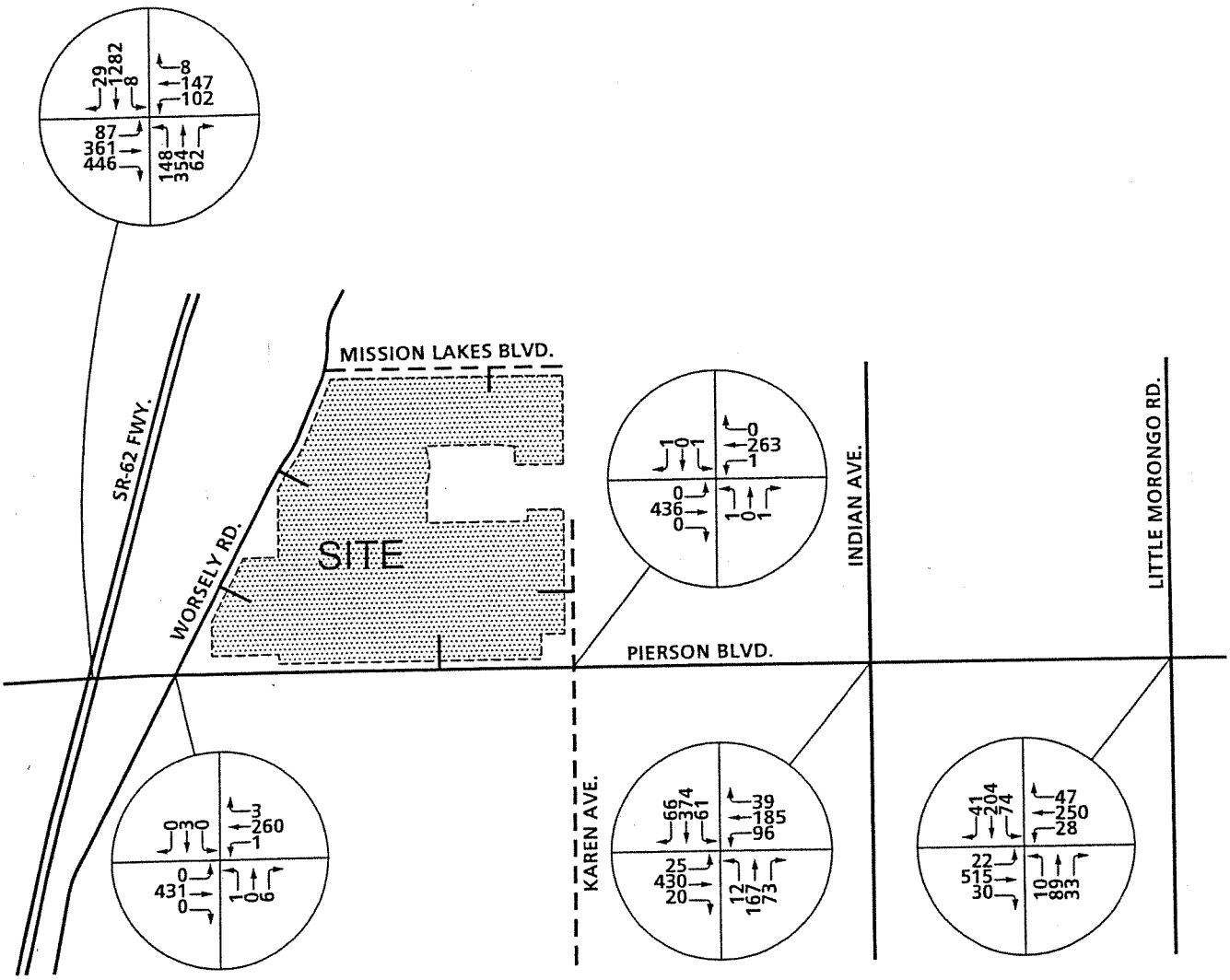

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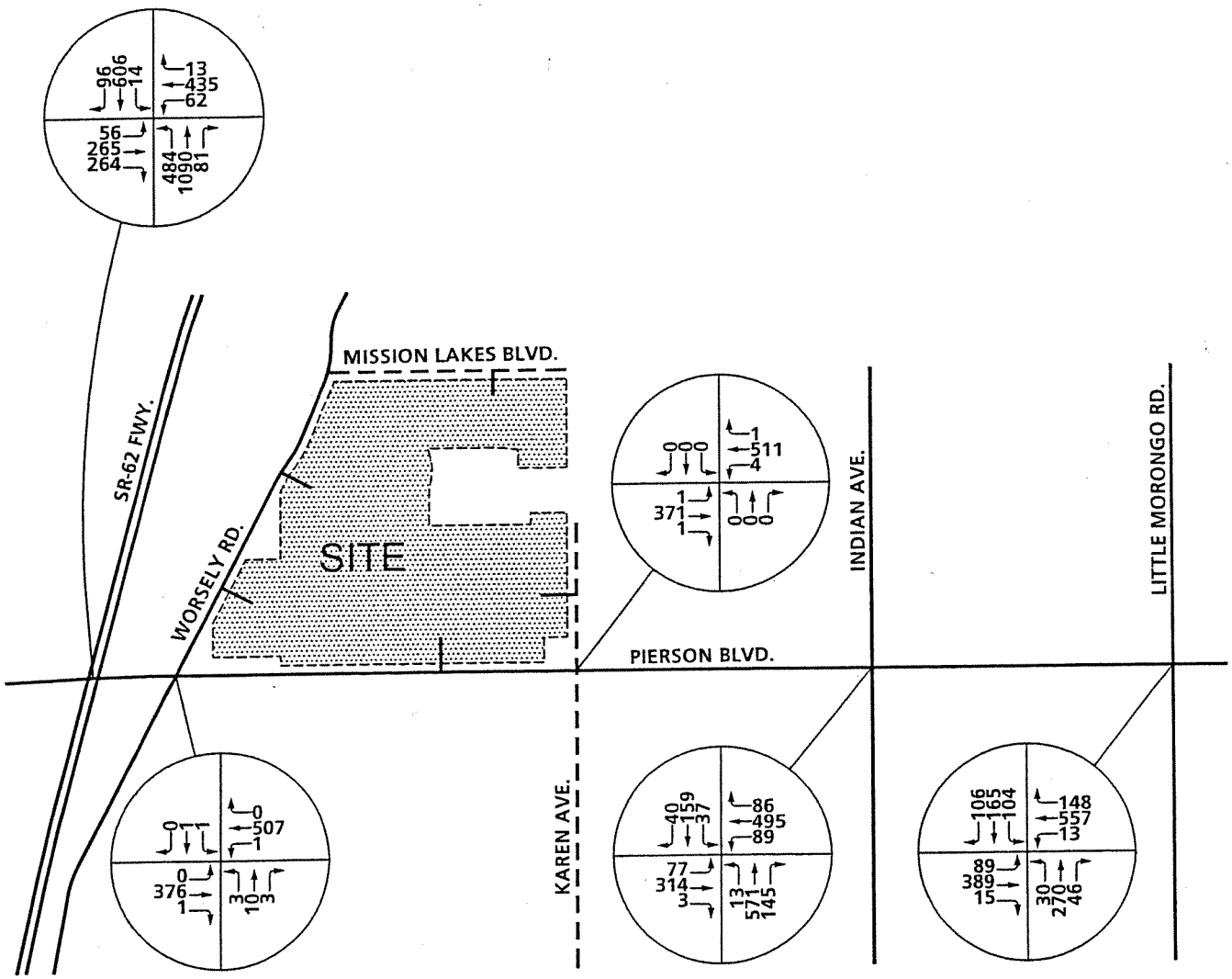
EXHIBIT 5-N

CUMULATIVE (2007) WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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8. Level of Service for Cumulative (2007) Conditions With Project

Cumulative (2007) with project conditions intersection level of service for the existing network with cumulative projects and areawide growth are shown in Table 5-8. Table 5-8 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2007) with project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-O and 5-P, respectively.

For cumulative (2007) with project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Worsley Road (NS) at:

- Pierson Boulevard (EW)

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

TABLE 5-8

INTERSECTION ANALYSIS FOR CUMULATIVE (2007) WITH PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	1	2	1>	1	2	1	1	1	1>	1	1	0	54.6	54.1	D	D
Worsley Rd. (NS) at:																	
• Driveway 1 (EW)	CSS	0	1	0	0	1	0	0	0	0	0	1	0	9.3	9.5	A	A
• Driveway 2 (EW)	CSS	0	1	0	0	1	0	0	0	0	0	1	0	10.3	10.9	B	B
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	22.6	—[4]	C	F
- with improvements	TS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	14.3	35.6	B	D
Driveway 3 (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	0	0	0	1	0	1	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	0	0	0	0	1	0	1	1	0	0	1	0	16.3	37.9	B	D
Driveway 4 (NS) at:																	
• Mission Lakes Blvd. (EW)	CSS	0	1	0	0	0	0	0	1	0	0	0	0	0.0	0.0	A	A
Karen Ave. (NS) at:																	
• Driveway 5 (EW)	CSS	0	1	0	0	1	0	0	1	0	0	0	0	0.0	0.0	A	A
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	0	1	0	0	1	0	0	1	0	0	1	0	23.8	13.0	C	B
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	1	1	1	0	1	0	1	1	0	1	1	0	47.9	48.1	D	D
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	0	1	0	0	1	0	0	1	0	0	1	0	13.7	33.8	B	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement; 1> = Right-Turn Overlap

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] — = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-O

CUMULATIVE (2007) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

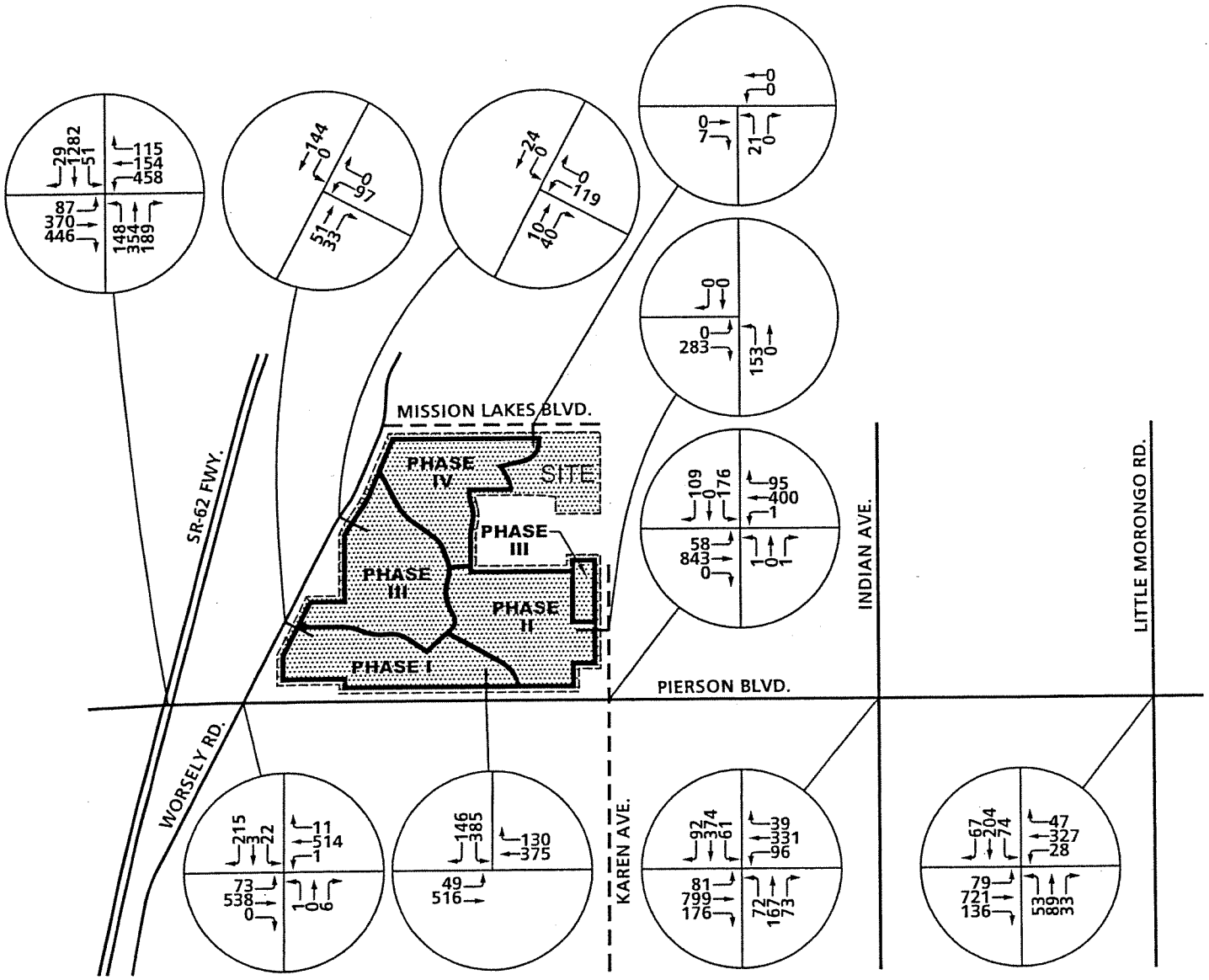
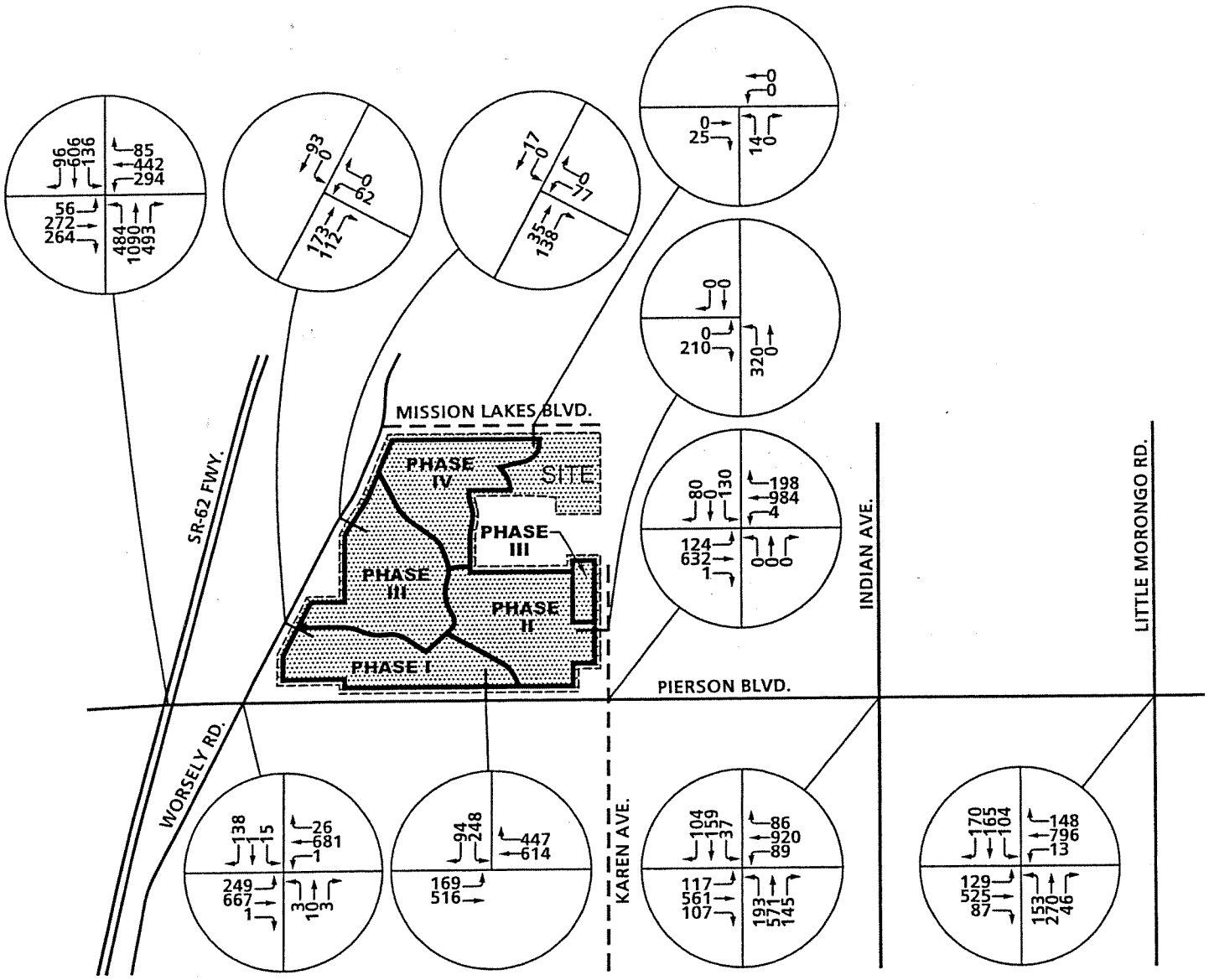


EXHIBIT 5-P

CUMULATIVE (2007) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



For cumulative (2007) with project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-8. Cumulative (2007) With Project HCM calculation worksheets are provided in Appendix "K".

9. Level of Service for Cumulative (2008) Conditions Without Project

Cumulative (2008) without project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-9. Table 5-9 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2008) without project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-Q and 5-R, respectively.

For cumulative (2008) without project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For cumulative (2008) without project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-9. Cumulative (2008) Without Project HCM calculation worksheets are provided in Appendix "L".

TABLE 5-9

INTERSECTION ANALYSIS FOR CUMULATIVE (2008) WITHOUT PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—	F	F
- with improvements	**TS**	1	2	1	1	2	1	1	1	1	0	1	0	30.7	34.5	C	C
Worsley Rd. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	17.0	23.1	C	C
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	14.7	8.7	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	—	—	F	F
- with improvements	**TS**	0.5	0.5	1	0	1	0	0	1	0	0	1	0	13.3	19.7	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	76.9	—	F	F
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	11.4	18.8	B	B

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

4 — = Delay High, Intersection Unstable, Level of Service "F".

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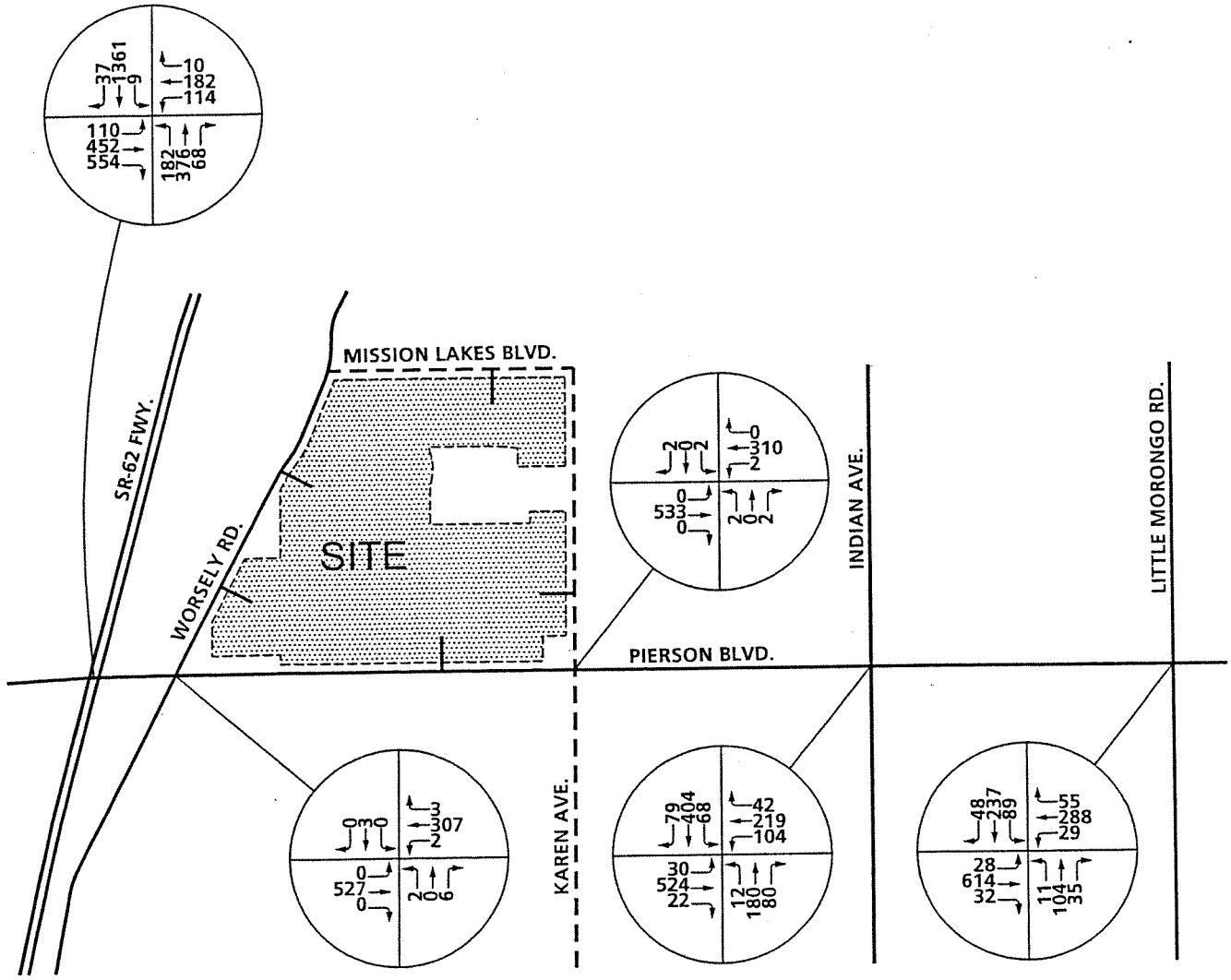
EXHIBIT 5-Q

CUMULATIVE (2008) CONDITIONS WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES



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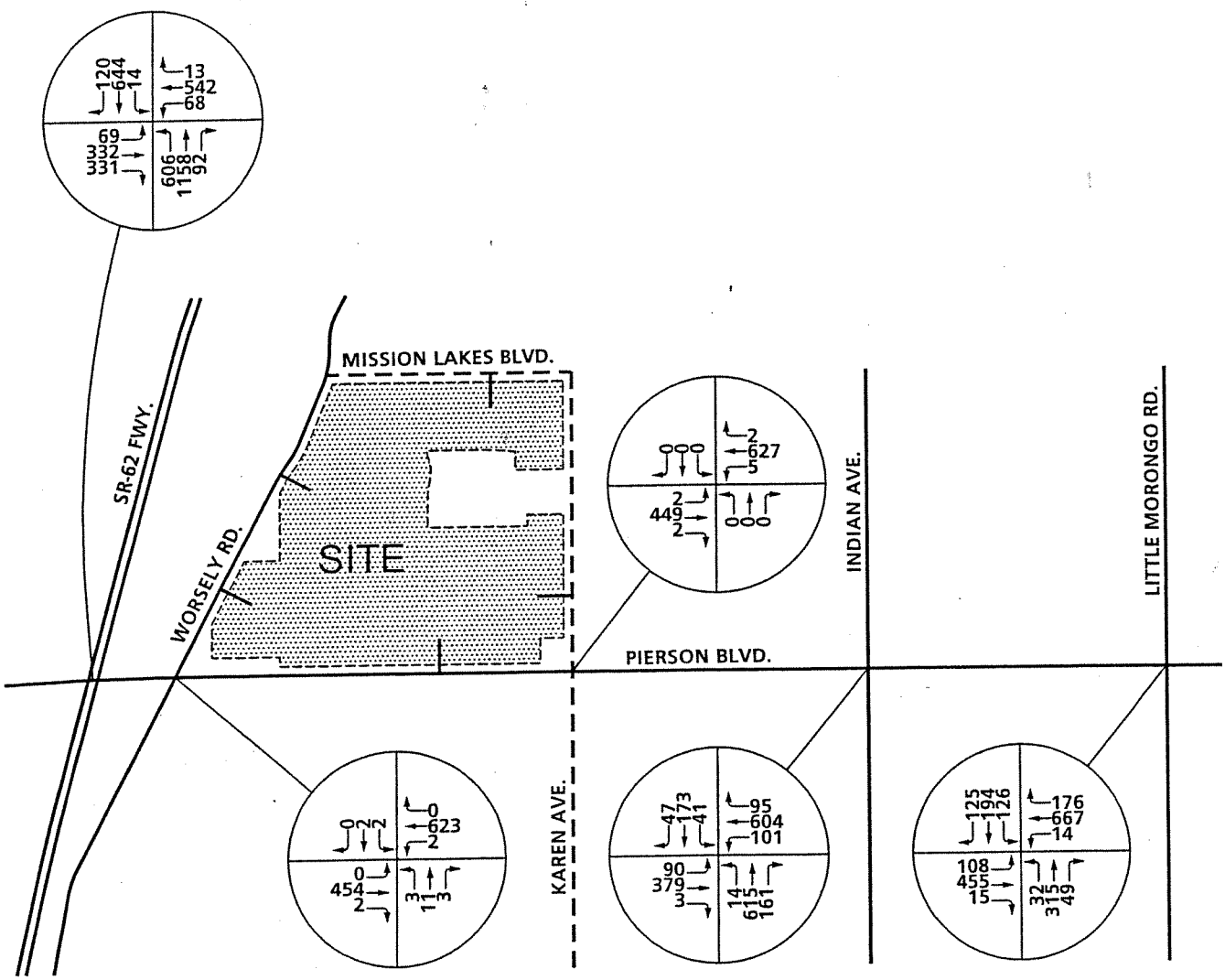
URBAN CROSSROADS

EXHIBIT 5-R

CUMULATIVE (2008) CONDITIONS WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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URBAN CROSSROADS

10. Level of Service for Cumulative (2008) Conditions With Project

Cumulative (2008) with project conditions intersection level of service for the existing network with cumulative projects and areawide growth are shown in Table 5-10. Table 5-10 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2008) with project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-S and 5-T, respectively.

For cumulative (2008) with project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Worsley Road (NS) at:

- Pierson Boulevard (EW)

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

TABLE 5-10

INTERSECTION ANALYSIS FOR CUMULATIVE (2008) WITH PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	1	2	1>	1	2	1	1	1	1>	2	1	0	46.4	54.2	D	D
Worsley Rd. (NS) at:																	
• Driveway 1 (EW)	CSS	0	1	0	0	1	0	0	0	0	0	1	0	9.8	10.2	A	B
• Driveway 2 (EW)	CSS	0	1	0	0	1	0	0	0	0	0	1	0	10.9	11.8	B	B
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	34.7	—[4]	D	F
- with improvements	TS	0	1	0	0	1	0	1	1	1	0	1	0	15.7	13.5	B	B
Driveway 3 (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	0	0	0	1	0	1	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	0	0	0	0	1	0	1	1	0	0	1	0	15.0	20.9	B	C
Driveway 4 (NS) at:																	
• Mission Lakes Blvd. (EW)	CSS	0	1	0	0	0	0	0	1	0	0	1	0	7.3	7.5	A	A
Karen Ave. (NS) at:																	
• Driveway 5 (EW)	CSS	0	1	0	0	1	0	0	1	0	0	0	0	10.0	9.4	A	A
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	0	1	0	0	1	0	0	1	0	0	1	0	16.0	29.2	B	C
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	1	2	0	0	1	0	1	2	0	1	2	0	31.3	29.3	C	C
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	—[4]	—[4]	F	F
- with improvements	TS	0	1	0	0	1	0	1	1	0	1	2	0	43.6	44.5	D	D

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement; > = Right-Turn Overlap Phasing

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

4 — = Delay High, Intersection Unstable, Level of Service "F".

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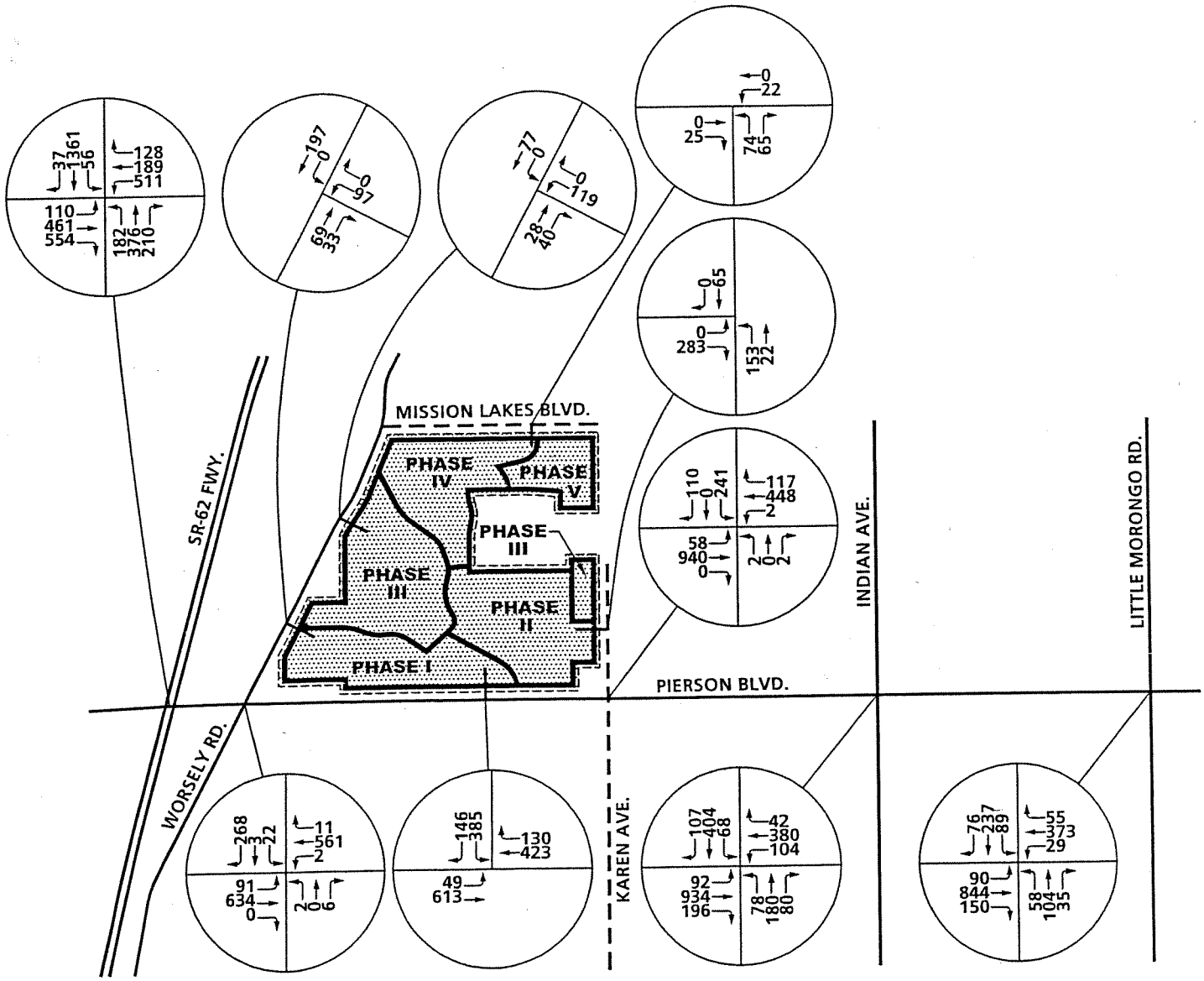
EXHIBIT 5-S

CUMULATIVE (2008) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

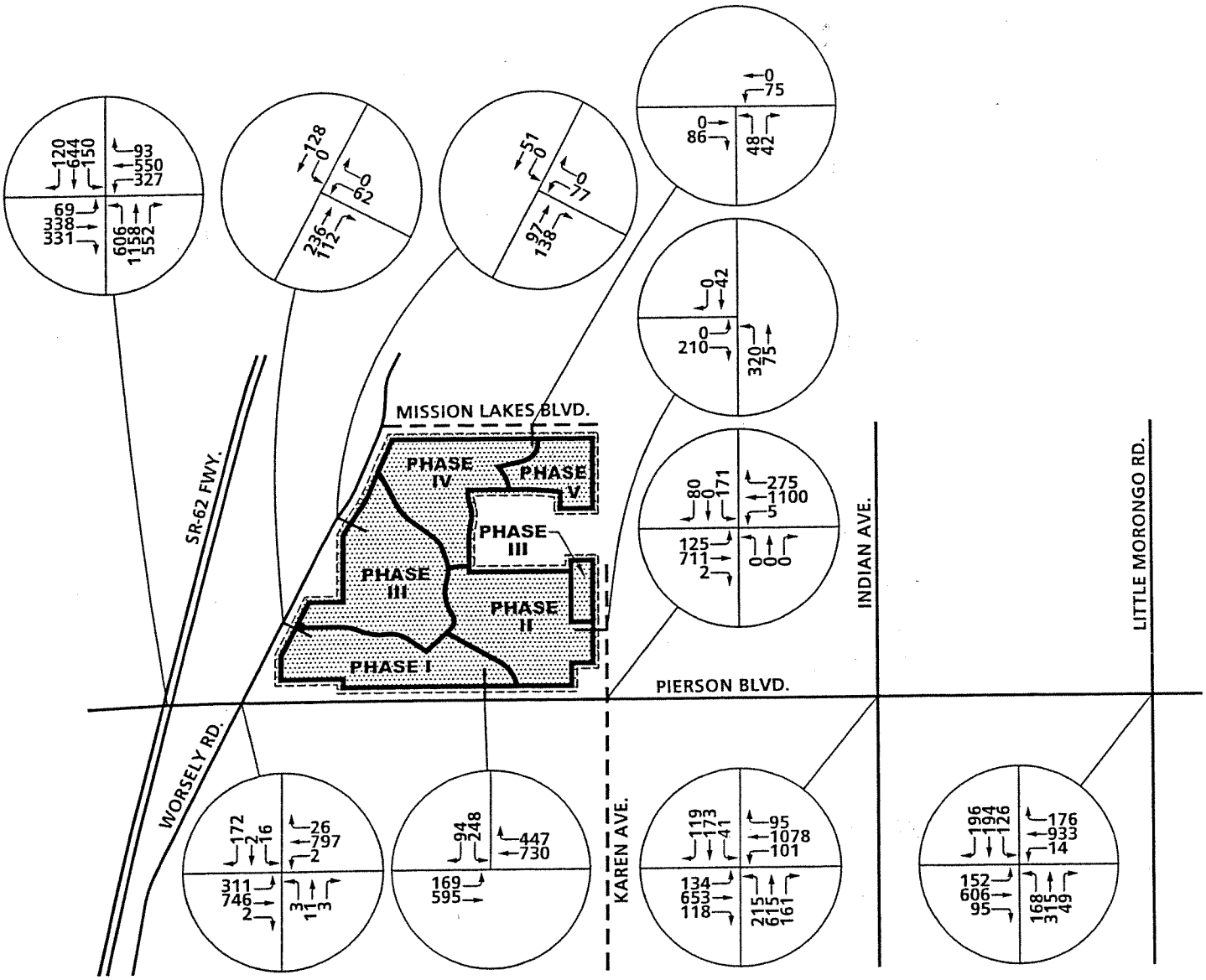


N

URBAN CROSSROADS

EXHIBIT 5-T

CUMULATIVE (2008) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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URBAN CROSSROADS

For cumulative (2008) with project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-10. Cumulative (2008) With Project HCM calculation worksheets are provided in Appendix "L".

6.0 CONCLUSIONS AND RECOMMENDATIONS

A. Site Access

The proposed project has been divided into traffic analysis zones (TAZ) in order to load traffic from the appropriate driveway locations. Exhibit 2-A (previously presented) shows the boundaries of the TAZ's and the location of the project driveways. These access locations that will serve these TAZ's are described as follows:

TAZ 1: This 370 unit residential development will have two full access driveway. Driveway 3 will be located along Pierson Boulevard and Driveway 2 will be located along Worsley Road.

TAZ 2: This 633 unit residential development will utilize two full access driveways. Driveway 5 will be located along Karen Avenue and the Driveway 3 will be located along Pierson Boulevard.

TAZ 3: This 400 unit residential development will utilize three full access driveways. Driveways 1 and 2 will be located along Worsley Road and Driveway 3 will be located along Pierson Boulevard. The 1,100 student elementary school will have one full access driveway. Driveway 5 will be located along Karen Avenue.

TAZ 4: This 380 unit residential development will utilize three full access driveways. Driveway 4 is anticipated to provide full access to Mission Lakes Boulevard, Driveway 1 will have access to Worsley Road and Driveway 3 will have access to Pierson Boulevard.

TAZ 5: This 210 unit residential development will utilize full access (Driveway 4) to Mission Lakes Boulevard.

B. Traffic Impacts

Based on the traffic analysis conducted for conditions with and without the proposed project, the study area intersections are anticipated to operate at acceptable service levels with the traffic signal and intersection improvements identified in Section 5 of this report and are described in the following sections:

C. Off-Site Improvements

For Cumulative (2004) With Project traffic conditions, the following intersection and traffic signal improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

For Cumulative (2005) With Project traffic conditions, the following additional intersection and traffic signal improvements are recommended:

Karen Avenue (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

For Cumulative (2006) With Project conditions, the following additional intersection improvements are recommended:

Worsley Road (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Westbound left turn lane

For Cumulative (2007) With Project traffic conditions, additional intersection and traffic signal improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Northbound right turn overlap phasing
  - Eastbound left turn lane
  - Eastbound right turn lane
  - Eastbound right turn overlap phasing
  - Westbound left turn lane

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Northbound left turn lane
  - Eastbound left turn lane
  - Westbound left turn lane

For Cumulative (2008) With Project conditions, the following additional intersection improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Second westbound left turn lane

Worsley Road (NS) at:

- Pierson Boulevard (EW)
  - Eastbound left turn lane

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Convert northbound right turn lane into a thru-right lane
  - Second eastbound through lane
  - Second westbound through lane

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)
  - Eastbound left turn lane
  - Westbound left turn lane
  - Second Westbound through lane

D. <u>On-Site Improvements</u>

Site specific circulation and access recommendations are depicted on Exhibit 6-A and are described below:

- Construct Pierson Boulevard at its ultimate half-section width as a major arterial from the westerly project boundary to the easterly project boundary in conjunction with development.

- Construct Karen Avenue at its ultimate half-section width as a collector (34 foot part width) from Mission Lakes Boulevard to Pierson Boulevard in conjunction with development.

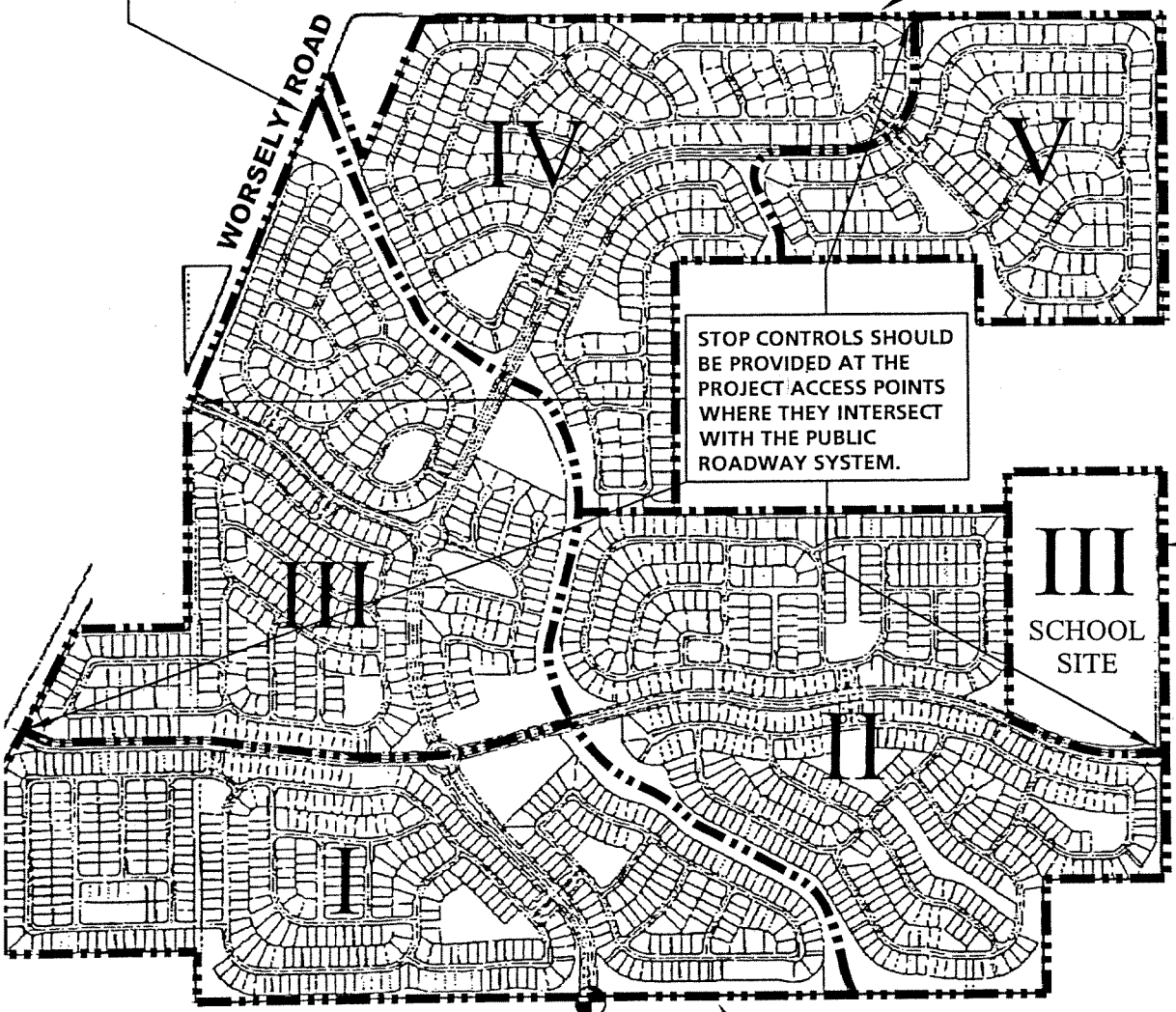
- Construct Worsley Road at its ultimate half-section width as a major collector from Mission Lakes Boulevard to the southerly project boundary in conjunction with development.

EXHIBIT 6-A

CIRCULATION RECOMMENDATIONS

CONSTRUCT WORSLEY ROAD AT ITS ULTIMATE CROSS-SECTION WIDTH AS A MAJOR COLLECTOR FROM MISSION LAKES BOULEVARD TO THE SOUTHERLY PROJECT BOUNDARY IN CONJUNCTION WITH DEVELOPMENT.

CONSTRUCT MISSION LAKES BOULEVARD AT ITS ULTIMATE HALF-SECTION WIDTH AS A MAJOR COLLECTOR FROM WORSLEY ROAD KAREN AVENUE IN CONJUNCTION WITH DEVELOPMENT.



STOP CONTROLS SHOULD BE PROVIDED AT THE PROJECT ACCESS POINTS WHERE THEY INTERSECT WITH THE PUBLIC ROADWAY SYSTEM.

CONSTRUCT KAREN AVENUE AT ITS ULTIMATE HALF-SECTION WIDTH AS A COLLECTOR (34-FOOT PART WIDTH) FROM THE MISSION LAKES BOULEVARD TO PIERSON BOULEVARD IN CONJUNCTION WITH DEVELOPMENT.

ON-SITE TRAFFIC SIGNING AND STRIPING SHOULD BE IMPLEMENTED IN CONJUNCTION WITH DETAILED CONSTRUCTION PLANS FOR THE PROJECT SITE.

CONSTRUCT A TRAFFIC SIGNAL AT THE FOLLOWING INTERSECTION IN CONJUNCTION WITH DEVELOPMENT WHEN WARRANTED:

DRIVEWAY 3 (NS) AT:
* PIERSON BOULEVARD (EW)

CONSTRUCT PIERSON BOULEVARD AT ITS ULTIMATE HALF-SECTION WIDTH AS A MAJOR ARTERIAL FROM THE WESTERLY PROJECT BOUNDARY TO THE EASTERLY PROJECT BOUNDARY IN CONJUNCTION WITH DEVELOPMENT.

THE PROJECT SHALL ALSO PARTICIPATE IN FUNDING OF OFF-SITE IMPROVEMENTS WHICH ARE NEEDED TO SERVE CUMULATIVE FUTURE CONDITIONS THROUGH PAYMENT OF APPROPRIATE FEES (CITY FEES AND TUMF). THE TUMF INCLUDES A NETWORK OF REGIONAL FACILITIES AND ENDEAVORS TO SPREAD THE COST ON A REGIONAL BASIS THROUGH PARTICIPATION OF THE COUNTY AND INDIVIDUAL CITIES. IT PROVIDES A KEY FUNDING SOURCE FOR GENERAL PLAN IMPROVEMENTS IN THIS AREA.

SIGHT DISTANCE AT THE PROJECT ENTRANCE SHOULD BE REVIEWED WITH RESPECT TO STANDARD CALTRANS AND CITY OF DESERT HOT SPRINGS SIGHT DISTANCE STANDARDS AT THE TIME OF PREPARATION OF FINAL GRADING, LANDSCAPE AND STREET IMPROVEMENT PLANS.

LEGEND:

= TRAFFIC SIGNAL

150' = 150-FOOT LEFT TURN POCKET

N

URBAN CROSSROADS

- Construct Mission Lakes Boulevard at its ultimate half-section width as a major collector from Worsley Road to Karen Avenue in conjunction with development.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project site.

Stop controls should be provided at the project access points where they intersect with the public roadway system

Construct a traffic signal at the following intersection in conjunction with development when warranted:

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

A 150 foot (minimum) eastbound left turn pocket should be provided along Pierson Boulevard at the intersections of Worsley Road, the Southerly Driveway and Karen Avenue.

A 150 foot (minimum) northbound left turn pocket should be provided along Karen Avenue at the intersection of the easterly Driveway.

Sight distance at the project entrance should be reviewed with respect to standard Caltrans and City of Desert Hot Springs sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

The project shall also participate in funding of off-site improvements which are needed to serve cumulative future conditions through payment of appropriate fees (City Fees and TUMF). The TUMF includes a network of regional facilities and endeavors to spread the cost on a regional basis through participation of the County and individual cities. It provides a key funding source for General Plan improvements in this area.

APPENDIX A

TRAFFIC COUNT WORKSHEETS

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Route 62 DATE: 10/16/2003 LOCATION: City of Desert Hot Springs

E-W STREET: Pierson Blvd. DAY: THURSDAY PROJECT# 03-1521-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:													
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	71	10	0	210	0	0	0	3	17	2	0	313
7:15 AM	3	57	11	1	237	1	0	1	2	11	4	1	329
7:30 AM	1	56	5	2	250	0	0	0	3	6	1	2	326
7:45 AM	2	60	8	2	187	0	1	0	2	17	0	2	281
8:00 AM	2	64	6	2	147	0	0	1	0	3	1	1	227
8:15 AM	0	65	3	2	156	0	0	3	0	8	0	5	242
8:30 AM	0	65	7	2	163	0	0	0	1	13	3	3	257
8:45 AM	0	63	1	1	138	0	0	1	1	4	1	4	214
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	8	501	51	12	1488	1	1	6	12	79	12	18	2189

AM Peak Hr Begins at: 700 AM

PEAK VOLUMES =	6	244	34	5	884	1	1	1	10	51	7	5	1249
PEAK HR. FACTOR:		0.877			0.883			1.000			0.829		0.949

CONTROL: Signalized;

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Route 62 DATE: 10/16/2003 LOCATION: City of Desert Hot Springs

E-W STREET: Pierson Blvd. DAY: THURSDAY PROJECT# 03-1521-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	1	162	5	2	113	0	0	0	0	7	1	2	293
4:15 PM	1	157	4	3	109	0	1	0	0	11	1	0	287
4:30 PM	1	176	9	5	94	0	0	2	0	6	3	0	296
4:45 PM	0	152	9	1	105	0	1	0	0	2	1	4	275
5:00 PM	0	154	13	3	83	0	0	1	0	13	2	2	271
5:15 PM	1	210	9	3	111	0	1	1	0	3	1	3	343
5:30 PM	2	201	6	0	122	0	0	1	0	8	1	1	342
5:45 PM	0	187	5	2	102	0	1	0	1	6	1	2	307
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 6	NT 1399	NR 60	SL 19	ST 839	SR 0	EL 4	ET 5	ER 1	WL 56	WT 11	WR 14	TOTAL 2414

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	3	752	33	8	418	0	2	3	1	30	5	8	1263
PEAK HR. FACTOR:		0.895			0.873			0.750			0.632		0.921

CONTROL: Signalized;

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Worsley Rd

DATE: 10/16/2003

LOCATION: City of Desert Hot Springs

E-W STREET: Pierson Blvd.

DAY: THURSDAY

PROJECT# 03-1521-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	1	0	1	0	0	10	0	0	19	0	31
7:15 AM	0	0	1	0	0	0	0	12	0	0	16	1	30
7:30 AM	1	0	1	0	0	0	0	7	0	1	10	1	21
7:45 AM	0	0	1	0	1	0	0	10	0	0	19	0	31
8:00 AM	0	0	0	0	1	0	0	8	0	0	5	0	14
8:15 AM	0	0	0	0	1	0	0	9	0	1	13	0	24
8:30 AM	0	0	2	0	0	0	0	8	0	2	19	0	31
8:45 AM	0	0	0	0	1	0	0	3	0	1	9	0	14
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 1	NT 0	NR 6	SL 0	ST 5	SR 0	EL 0	ET 67	ER 0	WL 5	WT 110	WR 2	TOTAL 196

AM Peak Hr Begins at: 700 AM

PEAK VOLUMES =	1	0	4	0	2	0	0	39	0	1	64	2	113
PEAK HR. FACTOR:		0.625			0.500			0.813			0.882		0.911

CONTROL: 2-way stop n/s

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Worsley Rd DATE: 10/16/2003 LOCATION: City of Desert Hot Springs

E-W STREET: Pierson Blvd. DAY: THURSDAY PROJECT# 03-1521-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	1	2	1	0	0	0	0	7	0	2	11	0	24
4:15 PM	1	0	1	0	0	0	1	7	0	0	13	0	23
4:30 PM	0	2	1	1	0	0	0	15	0	0	9	0	28
4:45 PM	2	1	0	0	0	0	0	10	0	0	9	0	22
5:00 PM	0	2	1	0	1	0	0	17	0	1	17	0	39
5:15 PM	0	2	0	0	0	0	0	13	1	0	7	0	23
5:30 PM	0	3	0	0	0	0	0	7	0	3	10	1	24
5:45 PM	1	2	0	0	1	0	1	7	0	1	10	0	23
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 5	NT 14	NR 4	SL 1	ST 2	SR 0	EL 2	ET 83	ER 1	WL 7	WT 86	WR 1	TOTAL 206

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	2	7	2	1	1	0	0	55	1	1	42	0	112
PEAK HR. FACTOR:		0.917			0.500			0.824			0.597		0.718

CONTROL: 2-way stop n/s

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Karen Ave | DATE: 10/16/2003 | LOCATION: City of Desert Hot Springs

E-W STREET: Pierson Blvd. | DAY: THURSDAY | PROJECT# 03-1521-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	1	0	0	0	0	0	0	11	0	0	19	0	31
7:15 AM	0	0	0	1	0	0	0	13	0	0	16	0	30
7:30 AM	0	0	1	0	0	1	0	8	0	0	12	0	22
7:45 AM	0	0	0	0	0	0	0	11	0	1	19	0	31
8:00 AM	0	0	0	0	0	0	0	8	0	0	7	0	15
8:15 AM	0	0	0	0	0	0	0	9	0	0	11	0	20
8:30 AM	1	0	0	0	0	0	0	10	0	0	19	0	30
8:45 AM	0	0	0	0	0	0	0	3	0	0	9	0	12
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	2	0	1	1	0	1	0	73	0	1	112	0	191

AM Peak Hr Begins at: 700 AM

PEAK VOLUMES =	1	0	1	1	0	1	0	43	0	1	66	0	114
PEAK HR. FACTOR:		0.500			0.500			0.827			0.838		0.919

CONTROL: no stop sign

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Karen Ave DATE: 10/16/2003 LOCATION: City of Desert Hot Springs

E-W STREET: Pierson Blvd. DAY: THURSDAY PROJECT# 03-1521-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	0	0	0	0	0	8	0	0	11	0	19
4:15 PM	0	0	0	0	0	0	0	8	1	0	13	0	22
4:30 PM	0	0	0	0	0	0	0	17	0	1	9	0	27
4:45 PM	0	0	0	0	0	0	0	10	0	0	9	1	20
5:00 PM	0	0	0	0	0	0	1	17	0	2	14	0	34
5:15 PM	0	0	0	0	0	0	0	13	0	0	7	0	20
5:30 PM	0	0	1	1	0	0	0	7	1	0	10	0	20
5:45 PM	0	0	0	0	0	0	1	7	0	0	10	0	18
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	NL 0	NT 0	NR 1	SL 1	ST 0	SR 0	EL 2	ET 87	ER 2	WL 3	WT 83	WR 1	TOTAL 180

PM Peak Hr Begins at: 415 PM

PEAK VOLUMES =	0	0	0	0	0	0	1	52	1	3	45	1	103
PEAK HR. FACTOR:		0.000			0.000			0.750			0.766		0.757

CONTROL: no stop sign

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Indian Ave. DATE: 8/26/03 LOCATION: Desert Hot Springs

E-W STREET: Pierson Blvd. DAY: TUESDAY PROJECT# 03-1302-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	12	8	5	41	1	1	4	2	11	4	3	92
7:15 AM	1	15	7	4	56	2	0	9	3	15	9	2	123
7:30 AM	2	20	9	2	51	3	0	11	1	16	5	6	126
7:45 AM	0	18	11	6	49	1	1	15	3	12	4	1	121
8:00 AM	1	21	7	3	63	3	2	8	2	15	10	4	139
8:15 AM	3	26	10	7	52	4	1	10	5	11	11	3	143
8:30 AM	2	23	9	8	47	4	0	12	4	14	9	8	140
8:45 AM	1	25	12	9	43	3	1	15	1	10	7	5	132
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 10	NT 160	NR 73	SL 44	ST 402	SR 21	EL 6	ET 84	ER 21	WL 104	WT 59	WR 32	TOTAL 1016

AM Peak Hr Begins at: 800 AM

PEAK VOLUMES =	7	95	38	27	205	14	4	45	12	50	37	20	554
PEAK HR. FACTOR:		0.897			0.891			0.897			0.863		0.969

CONTROL: 4 - Way Stop

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Indian Ave. DATE: 8/26/03 LOCATION: Desert Hot Springs

E-W STREET: Pierson Blvd. DAY: TUESDAY PROJECT# 03-1302-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	1	44	10	4	14	1	5	7	3	9	18	8	124
4:15 PM	4	52	12	2	12	4	1	5	1	9	12	7	121
4:30 PM	2	61	14	1	20	4	4	8	2	8	10	9	143
4:45 PM	0	59	10	5	17	2	2	10	0	6	19	7	137
5:00 PM	1	72	14	4	18	3	6	9	0	10	10	14	161
5:15 PM	4	84	18	6	24	2	4	12	1	9	15	7	186
5:30 PM	1	90	19	3	21	1	2	10	1	7	10	11	176
5:45 PM	2	76	15	3	19	2	5	10	0	7	11	9	159
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	15	538	112	28	145	19	29	71	8	65	105	72	1207

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	8	322	66	16	82	8	17	41	2	33	46	41	682
PEAK HR. FACTOR:		0.900			0.828			0.882			0.882		0.917

CONTROL: 4 - Way Stop

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Little Morongo Blvd. DATE: 8/26/03 LOCATION: Desert Hot Springs

E-W STREET: Pierson Blvd. DAY: TUESDAY PROJECT# 03-1302-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	1	5	11	3	8	3	0	18	4	5	15	1	74
7:15 AM	2	8	3	3	16	4	0	25	3	2	12	3	81
7:30 AM	1	6	7	1	10	0	0	25	7	4	23	1	85
7:45 AM	1	5	8	3	10	2	0	25	4	5	23	2	88
8:00 AM	2	7	2	2	22	4	0	19	5	6	23	3	95
8:15 AM	1	2	2	7	10	3	1	22	2	4	15	1	70
8:30 AM	2	4	4	5	12	5	0	17	4	4	19	2	78
8:45 AM	1	3	2	2	11	2	0	21	5	3	20	2	72
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	11	40	39	26	99	23	1	172	34	33	150	15	643

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	6	26	20	9	58	10	0	94	19	17	81	9	349
PEAK HR. FACTOR:		0.929			0.688			0.883			0.836		0.918

CONTROL: 4 - Way Stop

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Little Morongo Blvd. DATE: 8/26/03 LOCATION: Desert Hot Springs

E-W STREET: Pierson Blvd. DAY: TUESDAY PROJECT# 03-1302-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	6	15	8	9	19	3	1	9	1	7	16	9	103
4:15 PM	4	13	4	4	15	3	5	26	4	3	23	8	112
4:30 PM	7	13	4	4	5	2	3	30	2	1	21	6	98
4:45 PM	4	12	4	2	10	7	5	26	5	1	30	9	115
5:00 PM	5	17	10	2	12	2	0	26	2	3	20	6	105
5:15 PM	6	23	6	6	6	7	3	22	0	3	23	7	112
5:30 PM	4	21	8	4	10	5	3	29	2	1	21	5	113
5:45 PM	3	14	5	3	9	3	1	21	1	2	24	6	92
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													
TOTAL VOLUMES =	39	128	49	34	86	32	21	189	17	21	178	56	850

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	19	73	28	14	38	21	11	103	9	8	94	27	445
PEAK HR. FACTOR:		0.857			0.961			0.854			0.806		0.967

CONTROL: 4 - Way Stop

Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Wednesday, October 15, 2003 City: Desert Hot Springs

Project #: 03-1522-001

Location: Pierson Blvd. & W/o Worsley Rd.

Client Ref #: 01552

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
12:00-12:15			1		2			12:00-12:15			8		15		
12:15-12:30			1		0			12:15-12:30			7		6		
12:30-12:45			1		0			12:30-12:45			10		7		
12:45-1:00			1	4	1	3	7	12:45-1:00			8	33	13	41	74
1:00-1:15			4		1			1:00-1:15			6		5		
1:15-1:30			2		1			1:15-1:30			8		12		
1:30-1:45			1		0			1:30-1:45			9		7		
1:45-2:00			1	8	1	3	11	1:45-2:00			8	31	6	30	61
2:00-2:15			1		1			2:00-2:15			5		7		
2:15-2:30			0		0			2:15-2:30			20		17		
2:30-2:45			1		0			2:30-2:45			4		7		
2:45-3:00			0	2	1	2	4	2:45-3:00			7	36	8	39	75
3:00-3:15			0		0			3:00-3:15			10		12		
3:15-3:30			0		0			3:15-3:30			8		18		
3:30-3:45			2		0			3:30-3:45			11		6		
3:45-4:00			0	2	1	1	3	3:45-4:00			12	41	11	47	88
4:00-4:15			1		1			4:00-4:15			9		9		
4:15-4:30			0		2			4:15-4:30			9		10		
4:30-4:45			0		3			4:30-4:45			10		14		
4:45-5:00			0	1	1	7	8	4:45-5:00			5	33	10	43	76
5:00-5:15			3		5			5:00-5:15			13		7		
5:15-5:30			0		4			5:15-5:30			12		7		
5:30-5:45			3		7			5:30-5:45			17		20		
5:45-6:00			3	9	5	21	30	5:45-6:00			11	53	8	42	95
6:00-6:15			6		9			6:00-6:15			9		15		
6:15-6:30			7		11			6:15-6:30			14		8		
6:30-6:45			12		11			6:30-6:45			12		13		
6:45-7:00			16	41	9	40	81	6:45-7:00			12	47	4	40	87
7:00-7:15			12		9			7:00-7:15			12		7		
7:15-7:30			10		11			7:15-7:30			9		3		
7:30-7:45			7		20			7:30-7:45			6		6		
7:45-8:00			13	42	13	53	95	7:45-8:00			2	29	4	20	49
8:00-8:15			10		10			8:00-8:15			6		2		
8:15-8:30			7		15			8:15-8:30			11		4		
8:30-8:45			7		7			8:30-8:45			6		1		
8:45-9:00			8	32	21	53	85	8:45-9:00			5	28	4	11	39
9:00-9:15			7		15			9:00-9:15			7		1		
9:15-9:30			1		8			9:15-9:30			9		4		
9:30-9:45			5		10			9:30-9:45			11		2		
9:45-10:00			7	20	9	42	62	9:45-10:00			4	31	5	12	43
10:00-10:15			8		9			10:00-10:15			6		4		
10:15-10:30			12		14			10:15-10:30			4		5		
10:30-10:45			13		12			10:30-10:45			4		5		
10:45-11:00			10	43	7	42	85	10:45-11:00			2	16	2	16	32
11:00-11:15			10		5			11:00-11:15			2		0		
11:15-11:30			4		11			11:15-11:30			1		1		
11:30-11:45			10		7			11:30-11:45			3		2		
11:45-12:00			8	32	10	33	65	11:45-12:00			4	10	1	4	14
Total Vol.	0	0		236		300	536		0	0		388		345	733
Daily Totals									0	0		624		645	1269

Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Wednesday, October 15, 2003 City: Desert Hot Springs

Project #: 03-1522-002

Location: Pierson Blvd. & W/o Indian Ave.

Client Ref #: 01552

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
12:00-12:15			2		0			12:00-12:15			10		7		
12:15-12:30			0		0			12:15-12:30			7		10		
12:30-12:45			1		1			12:30-12:45			8		11		
12:45-1:00			2	5	1	2	7	12:45-1:00			11	36	8	36	72
1:00-1:15			3		0			1:00-1:15			4		16		
1:15-1:30			0		0			1:15-1:30			10		5		
1:30-1:45			2		1			1:30-1:45			11		6		
1:45-2:00			0	5	1	2	7	1:45-2:00			1	26	9	36	62
2:00-2:15			0		0			2:00-2:15			17		16		
2:15-2:30			2		1			2:15-2:30			6		6		
2:30-2:45			0		1			2:30-2:45			12		12		
2:45-3:00			0	2	0	2	4	2:45-3:00			8	43	14	48	91
3:00-3:15			0		0			3:00-3:15			5		17		
3:15-3:30			2		0			3:15-3:30			10		9		
3:30-3:45			0		1			3:30-3:45			14		13		
3:45-4:00			1	3	2	3	6	3:45-4:00			10	39	10	49	88
4:00-4:15			1		1			4:00-4:15			10		11		
4:15-4:30			0		4			4:15-4:30			13		15		
4:30-4:45			0		1			4:30-4:45			6		8		
4:45-5:00			0	1	3	9	10	4:45-5:00			11	40	8	42	82
5:00-5:15			3		5			5:00-5:15			13		6		
5:15-5:30			2		5			5:15-5:30			14		18		
5:30-5:45			3		3			5:30-5:45			12		10		
5:45-6:00			4	12	5	18	30	5:45-6:00			6	45	15	49	94
6:00-6:15			7		12			6:00-6:15			18		11		
6:15-6:30			13		9			6:15-6:30			12		12		
6:30-6:45			17		7			6:30-6:45			13		5		
6:45-7:00			13	50	9	37	87	6:45-7:00			14	57	8	36	93
7:00-7:15			16		8			7:00-7:15			9		2		
7:15-7:30			12		13			7:15-7:30			4		6		
7:30-7:45			15		12			7:30-7:45			6		6		
7:45-8:00			8	51	11	44	95	7:45-8:00			6	25	1	15	40
8:00-8:15			9		15			8:00-8:15			7		5		
8:15-8:30			9		5			8:15-8:30			9		2		
8:30-8:45			9		17			8:30-8:45			8		3		
8:45-9:00			11	38	16	53	91	8:45-9:00			5	29	1	11	40
9:00-9:15			4		10			9:00-9:15			8		5		
9:15-9:30			5		10			9:15-9:30			10		2		
9:30-9:45			7		8			9:30-9:45			4		3		
9:45-10:00			10	26	9	37	63	9:45-10:00			5	27	4	14	41
10:00-10:15			11		13			10:00-10:15			5		5		
10:15-10:30			12		13			10:15-10:30			2		4		
10:30-10:45			12		5			10:30-10:45			3		3		
10:45-11:00			10	45	5	36	81	10:45-11:00			2	12	0	12	24
11:00-11:15			4		9			11:00-11:15			1		1		
11:15-11:30			11		8			11:15-11:30			5		2		
11:30-11:45			6		10			11:30-11:45			1		1		
11:45-12:00			11	32	13	40	72	11:45-12:00			4	11	3	7	18
Total Vol.	0	0		270		283	553		0	0		390		355	745
Daily Totals									0	0		660		638	1298

APPENDIX B

EXISTING CONDITIONS INTERSECTION ANALYSIS

STONERIDGE PROJECT (JN# 01552)
Existing Conditions
AM Peak Hour

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

****
Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 1.5 Worst Case Level Of Service: C[24.4]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Initial Bse:	7	281	39	6	1017	1	1	1	12	59	8	6
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:	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 Volume:	7	281	39	6	1017	1	1	1	12	59	8	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	7	281	39	6	1017	1	1	1	12	59	8	6
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1018	xxxx	xxxxx	320	xxxx	xxxxx	1186	1362	508	815	1324	140
Potent Cap.:	690	xxxx	xxxxx	1252	xxxx	xxxxx	146	149	515	273	157	888
Move Cap.:	690	xxxx	xxxxx	1252	xxxx	xxxxx	138	147	515	262	155	888
Volume/Cap:	0.01	xxxx	xxxx	0.00	xxxx	xxxx	0.01	0.01	0.02	0.22	0.05	0.01
Level Of Service Module:												
Queue:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	10.3	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	359	xxxxx	xxxx	257	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	1.1	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.4	xxxxx	xxxxx	24.4	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			15.4			24.4		
ApproachLOS:	*			*			C			C		

STONERIDGE PROJECT (JN# 01552)
Existing Conditions
AM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.6 Worst Case Level Of Service: A[9.7]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1 0 0			0 1 0 0 1			0 0 1! 0 0		
Volume Module:												
Base Vol:	1	0	4	0	2	0	0	39	0	1	64	2
Growth Adj:	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Initial Bse:	1	0	5	0	2	0	0	45	0	1	74	2
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:	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 Volume:	1	0	5	0	2	0	0	45	0	1	74	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	5	0	2	0	0	45	0	1	74	2
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	xxxxx	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	123	xxxx	45	xxxx	122	xxxxx	xxxx	xxxx	xxxxx	45	xxxx	xxxxx
Potent Cap.:	856	xxxx	1031	xxxx	772	xxxxx	xxxx	xxxx	xxxxx	1576	xxxx	xxxxx
Move Cap.:	854	xxxx	1031	xxxx	772	xxxxx	xxxx	xxxx	xxxxx	1576	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	9.7	xxxxx	xxxxx	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	990	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	8.7	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	A	*	*	*	*	*
ApproachDel:		8.7			9.7		xxxxxx			xxxxxx		
ApproachLOS:		A			A		*			*		

STONERIDGE PROJECT (JN# 01552)
Existing Conditions
AM Peak Hour

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

****
Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A[8.9]
****

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 1	0 0	0
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Initial Bse:	1	0	1	1	0	1	0	49	0	1	76	0
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:	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 Volume:	1	0	1	1	0	1	0	49	0	1	76	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	1	1	0	1	0	49	0	1	76	0
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	128	xxxx	49	128	xxxx	76	xxxx	xxxx	xxxxx	49	xxxx	xxxxx
Potent Cap.:	850	xxxx	1025	850	xxxx	991	xxxx	xxxx	xxxxx	1570	xxxx	xxxxx
Move Cap.:	848	xxxx	1025	848	xxxx	991	xxxx	xxxx	xxxxx	1570	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	0.00	xxxx	0.00	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	928	xxxxx	xxxx	914	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	8.9	xxxxx	xxxxx	8.9	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
Shared LOS:	*	A	*	*	A	*	*	*	*	A	*	*
ApproachDel:		8.9			8.9			xxxxxx			xxxxxx	
ApproachLOS:		A			A			*			*	

STONERIDGE PROJECT (JN# 01552)
Existing Conditions
AM Peak Hour

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

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.439
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	10.1
Optimal Cycle:	0	Level Of Service:	B

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 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Initial Bse:	9	123	49	36	267	18	6	59	16	66	48	26
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:	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 Volume:	9	123	49	36	267	18	6	59	16	66	48	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	123	49	36	267	18	6	59	16	66	48	26
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 Vol.:	9	123	49	36	267	18	6	59	16	66	48	26
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:	0.07	0.93	1.00	0.11	0.83	0.06	0.07	0.73	0.20	0.47	0.34	0.19
Final Sat.:	45	595	737	81	607	42	45	461	127	301	222	121
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.07	0.44	0.44	0.44	0.13	0.13	0.13	0.22	0.22	0.22
Crit Moves:		****			****			****			****	
Delay/Veh:	9.4	9.4	7.7	11.3	11.3	11.3	8.9	8.9	8.9	9.5	9.5	9.5
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:	9.4	9.4	7.7	11.3	11.3	11.3	8.9	8.9	8.9	9.5	9.5	9.5
LOS by Move:	A	A	A	B	B	B	A	A	A	A	A	A
ApproachDel:		9.0			11.3			8.9			9.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.0			11.3			8.9			9.5	
LOS by Appr:		A			B			A			A	

STONERIDGE PROJECT (JN# 01552)
Existing Conditions
AM Peak Hour

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

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.182
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.2
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Initial Bse:	8	33	26	12	76	13	0	122	24	22	106	12
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:	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 Volume:	8	33	26	12	76	13	0	122	24	22	106	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	33	26	12	76	13	0	122	24	22	106	12
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 Vol.:	8	33	26	12	76	13	0	122	24	22	106	12
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	0.49	0.39	0.11	0.76	0.13	0.00	0.83	0.17	0.16	0.76	0.08
Final Sat.:	91	376	298	86	568	95	0	670	133	124	598	65
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.13	0.13	0.13	xxxx	0.18	0.18	0.18	0.18	0.18
Crit Moves:	****				****				****	****		
Delay/Veh:	7.8	7.8	7.8	8.2	8.2	8.2	0.0	8.2	8.2	8.3	8.3	8.3
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:	7.8	7.8	7.8	8.2	8.2	8.2	0.0	8.2	8.2	8.3	8.3	8.3
LOS by Move:	A	A	A	A	A	A	*	A	A	A	A	A
ApproachDel:	7.8			8.2			8.2			8.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.8			8.2			8.2			8.3		
LOS by Appr:	A			A			A			A		

STONERIDGE PROJECT (JN# 01552)
Existing Conditions
PM Peak Hour

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

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: D[32.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Initial Bse:	3	865	38	9	481	0	2	3	1	35	6	9
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:	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 Volume:	3	865	38	9	481	0	2	3	1	35	6	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	865	38	9	481	0	2	3	1	35	6	9
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	481	xxxx	xxxxx	903	xxxx	xxxxx	941	1409	240	1132	1371	432
Potent Cap.:	1092	xxxx	xxxxx	762	xxxx	xxxxx	221	140	767	160	148	577
Move Cap.:	1092	xxxx	xxxxx	762	xxxx	xxxxx	208	138	767	155	145	577
Volume/Cap:	0.00	xxxx	xxxx	0.01	xxxx	xxxx	0.01	0.03	0.00	0.22	0.04	0.02
Level Of Service Module:												
Queue:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	8.3	xxxx	xxxxx	9.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	184	xxxxx	xxxx	178	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	1.1	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	25.4	xxxxx	xxxxx	32.8	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			25.4			32.8		
ApproachLOS:	*			*			D			D		

STONERIDGE PROJECT (JN# 01552)
Existing Conditions
PM Peak Hour

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

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: A[9.4]

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	0	1	0	0	1	0	1	0	0	0
Volume Module:																				
Base Vol:	2		7		2	1		1		0	0		55		1	1		42		0
Growth Adj:	1.15		1.15		1.15	1.15		1.15		1.15	1.15		1.15		1.15	1.15		1.15		1.15
Initial Bse:	2		8		2	1		1		0	0		63		1	1		48		0
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:	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 Volume:	2		8		2	1		1		0	0		63		1	1		48		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	2		8		2	1		1		0	0		63		1	1		48		0
Critical Gap Module:																				
Critical Gp:	7.1		6.5		6.2	7.1		6.5		xxxxx	xxxxx		xxxx		xxxxx	4.1		xxxx		xxxxx
FollowUpTim:	3.5		4.0		3.3	3.5		4.0		xxxxx	xxxxx		xxxx		xxxxx	2.2		xxxx		xxxxx
Capacity Module:																				
Cnflict Vol:	114		114		63	120		115		xxxxx	xxxx		xxxx		xxxxx	64		xxxx		xxxxx
Potent Cap.:	867		780		1007	861		779		xxxxx	xxxx		xxxx		xxxxx	1551		xxxx		xxxxx
Move Cap.:	866		780		1007	851		778		xxxxx	xxxx		xxxx		xxxxx	1551		xxxx		xxxxx
Volume/Cap:	0.00		0.01		0.00	0.00		0.00		xxxx	xxxx		xxxx		xxxx	0.00		xxxx		xxxx
Level Of Service Module:																				
Queue:	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx	0.0		xxxx		xxxxx
Stopped Del:	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx	7.3		xxxx		xxxxx
LOS by Move:	*		*		*	*		*		*	*		*		*	A		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		829		xxxxx	813		xxxx		xxxxx	xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx		0.0		xxxxx	0.0		xxxx		xxxxx	0.0		xxxx		xxxxx	0.0		xxxx		xxxxx
Shrd StpDel:	xxxxx		9.4		xxxxx	9.4		xxxx		xxxxx	0.0		xxxx		xxxxx	7.3		xxxx		xxxxx
Shared LOS:	*		A		*	A		*		*	A		*		*	A		*		*
ApproachDel:			9.4					9.4					xxxxxx					xxxxxx		
ApproachLOS:			A					A					*					*		

STONERIDGE PROJECT (JN# 01552)
Existing Conditions
PM Peak Hour

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

Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: A[7.3]

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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Initial Bse:	0	0	0	0	0	0	1	60	1	3	52	1
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:	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 Volume:	0	0	0	0	0	0	1	60	1	3	52	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	1	60	1	3	52	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	53	xxxx	xxxxx	61	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1566	xxxx	xxxxx	1555	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1566	xxxx	xxxxx	1555	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	7.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

STONERIDGE PROJECT (JN# 01552)
Existing Conditions
PM Peak Hour

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

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.641
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.9
Optimal Cycle: 0 Level Of Service: B

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	1 0	0	1	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	9	364	75		18	93	9		19	46	2		37	52	46	
Growth Adj:	1.15	1.15	1.15		1.15	1.15	1.15		1.15	1.15	1.15		1.15	1.15	1.15	
Initial Bse:	10	419	86		21	107	10		22	53	2		43	60	53	
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:	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 Volume:	10	419	86		21	107	10		22	53	2		43	60	53	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	10	419	86		21	107	10		22	53	2		43	60	53	
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 Vol.:	10	419	86		21	107	10		22	53	2		43	60	53	
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:	0.02	0.98	1.00		0.15	0.77	0.08		0.28	0.69	0.03		0.27	0.39	0.34	
Final Sat.:	16	654	771		98	507	49		162	393	17		169	237	210	
Capacity Analysis Module:																
Vol/Sat:	0.64	0.64	0.11		0.21	0.21	0.21		0.13	0.13	0.13		0.25	0.25	0.25	
Crit Moves:	****					****				****				****		
Delay/Veh:	16.6	16.6	7.8		9.6	9.6	9.6		9.5	9.5	9.5		10.0	10.0	10.0	
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:	16.6	16.6	7.8		9.6	9.6	9.6		9.5	9.5	9.5		10.0	10.0	10.0	
LOS by Move:	C	C	A		A	A	A		A	A	A		B	B	B	
ApproachDel:		15.1				9.6				9.5				10.0		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		15.1				9.6				9.5				10.0		
LOS by Appr:		C				A				A				B		

STONERIDGE PROJECT (JN# 01552)
Existing Conditions
PM Peak Hour

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

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.223
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.7
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Initial Bse:	24	94	37	18	49	28	14	133	12	10	122	36
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:	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 Volume:	24	94	37	18	49	28	14	133	12	10	122	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	94	37	18	49	28	14	133	12	10	122	36
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 Vol.:	24	94	37	18	49	28	14	133	12	10	122	36
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:	0.15	0.61	0.24	0.19	0.52	0.29	0.09	0.84	0.07	0.06	0.73	0.21
Final Sat.:	114	443	173	138	371	207	64	620	53	46	546	160
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.21	0.13	0.13	0.13	0.22	0.22	0.22	0.22	0.22	0.22
Crit Moves:		****			****				****		****	
Delay/Veh:	8.8	8.8	8.8	8.4	8.4	8.4	8.8	8.8	8.8	8.8	8.8	8.8
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:	8.8	8.8	8.8	8.4	8.4	8.4	8.8	8.8	8.8	8.8	8.8	8.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		8.8			8.4			8.8			8.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.8			8.4			8.8			8.8	
LOS by Appr:		A			A			A			A	

APPENDIX C

TRAFFIC SIGNAL WARRANTS

TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: SR-62 Fwy. Minor St: Pierson Blvd. Year = 2004 NP

Volume = 18,950 Lanes= 1 Volume = 2,050 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 18,950 / Minor Street 2,050	Urban / Rural	Urban / Rural
1 / 1	8,000 / 5,600 *	2,400 / 1,680 *
2 + / 1	9,600 / 6,720	2,400 / 1,680
2 + / 2 +	9,600 / 6,720	3,200 / 2,240
1 / 2 +	8,000 / 5,600	3,200 / 2,240
2. Interruption of Continuous traffic Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 18,950 / Minor Street 2,050	Urban / Rural	Urban / Rural
1 / 1	12,000 / 8,400 *	1,200 / 850 *
2 + / 1	14,400 / 10,080	1,200 / 850
2 + / 2 +	14,000 / 10,080	1,600 / 1,120
1 / 2 +	12,000 / 8,400	1,600 / 1,120
3. Combination Satisfied XX Not Satisfied No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 1 / 100% 2	2 Warrants	2 Warrants

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Indian Ave. Minor St: Pierson Blvd. Year = 2004 NP

Volume = 8,650 Lanes= 1 Volume = 3,100 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 8,650 / Minor Street 3,100 1 / 1 2 + / 1 2 + / 2 + 1 / 2 +	Urban / Rural 8,000 / 5,600 * 9,600 / 6,720 9,600 / 6,720 8,000 / 5,600	Urban / Rural 2,400 / 1,680 * 2,400 / 1,680 3,200 / 2,240 3,200 / 2,240
2. Interruption of Continuous traffic Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 8,650 / Minor Street 3,100 1 / 1 2 + / 1 2 + / 2 + 1 / 2 +	Urban / Rural 12,000 / 8,400 * 14,400 / 10,080 14,000 / 10,080 12,000 / 8,400	Urban / Rural 1,200 / 850 * 1,200 / 850 1,600 / 1,120 1,600 / 1,120
3. Combination Satisfied XX Not Satisfied No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 1 / 100% 2	2 Warrants	2 Warrants

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Pierson Blvd. Minor St: Little Morongo Blvd. Year = 2004 NP

Volume = 6,400 Lanes= 1 Volume = 2,300 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 6,400 / Minor Street 2,300	Urban / Rural	Urban / Rural
1 / 1	8,000 / 5,600 *	2,400 / 1,680 *
2 + / 1	9,600 / 6,720	2,400 / 1,680
2 + / 2 +	9,600 / 6,720	3,200 / 2,240
1 / 2 +	8,000 / 5,600	3,200 / 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 6,400 / Minor Street 2,300	Urban / Rural	Urban / Rural
1 / 1	12,000 / 8,400	1,200 / 850 *
2 + / 1	14,400 / 10,080	1,200 / 850
2 + / 2 +	14,000 / 10,080	1,600 / 1,120
1 / 2 +	12,000 / 8,400	1,600 / 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 76% 1 2	2 Warrants	2 Warrants

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Pierson Blvd. Minor St: Driveway 3 Year = 2005 WP

Volume = 9,200 Lanes= 1 Volume = 2,400 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 9,200 / Minor Street 2,400	Urban / Rural	Urban / Rural
1 / 1	8,000 / 5,600 *	2,400 / 1,680 *
2 + / 1	9,600 / 6,720	2,400 / 1,680
2 + / 2 +	9,600 / 6,720	3,200 / 2,240
1 / 2 +	8,000 / 5,600	3,200 / 2,240
2. Interruption of Continuous traffic Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 9,200 / Minor Street 2,400	Urban / Rural	Urban / Rural
1 / 1	12,000 / 8,400 *	1,200 / 850 *
2 + / 1	14,400 / 10,080	1,200 / 850
2 + / 2 +	14,000 / 10,080	1,600 / 1,120
1 / 2 +	12,000 / 8,400	1,600 / 1,120
3. Combination Satisfied XX Not Satisfied No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 1 / 100% 2	2 Warrants	2 Warrants

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Pierson Blvd. Minor St: Karen Ave. Year = 2005 WP

Volume = 10,200 Lanes= 1 Volume = 2,000 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 10,200 / Minor Street 2,000	Urban / Rural	Urban / Rural
1 / 1	8,000 / 5,600 *	2,400 / 1,680 *
2 + / 1	9,600 / 6,720	2,400 / 1,680
2 + / 2 +	9,600 / 6,720	3,200 / 2,240
1 / 2 +	8,000 / 5,600	3,200 / 2,240
2. Interruption of Continuous traffic Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 10,200 / Minor Street 2,000	Urban / Rural	Urban / Rural
1 / 1	12,000 / 8,400 *	1,200 / 850 *
2 + / 1	14,400 / 10,080	1,200 / 850
2 + / 2 +	14,000 / 10,080	1,600 / 1,120
1 / 2 +	12,000 / 8,400	1,600 / 1,120
3. Combination Satisfied XX Not Satisfied No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 1 / 100% 2	2 Warrants	2 Warrants

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Pierson Blvd. Minor St: Worsley Rd. Year = 2006 WP

Volume = 12,700 Lanes= 1 Volume = 1,300 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 12,700 / Minor Street 1,300	Urban / Rural	Urban / Rural
1 / 1	8,000 / 5,600 *	2,400 / 1,680
2 + / 1	9,600 / 6,720	2,400 / 1,680
2 + / 2 +	9,600 / 6,720	3,200 / 2,240
1 / 2 +	8,000 / 5,600	3,200 / 2,240
2. Interruption of Continuous traffic Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 12,700 / Minor Street 1,300	Urban / Rural	Urban / Rural
1 / 1	12,000 / 8,400 *	1,200 / 850 *
2 + / 1	14,400 / 10,080	1,200 / 850
2 + / 2 +	14,000 / 10,080	1,600 / 1,120
1 / 2 +	12,000 / 8,400	1,600 / 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 77% 100% 1 2	2 Warrants	2 Warrants

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

APPENDIX D

CUMULATIVE (2004) WITHOUT PROJECT CONDITIONS INTERSECTION ANALYSIS

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions
AM Peak Hour

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

****

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

****

Average Delay (sec/veh): 64.7 Worst Case Level Of Service: F[521.2]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	7	298	41	6	1078	1	1	1	12	62	9	6
Added Vol:	35	0	3	0	0	7	21	90	107	7	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	298	44	6	1078	8	22	91	119	69	43	6
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:	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 Volume:	42	298	44	6	1078	8	22	91	119	69	43	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	42	298	44	6	1078	8	22	91	119	69	43	6
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1087	xxxx	xxxxx	342	xxxx	xxxxx	1345	1517	539	979	1481	149
Potent Cap.:	650	xxxx	xxxxx	1228	xxxx	xxxxx	112	120	492	207	127	877
Move Cap.:	650	xxxx	xxxxx	1228	xxxx	xxxxx	76	112	492	48	118	877
Volume/Cap:	0.07	xxxx	xxxx	0.00	xxxx	xxxx	0.29	0.82	0.24	1.44	0.36	0.01
Level Of Service Module:												
Queue:	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	10.9	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	172	xxxxx	xxxx	65	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.8	xxxxx	xxxxx	10.7	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	242	xxxxx	xxxxx	521	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			242.4			521.2		
ApproachLOS:	*			*			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions With Impovements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.509
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.1
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	7	298	41	6	1078	1	1	1	12	62	9	6
Added Vol:	35	0	3	0	0	7	21	90	107	7	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	298	44	6	1078	8	22	91	119	69	43	6
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:	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 Volume:	42	298	44	6	1078	8	22	91	119	69	43	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	298	44	6	1078	8	22	91	119	69	43	6
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 Vol.:	42	298	44	6	1078	8	22	91	119	69	43	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.90	0.90	0.90	0.66	0.66	0.66
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.10	0.39	0.51	0.59	0.36	0.05
Final Sat.:	1805	3610	1615	1805	3610	1615	164	671	877	738	454	65
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.03	0.00	0.30	0.01	0.14	0.14	0.14	0.09	0.09	0.09
Crit Moves:	****				****			****				
Green/Cycle:	0.17	0.34	0.34	0.34	0.50	0.50	0.23	0.23	0.23	0.23	0.23	0.23
Volume/Cap:	0.14	0.25	0.08	0.01	0.59	0.01	0.59	0.59	0.59	0.41	0.41	0.41
Delay/Veh:	21.5	14.5	13.7	13.3	11.0	7.4	23.0	23.0	23.0	20.6	20.6	20.6
User DelAdj:	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:	21.5	14.5	13.7	13.3	11.0	7.4	23.0	23.0	23.0	20.6	20.6	20.6
HCM2kAvg:	1	2	1	0	8	0	5	5	5	3	3	3

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions
AM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[10.6]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1!	0	0
Volume Module:																				
Base Vol:	1	0	4	0	2	0	0	39	0	1	64	2								
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22								
Initial Bse:	1	0	5	0	2	0	0	48	0	1	78	2								
Added Vol:	0	0	0	0	0	0	0	93	0	0	42	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	1	0	5	0	2	0	0	141	0	1	120	2								
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:	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 Volume:	1	0	5	0	2	0	0	141	0	1	120	2								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	1	0	5	0	2	0	0	141	0	1	120	2								
Critical Gap Module:																				
Critical Gp:	7.1	xxxx	6.2	xxxxx	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	xxxx	3.3	xxxxx	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	266	xxxx	141	xxxx	264	xxxxx	xxxx	xxxx	xxxxx	141	xxxx	xxxxx								
Potent Cap.:	691	xxxx	913	xxxx	644	xxxxx	xxxx	xxxx	xxxxx	1455	xxxx	xxxxx								
Move Cap.:	689	xxxx	913	xxxx	644	xxxxx	xxxx	xxxx	xxxxx	1455	xxxx	xxxxx								
Volume/Cap:	0.00	xxxx	0.01	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx								
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx								
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	10.6	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx								
LOS by Move:	*	*	*	*	B	*	*	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	857	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd StpDel:	xxxxx	9.2	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	A	*	*	*	*	A	*	*	*	*	*								
ApproachDel:		9.2			10.6			xxxxxx			xxxxxx									
ApproachLOS:		A			B			*			*									

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions
AM Peak Hour

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

Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: A[9.6]

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 1	0 0	0
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	1	0	1	1	0	1	0	52	0	1	81	0
Added Vol:	0	0	0	0	0	0	0	93	0	0	42	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	1	1	0	1	0	145	0	1	123	0
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:	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 Volume:	1	0	1	1	0	1	0	145	0	1	123	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	1	1	0	1	0	145	0	1	123	0
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	271	xxxx	145	271	xxxx	123	xxxx	xxxx	xxxxx	145	xxxx	xxxxx
Potent Cap.:	686	xxxx	907	686	xxxx	934	xxxx	xxxx	xxxxx	1449	xxxx	xxxxx
Move Cap.:	684	xxxx	907	684	xxxx	934	xxxx	xxxx	xxxxx	1449	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	0.00	xxxx	0.00	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	780	xxxxx	xxxx	790	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	9.6	xxxxx	xxxxx	9.6	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
Shared LOS:	*	A	*	*	A	*	*	*	*	A	*	*
ApproachDel:		9.6			9.6			xxxxxx			xxxxxx	
ApproachLOS:		A			A			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions
AM Peak Hour

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

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.555
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	12.0
Optimal Cycle:	0	Level Of Service:	B

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 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	10	131	52	38	283	20	6	62	17	70	51	28
Added Vol:	0	3	3	4	10	11	5	89	0	3	31	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	134	55	42	293	31	11	151	17	73	82	29
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:	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 Volume:	10	134	55	42	293	31	11	151	17	73	82	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	134	55	42	293	31	11	151	17	73	82	29
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 Vol.:	10	134	55	42	293	31	11	151	17	73	82	29
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:	0.07	0.93	1.00	0.11	0.81	0.08	0.06	0.84	0.10	0.39	0.45	0.16
Final Sat.:	39	528	640	75	528	55	36	496	56	232	263	93
Capacity Analysis Module:												
Vol/Sat:	0.25	0.25	0.09	0.56	0.56	0.56	0.30	0.30	0.30	0.31	0.31	0.31
Crit Moves:		****		****				****				****
Delay/Veh:	10.5	10.5	8.4	14.2	14.2	14.2	10.8	10.8	10.8	10.9	10.9	10.9
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:	10.5	10.5	8.4	14.2	14.2	14.2	10.8	10.8	10.8	10.9	10.9	10.9
LOS by Move:	B	B	A	B	B	B	B	B	B	B	B	B
ApproachDel:		9.9			14.2			10.8			10.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.9			14.2			10.8			10.9	
LOS by Appr:		A			B			B			B	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions With Impovements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****
Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	0.342
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	9.5
Optimal Cycle:	60	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	10	131	52	38	283	20	6	62	17	70	51	28
Added Vol:	0	3	3	4	10	11	5	89	0	3	31	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	134	55	42	293	31	11	151	17	73	82	29
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:	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 Volume:	10	134	55	42	293	31	11	151	17	73	82	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	134	55	42	293	31	11	151	17	73	82	29
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 Vol.:	10	134	55	42	293	31	11	151	17	73	82	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.85	0.95	0.95	0.95	0.97	0.97	0.97	0.83	0.83	0.83
Lanes:	0.07	0.93	1.00	0.11	0.81	0.08	0.06	0.84	0.10	0.39	0.45	0.16
Final Sat.:	127	1733	1615	207	1451	151	114	1554	176	620	703	248
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.03	0.20	0.20	0.20	0.10	0.10	0.10	0.12	0.12	0.12
Crit Moves:					****						****	
Green/Cycle:	0.59	0.59	0.59	0.59	0.59	0.59	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.13	0.13	0.06	0.34	0.34	0.34	0.28	0.28	0.28	0.34	0.34	0.34
Delay/Veh:	5.5	5.5	5.2	6.5	6.5	6.5	14.6	14.6	14.6	15.1	15.1	15.1
User DelAdj:	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:	5.5	5.5	5.2	6.5	6.5	6.5	14.6	14.6	14.6	15.1	15.1	15.1
HCM2kAvg:	1	1	0	4	4	4	3	3	3	3	3	3

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions
AM Peak Hour

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

****

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.336
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.4
Optimal Cycle: 0 Level Of Service: A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	9	35	28	12	81	13	0	129	26	23	112	12
Added Vol:	0	12	0	15	27	6	5	90	0	0	29	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	47	28	27	108	19	5	219	26	23	141	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:	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 Volume:	9	47	28	27	108	19	5	219	26	23	141	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	47	28	27	108	19	5	219	26	23	141	20
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 Vol.:	9	47	28	27	108	19	5	219	26	23	141	20
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	0.57	0.33	0.18	0.70	0.12	0.02	0.88	0.10	0.13	0.76	0.11
Final Sat.:	68	377	223	119	471	85	15	652	76	91	553	79
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.13	0.23	0.23	0.23	0.34	0.34	0.34	0.26	0.26	0.26
Crit Moves:		****			****			****			****	
Delay/Veh:	8.6	8.6	8.6	9.3	9.3	9.3	9.9	9.9	9.9	9.3	9.3	9.3
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:	8.6	8.6	8.6	9.3	9.3	9.3	9.9	9.9	9.9	9.3	9.3	9.3
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		8.6			9.3			9.9			9.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.6			9.3			9.9			9.3	
LOS by Appr:		A			A			A			A	

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions With Impovements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

****

Cycle (sec):	0	Critical Vol./Cap. (X):	0.236
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	8.9
Optimal Cycle:	60	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	9	35	28	12	81	13	0	129	26	23	112	12
Added Vol:	0	12	0	15	27	6	5	90	0	0	29	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	47	28	27	108	19	5	219	26	23	141	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:	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 Volume:	9	47	28	27	108	19	5	219	26	23	141	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	47	28	27	108	19	5	219	26	23	141	20
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 Vol.:	9	47	28	27	108	19	5	219	26	23	141	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.93	0.93	0.94	0.94	0.94	0.98	0.98	0.98	0.94	0.94	0.94
Lanes:	0.10	0.57	0.33	0.18	0.70	0.12	0.02	0.88	0.10	0.13	0.76	0.11
Final Sat.:	180	1000	592	314	1242	224	37	1637	191	225	1370	196
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.09	0.09	0.09	0.13	0.13	0.13	0.10	0.10	0.10
Crit Moves:					****			****				
Green/Cycle:	0.37	0.37	0.37	0.37	0.37	0.37	0.57	0.57	0.57	0.57	0.57	0.57
Volume/Cap:	0.13	0.13	0.13	0.24	0.24	0.24	0.24	0.24	0.24	0.18	0.18	0.18
Delay/Veh:	12.7	12.7	12.7	13.4	13.4	13.4	6.6	6.6	6.6	6.4	6.4	6.4
User DelAdj:	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:	12.7	12.7	12.7	13.4	13.4	13.4	6.6	6.6	6.6	6.4	6.4	6.4
HCM2kAvg:	1	1	1	2	2	2	2	2	2	2	2	2

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions
PM Peak Hour

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

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	4	917	40	10	510	0	2	4	1	37	6	10
Added Vol:	120	0	8	0	0	24	13	65	66	4	107	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	917	48	10	510	24	15	69	67	41	113	10
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:	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 Volume:	124	917	48	10	510	24	15	69	67	41	113	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	124	917	48	10	510	24	15	69	67	41	113	10
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	534	xxxx	xxxxx	966	xxxx	xxxxx	1292	1743	255	1474	1718	459
Potent Cap.:	1044	xxxx	xxxxx	721	xxxx	xxxxx	122	88	750	90	91	555
Move Cap.:	1044	xxxx	xxxxx	721	xxxx	xxxxx	0	76	750	17	79	555
Volume/Cap:	0.12	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	0.90	0.09	2.44	1.43	0.02
Level Of Service Module:												
Queue:	0.4	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	8.9	xxxx	xxxxx	10.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	42	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.5	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1497	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			1497.3		
ApproachLOS:	*			*			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions With Impovements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.394
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.0
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	4	917	40	10	510	0	2	4	1	37	6	10
Added Vol:	120	0	8	0	0	24	13	65	66	4	107	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	917	48	10	510	24	15	69	67	41	113	10
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:	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 Volume:	124	917	48	10	510	24	15	69	67	41	113	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	917	48	10	510	24	15	69	67	41	113	10
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 Vol.:	124	917	48	10	510	24	15	69	67	41	113	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.91	0.91	0.91	0.90	0.90	0.90
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.10	0.46	0.44	0.25	0.69	0.06
Final Sat.:	1805	3610	1615	1805	3610	1615	177	787	770	427	1189	103
Capacity Analysis Module:												
Vol/Sat:	0.07	0.25	0.03	0.01	0.14	0.01	0.09	0.09	0.09	0.10	0.10	0.10
Crit Moves:		****		****							****	
Green/Cycle:	0.35	0.53	0.53	0.17	0.35	0.35	0.20	0.20	0.20	0.20	0.20	0.20
Volume/Cap:	0.20	0.48	0.06	0.03	0.40	0.04	0.44	0.44	0.44	0.48	0.48	0.48
Delay/Veh:	13.8	8.9	6.8	21.0	15.0	12.9	21.9	21.9	21.9	22.3	22.3	22.3
User DelAdj:	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:	13.8	8.9	6.8	21.0	15.0	12.9	21.9	21.9	21.9	22.3	22.3	22.3
HCM2kAvg:	2	6	0	0	4	0	3	3	3	4	4	4

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions
PM Peak Hour

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

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[10.8]

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	0 1	0 0	1	0 1	0 0	0
Volume Module:												
Base Vol:	2	7	2	1	1	0	0	55	1	1	42	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	2	9	2	1	1	0	0	67	1	1	51	0
Added Vol:	0	0	0	0	0	0	0	74	0	0	111	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	9	2	1	1	0	0	141	1	1	162	0
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:	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 Volume:	2	9	2	1	1	0	0	141	1	1	162	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	2	9	2	1	1	0	0	141	1	1	162	0
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	306	306	141	312	307	xxxxx	xxxx	xxxx	xxxxx	142	xxxx	xxxxx
Potent Cap.:	650	611	912	645	610	xxxxx	xxxx	xxxx	xxxxx	1453	xxxx	xxxxx
Move Cap.:	649	611	912	636	610	xxxxx	xxxx	xxxx	xxxxx	1453	xxxx	xxxxx
Volume/Cap:	0.00	0.01	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	657	xxxxx	622	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	10.6	xxxxx	10.8	xxxx	xxxxx	0.0	xxxx	xxxxx	7.5	xxxx	xxxxx
Shared LOS:	*	B	*	B	*	*	A	*	*	A	*	*
ApproachDel:		10.6			10.8			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions
PM Peak Hour

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

Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[7.5]

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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	0	0	0	0	0	1	63	1	4	55	1
Added Vol:	0	0	0	0	0	0	0	74	0	0	111	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	1	137	1	4	166	1
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:	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 Volume:	0	0	0	0	0	0	1	137	1	4	166	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	1	137	1	4	166	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	167	xxxx	xxxxx	139	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1423	xxxx	xxxxx	1457	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1423	xxxx	xxxxx	1457	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions
PM Peak Hour

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

****
Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	0.799
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	18.4
Optimal Cycle:	0	Level Of Service:	C

****

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	1 0	0	1	0	0 1!	0	0	0	0 1!	0	0	0	0 1!	0	0
Volume Module:																
Base Vol:	9	364	75		18	93	9		19	46	2		37	52	46	
Growth Adj:	1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22	
Initial Bse:	11	444	92		22	113	11		23	56	2		45	63	56	
Added Vol:	0	11	9		3	6	7		12	62	0		9	105	5	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	11	455	101		25	119	18		35	118	2		54	168	61	
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:	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 Volume:	11	455	101		25	119	18		35	118	2		54	168	61	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	11	455	101		25	119	18		35	118	2		54	168	61	
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 Vol.:	11	455	101		25	119	18		35	118	2		54	168	61	
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:	0.02	0.98	1.00		0.15	0.74	0.11		0.23	0.76	0.01		0.19	0.59	0.22	
Final Sat.:	14	569	659		82	393	59		115	386	8		107	333	121	
Capacity Analysis Module:																
Vol/Sat:	0.80	0.80	0.15		0.30	0.30	0.30		0.31	0.31	0.31		0.51	0.51	0.51	
Crit Moves:		****				****					****			****		
Delay/Veh:	27.4	27.4	9.0		11.6	11.6	11.6		11.9	11.9	11.9		14.4	14.4	14.4	
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:	27.4	27.4	9.0		11.6	11.6	11.6		11.9	11.9	11.9		14.4	14.4	14.4	
LOS by Move:	D	D	A		B	B	B		B	B	B		B	B	B	
ApproachDel:		24.2				11.6				11.9				14.4		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		24.2				11.6				11.9				14.4		
LOS by Appr:		C				B				B				B		

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions With Impovements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.442
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 9.9
Optimal Cycle: 60 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	11	444	92	22	113	11	23	56	2	45	63	56
Added Vol:	0	11	9	3	6	7	12	62	0	9	105	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	455	101	25	119	18	35	118	2	54	168	61
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:	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 Volume:	11	455	101	25	119	18	35	118	2	54	168	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	455	101	25	119	18	35	118	2	54	168	61
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 Vol.:	11	455	101	25	119	18	35	118	2	54	168	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90
Lanes:	0.02	0.98	1.00	0.15	0.74	0.11	0.23	0.76	0.01	0.19	0.59	0.22
Final Sat.:	45	1848	1615	266	1272	191	386	1297	27	326	1014	368
Capacity Analysis Module:												
Vol/Sat:	0.25	0.25	0.06	0.09	0.09	0.09	0.09	0.09	0.09	0.17	0.17	0.17
Crit Moves:		****									****	
Green/Cycle:	0.56	0.56	0.56	0.56	0.56	0.56	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.44	0.44	0.11	0.17	0.17	0.17	0.24	0.24	0.24	0.44	0.44	0.44
Delay/Veh:	8.1	8.1	6.3	6.6	6.6	6.6	13.1	13.1	13.1	14.5	14.5	14.5
User DelAdj:	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:	8.1	8.1	6.3	6.6	6.6	6.6	13.1	13.1	13.1	14.5	14.5	14.5
HCM2kAvg:	6	5	1	2	2	2	2	2	3	5	5	5

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions
PM Peak Hour

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

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.458
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.2
Optimal Cycle: 0 Level Of Service: B

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	0	0	0	0
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	21	82	32		16	43	24		12	116	10		9	106	31	
Growth Adj:	1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22	
Initial Bse:	26	100	39		20	52	29		15	142	12		11	129	38	
Added Vol:	0	38	0		20	26	18		18	55	0		0	101	26	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	26	138	39		40	78	47		33	197	12		11	230	64	
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:	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 Volume:	26	138	39		40	78	47		33	197	12		11	230	64	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	26	138	39		40	78	47		33	197	12		11	230	64	
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 Vol.:	26	138	39		40	78	47		33	197	12		11	230	64	
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:	0.13	0.68	0.19		0.24	0.47	0.29		0.14	0.81	0.05		0.04	0.75	0.21	
Final Sat.:	77	413	117		143	283	171		86	518	32		24	503	139	
Capacity Analysis Module:																
Vol/Sat:	0.33	0.33	0.33		0.28	0.28	0.28		0.38	0.38	0.38		0.46	0.46	0.46	
Crit Moves:	****					****			****					****		
Delay/Veh:	10.8	10.8	10.8		10.3	10.3	10.3		11.2	11.2	11.2		12.0	12.0	12.0	
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:	10.8	10.8	10.8		10.3	10.3	10.3		11.2	11.2	11.2		12.0	12.0	12.0	
LOS by Move:	B	B	B		B	B	B		B	B	B		B	B	B	
ApproachDel:		10.8				10.3				11.2				12.0		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		10.8				10.3				11.2				12.0		
LOS by Appr:		B				B				B				B		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) Without Project Conditions With Impovements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.301
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	9.6
Optimal Cycle:	60	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	26	100	39	20	52	29	15	142	12	11	129	38
Added Vol:	0	38	0	20	26	18	18	55	0	0	101	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	138	39	40	78	47	33	197	12	11	230	64
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:	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 Volume:	26	138	39	40	78	47	33	197	12	11	230	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	138	39	40	78	47	33	197	12	11	230	64
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 Vol.:	26	138	39	40	78	47	33	197	12	11	230	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.94	0.94	0.88	0.88	0.88	0.93	0.93	0.93	0.96	0.96	0.96
Lanes:	0.13	0.68	0.19	0.24	0.47	0.29	0.14	0.81	0.05	0.04	0.75	0.21
Final Sat.:	225	1210	342	398	790	476	240	1446	90	66	1380	382
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.10	0.10	0.10	0.14	0.14	0.14	0.17	0.17	0.17
Crit Moves:		****									****	
Green/Cycle:	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Volume/Cap:	0.30	0.30	0.30	0.26	0.26	0.26	0.25	0.25	0.25	0.30	0.30	0.30
Delay/Veh:	13.3	13.3	13.3	13.1	13.1	13.1	7.0	7.0	7.0	7.3	7.3	7.3
User DelAdj:	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:	13.3	13.3	13.3	13.1	13.1	13.1	7.0	7.0	7.0	7.3	7.3	7.3
HCM2kAvg:	3	3	3	2	2	2	2	3	3	3	3	3

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APPENDIX E

CUMULATIVE (2004) WITH PROJECT CONDITIONS INTERSECTION ANALYSIS

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
AM Peak Hour

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

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 200.7 Worst Case Level Of Service: F[1548.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	1	1 0 2	0	1	0 0 1!	0	0	0 0 1!	0	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	7	298	41	6	1078	1	1	1	12	62	9	6
Added Vol:	35	0	28	7	0	7	21	90	107	80	34	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	298	69	13	1078	8	22	91	119	142	43	27
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:	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 Volume:	42	298	69	13	1078	8	22	91	119	142	43	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	42	298	69	13	1078	8	22	91	119	142	43	27
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1087	xxxx	xxxxx	367	xxxx	xxxxx	1359	1556	539	993	1495	149
Potent Cap.:	650	xxxx	xxxxx	1203	xxxx	xxxxx	109	114	492	202	124	877
Move Cap.:	650	xxxx	xxxxx	1203	xxxx	xxxxx	71	105	492	39	115	877
Volume/Cap:	0.07	xxxx	xxxx	0.01	xxxx	xxxx	0.31	0.87	0.24	3.68	0.37	0.03
Level Of Service Module:												
Queue:	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	10.9	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	164	xxxxx	xxxx	52	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.6	xxxxx	xxxxx	23.4	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	273	xxxxx	xxxxx	1549	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			273.3			1548.5		
ApproachLOS:	*			*			F			F		

E3

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.566
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.1
Optimal Cycle: 60 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	7	298	41	6	1078	1	1	1	12	62	9	6
Added Vol:	35	0	28	7	0	7	21	90	107	80	34	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	298	69	13	1078	8	22	91	119	142	43	27
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:	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 Volume:	42	298	69	13	1078	8	22	91	119	142	43	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	298	69	13	1078	8	22	91	119	142	43	27
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 Vol.:	42	298	69	13	1078	8	22	91	119	142	43	27
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.90	0.90	0.90	0.60	0.60	0.60
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.10	0.39	0.51	0.67	0.20	0.13
Final Sat.:	1805	3610	1615	1805	3610	1615	163	668	873	761	228	145
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.04	0.01	0.30	0.01	0.14	0.14	0.14	0.19	0.19	0.19
Crit Moves:	****				****						****	
Green/Cycle:	0.17	0.31	0.31	0.31	0.45	0.45	0.28	0.28	0.28	0.28	0.28	0.28
Volume/Cap:	0.14	0.27	0.14	0.02	0.66	0.01	0.48	0.48	0.48	0.66	0.66	0.66
Delay/Veh:	21.5	15.7	15.1	14.5	13.9	9.1	18.7	18.7	18.7	24.1	24.1	24.1
User DelAdj:	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:	21.5	15.7	15.1	14.5	13.9	9.1	18.7	18.7	18.7	24.1	24.1	24.1
HCM2kAvg:	1	2	1	0	9	0	4	4	4	7	7	7

****

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
AM Peak Hour

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

****
Intersection #54 Worsley Rd. (NS) / Driveway 2 (EW)
****
Average Delay (sec/veh): 6.1 Worst Case Level Of Service: A[8.8]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Volume Module:																				
Base Vol:	0		2		0	0		2		0	0		0		0	0		0		0
Growth Adj:	1.22	1.22			1.22	1.22	1.22			1.22	1.22	1.22			1.22	1.22	1.22			1.22
Initial Bse:	0		2		0	0		2		0	0		0		0	0		0		0
Added Vol:	0		0		18	0		0		0	0		0		0	52		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		2		18	0		2		0	0		0		0	52		0		0
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:	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 Volume:	0		2		18	0		2		0	0		0		0	52		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	0		2		18	0		2		0	0		0		0	52		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	6.4	xxxx			xxxxx
FollowUpTim:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	3.5	xxxx			xxxxx
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	14	xxxx			xxxxx
Potent Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	1010	xxxx			xxxxx
Move Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	1010	xxxx			xxxxx
Volume/Cap:	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	0.05	xxxx			xxxx
Level Of Service Module:																				
Queue:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	0.2	xxxx			xxxxx
Stopped Del:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	8.8	xxxx			xxxxx
LOS by Move:	*	*			*	*	*			*	*	*			*	A	*			*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shrd StpDel:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shared LOS:	*	*			*	*	*			*	*	*			*	*	*			*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					8.8				
ApproachLOS:	*					*					*					A				

ES

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
AM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 1.8 Worst Case Level Of Service: A[9.6]
****

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 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	4	0	2	0	0	39	0	1	64	2
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	1	0	5	0	2	0	0	48	0	1	78	2
Added Vol:	0	0	0	0	0	52	18	107	0	0	83	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	5	0	2	52	18	155	0	1	161	2
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:	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 Volume:	1	0	5	0	2	52	18	155	0	1	161	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	5	0	2	52	18	155	0	1	161	2
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	xxxxx	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	383	xxxx	155	xxxx	355	162	164	xxxx	xxxxx	155	xxxx	xxxxx
Potent Cap.:	579	xxxx	897	xxxx	574	888	1427	xxxx	xxxxx	1438	xxxx	xxxxx
Move Cap.:	538	xxxx	897	xxxx	566	888	1427	xxxx	xxxxx	1438	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.01	xxxx	0.00	0.06	0.01	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	791	xxxxx	xxxx	xxxx	866	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	0.2	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	9.6	xxxxx	xxxxx	xxxx	9.4	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	A	A	*	*	*	*	*
ApproachDel:		9.6			9.4		xxxxxx			xxxxxx		
ApproachLOS:		A			A			*			*	

E6

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
AM Peak Hour

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

****
Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 3.9 Worst Case Level Of Service: B[11.3]
****

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	0	0	0	0	1!	0	0	1	0	1	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0		0		0	0		0		0	0		43		0	0		64		0
Growth Adj:	1.22		1.22		1.22	1.22		1.22		1.22	1.22		1.22		1.22	1.22		1.22		1.22
Initial Bse:	0		0		0	0		0		0	0		52		0	0		78		0
Added Vol:	0		0		0	114		0		41	14		93		0	0		42		39
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		0		0	114		0		41	14		145		0	0		120		39
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:	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 Volume:	0		0		0	114		0		41	14		145		0	0		120		39
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	0		0		0	114		0		41	14		145		0	0		120		39
Critical Gap Module:																				
Critical Gp:	xxxxx		xxxx		xxxxx	6.4		xxxx		6.2	4.1		xxxx		xxxxx	xxxxx		xxxx		xxxxx
FollowUpTim:	xxxxx		xxxx		xxxxx	3.5		xxxx		3.3	2.2		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Capacity Module:																				
Cnflict Vol:	xxxx		xxxx		xxxxx	313		xxxx		140	159		xxxx		xxxxx	xxxx		xxxx		xxxxx
Potent Cap.:	xxxx		xxxx		xxxxx	684		xxxx		914	1433		xxxx		xxxxx	xxxx		xxxx		xxxxx
Move Cap.:	xxxx		xxxx		xxxxx	679		xxxx		914	1433		xxxx		xxxxx	xxxx		xxxx		xxxxx
Volume/Cap:	xxxx		xxxx		xxxx	0.17		xxxx		0.04	0.01		xxxx		xxxx	xxxx		xxxx		xxxx
Level Of Service Module:																				
Queue:	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx	0.0		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Stopped Del:	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx	7.5		xxxx		xxxxx	xxxxx		xxxx		xxxxx
LOS by Move:	*		*		*	*		*		*	A		*		*	*		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		xxxx		xxxxx	xxxx		728		xxxxx	xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx		xxxx		xxxxx	xxxxx		0.8		xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shrd StpDel:	xxxxx		xxxx		xxxxx	xxxxx		11.3		xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shared LOS:	*		*		*	*		B		*	*		*		*	*		*		*
ApproachDel:	xxxxxx							11.3					xxxxxx					xxxxxx		
ApproachLOS:			*					B					*					*		

E7

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
AM Peak Hour

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

****
Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[10.6]
****

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 1 0 0 0		
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	1	0	1	1	0	1	0	52	0	1	81	0
Added Vol:	0	0	0	0	0	0	0	207	0	0	80	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	1	1	0	1	0	259	0	1	161	0
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:	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 Volume:	1	0	1	1	0	1	0	259	0	1	161	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	1	1	0	1	0	259	0	1	161	0
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	423	xxxx	259	423	xxxx	161	xxxx	xxxx	xxxxx	259	xxxx	xxxxx
Potent Cap.:	545	xxxx	784	545	xxxx	890	xxxx	xxxx	xxxxx	1317	xxxx	xxxxx
Move Cap.:	544	xxxx	784	543	xxxx	890	xxxx	xxxx	xxxxx	1317	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	0.00	xxxx	0.00	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	642	xxxxx	xxxx	675	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	10.6	xxxxx	xxxxx	10.4	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	*	*	*	A	*	*
ApproachDel:		10.6			10.4			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
AM Peak Hour

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

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.618
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	14.0
Optimal Cycle:	0	Level Of Service:	B

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	1	0	0	1		0	0	1!	0	0		0	0	1!	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:		8	107		43			31	232		16			5	51		14			57	42		23	
Growth Adj:		1.22	1.22		1.22			1.22	1.22		1.22			1.22	1.22		1.22			1.22	1.22		1.22	
Initial Bse:		10	131		52			38	283		20			6	62		17			70	51		28	
Added Vol:		11	3		3			4	10		14			15	161		31			3	55		1	
PasserByVol:		0	0		0			0	0		0			0	0		0			0	0		0	
Initial Fut:		21	134		55			42	293		34			21	223		48			73	106		29	
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:		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 Volume:		21	134		55			42	293		34			21	223		48			73	106		29	
Reduct Vol:		0	0		0			0	0		0			0	0		0			0	0		0	
Reduced Vol:		21	134		55			42	293		34			21	223		48			73	106		29	
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 Vol.:		21	134		55			42	293		34			21	223		48			73	106		29	
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:		0.13	0.87		1.00			0.11	0.80		0.09			0.07	0.77		0.16			0.35	0.51		0.14	
Final Sat.:		68	438		568			68	475		54			42	441		95			190	278		76	
Capacity Analysis Module:																								
Vol/Sat:		0.31	0.31		0.10			0.62	0.62		0.62			0.51	0.51		0.51			0.38	0.38		0.38	
Crit Moves:			****						****						****					****				
Delay/Veh:		11.8	11.8		9.1			16.8	16.8		16.8			14.0	14.0		14.0			12.3	12.3		12.3	
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:		11.8	11.8		9.1			16.8	16.8		16.8			14.0	14.0		14.0			12.3	12.3		12.3	
LOS by Move:		B	B		A			C	C		C			B	B		B			B	B		B	
ApproachDel:			11.1						16.8						14.0						12.3			
Delay Adj:			1.00						1.00						1.00						1.00			
ApprAdjDel:			11.1						16.8						14.0						12.3			
LOS by Appr:			B						C						B						B			

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

****

Cycle (sec):	0	Critical Vol./Cap. (X):	0.391
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	10.3
Optimal Cycle:	60	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	10	131	52	38	283	20	6	62	17	70	51	28
Added Vol:	11	3	3	4	10	14	15	161	31	3	55	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	134	55	42	293	34	21	223	48	73	106	29
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:	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 Volume:	21	134	55	42	293	34	21	223	48	73	106	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	134	55	42	293	34	21	223	48	73	106	29
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 Vol.:	21	134	55	42	293	34	21	223	48	73	106	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.94	0.85	0.95	0.95	0.95	0.95	0.95	0.95	0.82	0.82	0.82
Lanes:	0.13	0.87	1.00	0.11	0.80	0.09	0.07	0.77	0.16	0.35	0.51	0.14
Final Sat.:	241	1552	1615	205	1437	164	131	1385	298	543	796	218
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.03	0.20	0.20	0.20	0.16	0.16	0.16	0.13	0.13	0.13
Crit Moves:					****			****				
Green/Cycle:	0.52	0.52	0.52	0.52	0.52	0.52	0.41	0.41	0.41	0.41	0.41	0.41
Volume/Cap:	0.17	0.17	0.07	0.39	0.39	0.39	0.39	0.39	0.39	0.32	0.32	0.32
Delay/Veh:	7.6	7.6	7.2	8.9	8.9	8.9	12.7	12.7	12.7	12.3	12.3	12.3
User DelAdj:	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:	7.6	7.6	7.2	8.9	8.9	8.9	12.7	12.7	12.7	12.3	12.3	12.3
HCM2kAvg:	2	2	1	5	4	5	4	4	4	3	3	3

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
AM Peak Hour

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

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.439
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	10.2
Optimal Cycle:	0	Level Of Service:	B

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	9	35	28	12	81	13	0	129	26	23	112	12
Added Vol:	7	12	0	15	27	10	16	131	21	0	43	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	47	28	27	108	23	16	260	47	23	155	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:	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 Volume:	16	47	28	27	108	23	16	260	47	23	155	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	47	28	27	108	23	16	260	47	23	155	20
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 Vol.:	16	47	28	27	108	23	16	260	47	23	155	20
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:	0.17	0.52	0.31	0.17	0.68	0.15	0.05	0.81	0.14	0.12	0.78	0.10
Final Sat.:	107	326	193	110	435	95	36	593	106	82	546	71
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.15	0.25	0.25	0.25	0.44	0.44	0.44	0.28	0.28	0.28
Crit Moves:		****			****		****				****	
Delay/Veh:	9.0	9.0	9.0	9.7	9.7	9.7	11.1	11.1	11.1	9.7	9.7	9.7
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:	9.0	9.0	9.0	9.7	9.7	9.7	11.1	11.1	11.1	9.7	9.7	9.7
LOS by Move:	A	A	A	A	A	A	B	B	B	A	A	A
ApproachDel:		9.0			9.7			11.1			9.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.0			9.7			11.1			9.7	
LOS by Appr:		A			A			B			A	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.284
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 60 Level Of Service: A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	9	35	28	12	81	13	0	129	26	23	112	12
Added Vol:	7	12	0	15	27	10	16	131	21	0	43	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	47	28	27	108	23	16	260	47	23	155	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:	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 Volume:	16	47	28	27	108	23	16	260	47	23	155	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	47	28	27	108	23	16	260	47	23	155	20
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 Vol.:	16	47	28	27	108	23	16	260	47	23	155	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	0.91	0.93	0.93	0.93	0.97	0.97	0.97	0.94	0.94	0.94
Lanes:	0.17	0.52	0.31	0.17	0.68	0.15	0.05	0.81	0.14	0.12	0.78	0.10
Final Sat.:	296	902	534	305	1204	262	91	1481	265	209	1397	182
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.09	0.09	0.09	0.18	0.18	0.18	0.11	0.11	0.11
Crit Moves:					****			****				
Green/Cycle:	0.31	0.31	0.31	0.31	0.31	0.31	0.62	0.62	0.62	0.62	0.62	0.62
Volume/Cap:	0.17	0.17	0.17	0.28	0.28	0.28	0.28	0.28	0.28	0.18	0.18	0.18
Delay/Veh:	15.0	15.0	15.0	15.8	15.8	15.8	5.4	5.4	5.4	5.0	5.0	5.0
User DelAdj:	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:	15.0	15.0	15.0	15.8	15.8	15.8	5.4	5.4	5.4	5.0	5.0	5.0
HCM2kAvg:	1	1	1	3	2	2	3	3	3	2	2	2

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
PM Peak Hour

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

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	4	917	40	10	510	0	2	4	1	37	6	10
Added Vol:	120	0	93	24	0	24	13	65	66	51	107	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	917	133	34	510	24	15	69	67	88	113	24
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:	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 Volume:	124	917	133	34	510	24	15	69	67	88	113	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	124	917	133	34	510	24	15	69	67	88	113	24
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	534	xxxx	xxxxx	1051	xxxx	xxxxx	1340	1876	255	1522	1766	459
Potent Cap.:	1044	xxxx	xxxxx	670	xxxx	xxxxx	113	72	750	83	85	555
Move Cap.:	1044	xxxx	xxxxx	670	xxxx	xxxxx	0	61	750	0	71	555
Volume/Cap:	0.12	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	1.13	0.09	xxxx	1.60	0.04
Level Of Service Module:												
Queue:	0.4	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	8.9	xxxx	xxxxx	10.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.460
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	14.4
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	4	917	40	10	510	0	2	4	1	37	6	10
Added Vol:	120	0	93	24	0	24	13	65	66	51	107	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	917	133	34	510	24	15	69	67	88	113	24
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:	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 Volume:	124	917	133	34	510	24	15	69	67	88	113	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	917	133	34	510	24	15	69	67	88	113	24
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 Vol.:	124	917	133	34	510	24	15	69	67	88	113	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.91	0.91	0.91	0.84	0.84	0.84
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.10	0.46	0.44	0.39	0.50	0.11
Final Sat.:	1805	3610	1615	1805	3610	1615	176	781	765	622	803	169
Capacity Analysis Module:												
Vol/Sat:	0.07	0.25	0.08	0.02	0.14	0.01	0.09	0.09	0.09	0.14	0.14	0.14
Crit Moves:		****		****							****	
Green/Cycle:	0.32	0.47	0.47	0.17	0.32	0.32	0.26	0.26	0.26	0.26	0.26	0.26
Volume/Cap:	0.21	0.54	0.17	0.11	0.44	0.05	0.34	0.34	0.34	0.54	0.54	0.54
Delay/Veh:	15.1	11.6	9.2	21.4	16.5	14.1	18.4	18.4	18.4	20.5	20.5	20.5
User DelAdj:	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:	15.1	11.6	9.2	21.4	16.5	14.1	18.4	18.4	18.4	20.5	20.5	20.5
HCM2kAvg:	2	7	1	1	4	0	3	3	3	5	5	5

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
PM Peak Hour

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

Intersection #54 Worsley Rd. (NS) / Driveway 2 (EW)

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 0 1 0 0			0 0 0 0 0			1 0 0 0 0		
Volume Module:												
Base Vol:	0	7	0	0	2	0	0	0	0	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	9	0	0	2	0	0	0	0	0	0	0
Added Vol:	0	0	60	0	0	0	0	0	0	33	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	9	60	0	2	0	0	0	0	33	0	0
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:	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 Volume:	0	9	60	0	2	0	0	0	0	33	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	9	60	0	2	0	0	0	0	33	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	41	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	975	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	975	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.8		
ApproachLOS:	*			*			*			A		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
PM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 2.0 Worst Case Level Of Service: B[12.5]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 1	0 0	0
Volume Module:												
Base Vol:	2	7	2	1	1	0	0	55	1	1	42	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	2	9	2	1	1	0	0	67	1	1	51	0
Added Vol:	0	0	0	0	0	33	60	122	0	0	138	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	9	2	1	1	33	60	189	1	1	189	0
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:	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 Volume:	2	9	2	1	1	33	60	189	1	1	189	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	2	9	2	1	1	33	60	189	1	1	189	0
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	518	501	189	507	502	189	189	xxxx	xxxxx	190	xxxx	xxxxx
Potent Cap.:	471	475	858	479	474	858	1397	xxxx	xxxxx	1396	xxxx	xxxxx
Move Cap.:	437	454	858	455	453	858	1397	xxxx	xxxxx	1396	xxxx	xxxxx
Volume/Cap:	0.01	0.02	0.00	0.00	0.00	0.04	0.04	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	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	492	xxxxx	xxxx	808	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	12.5	xxxxx	xxxxx	9.7	xxxxx	7.7	xxxx	xxxxx	7.6	xxxx	xxxxx
Shared LOS:	*	B	*	*	A	*	A	*	*	A	*	*
ApproachDel:		12.5			9.7		xxxxxx			xxxxxx		
ApproachLOS:		B			A			*			*	

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
PM Peak Hour

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

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: B[12.3]

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 Include			Stop Sign Include			Uncontrolled Include			Uncontrolled Include		
Rights:												
Lanes:	0 0	0 0	0 0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	58	0	0	43	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	0	0	0	0	0	0	71	0	0	52	0
Added Vol:	0	0	0	73	0	27	48	74	0	0	111	133
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	73	0	27	48	145	0	0	163	133
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:	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 Volume:	0	0	0	73	0	27	48	145	0	0	163	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	73	0	27	48	145	0	0	163	133
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	471	xxxx	230	296	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	555	xxxx	814	1276	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	539	xxxx	814	1276	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.14	xxxx	0.03	0.04	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	593	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	12.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	xxxxxx				12.3		xxxxxx			xxxxxx		
ApproachLOS:	*				B		*			*		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
PM Peak Hour

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

****

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[7.8]

****

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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	0	0	0	0	0	1	63	1	4	55	1
Added Vol:	0	0	0	0	0	0	0	147	0	0	244	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	1	210	1	4	299	1
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:	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 Volume:	0	0	0	0	0	0	1	210	1	4	299	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	1	210	1	4	299	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	300	xxxx	xxxxx	212	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1272	xxxx	xxxxx	1371	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1272	xxxx	xxxxx	1371	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	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	0	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

E18

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
PM Peak Hour

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

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.955
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	30.7
Optimal Cycle:	0	Level Of Service:	D

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	11	444	92	22	113	11	23	56	2	45	63	56
Added Vol:	36	11	9	3	6	19	19	108	20	9	189	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	455	101	25	119	30	42	164	22	54	252	61
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:	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 Volume:	47	455	101	25	119	30	42	164	22	54	252	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	455	101	25	119	30	42	164	22	54	252	61
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 Vol.:	47	455	101	25	119	30	42	164	22	54	252	61
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:	0.09	0.91	1.00	0.14	0.69	0.17	0.18	0.72	0.10	0.15	0.69	0.16
Final Sat.:	49	476	590	67	319	80	89	347	47	77	360	87
Capacity Analysis Module:												
Vol/Sat:	0.96	0.96	0.17	0.37	0.37	0.37	0.47	0.47	0.47	0.70	0.70	0.70
Crit Moves:	****				****			****			****	
Delay/Veh:	53.6	53.6	10.0	13.8	13.8	13.8	15.6	15.6	15.6	22.6	22.6	22.6
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:	53.6	53.6	10.0	13.8	13.8	13.8	15.6	15.6	15.6	22.6	22.6	22.6
LOS by Move:	F	F	B	B	B	B	C	C	C	C	C	C
ApproachDel:		46.3			13.8			15.6			22.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		46.3			13.8			15.6			22.6	
LOS by Appr:		E			B			C			C	

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.521
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 10.9
Optimal Cycle: 60 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	11	444	92	22	113	11	23	56	2	45	63	56
Added Vol:	36	11	9	3	6	19	19	108	20	9	189	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	455	101	25	119	30	42	164	22	54	252	61
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:	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 Volume:	47	455	101	25	119	30	42	164	22	54	252	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	455	101	25	119	30	42	164	22	54	252	61
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 Vol.:	47	455	101	25	119	30	42	164	22	54	252	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.97	0.97	0.85	0.90	0.90	0.90	0.89	0.89	0.89	0.91	0.91	0.91
Lanes:	0.09	0.91	1.00	0.14	0.69	0.17	0.18	0.72	0.10	0.15	0.69	0.16
Final Sat.:	172	1662	1615	245	1175	295	312	1212	166	255	1190	288
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.06	0.10	0.10	0.10	0.14	0.14	0.14	0.21	0.21	0.21
Crit Moves:		****									****	
Green/Cycle:	0.53	0.53	0.53	0.53	0.53	0.53	0.41	0.41	0.41	0.41	0.41	0.41
Volume/Cap:	0.52	0.52	0.12	0.19	0.19	0.19	0.33	0.33	0.33	0.52	0.52	0.52
Delay/Veh:	9.8	9.8	7.3	7.6	7.6	7.6	12.5	12.5	12.5	14.1	14.1	14.1
User DelAdj:	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:	9.8	9.8	7.3	7.6	7.6	7.6	12.5	12.5	12.5	14.1	14.1	14.1
HCM2kAvg:	7	7	1	2	2	2	3	3	3	6	6	6

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions
PM Peak Hour

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

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.557
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.0
Optimal Cycle: 0 Level Of Service: B

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	26	100	39	20	52	29	15	142	12	11	129	38
Added Vol:	24	37	0	20	26	30	25	82	13	0	149	25
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	137	39	40	78	59	40	224	25	11	278	63
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:	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 Volume:	50	137	39	40	78	59	40	224	25	11	278	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	137	39	40	78	59	40	224	25	11	278	63
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 Vol.:	50	137	39	40	78	59	40	224	25	11	278	63
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:	0.22	0.61	0.17	0.22	0.45	0.33	0.14	0.77	0.09	0.03	0.79	0.18
Final Sat.:	124	342	97	123	244	184	83	470	53	20	500	113
Capacity Analysis Module:												
Vol/Sat:	0.40	0.40	0.40	0.32	0.32	0.32	0.48	0.48	0.48	0.56	0.56	0.56
Crit Moves:			****		****			****		****		
Delay/Veh:	12.2	12.2	12.2	11.2	11.2	11.2	13.0	13.0	13.0	14.3	14.3	14.3
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:	12.2	12.2	12.2	11.2	11.2	11.2	13.0	13.0	13.0	14.3	14.3	14.3
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:	12.2			11.2			13.0			14.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.2			11.2			13.0			14.3		
LOS by Appr:	B			B			B			B		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2004) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.348
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 9.8
Optimal Cycle: 60 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	26	100	39	20	52	29	15	142	12	11	129	38
Added Vol:	24	38	0	20	26	30	25	82	13	0	149	25
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	138	39	40	78	59	40	224	25	11	278	63
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:	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 Volume:	50	138	39	40	78	59	40	224	25	11	278	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	138	39	40	78	59	40	224	25	11	278	63
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 Vol.:	50	138	39	40	78	59	40	224	25	11	278	63
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	0.89	0.89	0.87	0.87	0.87	0.92	0.92	0.92	0.97	0.97	0.97
Lanes:	0.22	0.61	0.17	0.22	0.45	0.33	0.14	0.77	0.09	0.03	0.79	0.18
Final Sat.:	372	1035	293	369	732	553	240	1353	153	57	1451	328
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.13	0.11	0.11	0.11	0.17	0.17	0.17	0.19	0.19	0.19
Crit Moves:		****									****	
Green/Cycle:	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Volume/Cap:	0.35	0.35	0.35	0.28	0.28	0.28	0.30	0.30	0.30	0.35	0.35	0.35
Delay/Veh:	13.5	13.5	13.5	13.0	13.0	13.0	7.4	7.4	7.4	7.7	7.7	7.7
User DelAdj:	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:	13.5	13.5	13.5	13.0	13.0	13.0	7.4	7.4	7.4	7.7	7.7	7.7
HCM2kAvg:	3	3	4	3	3	3	3	3	3	4	4	4

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APPENDIX F

CUMULATIVE (2005) WITHOUT PROJECT CONDITIONS INTERSECTION ANALYSIS

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions
AM Peak Hour

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

****
Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	8	315	44	6	1140	1	1	1	13	66	9	6
Added Vol:	69	0	7	0	0	14	43	180	215	14	68	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	77	315	51	6	1140	15	44	181	228	80	77	7
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:	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 Volume:	77	315	51	6	1140	15	44	181	228	80	77	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	77	315	51	6	1140	15	44	181	228	80	77	7
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1156	xxxx	xxxxx	366	xxxx	xxxxx	1503	1672	570	1142	1637	157
Potent Cap.:	612	xxxx	xxxxx	1204	xxxx	xxxxx	85	97	470	158	102	866
Move Cap.:	612	xxxx	xxxxx	1204	xxxx	xxxxx	20	84	470	0	88	866
Volume/Cap:	0.13	xxxx	xxxx	0.01	xxxx	xxxx	2.19	2.15	0.49	xxxx	0.87	0.01
Level Of Service Module:												
Queue:	0.4	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	11.7	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	94	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	48.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1815	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			1814.8			xxxxxx		
ApproachLOS:	*			*			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions With Impovements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.694
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 19.9
Optimal Cycle: 60 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	8	315	44	6	1140	1	1	1	13	66	9	6
Added Vol:	69	0	7	0	0	14	43	180	215	14	68	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	77	315	51	6	1140	15	44	181	228	80	77	7
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:	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 Volume:	77	315	51	6	1140	15	44	181	228	80	77	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	315	51	6	1140	15	44	181	228	80	77	7
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 Vol.:	77	315	51	6	1140	15	44	181	228	80	77	7
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.90	0.90	0.90	0.63	0.63	0.63
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.10	0.40	0.50	0.49	0.47	0.04
Final Sat.:	1805	3610	1615	1805	3610	1615	166	680	855	581	561	54
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.03	0.00	0.32	0.01	0.27	0.27	0.27	0.14	0.14	0.14
Crit Moves:	****				****			****				
Green/Cycle:	0.17	0.28	0.28	0.28	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.26	0.31	0.11	0.01	0.79	0.02	0.79	0.79	0.79	0.41	0.41	0.41
Delay/Veh:	22.2	17.1	16.1	15.5	19.0	11.0	25.6	25.6	25.6	16.0	16.0	16.0
User DelAdj:	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:	22.2	17.1	16.1	15.5	19.0	11.0	25.6	25.6	25.6	16.0	16.0	16.0
HCM2kAvg:	2	3	1	0	12	0	10	10	10	4	4	4

****

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions
AM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.7]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1 0 0			0 1 0 0 1			0 0 1! 0 0		
Volume Module:												
Base Vol:	1	0	4	0	2	0	0	39	0	1	64	2
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	1	0	5	0	3	0	0	50	0	1	83	3
Added Vol:	0	0	0	0	0	0	0	187	0	0	83	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	5	0	3	0	0	237	0	1	166	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:	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 Volume:	1	0	5	0	3	0	0	237	0	1	166	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	5	0	3	0	0	237	0	1	166	3
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	xxxxx	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	408	xxxx	237	xxxx	407	xxxxx	xxxx	xxxx	xxxxx	237	xxxx	xxxxx
Potent Cap.:	557	xxxx	807	xxxx	537	xxxxx	xxxx	xxxx	xxxxx	1342	xxxx	xxxxx
Move Cap.:	555	xxxx	807	xxxx	536	xxxxx	xxxx	xxxx	xxxxx	1342	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.01	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	11.7	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	B	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	739	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	9.9	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	A	*	*	*	*	*
ApproachDel:		9.9			11.7		xxxxxx			xxxxxx		
ApproachLOS:		A			B		*			*		

F5

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions
AM Peak Hour

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

****
Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[10.5]
****

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 1 0 0 0		
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	1	0	1	1	0	1	0	55	0	1	85	0
Added Vol:	0	0	0	0	0	0	0	187	0	0	83	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	1	1	0	1	0	242	0	1	168	0
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:	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 Volume:	1	0	1	1	0	1	0	242	0	1	168	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	1	1	0	1	0	242	0	1	168	0
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	414	xxxx	242	414	xxxx	168	xxxx	xxxx	xxxxx	242	xxxx	xxxxx
Potent Cap.:	552	xxxx	801	552	xxxx	881	xxxx	xxxx	xxxxx	1336	xxxx	xxxxx
Move Cap.:	551	xxxx	801	551	xxxx	881	xxxx	xxxx	xxxxx	1336	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	0.00	xxxx	0.00	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	653	xxxxx	xxxx	678	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	10.5	xxxxx	xxxxx	10.3	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	*	*	*	A	*	*
ApproachDel:		10.5			10.3			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

F6

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions
AM Peak Hour

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

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.689
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	15.4
Optimal Cycle:	0	Level Of Service:	C

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 1	0	0 1	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	10	138	55	40	299	21	6	66	18	74	54	30
Added Vol:	0	6	6	8	19	21	9	178	0	6	62	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	144	61	48	318	42	15	244	18	80	116	33
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:	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 Volume:	10	144	61	48	318	42	15	244	18	80	116	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	144	61	48	318	42	15	244	18	80	116	33
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 Vol.:	10	144	61	48	318	42	15	244	18	80	116	33
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:	0.07	0.93	1.00	0.12	0.78	0.10	0.06	0.88	0.06	0.35	0.51	0.14
Final Sat.:	33	462	551	70	462	60	31	482	36	185	270	76
Capacity Analysis Module:												
Vol/Sat:	0.31	0.31	0.11	0.69	0.69	0.69	0.51	0.51	0.51	0.43	0.43	0.43
Crit Moves:		****				****	****				****	
Delay/Veh:	12.0	12.0	9.3	19.6	19.6	19.6	14.4	14.4	14.4	13.2	13.2	13.2
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:	12.0	12.0	9.3	19.6	19.6	19.6	14.4	14.4	14.4	13.2	13.2	13.2
LOS by Move:	B	B	A	C	C	C	B	B	B	B	B	B
ApproachDel:		11.3			19.6			14.4			13.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.3			19.6			14.4			13.2	
LOS by Appr:		B			C			B			B	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions With Impovements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.405
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 60 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	10	138	55	40	299	21	6	66	18	74	54	30
Added Vol:	0	6	6	8	19	21	9	178	0	6	62	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	144	61	48	318	42	15	244	18	80	116	33
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:	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 Volume:	10	144	61	48	318	42	15	244	18	80	116	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	144	61	48	318	42	15	244	18	80	116	33
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 Vol.:	10	144	61	48	318	42	15	244	18	80	116	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.98	0.98	0.85	0.94	0.94	0.94	0.97	0.97	0.97	0.83	0.83	0.83
Lanes:	0.07	0.93	1.00	0.12	0.78	0.10	0.06	0.88	0.06	0.35	0.51	0.14
Final Sat.:	124	1730	1615	211	1399	183	103	1624	120	547	798	225
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.04	0.23	0.23	0.23	0.15	0.15	0.15	0.15	0.15	0.15
Crit Moves:					****			****				
Green/Cycle:	0.56	0.56	0.56	0.56	0.56	0.56	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.15	0.15	0.07	0.40	0.40	0.40	0.40	0.40	0.40	0.39	0.39	0.39
Delay/Veh:	6.3	6.3	6.0	7.7	7.7	7.7	14.4	14.4	14.4	14.3	14.3	14.3
User DelAdj:	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:	6.3	6.3	6.0	7.7	7.7	7.7	14.4	14.4	14.4	14.3	14.3	14.3
HCM2kAvg:	1	1	1	5	5	5	4	4	4	4	4	4

****

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions
AM Peak Hour

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

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.516
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	11.5
Optimal Cycle:	0	Level Of Service:	B

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	9	37	30	13	85	14	0	137	27	25	119	13
Added Vol:	0	24	0	30	54	13	11	181	0	0	58	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	61	30	43	139	27	11	318	27	25	177	29
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:	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 Volume:	9	61	30	43	139	27	11	318	27	25	177	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	61	30	43	139	27	11	318	27	25	177	29
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 Vol.:	9	61	30	43	139	27	11	318	27	25	177	29
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:	0.09	0.61	0.30	0.21	0.66	0.13	0.03	0.89	0.08	0.11	0.77	0.12
Final Sat.:	52	356	172	125	405	79	21	616	52	70	505	83
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.34	0.34	0.34	0.52	0.52	0.52	0.35	0.35	0.35
Crit Moves:		****			****			****			****	
Delay/Veh:	9.5	9.5	9.5	11.0	11.0	11.0	12.8	12.8	12.8	10.7	10.7	10.7
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:	9.5	9.5	9.5	11.0	11.0	11.0	12.8	12.8	12.8	10.7	10.7	10.7
LOS by Move:	A	A	A	B	B	B	B	B	B	B	B	B
ApproachDel:		9.5			11.0			12.8			10.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.5			11.0			12.8			10.7	
LOS by Appr:		A			B			B			B	

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions With Impovements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.333
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 9.2
Optimal Cycle: 60 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	9	37	30	13	85	14	0	137	27	25	119	13
Added Vol:	0	24	0	30	54	13	11	181	0	0	58	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	61	30	43	139	27	11	318	27	25	177	29
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:	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 Volume:	9	61	30	43	139	27	11	318	27	25	177	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	61	30	43	139	27	11	318	27	25	177	29
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 Vol.:	9	61	30	43	139	27	11	318	27	25	177	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.94	0.94	0.92	0.92	0.92	0.98	0.98	0.98	0.94	0.94	0.94
Lanes:	0.09	0.61	0.30	0.21	0.66	0.13	0.03	0.89	0.08	0.11	0.77	0.12
Final Sat.:	161	1092	528	358	1160	227	58	1666	142	190	1367	224
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.12	0.12	0.12	0.19	0.19	0.19	0.13	0.13	0.13
Crit Moves:					****			****				
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.57	0.57	0.57	0.57	0.57	0.57
Volume/Cap:	0.16	0.16	0.16	0.33	0.33	0.33	0.33	0.33	0.33	0.23	0.23	0.23
Delay/Veh:	13.1	13.1	13.1	14.3	14.3	14.3	6.9	6.9	6.9	6.4	6.4	6.4
User DelAdj:	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	14.3	14.3	14.3	6.9	6.9	6.9	6.4	6.4	6.4
HCM2kAvg:	1	1	1	3	3	3	4	4	3	2	2	2

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions
PM Peak Hour

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

****
Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	4	970	43	10	539	0	3	4	1	39	6	10
Added Vol:	240	0	17	1	0	48	26	130	131	9	214	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	244	970	60	11	539	48	29	134	132	48	220	10
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:	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 Volume:	244	970	60	11	539	48	29	134	132	48	220	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	244	970	60	11	539	48	29	134	132	48	220	10
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	587	xxxx	xxxxx	1030	xxxx	xxxxx	1645	2079	270	1817	2068	485
Potent Cap.:	998	xxxx	xxxxx	682	xxxx	xxxxx	67	54	734	50	55	533
Move Cap.:	998	xxxx	xxxxx	682	xxxx	xxxxx	0	40	734	0	41	533
Volume/Cap:	0.24	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	3.33	0.18	xxxx	5.40	0.02
Level Of Service Module:												
Queue:	1.0	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	9.8	xxxx	xxxxx	10.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions With Impovements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.496
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.1
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	4	970	43	10	539	0	3	4	1	39	6	10
Added Vol:	240	0	17	1	0	48	26	130	131	9	214	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	244	970	60	11	539	48	29	134	132	48	220	10
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:	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 Volume:	244	970	60	11	539	48	29	134	132	48	220	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	244	970	60	11	539	48	29	134	132	48	220	10
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 Vol.:	244	970	60	11	539	48	29	134	132	48	220	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.90	0.90	0.90	0.90	0.90	0.90
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.10	0.45	0.45	0.17	0.79	0.04
Final Sat.:	1805	3610	1615	1805	3610	1615	166	780	770	292	1348	63
Capacity Analysis Module:												
Vol/Sat:	0.14	0.27	0.04	0.01	0.15	0.03	0.17	0.17	0.17	0.16	0.16	0.16
Crit Moves:		****		****				****				
Green/Cycle:	0.31	0.45	0.45	0.17	0.31	0.31	0.29	0.29	0.29	0.29	0.29	0.29
Volume/Cap:	0.44	0.60	0.08	0.04	0.49	0.10	0.60	0.60	0.60	0.57	0.57	0.57
Delay/Veh:	17.2	13.2	9.6	21.0	17.3	14.9	20.5	20.5	20.5	19.9	19.9	19.9
User DelAdj:	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:	17.2	13.2	9.6	21.0	17.3	14.9	20.5	20.5	20.5	19.9	19.9	19.9
HCM2kAvg:	4	8	1	0	5	1	6	6	6	6	6	5

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions
PM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.6]
****

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	0	1	0	0	1	0	1	0	0	0
Volume Module:																				
Base Vol:	2	7		2		1	1		0		0	55		1		1	42		0	
Growth Adj:	1.29	1.29		1.29		1.29	1.29		1.29		1.29	1.29		1.29		1.29	1.29		1.29	
Initial Bse:	3	9		3		1	1		0		0	71		1		1	54		0	
Added Vol:	0	0		0		0	0		0		0	148		0		0	223		0	
PasserByVol:	0	0		0		0	0		0		0	0		0		0	0		0	
Initial Fut:	3	9		3		1	1		0		0	219		1		1	277		0	
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:	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 Volume:	3	9		3		1	1		0		0	219		1		1	277		0	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Final Vol.:	3	9		3		1	1		0		0	219		1		1	277		0	
Critical Gap Module:																				
Critical Gp:	7.1	6.5		6.2		7.1	6.5		xxxxx		xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx	
FollowUpTim:	3.5	4.0		3.3		3.5	4.0		xxxxx		xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	499	499		219		505	500		xxxxx		xxxx	xxxx		xxxxx		220	xxxx		xxxxx	
Potent Cap.:	485	476		826		481	476		xxxxx		xxxx	xxxx		xxxxx		1361	xxxx		xxxxx	
Move Cap.:	484	476		826		472	475		xxxxx		xxxx	xxxx		xxxxx		1361	xxxx		xxxxx	
Volume/Cap:	0.01	0.02		0.00		0.00	0.00		xxxx		xxxx	xxxx		xxxx		0.00	xxxx		xxxx	
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx	
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		7.6	xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		*	*		*		A	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	517		xxxxx		474	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	0.1		xxxxx		0.0	xxxx		xxxxx		0.0	xxxx		xxxxx		0.0	xxxx		xxxxx	
Shrd StpDel:	xxxxx	12.2		xxxxx		12.6	xxxx		xxxxx		0.0	xxxx		xxxxx		7.6	xxxx		xxxxx	
Shared LOS:	*	B		*		B	*		*		A	*		*		A	*		*	
ApproachDel:		12.2					12.6					xxxxxx					xxxxxx			
ApproachLOS:		B					B					*					*			

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions
PM Peak Hour

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

****
Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[7.8]
****

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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	0	0	0	0	0	0	1	67	1	4	58	1
Added Vol:	0	0	0	0	0	0	0	148	0	0	223	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	1	215	1	4	281	1
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:	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 Volume:	0	0	0	0	0	0	1	215	1	4	281	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	1	215	1	4	281	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	282	xxxx	xxxxx	216	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1292	xxxx	xxxxx	1365	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1292	xxxx	xxxxx	1365	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	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	0	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

F14

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions
PM Peak Hour

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

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.988
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	35.9
Optimal Cycle:	0	Level Of Service:	E

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	1	0	0 1	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	9	364		75	18	93		9	19	46		2	37	52		46
Growth Adj:	1.29	1.29		1.29	1.29	1.29		1.29	1.29	1.29		1.29	1.29	1.29		1.29
Initial Bse:	12	470		97	23	120		12	25	59		3	48	67		59
Added Vol:	0	22		18	5	12		13	25	123		0	18	210		10
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	12	492		115	28	132		25	50	182		3	66	277		69
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:	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 Volume:	12	492		115	28	132		25	50	182		3	66	277		69
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	12	492		115	28	132		25	50	182		3	66	277		69
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 Vol.:	12	492		115	28	132		25	50	182		3	66	277		69
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:	0.02	0.98		1.00	0.15	0.72		0.13	0.21	0.78		0.01	0.16	0.67		0.17
Final Sat.:	12	497		566	68	318		59	98	361		5	83	348		87
Capacity Analysis Module:																
Vol/Sat:	0.99	0.99		0.20	0.41	0.41		0.41	0.51	0.51		0.51	0.80	0.80		0.80
Crit Moves:		****			****					****			****			
Delay/Veh:	62.9	62.9		10.7	15.1	15.1		15.1	17.1	17.1		17.1	30.1	30.1		30.1
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:	62.9	62.9		10.7	15.1	15.1		15.1	17.1	17.1		17.1	30.1	30.1		30.1
LOS by Move:	F	F		B	C	C		C	C	C		C	D	D		D
ApproachDel:		53.2				15.1				17.1				30.1		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		53.2				15.1				17.1				30.1		
LOS by Appr:		F				C				C				D		

F15

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions With Impovements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.543
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 11.2
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	12	470	97	23	120	12	25	59	3	48	67	59
Added Vol:	0	22	18	5	12	13	25	123	0	18	210	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	492	115	28	132	25	50	182	3	66	277	69
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:	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 Volume:	12	492	115	28	132	25	50	182	3	66	277	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	492	115	28	132	25	50	182	3	66	277	69
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 Vol.:	12	492	115	28	132	25	50	182	3	66	277	69
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.90	0.90	0.90	0.88	0.88	0.88	0.90	0.90	0.90
Lanes:	0.02	0.98	1.00	0.15	0.72	0.13	0.21	0.78	0.01	0.16	0.67	0.17
Final Sat.:	44	1847	1615	260	1218	227	352	1295	18	273	1152	288
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.07	0.11	0.11	0.11	0.14	0.14	0.14	0.24	0.24	0.24
Crit Moves:		****									****	
Green/Cycle:	0.49	0.49	0.49	0.49	0.49	0.49	0.44	0.44	0.44	0.44	0.44	0.44
Volume/Cap:	0.54	0.54	0.14	0.22	0.22	0.22	0.32	0.32	0.32	0.54	0.54	0.54
Delay/Veh:	11.3	11.3	8.5	8.9	8.9	8.9	11.1	11.1	11.1	13.1	13.1	13.1
User DelAdj:	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:	11.3	11.3	8.5	8.9	8.9	8.9	11.1	11.1	11.1	13.1	13.1	13.1
HCM2kAvg:	8	7	1	2	2	2	3	3	4	7	7	7

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F16

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions
PM Peak Hour

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

****
Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	0.759
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	18.5
Optimal Cycle:	0	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	27	106	41	21	55	31	15	150	13	12	137	40
Added Vol:	0	76	0	41	52	35	36	110	0	0	202	51
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	182	41	62	107	66	51	260	13	12	339	91
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:	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 Volume:	27	182	41	62	107	66	51	260	13	12	339	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	182	41	62	107	66	51	260	13	12	339	91
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 Vol.:	27	182	41	62	107	66	51	260	13	12	339	91
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:	0.11	0.73	0.16	0.26	0.46	0.28	0.16	0.80	0.04	0.03	0.77	0.20
Final Sat.:	53	357	81	128	222	137	85	428	21	15	446	120
Capacity Analysis Module:												
Vol/Sat:	0.51	0.51	0.51	0.48	0.48	0.48	0.61	0.61	0.61	0.76	0.76	0.76
Crit Moves:		****			****			****			****	
Delay/Veh:	15.0	15.0	15.0	14.5	14.5	14.5	17.3	17.3	17.3	23.6	23.6	23.6
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:	15.0	15.0	15.0	14.5	14.5	14.5	17.3	17.3	17.3	23.6	23.6	23.6
LOS by Move:	C	C	C	B	B	B	C	C	C	C	C	C
ApproachDel:		15.0			14.5			17.3			23.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		15.0			14.5			17.3			23.6	
LOS by Appr:		C			B			C			C	

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) Without Project Conditions With Impovements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.414
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	27	106	41	21	55	31	15	150	13	12	137	40
Added Vol:	0	76	0	41	52	35	36	110	0	0	202	51
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	182	41	62	107	66	51	260	13	12	339	91
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:	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 Volume:	27	182	41	62	107	66	51	260	13	12	339	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	182	41	62	107	66	51	260	13	12	339	91
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 Vol.:	27	182	41	62	107	66	51	260	13	12	339	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.94	0.94	0.85	0.85	0.85	0.90	0.90	0.90	0.96	0.96	0.96
Lanes:	0.11	0.73	0.16	0.26	0.46	0.28	0.16	0.80	0.04	0.03	0.77	0.20
Final Sat.:	193	1292	293	425	741	455	271	1365	68	48	1405	377
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.14	0.14	0.14	0.19	0.19	0.19	0.24	0.24	0.24
Crit Moves:					****						****	
Green/Cycle:	0.35	0.35	0.35	0.35	0.35	0.35	0.58	0.58	0.58	0.58	0.58	0.58
Volume/Cap:	0.40	0.40	0.40	0.41	0.41	0.41	0.33	0.33	0.33	0.41	0.41	0.41
Delay/Veh:	15.2	15.2	15.2	15.3	15.3	15.3	6.6	6.6	6.6	7.1	7.1	7.1
User DelAdj:	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:	15.2	15.2	15.2	15.3	15.3	15.3	6.6	6.6	6.6	7.1	7.1	7.1
HCM2kAvg:	4	4	4	4	4	4	4	4	4	4	5	5

APPENDIX G

CUMULATIVE (2005) WITH PROJECT CONDITIONS INTERSECTION ANALYSIS

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
AM Peak Hour

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

****
Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	8	315	44	6	1140	1	1	1	13	66	9	6
Added Vol:	69	0	73	19	0	14	43	180	215	210	68	57
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	77	315	117	25	1140	15	44	181	228	276	77	63
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:	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 Volume:	77	315	117	25	1140	15	44	181	228	276	77	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	77	315	117	25	1140	15	44	181	228	276	77	63
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1156	xxxx	xxxxx	432	xxxx	xxxxx	1541	1776	570	1180	1675	157
Potent Cap.:	612	xxxx	xxxxx	1139	xxxx	xxxxx	80	83	470	148	96	866
Move Cap.:	612	xxxx	xxxxx	1139	xxxx	xxxxx	12	71	470	0	82	866
Volume/Cap:	0.13	xxxx	xxxx	0.02	xxxx	xxxx	3.73	2.54	0.49	xxxx	0.93	0.07
Level Of Service Module:												
Queue:	0.4	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	11.7	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	67	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	51.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2708	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			2708.3			xxxxxx		
ApproachLOS:	*			*			F			F		

G3

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

****

Cycle (sec):	0	Critical Vol./Cap. (X):	0.891
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	39.3
Optimal Cycle:	84	Level Of Service:	D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	8	315	44	6	1140	1	1	1	13	66	9	6
Added Vol:	69	0	73	19	0	14	43	180	215	210	68	57
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	77	315	117	25	1140	15	44	181	228	276	77	63
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:	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 Volume:	77	315	117	25	1140	15	44	181	228	276	77	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	315	117	25	1140	15	44	181	228	276	77	63
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 Vol.:	77	315	117	25	1140	15	44	181	228	276	77	63
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.87	0.87	0.87	0.47	0.47	0.47
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.10	0.40	0.50	0.66	0.19	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	162	662	832	588	164	135
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.07	0.01	0.32	0.01	0.27	0.27	0.27	0.47	0.47	0.47
Crit Moves:	****				****						****	
Green/Cycle:	0.12	0.22	0.22	0.22	0.33	0.33	0.48	0.48	0.48	0.48	0.48	0.48
Volume/Cap:	0.36	0.39	0.33	0.06	0.97	0.03	0.57	0.57	0.57	0.97	0.97	0.97
Delay/Veh:	35.1	28.1	27.9	25.8	47.2	19.3	16.4	16.4	16.4	56.6	56.6	56.6
User DelAdj:	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:	35.1	28.1	27.9	25.8	47.2	19.3	16.4	16.4	16.4	56.6	56.6	56.6
HCM2kAvg:	2	4	3	1	21	0	9	9	9	29	28	29

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
AM Peak Hour

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

****

Intersection #54 Worsley Rd. (NS) / Driveway 2 (EW)

****

Average Delay (sec/veh): 6.1 Worst Case Level Of Service: A[8.8]

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	1 0	0	0	1	0 0	0	0	0	0 0	1	0	0	0 0
Volume Module:																
Base Vol:	0	2	0		0	2	0		0	0	0		0	0	0	
Growth Adj:	1.29	1.29	1.29		1.29	1.29	1.29		1.29	1.29	1.29		1.29	1.29	1.29	
Initial Bse:	0	3	0		0	3	0		0	0	0		0	0	0	
Added Vol:	0	0	18		0	0	0		0	0	0		52	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	3	18		0	3	0		0	0	0		52	0	0	
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:	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 Volume:	0	3	18		0	3	0		0	0	0		52	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	3	18		0	3	0		0	0	0		52	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		6.4	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		3.5	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		14	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		1010	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		1010	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		0.05	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.2	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.8	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		A	*	*	
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				8.8			
ApproachLOS:	*				*				*				A			

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
AM Peak Hour

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

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[11.3]

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 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	4	0	2	0	0	39	0	1	64	2
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	1	0	5	0	3	0	0	50	0	1	83	3
Added Vol:	0	0	0	0	0	52	18	255	0	0	284	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	5	0	3	52	18	305	0	1	367	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:	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 Volume:	1	0	5	0	3	52	18	305	0	1	367	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	5	0	3	52	18	305	0	1	367	3
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	xxxxx	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	739	xxxx	305	xxxx	712	368	369	xxxx	xxxxx	305	xxxx	xxxxx
Potent Cap.:	336	xxxx	739	xxxx	360	682	1201	xxxx	xxxxx	1267	xxxx	xxxxx
Move Cap.:	305	xxxx	739	xxxx	354	682	1201	xxxx	xxxxx	1267	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.01	xxxx	0.01	0.08	0.01	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	7.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	575	xxxxx	xxxx	xxxx	654	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	0.3	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	11.3	xxxxx	xxxxx	xxxx	11.0	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	B	A	*	*	*	*	*
ApproachDel:		11.3			11.0		xxxxxx			xxxxxx		
ApproachLOS:		B			B			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
AM Peak Hour

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

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 6.3 Worst Case Level Of Service: C[19.2]

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 0 0			0 0 1! 0 0			1 0 1 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	43	0	0	64	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	0	0	0	0	0	0	0	55	0	0	83	0
Added Vol:	0	0	0	167	0	112	38	217	0	0	172	57
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	167	0	112	38	272	0	0	255	57
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:	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 Volume:	0	0	0	167	0	112	38	272	0	0	255	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	167	0	112	38	272	0	0	255	57
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	632	xxxx	283	312	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	448	xxxx	761	1260	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	438	xxxx	761	1260	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.38	xxxx	0.15	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	528	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	3.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	19.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	xxxxxx				19.2		xxxxxx			xxxxxx		
ApproachLOS:	*				C			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.351
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 60 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	0	10	10	10	0	0	10	10
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	43	0	0	64	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	0	0	0	0	0	0	0	55	0	0	83	0
Added Vol:	0	0	0	167	0	112	38	217	0	0	172	57
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	167	0	112	38	272	0	0	255	57
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:	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 Volume:	0	0	0	167	0	112	38	272	0	0	255	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	167	0	112	38	272	0	0	255	57
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 Vol.:	0	0	0	167	0	112	38	272	0	0	255	57
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.92	0.75	1.00	1.00	1.00	0.98	0.98
Lanes:	0.00	0.00	0.00	0.60	0.00	0.40	1.00	1.00	0.00	0.00	0.82	0.18
Final Sat.:	0	0	0	1045	0	701	1423	1900	0	0	1514	339
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.16	0.03	0.14	0.00	0.00	0.17	0.17
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.45	0.00	0.45	0.48	0.48	0.00	0.00	0.48	0.48
Volume/Cap:	0.00	0.00	0.00	0.35	0.00	0.35	0.06	0.30	0.00	0.00	0.35	0.35
Delay/Veh:	0.0	0.0	0.0	10.9	0.0	10.9	8.4	9.7	0.0	0.0	10.1	10.1
User DelAdj:	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:	0.0	0.0	0.0	10.9	0.0	10.9	8.4	9.7	0.0	0.0	10.1	10.1
HCM2kAvg:	0	0	0	4	0	4	1	3	0	0	4	4

****

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
AM Peak Hour

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

Intersection #58 Karen Ave. (NS) / Driveway 5 (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	0	0 0	0	0	1!	0 0	0	0	0	0 1	0	0	0	0 0
Volume Module:																
Base Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Growth Adj:	1.29	1.29		1.29	1.29	1.29		1.29	1.29	1.29		1.29	1.29	1.29		1.29
Initial Bse:	0		0	0	0		0	0	0		0	0	0		0	0
Added Vol:	78		0	0	0		0	0	0		0	230	0		0	0
PasserByVol:	0		0	0	0		0	0	0		0	0	0		0	0
Initial Fut:	78		0	0	0		0	0	0		0	230	0		0	0
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:	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 Volume:	78		0	0	0		0	0	0		0	230	0		0	0
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Final Vol.:	78		0	0	0		0	0	0		0	230	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx				6.2	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx				3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx				0	xxxx	xxxx	xxxxx	
Potent Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx				0	xxxx	xxxx	xxxxx	
Move Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx				0	xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx				0.00	xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx				0.0	xxxxx	xxxx	xxxxx	
Stopped Del:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx				0.0	xxxxx	xxxx	xxxxx	
LOS by Move:	A	*	*	*	*	*	*	*				A	*	*	*	
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				0.0				xxxxxx			
ApproachLOS:	*				*				A				*			

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
AM Peak Hour

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

****

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

****

Average Delay (sec/veh): 5.8 Worst Case Level Of Service: C[22.5]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	1	0	1	1	0	1	0	55	0	1	85	0
Added Vol:	0	0	0	142	0	89	30	354	0	0	140	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	1	143	0	90	30	409	0	1	225	48
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:	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 Volume:	1	0	1	143	0	90	30	409	0	1	225	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	1	143	0	90	30	409	0	1	225	48
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	766	xxxx	409	722	xxxx	249	273	xxxx	xxxxx	409	xxxx	xxxxx
Potent Cap.:	322	xxxx	646	345	xxxx	794	1302	xxxx	xxxxx	1160	xxxx	xxxxx
Move Cap.:	280	xxxx	646	338	xxxx	794	1302	xxxx	xxxxx	1160	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	0.42	xxxx	0.11	0.02	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	391	xxxxx	xxxx	434	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	3.1	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	14.3	xxxxx	xxxxx	22.5	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	C	*	A	*	*	*	*	*
ApproachDel:		14.3			22.5		xxxxxx			xxxxxx		
ApproachLOS:		B			C			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.415
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	13.2
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	1	0	1	1	0	1	0	55	0	1	85	0
Added Vol:	0	0	0	142	0	89	30	354	0	0	140	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	1	143	0	90	30	409	0	1	225	48
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:	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 Volume:	1	0	1	143	0	90	30	409	0	1	225	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	1	143	0	90	30	409	0	1	225	48
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 Vol.:	1	0	1	143	0	90	30	409	0	1	225	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	0.92	1.00	0.92	0.97	0.97	1.00	0.98	0.98	0.98
Lanes:	0.50	0.00	0.50	0.61	0.00	0.39	0.07	0.93	0.00	0.01	0.82	0.17
Final Sat.:	865	0	865	1072	0	675	126	1719	0	9	1520	324
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.13	0.24	0.24	0.00	0.15	0.15	0.15
Crit Moves:	****			****				****				
Green/Cycle:	0.17	0.00	0.17	0.26	0.00	0.26	0.47	0.47	0.00	0.47	0.47	0.47
Volume/Cap:	0.01	0.00	0.01	0.51	0.00	0.51	0.51	0.51	0.00	0.32	0.32	0.32
Delay/Veh:	20.9	0.0	20.9	19.7	0.0	19.7	11.6	11.6	0.0	10.1	10.1	10.1
User DelAdj:	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:	20.9	0.0	20.9	19.7	0.0	19.7	11.6	11.6	0.0	10.1	10.1	10.1
HCM2kAvg:	0	0	0	4	0	4	6	6	0	2	3	3

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
AM Peak Hour

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

****

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 1.139
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 59.4
Optimal Cycle: 0 Level Of Service: F

****

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	10	138	55	40	299	21	6	66	18	74	54	30
Added Vol:	29	6	6	8	19	31	37	374	84	6	128	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	144	61	48	318	52	43	440	102	80	182	33
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:	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 Volume:	39	144	61	48	318	52	43	440	102	80	182	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	144	61	48	318	52	43	440	102	80	182	33
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 Vol.:	39	144	61	48	318	52	43	440	102	80	182	33
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:	0.21	0.79	1.00	0.11	0.77	0.12	0.07	0.76	0.17	0.27	0.62	0.11
Final Sat.:	87	318	445	55	366	59	38	386	90	122	280	50
Capacity Analysis Module:												
Vol/Sat:	0.45	0.45	0.14	0.87	0.87	0.87	1.14	1.14	1.14	0.65	0.65	0.65
Crit Moves:	****					****		****		****		
Delay/Veh:	17.5	17.5	11.5	41.2	41.2	41.2	109.0	109	109.0	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:	17.5	17.5	11.5	41.2	41.2	41.2	109.0	109	109.0	22.8	22.8	22.8
LOS by Move:	C	C	B	E	E	E	F	F	F	C	C	C
ApproachDel:	16.0			41.2			109.0			22.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	16.0			41.2			109.0			22.8		
LOS by Appr:	C			E			F			C		

****

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.603
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	11.8
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted	Include		Permitted	Include		Permitted	Include		Permitted	Include	
Rights:												
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	10	138	55	40	299	21	6	66	18	74	54	30
Added Vol:	29	6	6	8	19	31	37	374	84	6	128	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	144	61	48	318	52	43	440	102	80	182	33
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:	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 Volume:	39	144	61	48	318	52	43	440	102	80	182	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	144	61	48	318	52	43	440	102	80	182	33
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 Vol.:	39	144	61	48	318	52	43	440	102	80	182	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	0.85	0.93	0.93	0.93	0.94	0.94	0.94	0.79	0.79	0.79
Lanes:	0.21	0.79	1.00	0.11	0.77	0.12	0.07	0.76	0.17	0.27	0.62	0.11
Final Sat.:	365	1339	1615	204	1353	219	133	1343	312	407	932	167
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.04	0.24	0.24	0.24	0.33	0.33	0.33	0.20	0.20	0.20
Crit Moves:					****			****				
Green/Cycle:	0.39	0.39	0.39	0.39	0.39	0.39	0.54	0.54	0.54	0.54	0.54	0.54
Volume/Cap:	0.28	0.28	0.10	0.60	0.60	0.60	0.60	0.60	0.60	0.36	0.36	0.36
Delay/Veh:	12.7	12.7	11.7	16.1	16.1	16.1	10.4	10.4	10.4	8.1	8.1	8.1
User DelAdj:	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:	12.7	12.7	11.7	16.1	16.1	16.1	10.4	10.4	10.4	8.1	8.1	8.1
HCM2kAvg:	3	3	1	8	7	7	9	8	9	4	4	4

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
AM Peak Hour

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

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.824
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	19.4
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	9	37	30	13	85	14	0	137	27	25	119	13
Added Vol:	19	24	0	30	54	22	39	293	56	0	96	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	61	30	43	139	36	39	430	83	25	215	29
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:	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 Volume:	28	61	30	43	139	36	39	430	83	25	215	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	61	30	43	139	36	39	430	83	25	215	29
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 Vol.:	28	61	30	43	139	36	39	430	83	25	215	29
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:	0.23	0.52	0.25	0.20	0.64	0.16	0.07	0.78	0.15	0.09	0.80	0.11
Final Sat.:	118	259	125	105	340	88	47	521	101	54	473	64
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.24	0.41	0.41	0.41	0.82	0.82	0.82	0.45	0.45	0.45
Crit Moves:		****			****			****			****	
Delay/Veh:	11.1	11.1	11.1	12.8	12.8	12.8	26.9	26.9	26.9	12.9	12.9	12.9
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:	11.1	11.1	11.1	12.8	12.8	12.8	26.9	26.9	26.9	12.9	12.9	12.9
LOS by Move:	B	B	B	B	B	B	D	D	D	B	B	B
ApproachDel:		11.1			12.8			26.9			12.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.1			12.8			26.9			12.9	
LOS by Appr:		B			B			D			B	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.463
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 8.8
Optimal Cycle: 60 Level Of Service: A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	9	37	30	13	85	14	0	137	27	25	119	13
Added Vol:	19	24	0	30	54	22	39	293	56	0	96	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	61	30	43	139	36	39	430	83	25	215	29
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:	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 Volume:	28	61	30	43	139	36	39	430	83	25	215	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	61	30	43	139	36	39	430	83	25	215	29
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 Vol.:	28	61	30	43	139	36	39	430	83	25	215	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	0.89	0.89	0.91	0.91	0.91	0.95	0.95	0.95	0.93	0.93	0.93
Lanes:	0.23	0.52	0.25	0.20	0.64	0.16	0.07	0.78	0.15	0.09	0.80	0.11
Final Sat.:	397	870	420	340	1102	287	128	1405	272	162	1419	191
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.13	0.13	0.13	0.31	0.31	0.31	0.15	0.15	0.15
Crit Moves:					****			****				
Green/Cycle:	0.27	0.27	0.27	0.27	0.27	0.27	0.66	0.66	0.66	0.66	0.66	0.66
Volume/Cap:	0.26	0.26	0.26	0.46	0.46	0.46	0.46	0.46	0.46	0.23	0.23	0.23
Delay/Veh:	17.4	17.4	17.4	18.9	18.9	18.9	5.3	5.3	5.3	4.2	4.2	4.2
User DelAdj:	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:	17.4	17.4	17.4	18.9	18.9	18.9	5.3	5.3	5.3	4.2	4.2	4.2
HCM2kAvg:	2	2	2	4	4	4	6	5	6	2	2	2

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
PM Peak Hour

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

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	4	970	43	10	539	0	3	4	1	39	6	10
Added Vol:	240	0	245	66	0	48	26	130	131	135	214	37
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	244	970	288	76	539	48	29	134	132	174	220	47
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:	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 Volume:	244	970	288	76	539	48	29	134	132	174	220	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	244	970	288	76	539	48	29	134	132	174	220	47
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	587	xxxx	xxxxx	1258	xxxx	xxxxx	1775	2437	270	1947	2198	485
Potent Cap.:	998	xxxx	xxxxx	560	xxxx	xxxxx	54	32	734	40	46	533
Move Cap.:	998	xxxx	xxxxx	560	xxxx	xxxxx	0	21	734	0	30	533
Volume/Cap:	0.24	xxxx	xxxx	0.14	xxxx	xxxx	xxxx	6.40	0.18	xxxx	7.42	0.09
Level Of Service Module:												
Queue:	1.0	xxxx	xxxxx	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	9.8	xxxx	xxxxx	12.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.702
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	20.7
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	4	970	43	10	539	0	3	4	1	39	6	10
Added Vol:	240	0	245	66	0	48	26	130	131	135	214	37
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	244	970	288	76	539	48	29	134	132	174	220	47
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:	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 Volume:	244	970	288	76	539	48	29	134	132	174	220	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	244	970	288	76	539	48	29	134	132	174	220	47
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 Vol.:	244	970	288	76	539	48	29	134	132	174	220	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.89	0.89	0.89	0.72	0.72	0.72
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.10	0.45	0.45	0.39	0.50	0.11
Final Sat.:	1805	3610	1615	1805	3610	1615	163	766	757	542	688	148
Capacity Analysis Module:												
Vol/Sat:	0.14	0.27	0.18	0.04	0.15	0.03	0.17	0.17	0.17	0.32	0.32	0.32
Crit Moves:		****		****							****	
Green/Cycle:	0.25	0.33	0.33	0.17	0.25	0.25	0.40	0.40	0.40	0.40	0.40	0.40
Volume/Cap:	0.54	0.80	0.53	0.25	0.60	0.12	0.44	0.44	0.44	0.80	0.80	0.80
Delay/Veh:	20.8	22.2	17.2	22.2	20.9	17.5	13.6	13.6	13.6	24.4	24.4	24.4
User DelAdj:	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:	20.8	22.2	17.2	22.2	20.9	17.5	13.6	13.6	13.6	24.4	24.4	24.4
HCM2kAvg:	5	11	5	2	5	1	4	5	5	12	12	12

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
PM Peak Hour

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

Intersection #54 Worsley Rd. (NS) / Driveway 2 (EW)

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 0 1 0 0			0 0 0 0 0			1 0 0 0 0		
Volume Module:												
Base Vol:	0	7	0	0	2	0	0	0	0	0	0	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	0	9	0	0	3	0	0	0	0	0	0	0
Added Vol:	0	0	60	0	0	0	0	0	0	33	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	9	60	0	3	0	0	0	0	33	0	0
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:	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 Volume:	0	9	60	0	3	0	0	0	0	33	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	9	60	0	3	0	0	0	0	33	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	42	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	975	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	975	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.8		
ApproachLOS:	*			*			*			A		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
PM Peak Hour

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

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[19.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 1 0 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	2	7	2	1	1	0	0	55	1	1	42	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	3	9	3	1	1	0	0	71	1	1	54	0
Added Vol:	0	0	0	0	0	33	60	381	0	0	353	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	9	3	1	1	33	60	452	1	1	407	0
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:	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 Volume:	3	9	3	1	1	33	60	452	1	1	407	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	9	3	1	1	33	60	452	1	1	407	0
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	999	982	452	988	983	407	407	xxxx	xxxxx	453	xxxx	xxxxx
Potent Cap.:	224	251	612	228	251	648	1163	xxxx	xxxxx	1118	xxxx	xxxxx
Move Cap.:	203	237	612	211	237	648	1163	xxxx	xxxxx	1118	xxxx	xxxxx
Volume/Cap:	0.01	0.04	0.00	0.01	0.01	0.05	0.05	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	258	xxxxx	xxxx	570	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.2	xxxxx	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	19.7	xxxxx	xxxxx	11.7	xxxxx	8.3	xxxx	xxxxx	8.2	xxxx	xxxxx
Shared LOS:	*	C	*	*	B	*	A	*	*	A	*	*
ApproachDel:		19.7			11.7		xxxxxx			xxxxxx		
ApproachLOS:		C			B			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
PM Peak Hour

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

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 5.6 Worst Case Level Of Service: D[29.7]

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 0 0			0 0 1! 0 0			1 0 1 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	58	0	0	43	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	0	0	0	0	0	0	0	75	0	0	55	0
Added Vol:	0	0	0	107	0	72	130	250	0	0	280	194
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	107	0	72	130	325	0	0	335	194
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:	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 Volume:	0	0	0	107	0	72	130	325	0	0	335	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	107	0	72	130	325	0	0	335	194
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1017	xxxx	432	529	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	265	xxxx	627	1048	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	240	xxxx	627	1048	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.45	xxxx	0.11	0.12	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	320	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	3.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	29.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	D	*	*	*	*	*	*	*
ApproachDel:	xxxxxx				29.7		xxxxxx			xxxxxx		
ApproachLOS:	*				D			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.424
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	6.4
Optimal Cycle:	60	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	0	10	10	10	0	0	10	10
Lanes:	0 0	0 0	0 0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	58	0	0	43	0
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	0	0	0	0	0	0	0	75	0	0	55	0
Added Vol:	0	0	0	107	0	72	130	250	0	0	280	194
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	107	0	72	130	325	0	0	335	194
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:	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 Volume:	0	0	0	107	0	72	130	325	0	0	335	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	107	0	72	130	325	0	0	335	194
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 Vol.:	0	0	0	107	0	72	130	325	0	0	335	194
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.92	0.55	1.00	1.00	1.00	0.95	0.95
Lanes:	0.00	0.00	0.00	0.60	0.00	0.40	1.00	1.00	0.00	0.00	0.63	0.37
Final Sat.:	0	0	0	1043	0	702	1039	1900	0	0	1145	662
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.10	0.13	0.17	0.00	0.00	0.29	0.29
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.24	0.00	0.24	0.69	0.69	0.00	0.00	0.69	0.69
Volume/Cap:	0.00	0.00	0.00	0.42	0.00	0.42	0.18	0.25	0.00	0.00	0.42	0.42
Delay/Veh:	0.0	0.0	0.0	19.9	0.0	19.9	3.4	3.5	0.0	0.0	4.3	4.3
User DelAdj:	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:	0.0	0.0	0.0	19.9	0.0	19.9	3.4	3.5	0.0	0.0	4.3	4.3
HCM2kAvg:	0	0	0	3	0	3	2	2	0	0	5	5

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
PM Peak Hour

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

****
Intersection #58 Karen Ave. (NS) / Driveway 5 (EW)
****
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	0	0	0	1!	0	0	0	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Growth Adj:	1.29		1.29		1.29	1.29		1.29		1.29	1.29		1.29		1.29	1.29		1.29		1.29
Initial Bse:	0		0		0	0		0		0	0		0		0	0		0		0
Added Vol:	267		0		0	0		0		0	0		0		148	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	267		0		0	0		0		0	0		0		148	0		0		0
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:	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 Volume:	267		0		0	0		0		0	0		0		148	0		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	267		0		0	0		0		0	0		0		148	0		0		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			6.2	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx			0	xxxx	xxxx	xxxxx						
Potent Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx			0	xxxx	xxxx	xxxxx						
Move Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx			0	xxxx	xxxx	xxxxx						
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx			0.00	xxxx	xxxx	xxxx						
Level Of Service Module:																				
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			0.0	xxxxx	xxxx	xxxxx						
Stopped Del:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			0.0	xxxxx	xxxx	xxxxx						
LOS by Move:	A	*	*	*	*	*	*	*			A	*	*	*						
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	*			*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx				0.0				xxxxxx								
ApproachLOS:	*			*				A				*								

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
PM Peak Hour

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

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 4.6 Worst Case Level Of Service: D[31.4]

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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	0	0	0	0	0	0	1	67	1	4	58	1
Added Vol:	0	0	0	91	0	57	103	255	0	0	418	164
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	91	0	57	104	322	1	4	476	165
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:	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 Volume:	0	0	0	91	0	57	104	322	1	4	476	165
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	91	0	57	104	322	1	4	476	165
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1098	xxxx	559	641	xxxx	xxxxx	323	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	238	xxxx	533	953	xxxx	xxxxx	1248	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	216	xxxx	533	953	xxxx	xxxxx	1248	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.42	xxxx	0.11	0.11	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	280	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	2.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	31.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	D	*	*	*	*	*	*	*
ApproachDel:	xxxxxx				31.4		xxxxxx			xxxxxx		
ApproachLOS:	*				D			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.486
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 6.0
Optimal Cycle: 60 Level Of Service: A

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-		R	L	-	T	-		R	L	-	T	-		R	L	-	T	-		R
Control:	Split Phase						Split Phase						Permitted						Permitted					
Rights:	Include						Include						Include						Include					
Min. Green:	10		10			10	10		10			10	10		10			10	10		10			10
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		0			0	0		0			0	1		52			1	3		45			1
Growth Adj:	1.29		1.29			1.29	1.29		1.29			1.29	1.29		1.29			1.29	1.29		1.29			1.29
Initial Bse:	0		0			0	0		0			0	1		67			1	4		58			1
Added Vol:	0		0			0	91		0			57	103		255			0	0		418			164
PasserByVol:	0		0			0	0		0			0	0		0			0	0		0			0
Initial Fut:	0		0			0	91		0			57	104		322			1	4		476			165
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:	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 Volume:	0		0			0	91		0			57	104		322			1	4		476			165
Reduct Vol:	0		0			0	0		0			0	0		0			0	0		0			0
Reduced Vol:	0		0			0	91		0			57	104		322			1	4		476			165
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 Vol.:	0		0			0	91		0			57	104		322			1	4		476			165
Saturation Flow Module:																								
Sat/Lane:	1900		1900			1900	1900		1900			1900	1900		1900			1900	1900		1900			1900
Adjustment:	1.00		1.00			1.00	0.92		1.00			0.92	0.78		0.78			0.78	0.96		0.96			0.96
Lanes:	0.00		1.00			0.00	0.61		0.00			0.39	0.24		0.75			0.01	0.01		0.74			0.25
Final Sat.:	0		1900			0	1074		0			673	360		1113			4	11		1350			469
Capacity Analysis Module:																								
Vol/Sat:	0.00		0.00			0.00	0.08		0.00			0.08	0.29		0.29			0.29	0.35		0.35			0.35
Crit Moves:							****														****			
Green/Cycle:	0.00		0.00			0.00	0.17		0.00			0.17	0.73		0.73			0.73	0.73		0.73			0.73
Volume/Cap:	0.00		0.00			0.00	0.49		0.00			0.49	0.40		0.40			0.40	0.49		0.49			0.49
Delay/Veh:	0.0		0.0			0.0	23.6		0.0			23.6	3.4		3.4			3.4	3.8		3.8			3.8
User DelAdj:	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:	0.0		0.0			0.0	23.6		0.0			23.6	3.4		3.4			3.4	3.8		3.8			3.8
HCM2kAvg:	0		0			0	3		0			3	4		4			2	4		5			6

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
PM Peak Hour

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

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	1.420
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	155.1
Optimal Cycle:	0	Level Of Service:	F

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	12	470	97	23	120	12	25	59	3	48	67	59
Added Vol:	98	22	18	5	12	46	43	249	54	18	438	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	492	115	28	132	58	68	308	57	66	505	69
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:	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 Volume:	110	492	115	28	132	58	68	308	57	66	505	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	492	115	28	132	58	68	308	57	66	505	69
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 Vol.:	110	492	115	28	132	58	68	308	57	66	505	69
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:	0.18	0.82	1.00	0.13	0.61	0.26	0.16	0.71	0.13	0.10	0.79	0.11
Final Sat.:	77	347	468	51	240	105	70	319	58	46	356	49
Capacity Analysis Module:												
Vol/Sat:	1.42	1.42	0.24	0.55	0.55	0.55	0.97	0.97	0.97	1.42	1.42	1.42
Crit Moves:		****				****		****				****
Delay/Veh:	223.5	223	12.9	22.3	22.3	22.3	63.0	63.0	63.0	223.8	224	223.8
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:	223.5	223	12.9	22.3	22.3	22.3	63.0	63.0	63.0	223.8	224	223.8
LOS by Move:	F	F	B	C	C	C	F	F	F	F	F	F
ApproachDel:	189.7			22.3			63.0			223.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	189.7			22.3			63.0			223.8		
LOS by Appr:	F			C			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.770
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 15.4
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	10	10		10	10	10		10	10	10		10	10	10	
Lanes:	0	1 0	0	1	0	0 1!	0	0	0	0 1!	0	0	0	0 1!	0	0
Volume Module:																
Base Vol:	9	364	75		18	93	9		19	46	2		37	52	46	
Growth Adj:	1.29	1.29	1.29		1.29	1.29	1.29		1.29	1.29	1.29		1.29	1.29	1.29	
Initial Bse:	12	470	97		23	120	12		25	59	3		48	67	59	
Added Vol:	98	22	18		5	12	46		43	249	54		18	438	10	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	110	492	115		28	132	58		68	308	57		66	505	69	
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:	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 Volume:	110	492	115		28	132	58		68	308	57		66	505	69	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	110	492	115		28	132	58		68	308	57		66	505	69	
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 Vol.:	110	492	115		28	132	58		68	308	57		66	505	69	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.90	0.90	0.85		0.83	0.83	0.83		0.85	0.85	0.85		0.91	0.91	0.91	
Lanes:	0.18	0.82	1.00		0.13	0.61	0.26		0.16	0.71	0.13		0.10	0.79	0.11	
Final Sat.:	313	1404	1615		205	959	419		253	1153	212		178	1369	188	
Capacity Analysis Module:																
Vol/Sat:	0.35	0.35	0.07		0.14	0.14	0.14		0.27	0.27	0.27		0.37	0.37	0.37	
Crit Moves:		****												****		
Green/Cycle:	0.45	0.45	0.45		0.45	0.45	0.45		0.48	0.48	0.48		0.48	0.48	0.48	
Volume/Cap:	0.77	0.77	0.16		0.30	0.30	0.30		0.56	0.56	0.56		0.77	0.77	0.77	
Delay/Veh:	18.5	18.5	9.7		10.6	10.6	10.6		12.0	12.0	12.0		17.4	17.4	17.4	
User DelAdj:	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:	18.5	18.5	9.7		10.6	10.6	10.6		12.0	12.0	12.0		17.4	17.4	17.4	
HCM2kAvg:	12	12	1		3	3	3		7	7	7		13	12	12	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions
PM Peak Hour

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

****

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 1.176
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 69.2
Optimal Cycle: 0 Level Of Service: F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	27	106	41	21	55	31	15	150	13	12	137	40
Added Vol:	65	76	0	41	52	68	54	182	36	0	332	51
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	182	41	62	107	99	69	332	49	12	469	91
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:	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 Volume:	92	182	41	62	107	99	69	332	49	12	469	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	182	41	62	107	99	69	332	49	12	469	91
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 Vol.:	92	182	41	62	107	99	69	332	49	12	469	91
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:	0.29	0.58	0.13	0.23	0.40	0.37	0.15	0.74	0.11	0.02	0.82	0.16
Final Sat.:	126	249	57	98	170	157	73	349	51	10	399	77
Capacity Analysis Module:												
Vol/Sat:	0.73	0.73	0.73	0.63	0.63	0.63	0.95	0.95	0.95	1.18	1.18	1.18
Crit Moves:		****			****			****			****	
Delay/Veh:	28.6	28.6	28.6	23.1	23.1	23.1	55.9	55.9	55.9	123.7	124	123.7
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:	28.6	28.6	28.6	23.1	23.1	23.1	55.9	55.9	55.9	123.7	124	123.7
LOS by Move:	D	D	D	C	C	C	F	F	F	F	F	F
ApproachDel:		28.6			23.1			55.9			123.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		28.6			23.1			55.9			123.7	
LOS by Appr:		D			C			F			F	

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2005) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.544
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 11.1
Optimal Cycle: 60 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Initial Bse:	27	106	41	21	55	31	15	150	13	12	137	40
Added Vol:	65	76	0	41	52	68	54	182	36	0	332	51
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	182	41	62	107	99	69	332	49	12	469	91
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:	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 Volume:	92	182	41	62	107	99	69	332	49	12	469	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	182	41	62	107	99	69	332	49	12	469	91
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 Vol.:	92	182	41	62	107	99	69	332	49	12	469	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.84	0.84	0.84	0.84	0.84	0.84	0.86	0.86	0.86	0.97	0.97	0.97
Lanes:	0.29	0.58	0.13	0.23	0.40	0.37	0.15	0.74	0.11	0.02	0.82	0.16
Final Sat.:	466	920	209	369	644	593	253	1206	178	37	1513	294
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.20	0.17	0.17	0.17	0.28	0.28	0.28	0.31	0.31	0.31
Crit Moves:		****									****	
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.57	0.57	0.57	0.57	0.57	0.57
Volume/Cap:	0.54	0.54	0.54	0.46	0.46	0.46	0.48	0.48	0.48	0.54	0.54	0.54
Delay/Veh:	16.2	16.2	16.2	15.2	15.2	15.2	8.1	8.1	8.1	8.6	8.6	8.6
User DelAdj:	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:	16.2	16.2	16.2	15.2	15.2	15.2	8.1	8.1	8.1	8.6	8.6	8.6
HCM2kAvg:	6	6	6	5	5	5	6	6	6	7	7	7

****

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APPENDIX H

CUMULATIVE (2006) WITHOUT PROJECT CONDITIONS INTERSECTION ANALYSIS

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions
AM Peak Hour

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

****
Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	8	334	47	7	1211	1	1	1	14	70	10	7
Added Vol:	104	0	10	1	0	21	65	270	323	21	103	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	112	334	57	8	1211	22	66	271	337	91	113	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:	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 Volume:	112	334	57	8	1211	22	66	271	337	91	113	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	112	334	57	8	1211	22	66	271	337	91	113	8
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1233	xxxx	xxxxx	391	xxxx	xxxxx	1675	1842	606	1316	1808	167
Potent Cap.:	572	xxxx	xxxxx	1179	xxxx	xxxxx	64	76	445	118	80	854
Move Cap.:	572	xxxx	xxxxx	1179	xxxx	xxxxx	0	61	445	0	64	854
Volume/Cap:	0.20	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	4.47	0.76	xxxx	1.77	0.01
Level Of Service Module:												
Queue:	0.7	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	12.8	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

H3

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.871
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	33.8
Optimal Cycle:	71	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	8	334	47	7	1211	1	1	1	14	70	10	7
Added Vol:	104	0	10	1	0	21	65	270	323	21	103	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	112	334	57	8	1211	22	66	271	337	91	113	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:	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 Volume:	112	334	57	8	1211	22	66	271	337	91	113	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	334	57	8	1211	22	66	271	337	91	113	8
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 Vol.:	112	334	57	8	1211	22	66	271	337	91	113	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.89	0.89	0.89	0.58	0.58	0.58
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.10	0.40	0.50	0.43	0.53	0.04
Final Sat.:	1805	3610	1615	1805	3610	1615	166	679	843	477	591	41
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.04	0.00	0.34	0.01	0.40	0.40	0.40	0.19	0.19	0.19
Crit Moves:	****				****			****				
Green/Cycle:	0.14	0.25	0.25	0.25	0.35	0.35	0.42	0.42	0.42	0.42	0.42	0.42
Volume/Cap:	0.44	0.37	0.14	0.02	0.95	0.04	0.95	0.95	0.95	0.45	0.45	0.45
Delay/Veh:	29.2	22.4	21.0	20.2	37.0	15.1	41.9	41.9	41.9	15.4	15.4	15.4
User DelAdj:	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:	29.2	22.4	21.0	20.2	37.0	15.1	41.9	41.9	41.9	15.4	15.4	15.4
HCM2kAvg:	3	3	1	0	19	0	21	21	21	6	6	6

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions
AM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[13.1]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1!	0	0
Volume Module:																				
Base Vol:	1	0	4	0	2	0	0	39	0	1	64	2								
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37								
Initial Bse:	1	0	5	0	3	0	0	53	0	1	88	3								
Added Vol:	0	0	0	0	0	0	0	280	0	0	125	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	1	0	5	0	3	0	0	333	0	1	213	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:	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 Volume:	1	0	5	0	3	0	0	333	0	1	213	3								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	1	0	5	0	3	0	0	333	0	1	213	3								
Critical Gap Module:																				
Critical Gp:	7.1	xxxx	6.2	xxxxx	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	xxxx	3.3	xxxxx	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	552	xxxx	333	xxxx	550	xxxxx	xxxx	xxxx	xxxxx	333	xxxx	xxxxx								
Potent Cap.:	448	xxxx	713	xxxx	445	xxxxx	xxxx	xxxx	xxxxx	1237	xxxx	xxxxx								
Move Cap.:	445	xxxx	713	xxxx	445	xxxxx	xxxx	xxxx	xxxxx	1237	xxxx	xxxxx								
Volume/Cap:	0.00	xxxx	0.01	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx								

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	13.1	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	B	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	636	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	10.7	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	A	*	*	*	*	*
ApproachDel:		10.7			13.1			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

H5

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions
AM Peak Hour

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

Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.6]

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 1	0 0	0
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	1	0	1	1	0	1	0	59	0	1	90	0
Added Vol:	0	0	0	0	0	0	0	280	0	0	125	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	1	1	0	1	0	339	0	1	215	0
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:	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 Volume:	1	0	1	1	0	1	0	339	0	1	215	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	1	1	0	1	0	339	0	1	215	0
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	558	xxxx	339	558	xxxx	215	xxxx	xxxx	xxxxx	339	xxxx	xxxxx
Potent Cap.:	444	xxxx	708	444	xxxx	830	xxxx	xxxx	xxxxx	1232	xxxx	xxxxx
Move Cap.:	442	xxxx	708	442	xxxx	830	xxxx	xxxx	xxxxx	1232	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	0.00	xxxx	0.00	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	545	xxxxx	xxxx	577	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	11.6	xxxxx	xxxxx	11.3	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	*	*	*	A	*	*
ApproachDel:		11.6			11.3			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

H6

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions
AM Peak Hour

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

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.853
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	24.5
Optimal Cycle:	0	Level Of Service:	C

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 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	11	147	59	42	318	22	7	70	19	78	58	32
Added Vol:	0	9	8	12	28	32	13	267	0	9	93	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	156	67	54	346	54	20	337	19	87	151	36
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:	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 Volume:	11	156	67	54	346	54	20	337	19	87	151	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	156	67	54	346	54	20	337	19	87	151	36
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 Vol.:	11	156	67	54	346	54	20	337	19	87	151	36
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:	0.07	0.93	1.00	0.12	0.76	0.12	0.05	0.90	0.05	0.32	0.55	0.13
Final Sat.:	28	399	468	64	405	63	27	456	26	150	260	61
Capacity Analysis Module:												
Vol/Sat:	0.39	0.39	0.14	0.85	0.85	0.85	0.74	0.74	0.74	0.58	0.58	0.58
Crit Moves:		****				****		****		****		
Delay/Veh:	14.4	14.4	10.6	34.4	34.4	34.4	24.2	24.2	24.2	17.7	17.7	17.7
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:	14.4	14.4	10.6	34.4	34.4	34.4	24.2	24.2	24.2	17.7	17.7	17.7
LOS by Move:	B	B	B	D	D	D	C	C	C	C	C	C
ApproachDel:		13.3			34.4			24.2			17.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		13.3			34.4			24.2			17.7	
LOS by Appr:		B			D			C			C	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

****

Cycle (sec):	0	Critical Vol./Cap. (X):	0.491
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	11.1
Optimal Cycle:	60	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	11	147	59	42	318	22	7	70	19	78	58	32
Added Vol:	0	9	8	12	28	32	13	267	0	9	93	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	156	67	54	346	54	20	337	19	87	151	36
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:	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 Volume:	11	156	67	54	346	54	20	337	19	87	151	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	156	67	54	346	54	20	337	19	87	151	36
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 Vol.:	11	156	67	54	346	54	20	337	19	87	151	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.97	0.97	0.85	0.94	0.94	0.94	0.97	0.97	0.97	0.80	0.80	0.80
Lanes:	0.07	0.93	1.00	0.12	0.76	0.12	0.05	0.90	0.05	0.32	0.55	0.13
Final Sat.:	122	1727	1615	214	1357	212	98	1655	94	484	837	197
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.04	0.25	0.25	0.25	0.20	0.20	0.20	0.18	0.18	0.18
Crit Moves:					****			****				
Green/Cycle:	0.52	0.52	0.52	0.52	0.52	0.52	0.41	0.41	0.41	0.41	0.41	0.41
Volume/Cap:	0.17	0.17	0.08	0.49	0.49	0.49	0.49	0.49	0.49	0.43	0.43	0.43
Delay/Veh:	7.7	7.7	7.3	9.7	9.7	9.7	13.4	13.4	13.4	13.0	13.0	13.0
User DelAdj:	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:	7.7	7.7	7.3	9.7	9.7	9.7	13.4	13.4	13.4	13.0	13.0	13.0
HCM2kAvg:	2	2	1	6	6	6	6	6	6	5	5	5

****

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions
AM Peak Hour

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

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0
Loss Time (sec): 0 (Y+R = 4 sec)
Optimal Cycle: 0
Critical Vol./Cap. (X): 0.721
Average Delay (sec/veh): 16.0
Level Of Service: C

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	10	40	32	14	90	15	0	145	29	26	126	14
Added Vol:	0	35	0	45	81	19	17	271	0	0	88	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	75	32	59	171	34	17	416	29	26	214	38
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:	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 Volume:	10	75	32	59	171	34	17	416	29	26	214	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	75	32	59	171	34	17	416	29	26	214	38
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 Vol.:	10	75	32	59	171	34	17	416	29	26	214	38
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	0.65	0.27	0.22	0.65	0.13	0.04	0.90	0.06	0.09	0.77	0.14
Final Sat.:	41	318	134	122	357	71	24	577	40	55	456	80
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.24	0.48	0.48	0.48	0.72	0.72	0.72	0.47	0.47	0.47
Crit Moves:		****		****				****			****	
Delay/Veh:	10.8	10.8	10.8	13.7	13.7	13.7	20.2	20.2	20.2	13.1	13.1	13.1
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:	10.8	10.8	10.8	13.7	13.7	13.7	20.2	20.2	20.2	13.1	13.1	13.1
LOS by Move:	B	B	B	B	B	B	C	C	C	B	B	B
ApproachDel:		10.8			13.7			20.2			13.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.8			13.7			20.2			13.1	
LOS by Appr:		B			B			C			B	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.431
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	9.7
Optimal Cycle:	60	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	0	10	10	10	10	10
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:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	10	40	32	14	90	15	0	145	29	26	126	14
Added Vol:	0	35	0	45	81	19	17	271	0	0	88	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	75	32	59	171	34	17	416	29	26	214	38
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:	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 Volume:	10	75	32	59	171	34	17	416	29	26	214	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	75	32	59	171	34	17	416	29	26	214	38
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 Vol.:	10	75	32	59	171	34	17	416	29	26	214	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.94	0.94	0.90	0.90	0.90	0.98	0.98	0.98	0.93	0.93	0.93
Lanes:	0.08	0.65	0.27	0.22	0.65	0.13	0.04	0.90	0.06	0.09	0.77	0.14
Final Sat.:	148	1150	485	382	1115	222	68	1676	116	166	1364	240
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.15	0.15	0.15	0.25	0.25	0.25	0.16	0.16	0.16
Crit Moves:					****			****				
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.58	0.58	0.58	0.58	0.58	0.58
Volume/Cap:	0.18	0.18	0.18	0.43	0.43	0.43	0.43	0.43	0.43	0.27	0.27	0.27
Delay/Veh:	13.4	13.4	13.4	15.2	15.2	15.2	7.4	7.4	7.4	6.5	6.5	6.5
User DelAdj:	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:	13.4	13.4	13.4	15.2	15.2	15.2	7.4	7.4	7.4	6.5	6.5	6.5
HCM2kAvg:	2	2	2	4	4	4	5	5	5	3	3	3

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions
PM Peak Hour

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

****
Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	4	1030	45	11	573	0	3	4	1	41	7	11
Added Vol:	361	0	24	1	0	72	39	196	197	13	321	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	365	1030	69	12	573	72	42	200	198	54	328	12
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:	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 Volume:	365	1030	69	12	573	72	42	200	198	54	328	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	365	1030	69	12	573	72	42	200	198	54	328	12
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	645	xxxx	xxxxx	1099	xxxx	xxxxx	2006	2426	286	2171	2429	515
Potent Cap.:	950	xxxx	xxxxx	642	xxxx	xxxxx	36	33	716	27	32	510
Move Cap.:	950	xxxx	xxxxx	642	xxxx	xxxxx	0	20	716	0	20	510
Volume/Cap:	0.38	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	10.17	0.28	xxxx	16.73	0.02
Level Of Service Module:												
Queue:	1.8	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	11.1	xxxx	xxxxx	10.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

H11

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.614
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	24.7
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	4	1030	45	11	573	0	3	4	1	41	7	11
Added Vol:	361	0	24	1	0	72	39	196	197	13	321	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	365	1030	69	12	573	72	42	200	198	54	328	12
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:	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 Volume:	365	1030	69	12	573	72	42	200	198	54	328	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	365	1030	69	12	573	72	42	200	198	54	328	12
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 Vol.:	365	1030	69	12	573	72	42	200	198	54	328	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.89	0.89	0.89	0.89	0.89	0.89
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.09	0.46	0.45	0.14	0.83	0.03
Final Sat.:	1805	3610	1615	1805	3610	1615	160	767	761	232	1405	51
Capacity Analysis Module:												
Vol/Sat:	0.20	0.29	0.04	0.01	0.16	0.04	0.26	0.26	0.26	0.23	0.23	0.23
Crit Moves:		****		****				****				
Green/Cycle:	0.38	0.38	0.38	0.17	0.17	0.17	0.35	0.35	0.35	0.35	0.35	0.35
Volume/Cap:	0.53	0.74	0.11	0.04	0.95	0.27	0.74	0.74	0.74	0.67	0.67	0.67
Delay/Veh:	15.1	18.2	12.0	21.0	50.0	22.3	22.3	22.3	22.3	19.4	19.4	19.4
User DelAdj:	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:	15.1	18.2	12.0	21.0	50.0	22.3	22.3	22.3	22.3	19.4	19.4	19.4
HCM2kAvg:	6	10	1	0	10	1	10	9	9	8	8	8

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions
PM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[15.1]
****

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	0	1	0	0	1	0	1	0	0	0
Volume Module:																				
Base Vol:	2	7		2		1	1		0		0	55		1		1	42		0	
Growth Adj:	1.37	1.37		1.37		1.37	1.37		1.37		1.37	1.37		1.37		1.37	1.37		1.37	
Initial Bse:	3	10		3		1	1		0		0	75		1		1	58		0	
Added Vol:	0	0		0		0	0		0		0	222		0		0	335		0	
PasserByVol:	0	0		0		0	0		0		0	0		0		0	0		0	
Initial Fut:	3	10		3		1	1		0		0	297		1		1	393		0	
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:	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 Volume:	3	10		3		1	1		0		0	297		1		1	393		0	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Final Vol.:	3	10		3		1	1		0		0	297		1		1	393		0	
Critical Gap Module:																				
Critical Gp:	7.1	6.5		6.2		7.1	6.5		xxxxx		xxxxx	xxxxx		xxxx		xxxxx	4.1		xxxx	xxxxx
FollowUpTim:	3.5	4.0		3.3		3.5	4.0		xxxxx		xxxxx	xxxxx		xxxx		xxxxx	2.2		xxxx	xxxxx
Capacity Module:																				
Cnflict Vol:	693	693		297		699	694		xxxxx		xxxx	xxxx		xxxxx		299	xxxx		xxxxx	
Potent Cap.:	360	369		747		357	369		xxxxx		xxxx	xxxx		xxxxx		1274	xxxx		xxxxx	
Move Cap.:	359	369		747		348	368		xxxxx		xxxx	xxxx		xxxxx		1274	xxxx		xxxxx	
Volume/Cap:	0.01	0.03		0.00		0.00	0.00		xxxx		xxxx	xxxx		xxxx		0.00	xxxx		xxxx	
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.0	xxxx		xxxxx	
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		7.8	xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		*	*		*		A	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	404		xxxxx		358	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	0.1		xxxxx		0.0	xxxx		xxxxx		0.0	xxxx		xxxxx		0.0	xxxx		xxxxx	
Shrd StpDel:	xxxxx	14.3		xxxxx		15.1	xxxx		xxxxx		0.0	xxxx		xxxxx		7.8	xxxx		xxxxx	
Shared LOS:	*	B		*		C	*		*		A	*		*		A	*		*	
ApproachDel:		14.3					15.1					xxxxxx					xxxxxx			
ApproachLOS:		B					C					*					*			

H13

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions
PM Peak Hour

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

Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[8.1]

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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	0	0	0	0	0	0	1	71	1	4	62	1
Added Vol:	0	0	0	0	0	0	0	222	0	0	335	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	1	293	1	4	397	1
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:	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 Volume:	0	0	0	0	0	0	1	293	1	4	397	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	1	293	1	4	397	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	398	xxxx	xxxxx	295	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1172	xxxx	xxxxx	1278	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1172	xxxx	xxxxx	1278	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	7.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

H14

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions
PM Peak Hour

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

****
Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	1.195
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	81.5
Optimal Cycle:	0	Level Of Service:	F

****

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 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	12	499	103	25	127	12	26	63	3	51	71	63
Added Vol:	0	32	27	8	18	20	37	185	0	27	315	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	531	130	33	145	32	63	248	3	78	386	77
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:	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 Volume:	12	531	130	33	145	32	63	248	3	78	386	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	531	130	33	145	32	63	248	3	78	386	77
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 Vol.:	12	531	130	33	145	32	63	248	3	78	386	77
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:	0.02	0.98	1.00	0.16	0.69	0.15	0.20	0.79	0.01	0.14	0.72	0.14
Final Sat.:	10	444	500	64	286	64	89	351	4	70	347	69
Capacity Analysis Module:												
Vol/Sat:	1.20	1.20	0.26	0.51	0.51	0.51	0.71	0.71	0.71	1.11	1.11	1.11
Crit Moves:		****			****		****				****	
Delay/Veh:	132.8	133	12.4	19.5	19.5	19.5	27.5	27.5	27.5	102.0	102	102.0
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:	132.8	133	12.4	19.5	19.5	19.5	27.5	27.5	27.5	102.0	102	102.0
LOS by Move:	F	F	B	C	C	C	D	D	D	F	F	F
ApproachDel:		109.6			19.5			27.5			102.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		109.6			19.5			27.5			102.0	
LOS by Appr:		F			C			D			F	

****

H15

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****
Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	0.648
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	12.6
Optimal Cycle:	60	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	12	499	103	25	127	12	26	63	3	51	71	63
Added Vol:	0	32	27	8	18	20	37	185	0	27	315	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	531	130	33	145	32	63	248	3	78	386	77
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:	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 Volume:	12	531	130	33	145	32	63	248	3	78	386	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	531	130	33	145	32	63	248	3	78	386	77
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 Vol.:	12	531	130	33	145	32	63	248	3	78	386	77
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.86	0.86	0.86	0.86	0.86	0.86	0.90	0.90	0.90
Lanes:	0.02	0.98	1.00	0.16	0.69	0.15	0.20	0.79	0.01	0.14	0.72	0.14
Final Sat.:	43	1848	1615	253	1125	250	329	1295	14	245	1216	243
Capacity Analysis Module:												
Vol/Sat:	0.29	0.29	0.08	0.13	0.13	0.13	0.19	0.19	0.19	0.32	0.32	0.32
Crit Moves:		****									****	
Green/Cycle:	0.44	0.44	0.44	0.44	0.44	0.44	0.49	0.49	0.49	0.49	0.49	0.49
Volume/Cap:	0.65	0.65	0.18	0.29	0.29	0.29	0.39	0.39	0.39	0.65	0.65	0.65
Delay/Veh:	14.8	14.8	10.2	10.9	10.9	10.9	10.0	10.0	10.0	13.2	13.2	13.2
User DelAdj:	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:	14.8	14.8	10.2	10.9	10.9	10.9	10.0	10.0	10.0	13.2	13.2	13.2
HCM2kAvg:	10	9	2	3	3	3	4	4	4	9	9	9

****

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H16

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions
PM Peak Hour

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

****
Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	1.180
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	66.8
Optimal Cycle:	0	Level Of Service:	F

****

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	29	112	44	22	59	33	16	159	14	12	145	42
Added Vol:	0	114	0	61	77	53	54	166	0	0	303	77
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	226	44	83	136	86	70	325	14	12	448	119
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:	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 Volume:	29	226	44	83	136	86	70	325	14	12	448	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	226	44	83	136	86	70	325	14	12	448	119
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 Vol.:	29	226	44	83	136	86	70	325	14	12	448	119
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:	0.09	0.76	0.15	0.27	0.45	0.28	0.17	0.80	0.03	0.02	0.77	0.21
Final Sat.:	41	323	63	117	192	121	80	368	16	10	380	101
Capacity Analysis Module:												
Vol/Sat:	0.70	0.70	0.70	0.71	0.71	0.71	0.88	0.88	0.88	1.18	1.18	1.18
Crit Moves:			****		****			****			****	
Delay/Veh:	26.0	26.0	26.0	26.3	26.3	26.3	43.7	43.7	43.7	125.3	125	125.3
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:	26.0	26.0	26.0	26.3	26.3	26.3	43.7	43.7	43.7	125.3	125	125.3
LOS by Move:	D	D	D	D	D	D	E	E	E	F	F	F
ApproachDel:	26.0			26.3			43.7			125.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	26.0			26.3			43.7			125.3		
LOS by Appr:	D			D			E			F		

****

H17

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) Without Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.550
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 11.1
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	0	10	10	10	10	10
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:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	29	112	44	22	59	33	16	159	14	12	145	42
Added Vol:	0	114	0	61	77	53	54	166	0	0	303	77
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	226	44	83	136	86	70	325	14	12	448	119
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:	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 Volume:	29	226	44	83	136	86	70	325	14	12	448	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	226	44	83	136	86	70	325	14	12	448	119
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 Vol.:	29	226	44	83	136	86	70	325	14	12	448	119
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.94	0.94	0.82	0.82	0.82	0.86	0.86	0.86	0.96	0.96	0.96
Lanes:	0.09	0.76	0.15	0.27	0.45	0.28	0.17	0.80	0.03	0.02	0.77	0.21
Final Sat.:	171	1346	261	423	693	438	281	1294	55	39	1414	377
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.20	0.20	0.20	0.25	0.25	0.25	0.32	0.32	0.32
Crit Moves:					****						****	
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.58	0.58	0.58	0.58	0.58	0.58
Volume/Cap:	0.47	0.47	0.47	0.55	0.55	0.55	0.44	0.44	0.44	0.55	0.55	0.55
Delay/Veh:	15.5	15.5	15.5	16.6	16.6	16.6	7.5	7.5	7.5	8.5	8.5	8.5
User DelAdj:	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:	15.5	15.5	15.5	16.6	16.6	16.6	7.5	7.5	7.5	8.5	8.5	8.5
HCM2kAvg:	5	5	5	6	6	6	5	5	6	8	7	7

H18

APPENDIX I

CUMULATIVE (2006) WITH PROJECT CONDITIONS INTERSECTION ANALYSIS

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
AM Peak Hour

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

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign Include			Stop Sign Include		
Rights:	Include			Include								
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	8	334	47	7	1211	1	1	1	14	70	10	7
Added Vol:	104	0	112	37	0	21	65	279	323	302	110	86
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	112	334	159	44	1211	22	66	280	337	372	120	93
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:	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 Volume:	112	334	159	44	1211	22	66	280	337	372	120	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	112	334	159	44	1211	22	66	280	337	372	120	93
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1233	xxxx	xxxxx	493	xxxx	xxxxx	1750	2016	606	1392	1880	167
Potent Cap.:	572	xxxx	xxxxx	1081	xxxx	xxxxx	56	59	445	103	72	854
Move Cap.:	572	xxxx	xxxxx	1081	xxxx	xxxxx	0	46	445	0	56	854
Volume/Cap:	0.20	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	6.14	0.76	xxxx	2.15	0.11
Level Of Service Module:												
Queue:	0.7	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	12.8	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.875
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 31.8
Optimal Cycle: 73 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	8	334	47	7	1211	1	1	1	14	70	10	7
Added Vol:	104	0	112	37	0	21	65	279	323	302	110	86
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	112	334	159	44	1211	22	66	280	337	372	120	93
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:	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 Volume:	112	334	159	44	1211	22	66	280	337	372	120	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	334	159	44	1211	22	66	280	337	372	120	93
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 Vol.:	112	334	159	44	1211	22	66	280	337	372	120	93
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.89	0.89	0.89	0.75	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.10	0.41	0.49	1.00	0.56	0.44
Final Sat.:	1805	3610	1615	1805	3610	1615	164	692	831	1427	999	776
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.10	0.02	0.34	0.01	0.41	0.41	0.41	0.26	0.12	0.12
Crit Moves:	****				****			****				
Green/Cycle:	0.14	0.25	0.25	0.25	0.35	0.35	0.43	0.43	0.43	0.43	0.43	0.43
Volume/Cap:	0.45	0.38	0.40	0.10	0.95	0.04	0.95	0.95	0.95	0.61	0.28	0.28
Delay/Veh:	30.3	23.2	23.7	21.4	37.6	15.5	42.0	42.0	42.0	18.0	13.8	13.8
User DelAdj:	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:	30.3	23.2	23.7	21.4	37.6	15.5	42.0	42.0	42.0	18.0	13.8	13.8
HCM2kAvg:	3	3	3	1	19	0	21	21	21	9	3	3

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
AM Peak Hour

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

Intersection #3 Worsley Rd. (NS) / Driveway 1 (EW)

Average Delay (sec/veh): 6.0 Worst Case Level Of Service: A[8.7]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Volume Module:																				
Base Vol:	0		2		0	0		2		0	0		0		0	0		0		0
Growth Adj:	1.37	1.37		1.37		1.37	1.37		1.37		1.37	1.37		1.37		1.37	1.37		1.37	
Initial Bse:	0		3		0	0		3		0	0		0		0	0		0		0
Added Vol:	0		0		15	0		0		0	0		0		0	45		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		3		15	0		3		0	0		0		0	45		0		0
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:	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 Volume:	0		3		15	0		3		0	0		0		0	45		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	0		3		15	0		3		0	0		0		0	45		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		6.4	xxxx		xxxxx	
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		3.5	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		13	xxxx		xxxxx	
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		1011	xxxx		xxxxx	
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		1011	xxxx		xxxxx	
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		0.04	xxxx		xxxx	
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.1	xxxx		xxxxx	
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		8.7	xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		*	*		*		A	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					8.7				
ApproachLOS:		*					*					*					A			

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
AM Peak Hour

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

Intersection #54 Worsley Rd. (NS) / Driveway 2 (EW)

Average Delay (sec/veh): 4.6 Worst Case Level Of Service: A[9.3]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Volume Module:																				
Base Vol:	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	0	15	33	0	45	0	0	0	0	0	0	0	0	0	0	97	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	18	33	0	48	0	0	0	0	0	0	0	0	0	0	97	0	0	0	0
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	18	33	0	48	0	0	0	0	0	0	0	0	0	0	97	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	18	33	0	48	0	0	0	0	0	0	0	0	0	0	97	0	0	0	0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	82	xxxx	xxxxx	xxxx	xxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	925	xxxx	xxxxx	xxxx	xxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	925	xxxx	xxxxx	xxxx	xxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxxx	xxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	A	*	*	*	*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx				9.3									
ApproachLOS:	*			*			*				A									

I6

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
AM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 2.5 Worst Case Level Of Service: C[16.4]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	0	1!	0	0
Volume Module:																				
Base Vol:	1		0		4	0		2		0	0		39		0	1		64		2
Growth Adj:	1.37		1.37		1.37	1.37		1.37		1.37	1.37		1.37		1.37	1.37		1.37		1.37
Initial Bse:	1		0		5	0		3		0	0		53		0	1		88		3
Added Vol:	0		0		0	22		0		119	40		387		0	0		379		8
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	1		0		5	22		3		119	40		440		0	1		467		11
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:	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 Volume:	1		0		5	22		3		119	40		440		0	1		467		11
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	1		0		5	22		3		119	40		440		0	1		467		11
Critical Gap Module:																				
Critical Gp:	7.1	xxxx			6.2	7.1		6.5		6.2	4.1	xxxx		xxxxx		4.1	xxxx		xxxxx	
FollowUpTim:	3.5	xxxx			3.3	3.5		4.0		3.3	2.2	xxxx		xxxxx		2.2	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	1056	xxxx			440	998		995		472	477	xxxx		xxxxx		440	xxxx		xxxxx	
Potent Cap.:	205	xxxx			621	225		247		596	1095	xxxx		xxxxx		1130	xxxx		xxxxx	
Move Cap.:	158	xxxx			621	216		237		596	1095	xxxx		xxxxx		1130	xxxx		xxxxx	
Volume/Cap:	0.01	xxxx			0.01	0.10		0.01		0.20	0.04	xxxx		xxxx		0.00	xxxx		xxxx	
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.1	xxxx		xxxxx		0.0	xxxx		xxxxx	
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		8.4	xxxx		xxxxx		8.2	xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		A	*		*		A	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		391		xxxxx	xxxx		459		xxxxx	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx		0.1		xxxxx	xxxxx		1.3		xxxxx	0.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx		14.4		xxxxx	xxxxx		16.4		xxxxx	8.4	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*		B		*	*		C		*	A	*		*		*	*		*	
ApproachDel:			14.4					16.4			xxxxxx					xxxxxx				
ApproachLOS:			B					C			*					*				

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.396
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	10.4
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	0	0	10	10	10	10	10
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	4	0	2	0	0	39	0	1	64	2
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	1	0	5	0	3	0	0	53	0	1	88	3
Added Vol:	0	0	0	22	0	119	40	387	0	0	379	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	5	22	3	119	40	440	0	1	467	11
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:	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 Volume:	1	0	5	22	3	119	40	440	0	1	467	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	5	22	3	119	40	440	0	1	467	11
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 Vol.:	1	0	5	22	3	119	40	440	0	1	467	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	0.88	0.88	0.88	0.95	0.95	1.00	1.00	1.00	1.00
Lanes:	0.20	0.00	0.80	0.15	0.02	0.83	0.08	0.92	1.00	0.01	0.97	0.02
Final Sat.:	336	0	1342	256	32	1386	150	1651	1900	5	1846	42
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.09	0.09	0.27	0.27	0.00	0.25	0.25	0.25
Crit Moves:	****				****			****				
Green/Cycle:	0.17	0.00	0.17	0.18	0.18	0.18	0.55	0.55	0.00	0.55	0.55	0.55
Volume/Cap:	0.02	0.00	0.02	0.48	0.48	0.48	0.48	0.48	0.00	0.46	0.46	0.46
Delay/Veh:	21.0	0.0	21.0	23.4	23.4	23.4	8.5	8.5	0.0	8.3	8.3	8.3
User DelAdj:	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:	21.0	0.0	21.0	23.4	23.4	23.4	8.5	8.5	0.0	8.3	8.3	8.3
HCM2kAvg:	0	0	0	3	3	3	6	6	0	2	6	6

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
AM Peak Hour

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

****
Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 34.4 Worst Case Level Of Service: F[107.3]
****

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	0 0	0 0	1!	0 0	1 0	1	0 0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	43	0	0	64	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	0	0	0	0	0	0	0	59	0	0	88	0
Added Vol:	0	0	0	268	0	146	49	360	0	0	241	91
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	268	0	146	49	419	0	0	329	91
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:	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 Volume:	0	0	0	268	0	146	49	419	0	0	329	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	268	0	146	49	419	0	0	329	91
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	891	xxxx	374	420	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	315	xxxx	677	1150	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	305	xxxx	677	1150	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.88	xxxx	0.22	0.04	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	378	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	14.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	107	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			107.3			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****
Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	0.497
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	11.5
Optimal Cycle:	60	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	10	0	0	10	0
Lanes:	0 0	0 0	0 0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	43	0	0	64	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	0	0	0	0	0	0	0	59	0	0	88	0
Added Vol:	0	0	0	268	0	146	49	360	0	0	241	91
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	268	0	146	49	419	0	0	329	91
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:	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 Volume:	0	0	0	268	0	146	49	419	0	0	329	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	268	0	146	49	419	0	0	329	91
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 Vol.:	0	0	0	268	0	146	49	419	0	0	329	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.92	0.69	1.00	1.00	1.00	0.97	0.97
Lanes:	0.00	0.00	0.00	0.65	0.00	0.35	1.00	1.00	0.00	0.00	0.78	0.22
Final Sat.:	0	0	0	1135	0	618	1311	1900	0	0	1445	400
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.24	0.00	0.24	0.04	0.22	0.00	0.00	0.23	0.23
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.48	0.00	0.48	0.46	0.46	0.00	0.00	0.46	0.46
Volume/Cap:	0.00	0.00	0.00	0.50	0.00	0.50	0.08	0.48	0.00	0.00	0.50	0.50
Delay/Veh:	0.0	0.0	0.0	11.3	0.0	11.3	9.2	11.7	0.0	0.0	11.9	11.9
User DelAdj:	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:	0.0	0.0	0.0	11.3	0.0	11.3	9.2	11.7	0.0	0.0	11.9	11.9
HCM2kAvg:	0	0	0	6	0	6	1	6	0	0	6	6

****

I10

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
AM Peak Hour

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

****
Intersection #58 Karen Ave. (NS) / Driveway 5 (EW)
****
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	0	0	0	1!	0	0	0	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Growth Adj:	1.37	1.37		1.37		1.37	1.37		1.37		1.37	1.37		1.37		1.37	1.37		1.37	
Initial Bse:	0		0		0	0		0		0	0		0		0	0		0		0
Added Vol:	153		0		0	0		0		0	0		0		283	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	153		0		0	0		0		0	0		0		283	0		0		0
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:	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 Volume:	153		0		0	0		0		0	0		0		283	0		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	153		0		0	0		0		0	0		0		283	0		0		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			6.2	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																				
Cnflict Vol:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx			0	xxxx	xxxx	xxxxx						
Potent Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx			0	xxxx	xxxx	xxxxx						
Move Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx			0	xxxx	xxxx	xxxxx						
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx			0.00	xxxx	xxxx	xxxx						
Level Of Service Module:																				
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			0.0	xxxxx	xxxx	xxxxx						
Stopped Del:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			0.0	xxxxx	xxxx	xxxxx						
LOS by Move:	A	*	*	*	*	*	*	*			A	*	*	*						
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*	*	*	*	*	*	*	*	*		*	*	*							
ApproachDel:	xxxxxx			xxxxxx			0.0				xxxxxx									
ApproachLOS:	*			*			A				*									

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
AM Peak Hour

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

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 29.5 Worst Case Level Of Service: F[140.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	1	0	1	1	0	1	0	59	0	1	90	0
Added Vol:	0	0	0	175	0	108	58	570	0	0	223	95
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	1	176	0	109	58	629	0	1	313	95
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:	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 Volume:	1	0	1	176	0	109	58	629	0	1	313	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	1	176	0	109	58	629	0	1	313	95
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1163	xxxx	629	1109	xxxx	361	408	xxxx	xxxxx	629	xxxx	xxxxx
Potent Cap.:	173	xxxx	486	189	xxxx	688	1161	xxxx	xxxxx	963	xxxx	xxxxx
Move Cap.:	140	xxxx	486	180	xxxx	688	1161	xxxx	xxxxx	963	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	0.00	0.98	xxxx	0.16	0.05	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx	8.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	217	xxxxx	xxxx	251	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	12.7	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	21.8	xxxxx	xxxxx	141	xxxxx	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	F	*	A	*	*	*	*	*
ApproachDel:		21.8			140.9		xxxxxx			xxxxxx		
ApproachLOS:		C			F			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.609
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.3
Optimal Cycle: 60 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	0	10	10	0	10	0	10	0	10	10	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	1	0	1	1	0	1	0	59	0	1	90	0
Added Vol:	0	0	0	175	0	108	58	570	0	0	223	95
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	1	176	0	109	58	629	0	1	313	95
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:	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 Volume:	1	0	1	176	0	109	58	629	0	1	313	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	1	176	0	109	58	629	0	1	313	95
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 Vol.:	1	0	1	176	0	109	58	629	0	1	313	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	0.92	1.00	0.92	0.94	0.94	1.00	0.97	0.97	0.97
Lanes:	0.50	0.00	0.50	0.62	0.00	0.38	0.08	0.92	0.00	0.01	0.76	0.23
Final Sat.:	865	0	865	1078	0	669	151	1640	0	6	1407	426
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.16	0.38	0.38	0.00	0.22	0.22	0.22
Crit Moves:	****			****				****				
Green/Cycle:	0.17	0.00	0.17	0.22	0.00	0.22	0.51	0.51	0.00	0.51	0.51	0.51
Volume/Cap:	0.01	0.00	0.01	0.75	0.00	0.75	0.75	0.75	0.00	0.43	0.43	0.43
Delay/Veh:	20.9	0.0	20.9	29.7	0.0	29.7	14.9	14.9	0.0	9.4	9.4	9.4
User DelAdj:	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:	20.9	0.0	20.9	29.7	0.0	29.7	14.9	14.9	0.0	9.4	9.4	9.4
HCM2kAvg:	0	0	0	7	0	7	13	12	0	2	5	5

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
AM Peak Hour

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

****
Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	1.869
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	211.7
Optimal Cycle:	0	Level Of Service:	F

****

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 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	11	147	59	42	318	22	7	70	19	78	58	32
Added Vol:	49	9	8	12	28	55	59	562	124	9	214	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	60	156	67	54	346	77	66	632	143	87	272	36
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:	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 Volume:	60	156	67	54	346	77	66	632	143	87	272	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	156	67	54	346	77	66	632	143	87	272	36
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 Vol.:	60	156	67	54	346	77	66	632	143	87	272	36
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:	0.28	0.72	1.00	0.11	0.73	0.16	0.08	0.75	0.17	0.22	0.69	0.09
Final Sat.:	107	277	421	51	322	72	35	338	77	96	300	39
Capacity Analysis Module:												
Vol/Sat:	0.56	0.56	0.16	1.08	1.08	1.08	1.87	1.87	1.87	0.91	0.91	0.91
Crit Moves:	****			****			****				****	
Delay/Veh:	22.7	22.7	12.6	93.0	93.0	93.0	418.4	418	418.4	51.4	51.4	51.4
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:	22.7	22.7	12.6	93.0	93.0	93.0	418.4	418	418.4	51.4	51.4	51.4
LOS by Move:	C	C	B	F	F	F	F	F	F	F	F	F
ApproachDel:	20.3			93.0			418.4			51.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	20.3			93.0			418.4			51.4		
LOS by Appr:	C			F			F			F		

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.801
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	15.4
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	1 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	11	147	59	42	318	22	7	70	19	78	58	32
Added Vol:	49	9	8	12	28	55	59	562	124	9	214	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	60	156	67	54	346	77	66	632	143	87	272	36
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:	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 Volume:	60	156	67	54	346	77	66	632	143	87	272	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	156	67	54	346	77	66	632	143	87	272	36
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 Vol.:	60	156	67	54	346	77	66	632	143	87	272	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.85	0.93	0.93	0.93	0.93	0.93	0.93	0.77	0.77	0.77
Lanes:	1.00	1.00	1.00	0.11	0.73	0.16	0.08	0.75	0.17	0.22	0.69	0.09
Final Sat.:	1579	1900	1615	202	1285	286	138	1321	299	322	1005	131
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.04	0.27	0.27	0.27	0.48	0.48	0.48	0.27	0.27	0.27
Crit Moves:					****			****				
Green/Cycle:	0.34	0.34	0.34	0.34	0.34	0.34	0.60	0.60	0.60	0.60	0.60	0.60
Volume/Cap:	0.11	0.24	0.12	0.80	0.80	0.80	0.80	0.80	0.80	0.45	0.45	0.45
Delay/Veh:	13.8	14.6	13.9	25.7	25.7	25.7	13.8	13.8	13.8	7.0	7.0	7.0
User DelAdj:	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:	13.8	14.6	13.9	25.7	25.7	25.7	13.8	13.8	13.8	7.0	7.0	7.0
HCM2kAvg:	1	2	1	11	11	11	15	15	15	6	5	5

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
AM Peak Hour

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

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	1.267
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	84.4
Optimal Cycle:	0	Level Of Service:	F

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	10	40	32	14	90	15	0	145	29	26	126	14
Added Vol:	36	35	0	45	81	42	63	434	85	0	150	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	75	32	59	171	57	63	579	114	26	276	38
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:	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 Volume:	46	75	32	59	171	57	63	579	114	26	276	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	75	32	59	171	57	63	579	114	26	276	38
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 Vol.:	46	75	32	59	171	57	63	579	114	26	276	38
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:	0.30	0.49	0.21	0.20	0.60	0.20	0.08	0.77	0.15	0.08	0.81	0.11
Final Sat.:	136	223	94	103	300	100	50	457	90	41	436	60
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.33	0.57	0.57	0.57	1.27	1.27	1.27	0.63	0.63	0.63
Crit Moves:	****				****			****		****		
Delay/Veh:	13.6	13.6	13.6	18.1	18.1	18.1	153.0	153	153.0	19.4	19.4	19.4
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:	13.6	13.6	13.6	18.1	18.1	18.1	153.0	153	153.0	19.4	19.4	19.4
LOS by Move:	B	B	B	C	C	C	F	F	F	C	C	C
ApproachDel:	13.6			18.1			153.0			19.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.6			18.1			153.0			19.4		
LOS by Appr:	B			C			F			C		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.638
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	10.4
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	10	40	32	14	90	15	0	145	29	26	126	14
Added Vol:	36	35	0	45	81	42	63	434	85	0	150	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	75	32	59	171	57	63	579	114	26	276	38
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:	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 Volume:	46	75	32	59	171	57	63	579	114	26	276	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	75	32	59	171	57	63	579	114	26	276	38
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 Vol.:	46	75	32	59	171	57	63	579	114	26	276	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.81	0.81	0.81	0.90	0.90	0.90	0.93	0.93	0.93	0.92	0.92	0.92
Lanes:	0.30	0.49	0.21	0.20	0.60	0.20	0.08	0.77	0.15	0.08	0.81	0.11
Final Sat.:	465	762	321	349	1020	339	147	1355	266	134	1425	195
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.10	0.17	0.17	0.17	0.43	0.43	0.43	0.19	0.19	0.19
Crit Moves:					****			****				
Green/Cycle:	0.26	0.26	0.26	0.26	0.26	0.26	0.67	0.67	0.67	0.67	0.67	0.67
Volume/Cap:	0.37	0.37	0.37	0.64	0.64	0.64	0.64	0.64	0.64	0.29	0.29	0.29
Delay/Veh:	18.6	18.6	18.6	22.6	22.6	22.6	6.9	6.9	6.9	4.2	4.2	4.2
User DelAdj:	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:	18.6	18.6	18.6	22.6	22.6	22.6	6.9	6.9	6.9	4.2	4.2	4.2
HCM2kAvg:	3	3	3	6	6	6	10	9	9	3	3	3

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
PM Peak Hour

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

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	4	1030	45	11	573	0	3	4	1	41	7	11
Added Vol:	361	0	350	99	0	72	39	203	197	198	329	59
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	365	1030	395	110	573	72	42	207	198	239	336	70
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:	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 Volume:	365	1030	395	110	573	72	42	207	198	239	336	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	365	1030	395	110	573	72	42	207	198	239	336	70
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	645	xxxx	xxxxx	1425	xxxx	xxxxx	2206	2948	286	2370	2625	515
Potent Cap.:	950	xxxx	xxxxx	483	xxxx	xxxxx	25	15	716	19	24	510
Move Cap.:	950	xxxx	xxxxx	483	xxxx	xxxxx	0	7	716	0	12	510
Volume/Cap:	0.38	xxxx	xxxx	0.23	xxxx	xxxx	xxxx	29.14	0.28	xxxx	29.10	0.14
Level Of Service Module:												
Queue:	1.8	xxxx	xxxxx	0.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	11.1	xxxx	xxxxx	14.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.696
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 23.9
Optimal Cycle: 60 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	4	1030	45	11	573	0	3	4	1	41	7	11
Added Vol:	361	0	350	99	0	72	39	203	197	198	329	59
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	365	1030	395	110	573	72	42	207	198	239	336	70
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:	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 Volume:	365	1030	395	110	573	72	42	207	198	239	336	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	365	1030	395	110	573	72	42	207	198	239	336	70
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 Vol.:	365	1030	395	110	573	72	42	207	198	239	336	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.84	0.84	0.84	0.78	0.97	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.09	0.47	0.44	1.00	0.83	0.17
Final Sat.:	1805	3610	1615	1805	3610	1615	149	739	708	1480	1532	319
Capacity Analysis Module:												
Vol/Sat:	0.20	0.29	0.24	0.06	0.16	0.04	0.28	0.28	0.28	0.16	0.22	0.22
Crit Moves:		****		****				****				
Green/Cycle:	0.37	0.37	0.37	0.17	0.17	0.17	0.36	0.36	0.36	0.36	0.36	0.36
Volume/Cap:	0.55	0.77	0.66	0.37	0.95	0.27	0.77	0.77	0.77	0.44	0.60	0.60
Delay/Veh:	15.9	19.5	18.5	22.9	50.0	22.3	23.2	23.2	23.2	15.1	17.1	17.1
User DelAdj:	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:	15.9	19.5	18.5	22.9	50.0	22.3	23.2	23.2	23.2	15.1	17.1	17.1
HCM2kAvg:	6	10	7	2	10	1	11	10	10	5	7	7

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #3 Worsley Rd. (NS) / Driveway 1 (EW)

****

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: A[8.8]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 1	0	0 0	1 0	0	0 0	0 0	0	1 0	0 0	0
Volume Module:												
Base Vol:	0	7	0	0	2	0	0	0	0	0	0	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	0	10	0	0	3	0	0	0	0	0	0	0
Added Vol:	0	0	52	0	0	0	0	0	0	29	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	10	52	0	3	0	0	0	0	29	0	0
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:	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 Volume:	0	10	52	0	3	0	0	0	0	29	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	10	52	0	3	0	0	0	0	29	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	38	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	979	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	979	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.8		
ApproachLOS:	*			*			*			A		

I20

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
PM Peak Hour

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

****
Intersection #54 Worsley Rd. (NS) / Driveway 2 (EW)
****
Average Delay (sec/veh): 2.2 Worst Case Level Of Service: A[9.6]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Volume Module:																				
Base Vol:	0	7	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	0	10	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	0	52	112	0	29	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	62	112	0	32	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	62	112	0	32	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	62	112	0	32	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.4	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							149	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							847	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							847	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx							0.07	xxxx	xxxx		
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.2	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							9.6	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*	*	*	*							A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	*	*	*	*	*	*							*	*	*		
ApproachDel:	xxxxxx			xxxxxx			xxxxxx									9.6				
ApproachLOS:	*			*			*									A				

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
PM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 2.9 Worst Case Level Of Service: E[39.9]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0 0		0 0 1!	0 0		0 1 0	0 1		0 0 1!	0 0	
Volume Module:												
Base Vol:	2	7	2	1	1	0	0	55	1	1	42	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	3	10	3	1	1	0	0	75	1	1	58	0
Added Vol:	0	0	0	14	0	76	138	514	0	0	509	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	10	3	15	1	76	138	589	1	1	567	26
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:	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 Volume:	3	10	3	15	1	76	138	589	1	1	567	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	10	3	15	1	76	138	589	1	1	567	26
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1486	1461	589	1454	1449	580	593	xxxx	xxxxx	591	xxxx	xxxxx
Potent Cap.:	104	130	512	109	132	518	993	xxxx	xxxxx	995	xxxx	xxxxx
Move Cap.:	77	110	512	90	112	518	993	xxxx	xxxxx	995	xxxx	xxxxx
Volume/Cap:	0.04	0.09	0.01	0.17	0.01	0.15	0.14	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx	8.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	118	xxxxx	xxxx	281	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	1.4	xxxxx	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	39.9	xxxxx	xxxxx	24.0	xxxxx	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	E	*	*	C	*	A	*	*	*	*	*
ApproachDel:		39.9			24.0			xxxxxx			xxxxxx	
ApproachLOS:		E			C			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.598
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.5
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	0	0	10	10	10	10	10
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	2	7	2	1	1	0	0	55	1	1	42	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	3	10	3	1	1	0	0	75	1	1	58	0
Added Vol:	0	0	0	14	0	76	138	514	0	0	509	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	10	3	15	1	76	138	589	1	1	567	26
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:	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 Volume:	3	10	3	15	1	76	138	589	1	1	567	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	10	3	15	1	76	138	589	1	1	567	26
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 Vol.:	3	10	3	15	1	76	138	589	1	1	567	26
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.97	0.97	0.97	0.88	0.88	0.88	0.81	0.81	0.85	0.99	0.99	0.99
Lanes:	0.18	0.64	0.18	0.17	0.01	0.82	0.19	0.81	1.00	0.01	0.95	0.04
Final Sat.:	334	1168	334	278	25	1373	291	1241	1615	4	1802	83
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.06	0.06	0.06	0.47	0.47	0.00	0.31	0.31	0.31
Crit Moves:		****			****			****				
Green/Cycle:	0.17	0.17	0.17	0.17	0.17	0.17	0.57	0.57	0.57	0.57	0.57	0.57
Volume/Cap:	0.05	0.05	0.05	0.33	0.33	0.33	0.84	0.84	0.00	0.55	0.55	0.55
Delay/Veh:	21.1	21.1	21.1	22.8	22.8	22.8	18.0	18.0	5.6	8.9	8.9	8.9
User DelAdj:	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:	21.1	21.1	21.1	22.8	22.8	22.8	18.0	18.0	5.6	8.9	8.9	8.9
HCM2kAvg:	0	0	0	2	3	2	17	17	0	3	8	8

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
PM Peak Hour

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

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 53.2 Worst Case Level Of Service: F[330.4]

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 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	58	0	0	43	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	0	0	0	0	0	0	0	79	0	0	59	0
Added Vol:	0	0	0	172	0	94	169	359	0	0	441	311
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	172	0	94	169	438	0	0	500	311
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:	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 Volume:	0	0	0	172	0	94	169	438	0	0	500	311
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	172	0	94	169	438	0	0	500	311
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1432	xxxx	655	811	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	149	xxxx	469	824	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	126	xxxx	469	824	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.37	xxxx	0.20	0.21	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	170	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	17.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	330	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			330.4			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.645
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 60 Level Of Service: A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	10	0	0	10	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	58	0	0	43	0
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	0	0	0	0	0	0	0	79	0	0	59	0
Added Vol:	0	0	0	172	0	94	169	359	0	0	441	311
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	172	0	94	169	438	0	0	500	311
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:	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 Volume:	0	0	0	172	0	94	169	438	0	0	500	311
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	172	0	94	169	438	0	0	500	311
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 Vol.:	0	0	0	172	0	94	169	438	0	0	500	311
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.92	0.48	1.00	1.00	1.00	0.95	0.95
Lanes:	0.00	0.00	0.00	0.65	0.00	0.35	1.00	1.00	0.00	0.00	0.62	0.38
Final Sat.:	0	0	0	1133	0	619	910	1900	0	0	1110	691
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.15	0.19	0.23	0.00	0.00	0.45	0.45
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.24	0.00	0.24	0.70	0.70	0.00	0.00	0.70	0.70
Volume/Cap:	0.00	0.00	0.00	0.64	0.00	0.64	0.27	0.33	0.00	0.00	0.64	0.64
Delay/Veh:	0.0	0.0	0.0	24.2	0.0	24.2	3.6	3.7	0.0	0.0	6.1	6.1
User DelAdj:	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:	0.0	0.0	0.0	24.2	0.0	24.2	3.6	3.7	0.0	0.0	6.1	6.1
HCM2kAvg:	0	0	0	6	0	6	3	3	0	0	9	9

****

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
PM Peak Hour

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

Intersection #58 Karen Ave. (NS) / Driveway 5 (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	0	0	0	1!	0	0	0	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Growth Adj:	1.37		1.37		1.37	1.37		1.37		1.37	1.37		1.37		1.37	1.37		1.37		1.37
Initial Bse:	0		0		0	0		0		0	0		0		0	0		0		0
Added Vol:	320		0		0	0		0		0	0		0		210	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	320		0		0	0		0		0	0		0		210	0		0		0
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:	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 Volume:	320		0		0	0		0		0	0		0		210	0		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	320		0		0	0		0		0	0		0		210	0		0		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx							6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx							3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx							0	xxxx	xxxx	xxxxx		
Potent Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx							0	xxxx	xxxx	xxxxx		
Move Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx							0	xxxx	xxxx	xxxxx		
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx							0.00	xxxx	xxxx	xxxx		
Level Of Service Module:																				
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx							0.0	xxxxx	xxxx	xxxxx		
Stopped Del:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx							0.0	xxxxx	xxxx	xxxxx		
LOS by Move:	A	*	*	*	*	*	*	*							A	*	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	*	*	*	*	*	*						*	*	*	*		
ApproachDel:	xxxxxx					xxxxxx					0.0					xxxxxx				
ApproachLOS:	*					*					A					*				

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
PM Peak Hour

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

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 35.7 Worst Case Level Of Service: F[291.1]

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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	0	0	0	0	0	0	1	71	1	4	62	1
Added Vol:	0	0	0	130	0	80	123	408	0	0	672	197
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	130	0	80	124	479	1	4	734	198
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:	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 Volume:	0	0	0	130	0	80	124	479	1	4	734	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	130	0	80	124	479	1	4	734	198
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1570	xxxx	833	932	xxxx	xxxxx	481	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	123	xxxx	372	743	xxxx	xxxxx	1092	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	106	xxxx	372	743	xxxx	xxxxx	1092	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.23	xxxx	0.22	0.17	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.6	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.8	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	145	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	13.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	291	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			291.1			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.698
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	8.7
Optimal Cycle:	60	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	0	10	10	0	10	0	10	0	10	10	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	0	0	0	0	0	0	1	71	1	4	62	1
Added Vol:	0	0	0	130	0	80	123	408	0	0	672	197
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	130	0	80	124	479	1	4	734	198
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:	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 Volume:	0	0	0	130	0	80	124	479	1	4	734	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	130	0	80	124	479	1	4	734	198
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 Vol.:	0	0	0	130	0	80	124	479	1	4	734	198
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.92	0.72	0.72	0.72	0.97	0.97	0.97
Lanes:	0.00	1.00	0.00	0.62	0.00	0.38	0.20	0.79	0.01	0.01	0.78	0.21
Final Sat.:	0	1900	0	1083	0	666	282	1085	3	8	1444	391
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.12	0.44	0.44	0.44	0.51	0.51	0.51
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.17	0.00	0.17	0.73	0.73	0.73	0.73	0.73	0.73
Volume/Cap:	0.00	0.00	0.00	0.70	0.00	0.70	0.61	0.61	0.61	0.70	0.70	0.70
Delay/Veh:	0.0	0.0	0.0	30.4	0.0	30.4	5.1	5.1	5.1	6.2	6.2	6.2
User DelAdj:	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:	0.0	0.0	0.0	30.4	0.0	30.4	5.1	5.1	5.1	6.2	6.2	6.2
HCM2kAvg:	0	0	0	5	0	5	9	8	3	6	11	11

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
PM Peak Hour

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

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	2.030
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	316.6
Optimal Cycle:	0	Level Of Service:	F

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	12	499	103	25	127	12	26	63	3	51	71	63
Added Vol:	143	32	27	8	18	72	70	385	83	26	654	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	531	130	33	145	84	96	448	86	77	725	77
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:	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 Volume:	155	531	130	33	145	84	96	448	86	77	725	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	531	130	33	145	84	96	448	86	77	725	77
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 Vol.:	155	531	130	33	145	84	96	448	86	77	725	77
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:	0.23	0.77	1.00	0.12	0.56	0.32	0.15	0.71	0.14	0.09	0.82	0.09
Final Sat.:	93	318	454	49	220	128	66	309	59	38	357	38
Capacity Analysis Module:												
Vol/Sat:	1.67	1.67	0.29	0.66	0.66	0.66	1.45	1.45	1.45	2.03	2.03	2.03
Crit Moves:	****			****				****			****	
Delay/Veh:	332.9	333	13.8	28.0	28.0	28.0	238.5	238	238.5	490.7	491	490.7
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:	332.9	333	13.8	28.0	28.0	28.0	238.5	238	238.5	490.7	491	490.7
LOS by Move:	F	F	B	D	D	D	F	F	F	F	F	F
ApproachDel:	282.2			28.0			238.5			490.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	282.2			28.0			238.5			490.7		
LOS by Appr:	F			D			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****
Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	0.848
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	18.2
Optimal Cycle:	60	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	1 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	12	499	103	25	127	12	26	63	3	51	71	63
Added Vol:	143	32	27	8	18	72	70	385	83	26	654	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	531	130	33	145	84	96	448	86	77	725	77
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:	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 Volume:	155	531	130	33	145	84	96	448	86	77	725	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	531	130	33	145	84	96	448	86	77	725	77
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 Vol.:	155	531	130	33	145	84	96	448	86	77	725	77
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.76	1.00	0.85	0.59	0.59	0.59	0.80	0.80	0.80	0.90	0.90	0.90
Lanes:	1.00	1.00	1.00	0.12	0.56	0.32	0.15	0.71	0.14	0.09	0.82	0.09
Final Sat.:	1435	1900	1615	139	618	358	232	1084	208	150	1416	150
Capacity Analysis Module:												
Vol/Sat:	0.11	0.28	0.08	0.24	0.24	0.24	0.41	0.41	0.41	0.51	0.51	0.51
Crit Moves:		****									****	
Green/Cycle:	0.33	0.33	0.33	0.33	0.33	0.33	0.60	0.60	0.60	0.60	0.60	0.60
Volume/Cap:	0.33	0.85	0.24	0.71	0.71	0.71	0.68	0.68	0.68	0.85	0.85	0.85
Delay/Veh:	15.5	29.3	14.9	24.2	24.2	24.2	10.2	10.2	10.2	16.3	16.3	16.3
User DelAdj:	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:	15.5	29.3	14.9	24.2	24.2	24.2	10.2	10.2	10.2	16.3	16.3	16.3
HCM2kAvg:	3	12	2	9	8	9	11	11	10	17	18	17

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions
PM Peak Hour

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

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	1.858
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	242.9
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	29	112	44	22	59	33	16	159	14	12	145	42
Added Vol:	98	113	0	61	77	105	87	274	58	0	492	77
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	127	225	44	83	136	138	103	433	72	12	637	119
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:	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 Volume:	127	225	44	83	136	138	103	433	72	12	637	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	225	44	83	136	138	103	433	72	12	637	119
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 Vol.:	127	225	44	83	136	138	103	433	72	12	637	119
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:	0.32	0.57	0.11	0.23	0.38	0.39	0.17	0.71	0.12	0.02	0.83	0.15
Final Sat.:	130	231	45	94	153	156	70	293	49	7	343	64
Capacity Analysis Module:												
Vol/Sat:	0.97	0.97	0.97	0.89	0.89	0.89	1.48	1.48	1.48	1.86	1.86	1.86
Crit Moves:	****				****			****			****	
Delay/Veh:	68.3	68.3	68.3	49.9	49.9	49.9	251.1	251	251.1	415.7	416	415.7
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:	68.3	68.3	68.3	49.9	49.9	49.9	251.1	251	251.1	415.7	416	415.7
LOS by Move:	F	F	F	E	E	E	F	F	F	F	F	F
ApproachDel:	68.3			49.9			251.1			415.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	68.3			49.9			251.1			415.7		
LOS by Appr:	F			E			F			F		

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2006) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.743
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 15.3
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Initial Bse:	29	112	44	22	59	33	16	159	14	12	145	42
Added Vol:	98	113	0	61	77	105	87	274	58	0	492	77
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	127	225	44	83	136	138	103	433	72	12	637	119
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:	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 Volume:	127	225	44	83	136	138	103	433	72	12	637	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	225	44	83	136	138	103	433	72	12	637	119
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 Vol.:	127	225	44	83	136	138	103	433	72	12	637	119
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.97	0.97	0.97
Lanes:	0.32	0.57	0.11	0.23	0.38	0.39	0.17	0.71	0.12	0.02	0.83	0.15
Final Sat.:	458	815	159	354	580	588	258	1078	179	30	1527	286
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.28	0.23	0.23	0.23	0.40	0.40	0.40	0.42	0.42	0.42
Crit Moves:		****									****	
Green/Cycle:	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Volume/Cap:	0.74	0.74	0.74	0.63	0.63	0.63	0.72	0.72	0.72	0.74	0.74	0.74
Delay/Veh:	22.0	22.0	22.0	17.7	17.7	17.7	12.6	12.6	12.6	12.9	12.9	12.9
User DelAdj:	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:	22.0	22.0	22.0	17.7	17.7	17.7	12.6	12.6	12.6	12.9	12.9	12.9
HCM2kAvg:	10	10	10	7	7	7	12	12	11	10	12	13

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APPENDIX J

CUMULATIVE (2007) WITHOUT PROJECT CONDITIONS INTERSECTION ANALYSIS

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions
AM Peak Hour

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

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1	0	2	0 1	1	0	2	0 1	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	6	244		34	5	884		1	1		1	10	51		7	5
Growth Adj:	1.45	1.45		1.45	1.45	1.45		1.45	1.45		1.45	1.45	1.45		1.45	1.45
Initial Bse:	9	354		49	7	1282		1	1		1	15	74		10	7
Added Vol:	139	0		13	1	0		28	86		360	431	28		137	1
PasserByVol:	0	0		0	0	0		0	0		0	0	0		0	0
Initial Fut:	148	354		62	8	1282		29	87		361	446	102		147	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:	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 Volume:	148	354		62	8	1282		29	87		361	446	102		147	8
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Final Vol.:	148	354		62	8	1282		29	87		361	446	102		147	8
Critical Gap Module:																
Critical Gp:	4.1	xxxx		xxxxx	4.1	xxxx		xxxxx	7.5		6.5	6.9	7.5		6.5	6.9
FollowUpTim:	2.2	xxxx		xxxxx	2.2	xxxx		xxxxx	3.5		4.0	3.3	3.5		4.0	3.3
Capacity Module:																
Cnflict Vol:	1311	xxxx		xxxxx	416	xxxx		xxxxx	1844		2010	641	1487		1977	177
Potent Cap.:	534	xxxx		xxxxx	1154	xxxx		xxxxx	47		60	422	88		63	842
Move Cap.:	534	xxxx		xxxxx	1154	xxxx		xxxxx	0		43	422	0		45	842
Volume/Cap:	0.28	xxxx		xxxx	0.01	xxxx		xxxx	xxxx		8.42	1.05	xxxx		3.27	0.01
Level Of Service Module:																
Queue:	1.1	xxxx		xxxxx	0.0	xxxx		xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx
Stopped Del:	14.3	xxxx		xxxxx	8.1	xxxx		xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx
LOS by Move:	B	*		*	A	*		*	*		*	*	*		*	*
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx		0	xxxxx	xxxx		0	xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx
Shared LOS:	*	*		*	*	*		*	*		*	*	*		*	*
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				F				F			

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.947
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 47.9
Optimal Cycle: 120 Level Of Service: D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	9	354	49	7	1282	1	1	1	15	74	10	7
Added Vol:	139	0	13	1	0	28	86	360	431	28	137	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	148	354	62	8	1282	29	87	361	446	102	147	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:	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 Volume:	148	354	62	8	1282	29	87	361	446	102	147	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	354	62	8	1282	29	87	361	446	102	147	8
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 Vol.:	148	354	62	8	1282	29	87	361	446	102	147	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.65	0.92	0.92	0.32	0.32	0.32
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.45	0.55	0.40	0.57	0.03
Final Sat.:	1805	3610	1615	1805	3610	1615	1229	780	962	243	351	20
Capacity Analysis Module:												
Vol/Sat:	0.08	0.10	0.04	0.00	0.36	0.02	0.07	0.46	0.46	0.42	0.42	0.42
Crit Moves:	****				****			****				
Green/Cycle:	0.09	0.38	0.38	0.08	0.37	0.37	0.49	0.49	0.49	0.49	0.49	0.49
Volume/Cap:	0.95	0.26	0.10	0.05	0.95	0.05	0.15	0.95	0.95	0.86	0.86	0.86
Delay/Veh:	110.9	25.9	24.2	50.8	50.2	23.9	17.0	48.4	48.4	48.2	48.2	48.2
User DelAdj:	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:	110.9	25.9	24.2	50.8	50.2	23.9	17.0	48.4	48.4	48.2	48.2	48.2
HCM2kAvg:	9	4	1	0	28	1	3	33	33	28	28	30

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions
AM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[14.9]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1!	0	0
Volume Module:																				
Base Vol:	1		0		4	0		2		0	0		39		0	1		64		2
Growth Adj:	1.45	1.45		1.45		1.45	1.45		1.45		1.45	1.45		1.45		1.45	1.45		1.45	
Initial Bse:	1		0		6	0		3		0	0		57		0	1		93		3
Added Vol:	0		0		0	0		0		0	0		374		0	0		167		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	1		0		6	0		3		0	0		431		0	1		260		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:	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 Volume:	1		0		6	0		3		0	0		431		0	1		260		3
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	1		0		6	0		3		0	0		431		0	1		260		3
Critical Gap Module:																				
Critical Gp:	7.1	xxxx		6.2	xxxxx	6.5	xxxxx		xxxxx	xxxx	xxxxx					4.1	xxxx	xxxxx		
FollowUpTim:	3.5	xxxx		3.3	xxxxx	4.0	xxxxx		xxxxx	xxxx	xxxxx					2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	696	xxxx		431	xxxx	695	xxxxx		xxxx	xxxx	xxxxx					431	xxxx	xxxxx		
Potent Cap.:	359	xxxx		629	xxxx	368	xxxxx		xxxx	xxxx	xxxxx					1140	xxxx	xxxxx		
Move Cap.:	356	xxxx		629	xxxx	368	xxxxx		xxxx	xxxx	xxxxx					1140	xxxx	xxxxx		
Volume/Cap:	0.00	xxxx		0.01	xxxx	0.01	xxxx		xxxx	xxxx	xxxx					0.00	xxxx	xxxx		
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx	xxxxx	0.0	xxxxx		xxxxx	xxxx	xxxxx					0.0	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx		xxxxx	xxxxx	14.9	xxxxx		xxxxx	xxxx	xxxxx					8.2	xxxx	xxxxx		
LOS by Move:	*	*		*	*	B	*		*	*	*					A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	545		xxxxx	xxxx	xxxx	xxxxx		xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	0.0		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	11.7		xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx				
Shared LOS:	*	B		*	*	*	*		*	A	*	*		*	*	*				
ApproachDel:		11.7				14.9				xxxxxx				xxxxxx						
ApproachLOS:		B				B				*				*						

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions
AM Peak Hour

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

****
Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.0]
****

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 1	0 0	0
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	1	0	1	1	0	1	0	62	0	1	96	0
Added Vol:	0	0	0	0	0	0	0	374	0	0	167	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	1	1	0	1	0	436	0	1	263	0
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:	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 Volume:	1	0	1	1	0	1	0	436	0	1	263	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	1	1	0	1	0	436	0	1	263	0
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	703	xxxx	436	703	xxxx	263	xxxx	xxxx	xxxxx	436	xxxx	xxxxx
Potent Cap.:	355	xxxx	624	355	xxxx	781	xxxx	xxxx	xxxxx	1134	xxxx	xxxxx
Move Cap.:	354	xxxx	624	354	xxxx	781	xxxx	xxxx	xxxxx	1134	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.00	0.00	xxxx	0.00	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	452	xxxxx	xxxx	487	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	13.0	xxxxx	xxxxx	12.4	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	*	*	*	A	*	*
ApproachDel:		13.0			12.4			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions
AM Peak Hour

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

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	1.058
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	56.9
Optimal Cycle:	0	Level Of Service:	F

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	12	155	62	45	336	23	7	74	20	83	61	33
Added Vol:	0	12	11	16	38	43	18	356	0	13	124	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	167	73	61	374	66	25	430	20	96	185	39
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:	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 Volume:	12	167	73	61	374	66	25	430	20	96	185	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	167	73	61	374	66	25	430	20	96	185	39
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 Vol.:	12	167	73	61	374	66	25	430	20	96	185	39
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:	0.06	0.94	1.00	0.12	0.75	0.13	0.05	0.91	0.04	0.30	0.58	0.12
Final Sat.:	26	377	438	58	354	63	25	432	20	133	257	55
Capacity Analysis Module:												
Vol/Sat:	0.44	0.44	0.17	1.06	1.06	1.06	1.00	1.00	1.00	0.72	0.72	0.72
Crit Moves:	****				****			****		****		
Delay/Veh:	18.0	18.0	12.3	85.0	85.0	85.0	67.7	67.7	67.7	28.6	28.6	28.6
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:	18.0	18.0	12.3	85.0	85.0	85.0	67.7	67.7	67.7	28.6	28.6	28.6
LOS by Move:	C	C	B	F	F	F	F	F	F	D	D	D
ApproachDel:		16.4			85.0			67.7			28.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		16.4			85.0			67.7			28.6	
LOS by Appr:		C			F			F			D	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.580
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 12.0
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	12	155	62	45	336	23	7	74	20	83	61	33
Added Vol:	0	12	11	16	38	43	18	356	0	13	124	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	167	73	61	374	66	25	430	20	96	185	39
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:	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 Volume:	12	167	73	61	374	66	25	430	20	96	185	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	167	73	61	374	66	25	430	20	96	185	39
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 Vol.:	12	167	73	61	374	66	25	430	20	96	185	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.97	0.97	0.85	0.93	0.93	0.93	0.97	0.97	0.97	0.77	0.77	0.77
Lanes:	0.06	0.94	1.00	0.12	0.75	0.13	0.05	0.91	0.04	0.30	0.58	0.12
Final Sat.:	120	1723	1615	215	1323	234	98	1667	79	437	844	180
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.05	0.28	0.28	0.28	0.26	0.26	0.26	0.22	0.22	0.22
Crit Moves:					****			****				
Green/Cycle:	0.49	0.49	0.49	0.49	0.49	0.49	0.45	0.45	0.45	0.45	0.45	0.45
Volume/Cap:	0.20	0.20	0.09	0.58	0.58	0.58	0.58	0.58	0.58	0.49	0.49	0.49
Delay/Veh:	8.8	8.8	8.3	11.9	11.9	11.9	13.5	13.5	13.5	12.4	12.4	12.4
User DelAdj:	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:	8.8	8.8	8.3	11.9	11.9	11.9	13.5	13.5	13.5	12.4	12.4	12.4
HCM2kAvg:	2	2	1	8	8	8	8	7	8	6	6	6

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions
AM Peak Hour

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

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.958
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 31.4
Optimal Cycle: 0 Level Of Service: D

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	10	42	33	15	96	16	0	154	30	28	133	15
Added Vol:	0	47	0	59	108	25	22	361	0	0	117	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	89	33	74	204	41	22	515	30	28	250	47
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:	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 Volume:	10	89	33	74	204	41	22	515	30	28	250	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	89	33	74	204	41	22	515	30	28	250	47
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 Vol.:	10	89	33	74	204	41	22	515	30	28	250	47
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	0.67	0.25	0.23	0.64	0.13	0.04	0.91	0.05	0.08	0.78	0.14
Final Sat.:	35	304	114	118	328	66	23	537	32	45	413	77
Capacity Analysis Module:												
Vol/Sat:	0.29	0.29	0.29	0.62	0.62	0.62	0.96	0.96	0.96	0.61	0.61	0.61
Crit Moves:	****				****				****		****	
Delay/Veh:	12.8	12.8	12.8	19.2	19.2	19.2	50.3	50.3	50.3	18.0	18.0	18.0
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:	12.8	12.8	12.8	19.2	19.2	19.2	50.3	50.3	50.3	18.0	18.0	18.0
LOS by Move:	B	B	B	C	C	C	F	F	F	C	C	C
ApproachDel:		12.8			19.2			50.3			18.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		12.8			19.2			50.3			18.0	
LOS by Appr:		B			C			F			C	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.528
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 10.3
Optimal Cycle: 60 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	10	42	33	15	96	16	0	154	30	28	133	15
Added Vol:	0	47	0	59	108	25	22	361	0	0	117	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	89	33	74	204	41	22	515	30	28	250	47
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:	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 Volume:	10	89	33	74	204	41	22	515	30	28	250	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	89	33	74	204	41	22	515	30	28	250	47
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 Vol.:	10	89	33	74	204	41	22	515	30	28	250	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.94	0.94	0.89	0.89	0.89	0.98	0.98	0.98	0.93	0.93	0.93
Lanes:	0.08	0.67	0.25	0.23	0.64	0.13	0.04	0.91	0.05	0.08	0.78	0.14
Final Sat.:	137	1199	449	392	1086	218	72	1685	100	150	1361	253
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.19	0.19	0.19	0.31	0.31	0.31	0.18	0.18	0.18
Crit Moves:					****			****				
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.58	0.58	0.58	0.58	0.58	0.58
Volume/Cap:	0.21	0.21	0.21	0.53	0.53	0.53	0.53	0.53	0.53	0.32	0.32	0.32
Delay/Veh:	13.6	13.6	13.6	16.2	16.2	16.2	8.2	8.2	8.2	6.7	6.7	6.7
User DelAdj:	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:	13.6	13.6	13.6	16.2	16.2	16.2	8.2	8.2	8.2	6.7	6.7	6.7
HCM2kAvg:	2	2	2	6	6	6	7	7	7	4	3	3

****

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions
PM Peak Hour

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

****

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

****

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	4	1090	48	12	606	0	3	4	1	43	7	12
Added Vol:	480	0	33	2	0	96	53	261	263	18	428	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	484	1090	81	14	606	96	56	265	264	62	435	13
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:	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 Volume:	484	1090	81	14	606	96	56	265	264	62	435	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	484	1090	81	14	606	96	56	265	264	62	435	13
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	702	xxxx	xxxxx	1171	xxxx	xxxxx	2365	2773	303	2522	2788	545
Potent Cap.:	905	xxxx	xxxxx	604	xxxx	xxxxx	19	19	699	14	19	488
Move Cap.:	905	xxxx	xxxxx	604	xxxx	xxxxx	0	9	699	0	9	488
Volume/Cap:	0.54	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	30.05	0.38	xxxx	50.43	0.03
Level Of Service Module:												
Queue:	3.3	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	13.5	xxxx	xxxxx	11.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.764
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	31.4
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	4	1090	48	12	606	0	3	4	1	43	7	12
Added Vol:	480	0	33	2	0	96	53	261	263	18	428	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	484	1090	81	14	606	96	56	265	264	62	435	13
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:	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 Volume:	484	1090	81	14	606	96	56	265	264	62	435	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	484	1090	81	14	606	96	56	265	264	62	435	13
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 Vol.:	484	1090	81	14	606	96	56	265	264	62	435	13
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.74	0.93	0.93	0.71	0.71	0.71
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.50	0.50	0.12	0.86	0.02
Final Sat.:	1805	3610	1615	1805	3610	1615	1408	880	877	163	1151	33
Capacity Analysis Module:												
Vol/Sat:	0.27	0.30	0.05	0.01	0.17	0.06	0.04	0.30	0.30	0.38	0.38	0.38
Crit Moves:		****		****							****	
Green/Cycle:	0.30	0.33	0.33	0.17	0.19	0.19	0.41	0.41	0.41	0.41	0.41	0.41
Volume/Cap:	0.89	0.93	0.15	0.05	0.89	0.31	0.10	0.74	0.74	0.93	0.93	0.93
Delay/Veh:	35.9	32.1	14.5	21.1	37.0	21.5	11.0	19.2	19.2	39.0	39.0	39.0
User DelAdj:	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:	35.9	32.1	14.5	21.1	37.0	21.5	11.0	19.2	19.2	39.0	39.0	39.0
HCM2kAvg:	13	15	1	0	9	2	1	10	10	18	18	21

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions
PM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[18.5]
****

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	0 1	0 0	1	0 1	0 0	0
Volume Module:												
Base Vol:	2	7	2	1	1	0	0	55	1	1	42	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	3	10	3	1	1	0	0	80	1	1	61	0
Added Vol:	0	0	0	0	0	0	0	296	0	0	446	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	10	3	1	1	0	0	376	1	1	507	0
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:	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 Volume:	3	10	3	1	1	0	0	376	1	1	507	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	10	3	1	1	0	0	376	1	1	507	0
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	886	886	376	893	887	xxxxx	xxxx	xxxx	xxxxx	377	xxxx	xxxxx
Potent Cap.:	267	286	675	265	285	xxxxx	xxxx	xxxx	xxxxx	1192	xxxx	xxxxx
Move Cap.:	266	285	675	256	285	xxxxx	xxxx	xxxx	xxxxx	1192	xxxx	xxxxx
Volume/Cap:	0.01	0.04	0.00	0.01	0.01	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	314	xxxxx	270	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	17.1	xxxxx	18.5	xxxx	xxxxx	0.0	xxxx	xxxxx	8.0	xxxx	xxxxx
Shared LOS:	*	C	*	C	*	*	A	*	*	A	*	*
ApproachDel:		17.1			18.5			xxxxxx			xxxxxx	
ApproachLOS:		C			C			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions
PM Peak Hour

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

****
Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[8.4]
****

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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	0	0	0	0	0	0	1	75	1	4	65	1
Added Vol:	0	0	0	0	0	0	0	296	0	0	446	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	1	371	1	4	511	1
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:	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 Volume:	0	0	0	0	0	0	1	371	1	4	511	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	1	371	1	4	511	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	513	xxxx	xxxxx	373	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1063	xxxx	xxxxx	1197	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1063	xxxx	xxxxx	1197	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	8.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	0	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions
PM Peak Hour

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

****

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

****

Cycle (sec):	0	Critical Vol./Cap. (X):	1.478
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	152.6
Optimal Cycle:	0	Level Of Service:	F

****

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 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	13	528	109	26	135	13	28	67	3	54	75	67
Added Vol:	0	43	36	11	24	27	49	247	0	35	420	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	571	145	37	159	40	77	314	3	89	495	86
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:	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 Volume:	13	571	145	37	159	40	77	314	3	89	495	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	571	145	37	159	40	77	314	3	89	495	86
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 Vol.:	13	571	145	37	159	40	77	314	3	89	495	86
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:	0.02	0.98	1.00	0.16	0.67	0.17	0.19	0.80	0.01	0.13	0.74	0.13
Final Sat.:	10	421	471	62	265	67	85	348	3	60	335	58
Capacity Analysis Module:												
Vol/Sat:	1.36	1.36	0.31	0.60	0.60	0.60	0.90	0.90	0.90	1.48	1.48	1.48
Crit Moves:	****				****		****				****	
Delay/Veh:	198.5	198	13.7	23.7	23.7	23.7	50.1	50.1	50.1	248.2	248	248.2
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:	198.5	198	13.7	23.7	23.7	23.7	50.1	50.1	50.1	248.2	248	248.2
LOS by Move:	F	F	B	C	C	C	F	F	F	F	F	F
ApproachDel:	161.8			23.7			50.1			248.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	161.8			23.7			50.1			248.2		
LOS by Appr:	F			C			F			F		

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.755
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 14.8
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	13	528	109	26	135	13	28	67	3	54	75	67
Added Vol:	0	43	36	11	24	27	49	247	0	35	420	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	571	145	37	159	40	77	314	3	89	495	86
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:	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 Volume:	13	571	145	37	159	40	77	314	3	89	495	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	571	145	37	159	40	77	314	3	89	495	86
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 Vol.:	13	571	145	37	159	40	77	314	3	89	495	86
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.99	0.99	0.85	0.70	0.70	0.70	0.84	0.84	0.84	0.89	0.89	0.89
Lanes:	0.02	0.98	1.00	0.16	0.67	0.17	0.19	0.80	0.01	0.13	0.74	0.13
Final Sat.:	42	1846	1615	210	900	227	309	1266	12	224	1252	217
Capacity Analysis Module:												
Vol/Sat:	0.31	0.31	0.09	0.18	0.18	0.18	0.25	0.25	0.25	0.40	0.40	0.40
Crit Moves:		****									****	
Green/Cycle:	0.41	0.41	0.41	0.41	0.41	0.41	0.52	0.52	0.52	0.52	0.52	0.52
Volume/Cap:	0.76	0.76	0.22	0.43	0.43	0.43	0.47	0.47	0.47	0.76	0.76	0.76
Delay/Veh:	19.4	19.4	11.7	13.3	13.3	13.3	9.5	9.5	9.5	15.0	15.0	15.0
User DelAdj:	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:	19.4	19.4	11.7	13.3	13.3	13.3	9.5	9.5	9.5	15.0	15.0	15.0
HCM2kAvg:	12	11	2	5	5	5	6	6	5	13	13	12

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions
PM Peak Hour

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

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	1.684
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	177.4
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	30	119	46	23	62	35	17	168	15	13	154	45
Added Vol:	0	151	0	81	103	71	72	221	0	0	403	103
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	270	46	104	165	106	89	389	15	13	557	148
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:	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 Volume:	30	270	46	104	165	106	89	389	15	13	557	148
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	270	46	104	165	106	89	389	15	13	557	148
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 Vol.:	30	270	46	104	165	106	89	389	15	13	557	148
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:	0.09	0.78	0.13	0.28	0.44	0.28	0.18	0.79	0.03	0.02	0.77	0.21
Final Sat.:	35	314	54	115	182	116	76	331	12	8	331	88
Capacity Analysis Module:												
Vol/Sat:	0.86	0.86	0.86	0.91	0.91	0.91	1.18	1.18	1.18	1.68	1.68	1.68
Crit Moves:		****		****			****				****	
Delay/Veh:	45.6	45.6	45.6	53.3	53.3	53.3	129.4	129	129.4	338.9	339	338.9
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:	45.6	45.6	45.6	53.3	53.3	53.3	129.4	129	129.4	338.9	339	338.9
LOS by Move:	E	E	E	F	F	F	F	F	F	F	F	F
ApproachDel:		45.6			53.3			129.4			338.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		45.6			53.3			129.4			338.9	
LOS by Appr:		E			F			F			F	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) Without Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.695
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 13.3
Optimal Cycle: 60 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	30	119	46	23	62	35	17	168	15	13	154	45
Added Vol:	0	151	0	81	103	71	72	221	0	0	403	103
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	270	46	104	165	106	89	389	15	13	557	148
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:	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 Volume:	30	270	46	104	165	106	89	389	15	13	557	148
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	270	46	104	165	106	89	389	15	13	557	148
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 Vol.:	30	270	46	104	165	106	89	389	15	13	557	148
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.94	0.94	0.77	0.77	0.77	0.82	0.82	0.82	0.96	0.96	0.96
Lanes:	0.09	0.78	0.13	0.28	0.44	0.28	0.18	0.79	0.03	0.02	0.77	0.21
Final Sat.:	156	1386	238	406	644	412	284	1235	46	33	1420	377
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.19	0.26	0.26	0.26	0.32	0.32	0.32	0.39	0.39	0.39
Crit Moves:					****						****	
Green/Cycle:	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Volume/Cap:	0.53	0.53	0.53	0.69	0.69	0.69	0.56	0.56	0.56	0.69	0.69	0.69
Delay/Veh:	15.6	15.6	15.6	20.0	20.0	20.0	9.1	9.1	9.1	11.5	11.5	11.5
User DelAdj:	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:	15.6	15.6	15.6	20.0	20.0	20.0	9.1	9.1	9.1	11.5	11.5	11.5
HCM2kAvg:	6	6	6	9	9	9	8	8	7	10	11	11

****

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APPENDIX K

CUMULATIVE (2007) WITH PROJECT CONDITIONS INTERSECTION ANALYSIS

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
AM Peak Hour

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

****

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

****

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	1	1 0 2	0	1	0 0 1!	0	0	0 0 1!	0	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	9	354	49	7	1282	1	1	1	15	74	10	7
Added Vol:	139	0	140	44	0	28	86	369	431	384	144	108
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	148	354	189	51	1282	29	87	370	446	458	154	115
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:	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 Volume:	148	354	189	51	1282	29	87	370	446	458	154	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	148	354	189	51	1282	29	87	370	446	458	154	115
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1311	xxxx	xxxxx	543	xxxx	xxxxx	1934	2223	641	1578	2063	177
Potent Cap.:	534	xxxx	xxxxx	1036	xxxx	xxxxx	41	44	422	75	55	842
Move Cap.:	534	xxxx	xxxxx	1036	xxxx	xxxxx	0	30	422	0	38	842
Volume/Cap:	0.28	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	12.27	1.05	xxxx	4.05	0.14
Level Of Service Module:												
Queue:	1.1	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	14.3	xxxx	xxxxx	8.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

K3

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.949
Loss Time (sec):	8 (Y+R = 4 sec)	Average Delay (sec/veh):	54.6
Optimal Cycle:	120	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 1	0 1		1 0 0	1 0	
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	9	354	49	7	1282	1	1	1	15	74	10	7
Added Vol:	139	0	140	44	0	28	86	369	431	384	144	108
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	148	354	189	51	1282	29	87	370	446	458	154	115
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:	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 Volume:	148	354	189	51	1282	29	87	370	446	458	154	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	354	189	51	1282	29	87	370	446	458	154	115
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 Vol.:	148	354	189	51	1282	29	87	370	446	458	154	115
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	1.00	0.85	0.95	0.94	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.57	0.43
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	1900	1615	1805	1018	761
Capacity Analysis Module:												
Vol/Sat:	0.08	0.10	0.12	0.03	0.36	0.02	0.05	0.19	0.28	0.25	0.15	0.15
Crit Moves:	****				****			****		****		
Green/Cycle:	0.09	0.38	0.64	0.08	0.37	0.37	0.08	0.21	0.29	0.27	0.39	0.39
Volume/Cap:	0.95	0.26	0.18	0.34	0.95	0.05	0.58	0.95	0.95	0.95	0.39	0.39
Delay/Veh:	111.4	25.9	8.7	53.2	50.5	24.0	58.6	79.6	69.7	71.6	26.7	26.7
User DelAdj:	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:	111.4	25.9	8.7	53.2	50.5	24.0	58.6	79.6	69.7	71.6	26.7	26.7
HCM2kAvg:	9	4	3	2	28	1	4	18	21	22	7	7

K4

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
AM Peak Hour

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

****
Intersection #3 Worsley Rd. (NS) / Driveway 1 (EW)
****
Average Delay (sec/veh): 5.7 Worst Case Level Of Service: A[9.3]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Volume Module:																				
Base Vol:	0		2		0	0		2		0	0		0		0	0		0		0
Growth Adj:	1.45	1.45		1.45		1.45	1.45		1.45		1.45	1.45		1.45		1.45	1.45		1.45	
Initial Bse:	0		3		0	0		3		0	0		0		0	0		0		0
Added Vol:	0		7		40	0		21		0	0		0		0	119		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		10		40	0		24		0	0		0		0	119		0		0
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:	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 Volume:	0		10		40	0		24		0	0		0		0	119		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	0		10		40	0		24		0	0		0		0	119		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		6.4	xxxx		xxxxx	
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		3.5	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		54	xxxx		xxxxx	
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		959	xxxx		xxxxx	
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		959	xxxx		xxxxx	
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		0.12	xxxx		xxxx	
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.4	xxxx		xxxxx	
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		9.3	xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		*	*		*		A	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					9.3				
ApproachLOS:	*					*					*					A				

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
AM Peak Hour

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

****
Intersection #54 Worsley Rd. (NS) / Driveway 2 (EW)
****
Average Delay (sec/veh): 3.1 Worst Case Level Of Service: B[10.3]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Volume Module:																				
Base Vol:	0	2	0			0	2	0			0	0	0			0	0	0		
Growth Adj:	1.45	1.45	1.45			1.45	1.45	1.45			1.45	1.45	1.45			1.45	1.45	1.45		
Initial Bse:	0	3	0			0	3	0			0	0	0			0	0	0		
Added Vol:	0	48	33			0	141	0			0	0	0			97	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	51	33			0	144	0			0	0	0			97	0	0		
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:	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 Volume:	0	51	33			0	144	0			0	0	0			97	0	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	0	51	33			0	144	0			0	0	0			97	0	0		
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			6.4	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			3.5	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			211	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			782	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			782	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	xxxx	xxxx			0.12	xxxx	xxxx		
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			0.4	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			10.3	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			*	*	*			B	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			*	*	*			*	*	*		
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					10.3				
ApproachLOS:	*					*					*					B				

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
AM Peak Hour

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

****

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

****

Average Delay (sec/veh): 4.5 Worst Case Level Of Service: C[22.6]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	4	0	2	0	0	39	0	1	64	2
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	1	0	6	0	3	0	0	57	0	1	93	3
Added Vol:	0	0	0	22	0	215	73	481	0	0	421	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	6	22	3	215	73	538	0	1	514	11
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:	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 Volume:	1	0	6	22	3	215	73	538	0	1	514	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	6	22	3	215	73	538	0	1	514	11
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1315	xxxx	538	1209	1206	519	525	xxxx	xxxxx	538	xxxx	xxxxx
Potent Cap.:	136	xxxx	547	161	185	561	1052	xxxx	xxxxx	1041	xxxx	xxxxx
Move Cap.:	78	xxxx	547	151	172	561	1052	xxxx	xxxxx	1041	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	0.01	0.15	0.02	0.38	0.07	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.7	xxxx	xxxxx	8.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	249	xxxxx	xxxx	439	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	3.2	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	19.9	xxxxx	xxxxx	22.6	xxxxx	8.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	A	*	*	*	*	*
ApproachDel:		19.9			22.6			xxxxxx			xxxxxx	
ApproachLOS:		C			C			*			*	

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.560
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.3
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	4	0	2	0	0	39	0	1	64	2
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	1	0	6	0	3	0	0	57	0	1	93	3
Added Vol:	0	0	0	22	0	215	73	481	0	0	421	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	6	22	3	215	73	538	0	1	514	11
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:	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 Volume:	1	0	6	22	3	215	73	538	0	1	514	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	6	22	3	215	73	538	0	1	514	11
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 Vol.:	1	0	6	22	3	215	73	538	0	1	514	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	0.87	0.87	0.87	0.90	0.90	1.00	1.00	1.00	1.00
Lanes:	0.20	0.00	0.80	0.09	0.01	0.90	0.12	0.88	1.00	0.01	0.97	0.02
Final Sat.:	336	0	1342	152	20	1489	205	1512	1900	5	1850	39
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.14	0.14	0.36	0.36	0.00	0.28	0.28	0.28
Crit Moves:	****				****			****				
Green/Cycle:	0.17	0.00	0.17	0.21	0.21	0.21	0.52	0.52	0.00	0.52	0.52	0.52
Volume/Cap:	0.03	0.00	0.03	0.68	0.68	0.68	0.68	0.68	0.00	0.53	0.53	0.53
Delay/Veh:	21.0	0.0	21.0	27.2	27.2	27.2	12.8	12.8	0.0	10.1	10.1	10.1
User DelAdj:	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:	21.0	0.0	21.0	27.2	27.2	27.2	12.8	12.8	0.0	10.1	10.1	10.1
HCM2kAvg:	0	0	0	6	6	6	10	10	0	3	7	7

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
AM Peak Hour

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

****

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

****

Average Delay (sec/veh): 136.2 Worst Case Level Of Service: F[410.0]

****

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	0	0	0	0	1!	0	0	1	0	1	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	43	0	0	0	0	64	0	0	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	62	0	0	0	0	93	0	0	0
Added Vol:	0	0	0	385	0	146	49	454	0	0	0	282	130							
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0							
Initial Fut:	0	0	0	385	0	146	49	516	0	0	0	375	130							
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	1.00							
PHF 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	1.00							
PHF Volume:	0	0	0	385	0	146	49	516	0	0	0	375	130							
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0							
Final Vol.:	0	0	0	385	0	146	49	516	0	0	0	375	130							
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	1054	xxxx	440	505	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	xxxxx	252	xxxx	622	1070	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	xxxxx	244	xxxx	622	1070	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	xxxx	1.58	xxxx	0.23	0.05	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	292	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	35.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	410	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*								
ApproachDel:	xxxxxx			410.0			xxxxxx				xxxxxx									
ApproachLOS:	*			F			*				*									

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.670
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	16.3
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	10	0	0	10	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	43	0	0	64	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	0	0	0	0	0	0	0	62	0	0	93	0
Added Vol:	0	0	0	385	0	146	49	454	0	0	282	130
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	385	0	146	49	516	0	0	375	130
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:	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 Volume:	0	0	0	385	0	146	49	516	0	0	375	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	385	0	146	49	516	0	0	375	130
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 Vol.:	0	0	0	385	0	146	49	516	0	0	375	130
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.93	0.95	1.00	1.00	1.00	0.97	0.97
Lanes:	0.00	0.00	0.00	0.73	0.00	0.27	1.00	1.00	0.00	0.00	0.74	0.26
Final Sat.:	0	0	0	1280	0	485	1805	1900	0	0	1361	472
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.30	0.00	0.30	0.03	0.27	0.00	0.00	0.28	0.28
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.45	0.00	0.45	0.04	0.45	0.00	0.00	0.41	0.41
Volume/Cap:	0.00	0.00	0.00	0.67	0.00	0.67	0.67	0.60	0.00	0.00	0.67	0.67
Delay/Veh:	0.0	0.0	0.0	15.3	0.0	15.3	49.9	13.6	0.0	0.0	16.7	16.7
User DelAdj:	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:	0.0	0.0	0.0	15.3	0.0	15.3	49.9	13.6	0.0	0.0	16.7	16.7
HCM2kAvg:	0	0	0	9	0	9	2	8	0	0	9	9

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
AM Peak Hour

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

****
Intersection #57 Driveway 4 (NS) / Mission Lakes Blvd. (EW)
****
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]
****

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:	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1!	0	0
Volume Module:																				
Base Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Growth Adj:	1.45		1.45		1.45	1.45		1.45		1.45	1.45		1.45		1.45	1.45		1.45		1.45
Initial Bse:	0		0		0	0		0		0	0		0		0	0		0		0
Added Vol:	21		0		0	0		0		0	0		0		7	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	21		0		0	0		0		0	0		0		7	0		0		0
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:	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 Volume:	21		0		0	0		0		0	0		0		7	0		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	21		0		0	0		0		0	0		0		7	0		0		0
Critical Gap Module:																				
Critical Gp:	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Stopped Del:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*								
ApproachDel:		0.0			xxxxxx			xxxxxx			xxxxxx									
ApproachLOS:		A			*			*			*									

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
AM Peak Hour

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

****
Intersection #58 Karen Ave. (NS) / Driveway 5 (EW)
****
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	0	0	0	1!	0	0	0	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Growth Adj:	1.45	1.45		1.45		1.45	1.45		1.45		1.45	1.45		1.45		1.45	1.45		1.45	
Initial Bse:	0		0		0	0		0		0	0		0		0	0		0		0
Added Vol:	153		0		0	0		0		0	0		0		283	0		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	153		0		0	0		0		0	0		0		283	0		0		0
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:	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 Volume:	153		0		0	0		0		0	0		0		283	0		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	153		0		0	0		0		0	0		0		283	0		0		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx	6.2	xxxxx	xxxx		xxxxx	
FollowUpTim:	2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx	3.3	xxxxx	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	0	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxx	0	xxxx	xxxx		xxxxx	
Potent Cap.:	0	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxx	0	xxxx	xxxx		xxxxx	
Move Cap.:	0	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxx	0	xxxx	xxxx		xxxxx	
Volume/Cap:	0.00	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx	0.00	xxxx	xxxx		xxxx	
Level Of Service Module:																				
Queue:	0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx	0.0	xxxxx	xxxx		xxxxx	
Stopped Del:	0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx	0.0	xxxxx	xxxx		xxxxx	
LOS by Move:	A	*		*		*	*		*		*	*		*	A	*	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					0.0					xxxxxx				
ApproachLOS:	*					*					A					*				

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
AM Peak Hour

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

****

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

****

Average Delay (sec/veh): 70.6 Worst Case Level Of Service: F[414.3]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	1	0	1	1	0	1	0	62	0	1	96	0
Added Vol:	0	0	0	175	0	108	58	781	0	0	304	95
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	1	176	0	109	58	843	0	1	400	95
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:	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 Volume:	1	0	1	176	0	109	58	843	0	1	400	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	0	1	176	0	109	58	843	0	1	400	95
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1464	xxxx	843	1410	xxxx	447	495	xxxx	xxxxx	843	xxxx	xxxxx
Potent Cap.:	107	xxxx	367	117	xxxx	616	1079	xxxx	xxxxx	801	xxxx	xxxxx
Move Cap.:	84	xxxx	367	112	xxxx	616	1079	xxxx	xxxxx	801	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	0.00	1.58	xxxx	0.18	0.05	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	137	xxxxx	xxxx	162	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	20.6	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	31.8	xxxxx	xxxxx	414	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	D	*	*	F	*	A	*	*	*	*	*
ApproachDel:		31.8			414.3			xxxxxx			xxxxxx	
ApproachLOS:		D			F			*			*	

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.739
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	23.8
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	0	10	10	0	10	10	10	10	10	10	10
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	1	0	1	1	0	1	0	62	0	1	96	0
Added Vol:	0	0	0	175	0	108	58	781	0	0	304	95
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	1	176	0	109	58	843	0	1	400	95
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:	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 Volume:	1	0	1	176	0	109	58	843	0	1	400	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	1	176	0	109	58	843	0	1	400	95
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 Vol.:	1	0	1	176	0	109	58	843	0	1	400	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	0.92	1.00	0.92	0.95	0.95	1.00	0.97	0.97	0.97
Lanes:	0.50	0.00	0.50	0.62	0.00	0.38	0.06	0.94	0.00	0.01	0.80	0.19
Final Sat.:	865	0	865	1078	0	669	116	1689	0	5	1489	354
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.16	0.50	0.50	0.00	0.27	0.27	0.27
Crit Moves:	****			****				****				
Green/Cycle:	0.17	0.00	0.17	0.18	0.00	0.18	0.55	0.55	0.00	0.55	0.55	0.55
Volume/Cap:	0.01	0.00	0.01	0.90	0.00	0.90	0.90	0.90	0.00	0.49	0.49	0.49
Delay/Veh:	20.9	0.0	20.9	51.7	0.0	51.7	23.4	23.4	0.0	8.6	8.6	8.6
User DelAdj:	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:	20.9	0.0	20.9	51.7	0.0	51.7	23.4	23.4	0.0	8.6	8.6	8.6
HCM2kAvg:	0	0	0	9	0	9	22	20	0	2	6	6

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
AM Peak Hour

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

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	2.446
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	358.5
Optimal Cycle:	0	Level Of Service:	F

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 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	12	155	62	45	336	23	7	74	20	83	61	33
Added Vol:	60	12	11	16	38	69	74	725	156	13	270	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	72	167	73	61	374	92	81	799	176	96	331	39
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:	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 Volume:	72	167	73	61	374	92	81	799	176	96	331	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	167	73	61	374	92	81	799	176	96	331	39
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 Vol.:	72	167	73	61	374	92	81	799	176	96	331	39
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:	0.30	0.70	1.00	0.12	0.71	0.17	0.08	0.75	0.17	0.21	0.71	0.08
Final Sat.:	115	268	420	49	303	75	33	327	72	88	304	36
Capacity Analysis Module:												
Vol/Sat:	0.62	0.62	0.17	1.24	1.24	1.24	2.45	2.45	2.45	1.09	1.09	1.09
Crit Moves:		****			****			****			****	
Delay/Veh:	26.5	26.5	13.1	151.3	151	151.3	675.6	676	675.6	98.4	98.4	98.4
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:	26.5	26.5	13.1	151.3	151	151.3	675.6	676	675.6	98.4	98.4	98.4
LOS by Move:	D	D	B	F	F	F	F	F	F	F	F	F
ApproachDel:		23.4			151.3			675.6			98.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		23.4			151.3			675.6			98.4	
LOS by Appr:		C			F			F			F	

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.946
Loss Time (sec): 8 (Y+R = 4 sec) Average Delay (sec/veh): 47.9
Optimal Cycle: 120 Level Of Service: D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	1 0	1	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	12	155	62	45	336	23	7	74	20	83	61	33
Added Vol:	60	12	11	16	38	69	74	725	156	13	270	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	72	167	73	61	374	92	81	799	176	96	331	39
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:	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 Volume:	72	167	73	61	374	92	81	799	176	96	331	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	167	73	61	374	92	81	799	176	96	331	39
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 Vol.:	72	167	73	61	374	92	81	799	176	96	331	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	1.00	0.85	0.92	0.92	0.92	0.95	0.97	0.97	0.95	0.98	0.98
Lanes:	1.00	1.00	1.00	0.12	0.71	0.17	1.00	0.82	0.18	1.00	0.89	0.11
Final Sat.:	1640	1900	1615	202	1240	305	1805	1515	334	1805	1671	199
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.05	0.30	0.30	0.30	0.05	0.53	0.53	0.05	0.20	0.20
Crit Moves:					****			****		****		
Green/Cycle:	0.31	0.31	0.31	0.31	0.31	0.31	0.08	0.54	0.54	0.08	0.54	0.54
Volume/Cap:	0.14	0.28	0.15	0.98	0.98	0.98	0.54	0.98	0.98	0.64	0.37	0.37
Delay/Veh:	30.0	31.6	30.1	73.5	73.5	73.5	56.7	49.5	49.5	61.9	16.0	16.0
User DelAdj:	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:	30.0	31.6	30.1	73.5	73.5	73.5	56.7	49.5	49.5	61.9	16.0	16.0
HCM2kAvg:	2	5	2	25	26	27	4	41	41	5	8	7

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K16

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
AM Peak Hour

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

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	1.743
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	193.9
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	10	42	33	15	96	16	0	154	30	28	133	15
Added Vol:	43	47	0	59	108	51	79	567	106	0	194	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	89	33	74	204	67	79	721	136	28	327	47
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:	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 Volume:	53	89	33	74	204	67	79	721	136	28	327	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	89	33	74	204	67	79	721	136	28	327	47
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 Vol.:	53	89	33	74	204	67	79	721	136	28	327	47
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:	0.30	0.51	0.19	0.21	0.60	0.19	0.08	0.77	0.15	0.07	0.81	0.12
Final Sat.:	125	210	79	102	283	93	45	414	78	35	411	58
Capacity Analysis Module:												
Vol/Sat:	0.42	0.42	0.42	0.72	0.72	0.72	1.74	1.74	1.74	0.80	0.80	0.80
Crit Moves:		****			****		****				****	
Delay/Veh:	15.9	15.9	15.9	25.6	25.6	25.6	359.0	359	359.0	30.8	30.8	30.8
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:	15.9	15.9	15.9	25.6	25.6	25.6	359.0	359	359.0	30.8	30.8	30.8
LOS by Move:	C	C	C	D	D	D	F	F	F	D	D	D
ApproachDel:		15.9			25.6			359.0			30.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		15.9			25.6			359.0			30.8	
LOS by Appr:		C			D			F			D	

K17

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	60	Critical Vol./Cap. (X):	0.792
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	13.7
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	10	42	33	15	96	16	0	154	30	28	133	15
Added Vol:	43	47	0	59	108	51	79	567	106	0	194	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	89	33	74	204	67	79	721	136	28	327	47
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:	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 Volume:	53	89	33	74	204	67	79	721	136	28	327	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	89	33	74	204	67	79	721	136	28	327	47
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 Vol.:	53	89	33	74	204	67	79	721	136	28	327	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.75	0.75	0.75	0.89	0.89	0.89	0.92	0.92	0.92	0.91	0.91	0.91
Lanes:	0.30	0.51	0.19	0.21	0.60	0.19	0.08	0.77	0.15	0.07	0.81	0.12
Final Sat.:	432	724	271	359	996	327	148	1347	255	119	1415	201
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.20	0.20	0.20	0.53	0.53	0.53	0.23	0.23	0.23
Crit Moves:					****			****				
Green/Cycle:	0.26	0.26	0.26	0.26	0.26	0.26	0.68	0.68	0.68	0.68	0.68	0.68
Volume/Cap:	0.48	0.48	0.48	0.79	0.79	0.79	0.79	0.79	0.79	0.34	0.34	0.34
Delay/Veh:	19.8	19.8	19.8	30.3	30.3	30.3	10.5	10.5	10.5	4.3	4.3	4.3
User DelAdj:	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:	19.8	19.8	19.8	30.3	30.3	30.3	10.5	10.5	10.5	4.3	4.3	4.3
HCM2kAvg:	4	4	4	9	9	9	16	15	15	4	4	3

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
PM Peak Hour

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

****

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

****

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	4	1090	48	12	606	0	3	4	1	43	7	12
Added Vol:	480	0	445	124	0	96	53	268	263	250	435	73
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	484	1090	493	136	606	96	56	272	264	294	442	85
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:	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 Volume:	484	1090	493	136	606	96	56	272	264	294	442	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	484	1090	493	136	606	96	56	272	264	294	442	85
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	702	xxxx	xxxxx	1583	xxxx	xxxxx	2612	3429	303	2770	3032	545
Potent Cap.:	905	xxxx	xxxxx	421	xxxx	xxxxx	12	7	699	9	13	488
Move Cap.:	905	xxxx	xxxxx	421	xxxx	xxxxx	0	2	699	0	4	488
Volume/Cap:	0.54	xxxx	xxxx	0.32	xxxx	xxxx	xxxx	xxxx	0.38	xxxx	xxxx	0.17
Level Of Service Module:												
Queue:	3.3	xxxx	xxxxx	1.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	13.5	xxxx	xxxxx	17.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	C	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.799
Loss Time (sec):	8 (Y+R = 4 sec)	Average Delay (sec/veh):	54.1
Optimal Cycle:	60	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:		Ovl			Include			Ovl			Include	
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	4	1090	48	12	606	0	3	4	1	43	7	12
Added Vol:	480	0	445	124	0	96	53	268	263	250	435	73
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	484	1090	493	136	606	96	56	272	264	294	442	85
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:	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 Volume:	484	1090	493	136	606	96	56	272	264	294	442	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	484	1090	493	136	606	96	56	272	264	294	442	85
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 Vol.:	484	1090	493	136	606	96	56	272	264	294	442	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	1.00	0.85	0.95	0.98	0.98
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.84	0.16
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	1900	1615	1805	1557	298
Capacity Analysis Module:												
Vol/Sat:	0.27	0.30	0.31	0.08	0.17	0.06	0.03	0.14	0.16	0.16	0.28	0.28
Crit Moves:		****		****			****				****	
Green/Cycle:	0.27	0.27	0.49	0.17	0.17	0.17	0.17	0.21	0.48	0.21	0.26	0.26
Volume/Cap:	0.99	1.10	0.63	0.45	0.99	0.35	0.19	0.67	0.34	0.76	1.10	1.10
Delay/Veh:	59.2	81.4	12.9	23.6	58.0	22.8	21.8	26.2	9.8	31.1	93.0	93.0
User DelAdj:	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:	59.2	81.4	12.9	23.6	58.0	22.8	21.8	26.2	9.8	31.1	93.0	93.0
HCM2kAvg:	16	21	8	3	11	2	1	6	3	7	20	20

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
PM Peak Hour

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

Intersection #3 Worsley Rd. (NS) / Driveway 1 (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: A[9.5]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Volume Module:																				
Base Vol:	0	7	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	0	10	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	0	25	138	0	14	0	0	0	0	0	0	0	0	0	0	77	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	35	138	0	17	0	0	0	0	0	0	0	0	0	0	77	0	0	0	0
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	35	138	0	17	0	0	0	0	0	0	0	0	0	0	77	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	35	138	0	17	0	0	0	0	0	0	0	0	0	0	77	0	0	0	0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxxx	xxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxxx	xxxx
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	121	xxxx	xxxxx	xxxx	xxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	879	xxxx	xxxxx	xxxx	xxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	879	xxxx	xxxxx	xxxx	xxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx	xxxxx	xxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	A	*	*	*	*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx				9.5									
ApproachLOS:	*			*			*				A									

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
PM Peak Hour

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

****

Intersection #54 Worsley Rd. (NS) / Driveway 2 (EW)

****

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[10.9]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 1	0	0 0	1 0	0	0 0	0 0	0	1 0	0 0	0
Volume Module:												
Base Vol:	0	7	0	0	2	0	0	0	0	0	0	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	0	10	0	0	3	0	0	0	0	0	0	0
Added Vol:	0	163	112	0	90	0	0	0	0	62	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	173	112	0	93	0	0	0	0	62	0	0
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:	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 Volume:	0	173	112	0	93	0	0	0	0	62	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	173	112	0	93	0	0	0	0	62	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	322	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	676	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	676	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.9		
ApproachLOS:	*			*			*			B		

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
PM Peak Hour

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

****

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

****

Average Delay (sec/veh): 8.1 Worst Case Level Of Service: F[110.5]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	2	7	2	1	1	0	0	55	1	1	42	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	3	10	3	1	1	0	0	80	1	1	61	0
Added Vol:	0	0	0	14	0	138	249	587	0	0	620	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	10	3	15	1	138	249	667	1	1	681	26
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:	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 Volume:	3	10	3	15	1	138	249	667	1	1	681	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	10	3	15	1	138	249	667	1	1	681	26
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1931	1875	667	1869	1863	694	707	xxxx	xxxxx	668	xxxx	xxxxx
Potent Cap.:	51	73	462	56	74	446	901	xxxx	xxxxx	931	xxxx	xxxxx
Move Cap.:	26	49	462	35	50	446	901	xxxx	xxxxx	931	xxxx	xxxxx
Volume/Cap:	0.11	0.21	0.01	0.44	0.03	0.31	0.28	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.5	xxxx	xxxxx	8.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	49	xxxxx	xxxx	200	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.1	xxxxx	xxxxx	5.3	xxxxx	1.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	111	xxxxx	xxxxx	66.1	xxxxx	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	F	*	*	F	*	B	*	*	*	*	*
ApproachDel:		110.5			66.1		xxxxxx			xxxxxx		
ApproachLOS:		F			F			*			*	

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.904
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 35.6
Optimal Cycle: 93 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Split Phase				Split Phase				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10		10	10	10		10	10	10		10	10	10		10	10
Lanes:	0	0	1!	0 0	0	0	1!	0 0	0	1	0	0 1	0	0	1!	0 0
Volume Module:																
Base Vol:	2		7	2	1		1	0	0		55	1	1		42	0
Growth Adj:	1.45		1.45	1.45	1.45		1.45	1.45	1.45		1.45	1.45	1.45		1.45	1.45
Initial Bse:	3		10	3	1		1	0	0		80	1	1		61	0
Added Vol:	0		0	0	14		0	138	249		587	0	0		620	26
PasserByVol:	0		0	0	0		0	0	0		0	0	0		0	0
Initial Fut:	3		10	3	15		1	138	249		667	1	1		681	26
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:	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 Volume:	3		10	3	15		1	138	249		667	1	1		681	26
Reduct Vol:	0		0	0	0		0	0	0		0	0	0		0	0
Reduced Vol:	3		10	3	15		1	138	249		667	1	1		681	26
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 Vol.:	3		10	3	15		1	138	249		667	1	1		681	26
Saturation Flow Module:																
Sat/Lane:	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900
Adjustment:	0.97		0.97	0.97	0.88		0.88	0.88	0.65		0.65	0.85	1.00		1.00	1.00
Lanes:	0.18		0.64	0.18	0.10		0.01	0.89	0.27		0.73	1.00	0.01		0.96	0.03
Final Sat.:	334		1168	334	166		16	1482	335		896	1615	4		1817	69
Capacity Analysis Module:																
Vol/Sat:	0.01		0.01	0.01	0.09		0.09	0.09	0.74		0.74	0.00	0.37		0.37	0.37
Crit Moves:			****				****				****					
Green/Cycle:	0.11		0.11	0.11	0.11		0.11	0.11	0.72		0.72	0.72	0.72		0.72	0.72
Volume/Cap:	0.08		0.08	0.08	0.87		0.87	0.87	1.03		1.03	0.00	0.52		0.52	0.52
Delay/Veh:	37.5		37.5	37.5	73.8		73.8	73.8	51.9		51.9	3.6	6.2		6.2	6.2
User DelAdj:	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:	37.5		37.5	37.5	73.8		73.8	73.8	51.9		51.9	3.6	6.2		6.2	6.2
HCM2kAvg:	0		0	0	7		7	7	53		53	0	3		9	11

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
PM Peak Hour

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

****
Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 179.8 Worst Case Level Of Service: F[1091.7]
****

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 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	58	0	0	43	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	0	0	0	0	0	0	0	84	0	0	62	0
Added Vol:	0	0	0	248	0	94	169	432	0	0	552	447
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	248	0	94	169	516	0	0	614	447
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:	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 Volume:	0	0	0	248	0	94	169	516	0	0	614	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	248	0	94	169	516	0	0	614	447
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1692	xxxx	838	1061	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	104	xxxx	369	664	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	83	xxxx	369	664	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	2.98	xxxx	0.25	0.25	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	106	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	33.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	1092	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			1091.7			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.926
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	37.9
Optimal Cycle:	120	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	10	0	0	10	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	58	0	0	43	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	0	0	0	0	0	0	0	84	0	0	62	0
Added Vol:	0	0	0	248	0	94	169	432	0	0	552	447
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	248	0	94	169	516	0	0	614	447
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:	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 Volume:	0	0	0	248	0	94	169	516	0	0	614	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	248	0	94	169	516	0	0	614	447
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 Vol.:	0	0	0	248	0	94	169	516	0	0	614	447
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.93	0.95	1.00	1.00	1.00	0.94	0.94
Lanes:	0.00	0.00	0.00	0.73	0.00	0.27	1.00	1.00	0.00	0.00	0.58	0.42
Final Sat.:	0	0	0	1280	0	485	1805	1900	0	0	1037	755
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.19	0.09	0.27	0.00	0.00	0.59	0.59
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.21	0.00	0.21	0.10	0.74	0.00	0.00	0.64	0.64
Volume/Cap:	0.00	0.00	0.00	0.93	0.00	0.93	0.93	0.37	0.00	0.00	0.93	0.93
Delay/Veh:	0.0	0.0	0.0	75.4	0.0	75.4	99.3	5.7	0.0	0.0	31.7	31.7
User DelAdj:	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:	0.0	0.0	0.0	75.4	0.0	75.4	99.3	5.7	0.0	0.0	31.7	31.7
HCM2kAvg:	0	0	0	17	0	17	10	7	0	0	39	39

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
PM Peak Hour

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

****

Intersection #57 Driveway 4 (NS) / Mission Lakes Blvd. (EW)

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

****

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:	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1!	0
Volume Module:																
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	14	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0
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	1.00	1.00	1.00	1.00
PHF 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	1.00	1.00	1.00	1.00
PHF Volume:	14	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	14	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0
Critical Gap Module:																
Critical Gp:	6.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*				
ApproachDel:		0.0			xxxxxx			xxxxxx			xxxxxx					
ApproachLOS:		A			*			*			*					

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
PM Peak Hour

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

Intersection #58 Karen Ave. (NS) / Driveway 5 (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0 0 0			0 0 1! 0 0			0 0 0 0 1			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	320	0	0	0	0	0	0	0	210	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	320	0	0	0	0	0	0	0	210	0	0	0
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:	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 Volume:	320	0	0	0	0	0	0	0	210	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	320	0	0	0	0	0	0	0	210	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0	xxxx	xxxx	xxxxx
Potent Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0	xxxx	xxxx	xxxxx
Move Cap.:	0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx
Stopped Del:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	A	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			0.0			xxxxxx		
ApproachLOS:	*			*			A			*		

K28

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
PM Peak Hour

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

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 81.2 Worst Case Level Of Service: F[825.4]

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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	0	0	0	0	0	0	1	75	1	4	65	1
Added Vol:	0	0	0	130	0	80	123	557	0	0	919	197
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	130	0	80	124	632	1	4	984	198
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:	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 Volume:	0	0	0	130	0	80	124	632	1	4	984	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	130	0	80	124	632	1	4	984	198
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1974	xxxx	1083	1183	xxxx	xxxxx	634	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	69	xxxx	266	598	xxxx	xxxxx	959	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	57	xxxx	266	598	xxxx	xxxxx	959	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	2.28	xxxx	0.30	0.21	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.6	xxxx	xxxxx	8.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	81	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	20.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	825	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			825.4			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.845
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	13.0
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	0	10	10	0	10	10	10	10	10	10	10
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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	0	0	0	0	0	0	1	75	1	4	65	1
Added Vol:	0	0	0	130	0	80	123	557	0	0	919	197
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	130	0	80	124	632	1	4	984	198
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:	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 Volume:	0	0	0	130	0	80	124	632	1	4	984	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	130	0	80	124	632	1	4	984	198
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 Vol.:	0	0	0	130	0	80	124	632	1	4	984	198
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.92	0.71	0.71	0.71	0.98	0.98	0.98
Lanes:	0.00	1.00	0.00	0.62	0.00	0.38	0.16	0.83	0.01	0.01	0.83	0.16
Final Sat.:	0	1900	0	1083	0	666	222	1127	3	7	1536	310
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.12	0.56	0.56	0.56	0.64	0.64	0.64
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.17	0.00	0.17	0.73	0.73	0.73	0.73	0.73	0.73
Volume/Cap:	0.00	0.00	0.00	0.72	0.00	0.72	0.77	0.77	0.77	0.87	0.87	0.87
Delay/Veh:	0.0	0.0	0.0	32.2	0.0	32.2	8.5	8.5	8.5	12.5	12.5	12.5
User DelAdj:	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:	0.0	0.0	0.0	32.2	0.0	32.2	8.5	8.5	8.5	12.5	12.5	12.5
HCM2kAvg:	0	0	0	6	0	6	14	14	5	10	20	21

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
PM Peak Hour

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

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	2.594
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	479.6
Optimal Cycle:	0	Level Of Service:	F

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 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	13	528	109	26	135	13	28	67	3	54	75	67
Added Vol:	180	43	36	11	24	91	89	494	104	35	845	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	193	571	145	37	159	104	117	561	107	89	920	86
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:	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 Volume:	193	571	145	37	159	104	117	561	107	89	920	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	571	145	37	159	104	117	561	107	89	920	86
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 Vol.:	193	571	145	37	159	104	117	561	107	89	920	86
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:	0.25	0.75	1.00	0.12	0.53	0.35	0.15	0.71	0.14	0.08	0.84	0.08
Final Sat.:	102	301	444	49	211	138	63	302	58	34	355	33
Capacity Analysis Module:												
Vol/Sat:	1.90	1.90	0.33	0.75	0.75	0.75	1.85	1.85	1.85	2.59	2.59	2.59
Crit Moves:	****				****			****		****		
Delay/Veh:	433.4	433	14.7	34.9	34.9	34.9	413.3	413	413.3	742.6	743	742.6
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:	433.4	433	14.7	34.9	34.9	34.9	413.3	413	413.3	742.6	743	742.6
LOS by Move:	F	F	B	D	D	D	F	F	F	F	F	F
ApproachDel:	366.7			34.9			413.3			742.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	366.7			34.9			413.3			742.6		
LOS by Appr:	F			D			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.966
Loss Time (sec):	8 (Y+R = 4 sec)	Average Delay (sec/veh):	48.1
Optimal Cycle:	120	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Permitted				Permitted				Protected				Protected			
Rights:		Include				Include				Include				Include		
Min. Green:	10	10		10	10	10		10	10	10		10	10	10		10
Lanes:	1	0 1	0	1	0	0 1!	0	0	1	0 0	1	0	1	0 0	1	0
Volume Module:																
Base Vol:	9	364		75	18	93		9	19	46		2	37	52		46
Growth Adj:	1.45	1.45		1.45	1.45	1.45		1.45	1.45	1.45		1.45	1.45	1.45		1.45
Initial Bse:	13	528		109	26	135		13	28	67		3	54	75		67
Added Vol:	180	43		36	11	24		91	89	494		104	35	845		19
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	193	571		145	37	159		104	117	561		107	89	920		86
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:	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 Volume:	193	571		145	37	159		104	117	561		107	89	920		86
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	193	571		145	37	159		104	117	561		107	89	920		86
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 Vol.:	193	571		145	37	159		104	117	561		107	89	920		86
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.69	1.00		0.85	0.65	0.65		0.65	0.95	0.98		0.98	0.95	0.99		0.99
Lanes:	1.00	1.00		1.00	0.12	0.53		0.35	1.00	0.84		0.16	1.00	0.91		0.09
Final Sat.:	1302	1900		1615	153	657		430	1805	1557		297	1805	1716		160
Capacity Analysis Module:																
Vol/Sat:	0.15	0.30		0.09	0.24	0.24		0.24	0.06	0.36		0.36	0.05	0.54		0.54
Crit Moves:		****							****					****		
Green/Cycle:	0.31	0.31		0.31	0.31	0.31		0.31	0.08	0.54		0.54	0.08	0.54		0.54
Volume/Cap:	0.49	0.98		0.29	0.79	0.79		0.79	0.77	0.66		0.66	0.59	0.98		0.98
Delay/Veh:	35.0	74.7		32.2	49.1	49.1		49.1	75.7	21.1		21.1	59.1	51.2		51.2
User DelAdj:	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:	35.0	74.7		32.2	49.1	49.1		49.1	75.7	21.1		21.1	59.1	51.2		51.2
HCM2kAvg:	9	27		4	17	17		16	6	18		18	4	43		41

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions
PM Peak Hour

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

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	2.403
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	403.3
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	30	119	46	23	62	35	17	168	15	13	154	45
Added Vol:	123	151	0	81	103	135	112	357	72	0	642	103
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	270	46	104	165	170	129	525	87	13	796	148
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:	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 Volume:	153	270	46	104	165	170	129	525	87	13	796	148
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	270	46	104	165	170	129	525	87	13	796	148
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 Vol.:	153	270	46	104	165	170	129	525	87	13	796	148
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:	0.33	0.57	0.10	0.24	0.37	0.39	0.17	0.71	0.12	0.01	0.84	0.15
Final Sat.:	129	227	39	96	152	156	69	281	46	5	331	62
Capacity Analysis Module:												
Vol/Sat:	1.19	1.19	1.19	1.09	1.09	1.09	1.87	1.87	1.87	2.40	2.40	2.40
Crit Moves:		****			****			****				****
Delay/Veh:	137.3	137	137.3	101.7	102	101.7	422.6	423	422.6	657.4	657	657.4
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:	137.3	137	137.3	101.7	102	101.7	422.6	423	422.6	657.4	657	657.4
LOS by Move:	F	F	F	F	F	F	F	F	F	F	F	F
ApproachDel:	137.3			101.7			422.6			657.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	137.3			101.7			422.6			657.4		
LOS by Appr:	F			F			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2007) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 60 Critical Vol./Cap. (X): 0.970
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 33.8
Optimal Cycle: 120 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
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:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Initial Bse:	30	119	46	23	62	35	17	168	15	13	154	45
Added Vol:	123	151	0	81	103	135	112	357	72	0	642	103
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	270	46	104	165	170	129	525	87	13	796	148
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:	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 Volume:	153	270	46	104	165	170	129	525	87	13	796	148
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	270	46	104	165	170	129	525	87	13	796	148
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 Vol.:	153	270	46	104	165	170	129	525	87	13	796	148
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	0.69	0.69	0.76	0.76	0.76	0.71	0.71	0.71	0.97	0.97	0.97
Lanes:	0.33	0.57	0.10	0.24	0.37	0.39	0.17	0.71	0.12	0.01	0.84	0.15
Final Sat.:	428	752	129	342	542	557	237	962	158	25	1532	285
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.36	0.30	0.30	0.30	0.55	0.55	0.55	0.52	0.52	0.52
Crit Moves:		****						****				
Green/Cycle:	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Volume/Cap:	0.97	0.97	0.97	0.82	0.82	0.82	0.97	0.97	0.97	0.92	0.92	0.92
Delay/Veh:	51.6	51.6	51.6	27.2	27.2	27.2	37.8	37.8	37.8	25.1	25.1	25.1
User DelAdj:	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:	51.6	51.6	51.6	27.2	27.2	27.2	37.8	37.8	37.8	25.1	25.1	25.1
HCM2kAvg:	19	19	19	12	12	12	26	26	25	28	22	22

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APPENDIX L

CUMULATIVE (2008) WITHOUT PROJECT CONDITIONS INTERSECTION ANALYSIS

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions
AM Peak Hour

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

****
Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	2 0	1	1 0	2 0	1	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	9	376	52	8	1361	2	2	2	15	79	11	8
Added Vol:	173	0	16	1	0	35	108	450	539	35	171	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	182	376	68	9	1361	37	110	452	554	114	182	10
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:	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 Volume:	182	376	68	9	1361	37	110	452	554	114	182	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	182	376	68	9	1361	37	110	452	554	114	182	10
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1398	xxxx	xxxxx	444	xxxx	xxxxx	2022	2187	681	1664	2156	188
Potent Cap.:	495	xxxx	xxxxx	1127	xxxx	xxxxx	35	46	398	65	48	828
Move Cap.:	495	xxxx	xxxxx	1127	xxxx	xxxxx	0	29	398	0	30	828
Volume/Cap:	0.37	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	15.58	1.39	xxxx	5.99	0.01
Level Of Service Module:												
Queue:	1.7	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	16.4	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	C	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

C3

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec): 76 Critical Vol./Cap. (X): 0.892
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 30.7
Optimal Cycle: 81 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	9	376	52	8	1361	2	2	2	15	79	11	8
Added Vol:	173	0	16	1	0	35	108	450	539	35	171	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	182	376	68	9	1361	37	110	452	554	114	182	10
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:	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 Volume:	182	376	68	9	1361	37	110	452	554	114	182	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	376	68	9	1361	37	110	452	554	114	182	10
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 Vol.:	182	376	68	9	1361	37	110	452	554	114	182	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.73	1.00	0.85	0.49	0.49	0.49
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.37	0.60	0.03
Final Sat.:	1805	3610	1615	1805	3610	1615	1378	1900	1615	349	558	30
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.04	0.00	0.38	0.02	0.08	0.24	0.34	0.33	0.33	0.33
Crit Moves:	****				****				****			
Green/Cycle:	0.13	0.27	0.27	0.27	0.41	0.41	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.77	0.38	0.16	0.02	0.91	0.05	0.21	0.63	0.91	0.87	0.87	0.87
Delay/Veh:	45.9	22.7	21.2	20.2	29.8	13.4	16.3	21.2	40.7	41.4	41.4	41.4
User DelAdj:	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:	45.9	22.7	21.2	20.2	29.8	13.4	16.3	21.2	40.7	41.4	41.4	41.4
HCM2kAvg:	6	4	1	0	20	1	2	9	17	17	17	17

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L4

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions
AM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[17.0]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	4	0	2	0	0	39	0	1	64	2
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	2	0	6	0	3	0	0	60	0	2	99	3
Added Vol:	0	0	0	0	0	0	0	467	0	0	208	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	6	0	3	0	0	527	0	2	307	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:	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 Volume:	2	0	6	0	3	0	0	527	0	2	307	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	2	0	6	0	3	0	0	527	0	2	307	3
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	xxxxx	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	840	xxxx	527	xxxx	838	xxxxx	xxxx	xxxx	xxxxx	527	xxxx	xxxxx
Potent Cap.:	287	xxxx	555	xxxx	305	xxxxx	xxxx	xxxx	xxxxx	1050	xxxx	xxxxx
Move Cap.:	285	xxxx	555	xxxx	304	xxxxx	xxxx	xxxx	xxxxx	1050	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	0.01	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	17.0	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	C	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	466	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	12.8	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	A	*	*	*	*	*
ApproachDel:		12.8			17.0			xxxxxx			xxxxxx	
ApproachLOS:		B			C			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions
AM Peak Hour

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

****
Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[14.7]
****

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 1 0 0 0		
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	2	0	2	2	0	2	0	66	0	2	102	0
Added Vol:	0	0	0	0	0	0	0	467	0	0	208	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	2	2	0	2	0	533	0	2	310	0
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:	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 Volume:	2	0	2	2	0	2	0	533	0	2	310	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	2	0	2	2	0	2	0	533	0	2	310	0
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	847	xxxx	533	847	xxxx	310	xxxx	xxxx	xxxxx	533	xxxx	xxxxx
Potent Cap.:	284	xxxx	551	284	xxxx	735	xxxx	xxxx	xxxxx	1045	xxxx	xxxxx
Move Cap.:	283	xxxx	551	283	xxxx	735	xxxx	xxxx	xxxxx	1045	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	0.00	0.01	xxxx	0.00	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	374	xxxxx	xxxx	409	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	14.7	xxxxx	xxxxx	13.9	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	*	*	*	A	*	*
ApproachDel:		14.7			13.9			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

L6

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions
AM Peak Hour

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

****
Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	1.251
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	104.2
Optimal Cycle:	0	Level Of Service:	F

****

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 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	12	165	66	48	357	25	8	79	22	88	65	35
Added Vol:	0	15	14	20	47	54	22	445	0	16	154	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	180	80	68	404	79	30	524	22	104	219	42
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:	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 Volume:	12	180	80	68	404	79	30	524	22	104	219	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	180	80	68	404	79	30	524	22	104	219	42
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 Vol.:	12	180	80	68	404	79	30	524	22	104	219	42
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:	0.06	0.94	1.00	0.12	0.74	0.14	0.05	0.91	0.04	0.28	0.60	0.12
Final Sat.:	25	368	428	56	335	65	24	419	17	125	264	51
Capacity Analysis Module:												
Vol/Sat:	0.49	0.49	0.19	1.21	1.21	1.21	1.25	1.25	1.25	0.83	0.83	0.83
Crit Moves:	****			****				****		****		
Delay/Veh:	19.7	19.7	12.8	137.4	137	137.4	154.4	154	154.4	39.4	39.4	39.4
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:	19.7	19.7	12.8	137.4	137	137.4	154.4	154	154.4	39.4	39.4	39.4
LOS by Move:	C	C	B	F	F	F	F	F	F	E	E	E
ApproachDel:	17.6			137.4			154.4			39.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	17.6			137.4			154.4			39.4		
LOS by Appr:	C			F			F			E		

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.669
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 13.3
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	12	165	66	48	357	25	8	79	22	88	65	35
Added Vol:	0	15	14	20	47	54	22	445	0	16	154	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	180	80	68	404	79	30	524	22	104	219	42
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:	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 Volume:	12	180	80	68	404	79	30	524	22	104	219	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	180	80	68	404	79	30	524	22	104	219	42
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 Vol.:	12	180	80	68	404	79	30	524	22	104	219	42
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.97	0.97	0.85	0.93	0.93	0.93	0.97	0.97	0.97	0.74	0.74	0.74
Lanes:	0.06	0.94	1.00	0.12	0.74	0.14	0.05	0.91	0.04	0.28	0.60	0.12
Final Sat.:	118	1727	1615	217	1295	252	95	1675	69	399	840	163
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.05	0.31	0.31	0.31	0.31	0.31	0.31	0.26	0.26	0.26
Crit Moves:					****			****				
Green/Cycle:	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
Volume/Cap:	0.22	0.22	0.11	0.67	0.67	0.67	0.67	0.67	0.67	0.56	0.56	0.56
Delay/Veh:	9.7	9.7	9.0	14.6	14.6	14.6	14.5	14.5	14.5	12.6	12.6	12.6
User DelAdj:	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:	9.7	9.7	9.0	14.6	14.6	14.6	14.5	14.5	14.5	12.6	12.6	12.6
HCM2kAvg:	2	2	1	10	9	10	10	10	9	7	7	7

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions
AM Peak Hour

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

****

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

****

Cycle (sec):	0	Critical Vol./Cap. (X):	1.243
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	76.9
Optimal Cycle:	0	Level Of Service:	F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	11	45	35	15	102	17	0	163	32	29	142	15
Added Vol:	0	59	0	74	135	31	28	451	0	0	146	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	104	35	89	237	48	28	614	32	29	288	55
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:	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 Volume:	11	104	35	89	237	48	28	614	32	29	288	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	104	35	89	237	48	28	614	32	29	288	55
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 Vol.:	11	104	35	89	237	48	28	614	32	29	288	55
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:	0.07	0.69	0.24	0.24	0.63	0.13	0.04	0.91	0.05	0.08	0.77	0.15
Final Sat.:	30	288	98	118	312	63	23	494	26	40	390	75
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.36	0.76	0.76	0.76	1.24	1.24	1.24	0.74	0.74	0.74
Crit Moves:	****			****				****		****		
Delay/Veh:	14.6	14.6	14.6	28.0	28.0	28.0	146.0	146	146.0	25.8	25.8	25.8
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:	14.6	14.6	14.6	28.0	28.0	28.0	146.0	146	146.0	25.8	25.8	25.8
LOS by Move:	B	B	B	D	D	D	F	F	F	D	D	D
ApproachDel:	14.6			28.0			146.0			25.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.6			28.0			146.0			25.8		
LOS by Appr:	B			D			F			D		

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****
Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	0.630
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	11.4
Optimal Cycle:	60	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	0	10	10	10	10	10
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:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	11	45	35	15	102	17	0	163	32	29	142	15
Added Vol:	0	59	0	74	135	31	28	451	0	0	146	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	104	35	89	237	48	28	614	32	29	288	55
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:	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 Volume:	11	104	35	89	237	48	28	614	32	29	288	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	104	35	89	237	48	28	614	32	29	288	55
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 Vol.:	11	104	35	89	237	48	28	614	32	29	288	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.94	0.94	0.88	0.88	0.88	0.97	0.97	0.97	0.92	0.92	0.92
Lanes:	0.07	0.69	0.24	0.24	0.63	0.13	0.04	0.91	0.05	0.08	0.77	0.15
Final Sat.:	128	1235	422	400	1060	215	77	1684	89	137	1351	260
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.22	0.22	0.22	0.36	0.36	0.36	0.21	0.21	0.21
Crit Moves:					****			****				
Green/Cycle:	0.35	0.35	0.35	0.35	0.35	0.35	0.58	0.58	0.58	0.58	0.58	0.58
Volume/Cap:	0.24	0.24	0.24	0.63	0.63	0.63	0.63	0.63	0.63	0.37	0.37	0.37
Delay/Veh:	13.8	13.8	13.8	18.3	18.3	18.3	9.6	9.6	9.6	7.0	7.0	7.0
User DelAdj:	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:	13.8	13.8	13.8	18.3	18.3	18.3	9.6	9.6	9.6	7.0	7.0	7.0
HCM2kAvg:	2	2	2	7	7	7	10	9	9	4	4	4

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions
PM Peak Hour

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

****
Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	5	1158	51	12	644	0	3	5	2	46	8	12
Added Vol:	601	0	41	2	0	120	66	327	329	22	534	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	606	1158	92	14	644	120	69	332	331	68	542	13
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:	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 Volume:	606	1158	92	14	644	120	69	332	331	68	542	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	606	1158	92	14	644	120	69	332	331	68	542	13
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	764	xxxx	xxxxx	1250	xxxx	xxxxx	2733	3134	322	2886	3162	579
Potent Cap.:	858	xxxx	xxxxx	564	xxxx	xxxxx	10	11	680	8	11	463
Move Cap.:	858	xxxx	xxxxx	564	xxxx	xxxxx	0	3	680	0	3	463
Volume/Cap:	0.71	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	0.49	xxxx	xxxx	0.03
Level Of Service Module:												
Queue:	6.0	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	18.6	xxxx	xxxxx	11.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	C	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #54 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

****

Cycle (sec): 66 Critical Vol./Cap. (X): 0.967
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 34.5
Optimal Cycle: 119 Level Of Service: C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	5	1158	51	12	644	0	3	5	2	46	8	12
Added Vol:	601	0	41	2	0	120	66	327	329	22	534	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	606	1158	92	14	644	120	69	332	331	68	542	13
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:	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 Volume:	606	1158	92	14	644	120	69	332	331	68	542	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	606	1158	92	14	644	120	69	332	331	68	542	13
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 Vol.:	606	1158	92	14	644	120	69	332	331	68	542	13
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.82	1.00	0.85	0.90	0.90	0.90
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.11	0.87	0.02
Final Sat.:	1805	3610	1615	1805	3610	1615	1558	1900	1615	187	1484	36
Capacity Analysis Module:												
Vol/Sat:	0.34	0.32	0.06	0.01	0.18	0.07	0.04	0.17	0.20	0.37	0.37	0.37
Crit Moves:	****				****						****	
Green/Cycle:	0.35	0.38	0.38	0.15	0.18	0.18	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.97	0.84	0.15	0.05	0.97	0.40	0.12	0.46	0.54	0.97	0.97	0.97
Delay/Veh:	48.9	23.7	13.6	24.0	53.5	24.6	13.5	16.0	17.1	47.4	47.4	47.4
User DelAdj:	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:	48.9	23.7	13.6	24.0	53.5	24.6	13.5	16.0	17.1	47.4	47.4	47.4
HCM2kAvg:	19	14	1	0	12	3	1	5	6	20	20	21

****

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions
PM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[23.1]
****

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			0 1 0 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	2	7	2	1	1	0	0	55	1	1	42	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	3	11	3	2	2	0	0	85	2	2	65	0
Added Vol:	0	0	0	0	0	0	0	369	0	0	558	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	11	3	2	2	0	0	454	2	2	623	0
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:	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 Volume:	3	11	3	2	2	0	0	454	2	2	623	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	11	3	2	2	0	0	454	2	2	623	0
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1080	1079	454	1087	1081	xxxxx	xxxx	xxxx	xxxxx	455	xxxx	xxxxx
Potent Cap.:	197	220	610	195	220	xxxxx	xxxx	xxxx	xxxxx	1116	xxxx	xxxxx
Move Cap.:	196	220	610	187	219	xxxxx	xxxx	xxxx	xxxxx	1116	xxxx	xxxxx
Volume/Cap:	0.02	0.05	0.01	0.01	0.01	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	243	xxxxx	202	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	20.9	xxxxx	23.1	xxxx	xxxxx	0.0	xxxx	xxxxx	8.2	xxxx	xxxxx
Shared LOS:	*	C	*	C	*	*	A	*	*	A	*	*
ApproachDel:		20.9			23.1			xxxxxx			xxxxxx	
ApproachLOS:		C			C			*			*	

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions
PM Peak Hour

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

Intersection #58 Karen Ave. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[8.7]

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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	0	0	0	0	0	2	80	2	5	69	2
Added Vol:	0	0	0	0	0	0	0	369	0	0	558	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	2	449	2	5	627	2
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:	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 Volume:	0	0	0	0	0	0	2	449	2	5	627	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	2	449	2	5	627	2
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	629	xxxx	xxxxx	451	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	963	xxxx	xxxxx	1121	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	963	xxxx	xxxxx	1121	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.7	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions
PM Peak Hour

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

****
Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	1.846
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	237.8
Optimal Cycle:	0	Level Of Service:	F

****

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 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	14	561	116	28	143	14	29	71	3	57	80	71
Added Vol:	0	54	45	13	30	33	61	308	0	44	524	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	615	161	41	173	47	90	379	3	101	604	95
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:	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 Volume:	14	615	161	41	173	47	90	379	3	101	604	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	615	161	41	173	47	90	379	3	101	604	95
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 Vol.:	14	615	161	41	173	47	90	379	3	101	604	95
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:	0.02	0.98	1.00	0.16	0.66	0.18	0.19	0.80	0.01	0.13	0.75	0.12
Final Sat.:	9	407	453	62	262	71	82	344	3	55	327	51
Capacity Analysis Module:												
Vol/Sat:	1.51	1.51	0.35	0.66	0.66	0.66	1.10	1.10	1.10	1.85	1.85	1.85
Crit Moves:	****			****				****				****
Delay/Veh:	264.9	265	15.0	28.4	28.4	28.4	102.3	102	102.3	409.5	410	409.5
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:	264.9	265	15.0	28.4	28.4	28.4	102.3	102	102.3	409.5	410	409.5
LOS by Move:	F	F	B	D	D	D	F	F	F	F	F	F
ApproachDel:	214.1			28.4			102.3			409.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	214.1			28.4			102.3			409.5		
LOS by Appr:	F			D			F			F		

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.866
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	19.7
Optimal Cycle:	61	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	14	561	116	28	143	14	29	71	3	57	80	71
Added Vol:	0	54	45	13	30	33	61	308	0	44	524	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	615	161	41	173	47	90	379	3	101	604	95
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:	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 Volume:	14	615	161	41	173	47	90	379	3	101	604	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	615	161	41	173	47	90	379	3	101	604	95
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 Vol.:	14	615	161	41	173	47	90	379	3	101	604	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.99	0.99	0.85	0.55	0.55	0.55	0.80	0.80	0.80	0.88	0.88	0.88
Lanes:	0.02	0.98	1.00	0.16	0.66	0.18	0.19	0.80	0.01	0.13	0.75	0.12
Final Sat.:	42	1845	1615	162	689	186	289	1214	10	212	1268	199
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.10	0.25	0.25	0.25	0.31	0.31	0.31	0.48	0.48	0.48
Crit Moves:		****									****	
Green/Cycle:	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Volume/Cap:	0.87	0.87	0.26	0.65	0.65	0.65	0.57	0.57	0.57	0.87	0.87	0.87
Delay/Veh:	28.1	28.1	13.1	19.3	19.3	19.3	9.9	9.9	9.9	20.5	20.5	20.5
User DelAdj:	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:	28.1	28.1	13.1	19.3	19.3	19.3	9.9	9.9	9.9	20.5	20.5	20.5
HCM2kAvg:	16	15	2	8	8	8	8	8	6	18	18	18

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions
PM Peak Hour

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

****
Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)
****

Cycle (sec):	0	Critical Vol./Cap. (X):	2.143
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	301.9
Optimal Cycle:	0	Level Of Service:	F

****

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	32	126	49	25	66	37	18	179	15	14	163	48
Added Vol:	0	189	0	101	128	88	90	276	0	0	504	128
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	315	49	126	194	125	108	455	15	14	667	176
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:	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 Volume:	32	315	49	126	194	125	108	455	15	14	667	176
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	315	49	126	194	125	108	455	15	14	667	176
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 Vol.:	32	315	49	126	194	125	108	455	15	14	667	176
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	0.80	0.12	0.28	0.44	0.28	0.19	0.78	0.03	0.02	0.78	0.20
Final Sat.:	32	315	49	113	174	112	74	309	10	6	311	82
Capacity Analysis Module:												
Vol/Sat:	1.00	1.00	1.00	1.11	1.11	1.11	1.47	1.47	1.47	2.14	2.14	2.14
Crit Moves:		****			****		****			****		
Delay/Veh:	75.8	75.8	75.8	109.3	109	109.3	248.9	249	248.9	542.5	542	542.5
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:	75.8	75.8	75.8	109.3	109	109.3	248.9	249	248.9	542.5	542	542.5
LOS by Move:	F	F	F	F	F	F	F	F	F	F	F	F
ApproachDel:		75.8			109.3			248.9			542.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		75.8			109.3			248.9			542.5	
LOS by Appr:		F			F			F			F	

****

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) Without Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.849
Loss Time (sec): 4 (Y+R = 4 sec) Average Delay (sec/veh): 18.8
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	0	10	10	10	10	10
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:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	32	126	49	25	66	37	18	179	15	14	163	48
Added Vol:	0	189	0	101	128	88	90	276	0	0	504	128
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	315	49	126	194	125	108	455	15	14	667	176
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:	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 Volume:	32	315	49	126	194	125	108	455	15	14	667	176
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	315	49	126	194	125	108	455	15	14	667	176
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 Vol.:	32	315	49	126	194	125	108	455	15	14	667	176
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.94	0.94	0.72	0.72	0.72	0.76	0.76	0.76	0.96	0.96	0.96
Lanes:	0.08	0.80	0.12	0.28	0.44	0.28	0.19	0.78	0.03	0.02	0.78	0.20
Final Sat.:	146	1420	222	388	599	386	269	1129	38	30	1425	375
Capacity Analysis Module:												
Vol/Sat:	0.22	0.22	0.22	0.32	0.32	0.32	0.40	0.40	0.40	0.47	0.47	0.47
Crit Moves:					****						****	
Green/Cycle:	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Volume/Cap:	0.58	0.58	0.58	0.85	0.85	0.85	0.73	0.73	0.73	0.85	0.85	0.85
Delay/Veh:	16.0	16.0	16.0	29.3	29.3	29.3	13.6	13.6	13.6	18.2	18.2	18.2
User DelAdj:	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:	16.0	16.0	16.0	29.3	29.3	29.3	13.6	13.6	13.6	18.2	18.2	18.2
HCM2kAvg:	7	7	7	13	13	13	12	12	11	14	17	17

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APPENDIX M

CUMULATIVE (2008) WITH PROJECT CONDITIONS INTERSECTION ANALYSIS

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
AM Peak Hour

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

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	2	0	1	1	0	2	0	1	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	6	244		34		5	884		1		1		1		10	51		7		5
Growth Adj:	1.54	1.54		1.54		1.54	1.54		1.54		1.54		1.54		1.54	1.54		1.54		1.54
Initial Bse:	9	376		52		8	1361		2		2		2		15	79		11		8
Added Vol:	173	0		158		48	0		35		108		459		539	432		178		120
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	182	376		210		56	1361		37		110		461		554	511		189		128
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:	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 Volume:	182	376		210		56	1361		37		110		461		554	511		189		128
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol.:	182	376		210		56	1361		37		110		461		554	511		189		128
Critical Gap Module:																				
Critical Gp:	4.1	xxxx		xxxxx		4.1	xxxx		xxxxx		7.5		6.5		6.9	7.5		6.5		6.9
FollowUpTim:	2.2	xxxx		xxxxx		2.2	xxxx		xxxxx		3.5		4.0		3.3	3.5		4.0		3.3
Capacity Module:																				
Cnflict Vol:	1398	xxxx		xxxxx		586	xxxx		xxxxx		2120		2423		681	1763		2250		188
Potent Cap.:	495	xxxx		xxxxx		999	xxxx		xxxxx		29		33		398	55		42		828
Move Cap.:	495	xxxx		xxxxx		999	xxxx		xxxxx		0		20		398	0		25		828
Volume/Cap:	0.37	xxxx		xxxx		0.06	xxxx		xxxx		xxxx		23.60		1.39	xxxx		7.50		0.15
Level Of Service Module:																				
Queue:	1.7	xxxx		xxxxx		0.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Stopped Del:	16.4	xxxx		xxxxx		8.8	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
LOS by Move:	C	*		*		A	*		*		*		*		*	*		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		0		xxxxx	xxxx		0		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shared LOS:	*	*		*		*	*		*		*		*		*	*		*		*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	*					*					F					F				

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.942
Loss Time (sec): 8 (Y+R = 4 sec) Average Delay (sec/veh): 46.4
Optimal Cycle: 120 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:		Ovl			Include			Ovl			Include	
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	2 0	0 1	0
Volume Module:												
Base Vol:	6	244	34	5	884	1	1	1	10	51	7	5
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	9	376	52	8	1361	2	2	2	15	79	11	8
Added Vol:	173	0	158	48	0	35	108	459	539	432	178	120
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	182	376	210	56	1361	37	110	461	554	511	189	128
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:	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 Volume:	182	376	210	56	1361	37	110	461	554	511	189	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	376	210	56	1361	37	110	461	554	511	189	128
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 Vol.:	182	376	210	56	1361	37	110	461	554	511	189	128
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	1.00	0.85	0.92	0.94	0.94
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	0.60	0.40
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	1900	1615	3502	1064	720
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.13	0.03	0.38	0.02	0.06	0.24	0.34	0.15	0.18	0.18
Crit Moves:	****				****			****		****		
Green/Cycle:	0.11	0.41	0.56	0.10	0.40	0.40	0.10	0.26	0.36	0.15	0.31	0.31
Volume/Cap:	0.94	0.26	0.23	0.31	0.94	0.06	0.61	0.94	0.94	0.94	0.57	0.57
Delay/Veh:	92.4	19.7	11.1	42.8	41.2	18.4	48.9	63.1	54.3	66.7	30.1	30.1
User DelAdj:	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:	92.4	19.7	11.1	42.8	41.2	18.4	48.9	63.1	54.3	66.7	30.1	30.1
HCM2kAvg:	10	4	3	2	25	1	4	19	21	12	9	9

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M4

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
AM Peak Hour

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

****

Intersection #3 Worsley Rd. (NS) / Driveway 1 (EW)

****

Average Delay (sec/veh): 4.4 Worst Case Level Of Service: A[9.8]

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Volume Module:																				
Base Vol:	0		2		0	0		2		0	0		0		0	0		0		0
Growth Adj:	1.54	1.54		1.54		1.54	1.54		1.54		1.54	1.54		1.54		1.54	1.54		1.54	
Initial Bse:	0		3		0	0		3		0	0		0		0	0		0		0
Added Vol:	0		25		40	0		74		0	0		0		0	119		0		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		28		40	0		77		0	0		0		0	119		0		0
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:	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 Volume:	0		28		40	0		77		0	0		0		0	119		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	0		28		40	0		77		0	0		0		0	119		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		6.4	xxxx		xxxxx	
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		3.5	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		125	xxxx		xxxxx	
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		874	xxxx		xxxxx	
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		874	xxxx		xxxxx	
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		0.14	xxxx		xxxx	
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.5	xxxx		xxxxx	
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		9.8	xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		*	*		*		A	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					9.8				
ApproachLOS:	*					*					*					A				

M5

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
AM Peak Hour

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

****
Intersection #54 Worsley Rd. (NS) / Driveway 2 (EW)
****
Average Delay (sec/veh): 2.7 Worst Case Level Of Service: B[10.9]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
Volume Module:																				
Base Vol:	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	0	66	33	0	194	0	0	0	0	0	0	0	0	0	0	97	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	69	33	0	197	0	0	0	0	0	0	0	0	0	0	97	0	0	0	0
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	69	33	0	197	0	0	0	0	0	0	0	0	0	0	97	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	69	33	0	197	0	0	0	0	0	0	0	0	0	0	97	0	0	0	0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx	xxxx	xxxxx
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	283	xxxx	xxxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	712	xxxx	xxxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	712	xxxx	xxxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.14	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.9	xxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	B	*	*	*	*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx				10.9									
ApproachLOS:	*			*			*				B									

M6

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
AM Peak Hour

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

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 7.0 Worst Case Level Of Service: D[34.7]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	0	1!	0	0
Volume Module:																				
Base Vol:	1		0		4	0		2		0	0		39		0	1		64		2
Growth Adj:	1.54	1.54		1.54		1.54	1.54		1.54		1.54	1.54		1.54		1.54	1.54		1.54	
Initial Bse:	2		0		6	0		3		0	0		60		0	2		99		3
Added Vol:	0		0		0	22		0		268	91		574		0	0		462		8
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	2		0		6	22		3		268	91		634		0	2		561		11
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:	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 Volume:	2		0		6	22		3		268	91		634		0	2		561		11
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Final Vol.:	2		0		6	22		3		268	91		634		0	2		561		11
Critical Gap Module:																				
Critical Gp:	7.1	xxxx		6.2		7.1	6.5		6.2		4.1	xxxx		xxxxx		4.1	xxxx		xxxxx	
FollowUpTim:	3.5	xxxx		3.3		3.5	4.0		3.3		2.2	xxxx		xxxxx		2.2	xxxx		xxxxx	
Capacity Module:																				
Cnflict Vol:	1521	xxxx		634		1388	1385		566		572	xxxx		xxxxx		634	xxxx		xxxxx	
Potent Cap.:	98	xxxx		483		121	145		527		1011	xxxx		xxxxx		959	xxxx		xxxxx	
Move Cap.:	44	xxxx		483		111	131		527		1011	xxxx		xxxxx		959	xxxx		xxxxx	
Volume/Cap:	0.04	xxxx		0.01		0.20	0.02		0.51		0.09	xxxx		xxxx		0.00	xxxx		xxxx	
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		0.3	xxxx		xxxxx		0.0	xxxx		xxxxx	
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		8.9	xxxx		xxxxx		8.8	xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		A	*		*		A	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		161	xxxxx		xxxx		401	xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx		0.1	xxxxx		xxxxx		5.7	xxxxx		0.3	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd StpDel:	xxxxx		28.5	xxxxx		xxxxx		34.7	xxxxx		8.9	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*		D	*		*		D	*		A	*		*		*	*		*	
ApproachDel:			28.5					34.7				xxxxxx					xxxxxx			
ApproachLOS:			D					D				*					*			

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.572
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.7
Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	4	0	2	0	0	39	0	1	64	2
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	2	0	6	0	3	0	0	60	0	2	99	3
Added Vol:	0	0	0	22	0	268	91	574	0	0	462	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	6	22	3	268	91	634	0	2	561	11
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:	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 Volume:	2	0	6	22	3	268	91	634	0	2	561	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	6	22	3	268	91	634	0	2	561	11
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 Vol.:	2	0	6	22	3	268	91	634	0	2	561	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	0.87	0.87	0.87	0.67	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.00	0.80	0.08	0.01	0.91	1.00	1.00	1.00	0.01	0.97	0.02
Final Sat.:	336	0	1342	125	17	1518	1279	1900	1900	5	1853	37
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.18	0.18	0.07	0.33	0.00	0.30	0.30	0.30
Crit Moves:	****			****				****				
Green/Cycle:	0.17	0.00	0.17	0.25	0.25	0.25	0.48	0.48	0.00	0.48	0.48	0.48
Volume/Cap:	0.03	0.00	0.03	0.70	0.70	0.70	0.15	0.70	0.00	0.63	0.63	0.63
Delay/Veh:	21.0	0.0	21.0	25.3	25.3	25.3	8.9	14.6	0.0	13.1	13.1	13.1
User DelAdj:	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:	21.0	0.0	21.0	25.3	25.3	25.3	8.9	14.6	0.0	13.1	13.1	13.1
HCM2kAvg:	0	0	0	6	7	6	1	10	0	3	9	9

M8

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
AM Peak Hour

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

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 176.0 Worst Case Level Of Service: F[577.9]

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	0 0	0	0	1!	0 0	1	0	1	0 0	0	0	0	1 0
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	43	0		0	64	0	
Growth Adj:	1.54	1.54	1.54		1.54	1.54	1.54		1.54	1.54	1.54		1.54	1.54	1.54	
Initial Bse:	0	0	0		0	0	0		0	66	0		0	99	0	
Added Vol:	0	0	0		385	0	146		49	547	0		0	324	130	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		385	0	146		49	613	0		0	423	130	
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:	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 Volume:	0	0	0		385	0	146		49	613	0		0	423	130	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	0	0		385	0	146		49	613	0		0	423	130	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		1199	xxxx	488		553	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		207	xxxx	584		1028	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		199	xxxx	584		1028	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		1.93	xxxx	0.25		0.05	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			8.7	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*			A	*	*		*	*	*	
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	243	xxxxx			xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	40.8	xxxxx			xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	578	xxxxx			xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	F	*			*	*	*		*	*	*	
ApproachDel:	xxxxxx			577.9					xxxxxx				xxxxxx			
ApproachLOS:	*			F					*				*			

M9

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.693
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	15.0
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	10	0	0	10	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	43	0	0	64	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	0	0	0	0	0	0	66	0	0	99	0
Added Vol:	0	0	0	385	0	146	49	547	0	0	324	130
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	385	0	146	49	613	0	0	423	130
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:	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 Volume:	0	0	0	385	0	146	49	613	0	0	423	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	385	0	146	49	613	0	0	423	130
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 Vol.:	0	0	0	385	0	146	49	613	0	0	423	130
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.93	0.67	1.00	1.00	1.00	0.97	0.97
Lanes:	0.00	0.00	0.00	0.73	0.00	0.27	1.00	1.00	0.00	0.00	0.76	0.24
Final Sat.:	0	0	0	1280	0	485	1264	1900	0	0	1406	433
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.30	0.00	0.30	0.04	0.32	0.00	0.00	0.30	0.30
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.43	0.00	0.43	0.47	0.47	0.00	0.00	0.47	0.47
Volume/Cap:	0.00	0.00	0.00	0.69	0.00	0.69	0.08	0.69	0.00	0.00	0.64	0.64
Delay/Veh:	0.0	0.0	0.0	16.5	0.0	16.5	9.0	15.0	0.0	0.0	13.9	13.9
User DelAdj:	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:	0.0	0.0	0.0	16.5	0.0	16.5	9.0	15.0	0.0	0.0	13.9	13.9
HCM2kAvg:	0	0	0	9	0	10	1	10	0	0	9	9

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M10

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
AM Peak Hour

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

****

Intersection #57 Driveway 4 (NS) / Mission Lakes Blvd. (EW)

****

Average Delay (sec/veh): 6.2 Worst Case Level Of Service: A[7.3]

****

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 0	0	0 0	0 0	1	1 0	0 0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	74	0	65	0	0	0	0	0	25	22	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	74	0	65	0	0	0	0	0	25	22	0	0
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:	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 Volume:	74	0	65	0	0	0	0	0	25	22	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	74	0	65	0	0	0	0	0	25	22	0	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	44	xxxx	0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	25	xxxx	xxxxx
Potent Cap.:	972	xxxx	0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1603	xxxx	xxxxx
Move Cap.:	961	xxxx	0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1603	xxxx	xxxxx
Volume/Cap:	0.08	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	1806	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	7.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	*	*	*
ApproachDel:		7.2		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		A			*			*			*	

M11

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
AM Peak Hour

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

****
Intersection #58 Karen Ave. (NS) / Driveway 5 (EW)
****
Average Delay (sec/veh): 7.6 Worst Case Level Of Service: A[10.0]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	153	22	0	0	65	0	0	0	283	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	22	0	0	65	0	0	0	283	0	0	0	0	0	0	0	0	0	0	0
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	22	0	0	65	0	0	0	283	0	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	153	22	0	0	65	0	0	0	283	0	0	0	0	0	0	0	0	0	0	0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		6.2	xxxxx	xxxx	xxxxx							
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		3.3	xxxxx	xxxx	xxxxx							
Capacity Module:																				
Cnflict Vol:	65	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx		65	xxxx	xxxx	xxxxx							
Potent Cap.:	1550	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx		1005	xxxx	xxxx	xxxxx							
Move Cap.:	1550	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx		1005	xxxx	xxxx	xxxxx							
Volume/Cap:	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		0.28	xxxx	xxxx	xxxx							
Level Of Service Module:																				
Queue:	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		1.2	xxxxx	xxxx	xxxxx							
Stopped Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx		10.0	xxxxx	xxxx	xxxxx							
LOS by Move:	A	*	*	*	*	*	*	*		A	*	*	*							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd StpDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	A	*	*	*	*	*	*	*	*		*	*	*							
ApproachDel:	xxxxxx			xxxxxx				10.0			xxxxxx									
ApproachLOS:	*			*				A			*									

M12

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
AM Peak Hour

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

****

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

****

Average Delay (sec/veh): 176.7 Worst Case Level Of Service: F[966.0]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	1		0		1		1		0		1		0		43		0		1		66		0	
Growth Adj:	1.54		1.54		1.54		1.54		1.54		1.54		1.54		1.54		1.54		1.54		1.54		1.54	
Initial Bse:	2		0		2		2		0		2		0		66		0		2		102		0	
Added Vol:	0		0		0		239		0		108		58		874		0		0		346		117	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	2		0		2		241		0		110		58		940		0		2		448		117	
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:	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 Volume:	2		0		2		241		0		110		58		940		0		2		448		117	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	2		0		2		241		0		110		58		940		0		2		448		117	
Critical Gap Module:																								
Critical Gp:	7.1	xxxx			6.2		7.1	xxxx			6.2		4.1	xxxx		xxxxx			4.1	xxxx		xxxxx		
FollowUpTim:	3.5	xxxx			3.3		3.5	xxxx			3.3		2.2	xxxx		xxxxx			2.2	xxxx		xxxxx		
Capacity Module:																								
Cnflict Vol:	1620	xxxx			940		1566	xxxx			506		565	xxxx		xxxxx			940	xxxx		xxxxx		
Potent Cap.:	84	xxxx			322		91	xxxx			570		1017	xxxx		xxxxx			737	xxxx		xxxxx		
Move Cap.:	64	xxxx			322		87	xxxx			570		1017	xxxx		xxxxx			737	xxxx		xxxxx		
Volume/Cap:	0.02	xxxx			0.00		2.78	xxxx			0.19		0.06	xxxx		xxxx			0.00	xxxx		xxxx		
Level Of Service Module:																								
Queue:	xxxxx	xxxx			xxxxx		xxxxx	xxxx			xxxxx		0.2	xxxx		xxxxx			0.0	xxxx		xxxxx		
Stopped Del:	xxxxx	xxxx			xxxxx		xxxxx	xxxx			xxxxx		8.8	xxxx		xxxxx			9.9	xxxx		xxxxx		
LOS by Move:	*		*		*		*		*		*		A		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		107		xxxxx		xxxx		118		xxxxx		xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx		0.1		xxxxx		xxxxx		33.0		xxxxx		0.2	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd StpDel:	xxxxx		39.5		xxxxx		xxxxx		966		xxxxx		8.8	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*		E		*		*		F		*		A		*		*		*		*		*	
ApproachDel:			39.5						966.0						xxxxxx						xxxxxx			
ApproachLOS:			E						F						*						*			

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.855
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	16.0
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	10	10	10	10	10	10
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	1	0	1	1	0	1	0	43	0	1	66	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	2	0	2	2	0	2	0	66	0	2	102	0
Added Vol:	0	0	0	239	0	108	58	874	0	0	346	117
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	0	2	241	0	110	58	940	0	2	448	117
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:	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 Volume:	2	0	2	241	0	110	58	940	0	2	448	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	2	241	0	110	58	940	0	2	448	117
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 Vol.:	2	0	2	241	0	110	58	940	0	2	448	117
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.84	1.00	0.84	0.75	1.00	0.75	0.95	0.95	1.00	0.97	0.97	0.97
Lanes:	0.50	0.00	0.50	0.69	0.00	0.31	0.06	0.94	0.00	0.01	0.79	0.20
Final Sat.:	796	0	796	979	0	446	105	1702	0	5	1459	381
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.25	0.00	0.25	0.55	0.55	0.00	0.31	0.31	0.31
Crit Moves:				****				****				
Green/Cycle:	0.29	0.00	0.29	0.29	0.00	0.29	0.65	0.65	0.00	0.65	0.65	0.65
Volume/Cap:	0.01	0.00	0.01	0.86	0.00	0.86	0.86	0.86	0.00	0.47	0.47	0.47
Delay/Veh:	15.3	0.0	15.3	36.2	0.0	36.2	14.8	14.8	0.0	5.7	5.7	5.7
User DelAdj:	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:	15.3	0.0	15.3	36.2	0.0	36.2	14.8	14.8	0.0	5.7	5.7	5.7
HCM2kAvg:	0	0	0	11	0	11	18	19	0	2	6	6

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
AM Peak Hour

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

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	2.863
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	474.0
Optimal Cycle:	0	Level Of Service:	F

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	12	165	66	48	357	25	8	79	22	88	65	35
Added Vol:	66	15	14	20	47	82	84	855	174	16	315	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	180	80	68	404	107	92	934	196	104	380	42
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:	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 Volume:	78	180	80	68	404	107	92	934	196	104	380	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	180	80	68	404	107	92	934	196	104	380	42
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 Vol.:	78	180	80	68	404	107	92	934	196	104	380	42
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:	0.30	0.70	1.00	0.12	0.70	0.18	0.08	0.76	0.16	0.20	0.72	0.08
Final Sat.:	116	266	420	49	295	78	32	326	68	83	305	34
Capacity Analysis Module:												
Vol/Sat:	0.68	0.68	0.19	1.37	1.37	1.37	2.86	2.86	2.86	1.24	1.24	1.24
Crit Moves:	****				****			****				****
Delay/Veh:	29.6	29.6	13.3	206.2	206	206.2	862.8	863	862.8	154.6	155	154.6
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:	29.6	29.6	13.3	206.2	206	206.2	862.8	863	862.8	154.6	155	154.6
LOS by Move:	D	D	B	F	F	F	F	F	F	F	F	F
ApproachDel:		25.7			206.2			862.8			154.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		25.7			206.2			862.8			154.6	
LOS by Appr:		D			F			F			F	

M15

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.753
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 31.3
Optimal Cycle: 60 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	1 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	8	107	43	31	232	16	5	51	14	57	42	23
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	12	165	66	48	357	25	8	79	22	88	65	35
Added Vol:	66	15	14	20	47	82	84	855	174	16	315	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	180	80	68	404	107	92	934	196	104	380	42
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:	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 Volume:	78	180	80	68	404	107	92	934	196	104	380	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	180	80	68	404	107	92	934	196	104	380	42
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 Vol.:	78	180	80	68	404	107	92	934	196	104	380	42
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	0.91	0.91	0.90	0.90	0.90	0.95	0.93	0.93	0.95	0.94	0.94
Lanes:	1.00	1.38	0.62	0.12	0.70	0.18	1.00	1.65	0.35	1.00	1.80	0.20
Final Sat.:	1313	2381	1063	201	1201	317	1805	2907	609	1805	3198	357
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.34	0.34	0.34	0.05	0.32	0.32	0.06	0.12	0.12
Crit Moves:					****			****		****		
Green/Cycle:	0.44	0.44	0.44	0.44	0.44	0.44	0.08	0.42	0.42	0.08	0.42	0.42
Volume/Cap:	0.13	0.17	0.17	0.76	0.76	0.76	0.61	0.76	0.76	0.69	0.28	0.28
Delay/Veh:	19.9	20.1	20.1	32.4	32.4	32.4	60.2	31.7	31.7	66.3	22.8	22.8
User DelAdj:	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:	19.9	20.1	20.1	32.4	32.4	32.4	60.2	31.7	31.7	66.3	22.8	22.8
HCM2kAvg:	2	3	3	20	20	21	4	19	19	5	5	5

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M16

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
AM Peak Hour

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

****

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

****

Cycle (sec):	0	Critical Vol./Cap. (X):	2.266
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	323.5
Optimal Cycle:	0	Level Of Service:	F

****

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	11	45	35	15	102	17	0	163	32	29	142	15
Added Vol:	47	59	0	74	135	59	90	681	118	0	231	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	104	35	89	237	76	90	844	150	29	373	55
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:	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 Volume:	58	104	35	89	237	76	90	844	150	29	373	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	104	35	89	237	76	90	844	150	29	373	55
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 Vol.:	58	104	35	89	237	76	90	844	150	29	373	55
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:	0.29	0.53	0.18	0.22	0.59	0.19	0.08	0.78	0.14	0.06	0.82	0.12
Final Sat.:	116	209	71	101	268	86	40	373	66	30	385	57
Capacity Analysis Module:												
Vol/Sat:	0.50	0.50	0.50	0.88	0.88	0.88	2.27	2.27	2.27	0.97	0.97	0.97
Crit Moves:	****				****			****		****		
Delay/Veh:	19.4	19.4	19.4	44.2	44.2	44.2	593.2	593	593.2	60.3	60.3	60.3
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:	19.4	19.4	19.4	44.2	44.2	44.2	593.2	593	593.2	60.3	60.3	60.3
LOS by Move:	C	C	C	E	E	E	F	F	F	F	F	F
ApproachDel:	19.4			44.2			593.2			60.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	19.4			44.2			593.2			60.3		
LOS by Appr:	C			E			F			F		

****

M17

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

****

Cycle (sec): 0 Critical Vol./Cap. (X): 0.876
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 43.6
Optimal Cycle: 73 Level Of Service: D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	7	29	23	10	66	11	0	106	21	19	92	10
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	11	45	35	15	102	17	0	163	32	29	142	15
Added Vol:	47	59	0	74	135	59	90	681	118	0	231	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	104	35	89	237	76	90	844	150	29	373	55
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:	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 Volume:	58	104	35	89	237	76	90	844	150	29	373	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	104	35	89	237	76	90	844	150	29	373	55
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 Vol.:	58	104	35	89	237	76	90	844	150	29	373	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.68	0.68	0.68	0.84	0.84	0.84	0.95	0.98	0.98	0.95	0.93	0.93
Lanes:	0.29	0.53	0.18	0.22	0.59	0.19	1.00	0.85	0.15	1.00	1.74	0.26
Final Sat.:	380	683	233	355	940	302	1805	1576	281	1805	3083	458
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.15	0.25	0.25	0.25	0.05	0.54	0.54	0.02	0.12	0.12
Crit Moves:					****			****		****		
Green/Cycle:	0.25	0.25	0.25	0.25	0.25	0.25	0.33	0.53	0.53	0.14	0.33	0.33
Volume/Cap:	0.61	0.61	0.61	1.01	1.01	1.01	0.15	1.01	1.01	0.12	0.36	0.36
Delay/Veh:	27.6	27.6	27.6	74.6	74.6	74.6	17.1	47.9	47.9	27.8	18.6	18.6
User DelAdj:	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:	27.6	27.6	27.6	74.6	74.6	74.6	17.1	47.9	47.9	27.8	18.6	18.6
HCM2kAvg:	7	6	7	17	17	17	2	32	32	1	4	4

****

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M18

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
PM Peak Hour

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

****
Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2 0 1			1 0 2 0 1			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	5	1158	51	12	644	0	3	5	2	46	8	12
Added Vol:	601	0	501	138	0	120	66	333	329	281	542	81
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	606	1158	552	150	644	120	69	338	331	327	550	93
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:	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 Volume:	606	1158	552	150	644	120	69	338	331	327	550	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	606	1158	552	150	644	120	69	338	331	327	550	93
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	764	xxxx	xxxxx	1710	xxxx	xxxxx	3009	3866	322	3161	3434	579
Potent Cap.:	858	xxxx	xxxxx	376	xxxx	xxxxx	6	4	680	5	7	463
Move Cap.:	858	xxxx	xxxxx	376	xxxx	xxxxx	0	1	680	0	1	463
Volume/Cap:	0.71	xxxx	xxxx	0.40	xxxx	xxxx	xxxx	xxxx	0.49	xxxx	xxxx	0.20
Level Of Service Module:												
Queue:	6.0	xxxx	xxxxx	1.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	18.6	xxxx	xxxxx	20.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	C	*	*	C	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			F			F		

M19

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 SR-62 Fwy. (NS) / Pierson Blvd. (EW)

Cycle (sec):	100	Critical Vol./Cap. (X):	0.976
Loss Time (sec):	8 (Y+R = 4 sec)	Average Delay (sec/veh):	54.2
Optimal Cycle:	120	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	2 0	0 1	0
Volume Module:												
Base Vol:	3	752	33	8	418	0	2	3	1	30	5	8
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	5	1158	51	12	644	0	3	5	2	46	8	12
Added Vol:	601	0	501	138	0	120	66	333	329	281	542	81
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	606	1158	552	150	644	120	69	338	331	327	550	93
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:	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 Volume:	606	1158	552	150	644	120	69	338	331	327	550	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	606	1158	552	150	644	120	69	338	331	327	550	93
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 Vol.:	606	1158	552	150	644	120	69	338	331	327	550	93
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	1.00	0.85	0.92	0.98	0.98
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	0.85	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	1900	1615	3502	1589	270
Capacity Analysis Module:												
Vol/Sat:	0.34	0.32	0.34	0.08	0.18	0.07	0.04	0.18	0.20	0.09	0.35	0.35
Crit Moves:	****				****		****				****	
Green/Cycle:	0.32	0.39	0.49	0.10	0.17	0.17	0.10	0.33	0.65	0.10	0.33	0.33
Volume/Cap:	1.05	0.82	0.70	0.83	1.05	0.44	0.38	0.54	0.31	0.93	1.05	1.05
Delay/Veh:	84.8	31.4	22.5	71.0	91.2	38.3	43.5	28.2	7.9	76.3	83.2	83.2
User DelAdj:	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:	84.8	31.4	22.5	71.0	91.2	38.3	43.5	28.2	7.9	76.3	83.2	83.2
HCM2kAvg:	29	18	14	7	16	4	2	9	4	9	29	28

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
PM Peak Hour

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

Intersection #3 Worsley Rd. (NS) / Driveway 1 (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[10.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 1	0	0 0	1 0	0	0 0	0 0	0	1 0	0 0	0
Volume Module:												
Base Vol:	0	7	0	0	2	0	0	0	0	0	0	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	11	0	0	3	0	0	0	0	0	0	0
Added Vol:	0	86	138	0	48	0	0	0	0	77	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	97	138	0	51	0	0	0	0	77	0	0
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:	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 Volume:	0	97	138	0	51	0	0	0	0	77	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	97	138	0	51	0	0	0	0	77	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	217	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	776	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	776	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.2		
ApproachLOS:	*			*			*			B		

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
PM Peak Hour

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

****
Intersection #54 Worsley Rd. (NS) / Driveway 2 (EW)
****
Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[11.8]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 0 1 0 0			0 0 0 0 0			1 0 0 0 0		
Volume Module:												
Base Vol:	0	7	0	0	2	0	0	0	0	0	0	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	11	0	0	3	0	0	0	0	0	0	0
Added Vol:	0	225	112	0	125	0	0	0	0	62	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	236	112	0	128	0	0	0	0	62	0	0
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:	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 Volume:	0	236	112	0	128	0	0	0	0	62	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	236	112	0	128	0	0	0	0	62	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	420	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	594	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	594	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.8		
ApproachLOS:	*			*			*			B		

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
PM Peak Hour

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

****
Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 38.0 Worst Case Level Of Service: F[368.1]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	2	7	2	1	1	0	0	55	1	1	42	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	3	11	3	2	2	0	0	85	2	2	65	0
Added Vol:	0	0	0	14	0	172	311	661	0	0	732	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	11	3	16	2	172	311	746	2	2	797	26
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:	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 Volume:	3	11	3	16	2	172	311	746	2	2	797	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	11	3	16	2	172	311	746	2	2	797	26
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	2267	2193	746	2188	2182	810	823	xxxx	xxxxx	747	xxxx	xxxxx
Potent Cap.:	29	46	417	33	47	383	816	xxxx	xxxxx	870	xxxx	xxxxx
Move Cap.:	10	25	417	14	25	383	816	xxxx	xxxxx	870	xxxx	xxxxx
Volume/Cap:	0.31	0.44	0.01	1.08	0.06	0.45	0.38	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.8	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.1	xxxx	xxxxx	9.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	A	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	22	xxxxx	xxxx	119	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	2.2	xxxxx	xxxxx	13.9	xxxxx	1.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	353	xxxxx	xxxxx	368	xxxxx	12.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	F	*	*	F	*	B	*	*	*	*	*
ApproachDel:		352.9			368.1			xxxxxx			xxxxxx	
ApproachLOS:		F			F			*			*	

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #55 Worsely Rd. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.621
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	13.5
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	2	7	2	1	1	0	0	55	1	1	42	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	3	11	3	2	2	0	0	85	2	2	65	0
Added Vol:	0	0	0	14	0	172	311	661	0	0	732	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	11	3	16	2	172	311	746	2	2	797	26
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:	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 Volume:	3	11	3	16	2	172	311	746	2	2	797	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	11	3	16	2	172	311	746	2	2	797	26
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 Vol.:	3	11	3	16	2	172	311	746	2	2	797	26
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.97	0.97	0.97	0.87	0.87	0.87	0.60	1.00	0.85	1.00	1.00	1.00
Lanes:	0.18	0.64	0.18	0.08	0.01	0.91	1.00	1.00	1.00	0.01	0.96	0.03
Final Sat.:	334	1168	334	136	14	1510	1136	1900	1615	4	1829	60
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.11	0.11	0.11	0.27	0.39	0.00	0.44	0.44	0.44
Crit Moves:		****		****							****	
Green/Cycle:	0.17	0.17	0.17	0.17	0.17	0.17	0.57	0.57	0.57	0.57	0.57	0.57
Volume/Cap:	0.06	0.06	0.06	0.68	0.68	0.68	0.48	0.69	0.00	0.77	0.77	0.77
Delay/Veh:	21.1	21.1	21.1	30.4	30.4	30.4	8.3	11.2	5.6	13.4	13.4	13.4
User DelAdj:	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:	21.1	21.1	21.1	30.4	30.4	30.4	8.3	11.2	5.6	13.4	13.4	13.4
HCM2kAvg:	0	0	0	5	4	5	6	11	0	4	14	14

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
PM Peak Hour

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

****
Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)
****
Average Delay (sec/veh): 242.2 Worst Case Level Of Service: F[1610.4]
****

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	0 0		0 0 1!	0 0		1 0 1	0 0		0 0 0	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	58	0	0	43	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	0	0	0	0	0	0	89	0	0	66	0
Added Vol:	0	0	0	248	0	94	169	506	0	0	664	447
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	248	0	94	169	595	0	0	730	447
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:	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 Volume:	0	0	0	248	0	94	169	595	0	0	730	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	248	0	94	169	595	0	0	730	447
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1887	xxxx	954	1177	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	78	xxxx	317	600	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	61	xxxx	317	600	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	4.04	xxxx	0.30	0.28	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	79	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	36.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	1610	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			1610.4			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #56 Driveway 3 (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.904
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	20.9
Optimal Cycle:	94	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	10	0	0	10	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	58	0	0	43	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	0	0	0	0	0	0	89	0	0	66	0
Added Vol:	0	0	0	248	0	94	169	506	0	0	664	447
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	248	0	94	169	595	0	0	730	447
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:	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 Volume:	0	0	0	248	0	94	169	595	0	0	730	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	248	0	94	169	595	0	0	730	447
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 Vol.:	0	0	0	248	0	94	169	595	0	0	730	447
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.93	0.41	1.00	1.00	1.00	0.95	0.95
Lanes:	0.00	0.00	0.00	0.73	0.00	0.27	1.00	1.00	0.00	0.00	0.62	0.38
Final Sat.:	0	0	0	1280	0	485	783	1900	0	0	1118	685
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.19	0.22	0.31	0.00	0.00	0.65	0.65
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.21	0.00	0.21	0.72	0.72	0.00	0.00	0.72	0.72
Volume/Cap:	0.00	0.00	0.00	0.90	0.00	0.90	0.30	0.43	0.00	0.00	0.90	0.90
Delay/Veh:	0.0	0.0	0.0	60.3	0.0	60.3	4.9	5.5	0.0	0.0	19.6	19.6
User DelAdj:	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:	0.0	0.0	0.0	60.3	0.0	60.3	4.9	5.5	0.0	0.0	19.6	19.6
HCM2kAvg:	0	0	0	14	0	14	4	7	0	0	31	31

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
PM Peak Hour

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

Intersection #57 Driveway 4 (NS) / Mission Lakes Blvd. (EW)

Average Delay (sec/veh): 4.9 Worst Case Level Of Service: A[7.5]

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 Include			Stop Sign Include			Uncontrolled Include			Uncontrolled Include		
Rights:												
Lanes:	0 0 1! 0 0			0 0 0 0 0			0 0 0 0 1			1 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	48	0	42	0	0	0	0	0	86	75	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	0	42	0	0	0	0	0	86	75	0	0
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:	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 Volume:	48	0	42	0	0	0	0	0	86	75	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	48	0	42	0	0	0	0	0	86	75	0	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	150	xxxx	0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	86	xxxx	xxxxx
Potent Cap.:	847	xxxx	0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1523	xxxx	xxxxx
Move Cap.:	815	xxxx	0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1523	xxxx	xxxxx
Volume/Cap:	0.06	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	1528	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	7.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	*	*	*
ApproachDel:		7.5		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		A			*			*			*	

M27

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
PM Peak Hour

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

Intersection #58 Karen Ave. (NS) / Driveway 5 (EW)

Average Delay (sec/veh): 6.9 Worst Case Level Of Service: A[9.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0 0 0			0 0 1 0 0			0 0 0 0 1			0 0 0 0 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	320	75	0	0	42	0	0	0	210	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	320	75	0	0	42	0	0	0	210	0	0	0
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:	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 Volume:	320	75	0	0	42	0	0	0	210	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	320	75	0	0	42	0	0	0	210	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	42	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	42	xxxx	xxxx	xxxxx
Potent Cap.:	1580	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1034	xxxx	xxxx	xxxxx
Move Cap.:	1580	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1034	xxxx	xxxx	xxxxx
Volume/Cap:	0.20	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.20	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.8	xxxxx	xxxx	xxxxx
Stopped Del:	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.4	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	A	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.4			xxxxxx		
ApproachLOS:	*			*			A			*		

M28

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
PM Peak Hour

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

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

Average Delay (sec/veh): 187.7 Worst Case Level Of Service: F[1838.3]

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 Include			Stop Sign Include			Uncontrolled Include			Uncontrolled Include		
Rights:												
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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	0	0	0	0	0	2	80	2	5	69	2
Added Vol:	0	0	0	171	0	80	123	631	0	0	1031	273
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	171	0	80	125	711	2	5	1100	275
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:	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 Volume:	0	0	0	171	0	80	125	711	2	5	1100	275
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	171	0	80	125	711	2	5	1100	275
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	2208	xxxx	1238	1375	xxxx	xxxxx	713	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	49	xxxx	216	505	xxxx	xxxxx	896	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	39	xxxx	216	505	xxxx	xxxxx	896	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	4.37	xxxx	0.37	0.25	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	14.4	xxxx	xxxxx	9.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	0	xxxxx	xxxx	53	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	28.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	1838	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			1838.3			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

M29

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #63 Karen Ave. (NS) / Pierson Blvd. (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.955
Loss Time (sec):	4 (Y+R = 4 sec)	Average Delay (sec/veh):	29.2
Optimal Cycle:	120	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	10	10	10	10	10	10
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	0	0	0	0	0	1	52	1	3	45	1
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	0	0	0	0	0	0	2	80	2	5	69	2
Added Vol:	0	0	0	171	0	80	123	631	0	0	1031	273
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	171	0	80	125	711	2	5	1100	275
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:	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 Volume:	0	0	0	171	0	80	125	711	2	5	1100	275
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	171	0	80	125	711	2	5	1100	275
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 Vol.:	0	0	0	171	0	80	125	711	2	5	1100	275
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.75	1.00	0.75	0.66	0.66	0.66	0.97	0.97	0.97
Lanes:	0.00	1.00	0.00	0.68	0.00	0.32	0.14	0.85	0.01	0.01	0.79	0.20
Final Sat.:	0	1900	0	974	0	456	185	1057	2	6	1472	367
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.18	0.67	0.67	0.67	0.75	0.75	0.75
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.18	0.00	0.18	0.78	0.78	0.78	0.78	0.78	0.78
Volume/Cap:	0.00	0.00	0.00	0.96	0.00	0.96	0.86	0.86	0.86	0.96	0.96	0.96
Delay/Veh:	0.0	0.0	0.0	91.6	0.0	91.6	16.4	16.4	16.4	25.6	25.6	25.6
User DelAdj:	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:	0.0	0.0	0.0	91.6	0.0	91.6	16.4	16.4	16.4	25.6	25.6	25.6
HCM2kAvg:	0	0	0	16	0	16	35	33	9	20	50	49

M30

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
PM Peak Hour

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

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	3.085
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	623.8
Optimal Cycle:	0	Level Of Service:	F

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	14	561	116	28	143	14	29	71	3	57	80	71
Added Vol:	201	54	45	13	30	105	105	582	115	44	998	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	215	615	161	41	173	119	134	653	118	101	1078	95
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:	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 Volume:	215	615	161	41	173	119	134	653	118	101	1078	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	215	615	161	41	173	119	134	653	118	101	1078	95
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 Vol.:	215	615	161	41	173	119	134	653	118	101	1078	95
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:	0.26	0.74	1.00	0.12	0.52	0.36	0.15	0.72	0.13	0.08	0.85	0.07
Final Sat.:	103	293	436	49	207	142	61	298	54	33	349	31
Capacity Analysis Module:												
Vol/Sat:	2.10	2.10	0.37	0.84	0.84	0.84	2.19	2.19	2.19	3.09	3.09	3.09
Crit Moves:	****				****			****			****	
Delay/Veh:	521.4	521	15.7	44.0	44.0	44.0	561.6	562	561.6	962.9	963	962.9
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:	521.4	521	15.7	44.0	44.0	44.0	561.6	562	561.6	962.9	963	962.9
LOS by Move:	F	F	C	E	E	E	F	F	F	F	F	F
ApproachDel:	439.4				44.0			561.6			962.9	
Delay Adj:	1.00				1.00			1.00			1.00	
ApprAdjDel:	439.4				44.0			561.6			962.9	
LOS by Appr:	F				E			F			F	

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M31

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #64 Indian Avenue (NS) / Pierson Blvd (EW)

Cycle (sec): 120 Critical Vol./Cap. (X): 0.685
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 29.3
Optimal Cycle: 60 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0	1 1	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	9	364	75	18	93	9	19	46	2	37	52	46
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	14	561	116	28	143	14	29	71	3	57	80	71
Added Vol:	201	54	45	13	30	105	105	582	115	44	998	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	215	615	161	41	173	119	134	653	118	101	1078	95
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:	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 Volume:	215	615	161	41	173	119	134	653	118	101	1078	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	215	615	161	41	173	119	134	653	118	101	1078	95
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 Vol.:	215	615	161	41	173	119	134	653	118	101	1078	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.74	0.92	0.92	0.71	0.71	0.71	0.95	0.93	0.93	0.95	0.94	0.94
Lanes:	1.00	1.59	0.41	0.12	0.52	0.36	1.00	1.69	0.31	1.00	1.84	0.16
Final Sat.:	1397	2774	724	164	699	479	1805	2987	540	1805	3278	288
Capacity Analysis Module:												
Vol/Sat:	0.15	0.22	0.22	0.25	0.25	0.25	0.07	0.22	0.22	0.06	0.33	0.33
Crit Moves:					****		****				****	
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.50	0.50	0.08	0.48	0.48
Volume/Cap:	0.43	0.61	0.61	0.69	0.69	0.69	0.69	0.43	0.43	0.67	0.69	0.69
Delay/Veh:	29.5	32.3	32.3	36.6	36.6	36.6	61.2	19.0	19.0	64.6	25.4	25.4
User DelAdj:	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:	29.5	32.3	32.3	36.6	36.6	36.6	61.2	19.0	19.0	64.6	25.4	25.4
HCM2kAvg:	8	12	12	15	15	15	6	9	9	5	17	17

M32

STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions
PM Peak Hour

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

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	2.820
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	532.2
Optimal Cycle:	0	Level Of Service:	F

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 Include			Stop Sign Include			Stop Sign Include			Stop Sign Include		
Rights:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	21	82	32	16	43	24	12	116	10	9	106	31
Growth Adj:	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Initial Bse:	32	126	49	25	66	37	18	179	15	14	163	48
Added Vol:	136	189	0	101	128	159	134	427	80	0	770	128
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	168	315	49	126	194	196	152	606	95	14	933	176
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:	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 Volume:	168	315	49	126	194	196	152	606	95	14	933	176
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	315	49	126	194	196	152	606	95	14	933	176
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 Vol.:	168	315	49	126	194	196	152	606	95	14	933	176
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:	0.32	0.59	0.09	0.24	0.38	0.38	0.18	0.71	0.11	0.01	0.83	0.16
Final Sat.:	125	233	36	98	151	153	71	281	44	5	331	62
Capacity Analysis Module:												
Vol/Sat:	1.35	1.35	1.35	1.28	1.28	1.28	2.16	2.16	2.16	2.82	2.82	2.82
Crit Moves:		****		****				****		****		
Delay/Veh:	199.9	200	199.9	171.0	171	171.0	548.5	549	548.5	843.4	843	843.4
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:	199.9	200	199.9	171.0	171	171.0	548.5	549	548.5	843.4	843	843.4
LOS by Move:	F	F	F	F	F	F	F	F	F	F	F	F
ApproachDel:	199.9			171.0			548.5			843.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	199.9			171.0			548.5			843.4		
LOS by Appr:	F			F			F			F		

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STONERIDGE PROJECT (JN# 01552)
Cumulative (2008) With Project Conditions With Improvements
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #65 Little Morongo Road (NS) / Pierson Blvd (EW)

Cycle (sec):	0	Critical Vol./Cap. (X):	0.878
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	44.5
Optimal Cycle:	74	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	10	10		10	10	10		10	10	10		10	10	10	
Lanes:	0 0	1! 0	0		0 0	1! 0	0		1 0	0 1	0		1 0	1 1	0	
Volume Module:																
Base Vol:	21	82	32		16	43	24		12	116	10		9	106	31	
Growth Adj:	1.54	1.54	1.54		1.54	1.54	1.54		1.54	1.54	1.54		1.54	1.54	1.54	
Initial Bse:	32	126	49		25	66	37		18	179	15		14	163	48	
Added Vol:	136	189	0		101	128	159		134	427	80		0	770	128	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	168	315	49		126	194	196		152	606	95		14	933	176	
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:	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 Volume:	168	315	49		126	194	196		152	606	95		14	933	176	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	168	315	49		126	194	196		152	606	95		14	933	176	
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 Vol.:	168	315	49		126	194	196		152	606	95		14	933	176	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.66	0.66	0.66		0.72	0.72	0.72		0.95	0.98	0.98		0.95	0.93	0.93	
Lanes:	0.32	0.59	0.09		0.24	0.38	0.38		1.00	0.86	0.14		1.00	1.68	0.32	
Final Sat.:	398	746	117		335	517	522		1805	1609	253		1805	2965	558	
Capacity Analysis Module:																
Vol/Sat:	0.42	0.42	0.42		0.38	0.38	0.38		0.08	0.38	0.38		0.01	0.31	0.31	
Crit Moves:		****								****			****			
Green/Cycle:	0.41	0.41	0.41		0.41	0.41	0.41		0.14	0.37	0.37		0.14	0.37	0.37	
Volume/Cap:	1.02	1.02	1.02		0.91	0.91	0.91		0.63	1.02	1.02		0.06	0.85	0.85	
Delay/Veh:	66.0	66.0	66.0		38.4	38.4	38.4		35.3	62.6	62.6		28.0	27.1	27.1	
User DelAdj:	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:	66.0	66.0	66.0		38.4	38.4	38.4		35.3	62.6	62.6		28.0	27.1	27.1	
HCM2kAvg:	27	27	28		19	19	19		5	25	24		0	15	15	

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APPENDIX F-2

TRAFFIC STUDY (2,140-UNIT VERSION)

STONERIDGE
TRAFFIC IMPACT ANALYSIS (2,140 UNIT DEVELOPMENT)
CITY OF DESERT HOT SPRINGS, CALIFORNIA

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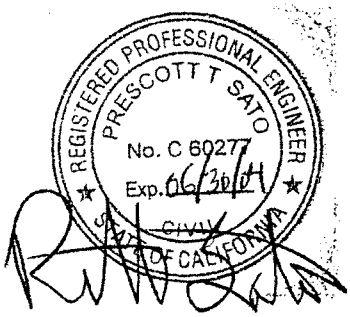

June 8, 2004

JN:01552-07
JK:SS:PN:jb

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STONERIDGE
TRAFFIC IMPACT ANALYSIS (2,140 UNIT DEVELOPMENT)
CITY OF DESERT HOT SPRINGS, CALIFORNIA

1.0 INTRODUCTION AND SUMMARY

A. Purpose of Report and Study Objectives

The purpose of this traffic impact analysis is to evaluate the development of the Stoneridge Residential Development from a traffic circulation standpoint. The proposed development is located north of Pierson Boulevard and west of Karen Avenue (Proposed) in the City of Desert Hot Springs.

Study objectives include (1) documentation of existing traffic conditions in the vicinity of the site; (2) evaluation of cumulative traffic conditions without the project for years 2004, 2005, 2006, 2007 and 2008; (3) evaluation of cumulative traffic conditions with the project for years 2004, 2005, 2006, 2007 and 2008; and (4) determination of on-site and off-site improvements and system management actions needed to achieve City of Desert Hot Springs level of service requirements.

B. Executive Summary

1. Site Location and Study Area

The project site is located north of Pierson Boulevard and west of Karen Avenue (Proposed) in the City of Desert Hot Springs. Exhibit 1-A illustrates the site location and traffic analysis study area.

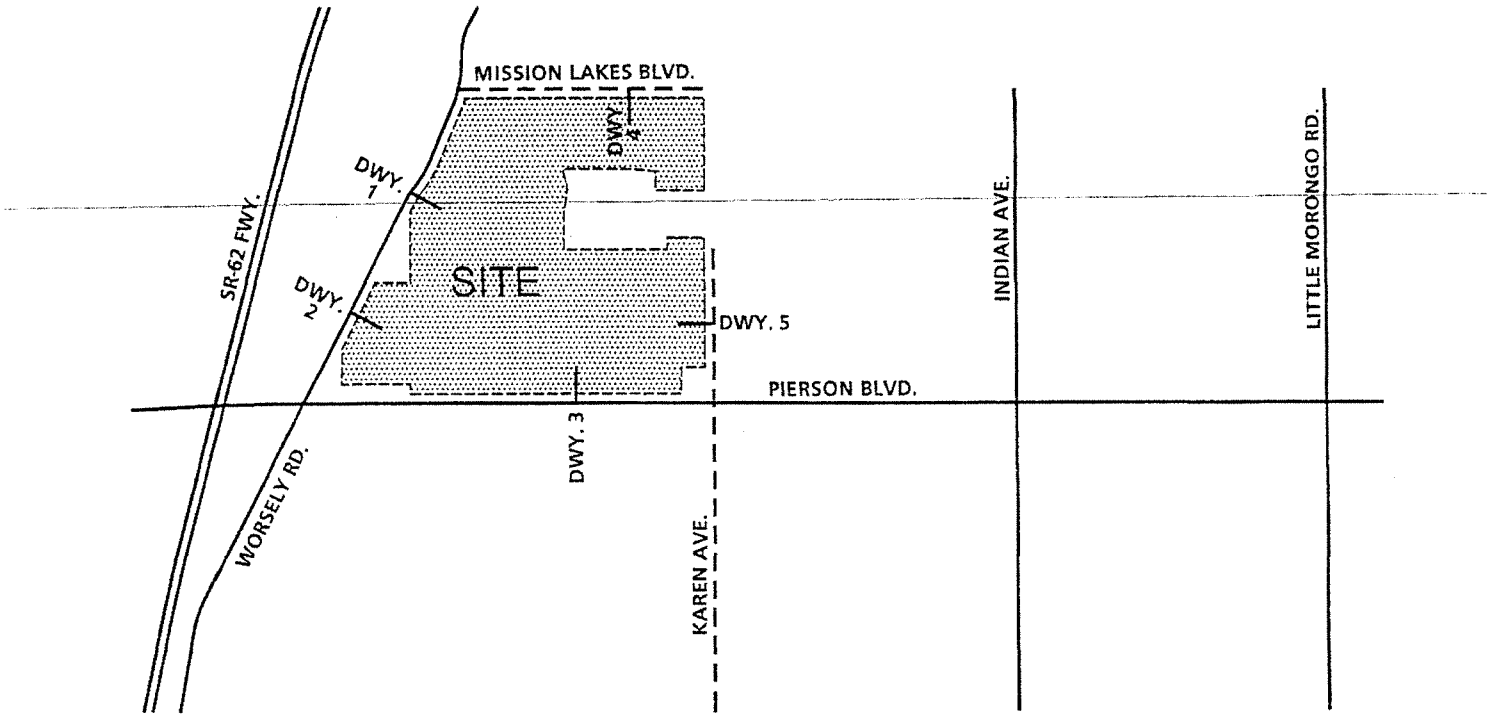
The study area includes the following intersections:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

EXHIBIT 1-A

LOCATION MAP



N

Worsley Road (NS) at:

- Driveway 1 (EW) – Future Intersection
- Driveway 2 (EW) – Future Intersection
- Pierson Boulevard (EW)

Driveway 3 (NS) at:

- Pierson Boulevard (EW) – Future Intersection

Driveway 4 (NS) at:

- Mission Lakes Boulevard (EW) – Future Intersection

Karen Avenue (NS) at:

- Driveway 5 (EW) – Future Intersection
- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

2. Development Description

The proposed land use consists of developing 2,140 detached single-family residential dwelling units. The project will be built in five phases during a 5-year span (2004-2008).

3. Principal Findings

a. Required Level of Service: The City has established a Level of Service "D" at all intersections.

b. Level of Service for Cumulative (2004) With Project Conditions: For Cumulative (2004) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals at the following intersections:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

It should be noted that these traffic signals are anticipated to be warranted with or without the proposed project.

c. Level of Service for Cumulative (2005) With Project Conditions: For Cumulative (2005) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of <u>additional</u> traffic signals at the following intersections:

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

It should be noted that these traffic signals are anticipated to be warranted with the proposed project.

d. Level of Service for Cumulative (2006) With Project Conditions: For Cumulative (2006) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the improvements listed on Table 5-6 and the installation of an additional traffic signal at the following intersection:

Worsley Road (NS) at:

- Pierson Boulevard (EW)

It should be noted that this traffic signal is anticipated to be warranted with the proposed project.

e. Level of Service for Cumulative (2007) With Project Conditions: For Cumulative (2007) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the improvements listed on Table 5-8. No additional traffic signals are warranted for Cumulative (2007) With Project conditions.

f. Level of Service for Cumulative (2008) With Project Conditions: For Cumulative (2008) With Project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the improvements listed on Table 5-10. No additional traffic signals are warranted for Cumulative (2008) With Project conditions.

The proposed development is projected to generate a net total of approximately 20,481 trip-ends per day with 1,604 vehicles per hour during the AM peak hour and 2,163 vehicles per hour during the PM peak hour.

Other developments that are approved or being processed concurrently in the study area includes the following:

- Rancho Royale/Snellenberger Group
- Rancho Morongo Group
- Little Morongo Annenburg
- Century Crowell Homes

For Cumulative (2004) Without Project traffic conditions, the following traffic signals are projected to be warranted (see Appendix "C"):

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For Cumulative (2005) With Project traffic conditions, additional traffic signals are projected to be warranted at the following study area intersections (see Appendix "C"):

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

For Cumulative (2006) With Project traffic conditions, an additional traffic signal is projected to be warranted at the following study area intersection (see Appendix "C"):

Worsley Road (NS) at:

- Pierson Boulevard (EW)

4. Off-Site Improvements

For Cumulative (2004) With Project traffic conditions, the following intersection and traffic signal improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

For Cumulative (2005) With Project traffic conditions, additional intersection and traffic signal improvements are recommended:

Karen Avenue (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

For Cumulative (2006) With Project conditions, the following additional intersection improvements are recommended:

Worsley Road (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Westbound left turn lane

For Cumulative (2007) With Project traffic conditions, additional intersection and traffic signal improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Northbound right turn overlap phasing
  - Eastbound left turn lane
  - Eastbound right turn lane
  - Eastbound right turn overlap phasing
  - Westbound left turn lane

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Northbound left turn lane
  - Eastbound left turn lane
  - Westbound left turn lane

For Cumulative (2008) With Project conditions, the following additional intersection improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Second westbound left turn lane

Worsley Road (NS) at:

- Pierson Boulevard (EW)
  - Eastbound left turn lane

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Convert northbound right turn lane into a thru-right lane
  - Second eastbound through lane
  - Second westbound through lane

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)
  - Eastbound left turn lane
  - Westbound left turn lane
  - Second Westbound through lane

5. <u>On-Site Recommendations</u>

Site-specific circulation and access recommendations are depicted on Exhibit 6-A and are described below:

- Construct Pierson Boulevard at its ultimate half-section width as a major arterial from the westerly project boundary to the easterly project boundary in conjunction with development.

- Construct Karen Avenue at its ultimate half-section width as a collector (34 foot part width) from Mission Lakes Boulevard to Pierson Boulevard in conjunction with development.

- Construct Worsley Road at its ultimate half-section width as a major collector from Mission Lakes Boulevard to the southerly project boundary in conjunction with development.

- Construct Mission Lakes Boulevard at its ultimate half-section width as a major collector from Worsley Road to Karen Avenue in conjunction with development.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project site.

Stop controls should be provided at the project access points where they intersect with the public roadway system

Construct a traffic signal at the following intersection in conjunction with development when warranted:

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

A 150 foot (minimum) eastbound left turn pocket should be provided along Pierson Boulevard at the intersections of Worsley Road, the Southerly Driveway and Karen Avenue.

A 150 foot (minimum) northbound left turn pocket should be provided along Karen Avenue at the intersection of the easterly driveway.

Sight distance at the project entrance should be reviewed with respect to standard Caltrans and City of Desert Hot Springs sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

The project shall also participate in funding of off-site improvements which are needed to serve cumulative future conditions through payment of appropriate fees (City Fees and TUMF). The TUMF includes a network of regional facilities and endeavors to spread the cost on a regional basis through participation of the County and individual cities. It provides a key funding source for General Plan improvements in this area.

2.0 PROPOSED DEVELOPMENT

A. Location

The project site is located north of Pierson Boulevard and west of Karen Avenue (Proposed).

B. Land Use and Intensity

The project site is proposed to be developed with 2,140 detached single-family residential dwelling units. The project will be built in five phases during a 5-year span (2004-2008).

C. Site Plan

Exhibit 2-A illustrates the proposed site plan divided into five phases. The proposed project has been divided into five traffic analysis zones (TAZ) in order to load traffic from the appropriate driveway locations. Each phase of development is represented by the boundaries of the TAZ's. Exhibit 2-A shows the boundaries of the TAZ's and the location of the project driveways. These access locations that will serve these TAZ's are described as follows:

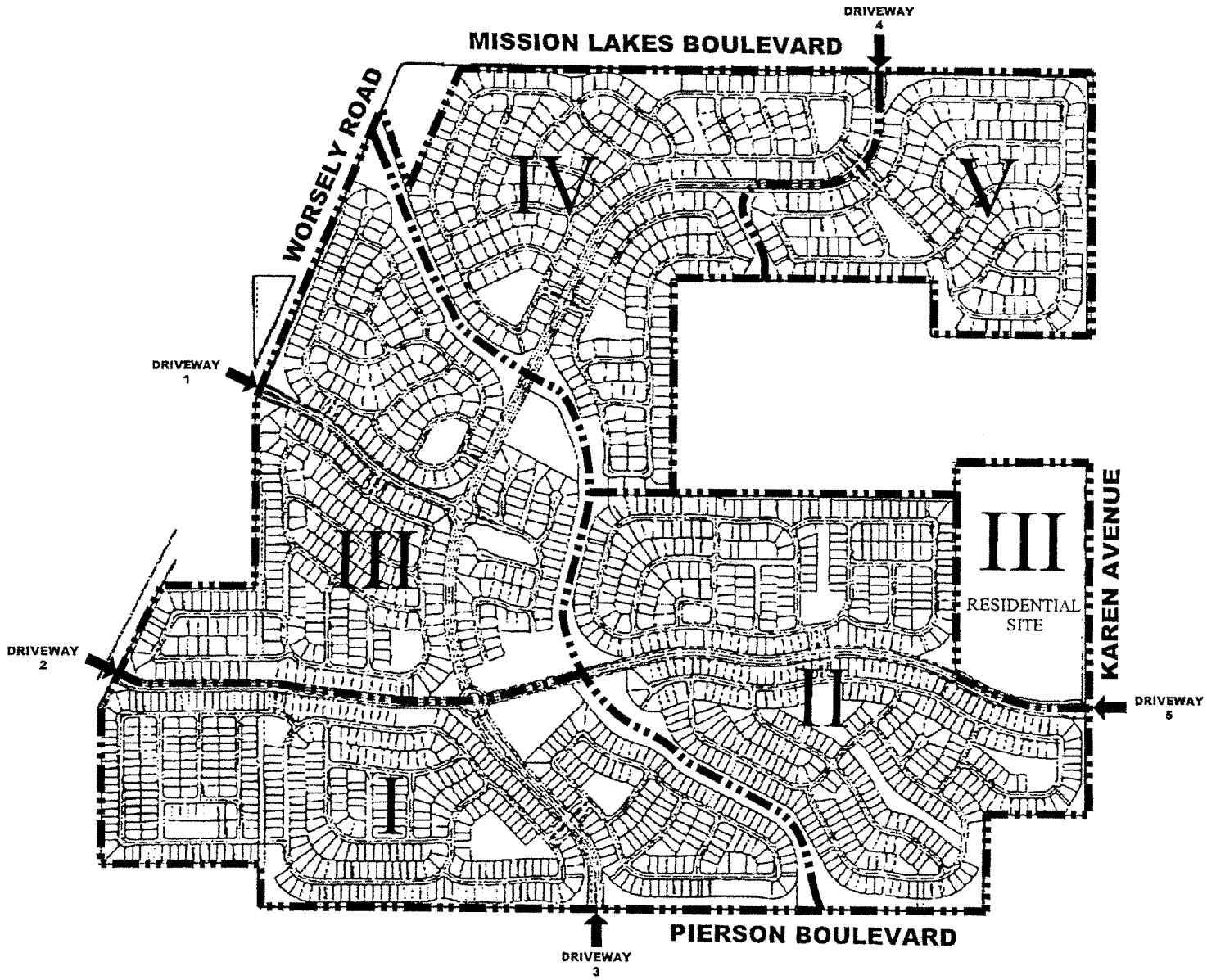
TAZ 1: This 370 unit residential development will have two full access driveway. Driveway 3 will be located along Pierson Boulevard and Driveway 2 will be located along Worsley Road.

TAZ 2: This 633 unit residential development will utilize two full access driveways. Driveway 5 will be located along Karen Avenue and the Driveway 3 will be located along Pierson Boulevard.

TAZ 3: This 547 unit residential development will utilize four full access driveways. Driveways 1 and 2 will be located along Worsley Road, Driveway 3 will be located along Pierson Boulevard and Driveway 5 will be located along Karen Avenue.

EXHIBIT 2-A

SITE PLAN



LEGEND:

I = TRAFFIC ANALYSIS ZONE (TAZ)/DEVELOPMENT PHASE

N

TAZ 4: This 380 unit residential development will utilize three full access driveways. Driveway 4 is anticipated to provide full access to Mission Lakes Boulevard, Driveway 1 will have access to Worsley Road and Driveway 3 will have access to Pierson Boulevard.

TAZ 5: This 210 unit residential development will utilize full access (Driveway 4) to Mission Lakes Boulevard.

D. Phasing and Timing

For purposes of this analysis, the project is anticipated to be completed in five phases. Phase I will be completed by Year 2004. Phase II is projected to be developed by Year 2005. The completion of Phase III will be by Year 2006. Year 2007 is the anticipated completion date for Phase IV. Phase V will be constructed by Year 2008.

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3.0 AREA CONDITIONS

A. Study Area

1. Area of Significant Traffic Impact

The study area includes the following existing intersections:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Worsley Road (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

B. Study Area Land Use

1. Existing Land Uses

The site is currently vacant. Adjacent uses include the following:

North	–	Vacant
South	–	Vacant
East	–	Vacant
West	–	Vacant

2. Approved Future Development

Other developments that are approved or being processed concurrently in the study area includes the following:

- Rancho Royale/Snellenberger Group
- Rancho Morongo Group
- Little Morongo Annenburg
- Century Crowell Homes

C. Site Accessibility

1. Area Roadway System

Exhibit 3-A identifies the existing roadway conditions for study area roadways. The number of through traffic lanes for existing roadways and the existing intersection controls are identified.

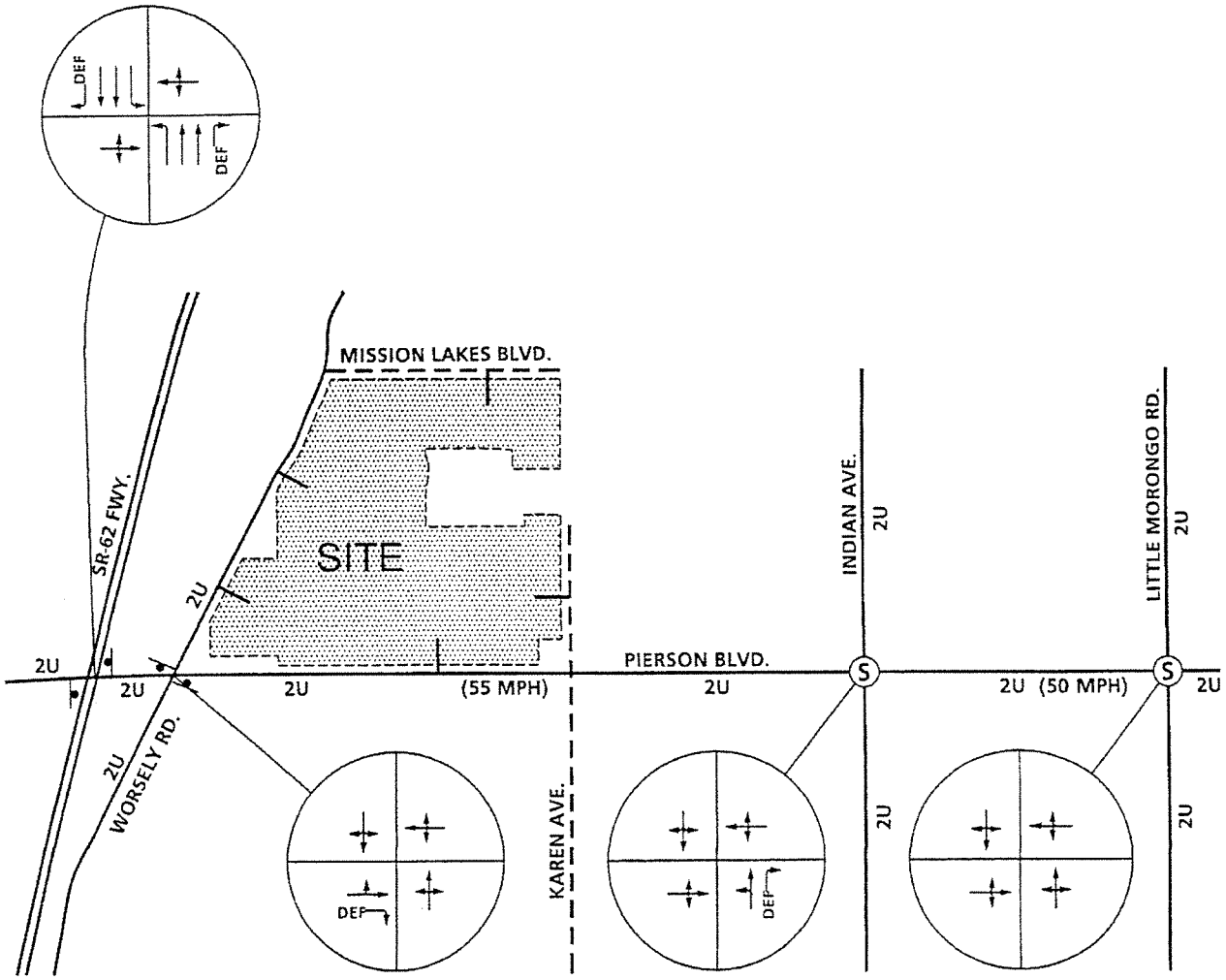
Exhibit 3-B shows the City of Desert Hot Springs General Plan Circulation Element and Exhibit 3-C illustrates the City of Desert Hot Springs arterial street cross-sections. Exhibits 3-D and 3-E illustrate the Riverside County General Plan Circulation Element and arterial street cross-sections, respectively.

2. Traffic Volumes and Conditions

Existing average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 3-F. It should be noted that based on recommendations by the staff at the City of Desert Hot Springs, an increase of 30 percent has been applied to the existing counts that were conducted in August and an increase of 15 percent has been applied to

EXHIBIT 3-A

EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



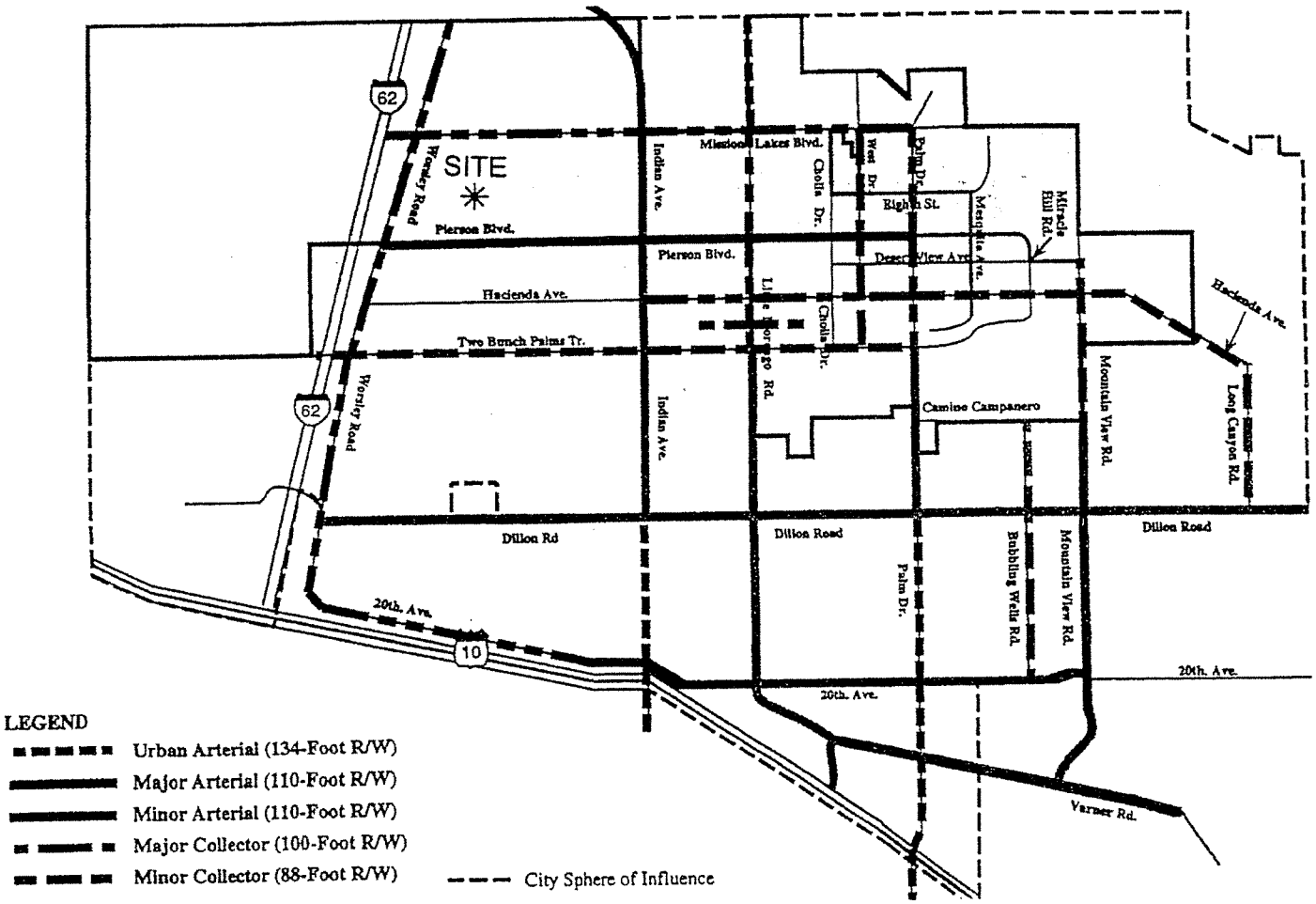
LEGEND:

- (S) = ALL WAY STOP
- = STOP SIGN
- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED
- DEF = DEFACTO RIGHT TURN
- = FUTURE ROADWAY

N

EXHIBIT 3-B

CITY OF DESERT HOT SPRINGS GENERAL PLAN CIRCULATION ELEMENT



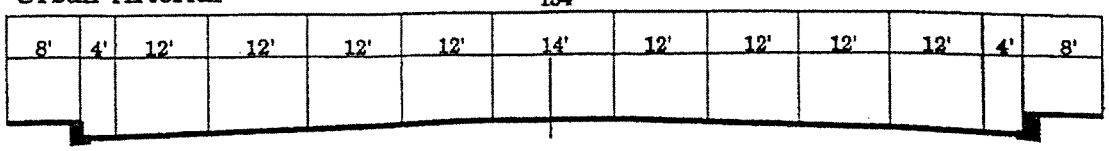
N

SOURCE: CITY OF DESERT HOT SPRINGS

EXHIBIT 3-C

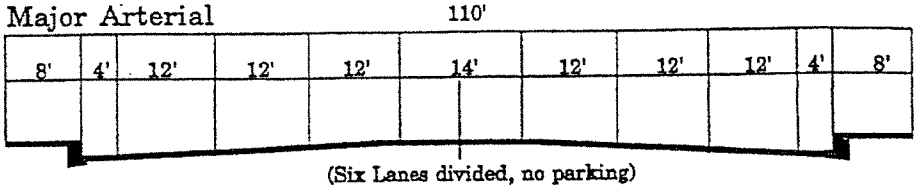
CITY OF DESERT HOT SPRINGS GENERAL PLAN ROADWAY CROSS-SECTIONS

Urban Arterial 134'



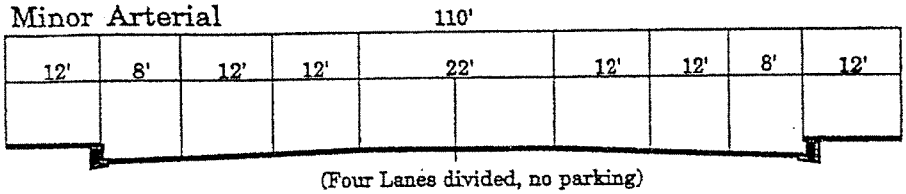
(Eight Lanes divided, no parking)

Major Arterial 110'



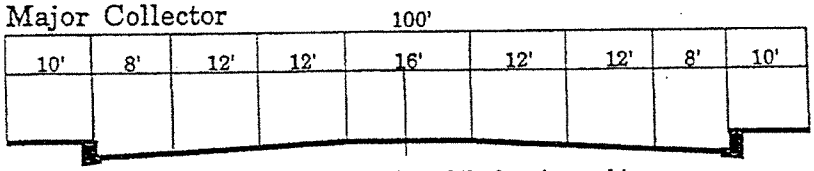
(Six Lanes divided, no parking)

Minor Arterial 110'



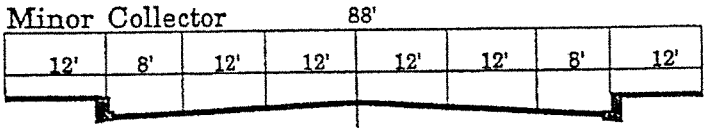
(Four Lanes divided, no parking)

Major Collector 100'



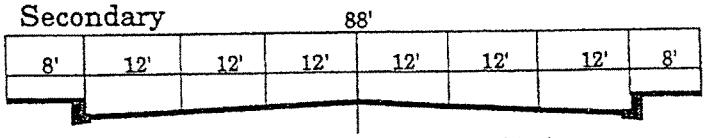
(Four Lanes divided, no bike lane/no parking

Minor Collector 88'



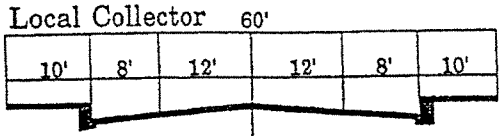
(Four Lanes undivided, w/parking)

Secondary 88'



(Four Lanes undivided, w/parking)

Local Collector 60'

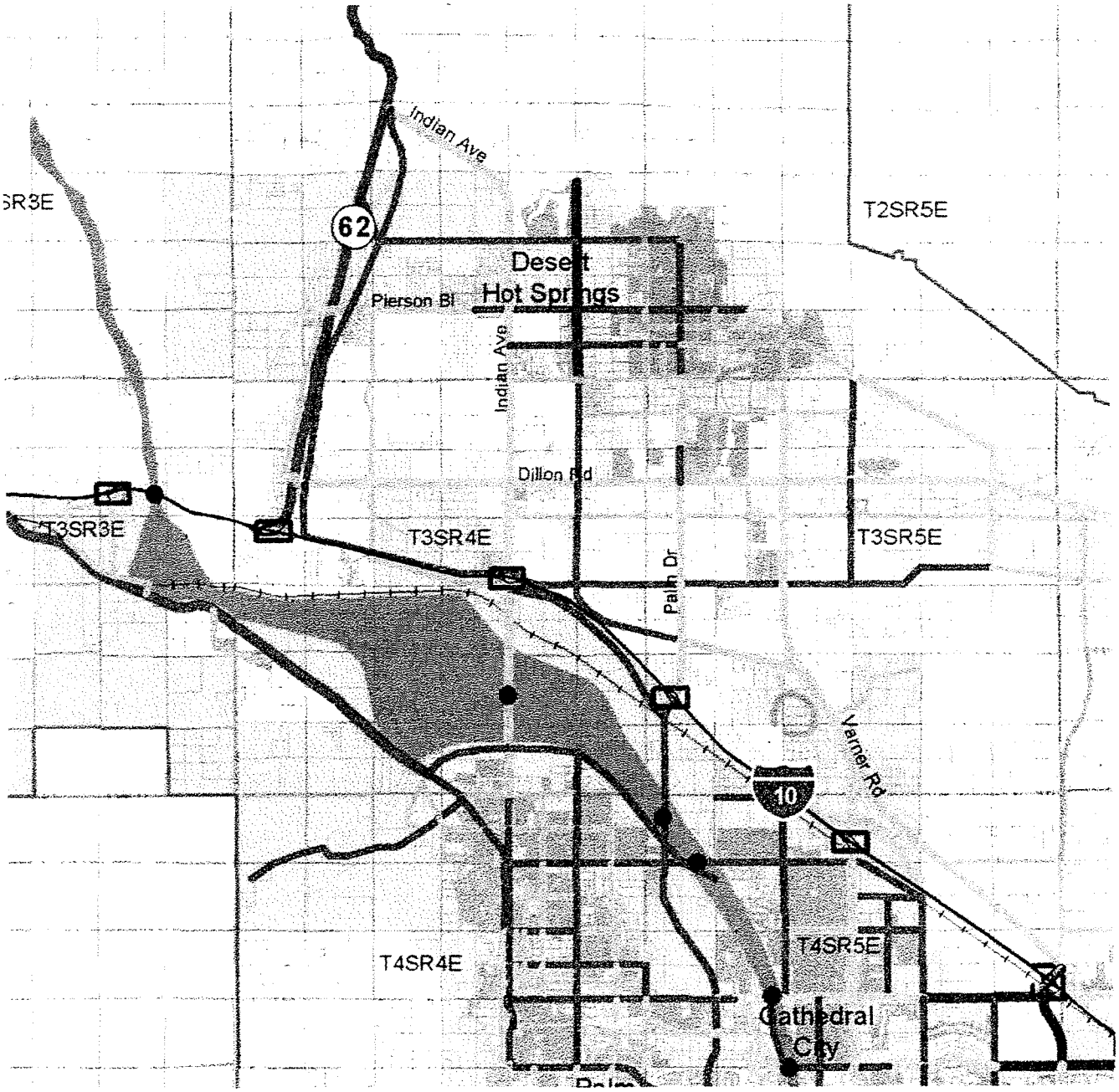


(Two Lanes w/parking)

SOURCE: CITY OF DESERT HOT SPRINGS

EXHIBIT 3-D

RIVERSIDE COUNTY GENERAL PLAN CIRCULATION ELEMENT



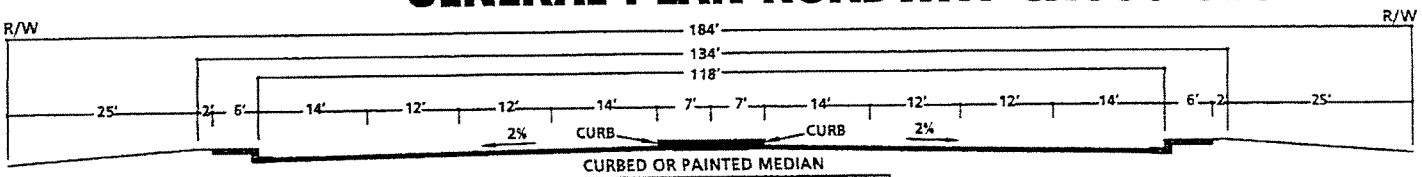
Expressway (184' ROW)
Urban Arterial (152' ROW)
Arterial (128' ROW)
Major (118' ROW)
Secondary (100' ROW)
Collector (74' ROW)
Mountain Arterial (110' ROW)
Freeway
Railroad

Existing Interchanges
Proposed Interchanges
Bridges
Water
City
Area Plan Boundary

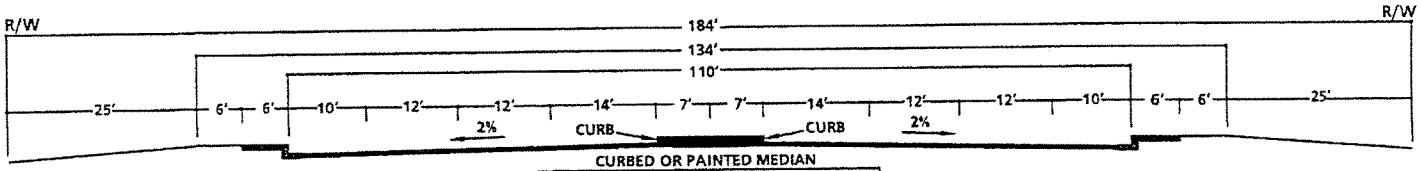
N

EXHIBIT 3-E

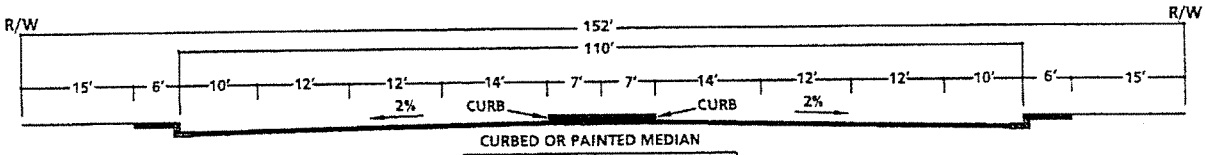
RIVERSIDE COUNTY GENERAL PLAN ROADWAY CROSS-SECTIONS



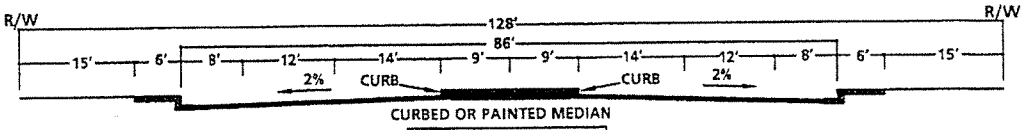
EXPRESSWAY CORRIDOR - 8 LANES



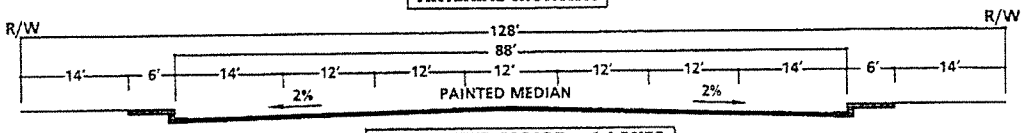
EXPRESSWAY CORRIDOR - 6 LANES



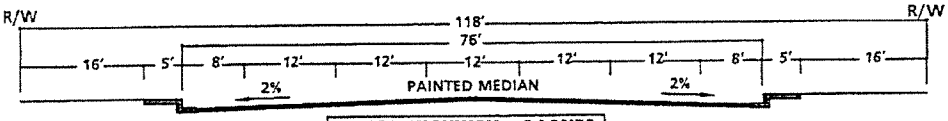
URBAN ARTERIAL HIGHWAY



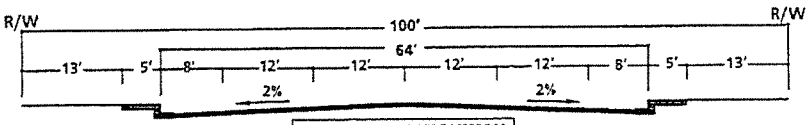
ARTERIAL HIGHWAY



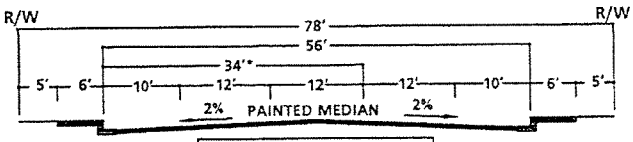
AUGMENTED MAJOR - 6 LANES



MAJOR HIGHWAY - 4 LANES

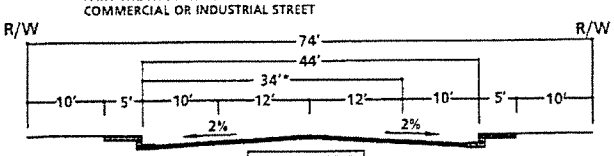


SECONDARY HIGHWAY



INDUSTRIAL COLLECTOR

* PART WIDTH STREET SECTION FOR AN INTERIOR COMMERCIAL OR INDUSTRIAL STREET



COLLECTOR

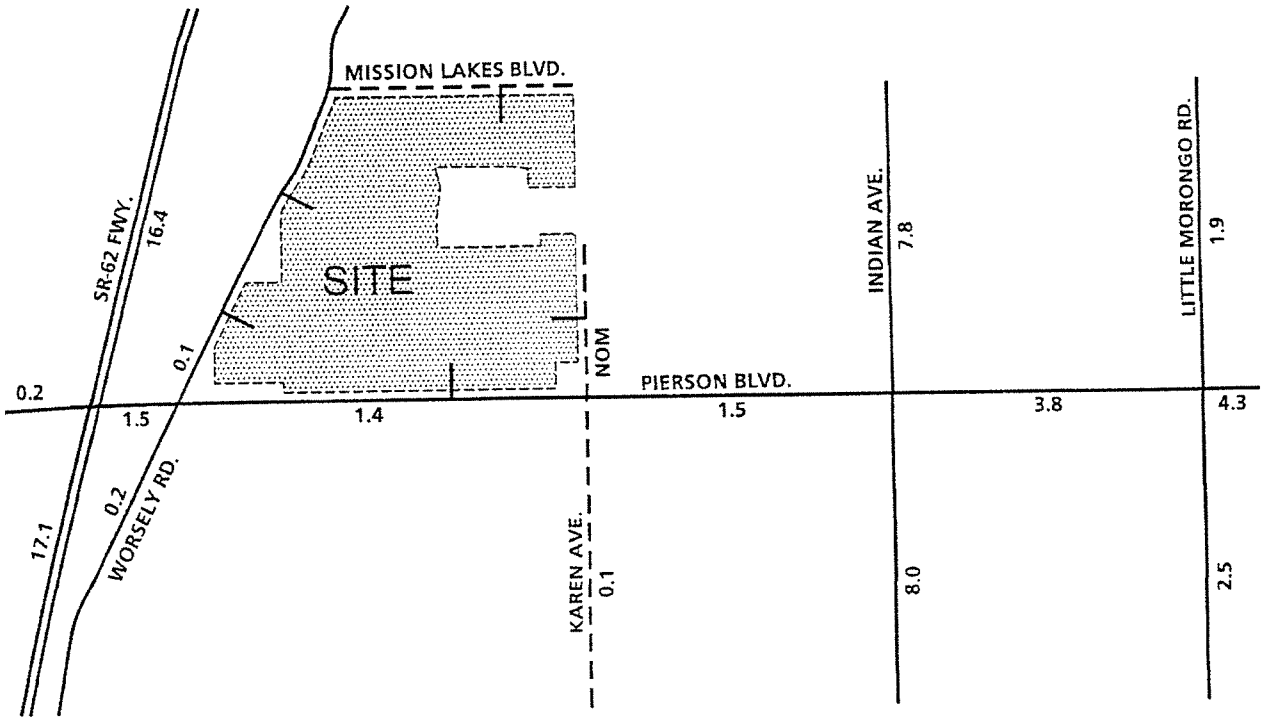
* PART WIDTH STREET SECTION FOR ALL COLLECTOR STREET - 34' IMPROVEMENTS ON 48' R/W

SOURCE: RIVERSIDE COUNTY

URBAN CROSSROADS

EXHIBIT 3-F

EXISTING AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

URBAN CROSSROADS

the existing counts that were conducted in October to account for volume discrepancies between summer and winter season in the area. Existing ADT volumes were based on manual traffic counts from Coachella Valley Association of Governments (CVAG), empirical 24-hour daily tube counts and empirical traffic counts factored up from peak hour counts made for Urban Crossroads, Inc. using the following formula for each intersection leg:

PM Peak Hour (Approach Volume + Exit Volume) x 12 = Leg Volume.

The current technical guide to the evaluation of traffic operations is the 2000 Highway Capacity Manual (HCM) (Transportation Research Board Special Report 209). The HCM defines level of service as a qualitative measure which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate LOS (Level of Service) conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted.

The definitions of level of service for uninterrupted flow (flow unrestrained by the existence of traffic control devices) are:

- LOS "A" represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.

- LOS "B" is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.

- LOS "C" is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.

- LOS "D" represents high-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.

- LOS "E" represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.

- LOS "F" is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations.

The definitions of level of service for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control.

The level of service is typically dependent on the quality of traffic flow at the intersections along a roadway. The HCM methodology expresses the level of service at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control. The levels of service determined in this study are determined using the HCM methodology.

For signalized intersections, average total delay per vehicle for the overall intersection is used to determine level of service. Levels of service at the signalized study area intersection have been evaluated using an HCM intersection analysis program.

The study area intersections which are currently stop sign controlled with stop control on the minor street only have been analyzed using the unsignalized intersection methodology of the HCM. For these intersections,

the calculation of level of service is dependent on the occurrence of gaps occurring in the traffic flow of the main street. Using data collected describing the intersection configuration and traffic volumes at the study area location, the level of service has been calculated. The level of service criteria for this type of intersection analysis is based on measured or computed control delay per vehicle. The Level of Service is defined/computed for each minor movement. Level of Service is not defined for the intersection as a whole. For this reason the level of service is reported only for the worst minor street movement(s).

The levels of service are defined for the various analysis methodologies as follows:

LEVEL OF SERVICE	AVERAGE TOTAL DELAY PER VEHICLE (SECONDS)	
	SIGNALIZED	UNSIGNALIZED
A	0 to 10.00	0 to 10.00
B	10.01 to 20.00	10.01 to 15.00
C	20.01 to 35.00	15.01 to 25.00
D	35.01 to 55.00	25.01 to 35.00
E	55.01 to 80.00	35.01 to 50.00
F	80.01 and up	50.01 and up

Existing peak hour traffic operations have been evaluated for the study area intersections. The results of this analysis are summarized in Table 3-1, along with the existing intersection geometrics and traffic control devices at the analysis locations. Existing intersection level of service calculations are based upon manual AM and PM peak hour turning movement counts made in August and October 2003 (see Exhibits 3-G and 3-H). Traffic count worksheets are included in Appendix "A". It should be noted that based on recommendations by the staff at the City of

TABLE 3-1

INTERSECTION ANALYSIS FOR EXISTING CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at: • Pierson Blvd. (EW)	CSS	1	2	1	1	2	1	0	1	0	0	1	0	24.4	32.8	C	D
Worsley Rd. (NS) at: • Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	9.7	9.4	A	A
Karen Ave. (NS) at: • Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	8.9	7.3	A	A
Indian Ave. (NS) at: • Pierson Blvd. (EW)	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	10.1	12.9	B	B
Little Morongo Rd. (NS) at: • Pierson Blvd. (EW)	AWS	0	1	0	0	1	0	0	1	0	0	1	0	8.2	8.7	A	A

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop

4 -- = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 3-G

EXISTING AM PEAK HOUR INTERSECTION VOLUMES

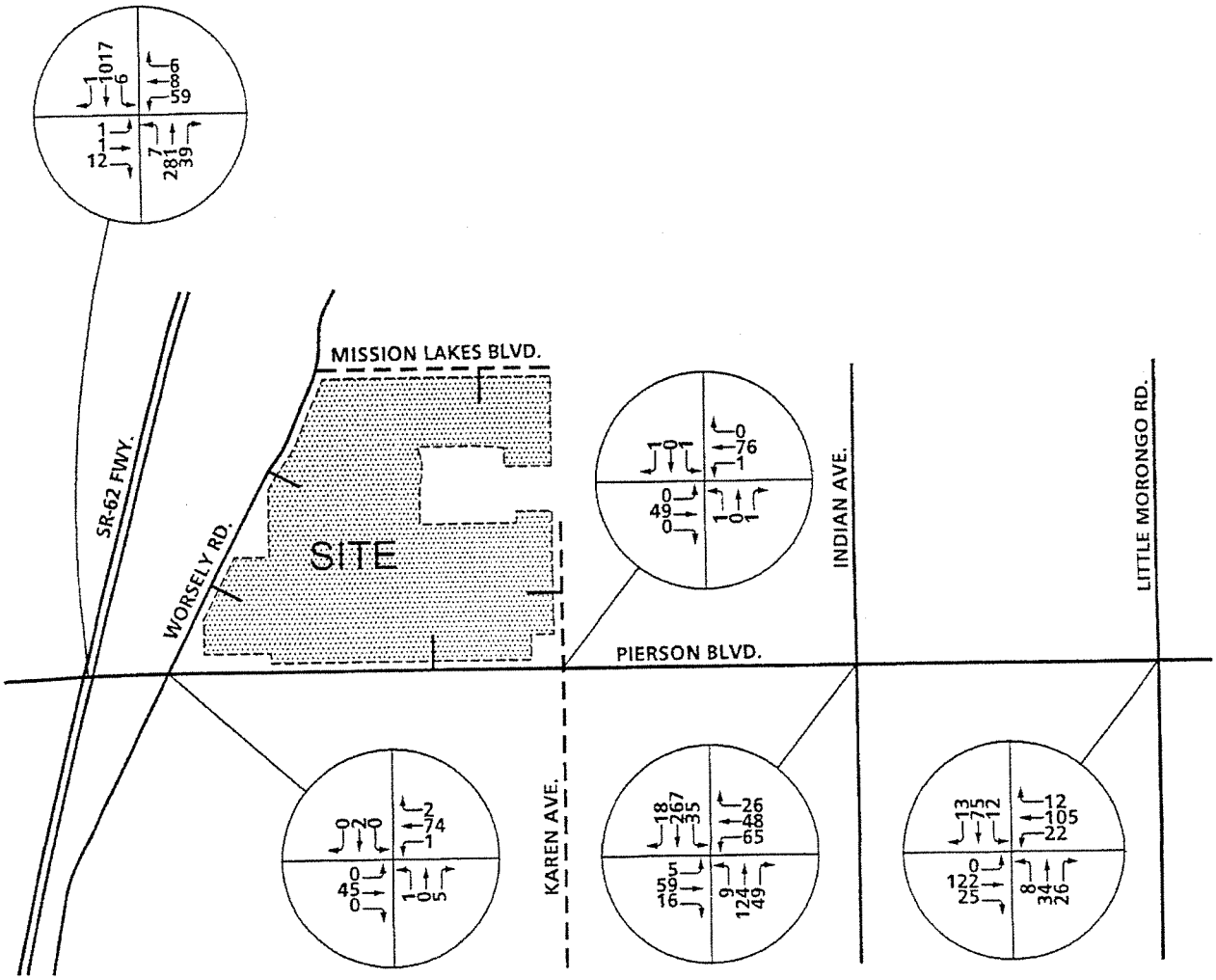

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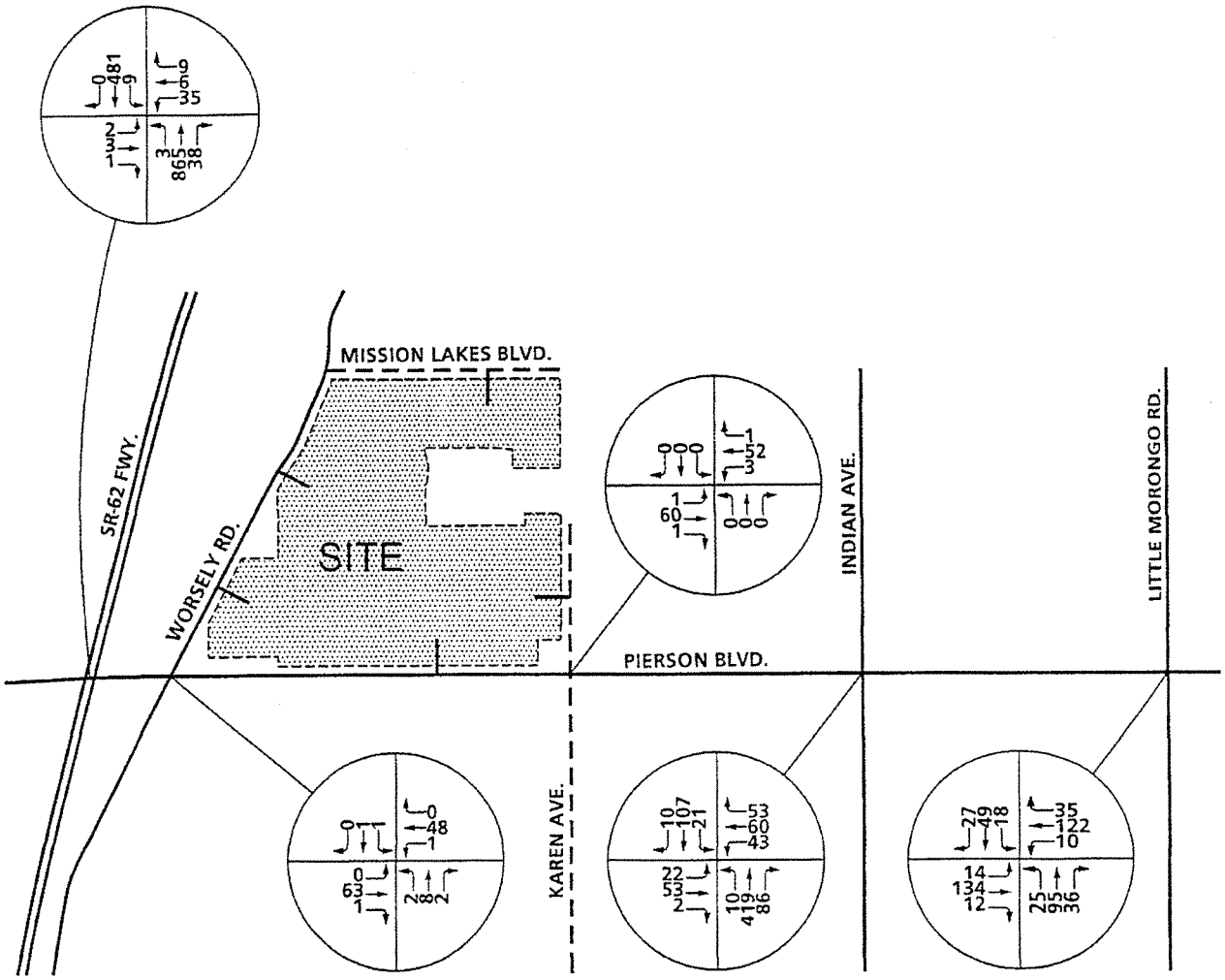
EXHIBIT 3-H

EXISTING PM PEAK HOUR INTERSECTION VOLUMES



N

Desert Hot Springs, an increase of 30 percent has been applied to the existing counts and an increase of 15 percent has been applied to the existing counts that were conducted in October to account for increased activity during the winter season in the area.

Based on the existing traffic volumes and intersection geometrics, the study area intersections are currently operating at acceptable levels of service.

Existing HCM calculation worksheets are provided in Appendix "B".

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4.0 PROJECTED TRAFFIC

A. Site Traffic

1. Trip Generation

Trip generation represents the amount of traffic which is attracted and produced by a development. The traffic generation for the project is based upon the specific land uses which have been planned for this development. The proposed land use consists of developing 2,140 detached single-family residential dwelling units. The proposed project has been divided into five separate Phases which are represented by traffic analysis zones (TAZ) based on the location of the development and utilization of the access points. Exhibit 2-A, presented previously, illustrates the boundaries for each Phase.

The derived trip generation rates for the proposed expansion are shown in Table 4-1. The trip generation rates are based upon the Institute of Transportation Engineers, Trip Generation (6th Edition).

For each phase, both daily and peak hour trip generation for the Stoneridge Residential Development are shown in Table 4-2. The proposed project is anticipated to generate approximately 20,481 trip-ends per day with 1,604 vehicles per hour during the AM peak hour and 2,163 vehicles per hour during the PM peak hour.

2. Trip Distribution

Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is heavily influenced by the geographical location of the site, the location of commercial, employment and the proximity to the regional freeway system. The directional orientation of

TABLE 4-1

TRIP GENERATION RATES[1]

LAND USE	ITE CODE	QUANTITY	UNITS[2]	PEAK HOUR TRIP RATES AM IN	AM OUT	PM IN	PM OUT	DAILY
Project Trip Rates:								
Single-Family Detached	210	2,140	DU	0.19	0.56	0.65	0.36	9.57
Other Development Trip Rates:								
Single-Family Detached	210	Varies	DU	0.19	0.56	0.65	0.36	9.57
Residential Condo / Townhouse	230	130	DU	0.07	0.37	0.36	0.18	5.86
Apartments	220	323	DU	0.08	0.43	0.42	0.20	6.63
Commercial	820	109.5	TSF	0.94	0.60	2.92	3.17	65.99
Elderly Housing Detached	251	424	DU	0.08	0.13	0.15	0.08	3.30
Golf Course	430	36	HOLES	1.75	0.47	1.21	1.53	35.74

[1] Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 6th Edition, 1997.

[2] DU = Dwelling Units
TSF = Thousand Square Feet
HOLES = Number of holes in a golf course

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TABLE 4-2

TRIP GENERATION SUMMARY

LAND USE	QUANTITY	UNITS[1]	PEAK HOUR AM IN	PEAK HOUR AM OUT	PEAK HOUR PM IN	PEAK HOUR PM OUT	DAILY
YEAR 2004 CONDITIONS							
SFDR[2] (PHASE I)	370	DU	70	207	241	133	3,541
YEAR 2005 CONDITIONS							
SFDR (PHASE I)	370	DU	70	207	241	133	3,541
SFDR (PHASE II)	633	DU	120	354	411	228	6,058
TOTAL (YEAR 2005: PHASES I-II)			**190**	**561**	**652**	**361**	**9,599**
YEAR 2006 CONDITIONS							
SFDR (PHASE I)	370	DU	70	207	241	133	3,541
SFDR (PHASE II)	633	DU	120	354	411	228	6,058
SFDR (PHASE III)	547	DU	104	306	356	197	5,235
TOTAL (YEAR 2006: PHASES I-III)			**294**	**867**	**1008**	**558**	**14,834**
YEAR 2007 CONDITIONS							
SFDR (PHASE I)	370	DU	70	207	241	133	3,541
SFDR (PHASE II)	633	DU	120	354	411	228	6,058
SFDR (PHASE III)	547	DU	104	306	356	197	5,235
SFDR (PHASE IV)	380	DU	72	213	247	137	3,637
TOTAL (YEAR 2007: PHASES I - IV)			**366**	**1080**	**1255**	**695**	**18,471**
YEAR 2008 CONDITIONS							
SFDR (PHASE I)	370	DU	70	207	241	133	3,541
SFDR (PHASE II)	633	DU	120	354	411	228	6,058
SFDR (PHASE III)	547	DU	104	306	356	197	5,235
SFDR (PHASE IV)	380	DU	72	213	247	137	3,637
SFDR (PHASE V)	210	DU	40	118	137	76	2,010
TOTAL (YEAR 2008: ALL PHASES)			**406**	**1198**	**1392**	**771**	**20,481**

[1] DU = Dwelling Units

[2] SFDR = Single-Family Detached Residential

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traffic was determined by evaluating existing and proposed land uses and highways within the community and existing traffic volumes.

Trip distribution for this study has been based upon near-term conditions, based upon those highway facilities which are either in place or will be completed over the next few years, which represents the opening occupancy time-frame for the proposed development. The trip distribution patterns for each phase of the project are graphically depicted on Exhibits 4-A through 4-E, respectively.

3. Modal Split

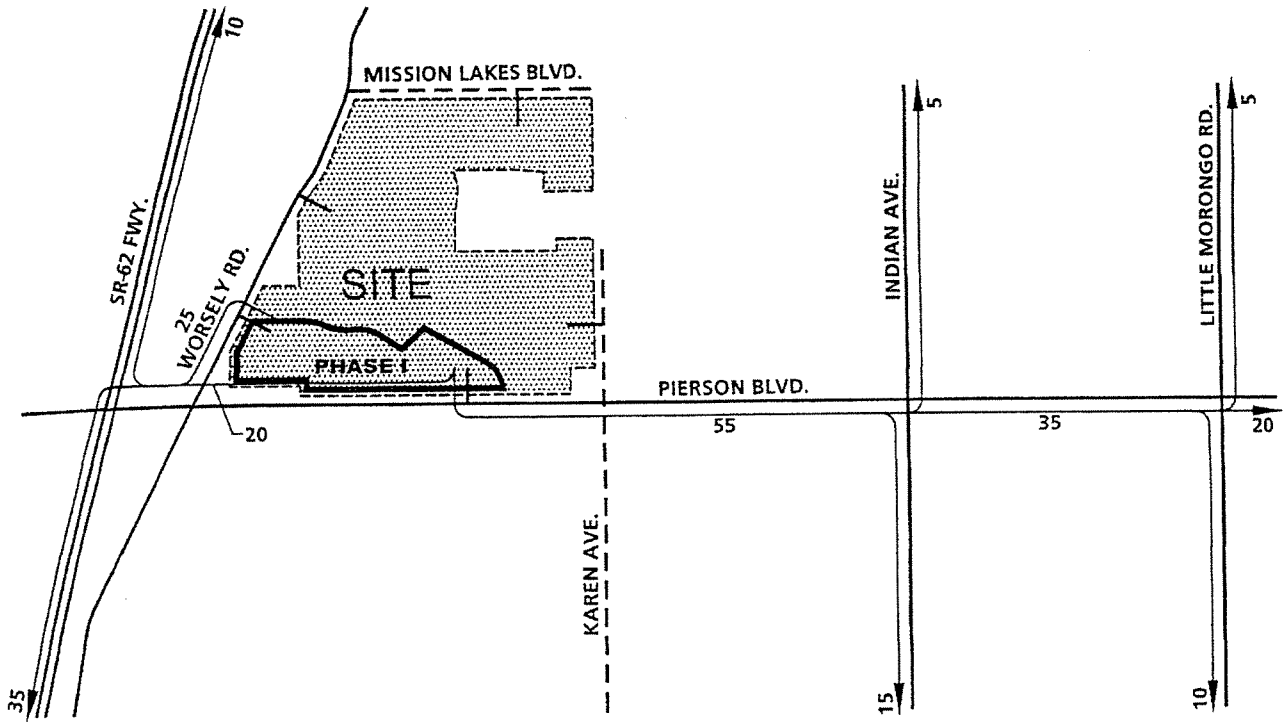
The traffic reducing potential of public transit has not been considered in this report. Essentially the traffic projections are "conservative" in that public transit might be able to reduce the traffic volumes.

4. Trip Assignment

The assignment of traffic from the site to the adjoining roadway system has been based upon the site's trip generation, trip distributions, proposed arterial highway and local street systems, which would be in place by the time of initial occupancy of the site. Based on the identified project traffic generation and distributions, project ADT volumes for Phases I, II, III, IV, and V are shown on Exhibits 4-F, 4-G, 4-H, 4-I, and 4-J, respectively. For Phase I, project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-K and 4-L, respectively. For Phase II, project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-M and 4-N, respectively. For Phase III, project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-O and 4-P, respectively. For Phase IV, project AM and PM

EXHIBIT 4-A

PROJECT (PHASE I) TRIP DISTRIBUTION



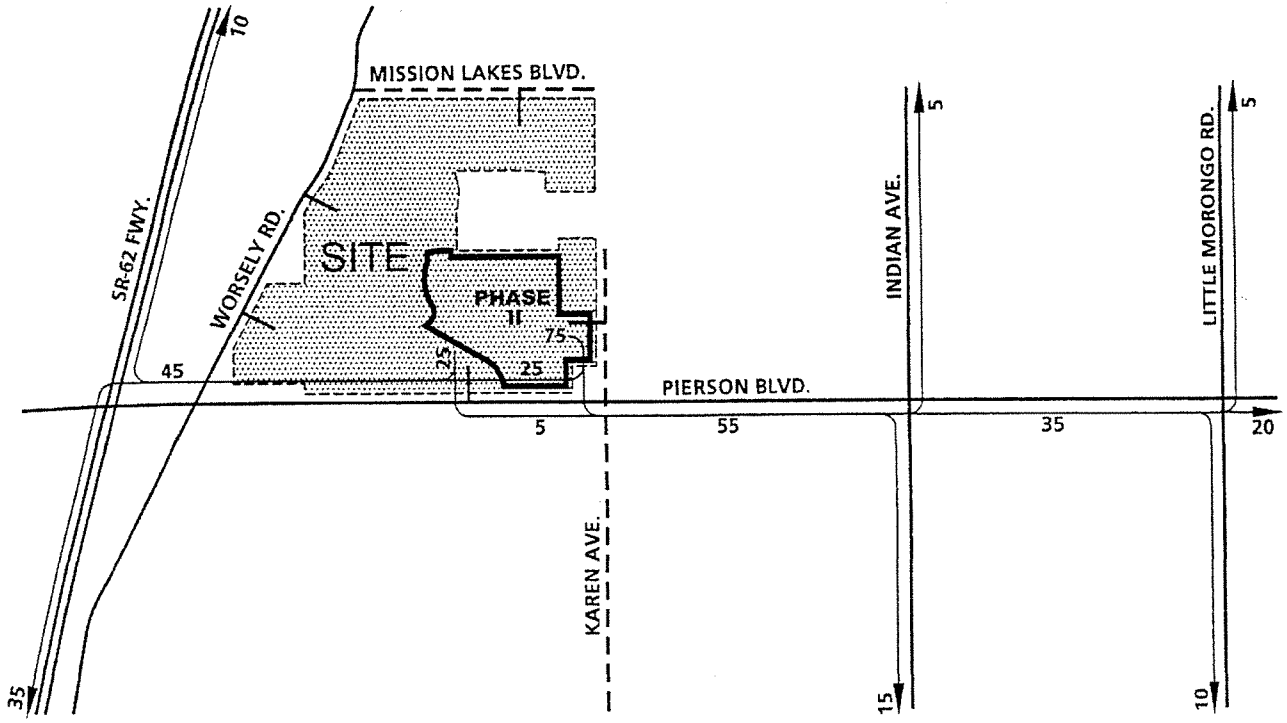
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 4-B

PROJECT (PHASE II) TRIP DISTRIBUTION



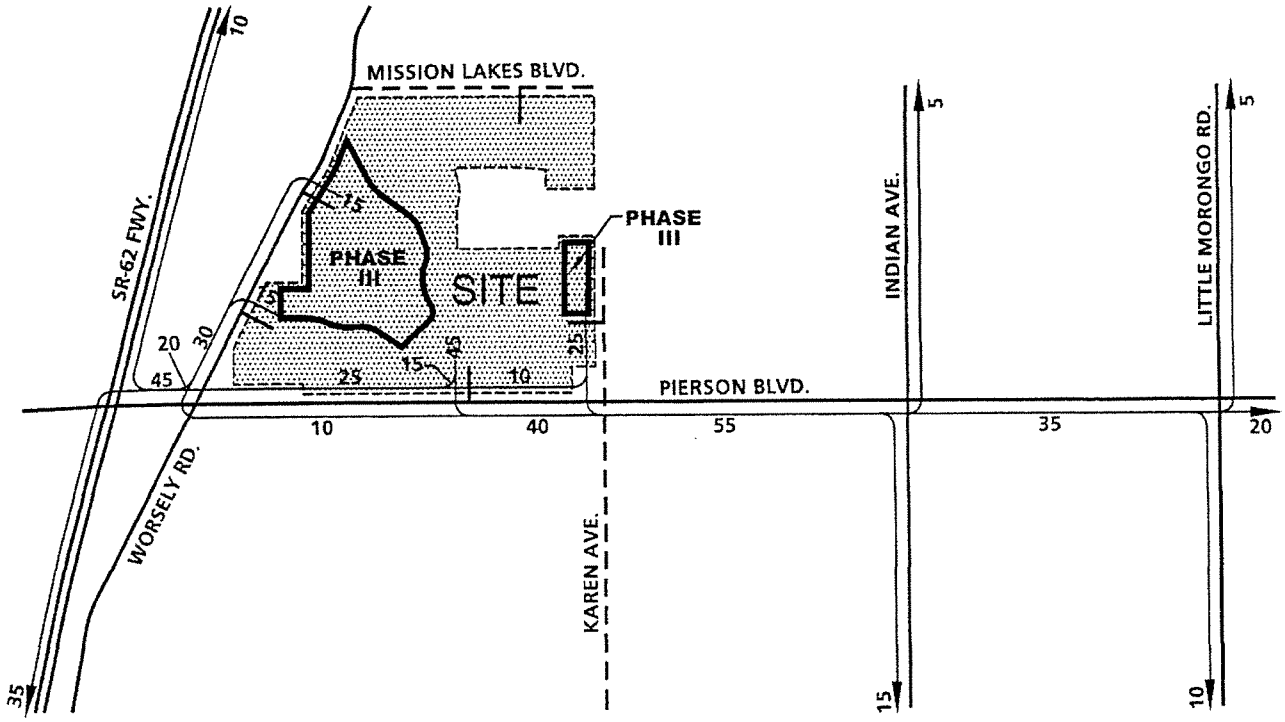
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 4-C

PROJECT (PHASE III) RESIDENTIAL TRIP DISTRIBUTION



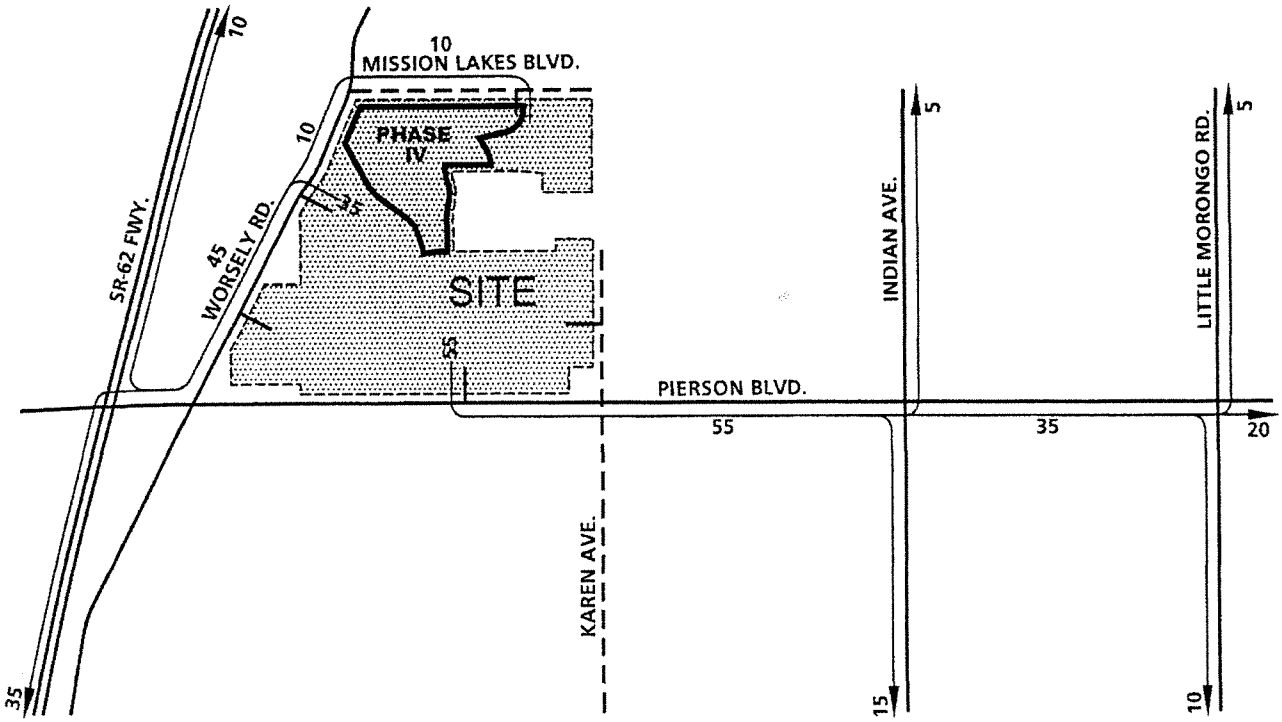
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 4-D

PROJECT (PHASE IV) TRIP DISTRIBUTION



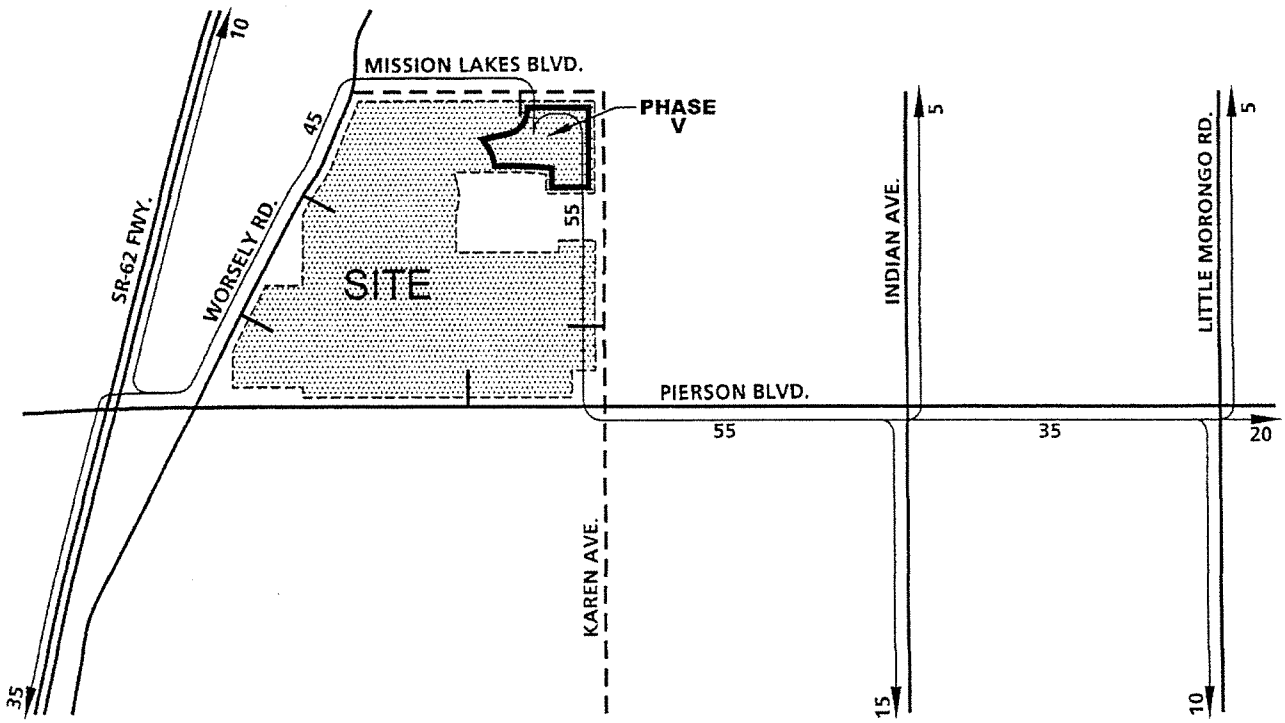
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 4-E

PROJECT (PHASE V) TRIP DISTRIBUTION



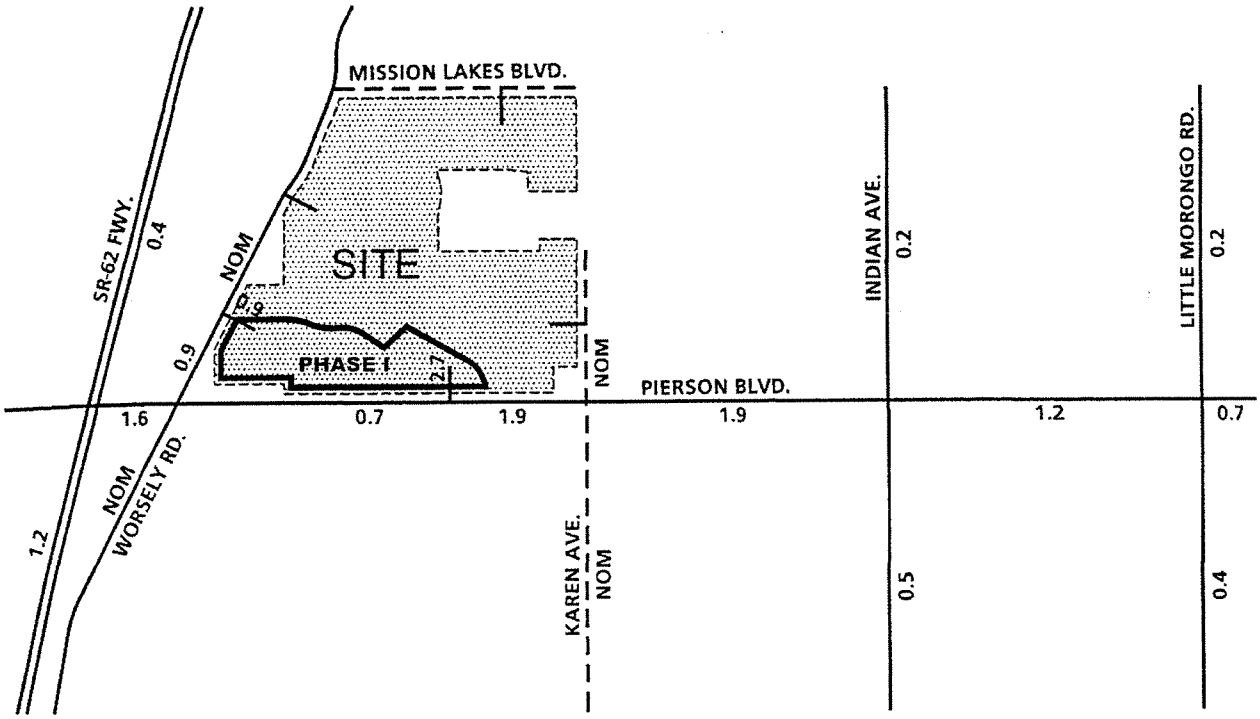
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 4-F

PROJECT (PHASE I) AVERAGE DAILY TRAFFIC (ADT)



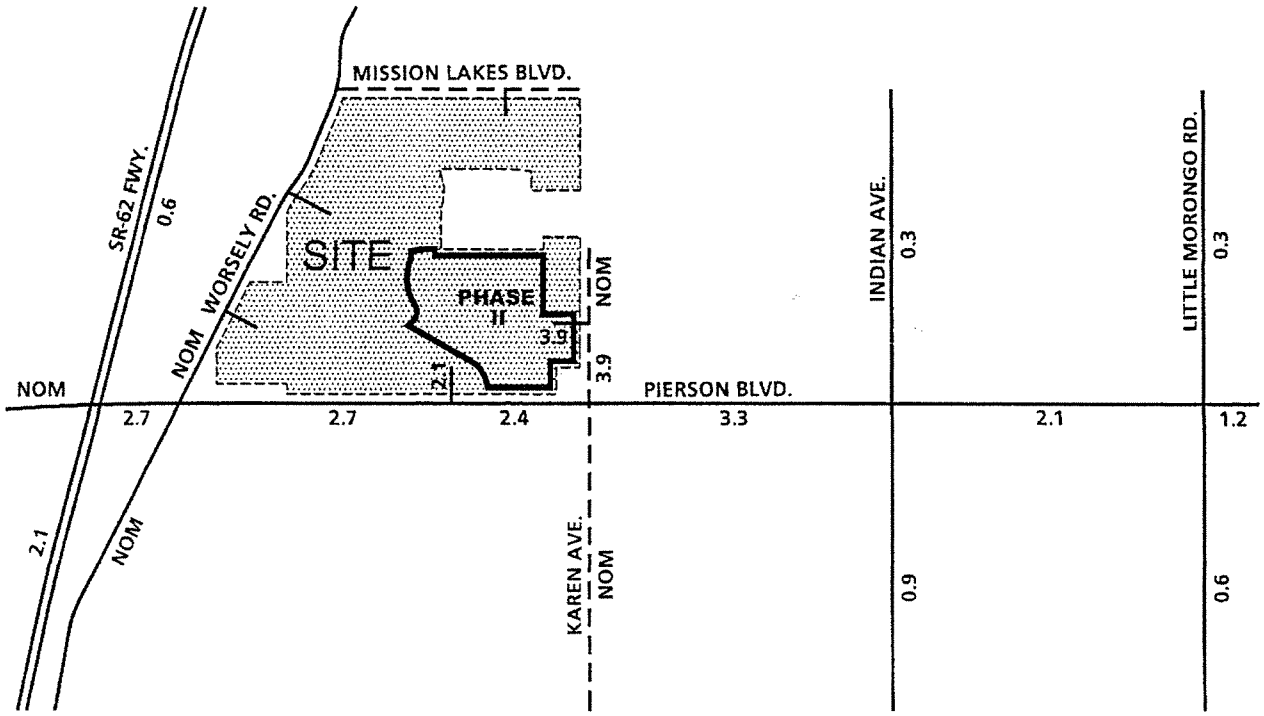
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-G

PROJECT (PHASE II) AVERAGE DAILY TRAFFIC (ADT)



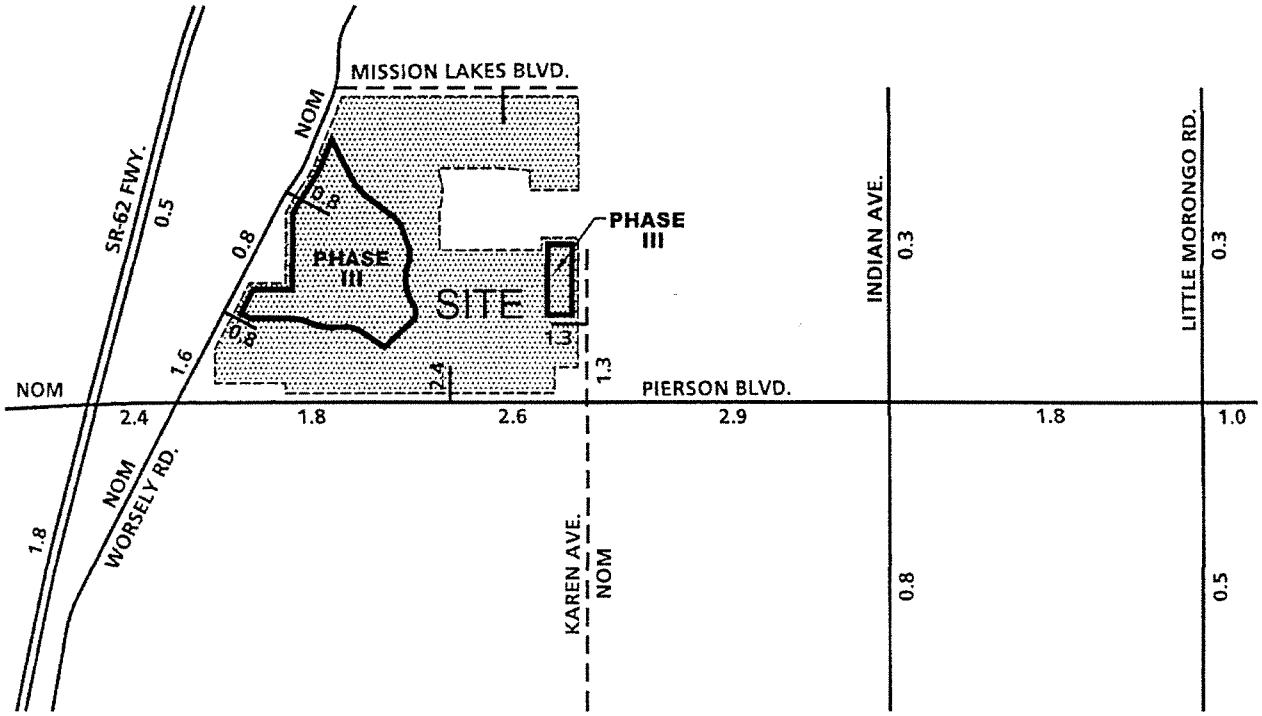
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-H

PROJECT (PHASE III) AVERAGE DAILY TRAFFIC (ADT)



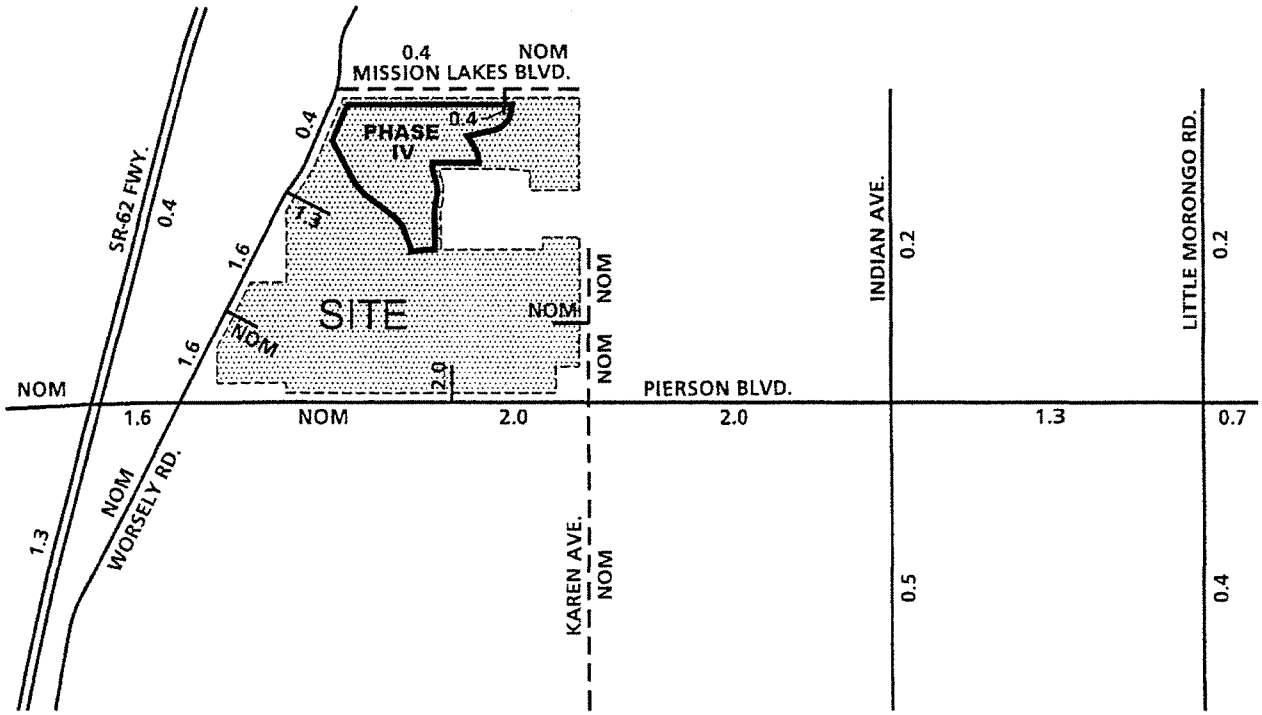
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-I

PROJECT (PHASE IV) AVERAGE DAILY TRAFFIC (ADT)



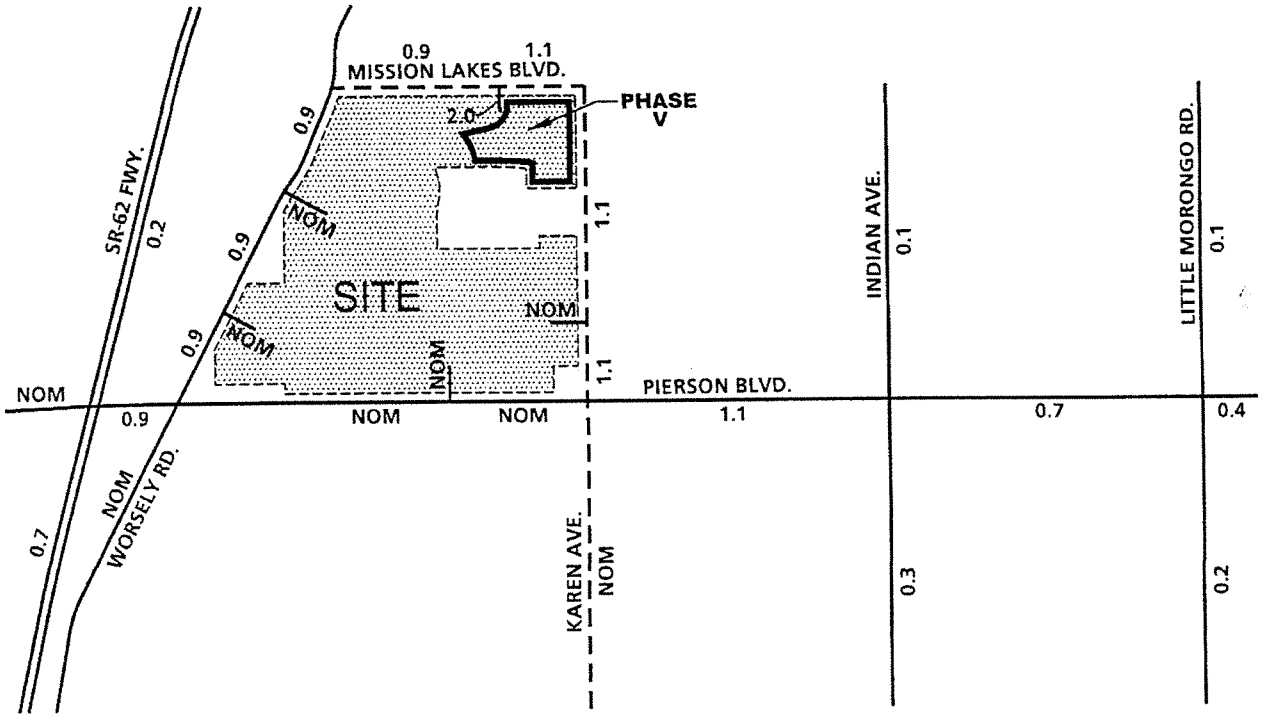
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-J

PROJECT (PHASE V) AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-K

PROJECT (PHASE I) AM PEAK HOUR INTERSECTION VOLUMES

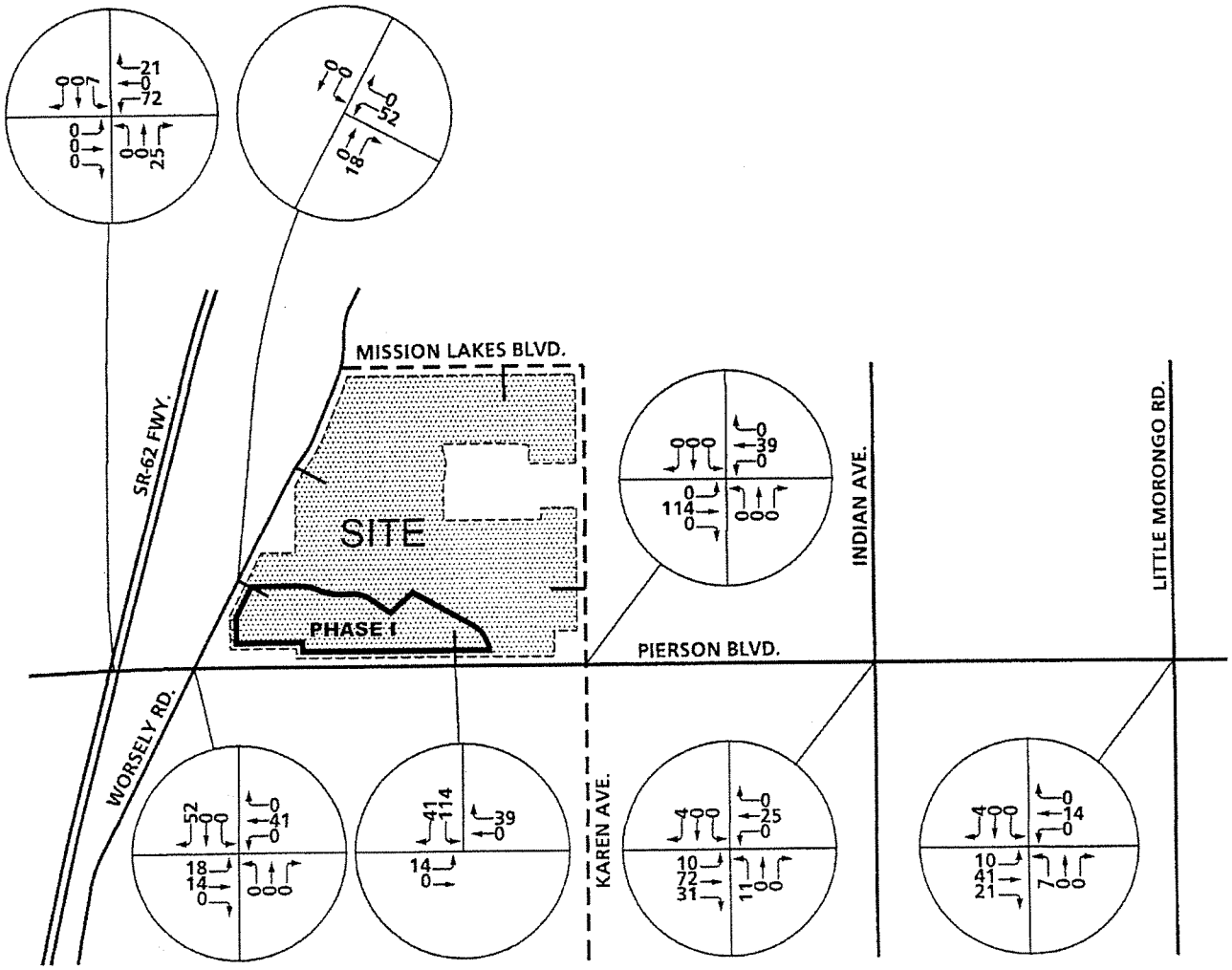
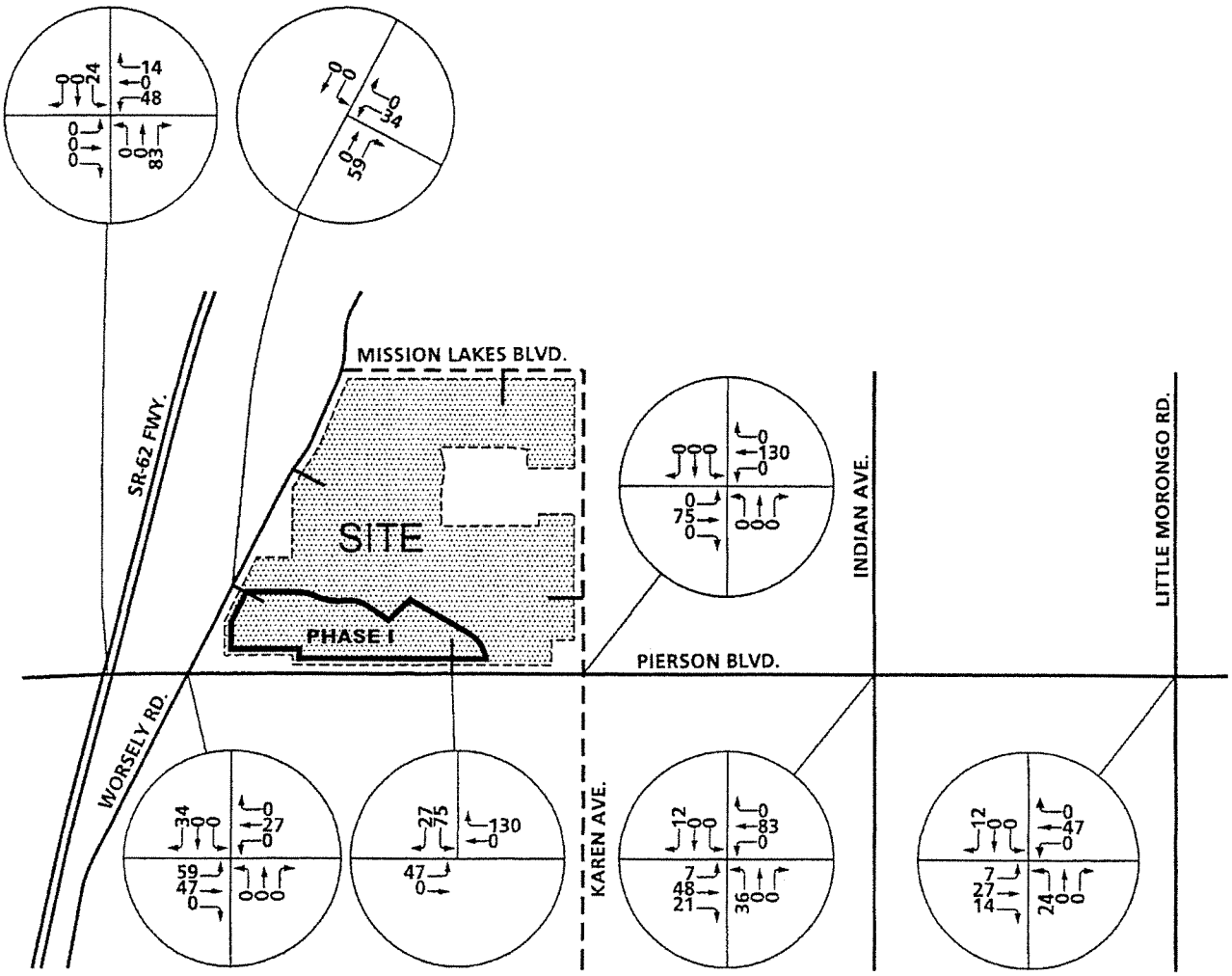

SR-62 FWY.
WORSELY RD.
MISSION LAKES BLVD.
SITE
PHASE I
KAREN AVE.
PIERSON BLVD.
INDIAN AVE.
LITTLE MORONGO RD.
52
0
41
0
18
14
0
41
114
39
0
14
0
4
0
0
25
0
10
72
31
11
0
4
0
0
14
0
10
41
21
7
0
0
0
0
0
0
25
0
0
0
0
0
0

EXHIBIT 4-L

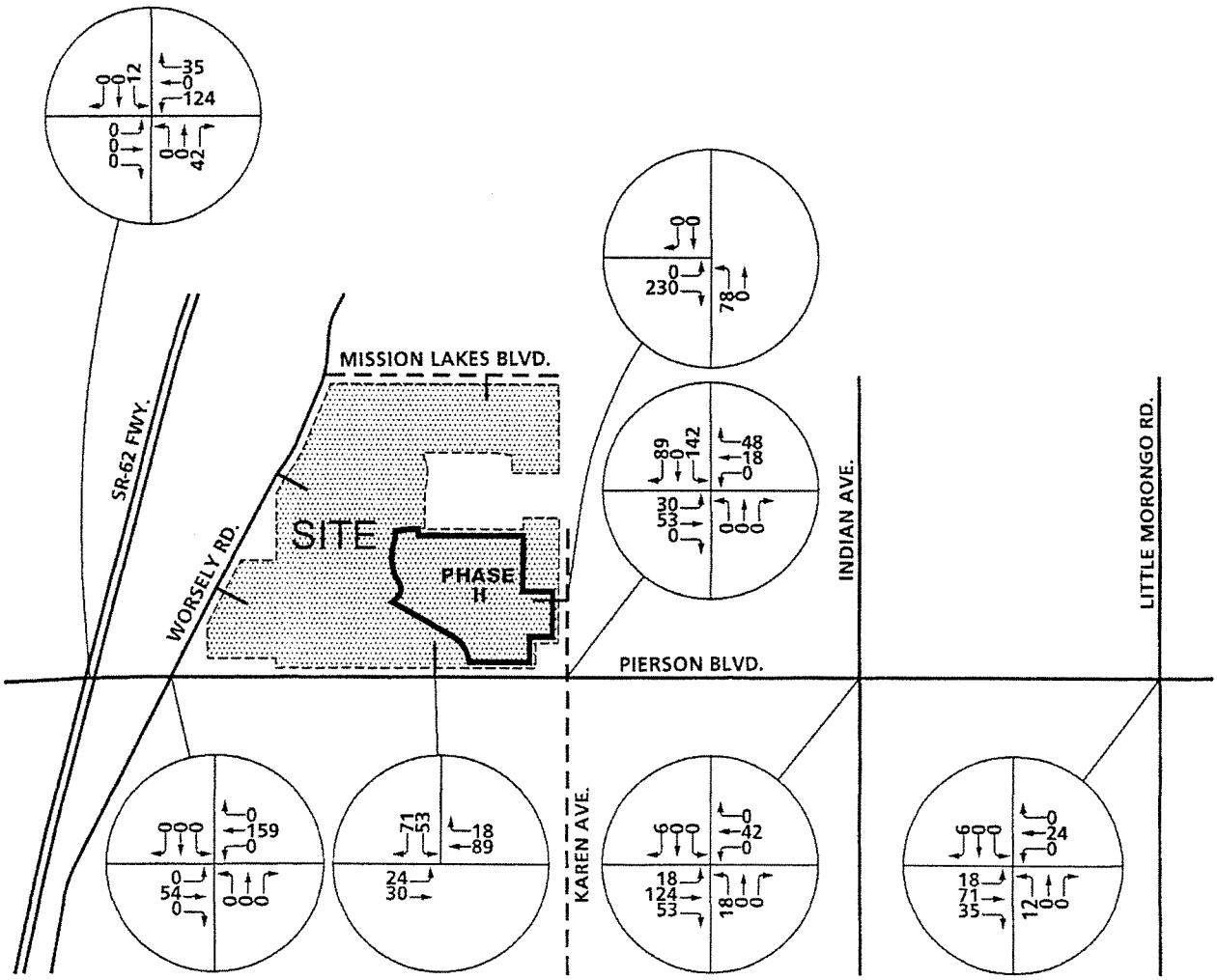
PROJECT (PHASE I) PM PEAK HOUR INTERSECTION VOLUMES



N

EXHIBIT 4-M

PROJECT (PHASE II) AM PEAK HOUR INTERSECTION VOLUMES



N

EXHIBIT 4-N

PROJECT (PHASE II) PM PEAK HOUR INTERSECTION VOLUMES

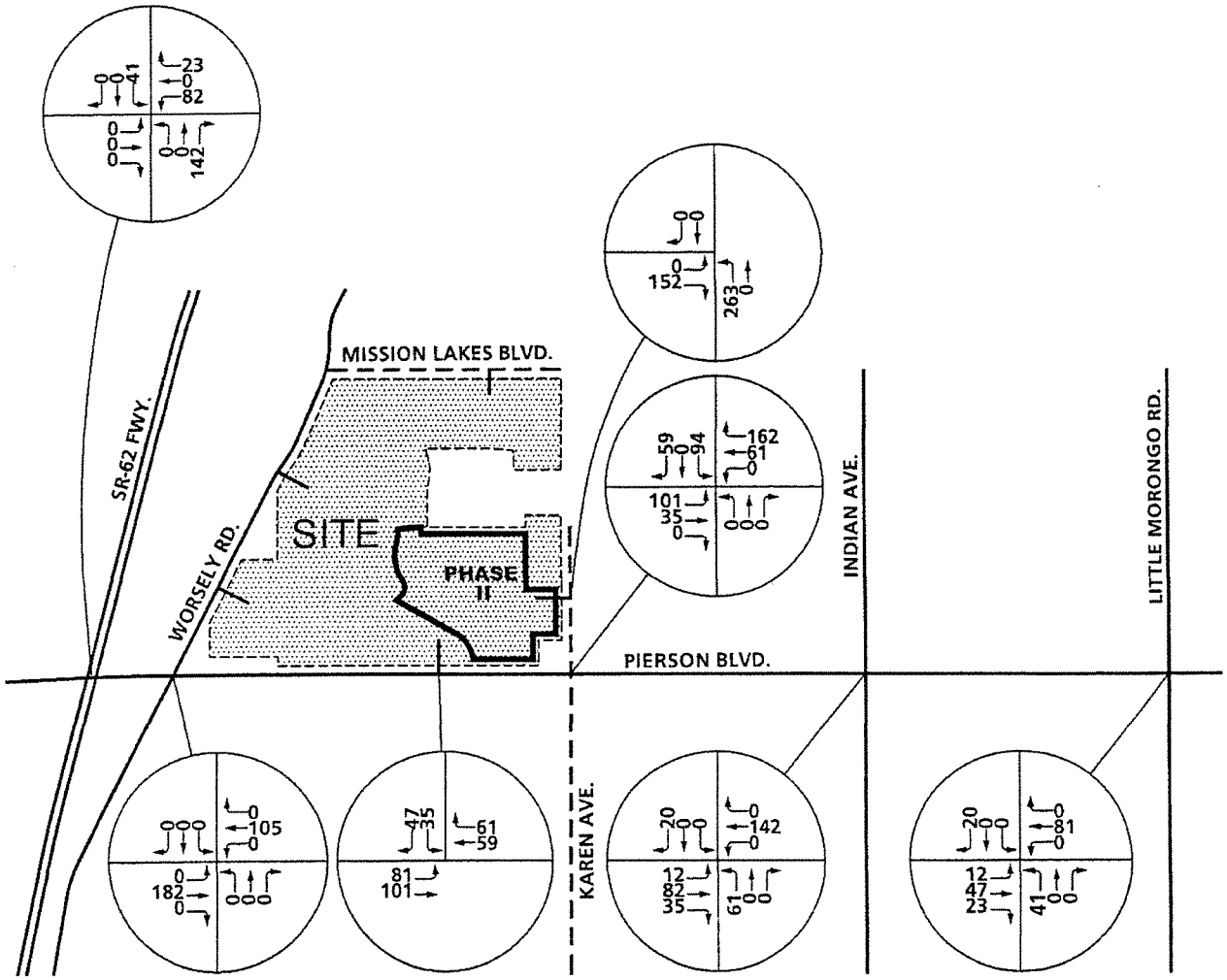


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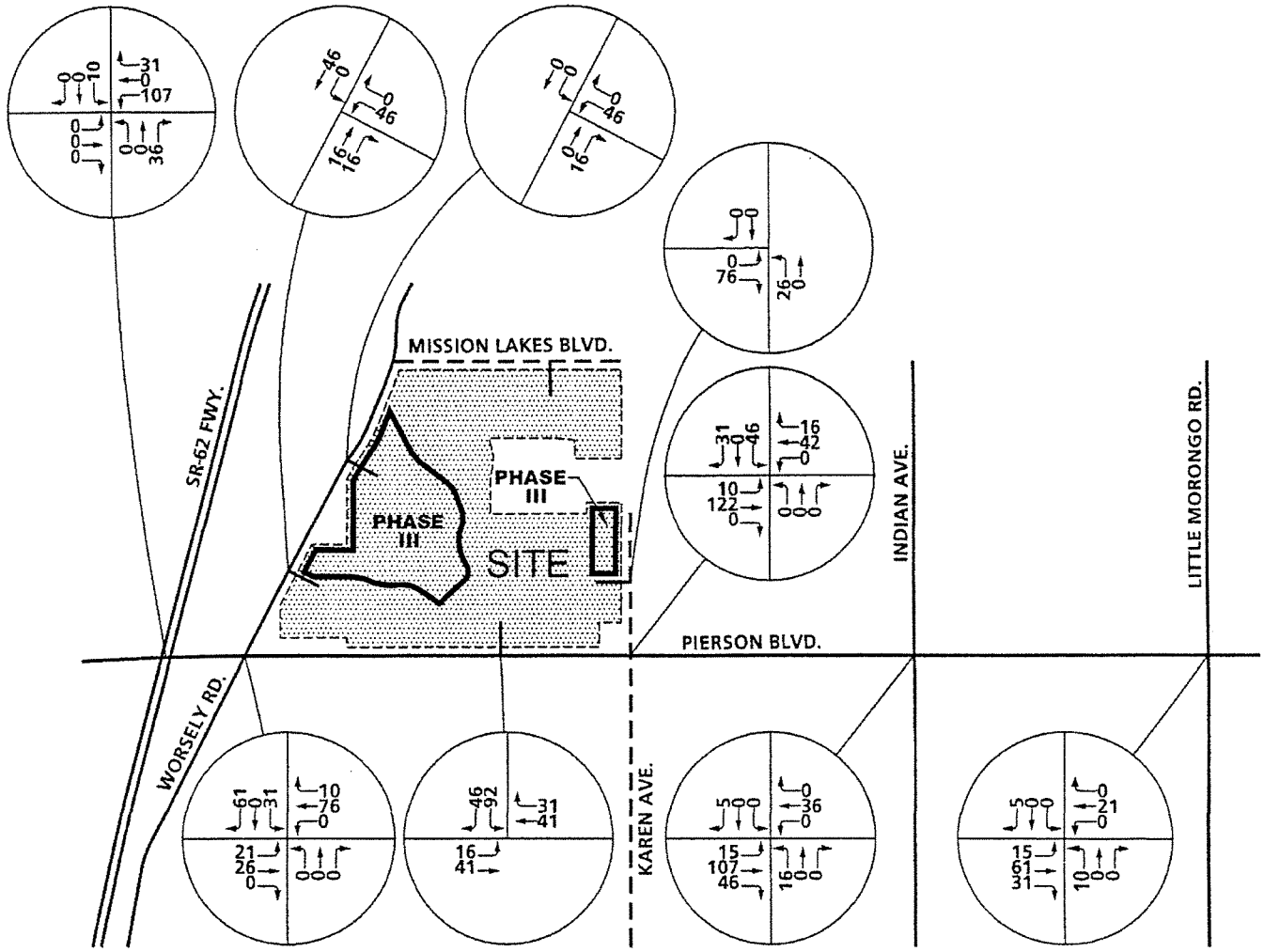
EXHIBIT 4-O

PROJECT (PHASE III) AM PEAK HOUR INTERSECTION VOLUMES



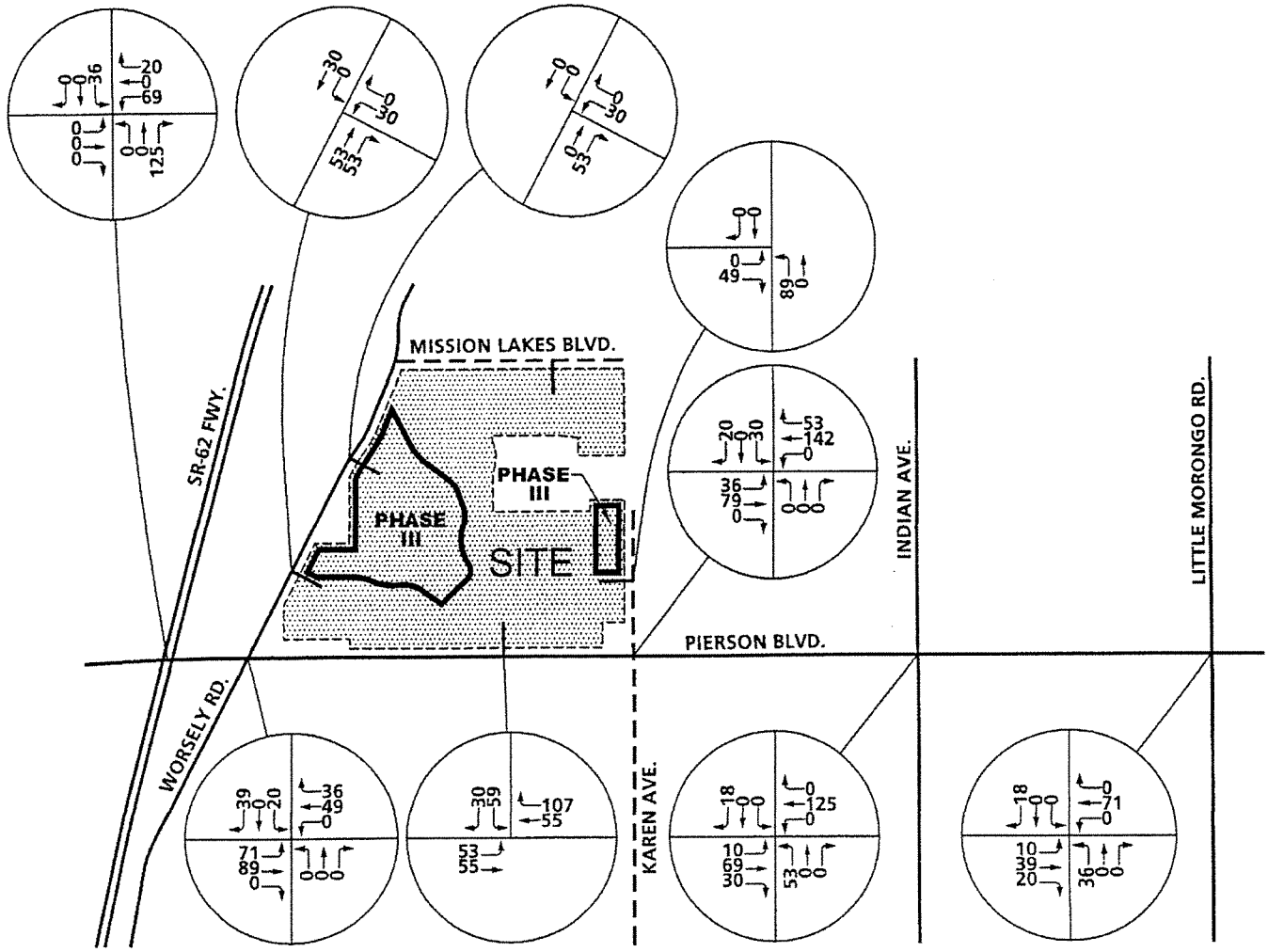
N

STONERIDGE PROJECT, City of Desert Hot Springs, California - 01552:53_rev.2

URBAN CROSSROADS

EXHIBIT 4-P

PROJECT (PHASE III) PM PEAK HOUR INTERSECTION VOLUMES



N

peak hour intersection turning movement volumes are shown on Exhibits 4-Q and 4-R, respectively. For Phase V, project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-S and 4-T, respectively.

B. Other Development Traffic

1. Method of Projection

To assess future traffic conditions, cumulative traffic is combined with existing traffic and areawide growth. These cumulative projects are illustrated on Exhibit 4-U.

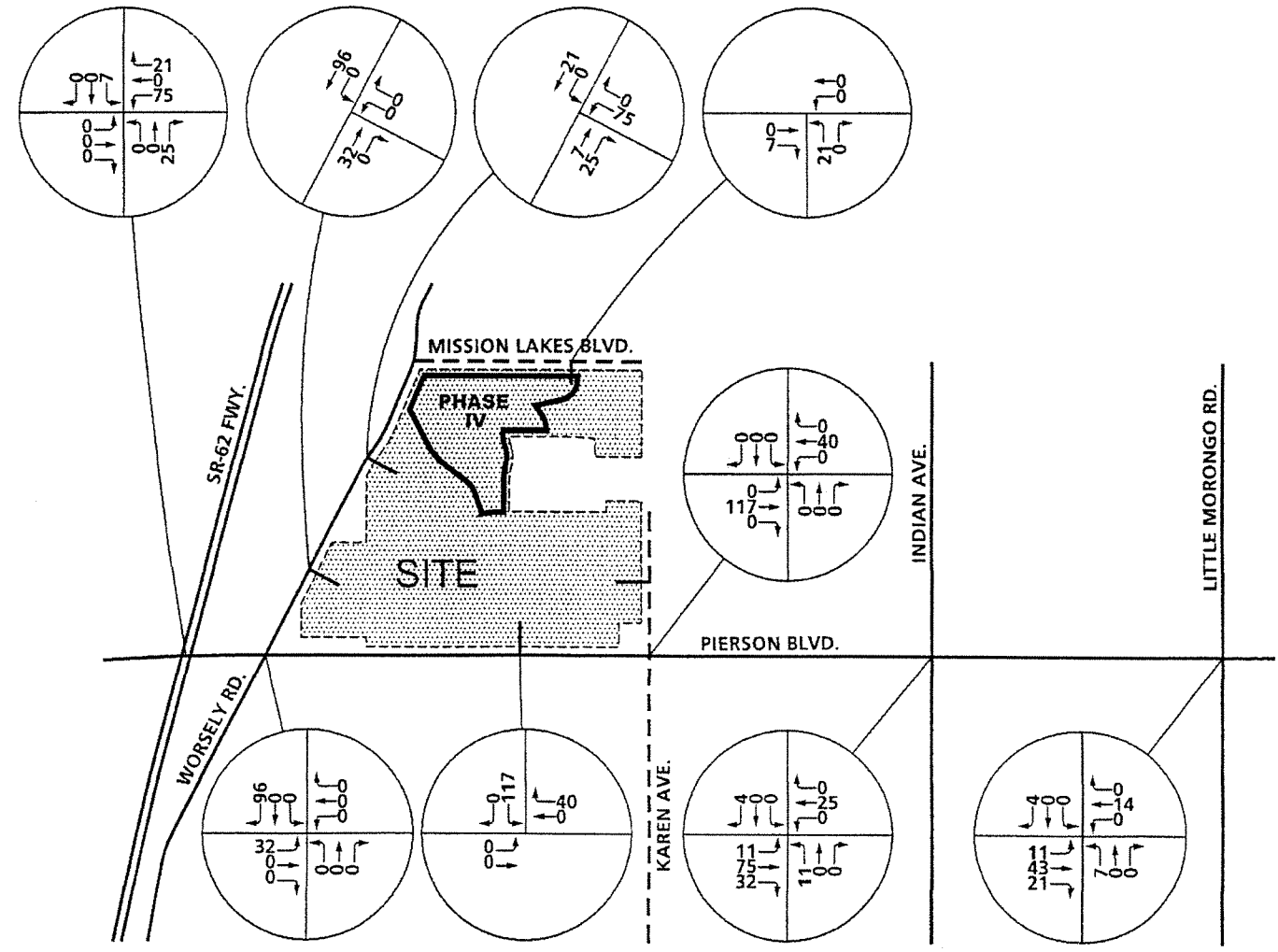
2. Non-Site Traffic for Study Area

Table 4-1 (previously illustrated) summarizes the trip rates used for the proposed land uses for the nearby developments known by Urban Crossroads, Inc. at the time this study was prepared and provided by the City of Desert Hot Springs Transportation Department staff.

Tables 4-3 to 4-7 show the daily and peak hour vehicle trips generated by the surrounding developments being processed concurrently in the study area for Year 2004, 2005, 2006, 2007 and 2008, respectively. The trip generation estimates included in these tables are based on the assumption that the developments will be constructed in equal increments (i.e. 20% per year). Exhibits 4-V to 4-Y contain the directional distribution and assignment of the other development traffic. Based on the identified trip distributions for the cumulative developments on arterial highways throughout the study area, other development ADT volumes are shown on Exhibit 4-Z. The cumulative developments' AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-AA and 4-BB, respectively.

EXHIBIT 4-Q

PROJECT (PHASE IV) AM PEAK HOUR INTERSECTION VOLUMES



N

EXHIBIT 4-R

PROJECT (PHASE IV) PM PEAK HOUR INTERSECTION VOLUMES

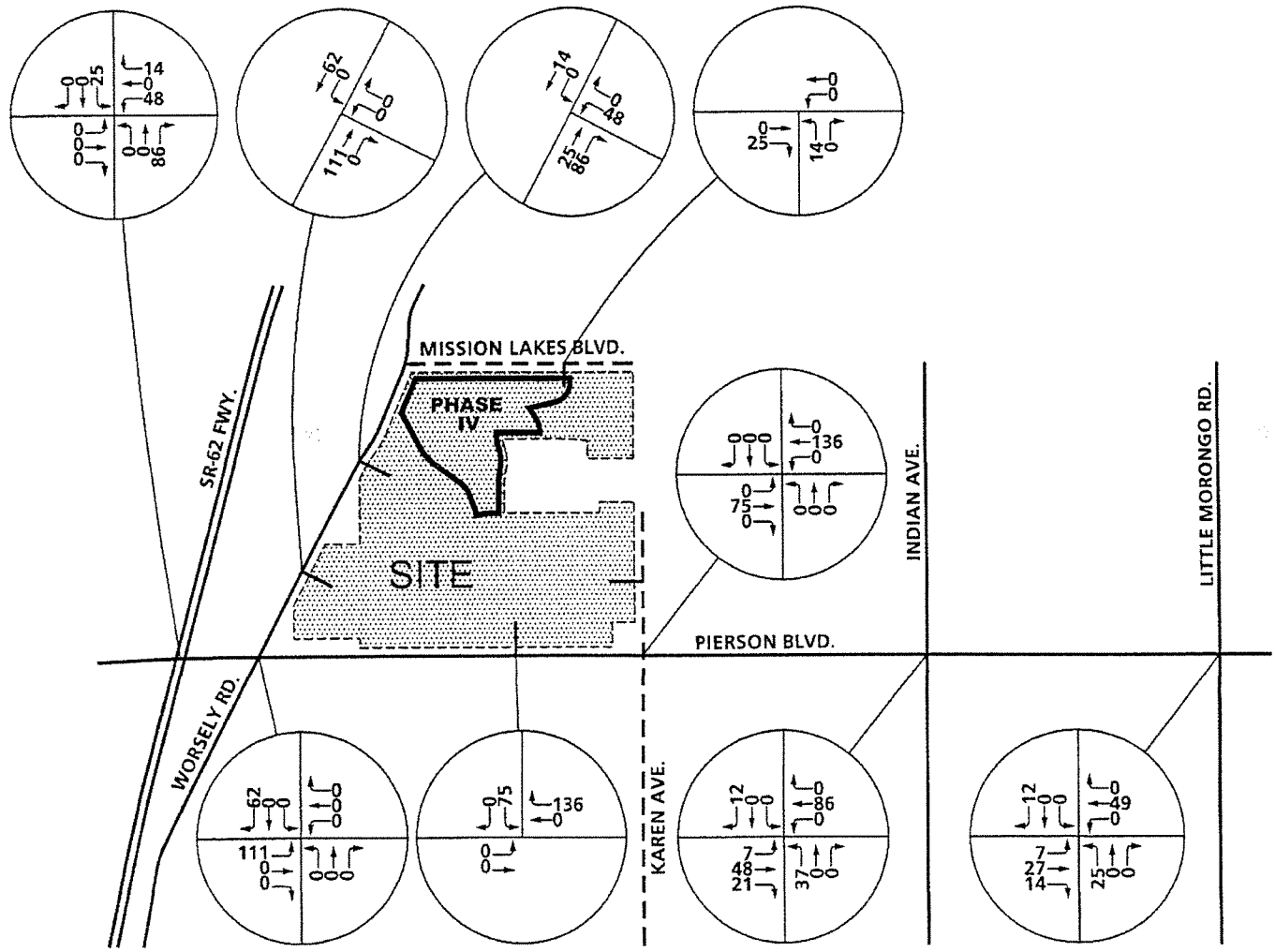


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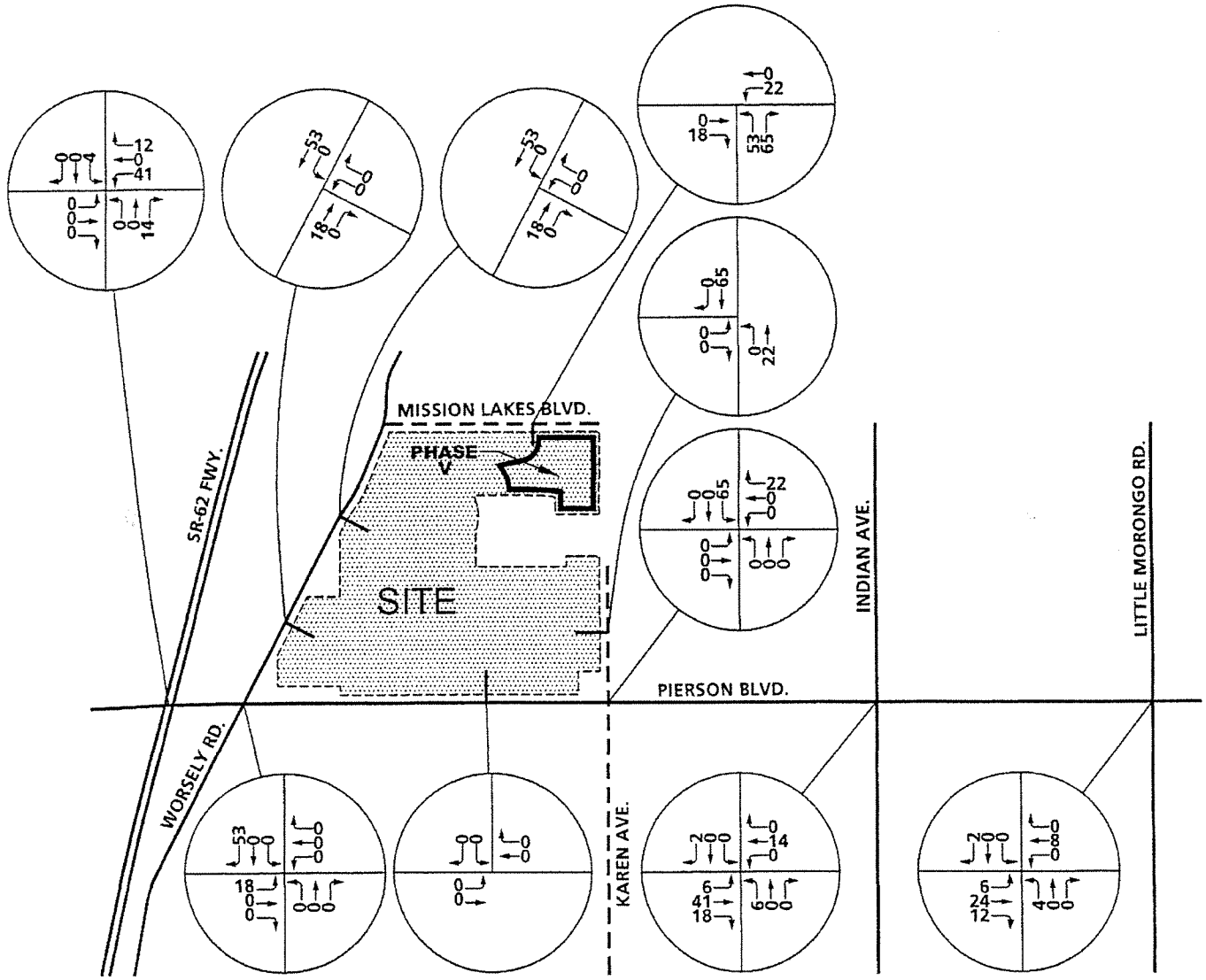
EXHIBIT 4-S

PROJECT (PHASE V) AM PEAK HOUR INTERSECTION VOLUMES



N

EXHIBIT 4-T

PROJECT (PHASE V) PM PEAK HOUR INTERSECTION VOLUMES

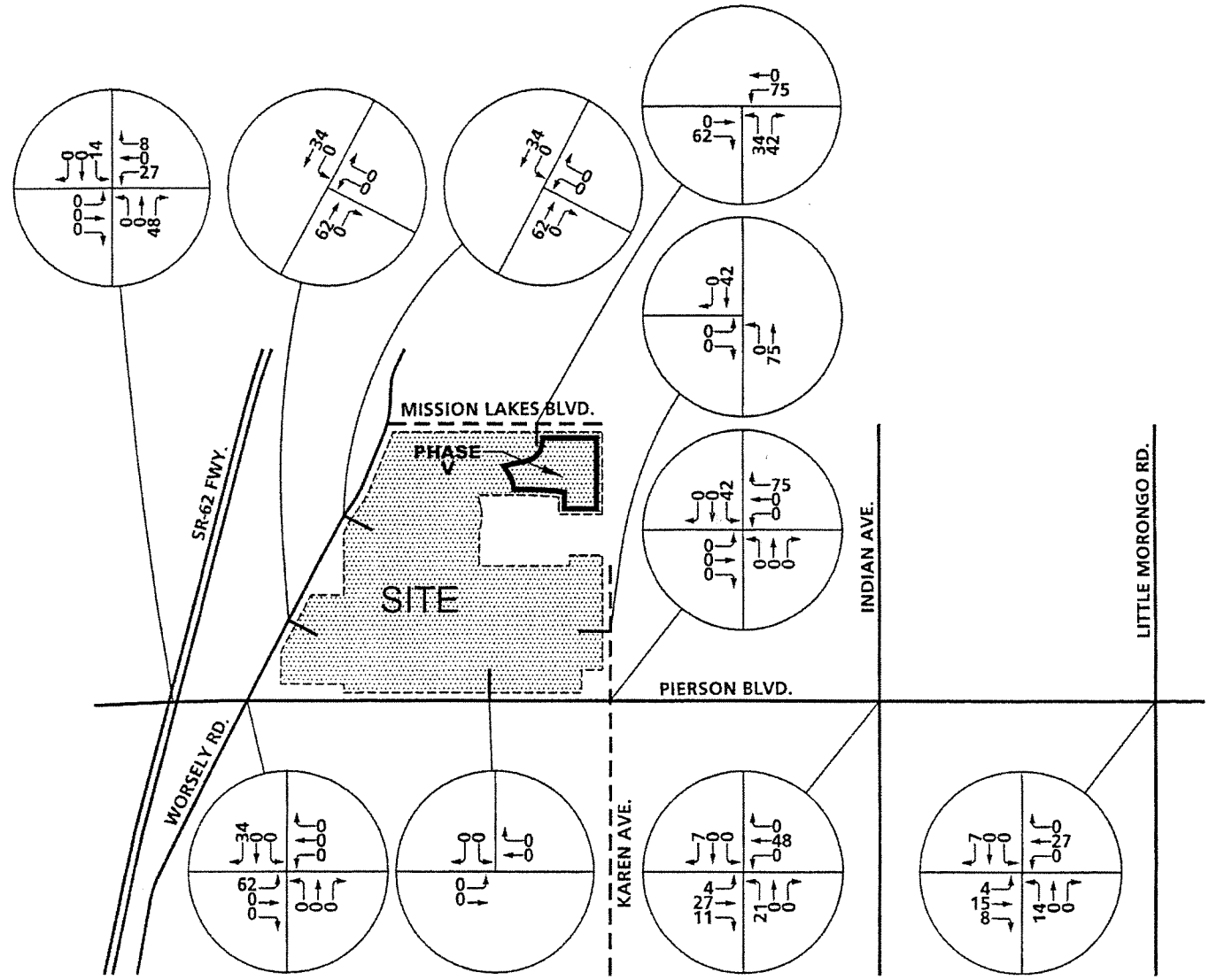


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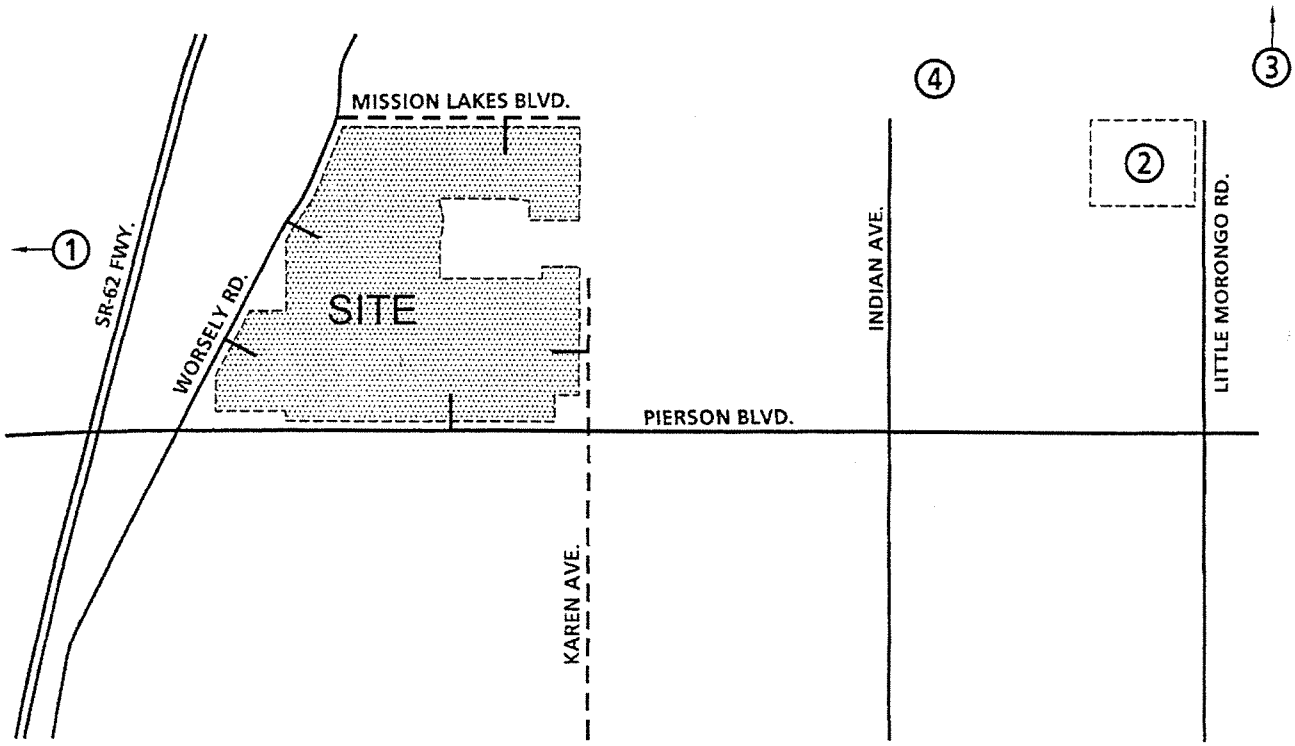
EXHIBIT 4-U

OTHER DEVELOPMENT LOCATION MAP



LEGEND:

1 = RANCHO ROYALE/SNELLENBERGER GROUP

2 = RANCHO MORONGO GROUP

3 = LITTLE MORONGO ANNENBURG

4 = CENTURY CROWELL HOMES

N

TABLE 4-3

YEAR 2004 OTHER DEVELOPMENT LAND USE AND TRIP GENERATION

PROJECT					PEAK HOUR				
					AM		PM		
#	NAME	LAND USE	QUANTITY	UNITS[1]	IN	OUT	IN	OUT	DAILY
1	Rancho Royale / Snellenberger Group (20%)	SFDR[2]	429	DU	82	240	279	154	4,106
		Apartments	268	DU	21	115	113	54	1,777
		Golf Course	7	HOLES	12	3	8	11	250
		Subtotal (Entire Rancho Royale)			115	358	400	219	6,133
2	Rancho Morongo Group (20%)	SFDR	58	DU	11	32	38	21	555
		Residential Condo	26	DU	2	10	9	5	152
		Apartments	65	DU	5	28	27	13	431
		Commercial	22.0	TSF	21	13	64	70	1,452
		- "Pass-By" Trips (25%)(Commercial Only)			-5	-3	-16	-18	-363
		Subtotal (Entire Rancho Morongo Group)			34	80	122	91	2,227
3	Little Morongo Annenburg (20%)	Elderly Housing Detached	85	DU	7	11	13	7	281
4	Century Crowell Homes (20%)	SFDR	73	DU	14	41	47	26	699
TOTAL					**170**	**490**	**582**	**343**	**9,340**

[1] DU = Dwelling Units
TSF = Thousand Square Feet
HOLES = Number of Holes in a golf course.

[2] SFDR = Single Family Detached Residential

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TABLE 4-4

YEAR 2005 OTHER DEVELOPMENT LAND USE AND TRIP GENERATION

PROJECT					PEAK HOUR				
					AM		PM		
#	NAME	LAND USE	QUANTITY	UNITS[1]	IN	OUT	IN	OUT	DAILY
1	Rancho Royale / Snellenberger Group (40%)	SFDR[2]	858	DU	163	480	558	309	8,211
		Apartments	537	DU	43	231	226	107	3,560
		Golf Course	14	HOLES	25	7	17	21	500
		Subtotal (Entire Rancho Royale)			231	718	801	437	12,271
2	Rancho Morongo Group (40%)	SFDR	117	DU	22	66	76	42	1,120
		Residential Condo	52	DU	4	19	19	9	305
		Apartments	129	DU	10	55	54	26	855
		Commercial	44.0	TSF	41	26	128	139	2,904
		- "Pass-By" Trips (25%)(Commercial Only)			-10	-7	-32	-35	-726
		Subtotal (Entire Rancho Morongo Group)			67	159	245	181	4,458
3	Little Morongo Annenburg (40%)	Elderly Housing Detached	170	DU	14	22	26	14	561
4	Century Crowell Homes (40%)	SFDR	146	DU	28	82	95	53	1,397
TOTAL					**340**	**981**	**1,167**	**685**	**18,687**

[1] DU = Dwelling Units
TSF = Thousand Square Feet
HOLES = Number of Holes in a golf course.

[2] SFDR = Single Family Detached Residential

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TABLE 4-5

YEAR 2006 OTHER DEVELOPMENT LAND USE AND TRIP GENERATION

PROJECT					PEAK HOUR				
					AM		PM		
#	NAME	LAND USE	QUANTITY	UNITS[1]	IN	OUT	IN	OUT	DAILY
1	Rancho Royale / Snellenberger Group (60%)	SFDR[2]	1,287	DU	245	721	837	463	12,317
		Apartments	805	DU	64	346	338	161	5,337
		Golf Course	22	HOLES	39	10	27	34	786
		Subtotal (Entire Rancho Royale)			348	1,077	1,202	658	18,440
2	Rancho Morongo Group (60%)	SFDR	175	DU	33	98	114	63	1,675
		Residential Condo	78	DU	5	29	28	14	457
		Apartments	194	DU	16	83	81	39	1,286
		Commercial	66.0	TSF	62	40	193	209	4,355
		- "Pass-By" Trips (25%)(Commercial Only)			-16	-10	-48	-52	-1,089
		Subtotal (Entire Rancho Morongo Group)			100	240	368	273	6,684
3	Little Morongo Annenburg (60%)	Elderly Housing Detached	254	DU	20	33	38	20	838
4	Century Crowell Homes (60%)	SFDR	218	DU	41	122	142	78	2,086
TOTAL					**509**	**1,472**	**1,750**	**1,029**	**28,048**

[1] DU = Dwelling Units
TSF = Thousand Square Feet
HOLES = Number of Holes in a golf course.

[2] SFDR = Single Family Detached Residential

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TABLE 4-6

YEAR 2007 OTHER DEVELOPMENT LAND USE AND TRIP GENERATION

PROJECT					PEAK HOUR				
					AM		PM		
#	NAME	LAND USE	QUANTITY	UNITS[1]	IN	OUT	IN	OUT	DAILY
1	Rancho Royale / Snellenberger Group (80%)	SFDR[2]	1,716	DU	326	961	1,115	618	16,422
		Apartments	1,074	DU	86	462	451	215	7,121
		Golf Course	29	HOLES	51	14	35	44	1,036
		Subtotal (Entire Rancho Royale)			463	1,437	1,601	877	24,579
2	Rancho Morongo Group (80%)	SFDR	234	DU	44	131	152	84	2,239
		Residential Condo	104	DU	7	38	37	19	609
		Apartments	258	DU	21	111	108	52	1,711
		Commercial	88.0	TSF	83	53	257	279	5,807
		- "Pass-By" Trips (25%)(Commercial Only)			-21	-13	-64	-70	-1,452
		Subtotal (Entire Rancho Morongo Group)			134	320	490	364	8,914
3	Little Morongo Annenburg (80%)	Elderly Housing Detached	339	DU	27	44	51	27	1,119
4	Century Crowell Homes (80%)	SFDR	291	DU	55	163	189	105	2,785
TOTAL					**679**	**1,964**	**2,331**	**1,373**	**37,397**

[1] DU = Dwelling Units
TSF = Thousand Square Feet
HOLES = Number of Holes in a golf course.

[2] SFDR = Single Family Detached Residential

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TABLE 4-7

YEAR 2008 OTHER DEVELOPMENT LAND USE AND TRIP GENERATION

PROJECT					PEAK HOUR				
					AM		PM		
#	NAME	LAND USE	QUANTITY	UNITS[1]	IN	OUT	IN	OUT	DAILY
1	Rancho Royale / Snellenberger Group	SFDR[2]	2,145	DU	408	1,201	1,394	772	20,528
		Apartments	1,342	DU	107	577	564	268	8,897
		Golf Course	36	HOLES	63	17	44	55	1,287
		Subtotal (Entire Rancho Royale)			578	1,795	2,002	1,095	30,712
2	Rancho Morongo Group	SFDR	292	DU	55	164	190	105	2,794
		Residential Condo	130	DU	9	48	47	23	762
		Apartments	323	DU	26	139	136	65	2,141
		Commercial	109.5	TSF	103	66	320	347	7,226
		- "Pass-By" Trips (25%)(Commercial Only)			-26	-17	-80	-87	-1,807
		Subtotal (Entire Rancho Morongo Group)			167	400	613	453	11,116
3	Little Morongo Annenburg	Elderly Housing Detached	424	DU	34	55	64	34	1,399
4	Century Crowell Homes	SFDR	364	DU	69	204	237	131	3,483
TOTAL					**848**	**2,454**	**2,916**	**1,713**	**46,710**

[1] DU = Dwelling Units
TSF = Thousand Square Feet
HOLES = Number of Holes in a golf course.

[2] SFDR = Single Family Detached Residential

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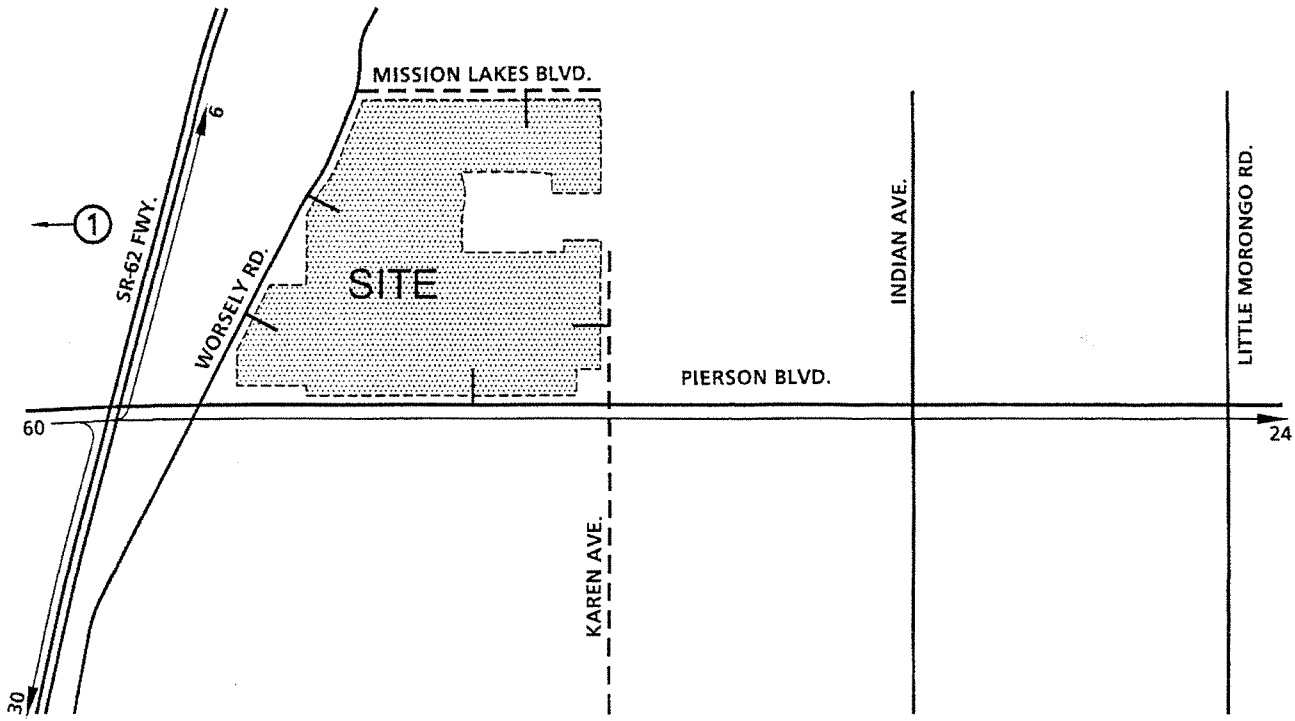
EXHIBIT 4-V

RANCHO ROYALE/SNELLENBERGER GROUP TRIP DISTRIBUTION



LEGEND:

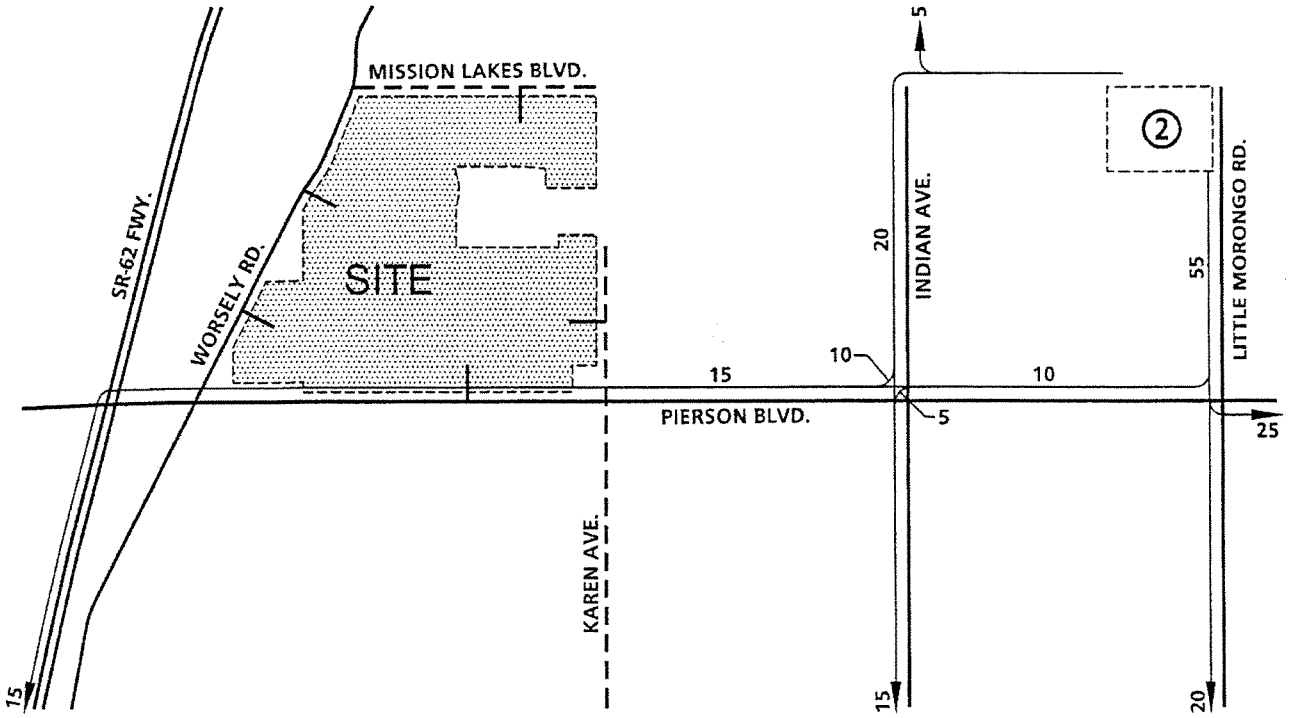
10 = PERCENT TO/FROM PROJECT

(1) = RANCHO ROYALE/SNELLENBERGER GROUP

N

EXHIBIT 4-W

RANCHO MORONGO GROUP TRIP DISTRIBUTION



LEGEND:

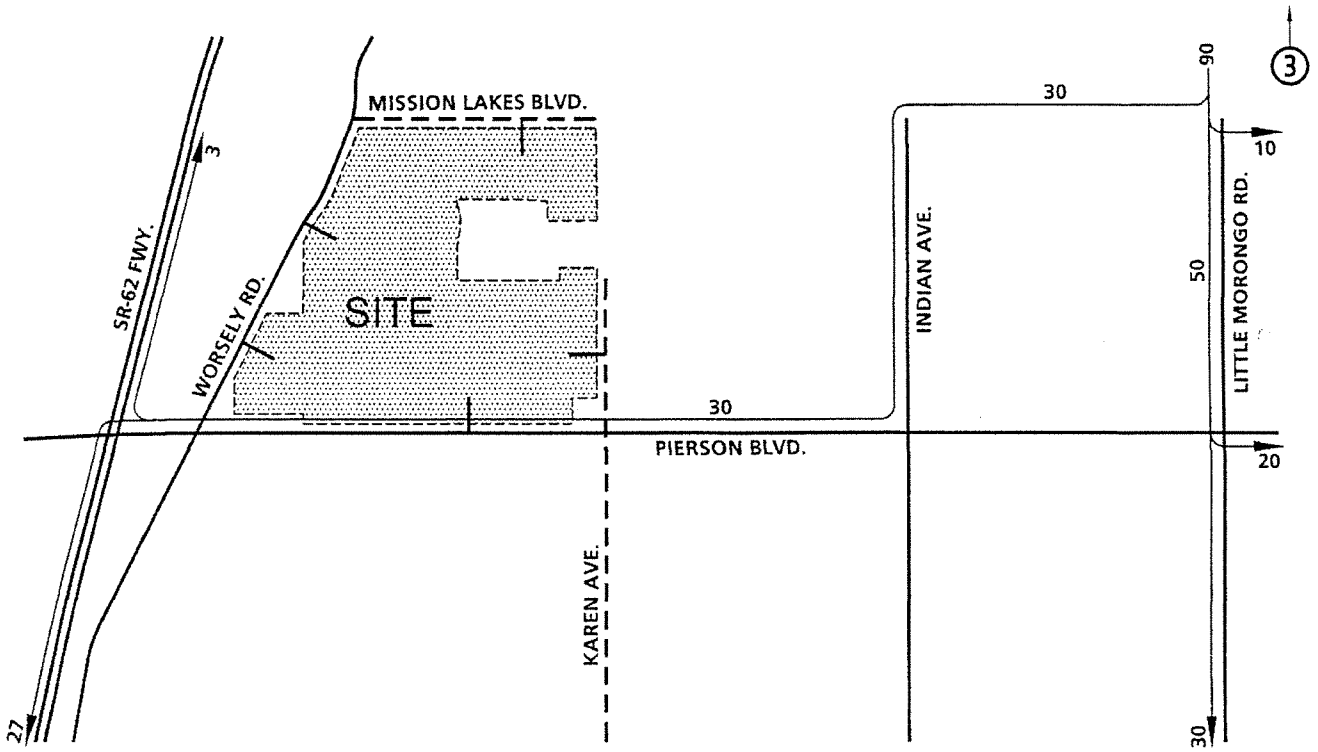
10 = PERCENT TO/FROM PROJECT

(2) = RANCHO MORONGO GROUP

N

EXHIBIT 4-X

LITTLE MORONGO GROUP TRIP DISTRIBUTION



LEGEND:

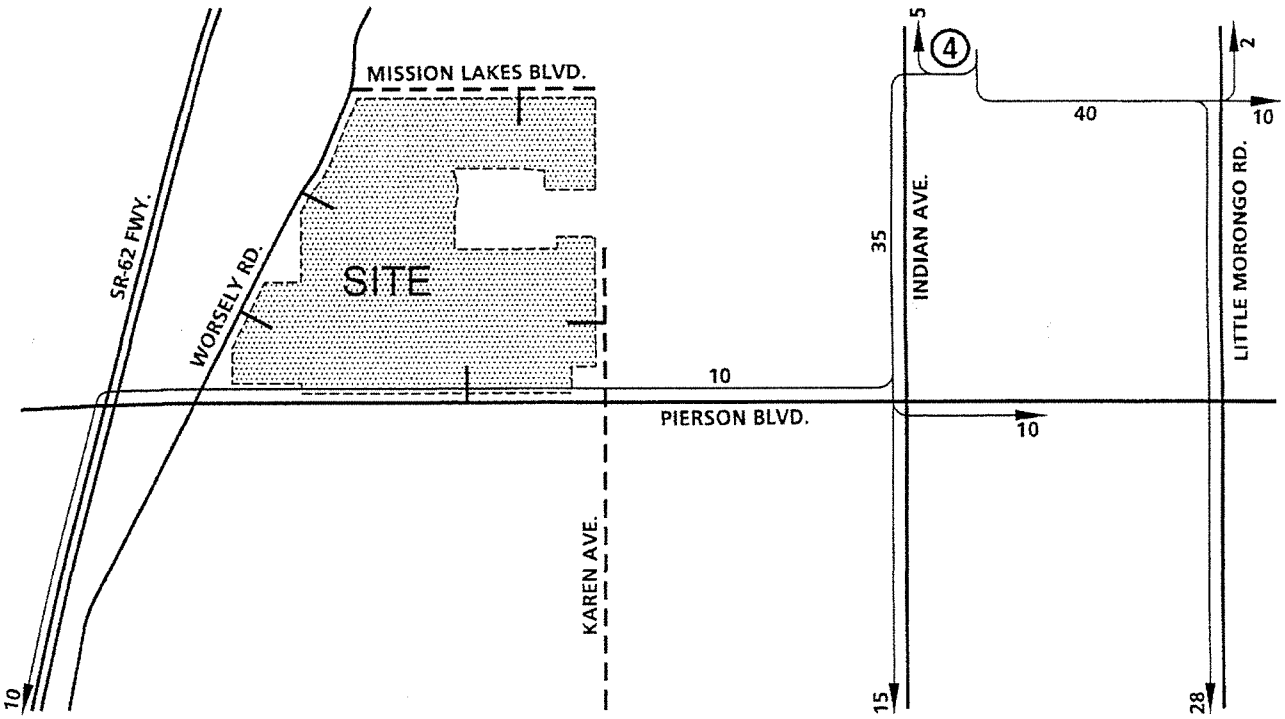
10 = PERCENT TO/FROM PROJECT

(3) = LITTLE MORONGO GROUP

N

EXHIBIT 4-Y

CENTURY CROWELL HOMES TRIP DISTRIBUTION



LEGEND:

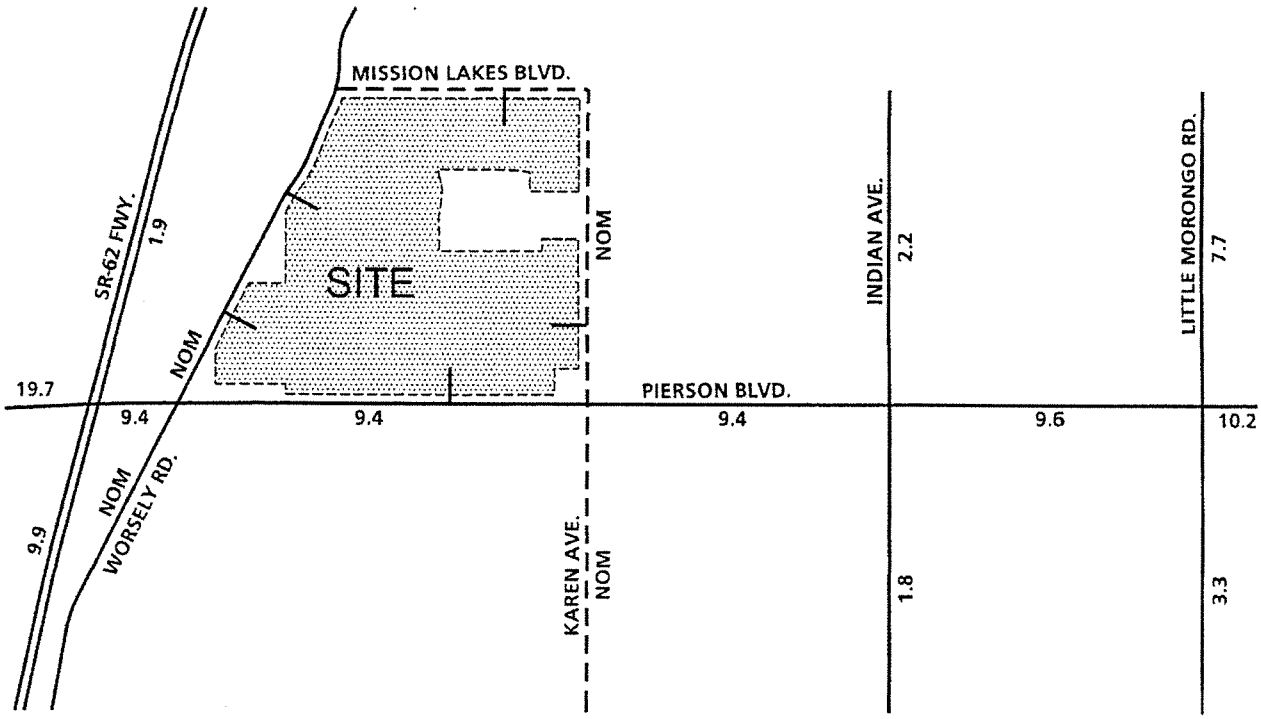
10 = PERCENT TO/FROM PROJECT

(4) = CENTURY CROWELL HOMES

N

EXHIBIT 4-Z

OTHER DEVELOPMENT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-AA

OTHER DEVELOPMENT AM PEAK HOUR INTERSECTION VOLUMES

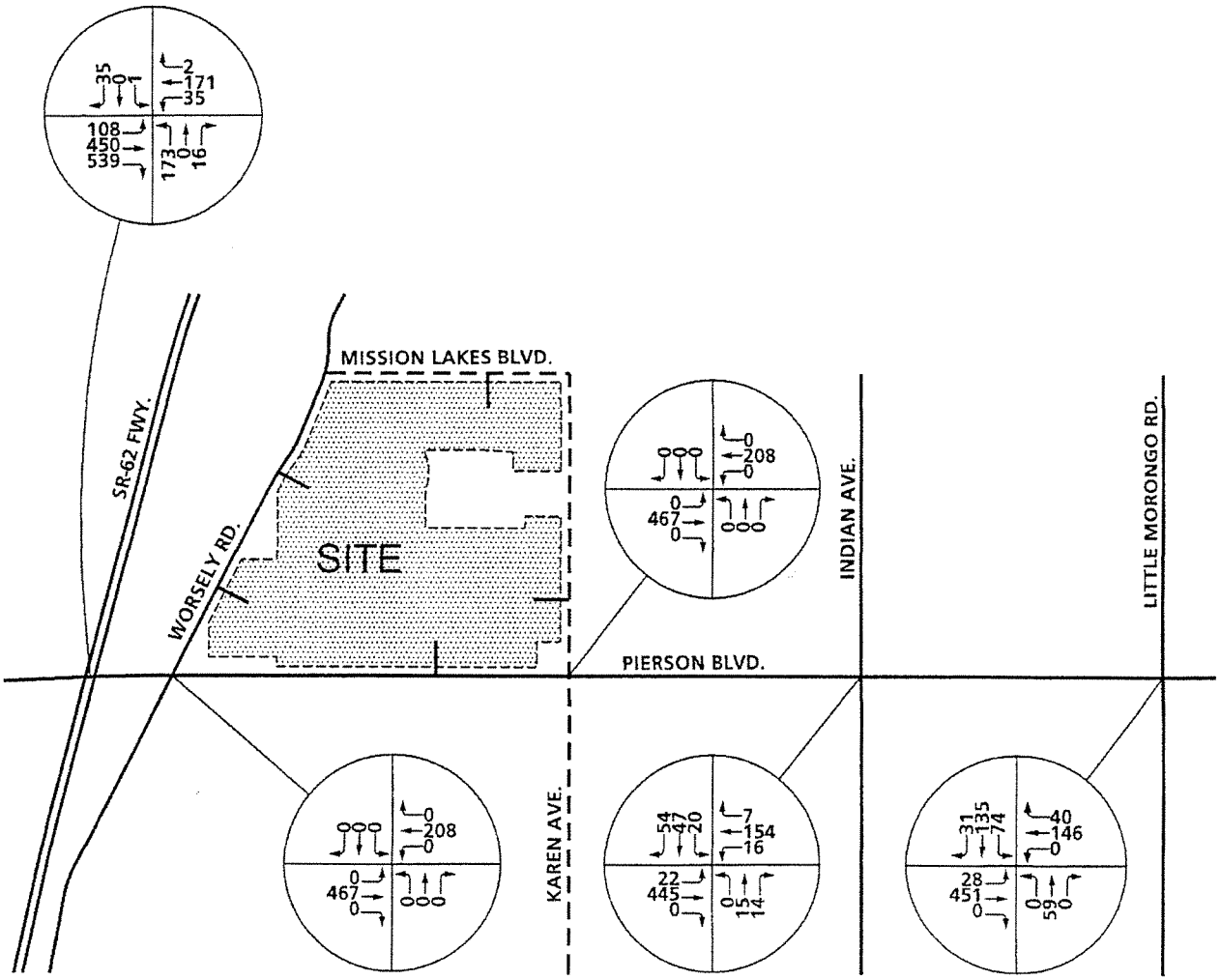


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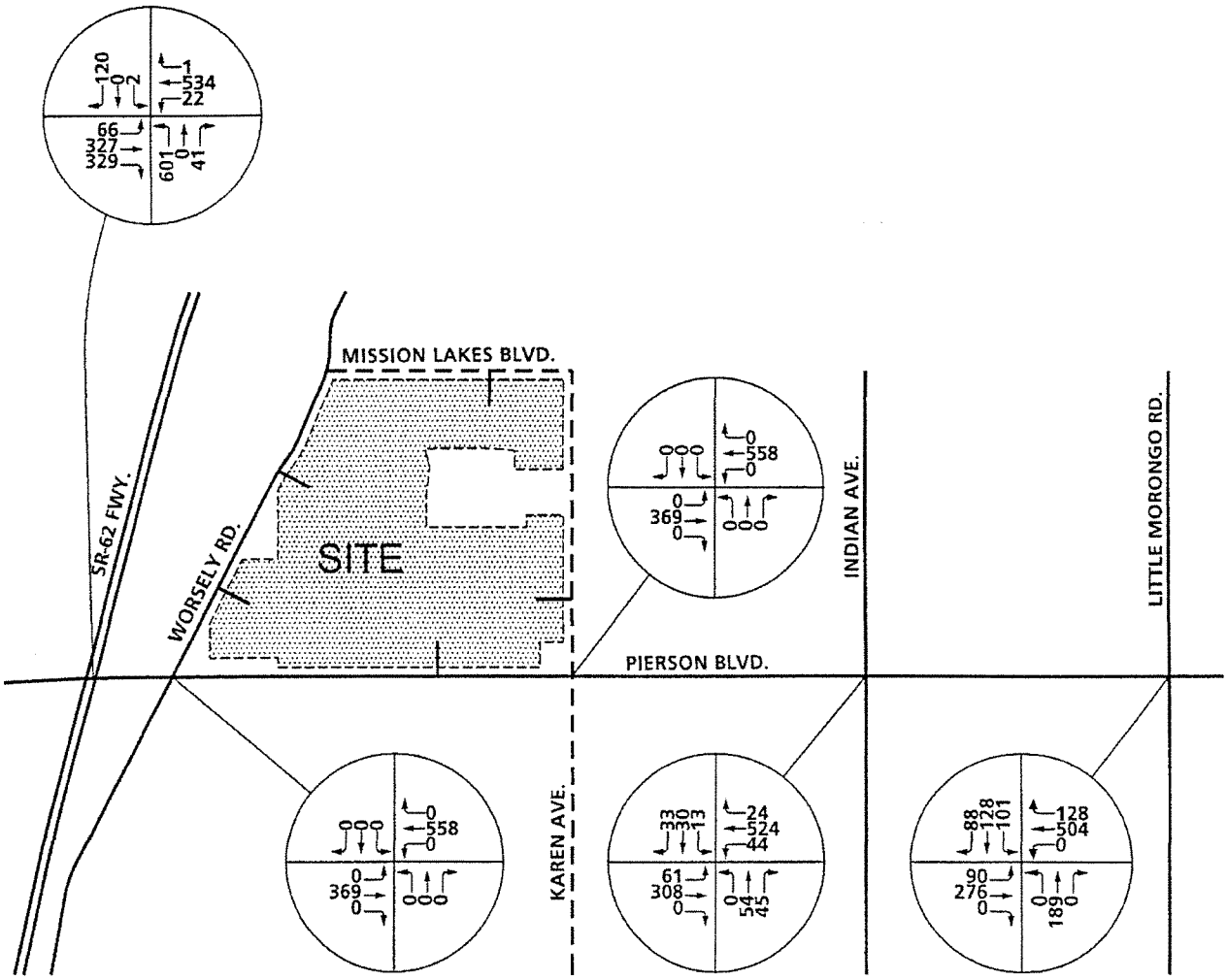
EXHIBIT 4-BB

OTHER DEVELOPMENT PM PEAK HOUR INTERSECTION VOLUMES



N

3. Through Traffic

To account for areawide growth on roadways, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes. The areawide growth rate was obtained based on discussions with the City staff. The remaining growth is anticipated to be accounted for by the development of cumulative projects in the study area.

Areawide growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the project and cumulative development.

C. Total Traffic for Year 2004

For Cumulative (2004) Without Project Conditions, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes over a one year period plus the portion of the total cumulative development traffic that is anticipated to occur by this timeframe (approximately 20 percent). Exhibit 4-CC shows the ADT volumes which can be expected for Cumulative (2004) Without Project traffic conditions.

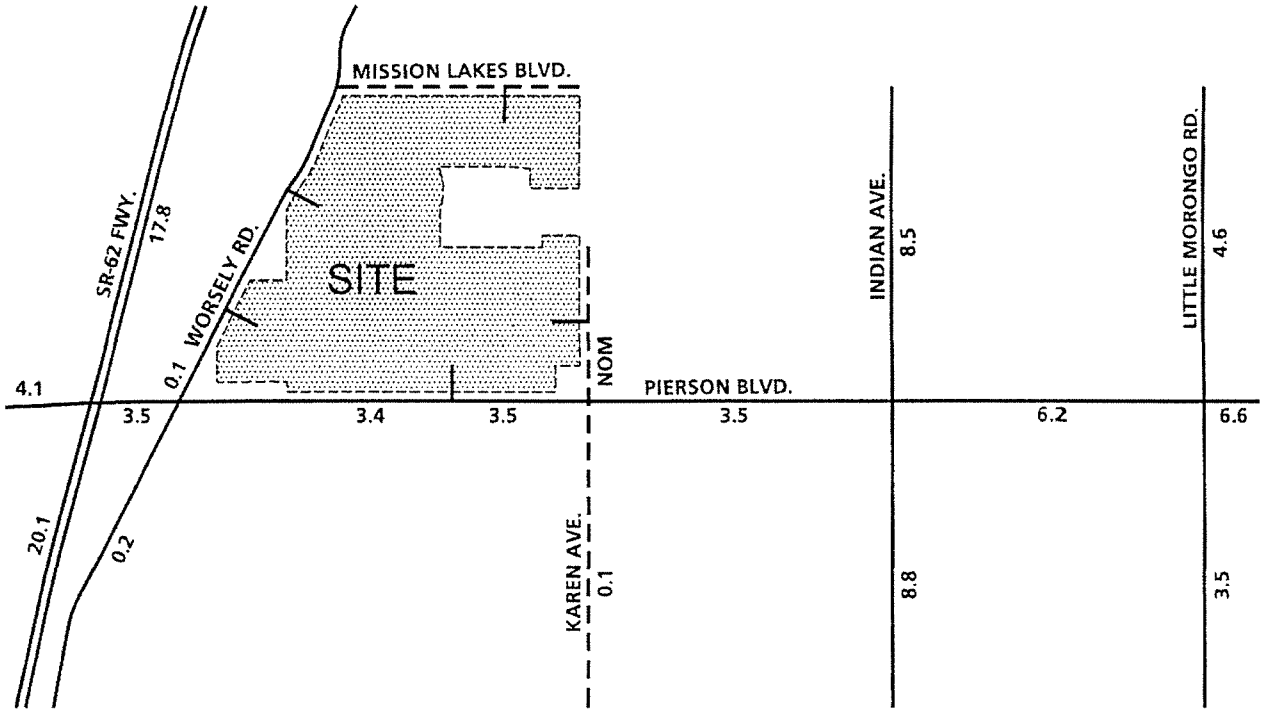
For Cumulative (2004) With Project Conditions, Phase I traffic volumes were added to Cumulative (2004) Without Project volumes. Exhibit 4-DD shows the ADT volumes which can be expected for Cumulative (2004) With Project traffic conditions.

D. Total Traffic for Year 2005

For Cumulative (2005) Without Project Conditions, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes over a two year period plus 40 percent of the total cumulative

EXHIBIT 4-CC

CUMULATIVE (2004) CONDITIONS WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



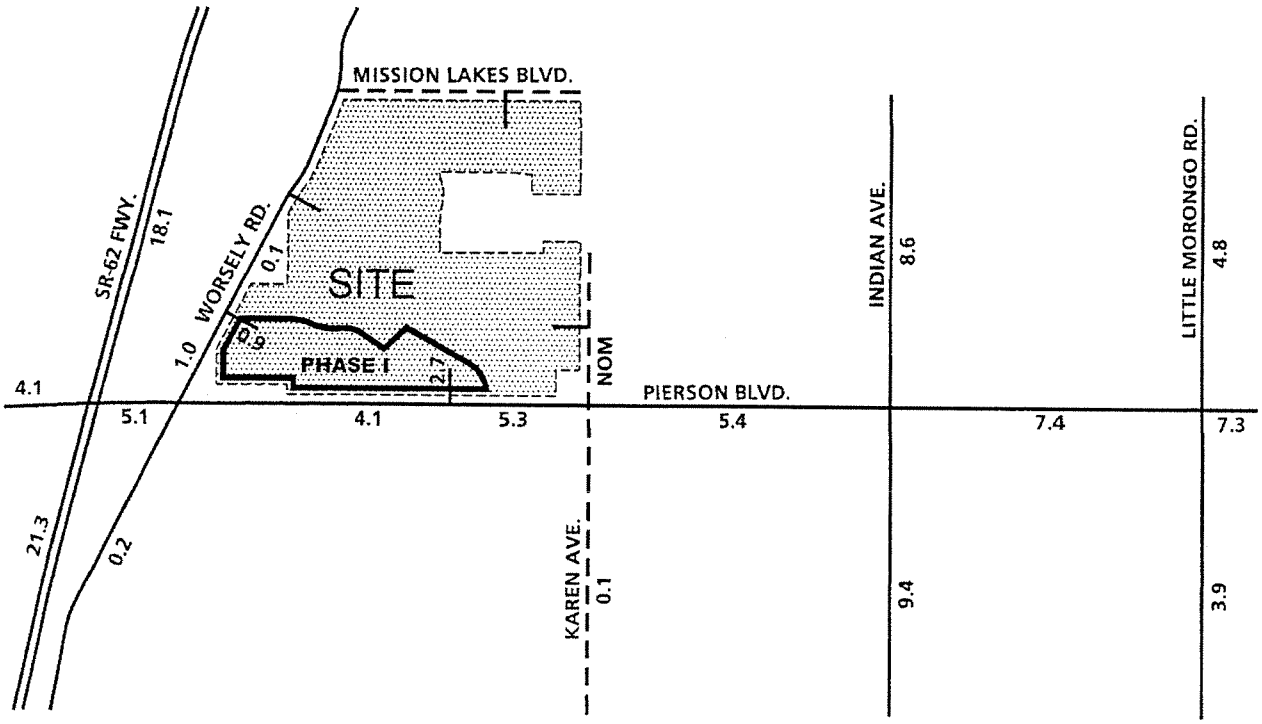
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-DD

CUMULATIVE (2004) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

development traffic. Exhibit 4-EE shows the ADT volumes which can be expected for Cumulative (2005) Without Project traffic conditions.

For Cumulative (2005) With Project Conditions, Phases I and II traffic volumes were added to Cumulative (2005) Without Project volumes. Exhibit 4-FF shows the ADT volumes which can be expected for Cumulative (2005) With Project traffic conditions.

E. Total Traffic for Year 2006

For Cumulative (2006) Without Project Conditions, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes over a three year period plus 60 percent of the total cumulative development traffic. Exhibit 4-GG shows the ADT volumes which can be expected for Cumulative (2006) Without Project traffic conditions.

For Cumulative (2006) With Project Conditions, Phases I,II and III traffic volumes were added to Cumulative (2006) Without Project volumes. Exhibit 4-HH shows the ADT volumes which can be expected for Cumulative (2006) With Project traffic conditions.

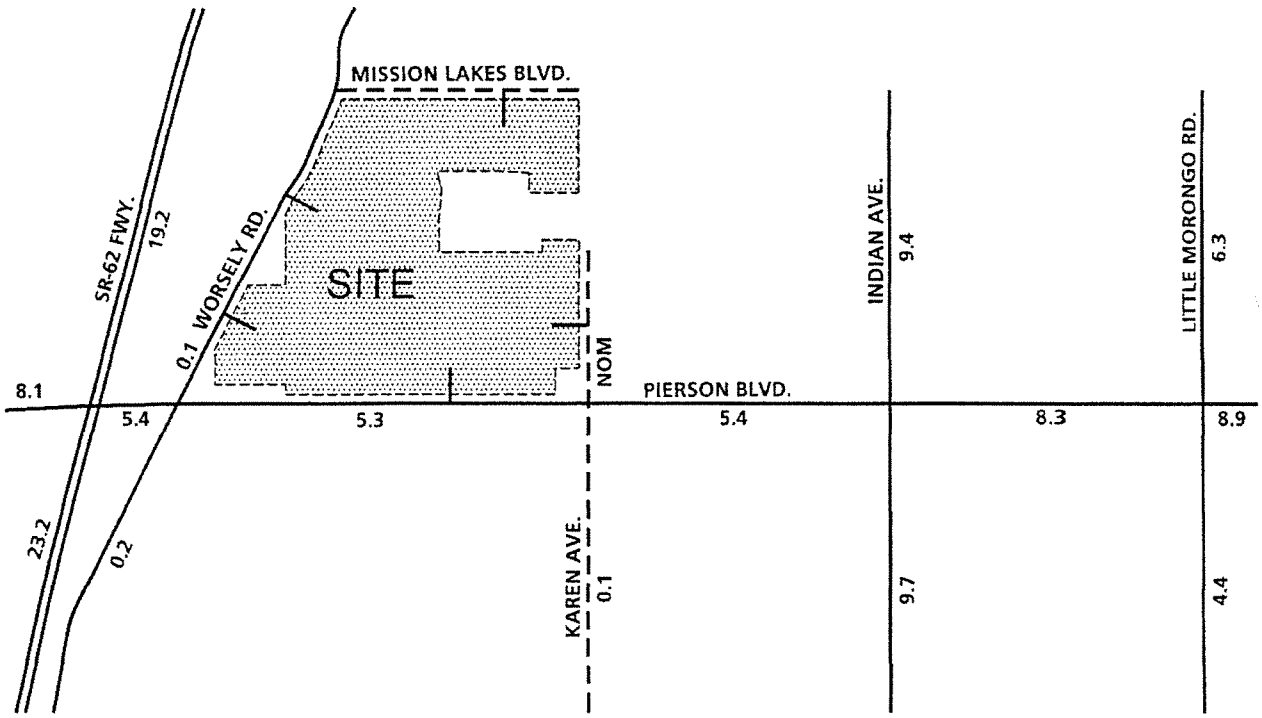
F. Total Traffic for Year 2007

For Cumulative (2007) Without Project Conditions, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes over a four year period plus 80 percent of the total cumulative development traffic. Exhibit 4-II shows the ADT volumes which can be expected for Cumulative (2007) Without Project traffic conditions.

For Cumulative (2007) With Project Conditions, Phases I, II, III, and IV traffic volumes were added to Cumulative (2007) Without Project volumes. Exhibit 4-JJ shows the ADT volumes which can be expected for Cumulative (2007) With Project traffic conditions.

EXHIBIT 4-EE

CUMULATIVE (2005) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



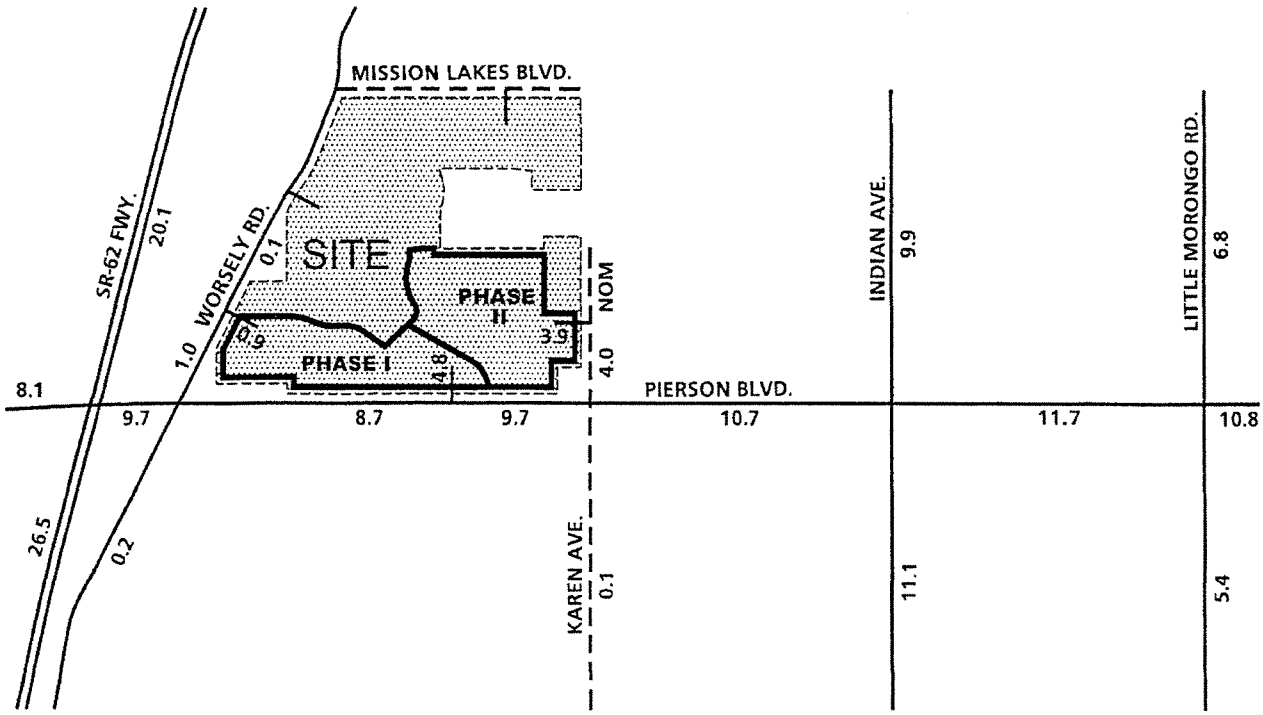
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-FF

CUMULATIVE (2005) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



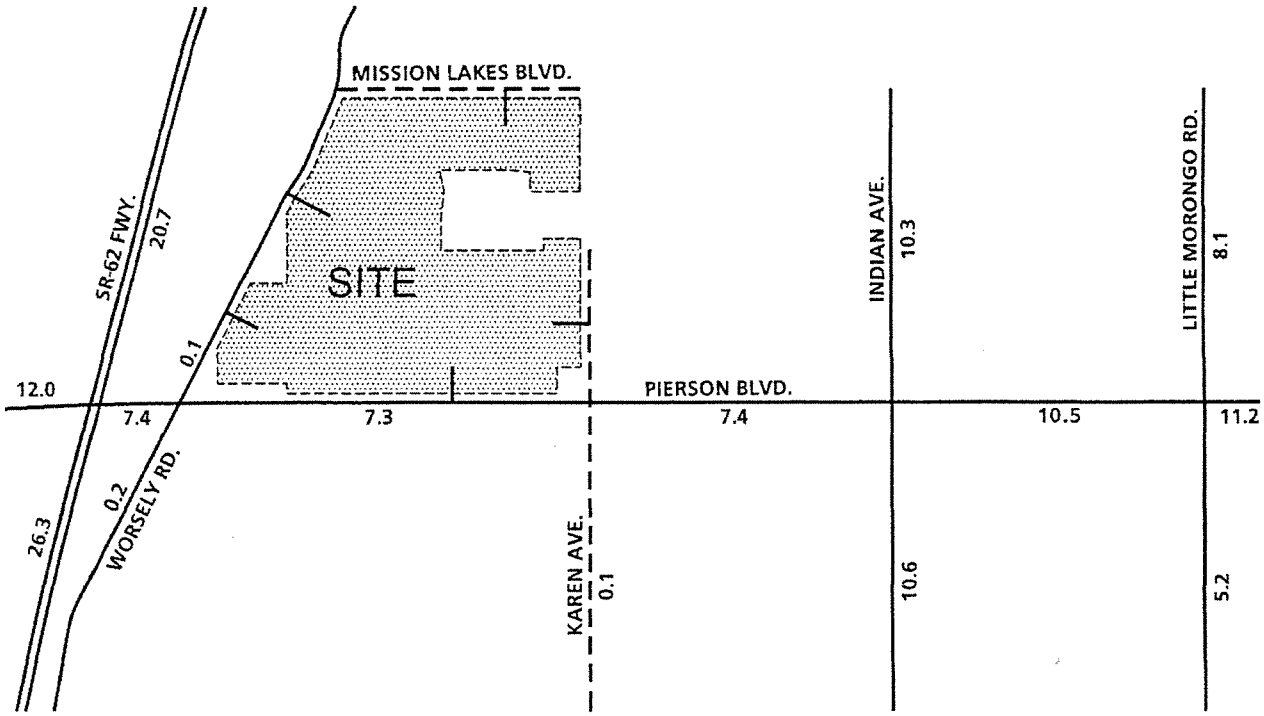
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-GG

CUMULATIVE (2006) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



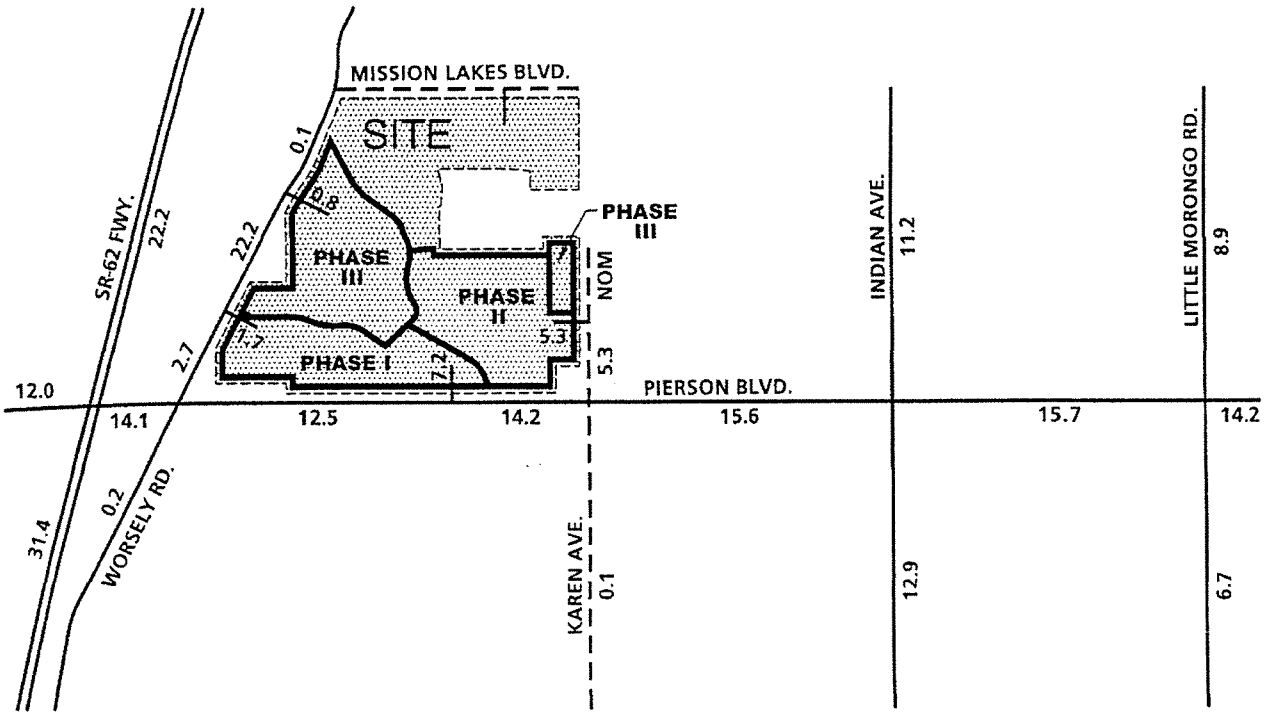
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-HH

CUMULATIVE (2006) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



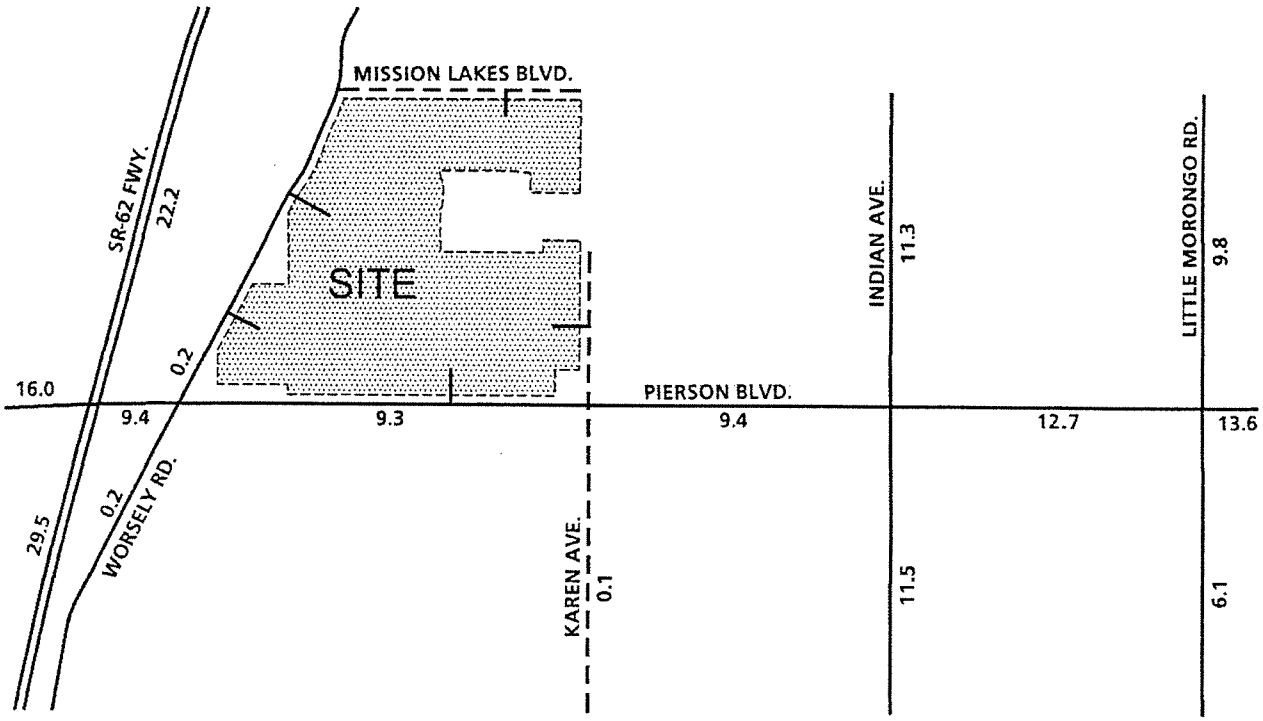
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-II

CUMULATIVE (2007) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



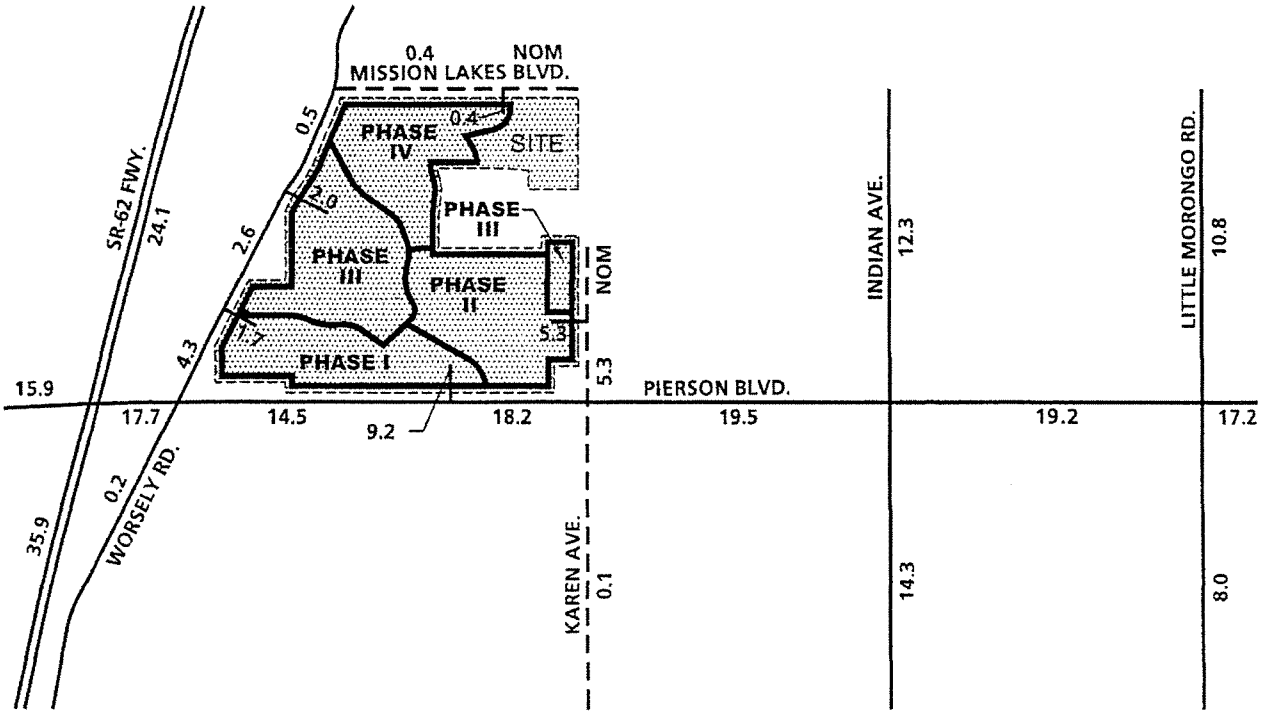
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-JJ

CUMULATIVE (2007) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

G. Total Traffic for Year 2008

For Cumulative (2008) Without Project Conditions, future traffic volumes have been calculated based on a 6.0 percent annual growth rate of existing traffic volumes over a five year period plus the entire cumulative development traffic. Exhibit 4-KK shows the ADT volumes which can be expected for Cumulative (2008) Without Project traffic conditions.

For Cumulative (2008) With Project Conditions, the traffic volumes from all five Phases of the project were added to Cumulative (2008) Without Project volumes. Exhibit 4-LL shows the ADT volumes which can be expected for Cumulative (2008) With Project traffic conditions.

H. Traffic Signal Warrants

For Cumulative (2004) Without Project traffic conditions, the following traffic signals are projected to be warranted (see Appendix "C"):

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

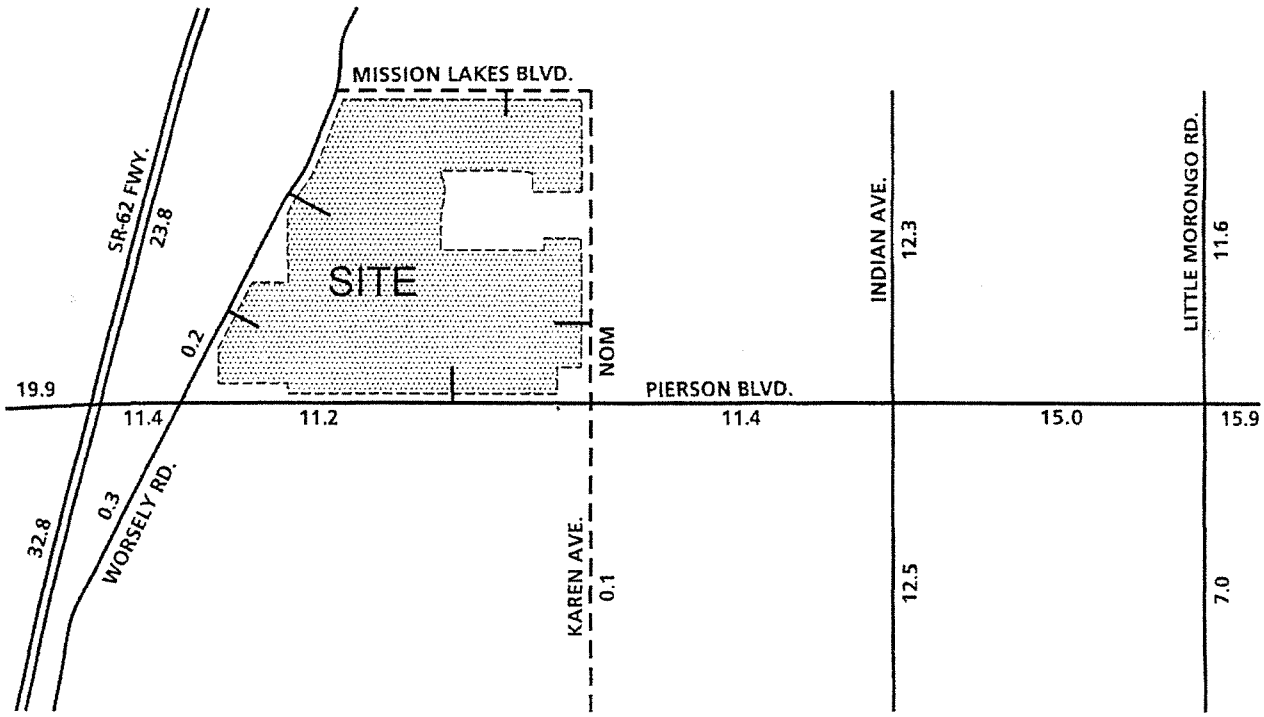
Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For Cumulative (2005) With Project traffic conditions, additional traffic signals are projected to be warranted at the following study area intersections (see Appendix "C"):

EXHIBIT 4-KK

CUMULATIVE (2008) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



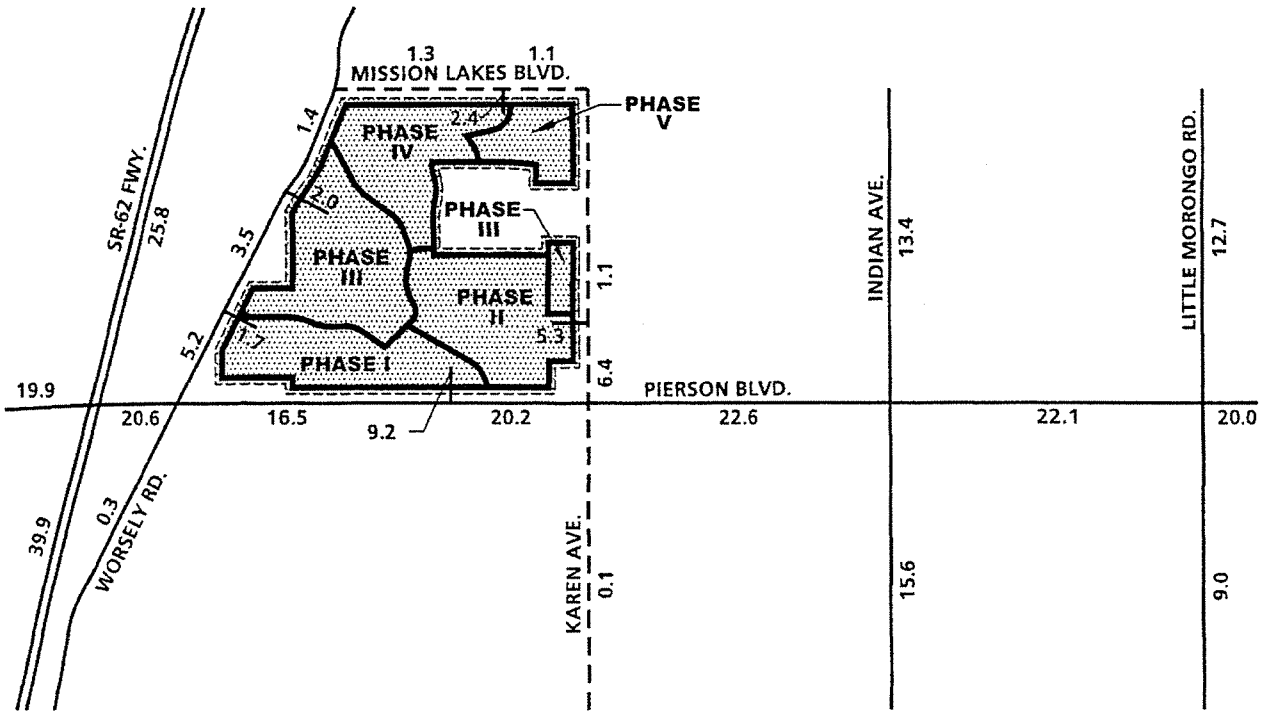
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 4-LL

CUMULATIVE (2008) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

N

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

For Cumulative (2006) With Project traffic conditions, an additional traffic signal is projected to be warranted at the following study area intersection (see Appendix "C"):

Worsley Road (NS) at:

- Pierson Boulevard (EW)

5.0 TRAFFIC ANALYSIS

A. Site Access

The proposed project has been divided into five phases which are each represented by traffic analysis zones (TAZ) in order to load traffic from the appropriate driveway locations. Exhibit 2-A (presented previously) shows the boundaries of each phase and the location of the project driveways. These access locations that will serve these TAZ's are described as follows:

TAZ 1: This 370 unit residential development will have two full access driveway. Driveway 3 will be located along Pierson Boulevard and Driveway 2 will be located along Worsley Road.

TAZ 2: This 633 unit residential development will utilize two full access driveways. Driveway 5 will be located along Karen Avenue and the Driveway 3 will be located along Pierson Boulevard.

TAZ 3: This 547 unit residential development will utilize four full access driveways. Driveways 1 and 2 will be located along Worsley Road, Driveway 3 will be located along Pierson Boulevard and Driveway 5 will be located along Karen Avenue.

TAZ 4: This 380 unit residential development will utilize three full access driveways. Driveway 4 is anticipated to provide full access to Mission Lakes Boulevard, Driveway 1 will have access to Worsley Road and Driveway 3 will have access to Pierson Boulevard.

TAZ 5: This 210 unit residential development will utilize full access (Driveway 4) to Mission Lakes Boulevard.

B. Capacity and Level of Service and Improvement Analysis

1. Level of Service for Cumulative (2004) Conditions Without Project

Cumulative (2004) without project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-1. Table 5-1 shows HCM calculations based on the geometrics at the intersections. Cumulative (2004) without project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-A and 5-B, respectively.

For cumulative (2004) without project traffic conditions, the following study area intersection is projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

For cumulative (2004) without project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-1. Cumulative (2004) Without Project HCM calculation worksheets are provided in Appendix "D". Traffic signal warrant worksheets for cumulative growth conditions are presented in Appendix "C"

2. Level of Service for Cumulative (2004) Conditions With Project

Cumulative (2004) with project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-2. Table 5-2 shows HCM calculations based on the geometrics at the intersections. Cumulative (2004) with project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-C and 5-D, respectively.

TABLE 5-1

INTERSECTION ANALYSIS FOR CUMULATIVE (2004) WITHOUT PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—	F	F
- with improvements	**TS**	1	2	1	1	2	1	0	1	0	0	1	0	14.1	13.0	B	B
Worsley Rd. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	10.6	10.8	B	B
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	9.6	7.5	A	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	12.0	18.4	B	C
- with improvements	**TS**	0.5	0.5	1	0	1	0	0	1	0	0	1	0	9.5	9.9	A	A
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	9.4	11.2	A	B
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	8.9	9.6	A	A

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] -- = Delay High, Intersection Unstable, Level of Service "F".

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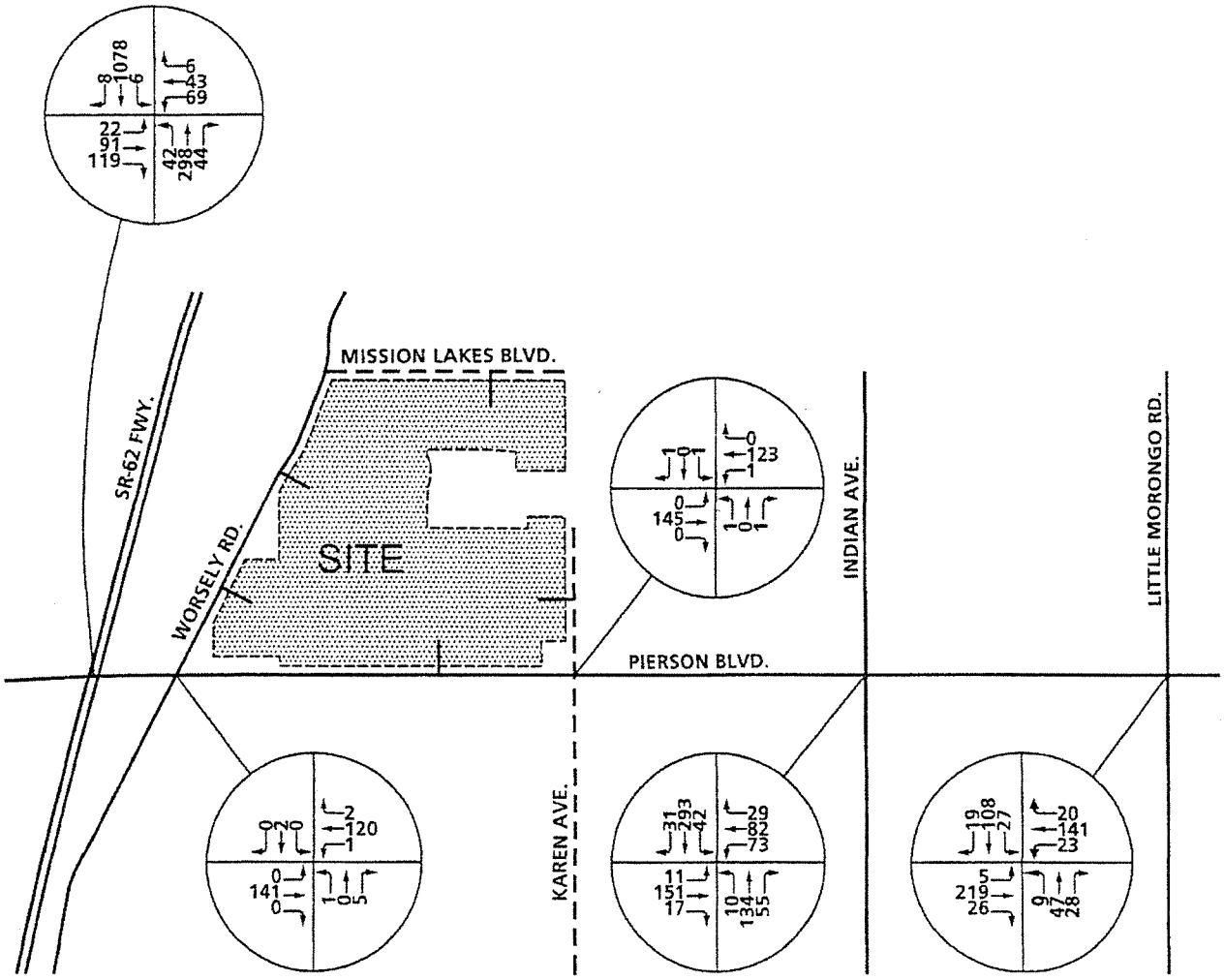
EXHIBIT 5-A

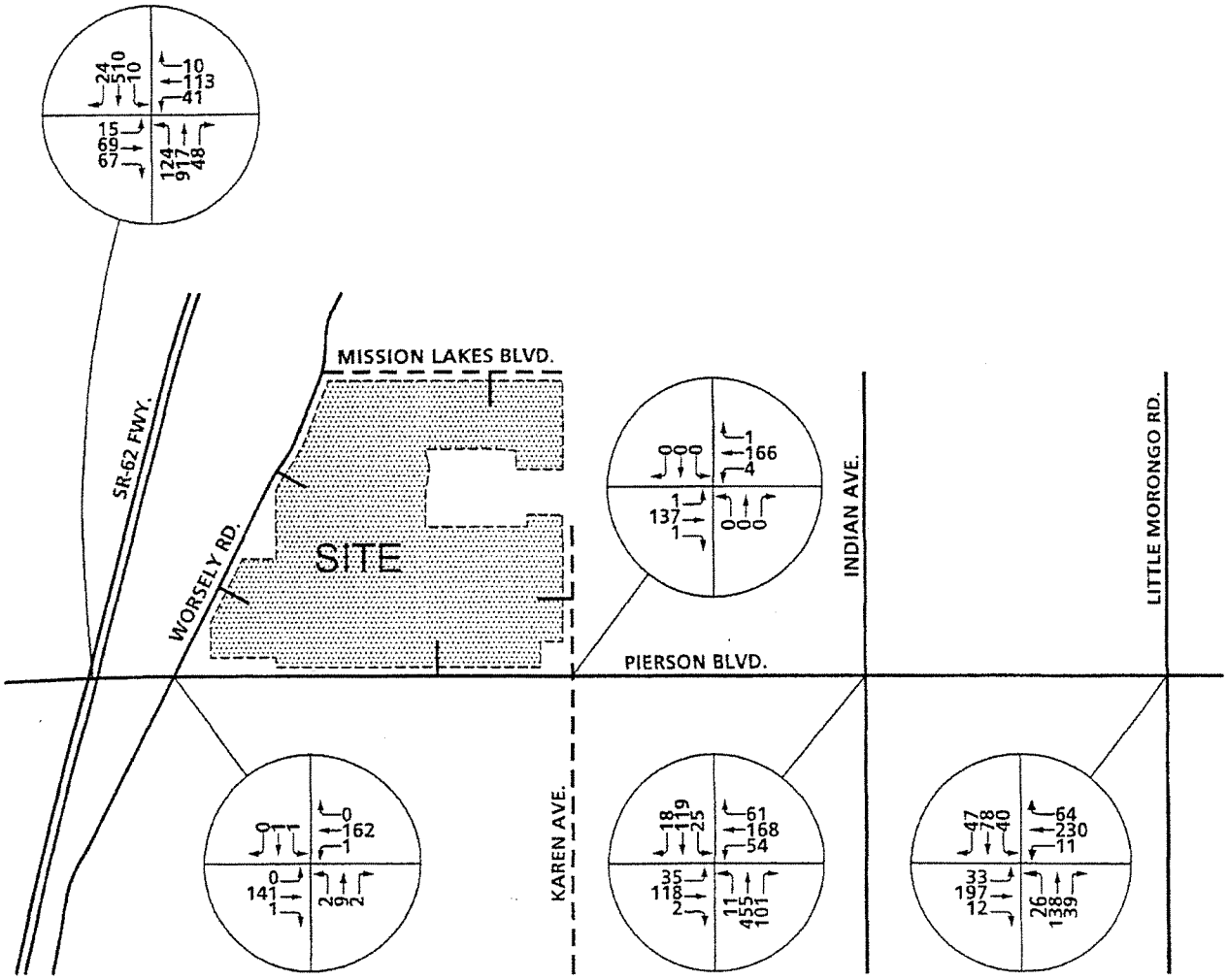
CUMULATIVE (2004) CONDITIONS WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES



N

EXHIBIT 5-B

CUMULATIVE (2004) CONDITIONS WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



N

TABLE 5-2

INTERSECTION ANALYSIS FOR CUMULATIVE (2004) WITH PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	--[4]	--	F	F
- with improvements	**TS**	1	2	1	1	2	1	0	1	0	0	1	0	16.1	14.4	B	B
Worsley Rd. (NS) at:																	
• Driveway 2 (EW)	**CSS**	0	**1**	0	0	**1**	0	0	0	0	0	**1**	0	8.8	8.8	A	A
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	9.6	12.5	A	B
Driveway 3 (NS) at:																	
• Pierson Blvd. (EW)	**CSS**	0	0	0	0	**1**	0	**1**	1	0	0	1	0	11.3	12.3	B	B
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	10.6	7.8	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	14.0	30.7	B	D
- with improvements	**TS**	0.5	0.5	1	0	1	0	0	1	0	0	1	0	10.3	10.9	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	10.2	13.0	B	B
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	8.6	9.8	A	A

---

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

4 -- = Delay High, Intersection Unstable, Level of Service "F".

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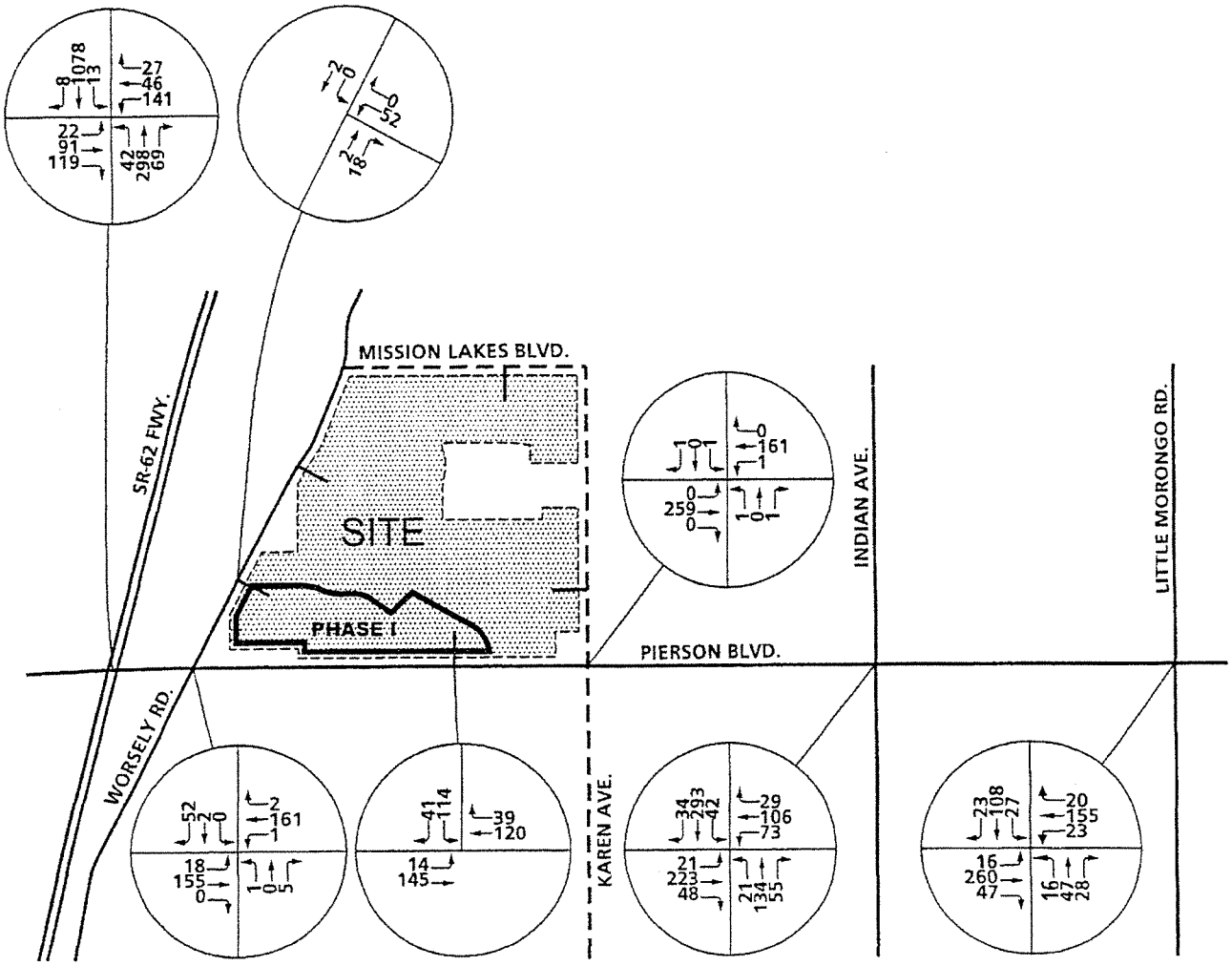
EXHIBIT 5-C

CUMULATIVE (2004) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES



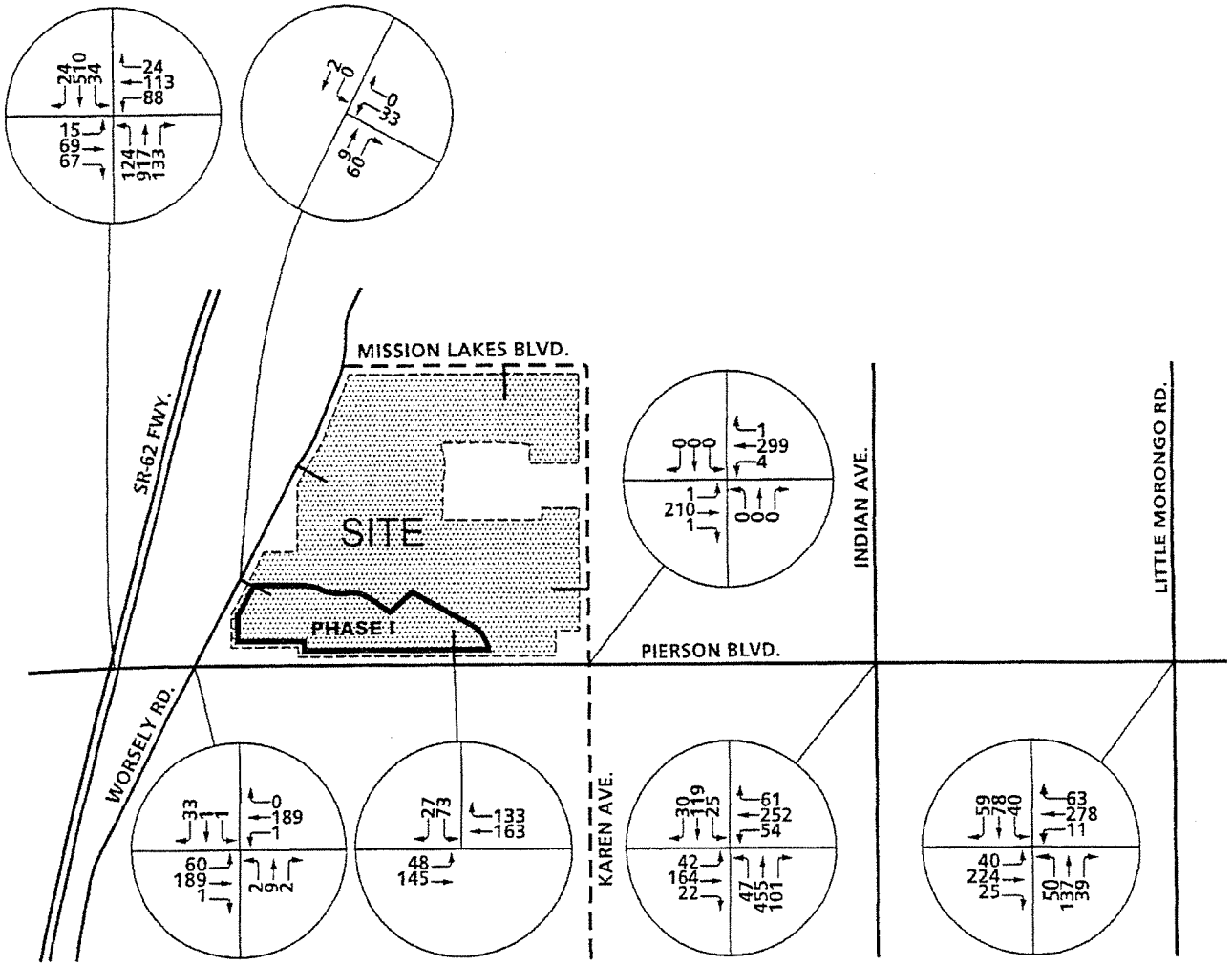
N

STONERIDGE PROJECT, City of Desert Hot Springs, California - 01552:27

URBAN CROSSROADS

EXHIBIT 5-D

CUMULATIVE (2004) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



N

For cumulative (2004) with project traffic conditions, the following study area intersection is projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

For cumulative (2004) with project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-2. Cumulative (2004) With Project HCM calculation worksheets are provided in Appendix "E".

3. Level of Service for Cumulative (2005) Conditions Without Project

Cumulative (2005) without project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-3. Table 5-3 shows HCM calculations based on the geometrics at the intersections. Cumulative (2005) without project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-E and 5-F, respectively.

For cumulative (2005) without project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

For cumulative (2005) without project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the

TABLE 5-3

INTERSECTION ANALYSIS FOR CUMULATIVE (2005) WITHOUT PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—	F	F
- with improvements	**TS**	1	2	1	1	2	1	0	1	0	0	1	0	19.9	16.1	B	B
Worsley Rd. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	11.7	12.6	B	B
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	10.5	7.8	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	15.4	35.9	C	E
- with improvements	**TS**	0.5	0.5	1	0	1	0	0	1	0	0	1	0	10.4	11.2	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	11.5	18.5	B	C
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	9.2	10.1	A	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] -- = Delay High, Intersection Unstable, Level of Service "F".

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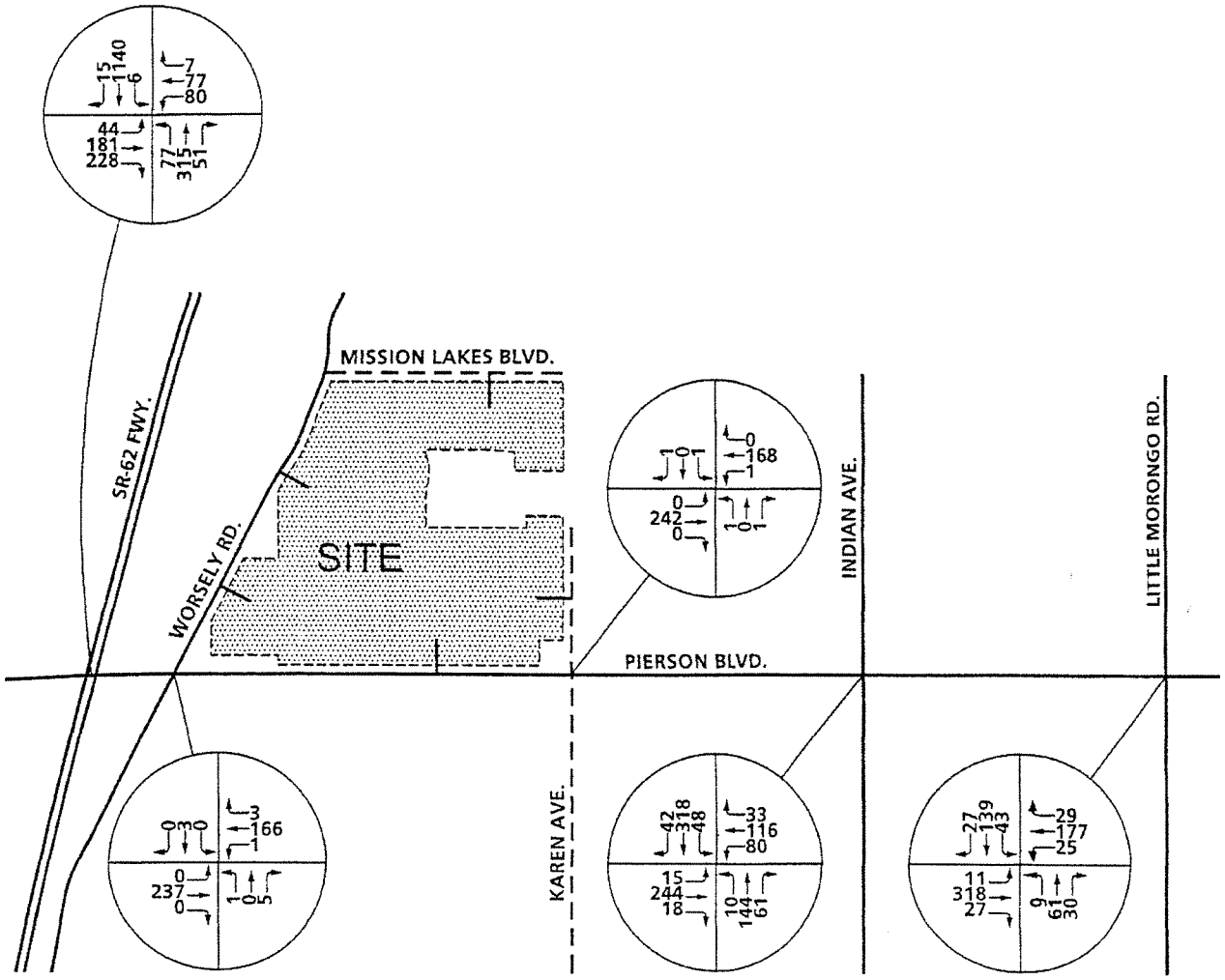
EXHIBIT 5-E

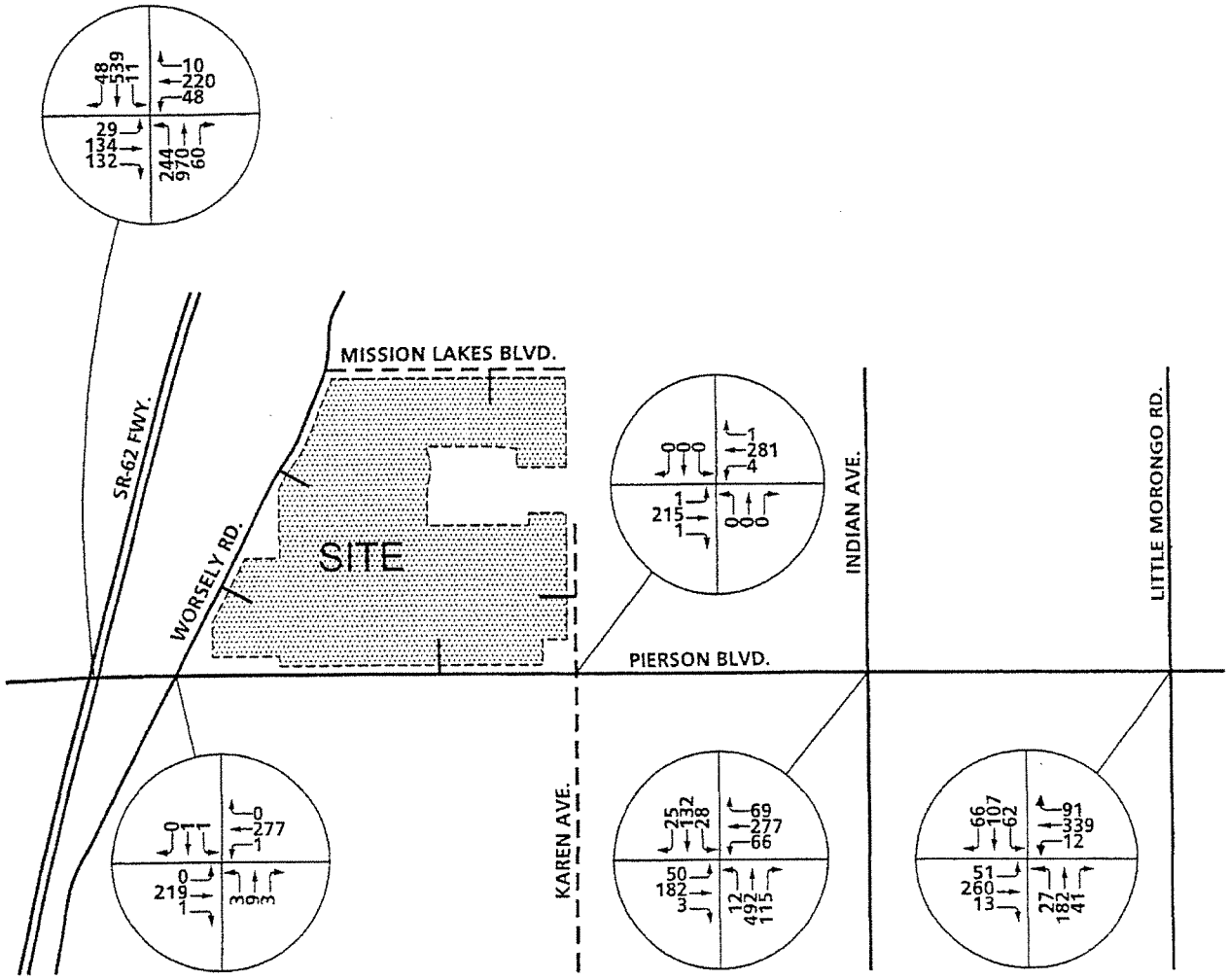
CUMULATIVE (2005) WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES



N

EXHIBIT 5-F

CUMULATIVE (2005) WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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improvements listed in Table 5-3. Cumulative (2005) Without Project HCM calculation worksheets are provided in Appendix "F".

4. Level of Service for Cumulative (2005) Conditions With Project

Cumulative (2005) with project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-4. Table 5-4 shows HCM calculations based on the geometrics at the intersections. Cumulative (2005) with project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-G and 5-H, respectively.

For cumulative (2005) with project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For cumulative (2005) with project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-4. Cumulative (2005) With Project HCM calculation worksheets are provided in Appendix "G".

TABLE 5-4

INTERSECTION ANALYSIS FOR CUMULATIVE (2005) WITH PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	1	2	1	1	2	1	0	1	0	0	1	0	39.3	20.7	D	C
Worsley Rd. (NS) at:																	
• Driveway 2 (EW)	CSS	0	1	0	0	0	0	0	0	0	0	1	0	8.8	8.8	A	A
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	11.3	19.7	B	C
Driveway 3 (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	**CSS**	0	0	0	0	1	0	1	1	0	0	1	0	19.2	29.7	C	D
- with improvements	**TS**	0	0	0	0	1	0	1	1	0	0	1	0	10.1	6.4	B	A
Karen Ave. (NS) at:																	
• Driveway 5 (EW)	**CSS**	0	1	0	0	1	0	0	1	0	0	0	0	0.0	0.0	A	A
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	22.5	31.4	C	D
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	13.2	6.0	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	0.5	0.5	1	0	1	0	0	1	0	0	1	0	11.8	15.4	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	19.4	---[4]	C	F
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	8.8	11.1	A	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] -- = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-G

CUMULATIVE (2005) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

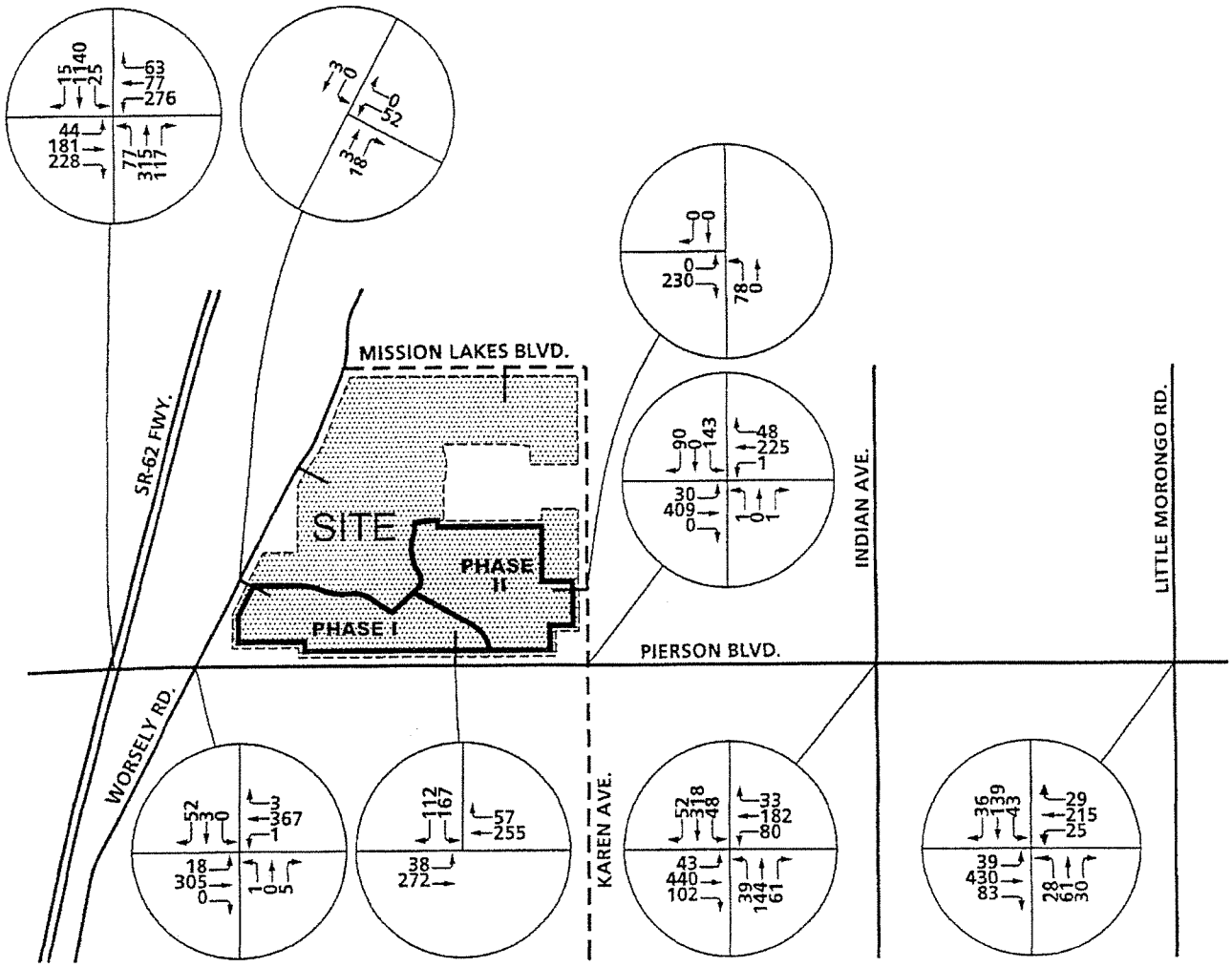

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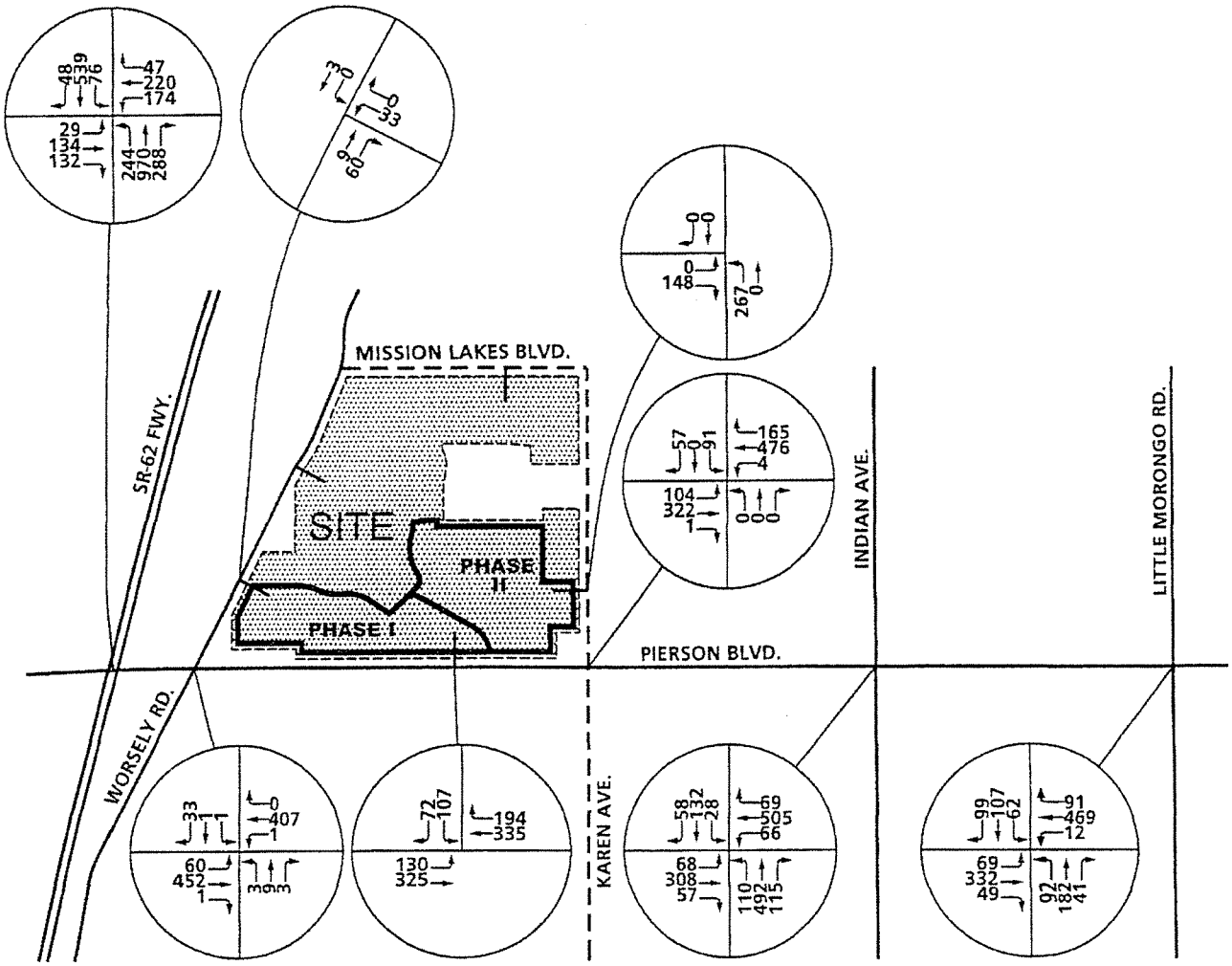
EXHIBIT 5-H

CUMULATIVE (2005) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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5. Level of Service for Cumulative (2006) Conditions Without Project

Cumulative (2006) without project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-5. Table 5-5 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2006) without project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-I and 5-J, respectively.

For cumulative (2006) without project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For cumulative (2006) without project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-5. Cumulative (2006) Without Project HCM calculation worksheets are provided in Appendix "H".

TABLE 5-5

INTERSECTION ANALYSIS FOR CUMULATIVE (2006) WITHOUT PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	---[4]	---	F	F
- with improvements	**TS**	1	2	1	1	2	1	0	1	0	0	1	0	33.8	24.7	C	C
Worsley Rd. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	13.1	15.1	B	C
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	11.6	8.1	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	24.5	81.5	C	F
- with improvements	**TS**	0.5	0.5	1	0	1	0	0	1	0	0	1	0	11.1	12.6	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	16.0	66.8	C	F
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	9.7	11.1	A	B

---

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

4 -- = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-I

CUMULATIVE (2006) CONDITIONS WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

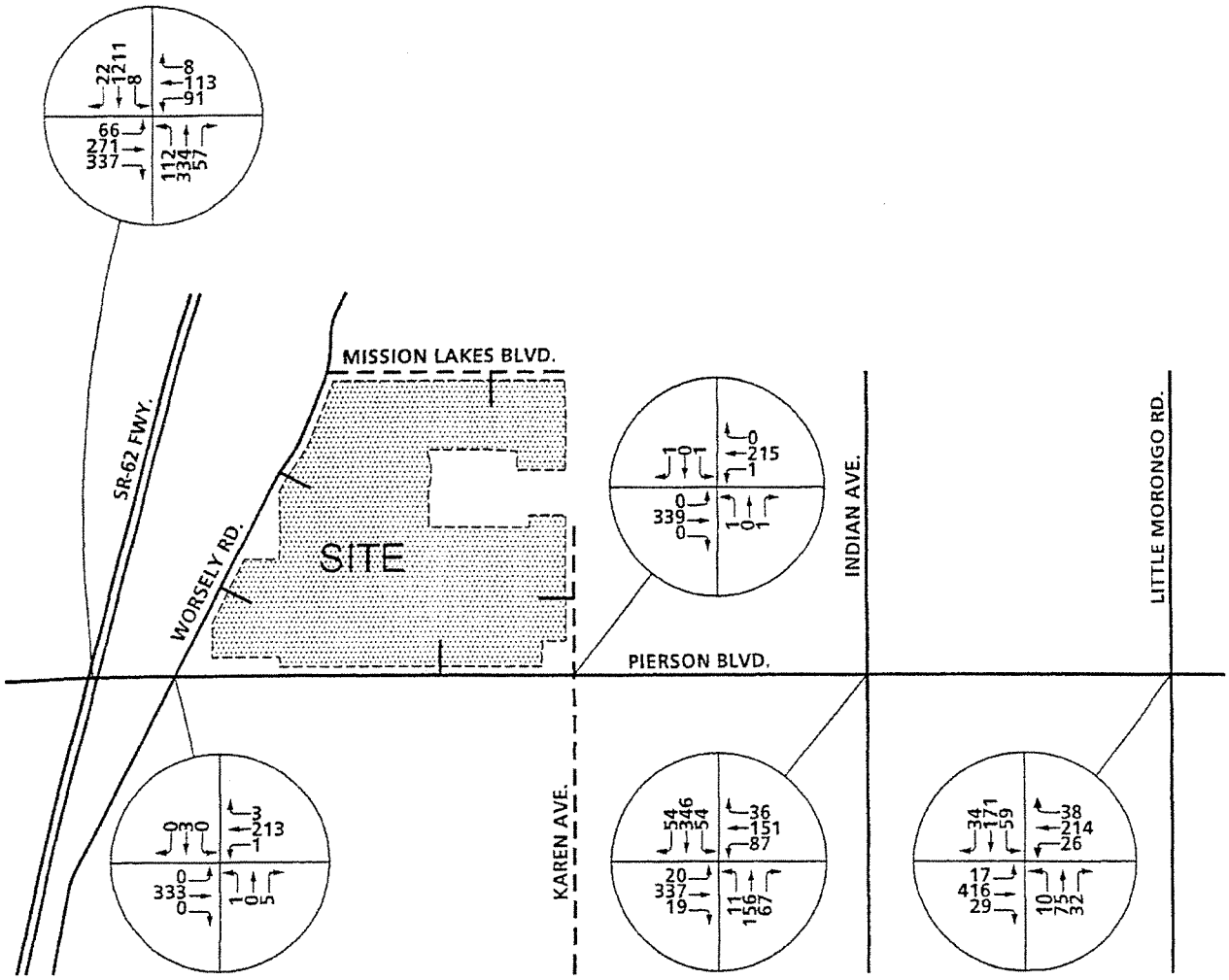

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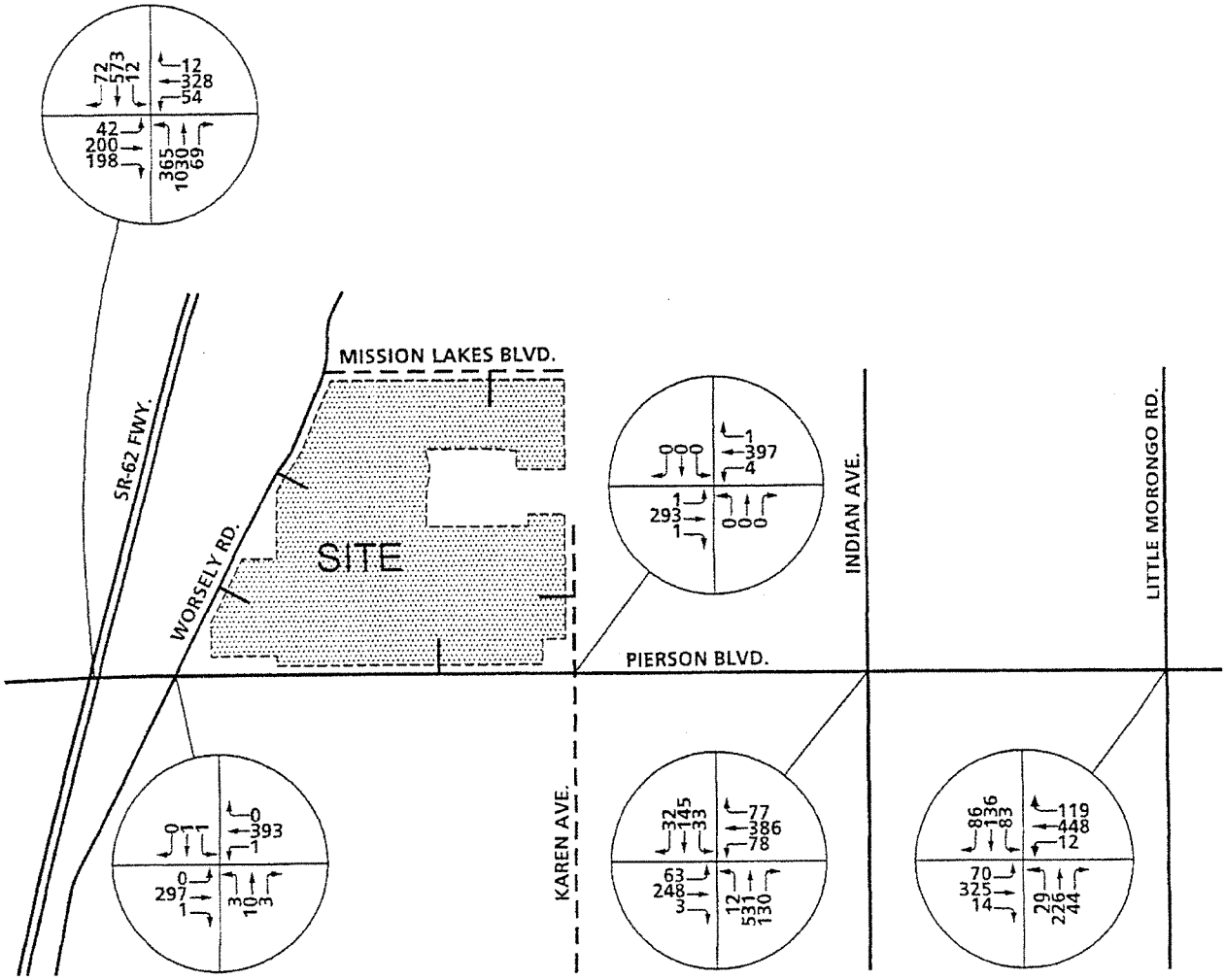
EXHIBIT 5-J

CUMULATIVE (2006) CONDITIONS WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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6. Level of Service for Cumulative (2006) Conditions With Project

Cumulative (2006) with project conditions intersection Level of Service for the existing network with cumulative projects and areawide growth are shown in Table 5-6. Table 5-6 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2006) with project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-K and 5-L, respectively.

For cumulative (2006) with project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Worsley Road (NS) at:

- Pierson Boulevard (EW)

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For cumulative (2006) with project traffic conditions, all of the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the

TABLE 5-6

INTERSECTION ANALYSIS FOR CUMULATIVE (2006) WITH PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	1	2	1	1	2	1	0	1	0	**1**	1	0	31.4	23.8	C	C
Worsley Rd. (NS) at:																	
• Driveway 1 (EW)	**CSS**	0	**1**	0	0	**1**	0	0	0	0	0	**1**	0	8.7	8.8	A	A
• Driveway 2 (EW)	**CSS**	0	**1**	0	0	**1**	0	0	0	0	0	**1**	0	9.4	9.6	A	A
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	18.3	41.2	C	E
- with improvements	**TS**	0	1	0	0	1	0	0.5	0.5	1	0	1	0	10.5	15.2	B	B
Driveway 3 (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	**CSS**	0	0	0	0	**1**	0	**1**	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	0	0	0	0	**1**	0	**1**	1	0	0	1	0	11.5	8.1	B	A
Karen Ave. (NS) at:																	
• Driveway 5 (EW)	**CSS**	0	**1**	0	0	**1**	0	0	**1**	0	0	0	0	0.0	0.0	A	A
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	16.7	8.6	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	0.5	0.5	1	0	1	0	0	1	0	0	1	0	15.4	18.5	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	10.2	15.4	B	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] -- = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-K

CUMULATIVE (2006) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

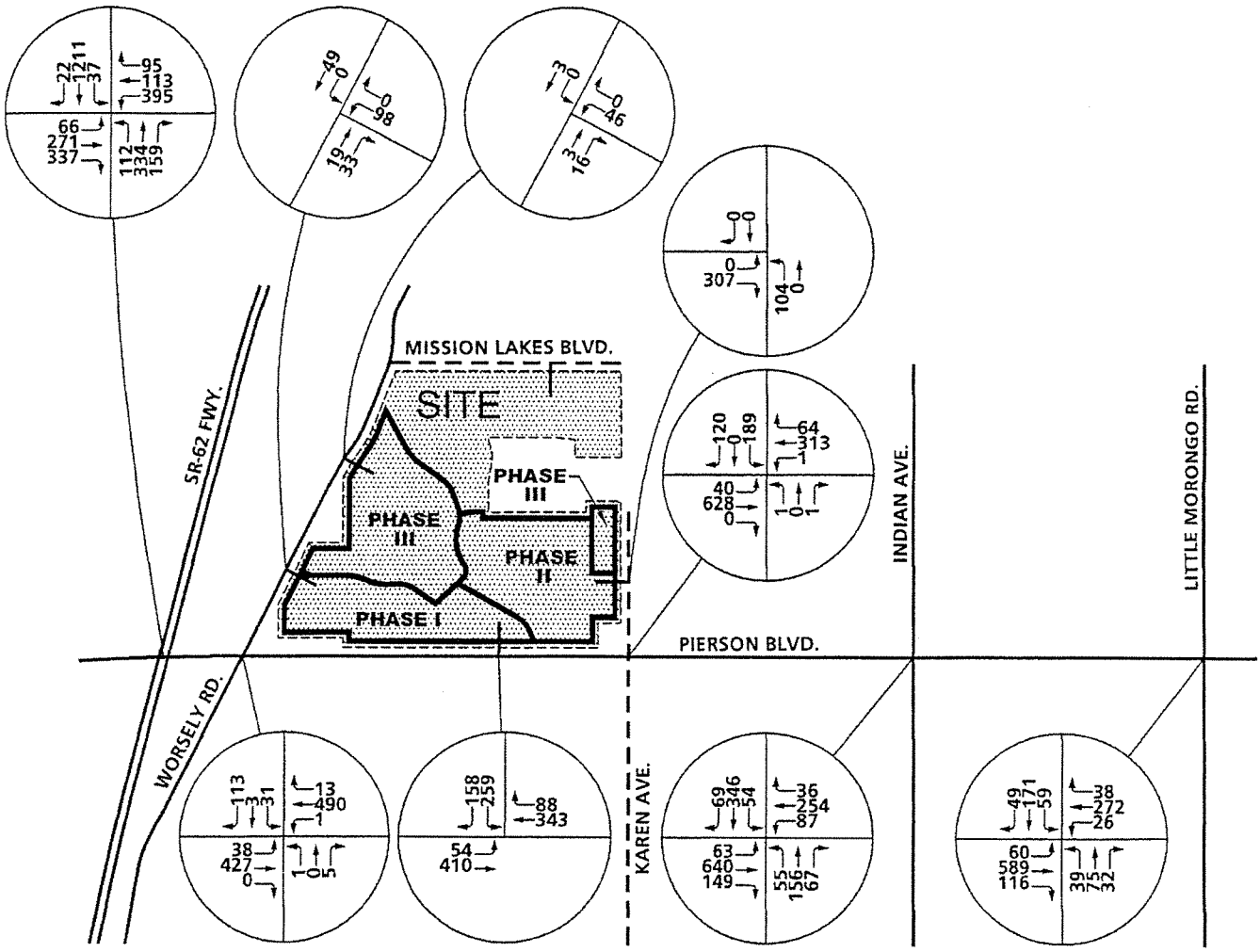

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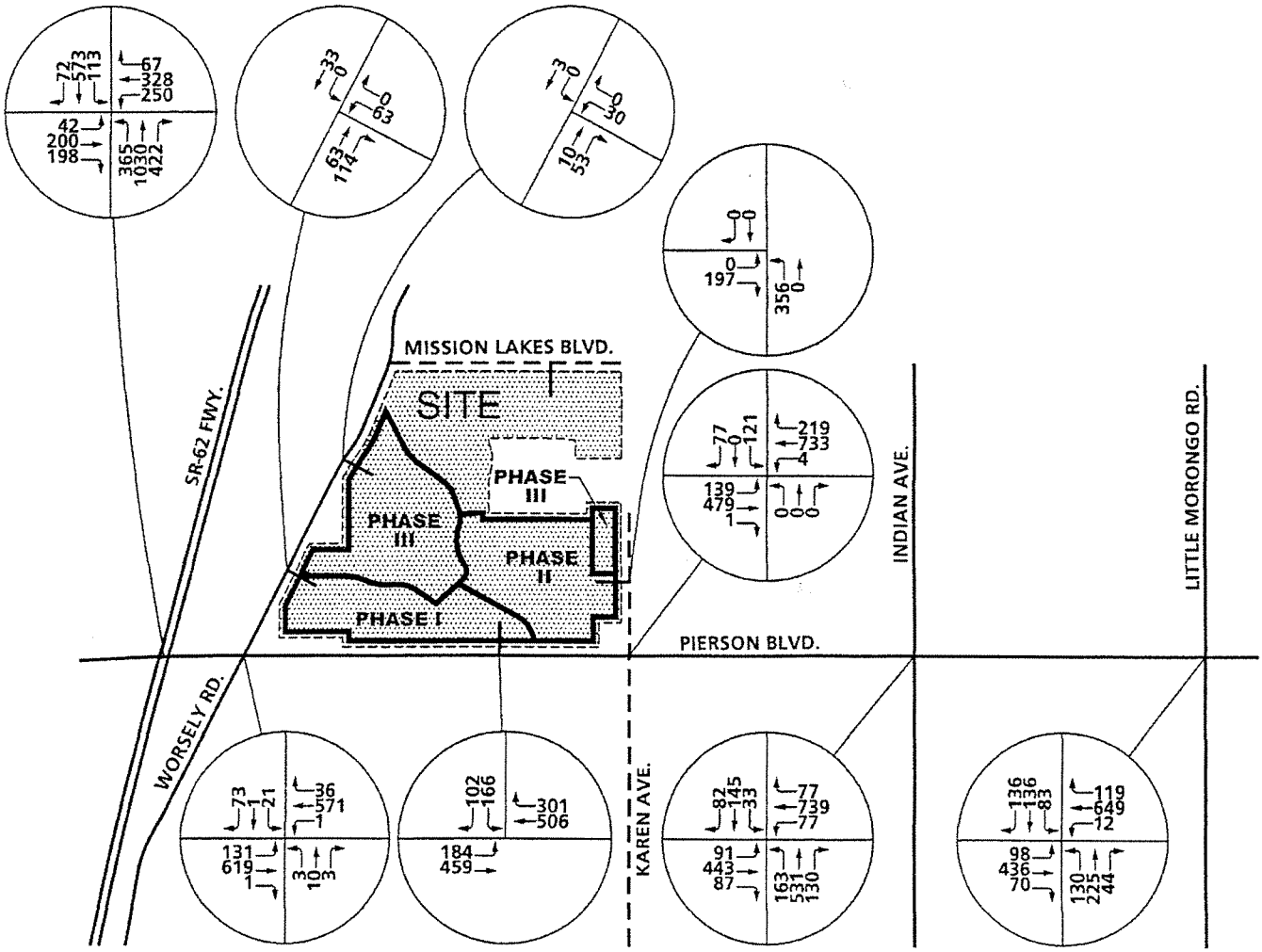
EXHIBIT 5-L

CUMULATIVE (2006) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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improvements listed in Table 5-6. Cumulative (2006) With Project HCM calculation worksheets are provided in Appendix "I".

7. Level of Service for Cumulative (2007) Conditions Without Project

Cumulative (2007) without project conditions intersection level of service for the existing network with cumulative projects and areawide growth are shown in Table 5-7. Table 5-7 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2007) without project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-M and 5-N, respectively.

For cumulative (2007) without project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For cumulative (2007) without project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-7. Cumulative (2007) Without Project HCM calculation worksheets are provided in Appendix "J".

TABLE 5-7

INTERSECTION ANALYSIS FOR CUMULATIVE (2007) WITHOUT PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	---[4]	---	F	F
- with improvements	TS	1	2	1	1	2	1	1	1	0	0	1	0	47.9	31.4	D	C
Worsley Rd. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	14.9	18.5	B	C
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	13.0	8.4	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	56.9	---	F	F
- with improvements	TS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	12.0	14.8	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	31.4	---	D	F
- with improvements	TS	0	1	0	0	1	0	0	1	0	0	1	0	10.3	13.3	B	B

1 When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

2 Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

3 CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

4 -- = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-M

CUMULATIVE (2007) WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

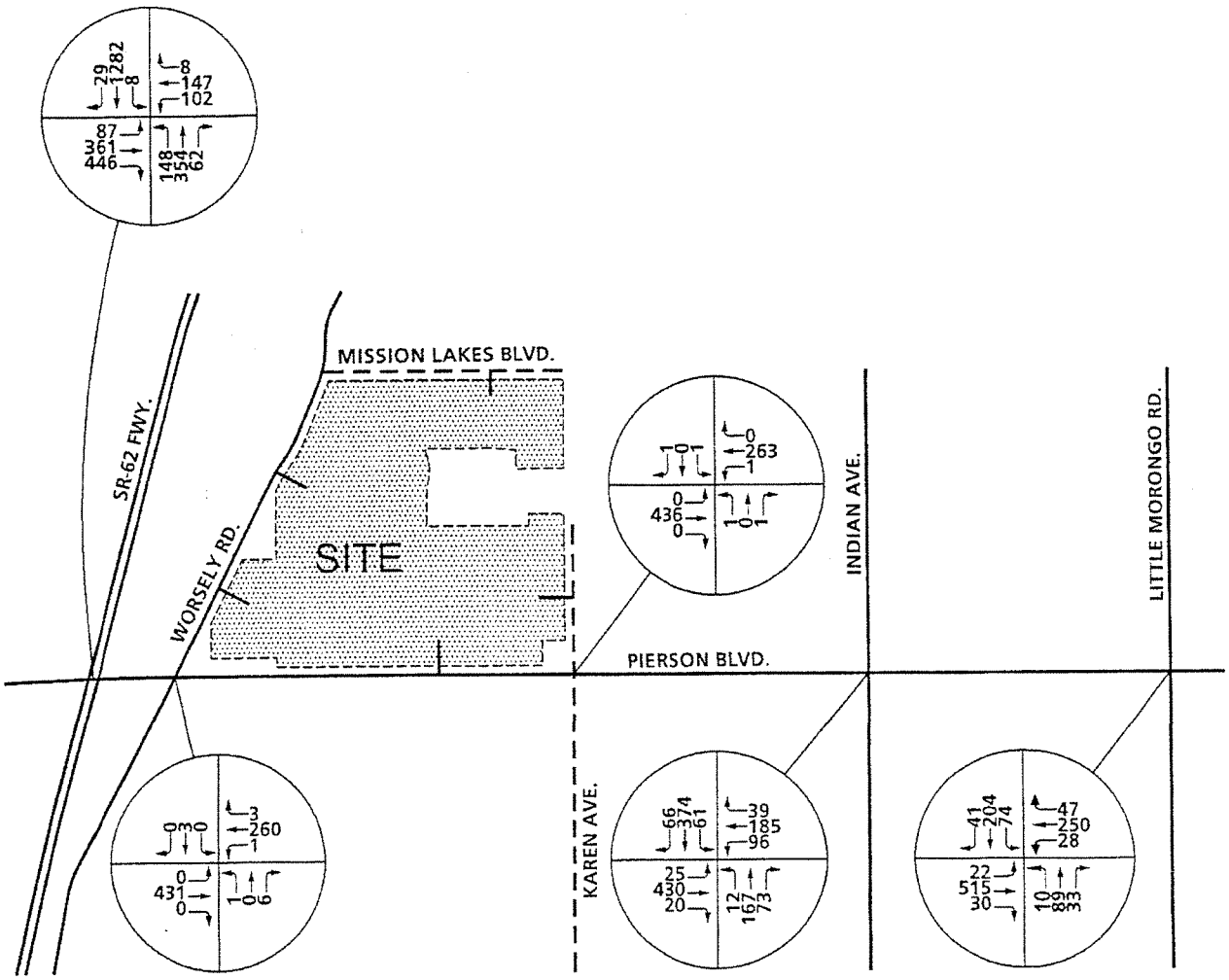

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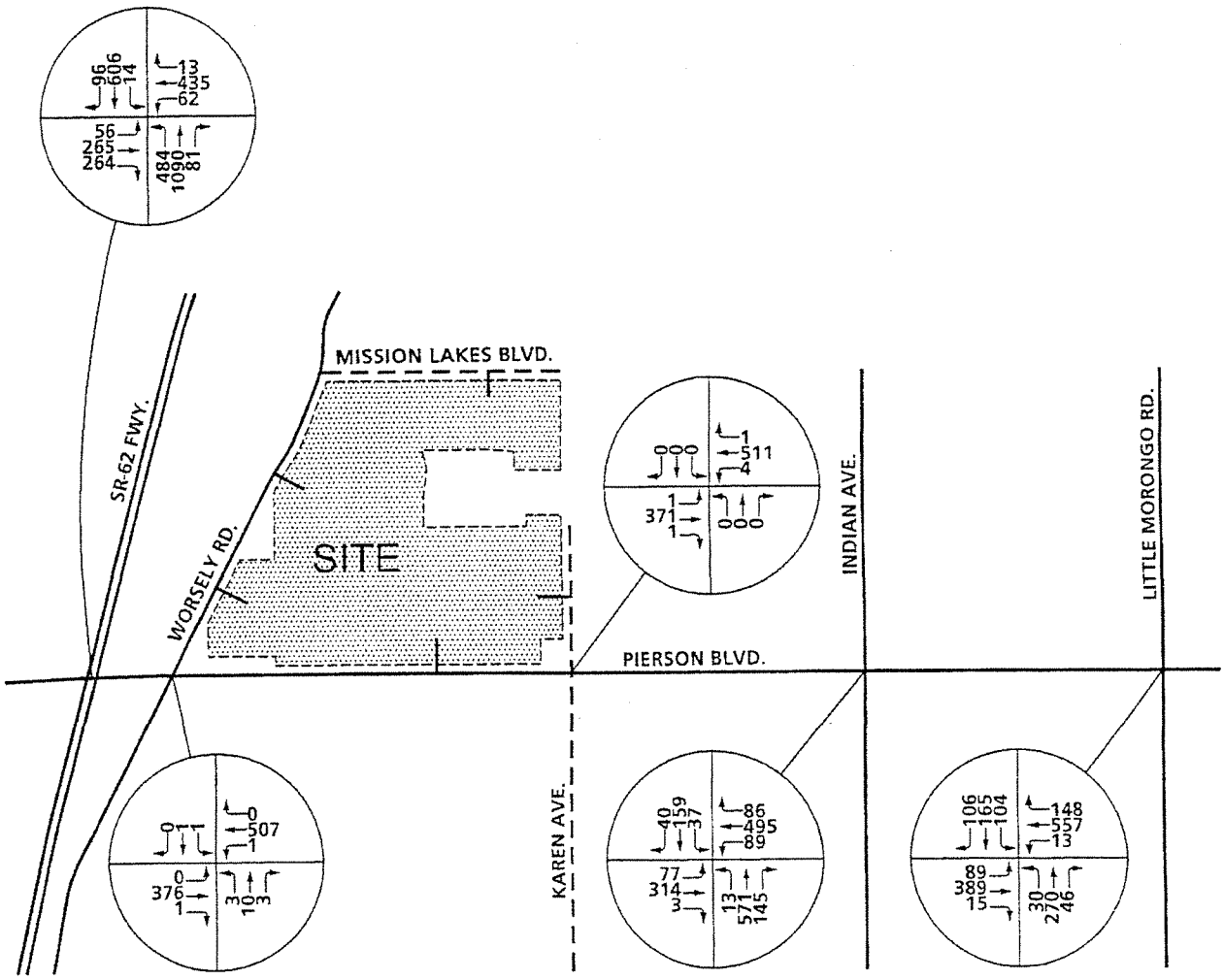
EXHIBIT 5-N

CUMULATIVE (2007) WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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8. Level of Service for Cumulative (2007) Conditions With Project

Cumulative (2007) with project conditions intersection level of service for the existing network with cumulative projects and areawide growth are shown in Table 5-8. Table 5-8 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2007) with project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-O and 5-P, respectively.

For cumulative (2007) with project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Worsley Road (NS) at:

- Pierson Boulevard (EW)

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

TABLE 5-8

INTERSECTION ANALYSIS FOR CUMULATIVE (2007) WITH PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	1	2	**1>**	1	2	1	**1**	1	**1>**	**1**	1	0	53.7	51.0	D	D
Worsley Rd. (NS) at:																	
• Driveway 1 (EW)	**CSS**	0	**1**	0	0	**1**	0	0	0	0	0	**1**	0	9.3	9.5	A	A
• Driveway 2 (EW)	**CSS**	0	**1**	0	0	**1**	0	0	0	0	0	**1**	0	10.3	10.9	B	B
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	27.2	---[4]	D	F
- with improvements	**TS**	0	1	0	0	1	0	0.5	0.5	1	0	1	0	13.2	46.3	B	D
Driveway 3 (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	**CSS**	0	0	0	0	**1**	0	**1**	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	0	0	0	0	**1**	0	**1**	1	0	0	1	0	15.5	29.1	B	C
Driveway 4 (NS) at:																	
• Mission Lakes Blvd. (EW)	**CSS**	0	**1**	0	0	0	0	0	**1**	0	0	0	0	0.0	0.0	A	A
Karen Ave. (NS) at:																	
• Driveway 5 (EW)	**CSS**	0	**1**	0	0	**1**	0	0	**1**	0	0	0	0	0.0	0.0	A	A
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	20.2	11.5	C	B
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	**1**	1	1	0	1	0	**1**	1	0	**1**	1	0	44.6	46.3	D	D
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	12.9	28.9	B	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement; 1> = Right-Turn Overlap

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] -- = Delay High, Intersection Unstable, Level of Service "F".

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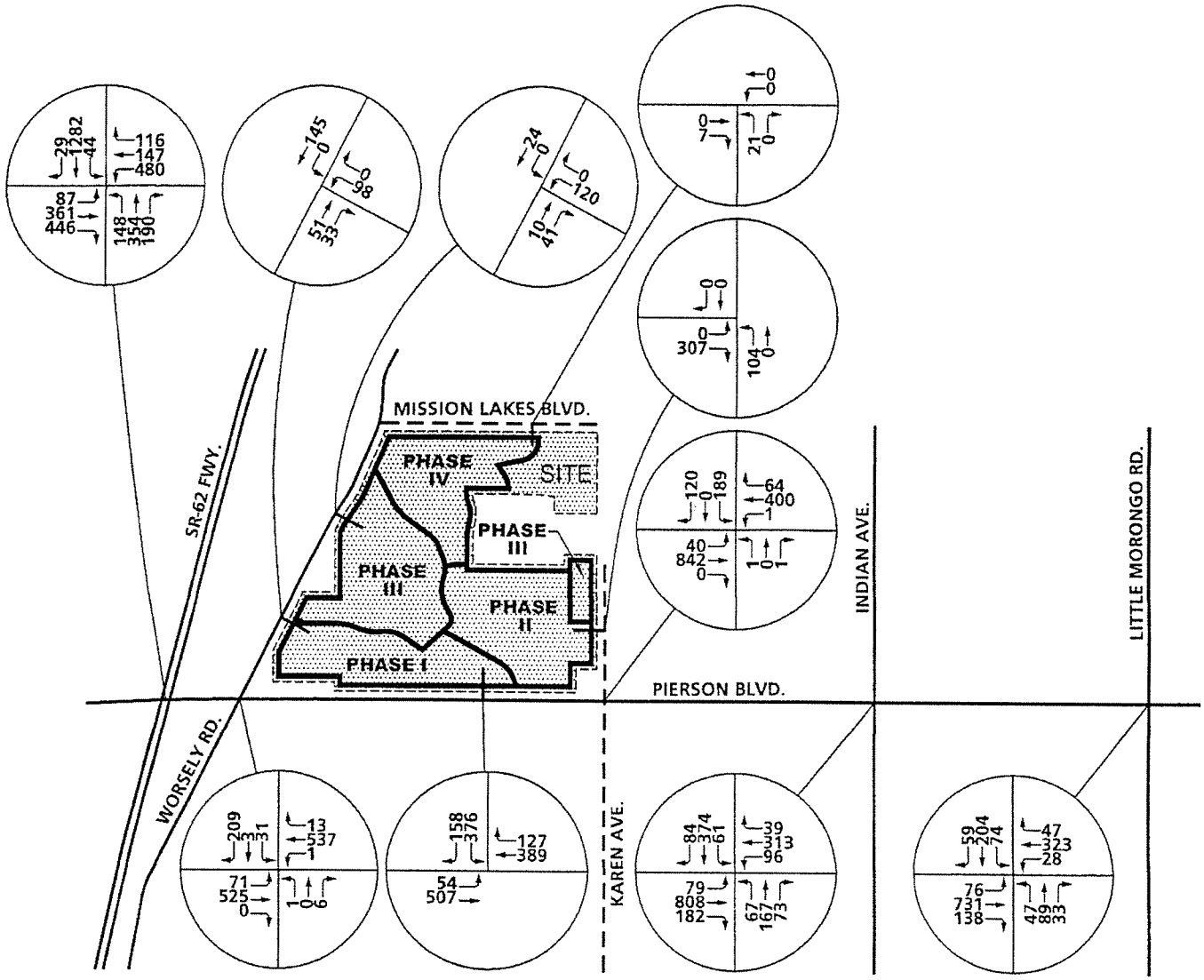
EXHIBIT 5-O

CUMULATIVE (2007) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES



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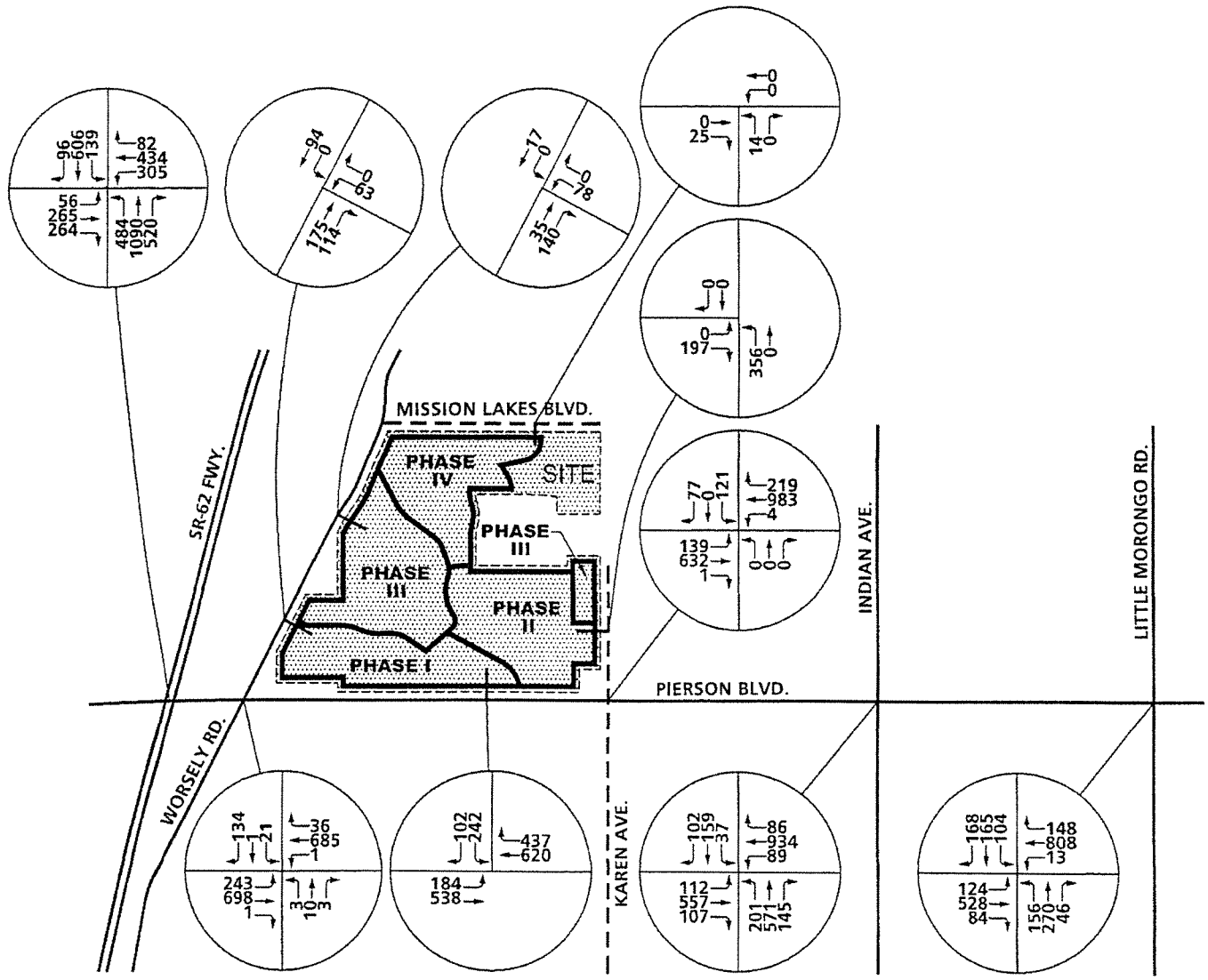
URBAN CROSSROADS

EXHIBIT 5-P

CUMULATIVE (2007) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



For cumulative (2007) with project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-8. Cumulative (2007) With Project HCM calculation worksheets are provided in Appendix "K".

9. Level of Service for Cumulative (2008) Conditions Without Project

Cumulative (2008) without project conditions intersection levels of service for the existing network with cumulative projects and areawide growth are shown in Table 5-9. Table 5-9 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2008) without project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-Q and 5-R, respectively.

For cumulative (2008) without project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

For cumulative (2008) without project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-9. Cumulative (2008) Without Project HCM calculation worksheets are provided in Appendix "L".

TABLE 5-9

INTERSECTION ANALYSIS FOR CUMULATIVE (2008) WITHOUT PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	—[4]	—	F	F
- with improvements	**TS**	1	2	1	1	2	1	**1**	1	**1**	0	1	0	30.7	34.5	C	C
Worsley Rd. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	17.0	23.1	C	C
Karen Ave. (NS) at:																	
• Pierson Blvd. (EW)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	14.7	8.7	B	A
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	—	—	F	F
- with improvements	**TS**	0.5	0.5	1	0	1	0	0	1	0	0	1	0	13.3	19.7	B	B
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	76.9	—	F	F
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	11.4	18.8	B	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] — = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-Q

CUMULATIVE (2008) CONDITIONS WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

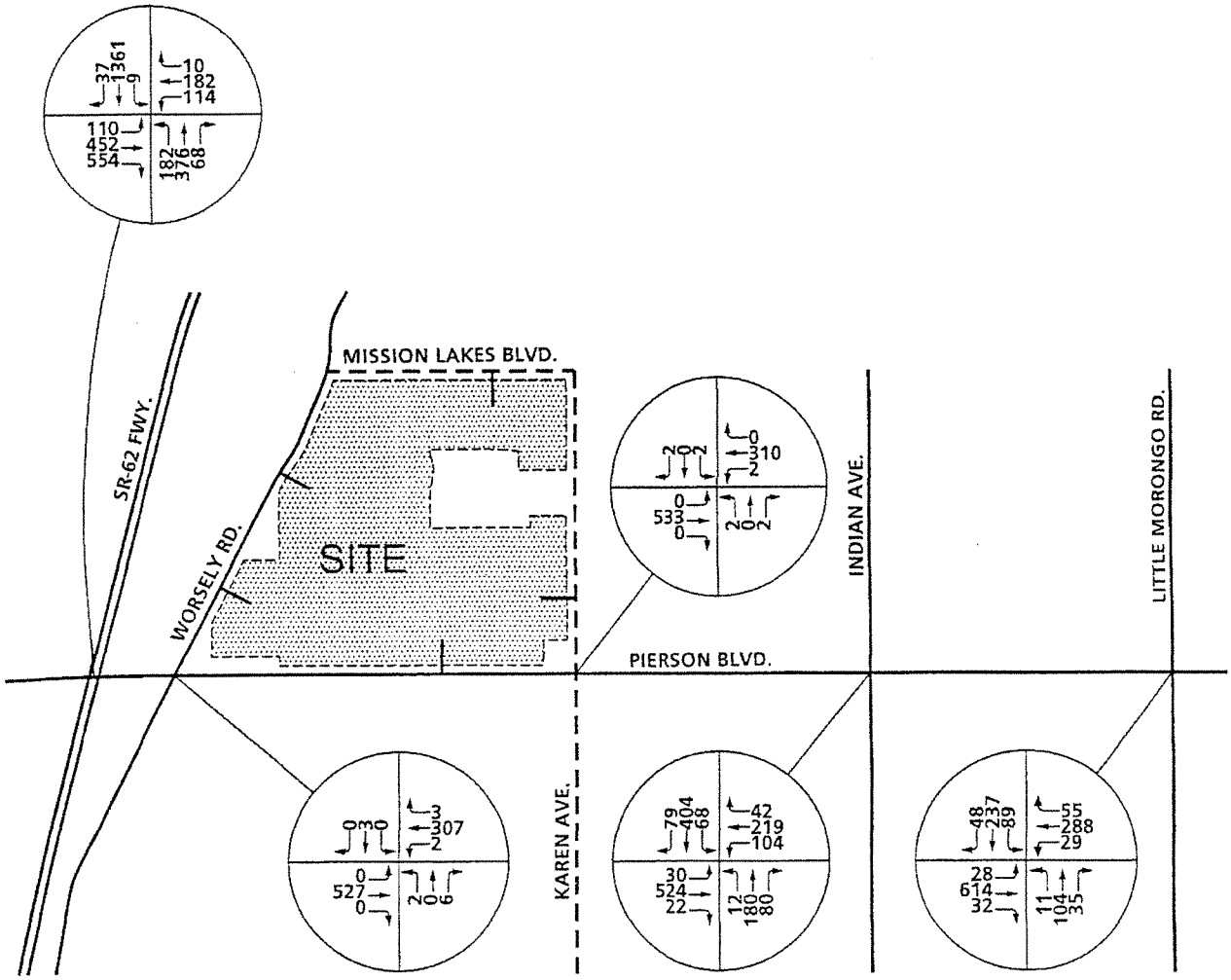

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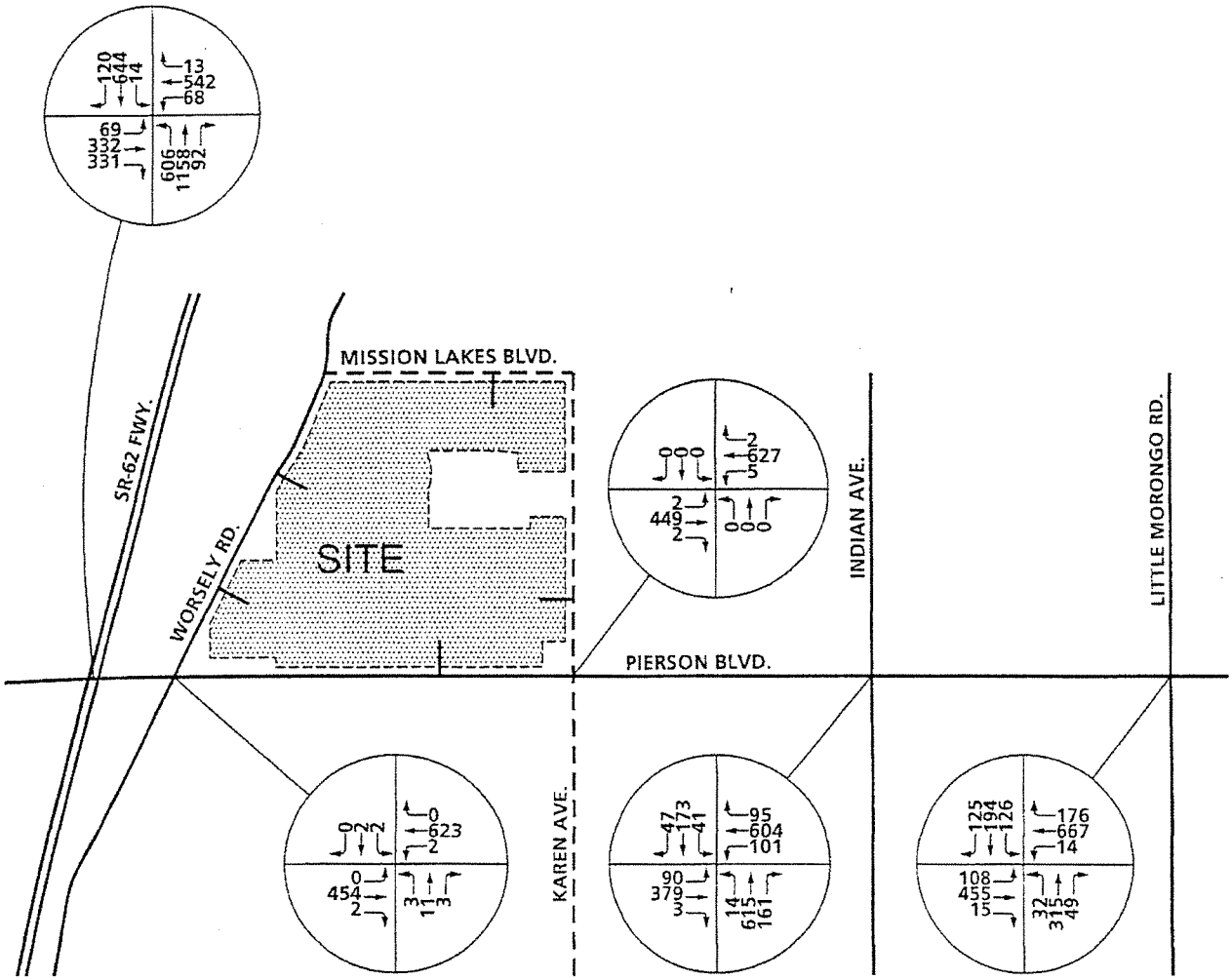
EXHIBIT 5-R

CUMULATIVE (2008) CONDITIONS WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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10. Level of Service for Cumulative (2008) Conditions With Project

Cumulative (2008) with project conditions intersection level of service for the existing network with cumulative projects and areawide growth are shown in Table 5-10. Table 5-10 shows HCM calculations based on the existing and improved geometrics at the intersections. Cumulative (2008) with project AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-S and 5-T, respectively.

For cumulative (2008) with project traffic conditions, the following study area intersections are projected to operate at an unacceptable Level of Service during the peak hours, without improvements:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)

Worsley Road (NS) at:

- Pierson Boulevard (EW)

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

Karen Avenue (NS) at:

- Pierson Boulevard (EW)

Indian Avenue (NS) at:

- Pierson Boulevard (EW)

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)

TABLE 5-10

INTERSECTION ANALYSIS FOR CUMULATIVE (2008) WITH PROJECT CONDITIONS

INTERSECTION	TRAFFIC CONTROL[3]	INTERSECTION APPROACH LANES[1]												DELAY[2] (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
SR-62 Fwy. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	CSS	1	2	1	1	2	1	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	1	2	**1>**	1	2	1	**1**	1	**1>**	**2**	1	0	45.9	52.2	D	D
Worsley Rd. (NS) at:																	
• Driveway 1 (EW)	**CSS**	0	**1**	0	0	**1**	0	0	0	0	0	**1**	0	9.8	10.2	A	B
• Driveway 2 (EW)	**CSS**	0	**1**	0	0	**1**	0	0	0	0	0	**1**	0	10.9	11.8	B	B
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	47.2	---[4]	E	F
- with improvements	**TS**	0	1	0	0	1	0	**1**	**1**	1	0	1	0	14.9	13.1	B	B
Driveway 3 (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	**CSS**	0	0	0	0	**1**	0	**1**	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	0	0	0	0	**1**	0	**1**	1	0	0	1	0	14.1	16.5	B	B
Driveway 4 (NS) at:																	
• Mission Lakes Blvd. (EW)	**CSS**	0	**1**	0	0	0	0	0	**1**	0	0	**1**	0	7.3	7.5	A	A
Karen Ave. (NS) at:																	
• Driveway 5 (EW)	**CSS**	0	**1**	0	0	**1**	0	0	**1**	0	0	0	0	10.2	9.3	B	A
• Pierson Blvd. (EW)																	
- without improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	14.4	22.5	B	C
Indian Ave. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0.5	0.5	1	0	1	0	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	**1**	**2**	**0**	0	1	0	**1**	**2**	0	**1**	**2**	0	30.9	29.0	C	C
Little Morongo Rd. (NS) at:																	
• Pierson Blvd. (EW)																	
- without improvements	AWS	0	1	0	0	1	0	0	1	0	0	1	0	---[4]	---[4]	F	F
- with improvements	**TS**	0	1	0	0	1	0	**1**	1	0	**1**	**2**	0	43.1	44.0	D	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement; **>** = Right-Turn Overlap Phasing

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] – = Delay High, Intersection Unstable, Level of Service "F".

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EXHIBIT 5-S

CUMULATIVE (2008) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

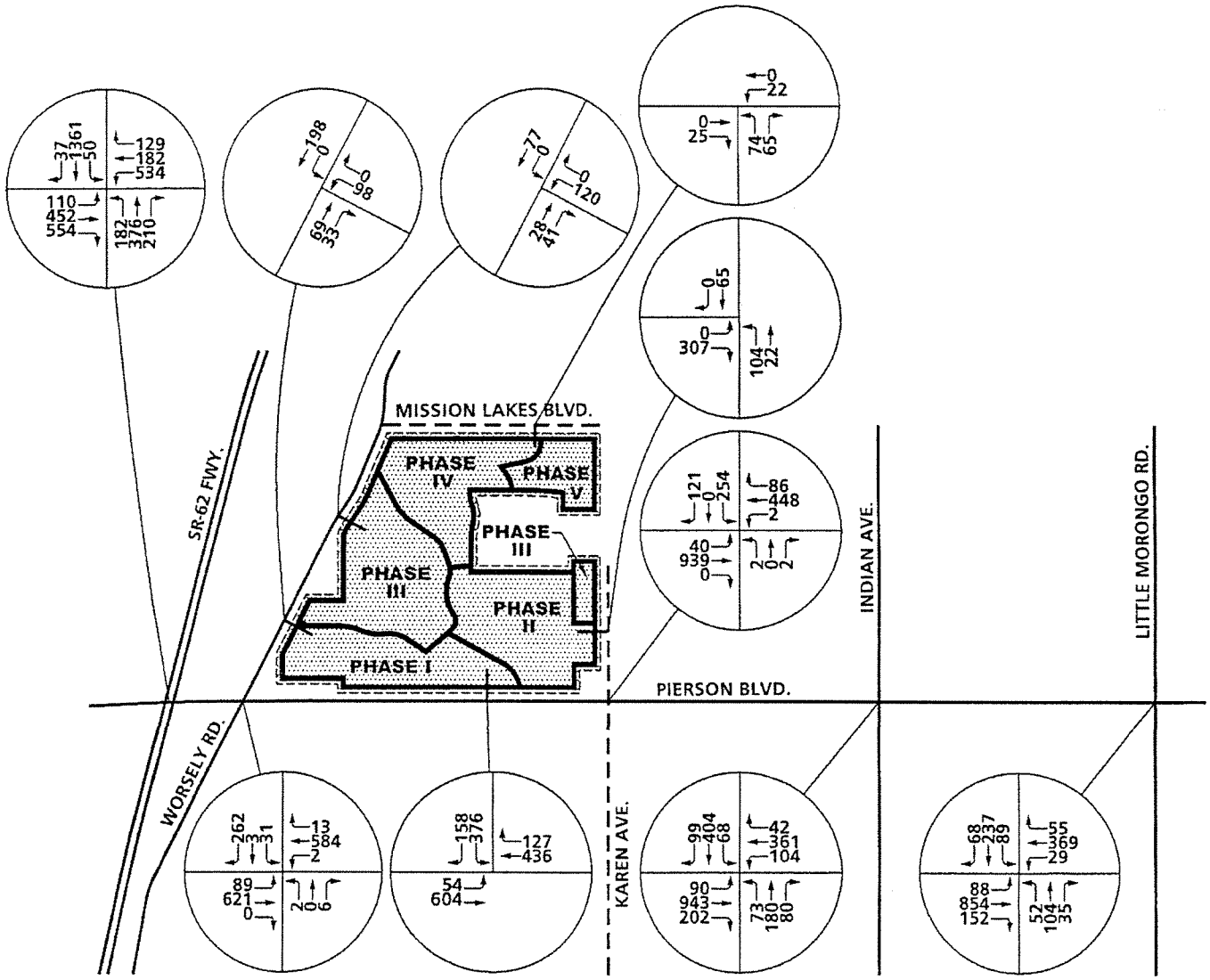
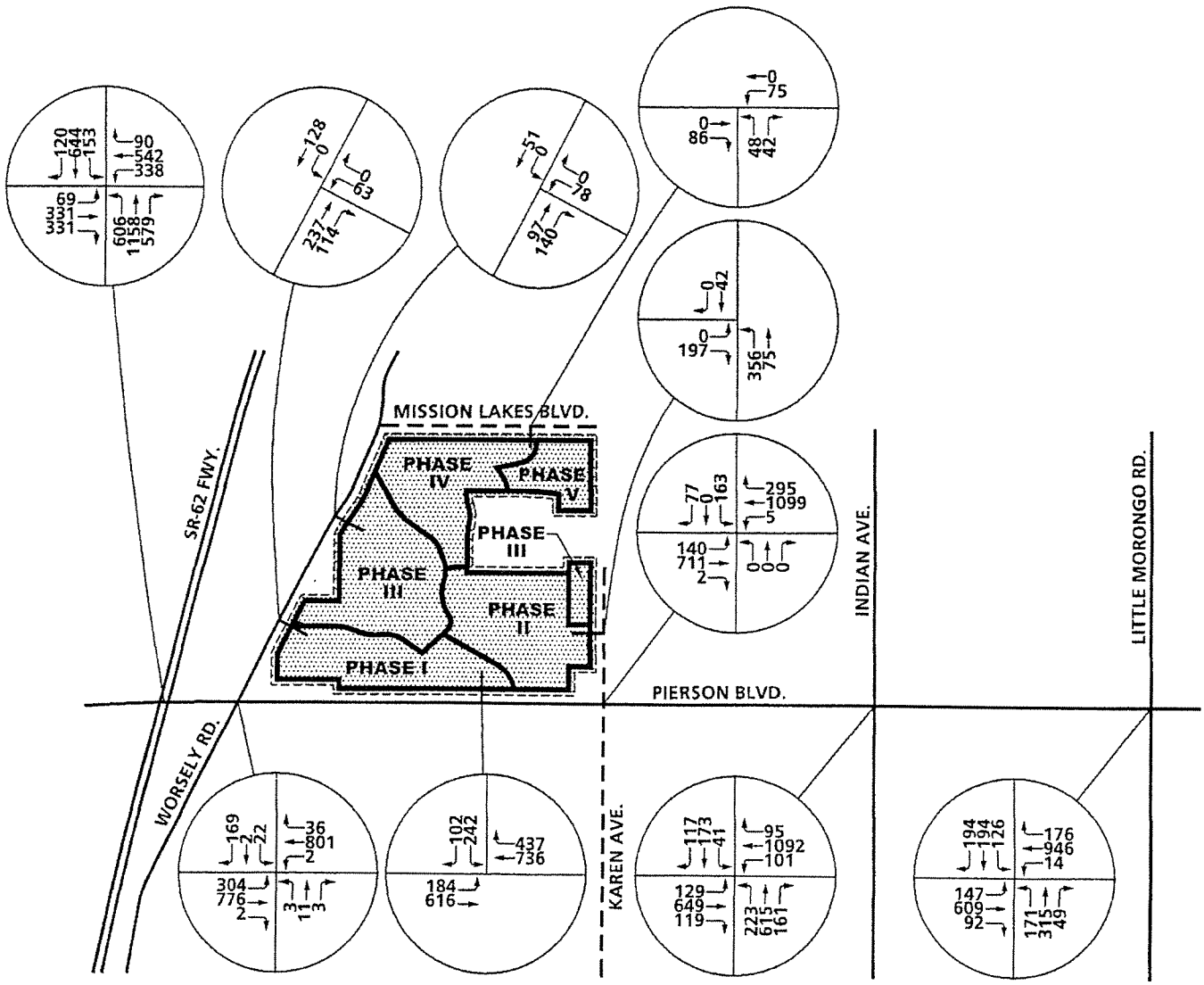


EXHIBIT 5-T

CUMULATIVE (2008) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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URBAN CROSSROADS

For cumulative (2008) with project traffic conditions, the study area intersections are projected to operate at an acceptable Level of Service during the peak hours with the installation of traffic signals and the improvements listed in Table 5-10. Cumulative (2008) With Project HCM calculation worksheets are provided in Appendix "L".

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6.0 CONCLUSIONS AND RECOMMENDATIONS

A. Site Access

The proposed project has been divided into traffic analysis zones (TAZ) in order to load traffic from the appropriate driveway locations. Exhibit 2-A (previously presented) shows the boundaries of the TAZ's and the location of the project driveways. These access locations that will serve these TAZ's are described as follows:

TAZ 1: This 370 unit residential development will have two full access driveway. Driveway 3 will be located along Pierson Boulevard and Driveway 2 will be located along Worsley Road.

TAZ 2: This 633 unit residential development will utilize two full access driveways. Driveway 5 will be located along Karen Avenue and the Driveway 3 will be located along Pierson Boulevard.

TAZ 3: This 547 unit residential development will utilize four full access driveways. Driveways 1 and 2 will be located along Worsley Road, Driveway 3 will be located along Pierson Boulevard and Driveway 5 will be located along Karen Avenue.

TAZ 4: This 380 unit residential development will utilize three full access driveways. Driveway 4 is anticipated to provide full access to Mission Lakes Boulevard, Driveway 1 will have access to Worsley Road and Driveway 3 will have access to Pierson Boulevard.

TAZ 5: This 210 unit residential development will utilize full access (Driveway 4) to Mission Lakes Boulevard.

B. Traffic Impacts

Based on the traffic analysis conducted for conditions with and without the proposed project, the study area intersections are anticipated to operate at acceptable service levels with the traffic signal and intersection improvements identified in Section 5 of this report and are described in the following sections:

C. Off-Site Improvements

For Cumulative (2004) With Project traffic conditions, the following intersection and traffic signal improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

For Cumulative (2005) With Project traffic conditions, the following additional intersection and traffic signal improvements are recommended:

Karen Avenue (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

For Cumulative (2006) With Project conditions, the following additional intersection improvements are recommended:

Worsley Road (NS) at:

- Pierson Boulevard (EW)
  - Traffic Signal

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Westbound left turn lane

For Cumulative (2007) With Project traffic conditions, additional intersection and traffic signal improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Northbound right turn overlap phasing
  - Eastbound left turn lane
  - Eastbound right turn lane
  - Eastbound right turn overlap phasing
  - Westbound left turn lane

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Northbound left turn lane
  - Eastbound left turn lane
  - Westbound left turn lane

For Cumulative (2008) With Project conditions, the following additional intersection improvements are recommended:

SR-62 Freeway (NS) at:

- Pierson Boulevard (EW)
  - Second westbound left turn lane

Worsley Road (NS) at:

- Pierson Boulevard (EW)
  - Eastbound left turn lane

Indian Avenue (NS) at:

- Pierson Boulevard (EW)
  - Convert northbound right turn lane into a thru-right lane
  - Second eastbound through lane
  - Second westbound through lane

Little Morongo Road (NS) at:

- Pierson Boulevard (EW)
  - Eastbound left turn lane
  - Westbound left turn lane
  - Second Westbound through lane

D. <u>On-Site Improvements</u>

Site specific circulation and access recommendations are depicted on Exhibit 6-A and are described below:

- Construct Pierson Boulevard at its ultimate half-section width as a major arterial from the westerly project boundary to the easterly project boundary in conjunction with development.

- Construct Karen Avenue at its ultimate half-section width as a collector (34 foot part width) from Mission Lakes Boulevard to Pierson Boulevard in conjunction with development.

- Construct Worsley Road at its ultimate half-section width as a major collector from Mission Lakes Boulevard to the southerly project boundary in conjunction with development.

- Construct Mission Lakes Boulevard at its ultimate half-section width as a major collector from Worsley Road to Karen Avenue in conjunction with development.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project site.

Stop controls should be provided at the project access points where they intersect with the public roadway system

Construct a traffic signal at the following intersection in conjunction with development when warranted:

Driveway 3 (NS) at:

- Pierson Boulevard (EW)

A 150 foot (minimum) eastbound left turn pocket should be provided along Pierson Boulevard at the intersections of Worsley Road, the Southerly Driveway and Karen Avenue.

A 150 foot (minimum) northbound left turn pocket should be provided along Karen Avenue at the intersection of the easterly Driveway.

Sight distance at the project entrance should be reviewed with respect to standard Caltrans and City of Desert Hot Springs sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

The project shall also participate in funding of off-site improvements which are needed to serve cumulative future conditions through payment of appropriate fees (City Fees and TUMF). The TUMF includes a network of regional facilities and endeavors to spread the cost on a regional basis through participation of the County and individual cities. It provides a key funding source for General Plan improvements in this area.

APPENDICES are available from Urban Crossroads.

They have not been provided to conserve paper.

Note: They are similar to the Appendices in the May 21, 2004 (Revised) document.