Darnell & ASSOCIATES

TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

March 4, 2022

Mr. Rafid Hamika
370 Bridgeton Cross Court
Las Vegas, NV. 89148
C/O Jason Greminger

D&A Ref. No: 191201

Subject: Revised Local Mobility Analysis (LMA) and Vehicle Miles Travelled (VMT) for Old Highway 395 Retail Center. PDS-STP-20-021, PDS-ER-02-003, APN#125-050-54

Dear Mr. Hamika

In accordance with your authorization Darnell Associates, Inc. has completed the following transportation analysis reports for the subject:

- Scoping Agreement for Transportation Studies
- Local Mobility Analysis (LMA)
- Year 2050 Traffic Operation Analysis for Old Highway 395 Retail Center in Fallbrook.

Figure 1 is a Vicinity Map showing the location of the project and Figure 2 presents the proposed Site Plan. The proposed is a small general commercial project consisting of two 6,000 square foot retail buildings and a 3,250 square foot convenience store with 12 vehicle fueling stations.

Scoping Agreement for Transportation Studies

The County of San Diego Scoping Agreement for Transportation Studies is presented in Attachment A. The Scoping Agreement identifies the project will generate 2,918 daily trips and with pass by reductions will add 1,310 daily trips to the surrounding roadways. Based on the County Guidelines the project is required to prepare a Local Mobility Analysis (LMA) report.

The Scoping Agreement for the project identified the subject project is screened from CEQA Transportation Analysis. In addition the project is identified as a locally serving retail project less than 50,000 square feet and is significant VMT impact. Therefore no additional VMT Analysis is required.

A summary of the Vehicle Miles Travelled (VMT) Local Mobility Analysis (LMA) and the Year 2050 Analysis reports and summarized here.

Vehicle Miles Travelled (VMT) Analysis

The Governor's Office of Planning and Research (OPR) provided a Technical Advisory on evaluating transportation impacts for CEQA in 2018. The advisory states adding retail opportunities improve destination proximity and tend to reduce VMT. Retail projects consisting of less than 50,000 square feet are considered *locally-serving* and lead agencies may presume such development creates a less than significant impact for transportation.

The proposed retail project consisting of a 3,250 convenience store with 12 vehicle fueling positions and 12,000 square feet of retail space is less than 50,000 square feet and is considered to have a less than significant impacts and is screened from further VMT analysis or mitigation.

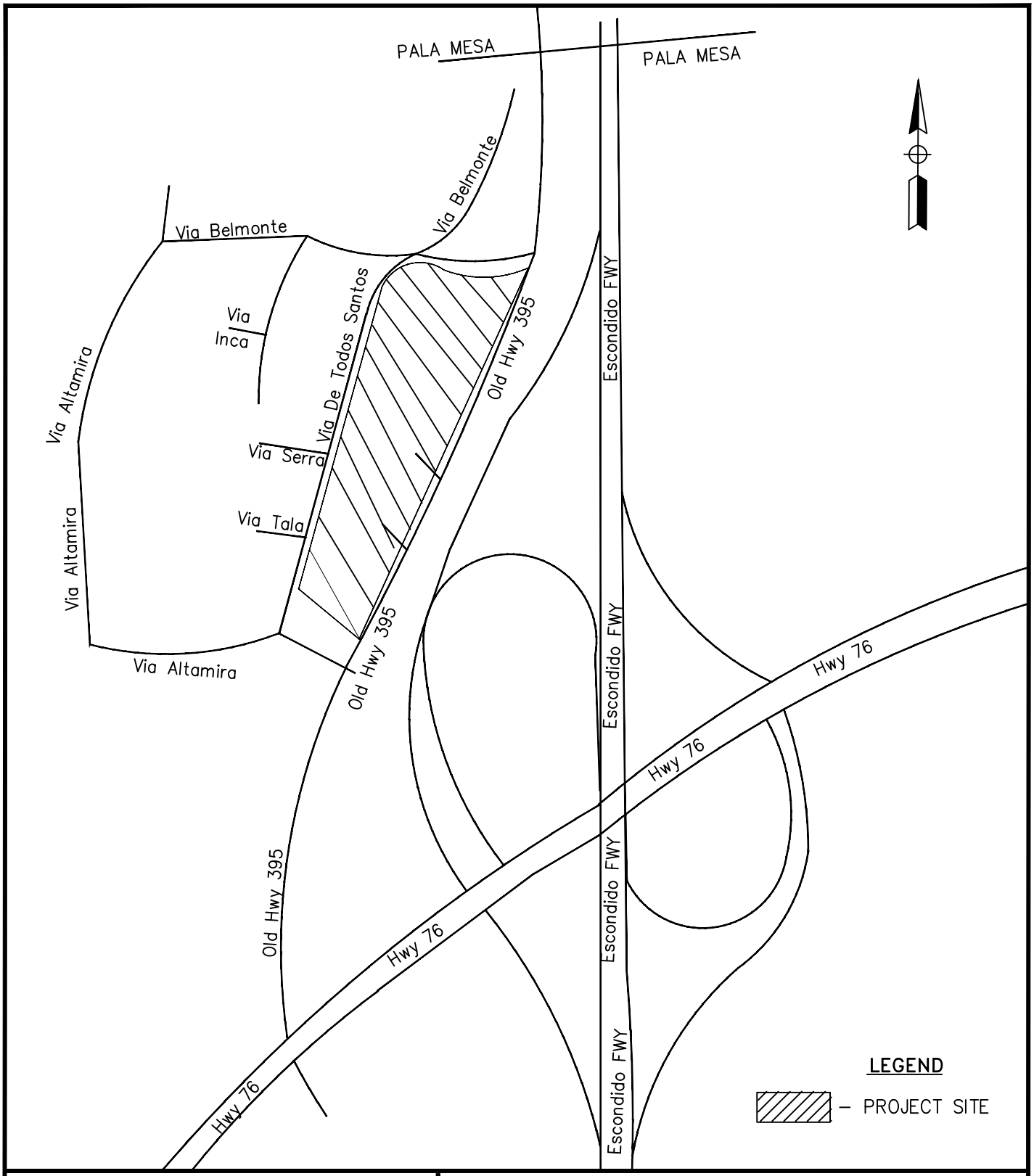

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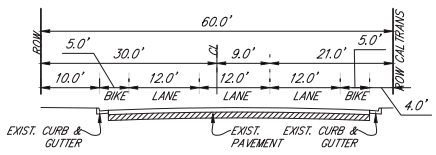
FIGURE 1

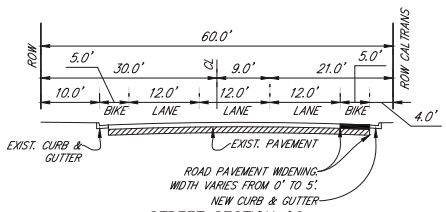
VICINITY MAP

LEGEND

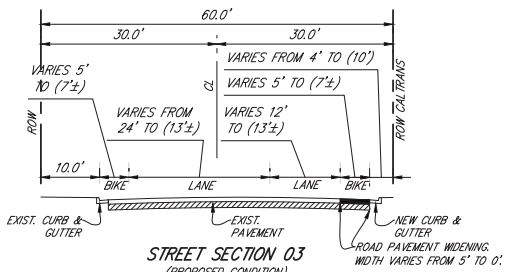
BOUNDARY LINE
RIGHT OF WAY LINE — RW
PARCEL LOT LINE — PL
PCC CURB
PCC CURB & GUTTER
SEWER LINE — S
WATER LINE — W
FIRE LINE — F
FIRE HYDRANT
BLDG FIRE SERVICE LATERAL — F
WATER SERVICE LATERAL — W
SEWER SERVICE LATERAL — S
DOUBLE DETECTOR CHECK VALVE
STORM DRAIN INLETS / CLEANOUTS
HEADWALL
HEADWALL
EXIST. TOPO MAJOR CONTOUR — 1000
EXIST. TOPO MINOR CONTOUR
PROPOSED TOPO MAJOR CONTOUR — 1000
PROPOSED TOPO MINOR CONTOUR



STREET SECTION 01
(EXISTING CONDITION)
NOT TO SCALE



STREET SECTION 02
(PROPOSED CONDITION)
NOT TO SCALE



STREET SECTION 03
(PROPOSED CONDITION)
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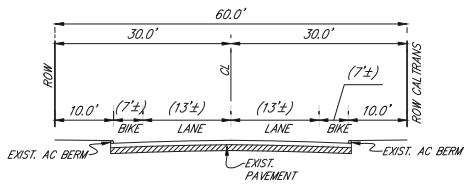

STREET SECTION 04
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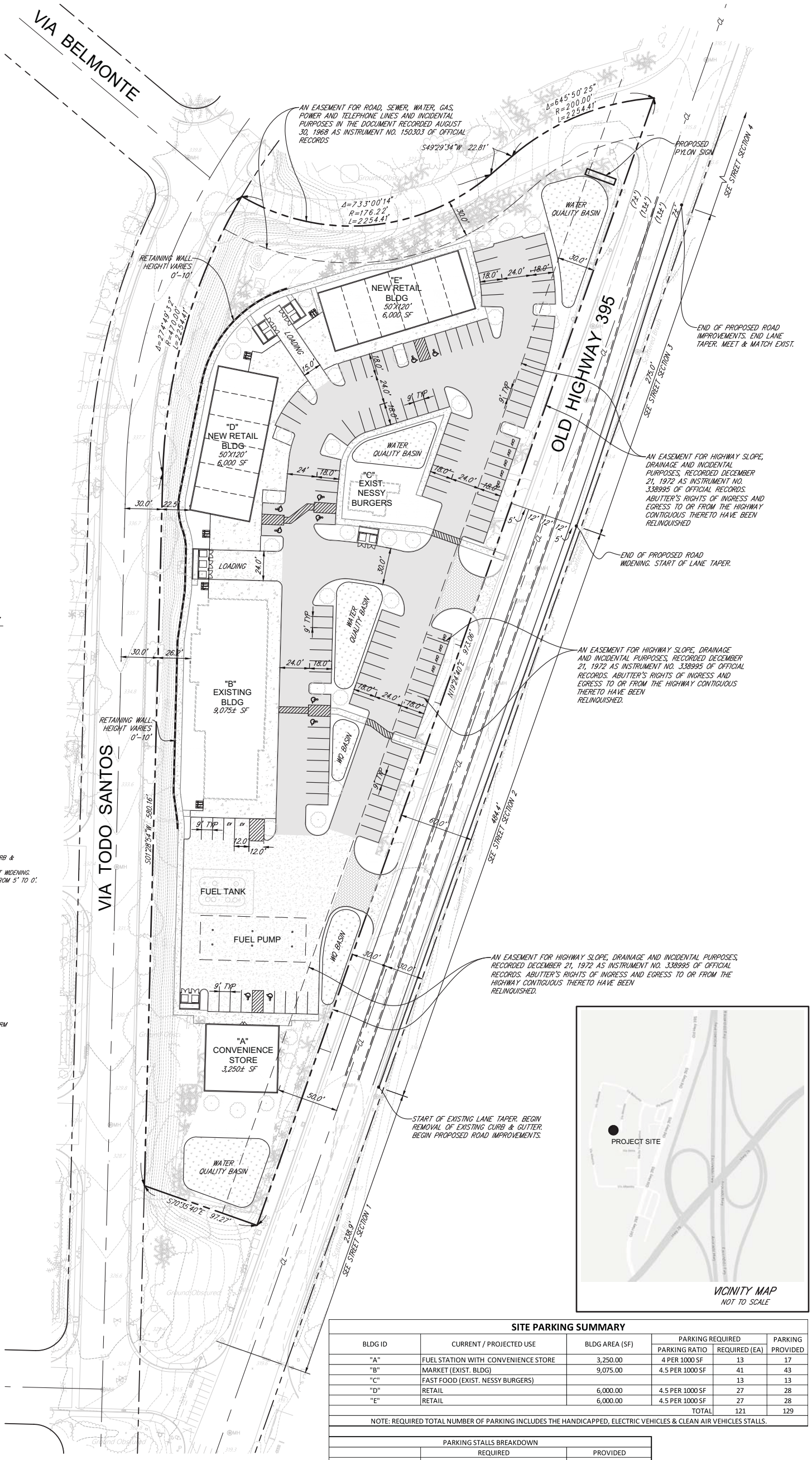


VICINITY MAP
NOT TO SCALE

SCALE 1":40'
0 40 80 Feet

OWNER
RAYES LLC
7060 CAMINITO MANRESA, LA JOLLA CA 92037

LEGAL DESCRIPTION
ALL THAT PORTION OF TRACT "A" OF MONSERATE RANCHO, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF ON FILE IN THE OFFICE OF COUNTY RECORDING TO MAP THEREOF ON FILE IN THE OFFICE OF COUNTY RECORDER OF SAN DIEGO COUNTY, IN BOOK 1, PAGE 108 OF PATENTS.

ACREAGE
GROSS AREA – 4.37 AC

PROPERTY ADDRESS
3233 OLD HIGHWAY 395
FALLBROOK, CA 92028

ASSESORS PARCEL NUMBER
125-050-54-00

GENERAL PLAN DESIGNATION
GENERAL COMMERCIAL

SETBACKS
FRONT = 50' FROM CENTERLINE
SIDE YARD EXTERIOR = 35' FROM THE CENTERLINE
SIDE YARD INTERIOR = 0' FROM THE LOTLINE (h)
REAR YARD = 15' FROM THE LOTLINE (m)

AGENCIES
FIRE DISTRICT = NORTH COUNTY FIRE PROTECTION DISTRICT
ELEMENTARY SCHOOL = GEN. ELEM. BONSALL UNION
HIGH SCHOOL DISTRICT = HIGH FALLBROOK UNION
WATER DISTRICT = RAINBOW MUNICIPAL WATER DISTRICT
SANITATION DISTRICT = RAINBOW MUNICIPAL WATER DISTRICT

SITE PARKING SUMMARY

BLDG ID	CURRENT / PROJECTED USE	BLDG AREA (SF)	PARKING REQUIRED		PARKING PROVIDED
			PARKING RATIO	REQUIRED (EA)	
"A"	FUEL STATION WITH CONVENIENCE STORE	3,250.00	4 PER 1000 SF	13	17
"B"	MARKET (EXIST. BLDG)	9,075.00	4.5 PER 1000 SF	41	43
"C"	FAST FOOD (EXIST. NESSY BURGERS)			13	13
"D"	RETAIL	6,000.00	4.5 PER 1000 SF	27	28
"E"	RETAIL	6,000.00	4.5 PER 1000 SF	27	28
			TOTAL	121	129
NOTE: REQUIRED TOTAL NUMBER OF PARKING INCLUDES THE HANDICAPPED, ELECTRIC VEHICLES & CLEAN AIR VEHICLES STALLS.					

PARKING STALLS BREAKDOWN		
	REQUIRED	PROVIDED
9'X18' STALLS	105	108
HANDICAPPED STALLS	5	10
ELECTRIC VEHICLE STALLS	2	2
CLEAN AIR VEHICLE STALLS	9	9
TOTAL	121	129

EXCEL ENGINEERING
LAND PLANNING • ENGINEERING • GIS • SURVEYING
440 STATE PLACE, ESCONDIDO, CA 92029
PH (760)745-8118 FX (760)745-8134

OLD HIGHWAY 395 RETAIL CENTER SITE CONCEPT

DATE JULY 11, 2019

SHEET 1 OF 1

V:\19\19025\Engineering\Concepts\20.03.00 concept\CONCEPT\19025 SITE CONCEPT 01 EXHIBIT.dwg 3/6/2020 2:31 PM ORIGINAL PLOT SIZE: ----

FIGURE 2 - PROPOSED PROJECT SITE PLAN

Local Mobility Analysis

The project is estimated to generate 2,918 total daily trips with pass-by trip reduction of 1,608 daily trips the project will 1,310 daily trips to the surrounding roadways and intersections and Local Mobility Analysis of existing and existing project traffic volumes. A copy of the Local Mobility Analysis Report is presented in Appendix A.

The following list provides a summary of the Key LMA findings for the Project:

- The Project consists of constructing two 6,000 sf retail buildings and 12 pump gas station with a 3,250 sf convenience store.
- The Project is forecasted to generate a total of 2,918 daily trips with 162 trips (85 inbound, 77 outbound) during the AM peak hour and 214 (109 inbound, 105 outbound) in the PM peak hour.
- After applying the pass-by trip credits, the project is forecasted to generate a net total of 1,310 daily trips with 63 trips (33 inbound, 33 outbound) during the AM peak hour and 96 trips (48 inbound, 48 outbound) during the PM peak hour.
- All intersections in the study area, including the Project driveways, are expected to operate at an acceptable LOS D or better during the peak hours except for the Old Highway 395 & Pala Road intersection, which would operate at LOS E during the AM peak hour.
- The increase in delay at the Old Highway 395 & Pala Road intersection does not satisfy the improvements are required at this location.
- The proposed Project will not exceed the improvement threshold criteria at the key intersections in the study area under all scenarios evaluated in this study. As a result, it is recommended that no intersection improvements are required or recommended of the proposed Project.

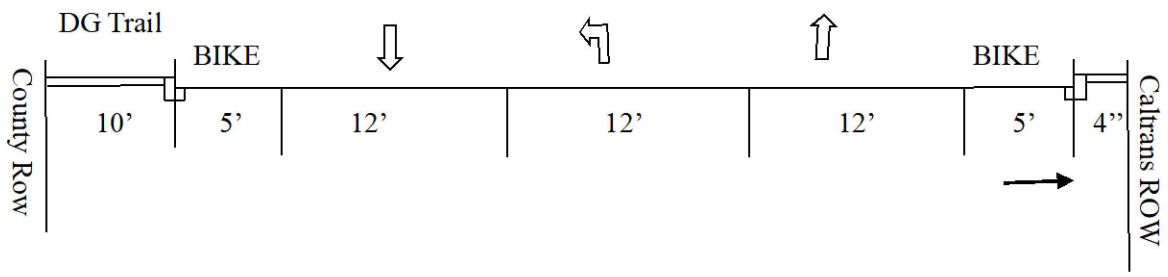
The projects Old Highway 395 frontage improvement requirements were analyzed in the 2050 Analysis and identified the project will need to reconstruct and widen the projects Old Highway 395 frontage. In addition a design exception for the spacing of the two (2) project driveways to be less than the county's 300 foot spacing requirements is required.

Year 2050 Analysis

In addition to the LMA analysis the project analyzed of the Existing plus Project traffic volumes and the Year 2050 future volumes to confirm the recommended improvements to Old Highway 395 adjacent to the project site. A copy of the Year 2050 analysis is presented in Appendix B.

The Existing plus Project and the 2050 plus project traffic volumes were analyzed and concluded that the future traffic volumes on Old Highway 395 between Via Altamira and Via Belmonte (Private Road) daily traffic forecasts of 8,000 daily vehicles will increase to 8,377 daily vehicles with the addition of project traffic and will continue to operate at LOS D. The recommended Geometrics are presented on Figure 3.

To improve the overall operating condition of Old Highway 395 with the addition of project traffic, it is recommended that the road be widened to maintain the existing bike lanes, provide one (1) lane in each direction and a center turn lane to accommodate left turns into the project site. The recommended improvements include the installation of no parking along both sides of the roadway to maintain the existing bike lanes along Old highway 395. The recommended minimum geometrics is: shown on Figure 3.



Old Highway 395

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FIGURE 3
RECOMMENDED GEOMETRICS
OLD HIGHWAY 395 VIA ALTIMIRA TO VIA BELMONTE (PRIVATE ROAD)

The Scoping Agreement for Transportation Studies is presented in attachment A. the Local Mobility Analysis is presented in Attachment B and the projects Existing Plus Project and Year 2050 Analysis for the projects Old Highway 395 frontage is presented in attachment C.

Please submit this report and Attachments to the County of San Diego for review an approval. Please call if you have any questions or need additional information.

Sincerely,

DARNELL & ASSOCIATES

Billy E. Darnell

Billy E. Darnell, P.E.
Firm Principal
RCE 22338

Date Signed: 3/4/2022

BED/jam
191201-Local Mobility Analysis and Vehicle Miles Report 3.3.21.docx

Attachments:

Attachments A- Scoping Agreement for Transportation Studies

Attachments B: Old Highway 395 Retail Center
Local Mobility Analysis
Vehicle Miles Traveled VMT

Attachments C: Year 2050 Analysis

ATTACHMENT A

- Scoping Agreement for Transportation Studies

ATTACHMENT A

Scoping Agreement for Transportation Studies

A

General Project Information and Description

Project Information

Project Name: Old Highway 395 Retail Center

Project PDS Number: PDS2020-STP-20-021, PDS-ER-02-003

Project Location: 3233 Old Highway 395, Fallbrook, CA. 92028

Project Description

Land Uses and Intensities: General Commercial, 2-6,000 sf retail and 4,980 sf convenience store with 12 fueling stations

Gross and Developable Acreage: 4.37 AC (gross and developable)

Number of Vehicle Parking Spaces: 134 (113 standard, 10 ADA, 2 electric vehicle, 9 clean air)

Bicycle Storage Capacity: n/a

Motorcycle Spaces: n/a

Consultant

Name of Firm: Darnell & Associates

Project Manager: Bill E. Darnell

Address: 4411 Mercury Street, #207A, San Diego CA. 92111

Telephone: 619-233-9373

Trip Generation

Source:	ITE Trip Generation, 10th Edition	**Pass-by Trips:**	1,608
Total Daily Trips:	2,918	**Diverted Trips:**	n/a
Internal Capture Rate:	n/a	**Trip Credit:**	n/a
Alternative Modes:	n/a	**Net Daily Trips:**	1,310 (see Table 1)

General Plan Consistency

Is this project consistent with the General Plan? ☒ **Yes** ☐ **No**

Site Plan

Attach 11x17 copies of the project location/vicinity map and site plan containing the following:

- Driveway locations and access type
- Pedestrian access, bicycle access, and on-site pedestrian circulation
- Location and distance to closest existing transit stop (measure as walking distance to project entrance or middle of parcel
- Location of any planned trails identified in the Community Trails Master Plan (CTMP) within ¼ mile of the project location

CEQA Transportation Analysis Screening

Project Type Screening

	1) Select the Land Uses that apply to your project 2) Answer the questions for each Land Use that applies to your project *(if "Yes" in any land use category below then that land use (or a portion of the land use) is screened from CEQA Transportation Analysis)*	Screened Out Yes	Not Screened Out No
☐	**1. Small Projects:**		
	a. Does the project result in 110 daily trips or less?	☐	☒
☒	**2. Small Service/Retail Project:**		
	a. Is the project less than 50,000 square feet?	☒	☐
☐	**3. Mixed-Use Project:**		
	a. Is the project location screened out based on the SANDAG screening map for VMT/service population?	☐	☒
☒	**4. Locally Serving Retail/Public Facility/Recreational**		
	a. Is the project locally serving: Retail OR Public Facility OR Recreational?	☒	☐
☐	**5. Redevelopment Project:**		
	a. Does the project result in a net decrease in total Project VMT than the existing use?	☐	☐
	b. If the project is to redevelop an affordable housing site, are all proposed units affordable housing units? Mark "No" for projects that replace affordable housing with market rate units	☐	☐

Project Location Screening (if not screened based on project type) – Part 1

	Yes	No
Is this project located within a grey area (area with little to no existing land use) on the applicable County screening maps for the project land use type?	☐	☒

If "yes", the project cannot be screened based on location. If "No", proceed to Part 2.

Project Location Screening (if not screened based on project type) – Part 2

	1) Select the Land Uses that apply to your project 2) Answer the questions for each Land Use that applies to your project *(if "Yes" in any land use category below then that land use (or a portion of the land use) is screened from CEQA Transportation Analysis)*	Screened Out Yes	Not Screened Out No
☐	**1. Residential**		
	a. Is the project location screened out using the County screening maps for VMT/resident?	☐	☒
☐	**2. Employment**		
	a. Is the project location screened out using the County screening maps for VMT/employee or VMT/service population?	☐	☒
☐	**3. Retail/Public Facility/Recreational**		
	a. Is the project location screened out using the County screening maps for VMT/service population?	☐	☒

Local Mobility Analysis

Type of Local Mobility Analysis (LMA)

☐	**Site Access Study**	249 daily trips or less
☐	**Focused LMA**	250 to 499 daily trips and consistent with the General Plan
☒	**Full LMA**	500 or greater daily trips and consistent with the General Plan, or 250 or greater daily trips and inconsistent with the General Plan

Trip Distribution

☐	**Select Zone (Model Series_____)**	Projects that generate greater than 1,000 daily trips
☒	**Manual Estimation**	Site Access Studies, Focused LMAs, or project's that generate less than 1,000 daily trips

Provide exhibit detailing trip distribution and trip assignment for review.

Study Intersections (and Roadway Segments) (NOTE: Subject to change based of staff review)

1.	Old Highway &Via Velmonte	**6.**	
2.	Old Highway & Via Altamire	**7.**	
3.	Old Highway 395 & Pala Rd (SR-76)	**8.**	
4.		**9.**	
5.		**10.**	

Attach a separate page if the number of study locations exceeds 10.

Other Jurisdictions

Is this project located within one mile of another Local Jurisdiction? ☒ **Yes** ☐ **No**

If so, name of Jurisdiction: Caltrans

Specific Issues to be addressed within the Study
(in addition to requirements described in the Guidelines – to be filled out by County Staff)

1.

2.

3.

4.

5.

Recommended by:

Bill E Wandell — 3/8/2021

Consultant's Representative — Date

Scoping Agreement Submitted on — 1/28/2021 — Date

Scoping Agreement Re-submitted on — 3/8/2021 — Date

Approved Scoping Agreement:

County of San Diego
Transportation Specialist — Date

ATTACHMENT B

Old Highway 395 Retail Center

- **Local Mobility Analysis**

- **Local Mobility Analysis**

Old Highway 395 Retail Center

Local Mobility Analysis
PDS2020-STP-20-021

Prepared By:

- ***Bill E. Darnell***
Darnell & Associates
4411 Mercury Street, #207A
San Diego, CA. 92111

- ***Marc Mizuta***
Mizuta Traffic Consulting
5694 Mission Center Road, #602-121
San Diego, CA. 92108

March 8, 2021

1 INTRODUCTION

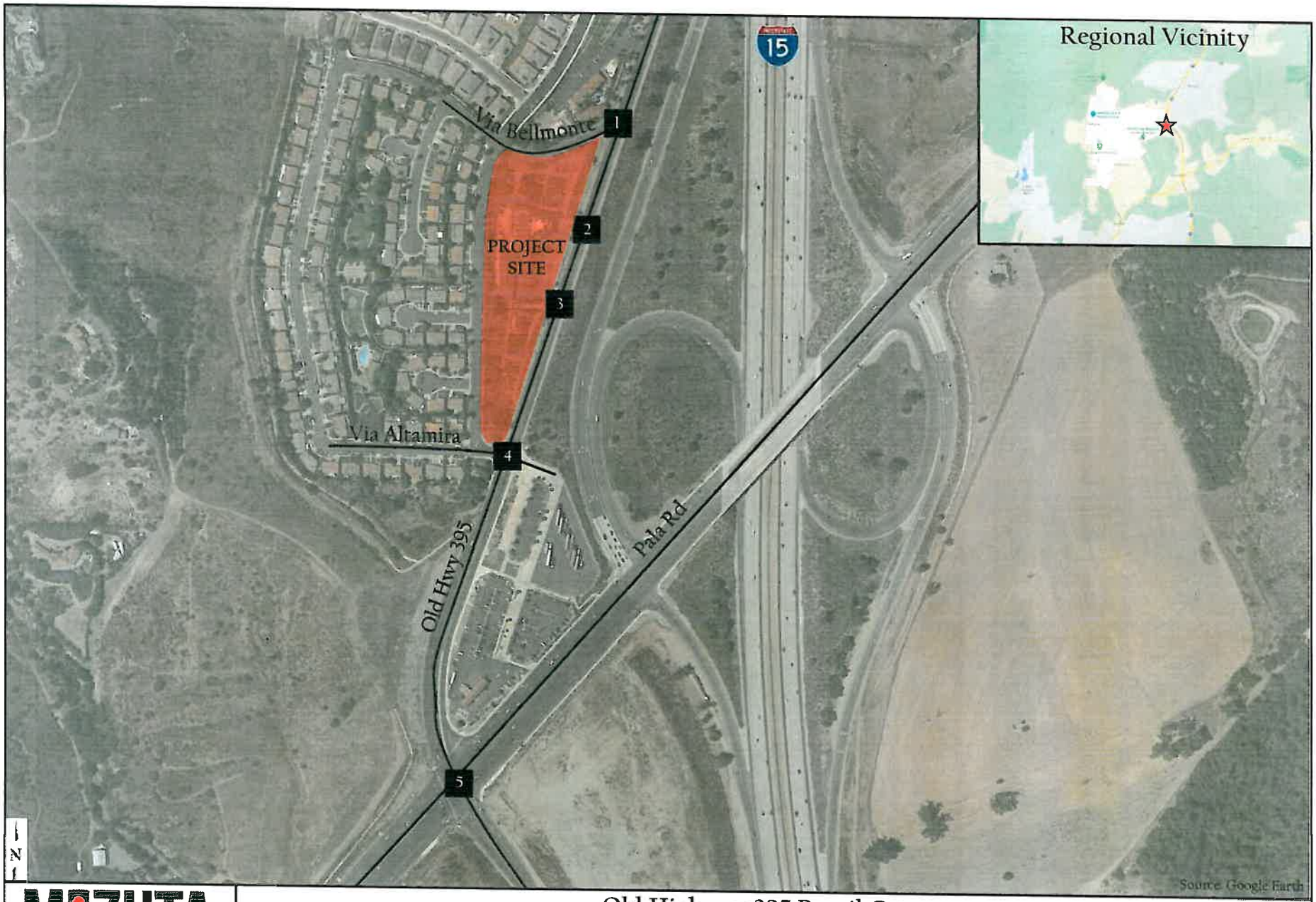
This Local Mobility Analysis (LMA) evaluates the traffic operations and safety for the road network associated with the proposed development (herein referred to as "the Project") located on the west side of Old Highway 395 between Via Belmonte and Via Altamira within the Fallbrook Community Planning Area within the County of San Diego. The site is currently zoned as General Commercial. **Figure 1-1** illustrates the project vicinity map.

Some of the other elements that the LMA will address include the following:

- Ensure that the local transportation system is adequate to serve the project and that improvements identified in the General Plan are constructed when needed and consistent with the County's Public Road Standards.
- Address issues related to operations and safety for all transportation modes.
- Ensure consideration of the County's Active Transportation Plan for bicycle and pedestrian facilities.
- Identify the necessary transportation entitlement conditions for land development projects.
- Outline the County's screening criteria, study area, and methodologies to assess the potential need for off-site transportation operation and safety improvements to the project study area roadway network.
- Establish measures of effectiveness to maintain transportation LOS consistent with the County's General Plan Mobility Element.
- Facilitate on-site project access and roadway frontage design infrastructure improvements to serve the project and the surrounding community.

1.1 Project Description

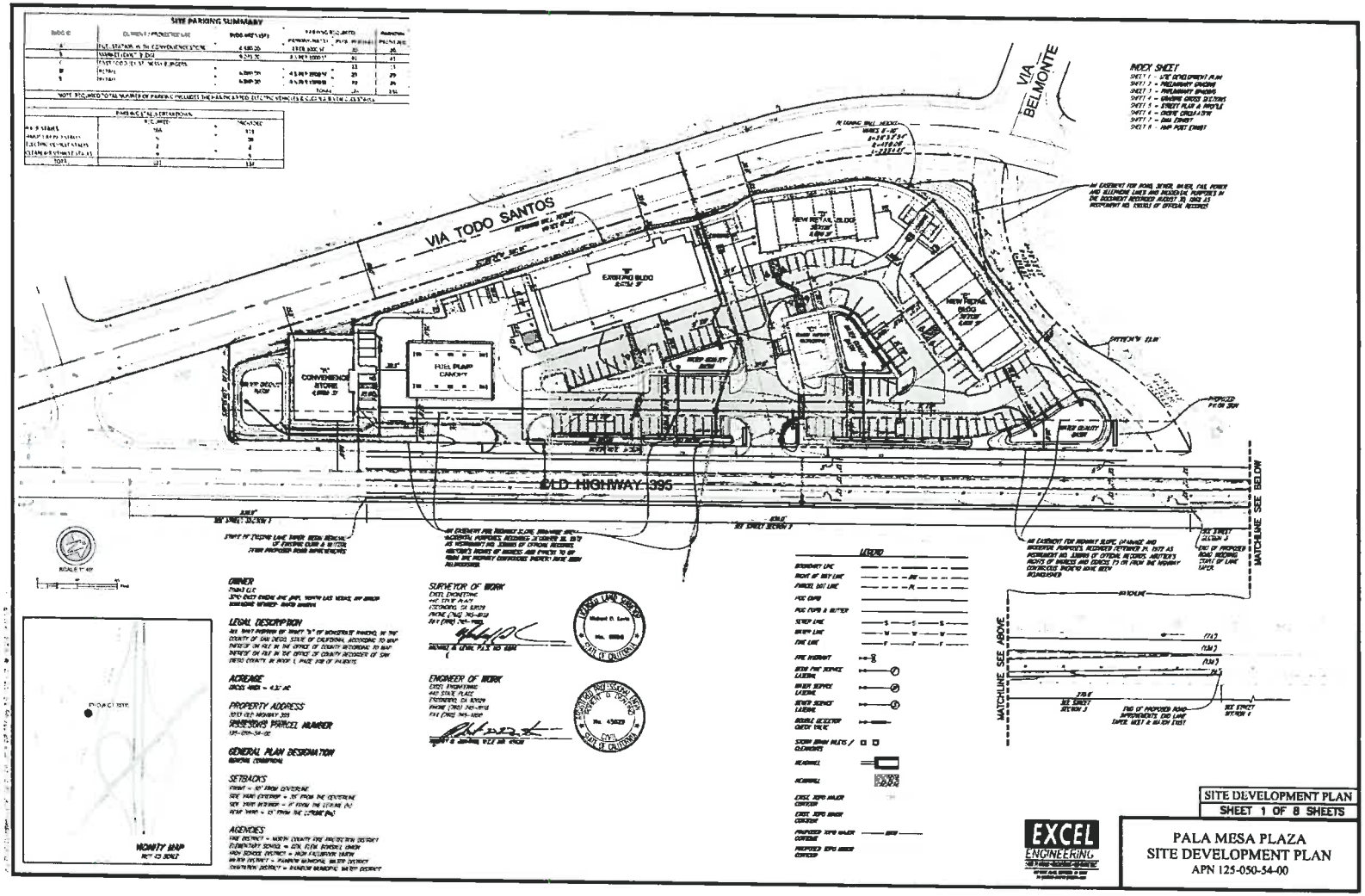
The existing site is located at 3233 Old Highway 395 (APN #125-050-54-00). Currently, there is a 9,075 square foot (sf) grocery store operating as Pala Mesa Market and a 700 sf fast-food restaurant without a drive-thru operating as Nessy Burgers on site. The Project proposes to construct two 6,000 sf retail buildings and 12-pump gas station with a 4,980 sf convenience store. Two access points will be provided off of Old Highway 395. The Project is estimated to be constructed by 2022. The Project will provide 134 parking spaces on-site, which is six spaces in excess of the parking requirement. **Figure 1-2** illustrates the Project site plan.



MIZUTA TRAFFIC CONSULTING

Old Highway 395 Retail Center

Figure 1-1
Project Vicinity Map



Old Highway 395 Retail Center

Figure 1-2
Site Plan

1.2 Study Area

This LMA addresses potential operational impacts that could result from the addition of the Project traffic to the local circulation system. The study area contains intersections within the immediate vicinity of the project site. The following intersections, including the Project driveways, are evaluated in this report:

1. Old Highway 395 & Via Belmonte
2. Old Highway 395 & Altamira
3. Old Highway 395 & Pala Road
4. Old Highway 395 & North Project Driveway
5. Old Highway 395 & South Project Driveway

Appendix B

Signal Timing Sheets

QuicNet® System	
System ID	193
Group	NONE
Field Master	NONE
N-S Street	Not Assigned
E-W Street	Not Assigned
Communications	
Channel	Serial:COM1:
Address	23
Area Number	1
Area Address	34
Database	
Last Changed	1/9/2020 10:04

QuicNet Timing Notes

Phase Timing - Bank 1								
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Min Green	4	6	0	4	4	6	0	4
Extension	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0
Max	26	50	0	26	26	50	0	50
Max 2	0	0	0	0	0	0	0	0
Cond Serve Check	0	0	0	0	0	0	0	0
Clearance Timing								
Yellow Change	4.8	5.5	0.0	3.6	4.8	5.5	0.0	3.6
Red Clear	0.5	1.0	0.0	1.0	0.5	1.0	0.0	1.0
Pedestrian Timing								
Walk	0	0	0	7	0	7	0	0
Pedestrian Change	0	0	0	13	0	15	0	0
Advance/Delay Walk	0	0	0	0	0	0	0	0
PE Min. Ped. Change	0	0	0	0	0	0	0	0
Volume-Density								
Type 3 Disconnect	0	0	0	0	0	0	0	0
Add per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Added Initial	0	0	0	0	0	0	0	0
Min Gap	2.0	1.5	0.0	2.0	2.0	1.5	0.0	2.0
Max Gap	2.0	2.1	0.0	2.0	2.0	2.1	0.0	2.0
Reduce Every	0.0	7.8	0.0	0.0	0.0	7.8	0.0	0.0
Alternate Timing								
Alternate Walk	0	0	0	0	0	0	0	0
Alternate Ped. Change	0	0	0	0	0	0	0	0
Alternate Minimum	0	0	0	0	0	0	0	0
Alternate Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Timing - Exclusive Pedestrian	
Exclusive Ped Assignment	
Exclusive Walk	0
Exclusive Pedestrian Change	0
Red Clear	0.0
Walk Output	0
Don't Walk Output	0

Phase Functions - Page 1	
Red Lock	
Yellow Lock	
Simultaneous Gap	
Rest In Walk	
Advance Walk	
Flashing Walk	
Max Extension	
Red Rest	
Dual Entry	4 8
Sequential Timing	
Inhibit Ped Reservice	
Delay Walk	
Guaranteed Passage	
Conditional Service	

Phase Functions - Page 2	
Minimum Recall	2 6
Ped Recall	
Maximum Recall	
Green Flash	
Overlap Green Flash	
Flashing Yellow Arrow for PPLT	
Max2	
Soft Recall	
External Recall	
Manual Control Calls	
Fast Green Flash	
Fast Overlap Green Flash	
Semi-Actuated	

Phase Timing - Bank 2								
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Min Green	0	0	0	0	0	0	0	0
Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0	0	0	0	0	0	0	0
Max 2	0	0	0	0	0	0	0	0
Cond Serve Check	0	0	0	0	0	0	0	0
Clearance Timing								
Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Timing								
Walk	0	0	0	0	0	0	0	0
Pedestrian Change	0	0	0	0	0	0	0	0
Advance/Delay Walk	0	0	0	0	0	0	0	0
PE Min. Ped. Change	0	0	0	0	0	0	0	0
Volume-Density								
Type 3 Disconnect	0	0	0	0	0	0	0	0
Add per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Added Initial	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alternate Timing								
Alternate Walk	0	0	0	0	0	0	0	0
Alternate Ped. Change	0	0	0	0	0	0	0	0
Alternate Minimum	0	0	0	0	0	0	0	0
Alternate Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phase Timing - Bank 3								
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Min Green	0	0	0	0	0	0	0	0
Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max	0	0	0	0	0	0	0	0
Max 2	0	0	0	0	0	0	0	0
Cond Serve Check	0	0	0	0	0	0	0	0
Clearance Timing								
Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Timing								
Walk	0	0	0	0	0	0	0	0
Pedestrian Change	0	0	0	0	0	0	0	0
Advance/Delay Walk	0	0	0	0	0	0	0	0
PE Min. Ped. Change	0	0	0	0	0	0	0	0
Volume-Density								
Type 3 Disconnect	0	0	0	0	0	0	0	0
Add per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Added Initial	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alternate Timing								
Alternate Walk	0	0	0	0	0	0	0	0
Alternate Ped. Change	0	0	0	0	0	0	0	0
Alternate Minimum	0	0	0	0	0	0	0	0
Alternate Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Preemption - General	
Min. Green Before Preempt Forceoff	0
Max. EV Preempt Duration	2
Min. Time Between Same EV Preempt	0
Disable Low Priority Preempt	
Leave Flash to Service Preempt	

Preemption - Relative Priority	
Special Event 1	1
Special Event 2	1
Special Event 3	0
Special Event 4	0
Special Event 5	0
Special Event 6	0
Emergency Vehicle A	1
Emergency Vehicle B	1
Emergency Vehicle C	1
Emergency Vehicle D	1

Preemption - Railroad 1	
Delay	0
Clear Time	10
Clear Phases	2 6

Preemption - Railroad 2	
Delay	0
Clear Time	0
Clear Phases	
Limited Service Phases	

Preemption - Emergency Vehicle			
	Delay	Clear	Clearance Phases
EV A	0	5	2 5
EV B	0	5	4
EV C	0	5	1 6
EV D	0	5	8

Preemption - Railroad 3	
Enabled	N
Advance Ped. Max. Time	0
Track Clear Min. Time	0
Track Clear Max. Time	0
Track Clear Phases	
Limited Service Max. Time	0
Limited Service Phases	
Truncate Green	N
Truncate Walk	N

I/O		
	Input	Output
Advance Ped.	0	0
Advance Preempt	0	0
Supervisor	0	0
Crossing Active	0	0
Gate Down	0	0
Fault	0	0
Watchdog Echo		0

Special Event Sequence 1

Step	Time	Clear	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit	Ped Omit	Output
0	0									
1	0									
2	0									
3	0									
4	0									
5	0									
6	0									
7	0									
8	0									
9	0									
10	0									
11	0									
12	0									
13	0									
14	0									
15	0									

Special Event Sequence 2

Step	Time	Clear	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit	Ped Omit	Output
0	0									
1	0									
2	0									
3	0									
4	0									
5	0									
6	0									
7	0									
8	0									
9	0									
10	0									
11	0									
12	0									
13	0									
14	0									
15	0									

Special Event Sequence 3

Step	Time	Clear	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit	Ped Omit	Output
0	0									
1	0									
2	0									
3	0									
4	0									
5	0									
6	0									
7	0									
8	0									
9	0									
10	0									
11	0									
12	0									
13	0									
14	0									
15	0									

Special Event Sequence 4

Step	Time	Clear	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit	Ped Omit	Output
0	0									
1	0									
2	0									
3	0									
4	0									
5	0									
6	0									
7	0									
8	0									
9	0									
10	0									
11	0									
12	0									
13	0									
14	0									
15	0									

Special Event Sequence 5

Step	Time	Clear	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit	Ped Omit	Output
0	0									
1	0									
2	0									
3	0									
4	0									
5	0									
6	0									
7	0									
8	0									
9	0									
10	0									
11	0									
12	0									
13	0									
14	0									
15	0									

Special Event Sequence 6

Step	Time	Clear	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit	Ped Omit	Output
0	0									
1	0									
2	0									
3	0									
4	0									
5	0									
6	0									
7	0									
8	0									
9	0									
10	0									
11	0									
12	0									
13	0									
14	0									
15	0									

Coordination - Cycle, Offsets, & Forceoffs									
	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
Cycle	0	0	0	0	0	0	0	0	0
Offset 1	0	0	0	0	0	0	0	0	0
Offset 2	0	0	0	0	0	0	0	0	0
Offset 3	0	0	0	0	0	0	0	0	0
Zone Offset	0	0	0	0	0	0	0	0	0
Ring Offset	0	0	0	0	0	0	0	0	0
Hold Release	0	0	0	0	0	0	0	0	0
Ped. Adjust	0	0	0	0	0	0	0	0	0
Forceoff Phase 1	0	0	0	0	0	0	0	0	0
Forceoff Phase 2	0	0	0	0	0	0	0	0	0
Forceoff Phase 3	0	0	0	0	0	0	0	0	0
Forceoff Phase 4	0	0	0	0	0	0	0	0	0
Forceoff Phase 5	0	0	0	0	0	0	0	0	0
Forceoff Phase 6	0	0	0	0	0	0	0	0	0
Forceoff Phase 7	0	0	0	0	0	0	0	0	0
Forceoff Phase 8	0	0	0	0	0	0	0	0	0
Adaptive Operation	N	N	N	N	N	N	N	N	N

Coordination - General	
Transition Type	0.3
0 = Shortway	
1 = Dwell	
2 = Shorten	
Tenths Digit: # Cycles to get in step (1–4)	
Coordination Extra	
1 = Programmed Walk Time for Sync Phases	
2 = Always Terminate Sync Phase Peds	
3 = Floating Forceoffs	
4 = Reservice for Ped Calls	
5 = Start of Green Offset Reference	
8 = Maintain Coord. During Spec. Event Preempt	
QuicTrac Max Cycle Length	200
QuicTrac Max Cycle Length Change	15

Coordination - Phase Minimums							
Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
8	25	0	34	8	25	0	35

Coordination - Permissives & Phase Sequences									
	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
Perm 1 - Begin	0	0	0	0	0	0	0	0	0
Perm 1 - End	0	0	0	0	0	0	0	0	0
Perm 1 - Veh Phases	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678
Perm 1 - Ped Phases	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678
Perm 2 - Begin	0	0	0	0	0	0	0	0	0
Perm 2 - End	0	0	0	0	0	0	0	0	0
Perm 2 - Veh Phases									
Perm 2 - Ped Phases									
Perm 3 - Begin	0	0	0	0	0	0	0	0	0
Perm 3 - End	0	0	0	0	0	0	0	0	0
Perm 3 - Veh Phases									
Perm 3 - Ped Phases									
Max Inhibit Phases	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678
Max Recall Phases									
Reservice Time	0	0	0	0	0	0	0	0	0
Reservice Phases									
Sync Phases									
Lag Phases									
Pre-Timed Phases									

Overlaps								
	Overlap 1	Overlap 2	Overlap 3	Overlap 4	Overlap 5	Overlap 6	Overlap 7	Overlap 8
Load Switch Number	0	0	0	0	0	0	0	0
Vehicle Set 1								
Vehicle Set 2								
Vehicle Set 3								
Negative Vehicle								
Negative Ped								
Green Omit								
Green Clear Omit								
Green Clearance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clearance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

AND Gates						
	AND 1	AND 2	AND 3	AND 4	AND 5	AND 6
Input A	0	0	0	0	0	0
Input B	0	0	0	0	0	0
Output	0	0	0	0	0	0

NAND Gates				
	NAND 1	NAND 2	NAND 3	NAND 4
Input A	0	0	0	0
Input B	0	0	0	0
Output	0	0	0	0

NOT Gates				
	NOT 1	NOT 2	NOT 3	NOT 4
Input	0	0	0	0
Output	0	0	0	0

Delay Timers						
	DELAY 1	DELAY 2	DELAY 3	DELAY 4	DELAY 5	DELAY 6
Input	0	0	0	0	0	0
Time	0	0	0	0	0	0
Output	0	0	0	0	0	0

Extension Timers						
	ET 1	ET 2	ET 3	ET 4	ET 5	ET 6
Input	0	0	0	0	0	0
Time	0.0	0.0	0.0	0.0	0.0	0.0
Output	0	0	0	0	0	0

OR Gates										
	OR 1	OR 2	OR 3	OR 4	OR 5	OR 6	OR 7	OR 8	OR 9	OR 10
Input A	0	0	0	0	0	0	0	0	0	0
Input B	0	0	0	0	0	0	0	0	0	0
Input C									0	0
Input D									0	0
Output	0	0	0	0	0	0	0	0	0	0

Latches								
	LATCH 1	LATCH 2	LATCH 3	LATCH 4	LATCH 5	LATCH 6	LATCH 7	LATCH 8
Set	0	0	0	0	0	0	0	0
Reset	0	0	0	0	0	0	0	0
Output	0	0	0	0	0	0	0	0
NOT Output	0	0	0	0	0	0	0	0

One Shot Timers						
	OS 1	OS 2	OS 3	OS 4	OS 5	OS 6
Input	0	0	0	0	0	0
Time	0.0	0.0	0.0	0.0	0.0	0.0
Output	0	0	0	0	0	0

Detectors

No.	Pin	Delay	Carry Over	Phases	Attributes	Assignments
1	39	0.0	0.0	_2_____	___45_7_	123___8
2	40	0.0	0.0	_____6__	___45_7_	123___8
3	41	0.0	0.0	___4____	___45_7_	123___8
4	42	0.0	0.0	_______8	___45_7_	123___8
5	43	0.0	0.0	_2_____	___45_7_	123___8
6	44	0.0	0.0	_____6__	___45_7_	123___8
7	45	0.0	0.0	___4____	___45_7_	123___8
8	46	0.0	0.0	_______8	___45_7_	123___8
9	47	0.0	0.0	_2_____	___45_7_	123___8
10	48	0.0	0.0	_____6__	___45_7_	123___8
11	49	0.0	0.0	___4____	___45_7_	123___8
12	50	0.0	0.0	_______8	___45_7_	123___8
13	55	0.0	0.0	____5___	___45_7_	123___8
14	56	0.0	0.0	1_____	___45_7_	123___8
15	57	0.0	0.0	_____7_	___45_7_	123___8
16	58	0.0	0.0	__3____	___45_7_	123___8
17	59	0.0	0.0	____5___	___45_7_	123___8
18	60	0.0	0.0	1_____	___45_7_	123___8
19	61	0.0	0.0	_____7_	___45_7_	123___8
20	62	0.0	0.0	__3____	___45_7_	123___8
21	63	0.0	0.0	_2_____	___45_7_	123___8
22	64	0.0	0.0	_____6__	___45_7_	123___8
23	65	0.0	0.0	___4____	___45_7_	123___8
24	66	0.0	0.0	_______8	___45_7_	123___8
25	67	0.0	0.0	_2_____	_2_____	123___8
26	68	0.0	0.0	_____6__	_2_____	123___8
27	69	0.0	0.0	___4____	_2_____	123___8
28	70	0.0	0.0	_______8	_2_____	123___8
29	76	0.0	0.0	_2_____	___45_7_	123___8
30	77	0.0	0.0	_____6__	___45_7_	123___8
31	78	0.0	0.0	___4____	___45_7_	123___8
32	79	0.0	0.0	_______8	___45_7_	123___8

Detector Attributes	Detector Assignments
1 = Full Time Delay	1 = Detector Set 1
2 = Pedestrian	2 = Detector Set 2
3 = (unused)	3 = Detector Set 3
4 = Count	4 = (unused)
5 = Extension	5 = (unused)
6 = Type 3	6 = Min. Recall on Failure
7 = Calling	7 = Max. Recall on Failure
8 = Alternate	8 = Monitor for Failure

Inputs - General	
Flash Sense	81
External Permit 1	0
External Permit 2	0
External Permit 3	0
Exclusive Ped Omit	0
Max. 2	0
External Lag	0
Max. Recall	0
Stop Time	82
Manual Control Enable	0
Manual Control Advance	0
Min. Recall	0
Pedestrian Forceoff	0

Inputs - Preemption	
Railroad 1	51
Railroad 2	52
Gate Down	0
Special Event 1	0
Special Event 2	0
Special Event 3	0
Special Event 4	0
Special Event 5	0
Special Event 6	0
Emergency Vehicle A	71
Emergency Vehicle B	72
Emergency Vehicle C	73
Emergency Vehicle D	74

Inputs - FYA Inhibit	
Phase 1	0
Phase 2	0
Phase 3	0
Phase 4	0
Phase 5	0
Phase 6	0
Phase 7	0
Phase 8	0

Inputs - Plan	
Plan 1	0
Plan 2	0
Plan 3	0
Plan 4	0
Plan 5	0
Plan 6	0
Plan 7	0
Plan 8	0
Plan 9	0
Free	0
Flash	0

Inputs - Bank & Set	
Phase Bank 2	0
Phase Bank 3	0
Detector Set 2	0
Detector Set 3	0
Overlap Set 2	0
Overlap Set 3	0

Inputs - Alarms	
Alarm 1	0
Alarm 2	0
Alarm 3	0
Alarm 4	0
Door Ajar	0
UPS Battery Low	0
UPS On Backup Power	0
Cabinet Temperature	0

Inputs - NEMA Functions	
Call to Non-Actuated	0
CNA Phases	_____
Forceoff Ring A	0
Forceoff Ring B	0
Hold	0
Hold Phases	_____
Max. Inhibit	0

Outputs - General	
Advance Warning Sign 1	0
Advance Warning Sign 2	0
Detector Failure	0
Flasher 1	0
Flasher 2	0
Fast Flasher	0
On Line	0
Exclusive Pedestrian Walk	0
Exclusive Pedestrian Don't Walk	0

Outputs - Plan	
Plan 1	0
Plan 2	0
Plan 3	0
Plan 4	0
Plan 5	0
Plan 6	0
Plan 7	0
Plan 8	0
Plan 9	0
Free	0
Flash	0

Outputs - Pedestrian Loadswitch Assignments	
Loadswitch 2P Phases	
Loadswitch 4P Phases	4
Loadswitch 6P Phases	6
Loadswitch 8P Phases	

Outputs - Preemption		
	Steady	Flashing
Railroad 1	0	0
Railroad 2	0	0
Special Event 1	0	0
Special Event 2	0	0
Special Event 3	0	0
Special Event 4	0	0
Special Event 5	0	0
Special Event 6	0	0
EV A	0	0
EV B	0	0
EV C	0	0
EV D	0	0
Any Preempt	0	0
Preempt Failure	0	0

Outputs - Phase Redirection								
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Red	0	0	0	0	0	0	0	0
Yellow	0	0	0	0	0	0	0	0
Green	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0

Outputs - Overlap Redirection								
	Overlap 1	Overlap 2	Overlap 3	Overlap 4	Overlap 5	Overlap 6	Overlap 7	Overlap 8
Red	0	0	0	0	0	0	0	0
Yellow	0	0	0	0	0	0	0	0
Green	0	0	0	0	0	0	0	0

Outputs - Time of Day							
TOD Out 1	TOD Out 2	TOD Out 3	TOD Out 4	TOD Out 5	TOD Out 6	TOD Out 7	TOD Out 8
0	0	0	0	0	0	0	0

Outputs - Special Event							
SE Out 1	SE Out 2	SE Out 3	SE Out 4	SE Out 5	SE Out 6	SE Out 7	SE Out 8
0	0	0	0	0	0	0	0

Outputs - Special Function							
SF Out 1	SF Out 2	SF Out 3	SF Out 4	SF Out 5	SF Out 6	SF Out 7	SF Out 8
0	0	0	0	0	0	0	0

Outputs - Phase Status								
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Check	0	0	0	0	0	0	0	0
On	0	0	0	0	0	0	0	0

Outputs - Flashing Yellow Arrow							
Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
0	0	0	0	0	0	0	0

Time Base Coordination Events

No.	Days of Week	Seasons	Hour	Minute	Plan	Offset
0	_____	12345678	0	0	0	0
1	_____	12345678	0	0	0	0
2	_____	12345678	0	0	0	0
3	_____	12345678	0	0	0	0
4	_____	12345678	0	0	0	0
5	_____	12345678	0	0	0	0
6	_____	12345678	0	0	0	0
7	_____	12345678	0	0	0	0
8	_____	12345678	0	0	0	0
9	_____	12345678	0	0	0	0
10	_____	12345678	0	0	0	0
11	_____	12345678	0	0	0	0
12	_____	12345678	0	0	0	0
13	_____	12345678	0	0	0	0
14	_____	12345678	0	0	0	0
15	_____	12345678	0	0	0	0
16	_____	12345678	0	0	0	0
17	_____	12345678	0	0	0	0
18	_____	12345678	0	0	0	0
19	_____	12345678	0	0	0	0
20	_____	12345678	0	0	0	0
21	_____	12345678	0	0	0	0
22	_____	12345678	0	0	0	0
23	_____	12345678	0	0	0	0
24	_____	12345678	0	0	0	0
25	_____	12345678	0	0	0	0
26	_____	12345678	0	0	0	0
27	_____	12345678	0	0	0	0
28	_____	12345678	0	0	0	0
29	_____	12345678	0	0	0	0
30	_____	12345678	0	0	0	0
31	_____	12345678	0	0	0	0

Time of Day Function Events

No.	Days of Week	Seasons	Hour	Minute	Function	Phases or Fn. 14 Bits
0	_____	12345678	0	0	0	_____
1	_____	12345678	0	0	0	_____
2	_____	12345678	0	0	0	_____
3	_____	12345678	0	0	0	_____
4	_____	12345678	0	0	0	_____
5	_____	12345678	0	0	0	_____
6	_____	12345678	0	0	0	_____
7	_____	12345678	0	0	0	_____
8	_____	12345678	0	0	0	_____
9	_____	12345678	0	0	0	_____
10	_____	12345678	0	0	0	_____
11	_____	12345678	0	0	0	_____
12	_____	12345678	0	0	0	_____
13	_____	12345678	0	0	0	_____
14	_____	12345678	0	0	0	_____
15	_____	12345678	0	0	0	_____

Function 1 = Red Lock
Function 2 = Yellow Lock
Function 3 = Minimum Recall
Function 4 = Pedestrian Recall
Function 6 = Rest in Walk
Function 7 = Red Rest
Function 8 = Double Entry
Function 9 = Maximum Recall
Function 10 = Soft Recall
Function 11 = Max 2
Function 12 = Conditional Service
Function 13 = Lag Free
Function 14 = (see Function 14 Bits)
Function 15 = Time of Day Outputs

Function 14 Bits
Bit 1 = Local Override
Bit 2 = Skip Overlap Green Clearance
Bit 4 = Disable Detector OFF Monitoring
Bit 5 = Disable Bus Priority
Bit 6 = Inhibit FYA
Bit 7 = Detector Count Recording
Bit 8 = Split Monitor Recording

Holiday Definitions

No.	Holiday Types	Day	Month	Year
0		0	0	0
1		0	0	0
2		0	0	0
3		0	0	0
4		0	0	0
5		0	0	0
6		0	0	0
7		0	0	0
8		0	0	0
9		0	0	0
10		0	0	0
11		0	0	0
12		0	0	0
13		0	0	0
14		0	0	0
15		0	0	0
16		0	0	0
17		0	0	0
18		0	0	0
19		0	0	0
20		0	0	0
21		0	0	0
22		0	0	0
23		0	0	0
24		0	0	0
25		0	0	0
26		0	0	0
27		0	0	0
28		0	0	0
29		0	0	0
30		0	0	0
31		0	0	0

Holiday Time Base Coordination Events

No.	Holiday Types	Hour	Minute	Plan	Offset
0		0	0	0	0
1		0	0	0	0
2		0	0	0	0
3		0	0	0	0
4		0	0	0	0
5		0	0	0	0
6		0	0	0	0
7		0	0	0	0
8		0	0	0	0
9		0	0	0	0
10		0	0	0	0
11		0	0	0	0
12		0	0	0	0
13		0	0	0	0
14		0	0	0	0
15		0	0	0	0
16		0	0	0	0
17		0	0	0	0
18		0	0	0	0
19		0	0	0	0
20		0	0	0	0
21		0	0	0	0
22		0	0	0	0
23		0	0	0	0
24		0	0	0	0
25		0	0	0	0
26		0	0	0	0
27		0	0	0	0
28		0	0	0	0
29		0	0	0	0
30		0	0	0	0
31		0	0	0	0

Holiday Time of Day Function Events

No.	Holiday Types	Hour	Minute	Function	Phases or Fn. 14 Bits
0		0	0	0	
1		0	0	0	
2		0	0	0	
3		0	0	0	
4		0	0	0	
5		0	0	0	
6		0	0	0	
7		0	0	0	
8		0	0	0	
9		0	0	0	
10		0	0	0	
11		0	0	0	
12		0	0	0	
13		0	0	0	
14		0	0	0	
15		0	0	0	

Season Definitions

No.	Start Month	Start Day	End Month	End Day
1	1	1	12	31
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	0	0	0	0
8	0	0	0	0

Startup	
Flash Start	0
All Red Start	0.0
Yellow Start Phases	___4___8
First Green Phases	_2___6__
Startup Vehicle Calls	12_456_8
Startup Ped Calls	___4_6__

Configuration	
Exclusive Phases	_____
Protected/Permissive Phases	_____
Disable Phase Min. Yellow	_____
Free Lag Phases	_2_4_6_8
External Lag Phases	_____
Pedestrian Forceoff Phases	_____
Extra One	1_3_5___

1 = TBC Type 1
2 = (unused)
3 = Adjust Clock for Daylight Saving Time
4 = Terminate Ped. for EV Preempt
5 = QuicComm Extended Status
6 = International Style Pedestrian Change Interval
7 = (unused)
8 = Split Ring Operation

Permitted Phases	12_456_8
Restricted Phases	_____
Disable Overlap Min. Yellow	_____
External Permit 1	_____
External Permit 2	_____
External Permit 3	_____
Extra Two	_____

1 = Adv. Warn. Signs On During Min. Init.
2 = Siemens i2 Communications Protocol
3 = Disable Minimum Walk Check
4 = QuicNet System Communications
5 = Ignore Anti-Backup During Preempt
6 = Bridgeport Naztec TS 2 I/O Map
7 = Allow Remote Preemption Calls
8 = Caltrans Traf. Resp. FM Comm.

Advance Warning Signs	Sign 1	Sign 2
Phase Number	0	0
Time Before Yellow	0.0	0.0

Software Flash	
Flash Entry Phases	_____
Flash Yellow Phases	_____
Flash Yellow Overlaps	_____
Flash Type	0

0 = All On/All Off (1-2-3-4-5-6-7-8, dark)
1 = Main/Side (1-2-5-6, 3-4-7-8)
2 = Odd/Even (1-3-5-7, 2-4-6-8)
3 = Ring Pairs (1-6, 4-7, 2-5, 3-8)

Flashing Yellow Arrow	
FYA Delay	0
FYA During Preempt	N

Front Panel	
Keyboard Beep	N
Backlight Timeout	60

Miscellaneous	
Red Revert	5.0
Log Preemption Events	N
Soft Recall Delay	0.0

Special Event Limited Service Intervals					
SE 1	SE 2	SE 3	SE 4	SE 5	SE 6
0	0	0	0	0	0

Detector Monitoring	
Max On	5
Max Off	15
Chatter	45

Daylight Saving Time	
Start Month	3
Start Week	2
End Month	11
End Week	1

Manual Operation	
Manual Plan	0

1–9 = Coordination Plans
14 = Free
15 = Flash

Manual Offset	0

Bus Priority - Schedule					
Event No.	Day of Week	Hour	Minute	Headway	Direction
1	_____	0	0	0	A
2	_____	0	0	0	A
3	_____	0	0	0	A
4	_____	0	0	0	A
5	_____	0	0	0	A
6	_____	0	0	0	A
7	_____	0	0	0	A
8	_____	0	0	0	A
9	_____	0	0	0	A
10	_____	0	0	0	A
11	_____	0	0	0	A
12	_____	0	0	0	A
13	_____	0	0	0	A
14	_____	0	0	0	A
15	_____	0	0	0	A
16	_____	0	0	0	A

Bus Priority - Timing				
	Direction A	Direction B	Direction C	Direction D
Delay	0	0	0	0
Early Green	0	0	0	0
Green Extension	0	0	0	0
Phases	_____	_____	_____	_____
Non-Priority Phase Maximum Adjustments				
Phase 1	0	0	0	0
Phase 2	0	0	0	0
Phase 3	0	0	0	0
Phase 4	0	0	0	0
Phase 5	0	0	0	0
Phase 6	0	0	0	0
Phase 7	0	0	0	0
Phase 8	0	0	0	0

Old Highway 395 & Pala Rd

Caltrans has requested that the existing signal timing data for the Old Highway 395 & Pala Road intersection to not be duplicated or included in the traffic report.

Appendix F

Intersection LOS Worksheets

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	2	167	563	1
Future Vol, veh/h	0	1	2	167	563	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	2	184	619	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	808	620	620	0	-	0
Stage 1	620	-	-	-	-	-
Stage 2	188	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	350	488	960	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	349	488	960	-	-	-
Mov Cap-2 Maneuver	349	-	-	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	844	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	960	-	488	-	-
HCM Lane V/C Ratio	0.002	-	0.002	-	-
HCM Control Delay (s)	8.8	0	12.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	31	112	0	25	7	147	3	34	529	0
Future Volume (veh/h)	1	1	31	112	0	25	7	147	3	34	529	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	1	35	127	0	28	8	167	3	39	601	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	7	160	392	0	187	15	705	13	64	771	0
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.01	0.38	0.38	0.04	0.41	0.00
Sat Flow, veh/h	18	59	1360	1608	0	1585	1781	1832	33	1781	1870	0
Grp Volume(v), veh/h	37	0	0	127	0	28	8	0	170	39	601	0
Grp Sat Flow(s),veh/h/ln	1437	0	0	1608	0	1585	1781	0	1864	1781	1870	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0	2.2	0.8	9.9	0.0
Cycle Q Clear(g_c), s	2.4	0.0	0.0	2.4	0.0	0.6	0.2	0.0	2.2	0.8	9.9	0.0
Prop In Lane	0.03		0.95	1.00		1.00	1.00		0.02	1.00		0.00
Lane Grp Cap(c), veh/h	273	0	0	392	0	187	15	0	718	64	771	0
V/C Ratio(X)	0.14	0.00	0.00	0.32	0.00	0.15	0.53	0.00	0.24	0.61	0.78	0.00
Avail Cap(c_a), veh/h	2110	0	0	1982	0	2023	1037	0	2281	1037	2288	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.2	0.0	0.0	14.9	0.0	14.1	17.6	0.0	7.4	16.9	9.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.1	10.0	0.0	0.1	3.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.8	0.0	0.2	0.1	0.0	0.6	0.3	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.2	0.0	0.0	15.1	0.0	14.2	27.6	0.0	7.5	20.3	9.7	0.0
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		37			155			178			640	
Approach Delay, s/veh		14.2			14.9			8.4			10.4	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	20.2		8.8	5.6	21.2		8.8				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.8	4.2		4.4	2.2	11.9		4.4				
Green Ext Time (p_c), s	0.0	0.6		0.1	0.0	2.8		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		10.8	
HCM 6th LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	687	200	74	1123	59	201	72	39	131	204	119
Future Volume (veh/h)	58	687	200	74	1123	59	201	72	39	131	204	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	755	220	81	1234	65	221	79	43	144	224	131
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	2241	696	144	1565	1108	222	144	250	893	244	142
Arrive On Green	0.08	0.44	0.44	0.08	0.44	0.44	0.12	0.08	0.08	0.26	0.22	0.22
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	1107	647
Grp Volume(v), veh/h	64	755	220	81	1234	65	221	79	43	144	0	355
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1754
Q Serve(g_s), s	6.7	19.0	17.6	8.5	58.0	0.9	24.2	7.9	2.6	6.3	0.0	38.6
Cycle Q Clear(g_c), s	6.7	19.0	17.6	8.5	58.0	0.9	24.2	7.9	2.6	6.3	0.0	38.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	142	2241	696	144	1565	1108	222	144	250	893	0	386
V/C Ratio(X)	0.45	0.34	0.32	0.56	0.79	0.06	1.00	0.55	0.17	0.16	0.00	0.92
Avail Cap(c_a), veh/h	195	2241	696	231	1565	1108	222	245	336	1139	0	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	85.7	36.0	35.6	86.3	46.8	2.6	85.3	86.7	31.7	55.9	0.0	74.4
Incr Delay (d2), s/veh	2.2	0.4	1.2	3.4	4.1	0.1	59.1	3.2	0.3	0.1	0.0	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	8.2	7.3	4.1	26.8	0.5	14.9	4.0	1.2	2.8	0.0	19.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.9	36.4	36.8	89.6	50.9	2.7	144.4	90.0	32.0	56.0	0.0	88.8
LnGrp LOS	F	D	D	F	D	A	F	F	C	E	A	F
Approach Vol, veh/h		1039			1380			343			499	
Approach Delay, s/veh		39.7			50.9			117.8			79.3	
Approach LOS		D			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	93.1	30.0	50.4	21.2	93.4	57.9	22.5
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	25	53.5	* 24	65.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	10.5	21.0	26.2	40.6	8.7	60.0	8.3	9.9
Green Ext Time (p_c), s	0.1	7.0	0.0	2.3	0.1	0.0	0.5	0.4

Intersection Summary	
HCM 6th Ctrl Delay	58.7
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	4	7	166	560	4
Future Vol, veh/h	3	4	7	166	560	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	4	8	180	609	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	807	611	613	0	-	0
Stage 1	611	-	-	-	-	-
Stage 2	196	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	351	494	966	-	-	-
Stage 1	542	-	-	-	-	-
Stage 2	837	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	348	494	966	-	-	-
Mov Cap-2 Maneuver	348	-	-	-	-	-
Stage 1	537	-	-	-	-	-
Stage 2	837	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	966	-	419	-	-
HCM Lane V/C Ratio	0.008	-	0.018	-	-
HCM Control Delay (s)	8.8	0	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	8	13	160	564	8
Future Vol, veh/h	6	8	13	160	564	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	9	14	174	613	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	820	618	622	0	-	0
Stage 1	618	-	-	-	-	-
Stage 2	202	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	345	489	959	-	-	-
Stage 1	538	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	339	489	959	-	-	-
Mov Cap-2 Maneuver	339	-	-	-	-	-
Stage 1	529	-	-	-	-	-
Stage 2	832	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.1	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	959	-	411	-	-
HCM Lane V/C Ratio	0.015	-	0.037	-	-
HCM Control Delay (s)	8.8	0	14.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	6	739	203	3
Future Vol, veh/h	1	3	6	739	203	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	6	762	209	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	985	211	212	0	-	0
Stage 1	211	-	-	-	-	-
Stage 2	774	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	275	829	1358	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	455	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	273	829	1358	-	-	-
Mov Cap-2 Maneuver	273	-	-	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	455	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1358	-	549	-	-
HCM Lane V/C Ratio	0.005	-	0.008	-	-
HCM Control Delay (s)	7.7	0	11.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	4	123	0	74	15	647	2	14	209	5
Future Volume (veh/h)	2	0	4	123	0	74	15	647	2	14	209	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	0	4	128	0	77	16	674	2	15	218	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	34	120	379	0	191	29	833	2	27	812	19
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.02	0.45	0.45	0.02	0.45	0.45
Sat Flow, veh/h	216	280	993	1621	0	1585	1781	1864	6	1781	1821	42
Grp Volume(v), veh/h	6	0	0	128	0	77	16	0	676	15	0	223
Grp Sat Flow(s),veh/h/ln	1489	0	0	1621	0	1585	1781	0	1869	1781	0	1863
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.8	0.4	0.0	12.3	0.3	0.0	3.0
Cycle Q Clear(g_c), s	2.7	0.0	0.0	2.7	0.0	1.8	0.4	0.0	12.3	0.3	0.0	3.0
Prop In Lane	0.33		0.67	1.00		1.00	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	302	0	0	379	0	191	29	0	835	27	0	830
V/C Ratio(X)	0.02	0.00	0.00	0.34	0.00	0.40	0.55	0.00	0.81	0.55	0.00	0.27
Avail Cap(c_a), veh/h	1839	0	0	1840	0	1831	938	0	2069	938	0	2062
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	0.0	16.4	0.0	16.0	19.2	0.0	9.4	19.2	0.0	6.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.5	5.9	0.0	0.7	6.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.9	0.0	0.6	0.2	0.0	3.5	0.2	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.3	0.0	0.0	16.6	0.0	16.5	25.1	0.0	10.2	25.4	0.0	6.9
LnGrp LOS	B	A	A	B	A	B	C	A	B	C	A	A
Approach Vol, veh/h		6			205			692			238	
Approach Delay, s/veh		15.3			16.5			10.5			8.1	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	24.1		9.3	5.9	24.0		9.3				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.3	14.3		4.7	2.4	5.0		4.7				
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	0.9		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	1032	125	26	831	306	96	161	43	146	58	86
Future Volume (veh/h)	204	1032	125	26	831	306	96	161	43	146	58	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	215	1086	132	27	875	322	101	169	45	154	61	91
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	3158	980	112	2034	1021	120	191	262	248	78	117
Arrive On Green	0.11	0.62	0.62	0.06	0.57	0.57	0.07	0.10	0.10	0.07	0.12	0.12
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	678	1011
Grp Volume(v), veh/h	215	1086	132	27	875	322	101	169	45	154	0	152
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1688
Q Serve(g_s), s	21.3	20.1	6.8	2.8	27.2	6.9	10.9	17.4	3.7	8.4	0.0	17.1
Cycle Q Clear(g_c), s	21.3	20.1	6.8	2.8	27.2	6.9	10.9	17.4	3.7	8.4	0.0	17.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	195	3158	980	112	2034	1021	120	191	262	248	0	195
V/C Ratio(X)	1.10	0.34	0.13	0.24	0.43	0.32	0.84	0.89	0.17	0.62	0.00	0.78
Avail Cap(c_a), veh/h	195	3158	980	231	2034	1021	322	245	307	1139	0	472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	86.8	18.0	15.5	86.9	23.7	4.8	89.9	86.4	44.5	87.9	0.0	83.8
Incr Delay (d2), s/veh	95.4	0.3	0.3	1.1	0.7	0.8	14.5	25.3	0.3	2.5	0.0	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	8.3	2.6	1.3	12.0	3.4	5.6	9.8	1.7	3.9	0.0	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	182.3	18.3	15.8	88.0	24.3	5.6	104.4	111.7	44.8	90.5	0.0	90.3
LnGrp LOS	F	B	B	F	C	A	F	F	D	F	A	F
Approach Vol, veh/h		1433			1224			315			306	
Approach Delay, s/veh		42.7			20.8			99.8			90.4	
Approach LOS		D			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	128.1	18.8	30.1	27.0	119.1	21.5	27.4
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	12.3	53.5	* 35	54.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	14.8	22.1	12.9	19.1	23.3	29.2	10.4	19.4
Green Ext Time (p_c), s	0.0	10.0	0.2	1.0	0.0	8.5	0.5	0.5

Intersection Summary	
HCM 6th Ctrl Delay	44.5
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	6	6	742	202	4
Future Vol, veh/h	4	6	6	742	202	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	7	7	807	220	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1043	222	224	0	-	0
Stage 1	222	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	254	818	1345	-	-	-
Stage 1	815	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	252	818	1345	-	-	-
Mov Cap-2 Maneuver	252	-	-	-	-	-
Stage 1	808	-	-	-	-	-
Stage 2	432	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.6	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1345	-	431	-	-
HCM Lane V/C Ratio	0.005	-	0.025	-	-
HCM Control Delay (s)	7.7	0	13.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	26	27	725	208	18
Future Vol, veh/h	17	26	27	725	208	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	28	29	788	226	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1082	236	246	0	-	0
Stage 1	236	-	-	-	-	-
Stage 2	846	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	241	803	1320	-	-	-
Stage 1	803	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	232	803	1320	-	-	-
Mov Cap-2 Maneuver	232	-	-	-	-	-
Stage 1	772	-	-	-	-	-
Stage 2	421	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1320	-	407	-	-
HCM Lane V/C Ratio	0.022	-	0.115	-	-
HCM Control Delay (s)	7.8	0	15	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	2	170	574	1
Future Vol, veh/h	0	1	2	170	574	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	2	187	631	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	823	632	632	0	-	0
Stage 1	632	-	-	-	-	-
Stage 2	191	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	343	480	951	-	-	-
Stage 1	530	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	342	480	951	-	-	-
Mov Cap-2 Maneuver	342	-	-	-	-	-
Stage 1	529	-	-	-	-	-
Stage 2	841	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	951	-	480	-	-
HCM Lane V/C Ratio	0.002	-	0.002	-	-
HCM Control Delay (s)	8.8	0	12.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	32	114	0	26	7	150	3	35	540	0
Future Volume (veh/h)	1	1	32	114	0	26	7	150	3	35	540	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	1	36	130	0	30	8	170	3	40	614	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	7	167	392	0	191	15	715	13	65	782	0
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.01	0.39	0.39	0.04	0.42	0.00
Sat Flow, veh/h	18	59	1387	1608	0	1585	1781	1832	32	1781	1870	0
Grp Volume(v), veh/h	38	0	0	130	0	30	8	0	173	40	614	0
Grp Sat Flow(s),veh/h/ln	1464	0	0	1608	0	1585	1781	0	1865	1781	1870	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0	2.3	0.8	10.3	0.0
Cycle Q Clear(g_c), s	2.5	0.0	0.0	2.5	0.0	0.6	0.2	0.0	2.3	0.8	10.3	0.0
Prop In Lane	0.03		0.95	1.00		1.00	1.00		0.02	1.00		0.00
Lane Grp Cap(c), veh/h	278	0	0	392	0	191	15	0	728	65	782	0
V/C Ratio(X)	0.14	0.00	0.00	0.33	0.00	0.16	0.53	0.00	0.24	0.61	0.78	0.00
Avail Cap(c_a), veh/h	2075	0	0	1946	0	1987	1018	0	2239	1018	2246	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.4	0.0	0.0	15.1	0.0	14.3	17.9	0.0	7.4	17.2	9.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.1	10.1	0.0	0.1	3.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.9	0.0	0.2	0.1	0.0	0.6	0.3	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.4	0.0	0.0	15.3	0.0	14.4	27.9	0.0	7.5	20.6	9.8	0.0
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		38			160			181			654	
Approach Delay, s/veh		14.4			15.1			8.4			10.5	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	20.6		9.0	5.6	21.6		9.0				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.8	4.3		4.5	2.2	12.3		4.5				
Green Ext Time (p_c), s	0.0	0.6		0.1	0.0	2.9		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		11.0	
HCM 6th LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	701	204	75	1145	60	205	73	40	134	208	121
Future Volume (veh/h)	59	701	204	75	1145	60	205	73	40	134	208	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	770	224	82	1258	66	225	80	44	147	229	133
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	2167	673	144	1513	1108	244	144	250	943	246	143
Arrive On Green	0.08	0.42	0.42	0.08	0.43	0.43	0.14	0.08	0.08	0.27	0.22	0.22
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	1110	645
Grp Volume(v), veh/h	65	770	224	82	1258	66	225	80	44	147	0	362
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1754
Q Serve(g_s), s	6.8	19.9	18.5	8.6	61.4	0.9	24.3	8.0	2.6	6.3	0.0	39.4
Cycle Q Clear(g_c), s	6.8	19.9	18.5	8.6	61.4	0.9	24.3	8.0	2.6	6.3	0.0	39.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	142	2167	673	144	1513	1108	244	144	250	943	0	389
V/C Ratio(X)	0.46	0.36	0.33	0.57	0.83	0.06	0.92	0.56	0.18	0.16	0.00	0.93
Avail Cap(c_a), veh/h	195	2167	673	231	1513	1108	322	245	336	1139	0	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	85.7	38.0	37.6	86.3	49.8	2.6	83.1	86.8	31.2	53.8	0.0	74.4
Incr Delay (d2), s/veh	2.3	0.5	1.3	3.5	5.5	0.1	26.1	3.3	0.3	0.1	0.0	21.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	8.6	7.6	4.2	28.6	0.5	13.1	4.1	1.2	2.8	0.0	20.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.0	38.5	39.0	89.8	55.2	2.7	109.2	90.1	31.5	53.9	0.0	95.8
LnGrp LOS	F	D	D	F	E	A	F	F	C	D	A	F
Approach Vol, veh/h		1059			1406			349			509	
Approach Delay, s/veh		41.6			54.8			95.0			83.7	
Approach LOS		D			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	90.3	32.4	50.8	21.2	90.5	60.7	22.5
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	25	53.5	* 35	54.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	10.6	21.9	26.3	41.4	8.8	63.4	8.3	10.0
Green Ext Time (p_c), s	0.1	7.1	0.4	1.8	0.1	0.0	0.5	0.4

Intersection Summary	
HCM 6th Ctrl Delay	59.2
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	4	7	169	571	4
Future Vol, veh/h	3	4	7	169	571	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	4	8	184	621	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	823	623	625	0	-	0
Stage 1	623	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	343	486	956	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	340	486	956	-	-	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	530	-	-	-	-	-
Stage 2	834	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.9	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	956	-	410	-	-
HCM Lane V/C Ratio	0.008	-	0.019	-	-
HCM Control Delay (s)	8.8	0	13.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	8	13	163	575	8
Future Vol, veh/h	6	8	13	163	575	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	9	14	177	625	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	835	630	634	0	-	0
Stage 1	630	-	-	-	-	-
Stage 2	205	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	338	482	949	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	333	482	949	-	-	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	829	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.3	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	949	-	404	-	-
HCM Lane V/C Ratio	0.015	-	0.038	-	-
HCM Control Delay (s)	8.9	0	14.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	6	754	207	3
Future Vol, veh/h	1	3	6	754	207	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	6	777	213	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1004	215	216	0	-	0
Stage 1	215	-	-	-	-	-
Stage 2	789	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	268	825	1354	-	-	-
Stage 1	821	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	266	825	1354	-	-	-
Mov Cap-2 Maneuver	266	-	-	-	-	-
Stage 1	814	-	-	-	-	-
Stage 2	448	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1354	-	541	-	-
HCM Lane V/C Ratio	0.005	-	0.008	-	-
HCM Control Delay (s)	7.7	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	4	125	0	75	15	660	2	14	213	5
Future Volume (veh/h)	2	0	4	125	0	75	15	660	2	14	213	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	0	4	130	0	78	16	688	2	15	222	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	35	122	377	0	193	29	845	2	27	824	19
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.02	0.45	0.45	0.02	0.45	0.45
Sat Flow, veh/h	214	286	1000	1622	0	1585	1781	1864	5	1781	1822	41
Grp Volume(v), veh/h	6	0	0	130	0	78	16	0	690	15	0	227
Grp Sat Flow(s),veh/h/ln	1500	0	0	1622	0	1585	1781	0	1869	1781	0	1863
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.8	0.4	0.0	12.8	0.3	0.0	3.0
Cycle Q Clear(g_c), s	2.8	0.0	0.0	2.8	0.0	1.8	0.4	0.0	12.8	0.3	0.0	3.0
Prop In Lane	0.33		0.67	1.00		1.00	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	303	0	0	377	0	193	29	0	847	27	0	842
V/C Ratio(X)	0.02	0.00	0.00	0.34	0.00	0.40	0.55	0.00	0.81	0.55	0.00	0.27
Avail Cap(c_a), veh/h	1807	0	0	1808	0	1798	921	0	2032	921	0	2025
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	0.0	16.7	0.0	16.2	19.5	0.0	9.5	19.6	0.0	6.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.5	5.9	0.0	0.7	6.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.0	0.0	0.6	0.2	0.0	3.7	0.2	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	0.0	0.0	16.9	0.0	16.7	25.5	0.0	10.2	25.8	0.0	6.9
LnGrp LOS	B	A	A	B	A	B	C	A	B	C	A	A
Approach Vol, veh/h		6			208			706			242	
Approach Delay, s/veh		15.5			16.8			10.6			8.1	
Approach LOS		B			B			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	24.6		9.5	6.0	24.6		9.5				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.3	14.8		4.8	2.4	5.0		4.8				
Green Ext Time (p_c), s	0.0	3.3		0.0	0.0	0.9		0.6				
Intersection Summary												
HCM 6th Ctrl Delay			11.2									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	1053	128	27	848	312	98	164	44	149	59	88
Future Volume (veh/h)	208	1053	128	27	848	312	98	164	44	149	59	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	219	1108	135	28	893	328	103	173	46	157	62	93
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	3143	976	114	2027	1018	122	195	266	248	79	118
Arrive On Green	0.11	0.62	0.62	0.06	0.57	0.57	0.07	0.10	0.10	0.07	0.12	0.12
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	675	1013
Grp Volume(v), veh/h	219	1108	135	28	893	328	103	173	46	157	0	155
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1688
Q Serve(g_s), s	21.3	20.8	7.0	2.9	28.1	7.0	11.1	17.8	3.8	8.6	0.0	17.4
Cycle Q Clear(g_c), s	21.3	20.8	7.0	2.9	28.1	7.0	11.1	17.8	3.8	8.6	0.0	17.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	195	3143	976	114	2027	1018	122	195	266	248	0	197
V/C Ratio(X)	1.13	0.35	0.14	0.25	0.44	0.32	0.85	0.89	0.17	0.63	0.00	0.79
Avail Cap(c_a), veh/h	195	3143	976	231	2027	1018	322	245	309	1139	0	472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	86.8	18.4	15.8	86.8	24.0	4.9	89.8	86.2	44.2	88.0	0.0	83.8
Incr Delay (d2), s/veh	102.3	0.3	0.3	1.1	0.7	0.8	14.5	26.3	0.3	2.7	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.4	8.6	2.7	1.4	12.4	3.5	5.7	10.1	1.7	4.0	0.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	189.1	18.7	16.1	87.9	24.7	5.7	104.3	112.5	44.5	90.7	0.0	90.6
LnGrp LOS	F	B	B	F	C	A	F	F	D	F	A	F
Approach Vol, veh/h		1462			1249			322			312	
Approach Delay, s/veh		44.0			21.2			100.2			90.6	
Approach LOS		D			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	38.2	127.5	19.0	30.3	27.0	118.7	21.5	27.8
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	25	53.5	* 35	54.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	14.9	22.8	13.1	19.4	23.3	30.1	10.6	19.8
Green Ext Time (p_c), s	0.0	10.2	0.2	1.0	0.0	8.7	0.6	0.5

Intersection Summary	
HCM 6th Ctrl Delay	45.2
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	6	6	757	206	4
Future Vol, veh/h	4	6	6	757	206	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	7	7	823	224	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1063	226	228	0	-	0
Stage 1	226	-	-	-	-	-
Stage 2	837	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	247	813	1340	-	-	-
Stage 1	812	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	245	813	1340	-	-	-
Mov Cap-2 Maneuver	245	-	-	-	-	-
Stage 1	804	-	-	-	-	-
Stage 2	425	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1340	-	422	-	-
HCM Lane V/C Ratio	0.005	-	0.026	-	-
HCM Control Delay (s)	7.7	0	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	27	28	740	212	18
Future Vol, veh/h	17	27	28	740	212	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	29	30	804	230	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1104	240	250	0	-	0
Stage 1	240	-	-	-	-	-
Stage 2	864	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	234	799	1316	-	-	-
Stage 1	800	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	224	799	1316	-	-	-
Mov Cap-2 Maneuver	224	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	413	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.2	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1316	-	401	-	-
HCM Lane V/C Ratio	0.023	-	0.119	-	-
HCM Control Delay (s)	7.8	0	15.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	2	182	587	1
Future Vol, veh/h	0	1	2	182	587	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	2	200	645	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	850	646	646	0	-	0
Stage 1	646	-	-	-	-	-
Stage 2	204	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	331	472	939	-	-	-
Stage 1	522	-	-	-	-	-
Stage 2	830	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	330	472	939	-	-	-
Mov Cap-2 Maneuver	330	-	-	-	-	-
Stage 1	521	-	-	-	-	-
Stage 2	830	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	939	-	472	-	-
HCM Lane V/C Ratio	0.002	-	0.002	-	-
HCM Control Delay (s)	8.8	0	12.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	32	114	0	26	7	170	3	35	558	0
Future Volume (veh/h)	1	1	32	114	0	26	7	170	3	35	558	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	1	36	130	0	30	8	193	3	40	634	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	7	167	388	0	190	15	735	11	65	800	0
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.01	0.40	0.40	0.04	0.43	0.00
Sat Flow, veh/h	18	60	1394	1609	0	1585	1781	1837	29	1781	1870	0
Grp Volume(v), veh/h	38	0	0	130	0	30	8	0	196	40	634	0
Grp Sat Flow(s),veh/h/ln	1472	0	0	1609	0	1585	1781	0	1865	1781	1870	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0	2.6	0.8	10.8	0.0
Cycle Q Clear(g_c), s	2.6	0.0	0.0	2.6	0.0	0.6	0.2	0.0	2.6	0.8	10.8	0.0
Prop In Lane	0.03		0.95	1.00		1.00	1.00		0.02	1.00		0.00
Lane Grp Cap(c), veh/h	277	0	0	388	0	190	15	0	746	65	800	0
V/C Ratio(X)	0.14	0.00	0.00	0.34	0.00	0.16	0.53	0.00	0.26	0.62	0.79	0.00
Avail Cap(c_a), veh/h	2033	0	0	1907	0	1946	997	0	2195	997	2201	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.7	0.0	0.0	15.4	0.0	14.6	18.3	0.0	7.4	17.6	9.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.1	10.1	0.0	0.1	3.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.9	0.0	0.2	0.1	0.0	0.7	0.3	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	0.0	0.0	15.6	0.0	14.7	28.3	0.0	7.5	21.1	9.8	0.0
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		38			160			204			674	
Approach Delay, s/veh		14.7			15.5			8.3			10.5	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	21.3		9.0	5.6	22.3		9.0				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.8	4.6		4.6	2.2	12.8		4.6				
Green Ext Time (p_c), s	0.0	0.7		0.1	0.0	3.0		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		11.0
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	701	204	75	1145	68	205	76	40	142	211	129
Future Volume (veh/h)	67	701	204	75	1145	68	205	76	40	142	211	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	770	224	82	1258	75	225	84	44	156	232	142
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	2131	662	144	1485	1106	244	144	250	968	249	152
Arrive On Green	0.08	0.42	0.42	0.08	0.42	0.42	0.14	0.08	0.08	0.28	0.23	0.23
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	1086	665
Grp Volume(v), veh/h	74	770	224	82	1258	75	225	84	44	156	0	374
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1751
Q Serve(g_s), s	7.8	20.2	18.7	8.6	62.2	1.1	24.3	8.5	2.5	6.6	0.0	40.8
Cycle Q Clear(g_c), s	7.8	20.2	18.7	8.6	62.2	1.1	24.3	8.5	2.5	6.6	0.0	40.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	144	2131	662	144	1485	1106	244	144	250	968	0	401
V/C Ratio(X)	0.52	0.36	0.34	0.57	0.85	0.07	0.92	0.58	0.18	0.16	0.00	0.93
Avail Cap(c_a), veh/h	195	2131	662	231	1485	1106	322	245	336	1139	0	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	86.0	39.0	38.5	86.3	51.1	2.6	83.1	87.0	31.0	52.9	0.0	73.7
Incr Delay (d2), s/veh	2.8	0.5	1.4	3.5	6.2	0.1	26.1	3.7	0.3	0.1	0.0	22.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	8.8	7.7	4.2	29.2	0.6	13.1	4.3	1.2	3.0	0.0	21.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.8	39.4	39.9	89.8	57.3	2.7	109.2	90.7	31.3	53.0	0.0	96.2
LnGrp LOS	F	D	D	F	E	A	F	F	C	D	A	F
Approach Vol, veh/h		1068			1415			353			530	
Approach Delay, s/veh		43.0			56.3			95.1			83.5	
Approach LOS		D			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	88.9	32.4	52.2	21.4	89.0	62.1	22.5
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	25	53.5	* 35	54.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	10.6	22.2	26.3	42.8	9.8	64.2	8.6	10.5
Green Ext Time (p_c), s	0.1	7.1	0.4	1.8	0.1	0.0	0.6	0.4

Intersection Summary	
HCM 6th Ctrl Delay	60.4
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	19	23	177	581	20
Future Vol, veh/h	18	19	23	177	581	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	21	25	192	632	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	885	643	654	0	-	0
Stage 1	643	-	-	-	-	-
Stage 2	242	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	315	473	933	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	798	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	306	473	933	-	-	-
Mov Cap-2 Maneuver	306	-	-	-	-	-
Stage 1	507	-	-	-	-	-
Stage 2	798	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.8	1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	933	-	374	-	-
HCM Lane V/C Ratio	0.027	-	0.108	-	-
HCM Control Delay (s)	9	0	15.8	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	27	34	43	166	577	31
Future Vol, veh/h	27	34	43	166	577	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	37	47	180	627	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	918	644	661	0	-	0
Stage 1	644	-	-	-	-	-
Stage 2	274	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	302	473	927	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	285	473	927	-	-	-
Mov Cap-2 Maneuver	285	-	-	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	772	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17	1.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	927	-	366	-	-
HCM Lane V/C Ratio	0.05	-	0.181	-	-
HCM Control Delay (s)	9.1	0	17	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.7	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	6	773	226	3
Future Vol, veh/h	1	3	6	773	226	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	6	797	233	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1044	235	236	0	-	0
Stage 1	235	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	254	804	1331	-	-	-
Stage 1	804	-	-	-	-	-
Stage 2	438	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	252	804	1331	-	-	-
Mov Cap-2 Maneuver	252	-	-	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	438	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1331	-	520	-	-
HCM Lane V/C Ratio	0.005	-	0.008	-	-
HCM Control Delay (s)	7.7	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	4	125	0	75	15	689	2	14	242	5
Future Volume (veh/h)	2	0	4	125	0	75	15	689	2	14	242	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	0	4	130	0	78	16	718	2	15	252	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	34	120	370	0	192	29	871	2	27	852	17
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.02	0.47	0.47	0.02	0.47	0.47
Sat Flow, veh/h	212	284	991	1624	0	1585	1781	1864	5	1781	1828	36
Grp Volume(v), veh/h	6	0	0	130	0	78	16	0	720	15	0	257
Grp Sat Flow(s),veh/h/ln	1486	0	0	1624	0	1585	1781	0	1869	1781	0	1864
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.9	0.4	0.0	13.8	0.3	0.0	3.5
Cycle Q Clear(g_c), s	2.9	0.0	0.0	2.9	0.0	1.9	0.4	0.0	13.8	0.3	0.0	3.5
Prop In Lane	0.33		0.67	1.00		1.00	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	296	0	0	370	0	192	29	0	874	27	0	869
V/C Ratio(X)	0.02	0.00	0.00	0.35	0.00	0.41	0.55	0.00	0.82	0.55	0.00	0.30
Avail Cap(c_a), veh/h	1747	0	0	1750	0	1740	892	0	1966	892	0	1960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.0	0.0	0.0	17.2	0.0	16.8	20.2	0.0	9.5	20.2	0.0	6.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.5	6.0	0.0	0.8	6.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.0	0.0	0.6	0.2	0.0	4.0	0.2	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	0.0	0.0	17.5	0.0	17.3	26.2	0.0	10.3	26.5	0.0	6.9
LnGrp LOS	B	A	A	B	A	B	C	A	B	C	A	A
Approach Vol, veh/h		6			208			736			272	
Approach Delay, s/veh		16.1			17.4			10.7			8.0	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	25.8		9.6	6.0	25.8		9.6				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.3	15.8		4.9	2.4	5.5		4.9				
Green Ext Time (p_c), s	0.0	3.5		0.0	0.0	1.0		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		11.2	
HCM 6th LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1053	128	27	848	324	98	169	44	161	64	100
Future Volume (veh/h)	220	1053	128	27	848	324	98	169	44	161	64	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	1108	135	28	893	341	103	178	46	169	67	105
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	3130	972	114	2018	1014	122	199	270	248	78	123
Arrive On Green	0.11	0.61	0.61	0.06	0.57	0.57	0.07	0.11	0.11	0.07	0.12	0.12
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	656	1029
Grp Volume(v), veh/h	232	1108	135	28	893	341	103	178	46	169	0	172
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1685
Q Serve(g_s), s	21.3	20.9	7.0	2.9	28.3	7.4	11.1	18.3	3.8	9.3	0.0	19.5
Cycle Q Clear(g_c), s	21.3	20.9	7.0	2.9	28.3	7.4	11.1	18.3	3.8	9.3	0.0	19.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	195	3130	972	114	2018	1014	122	199	270	248	0	201
V/C Ratio(X)	1.19	0.35	0.14	0.25	0.44	0.34	0.85	0.89	0.17	0.68	0.00	0.86
Avail Cap(c_a), veh/h	195	3130	972	231	2018	1014	322	245	309	1139	0	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	86.8	18.7	16.0	86.8	24.3	5.0	89.8	86.0	43.8	88.3	0.0	84.2
Incr Delay (d2), s/veh	126.0	0.3	0.3	1.1	0.7	0.9	14.5	27.5	0.3	3.3	0.0	10.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.7	8.6	2.7	1.4	12.4	3.7	5.7	10.5	1.7	4.3	0.0	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	212.8	19.0	16.3	87.9	25.0	5.9	104.3	113.5	44.1	91.6	0.0	94.2
LnGrp LOS	F	B	B	F	C	A	F	F	D	F	A	F
Approach Vol, veh/h		1475			1262			327			341	
Approach Delay, s/veh		49.2			21.3			100.8			92.9	
Approach LOS		D			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	127.0	19.0	30.7	27.0	118.2	21.5	28.3
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	12.5	53.5	* 35	54.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	14.9	22.9	13.1	21.5	23.3	30.3	11.3	20.3
Green Ext Time (p_c), s	0.0	10.2	0.2	1.1	0.0	8.7	0.6	0.5

Intersection Summary	
HCM 6th Ctrl Delay	48.2
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	25	26	770	220	24
Future Vol, veh/h	23	25	26	770	220	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	27	28	837	239	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1145	252	265	0	-	0
Stage 1	252	-	-	-	-	-
Stage 2	893	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	221	787	1299	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	400	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	212	787	1299	-	-	-
Mov Cap-2 Maneuver	212	-	-	-	-	-
Stage 1	758	-	-	-	-	-
Stage 2	400	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.4	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1299	-	342	-	-
HCM Lane V/C Ratio	0.022	-	0.153	-	-
HCM Control Delay (s)	7.8	0	17.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	45	66	68	745	216	47
Future Vol, veh/h	45	66	68	745	216	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	72	74	810	235	51

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1219	261	286	0	-	0
Stage 1	261	-	-	-	-	-
Stage 2	958	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	199	778	1276	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	373	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	178	778	1276	-	-	-
Mov Cap-2 Maneuver	178	-	-	-	-	-
Stage 1	701	-	-	-	-	-
Stage 2	373	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.1	0.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1276	-	329	-	-
HCM Lane V/C Ratio	0.058	-	0.367	-	-
HCM Control Delay (s)	8	0	22.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1.6	-	-

- **ATTACHMENT C: Year 2050 Analysis**

Darnell & ASSOCIATES
TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

October 28, 2021

Mr. Rafid Hamika
370 Bridgeton Cross Court
Las Vegas, NV. 89148
C/O: CCI

D&A Ref. No: 191201

Subject: Updated Year 2050 Traffic Operations Analysis for Old Highway 395 Retail Center in Fallbrook, California. PDS 2019-049, APN 125-050-54-00

Dear Mr. Hamika

In accordance with your authorization, Darnell & Associates (D&A) has analyzed the existing and future 2050 daily volumes for Old Highway 395 adjacent to the project site between Pala Mesa Road to the north and SR-76 to the south to determine the recommended channelization on Old Highway 395 adjacent to the project site. **Figure 1** is a vicinity map showing the project location and **Figure 2** presents the preliminary site plan. The report has been updated to expand Table 3 and clarify the recommended classification of Old Highway 395 and report to the County Traffic Engineer Comments dated June 2, 2021.

The purpose of our analysis is to review the existing traffic volumes on Old Highway 395 from Pala Mesa Road to SR-76, Year 2050 Traffic volumes ad the addition of project traffic to Old Highway 395. The project proposes to add two (2) 6,000 square foot retail buildings and a 3,250 square foot convenience store with 6 fueling positions to provide 12 pumps to the existing project site with a 9,075 square foot retail building and existing Nessy Burger fast food building.

The first step in the analysis, we collected existing daily traffic volumes and AM/PM peak hour traffic volumes on Old Highway 395. **Figure 3** presents the existing traffic volumes to be analyzed. The Future 2050 traffic forecasts for the area were obtained from the County of San Diego SANDAG General Plan 2050 Traffic Forecasts. The Year 2050 daily traffic forecasts are presented on **Figure 4**. The classification of the roadways is based on the County Mobility Element Classification for the Fallbrook Community Plan and is presented on **Figure 5**.

Trip generation for the proposed project was then estimated and assigned to Old Highway 395 from Pala Mesa Road to the to the north of the project to SR-78 to the south of the project. Table 1 presents the project Trip Generation. Review of Table 1 shows the project is estimated to generate 1,310 daily, 63 AM and 96 PM peak hour trips with pass-by reductions.

Project traffic was then assigned to Old Highway 395, based on sixty (60%) percent of the project traffic oriented to the south and forty (40%) percent of traffic to the north. **Figure 6** presents the project trip distribution and **Figure 7** presents the project traffic and **Figure 8** presents the existing roadway geometrics. Project traffic shown on **Figure 7** was then added to existing volumes shown on **Figure 3**. The results are presented on **Figure 9**.

To determine the roadway and intersection geometrics for Old Highway 395, we analyzed the daily traffic volumes and peak hourly volumes shown on **Figure 9** and the Future Year 2050 volumes presented on **Figure 4**, based on the existing roadway geometrics. Table 2 presents the results of the analysis.

Reviews of Table 2 shows the Old Highway 395 is operating at LOS D south of Via Alamira and LOS C north of Via Alamira. With the addition of project traffic Old Highway 395 south of Via Alamira with continue to operate at LOS D and LOS C adjacent to the project and north of the project.

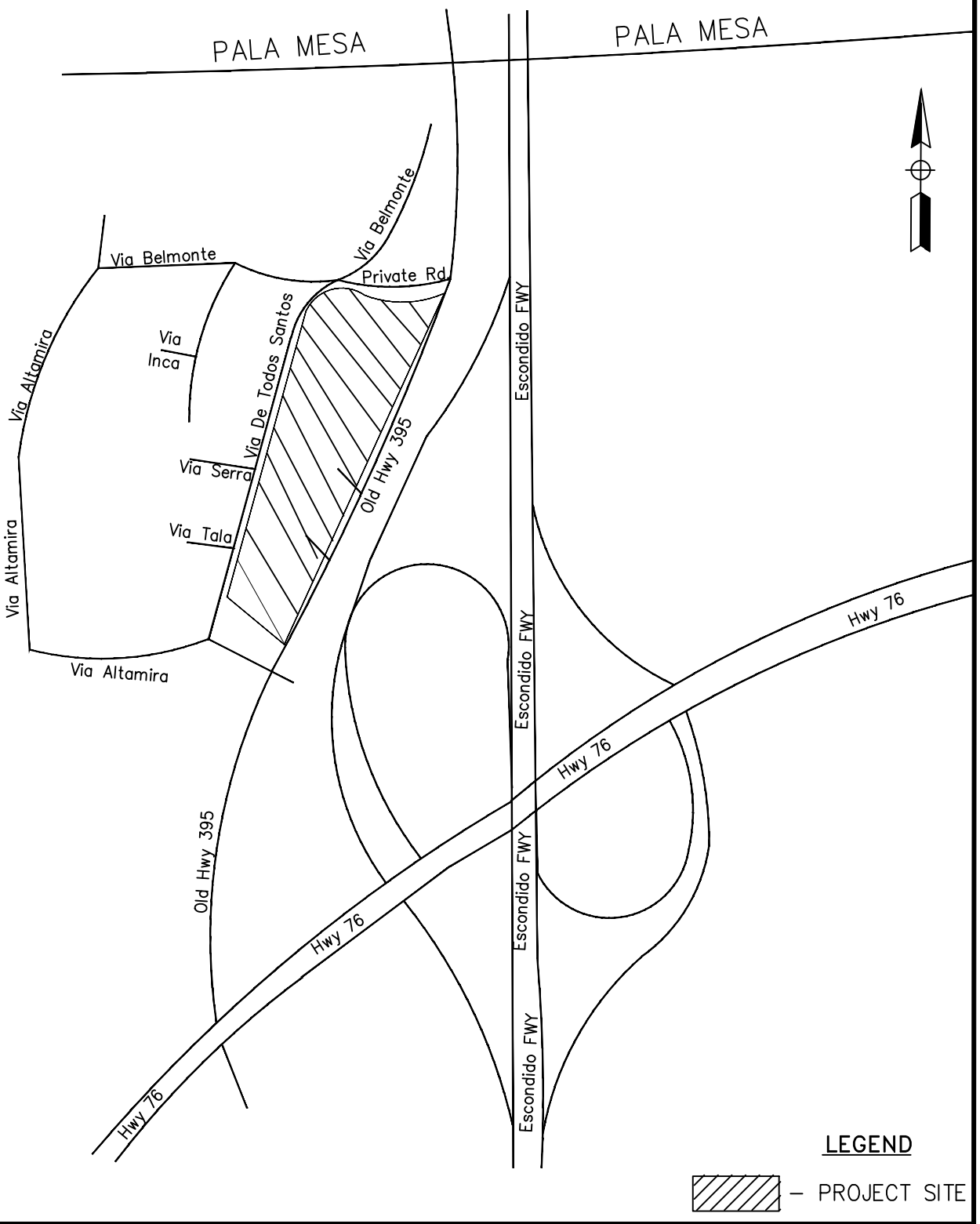


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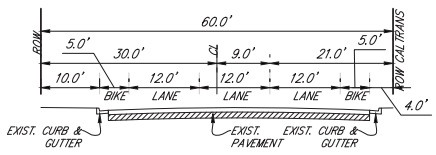
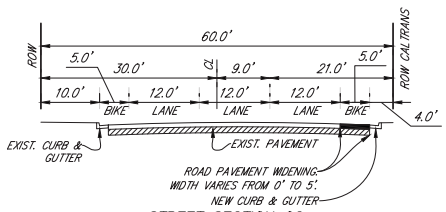
FIGURE 1
VICINITY MAP

LEGEND

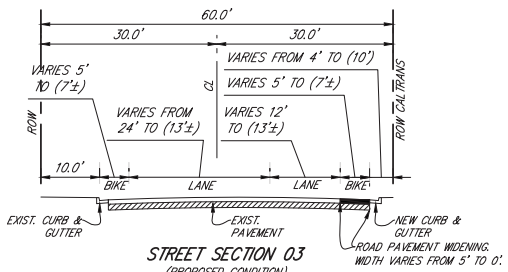
BOUNDARY LINE
RIGHT OF WAY LINE — RW
PARCEL LOT LINE — PL
PCC CURB
PCC CURB & GUTTER
SEWER LINE — S
WATER LINE — W
FIRE LINE — F
FIRE HYDRANT
BLDG FIRE SERVICE LATERAL — F
WATER SERVICE LATERAL — W
SEWER SERVICE LATERAL — S
DOUBLE DETECTOR CHECK VALVE
STORM DRAIN INLETS / CLEANOUTS
HEADWALL
HEADWALL
EXIST. TOPO MAJOR CONTOUR — 1000
EXIST. TOPO MINOR CONTOUR
PROPOSED TOPO MAJOR CONTOUR — 1000
PROPOSED TOPO MINOR CONTOUR



STREET SECTION 01
(EXISTING CONDITION)
NOT TO SCALE



STREET SECTION 02
(PROPOSED CONDITION)
NOT TO SCALE



STREET SECTION 03
(PROPOSED CONDITION)
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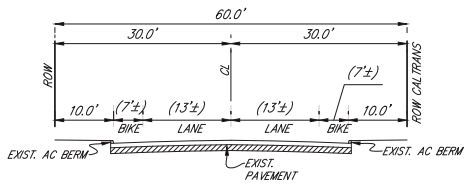

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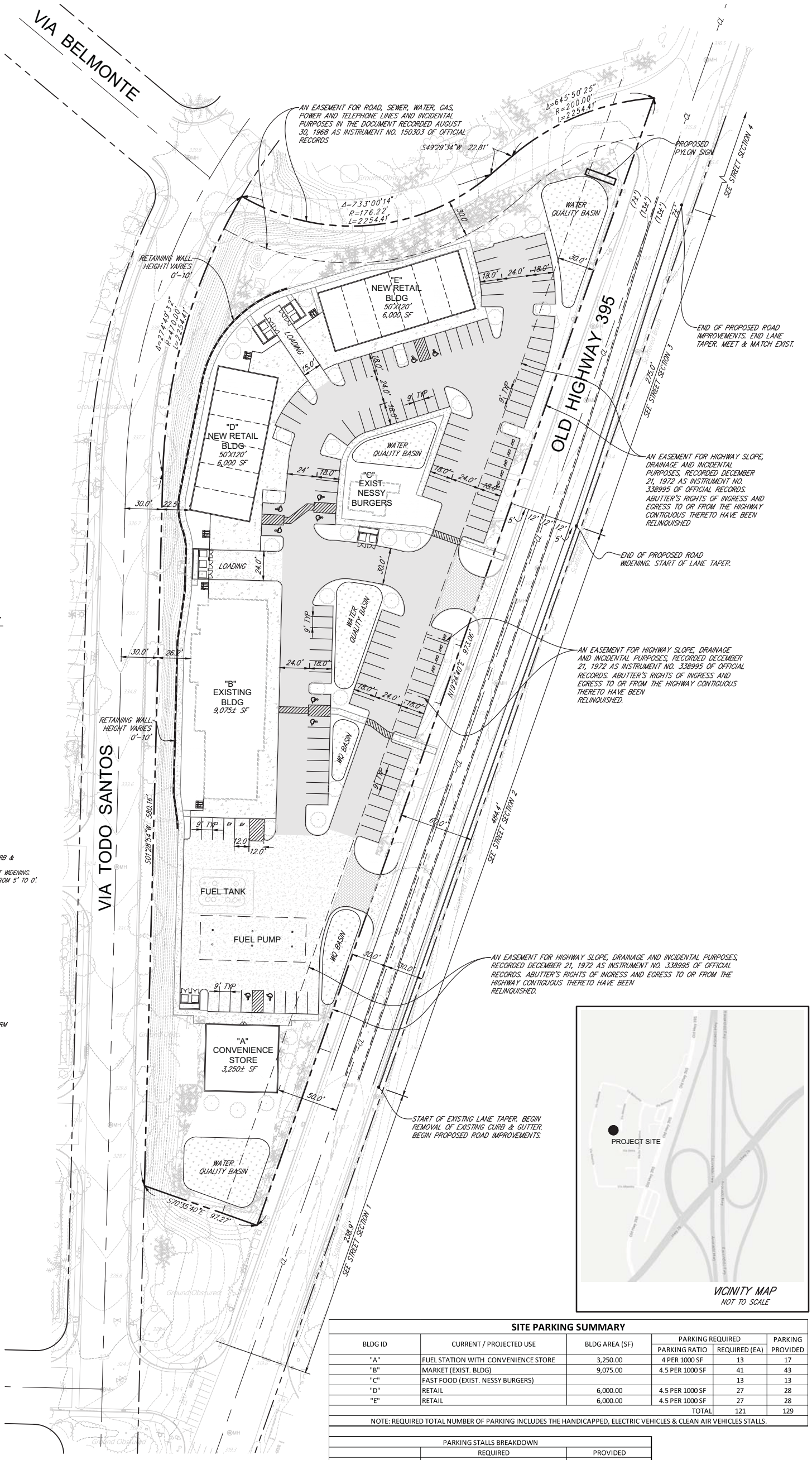


VICINITY MAP
NOT TO SCALE

SCALE 1":40'
0 40 80 Feet

OWNER
RAYES LLC
7060 CAMINITO MANRESA, LA JOLLA CA 92037

LEGAL DESCRIPTION
ALL THAT PORTION OF TRACT "A" OF MONSERATE RANCHO, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF ON FILE IN THE OFFICE OF COUNTY RECORDING TO MAP THEREOF ON FILE IN THE OFFICE OF COUNTY RECORDER OF SAN DIEGO COUNTY, IN BOOK 1, PAGE 108 OF PATENTS.

ACREAGE
GROSS AREA – 4.37 AC

PROPERTY ADDRESS
3233 OLD HIGHWAY 395
FALLBROOK, CA 92028

ASSESORS PARCEL NUMBER
125-050-54-00

GENERAL PLAN DESIGNATION
GENERAL COMMERCIAL

SETBACKS
FRONT = 50' FROM CENTERLINE
SIDE YARD EXTERIOR = 35' FROM THE CENTERLINE
SIDE YARD INTERIOR = 0' FROM THE LOTLINE (h)
REAR YARD = 15' FROM THE LOTLINE (m)

AGENCIES
FIRE DISTRICT = NORTH COUNTY FIRE PROTECTION DISTRICT
ELEMENTARY SCHOOL = GEN. ELEM. BONSALL UNION
HIGH SCHOOL DISTRICT = HIGH FALLBROOK UNION
WATER DISTRICT = RAINBOW MUNICIPAL WATER DISTRICT
SANITATION DISTRICT = RAINBOW MUNICIPAL WATER DISTRICT

SITE PARKING SUMMARY

BLDG ID	CURRENT / PROJECTED USE	BLDG AREA (SF)	PARKING REQUIRED		PARKING PROVIDED
			PARKING RATIO	REQUIRED (EA)	
"A"	FUEL STATION WITH CONVENIENCE STORE	3,250.00	4 PER 1000 SF	13	17
"B"	MARKET (EXIST. BLDG)	9,075.00	4.5 PER 1000 SF	41	43
"C"	FAST FOOD (EXIST. NESSY BURGERS)			13	13
"D"	RETAIL	6,000.00	4.5 PER 1000 SF	27	28
"E"	RETAIL	6,000.00	4.5 PER 1000 SF	27	28
			TOTAL	121	129
NOTE: REQUIRED TOTAL NUMBER OF PARKING INCLUDES THE HANDICAPPED, ELECTRIC VEHICLES & CLEAN AIR VEHICLES STALLS.					

PARKING STALLS BREAKDOWN		
	REQUIRED	PROVIDED
9'X18' STALLS	105	108
HANDICAPPED STALLS	5	10
ELECTRIC VEHICLE STALLS	2	2
CLEAN AIR VEHICLE STALLS	9	9
TOTAL	121	129

EXCEL ENGINEERING
LAND PLANNING • ENGINEERING • GIS • SURVEYING
440 STATE PLACE, ESCONDIDO, CA 92029
PH (760)745-8118 FX (760)745-8134

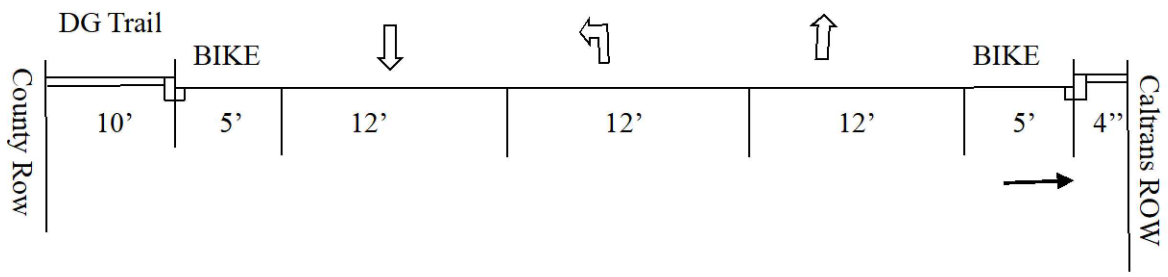
OLD HIGHWAY 395 RETAIL CENTER SITE CONCEPT

DATE JULY 11, 2019

SHEET 1 OF 1

V:\19\19025\Engineering\Concepts\20.03.00 concept\CONCEPT\19025 SITE CONCEPT 01 EXHIBIT.dwg 3/6/2020 2:31 PM ORIGINAL PLOT SIZE: ----

FIGURE 2 - PROPOSED PROJECT SITE PLAN



Old Highway 395

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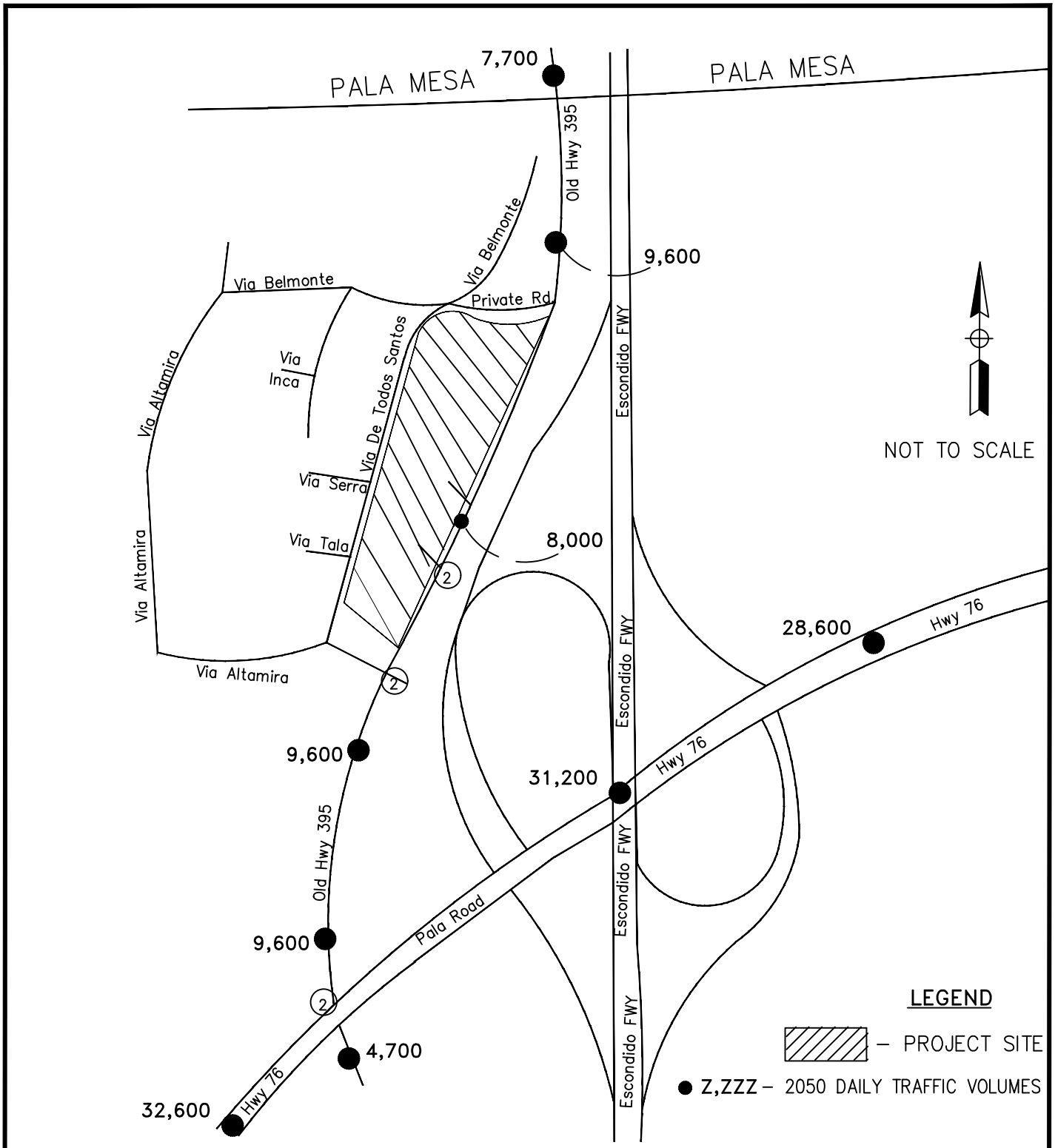
FIGURE 3
RECOMMENDED GEOMETRICS
OLD HIGHWAY 395 VIA ALTIMIRA TO VIA BELMONTE (PRIVATE ROAD)



SOURCE: County of San Diego SANDAG Series 12 General Plan Update 2050 Base Forecast

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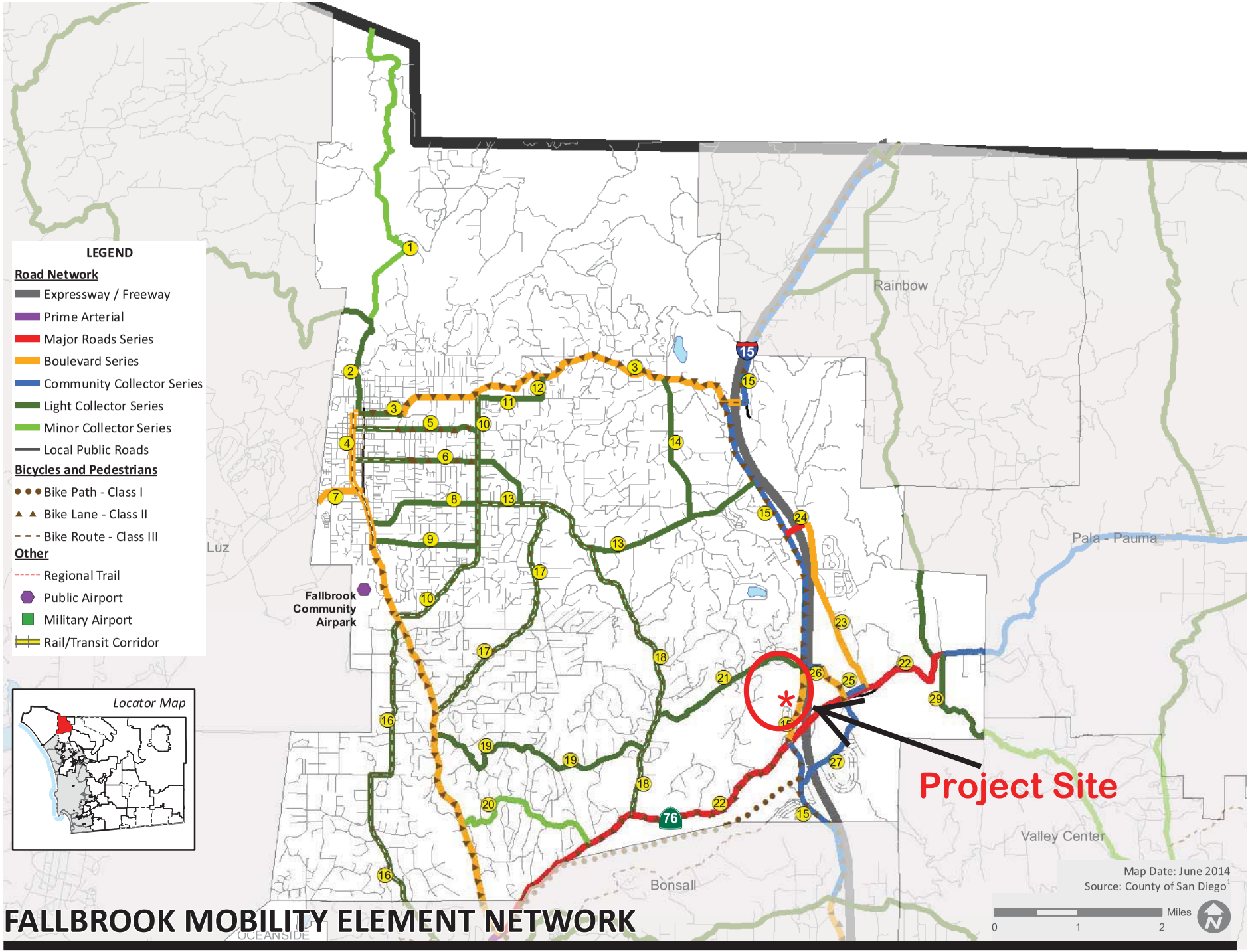
FIGURE 4
BUILD–OUT YEAR 2050 DAILY TRAFFIC VOLUMES

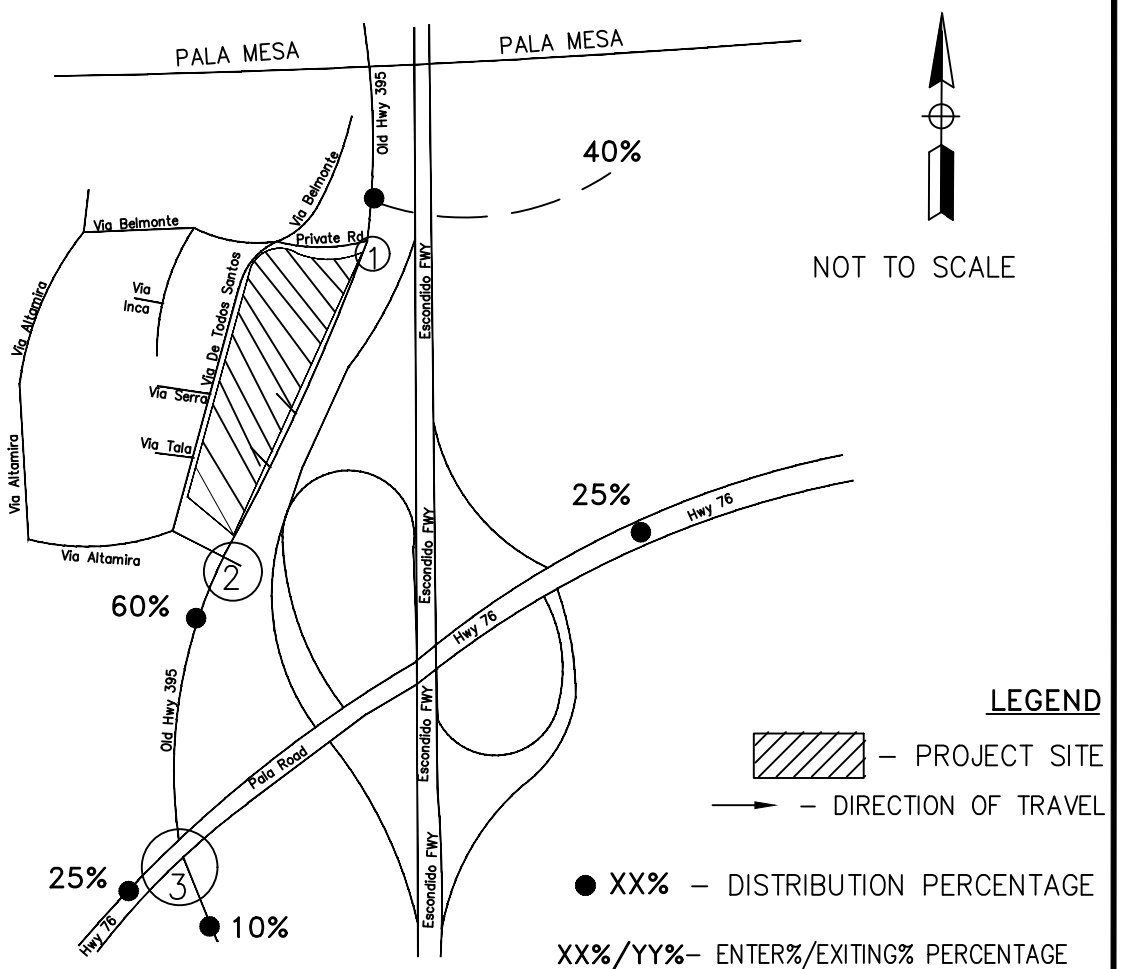


FALLBROOK MOBILITY ELEMENT NETWORK

San Diego County General Plan

Figure M-A-7

FIGURE 5 - Fallbrook Mobility Element Network



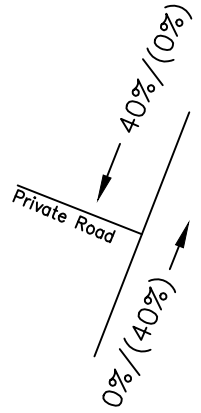
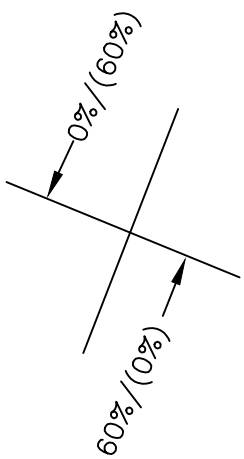
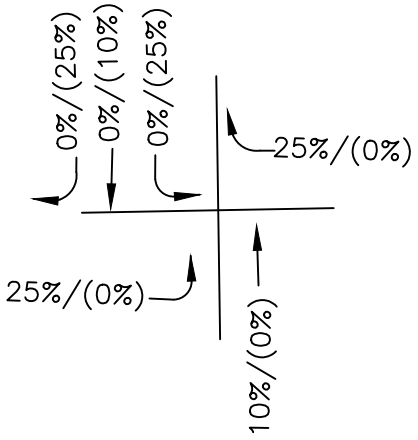
1. Old Highway 395 at Via Belmonte (Private Rd.)	2. Old Highway 395 at Via Altamira	3. Old Highway 395 at Pala Road (SR–78)
		

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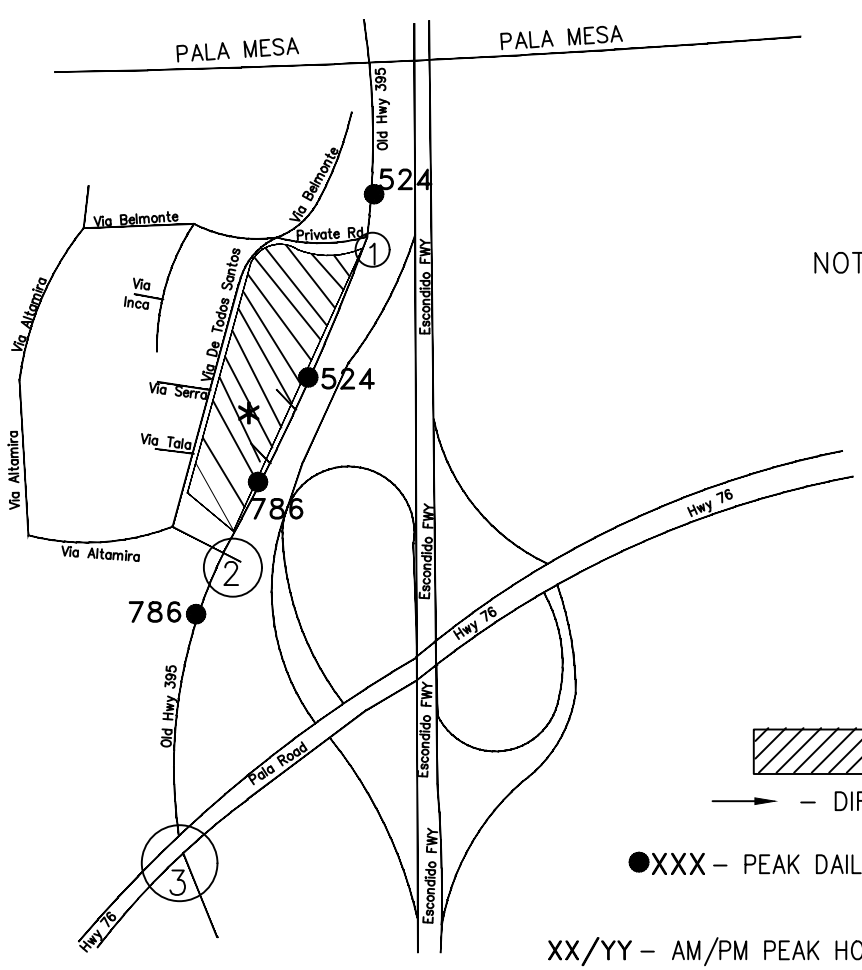
FIGURE 6
PROJECT TRIP DISTRIBUTION



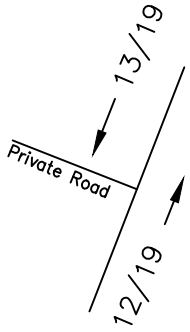
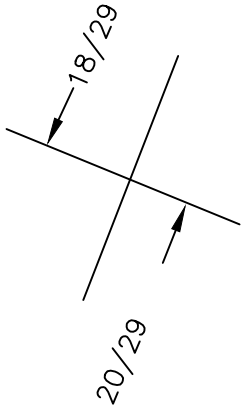
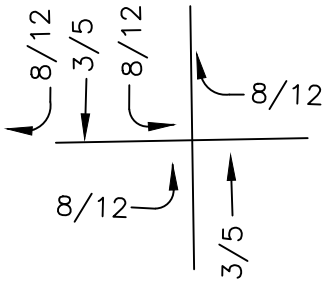
1. Old Highway 395 at Via Belmonte (Private Rd.)	2. Old Highway 395 at Via Altamira	3. Old Highway 395 at Pala Road (SR–78)
		

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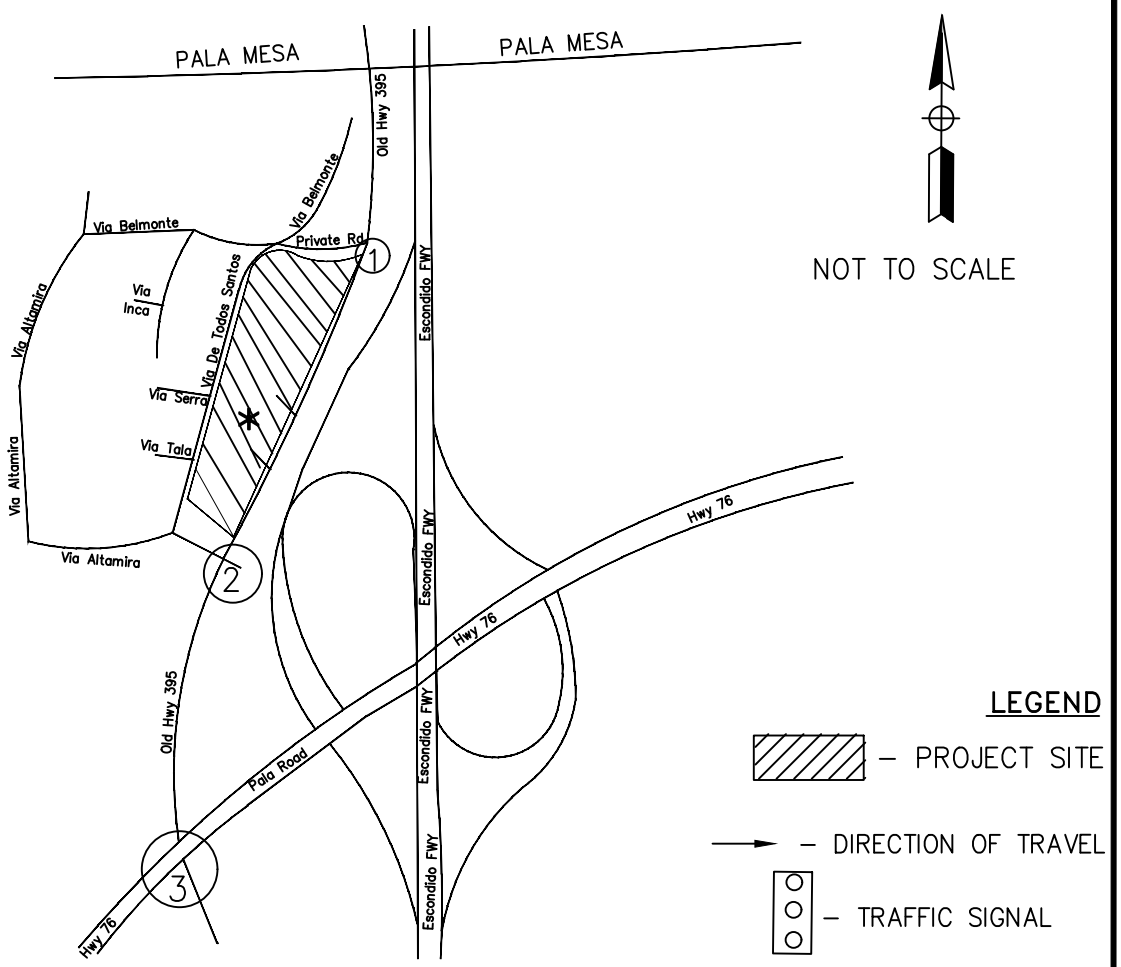
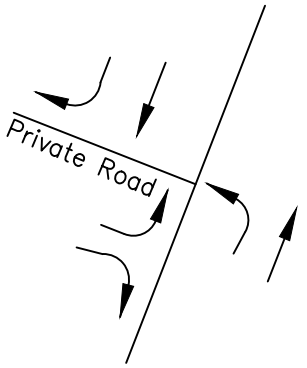
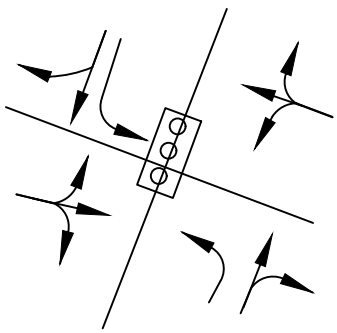
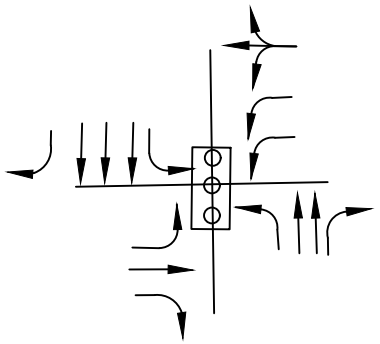
FIGURE 7
PROJECT TRIP ASSIGNMENT



1. Old Highway 395 at Via Belmonte (Private Rd.)	2. Old Highway 395 at Via Altamira	3. Old Highway 395 at Pala Road (SR–78)







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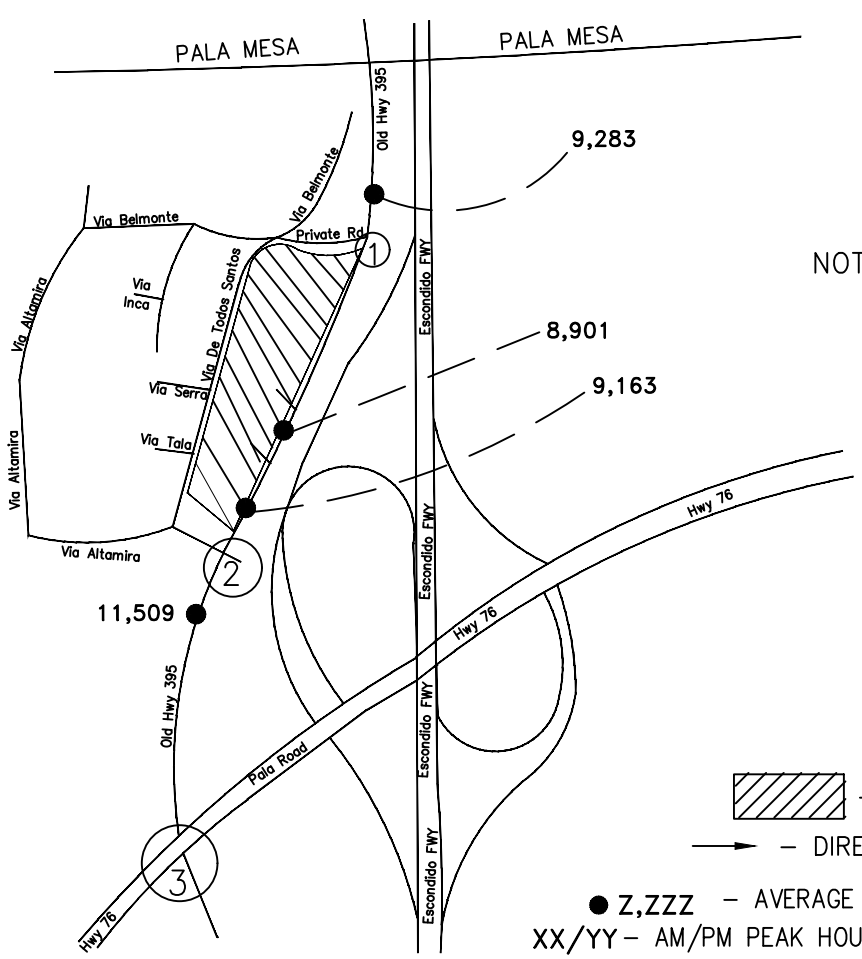
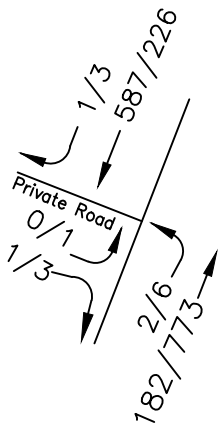
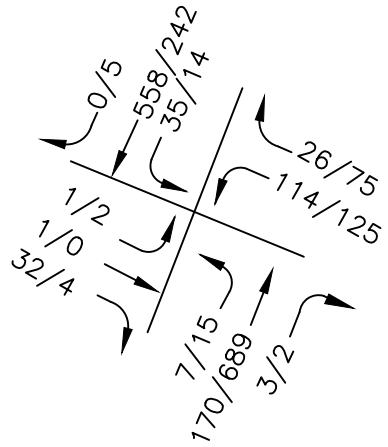
191201 –AC.dwg 10–26–2021 _2050 Analysis JAM

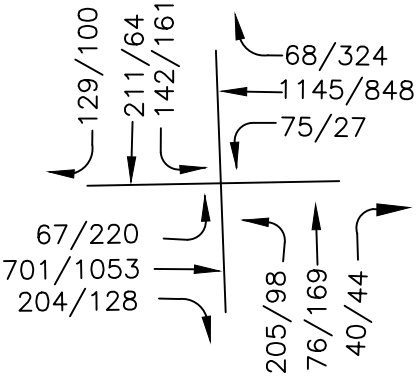
FIGURE 8
EXISTING LANE GEOMETRICS



1. Old Highway 395 at Via Belmonte (Private Rd.)	2. Old Highway 395 at Via Altamira	3. Old Highway 395 at Pala Road (SR–78)







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191201 –AC.dwg 10–26–2021 _2050 Analysis JAM

FIGURE 9

EXISTING PLUS PROJECT TRAFFIC VOLUMES

Table 1 - Summary of Trip Generation Summary

Land Use	Weekday Daily	AM PEAK		PM PEAK	
		% ADT	Rate (In:Out)	% ADT	Rate (In:Out)
TRIP GENERATION RATES					
Gas Station w Food Mart	205 trips/vsf	12%	51:49	14%	51:49
Specialty Store	38 trips/ksf	1%	62:38	4%	48:52

TRIP GENERATION CALCULATIONS								
Land Use	**Amount**	**ADT**	**AM Peak**			**PM PEAK**		
			In	**Out**	**Total**	**In**	**Out**	**Total**
Gas Station w Food Mart	12 VFS	2,465	77	73	150	86	82	168
Specialty Store	12.0 KSF	453	8	4	12	23	23	46
Driveway Trips Total:		**2.918**	**85**	**77**	**162**	**109**	**105**	**214**
Less Pass-by Trips		**-1,608**	**-52**	**-47**	**-99**	**-61**	**-57**	**-118**
Net New Traffic		**1,310**	**33**	**30**	**63**	**48**	**48**	**96**

ksf = 1,000 square foot, ADT = Average Daily Traffic, VFS = Vehicle Fueling Space

The trip rates are based on SANDAG's Brief Guide of Vehicular Trip Generation rates for the San Diego Region, April 2002.

Table 2 – Roadway Analysis for Existing Conditions and Existing Plus Project

Roadway Segment	Classification	LOS D Capacity	Existing 2020 Traffic	LOS	Existing 2020 plus Project Traffic	LOS
South of Via Altamira	2.1C Community Collector	13,500	10, 723	D	11,509	D
Via Altamira to Via Belmonte (Private Road)	2.1C Light Collector	10,900	8,377	D	9,163	C
South of Via Belmonte (Private Road)	2.1C Light Collector	10,900	8,377	D	8,901	C
South of Pala Mesa Road	2.1C Light Collector	10,900	8,759	D	9,283	C

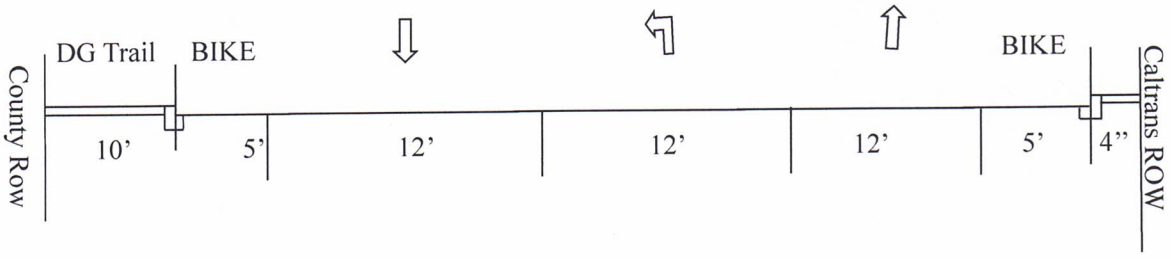
The next step in the analysis, we analyzed the year 2050 daily traffic volumes. Table 3 presents the results of the 2050 Analysis. Review of Tables 2 and 3 show the existing roadways can accommodate existing and the proposed project.

Table 3 – Year 2050 Roadway Analysis Conditions

Roadway Segment	Classification	LOS D Capacity	Year 2020 Traffic	Year 2050 Traffic	LOS
South of Via Altamira	2.1C Community Collector	13,500	12,163	9,600	D
Via Altamira to Via Belmonte (Private Road)	2.1C Light Collector	10,900	9,817	8,000	C
South of Via Belmonte (Private Road)	2.1C Light Collector	10,900	9,337	8,000	C
South of Pala Mesa Road	2.1C Light Collector	10,900	9,719	8,000	C

However, based on field observations and the existing 2-lane (40-foot curb to curb) roadway adjacent to the project site with one (1) lane in each direction experiences congestion at the project driveways due to the lack of a center turn lane and vehicles parking in the bike lanes.

To improve the overall operating condition of Old Highway 395 with the addition of project traffic, it is recommended that the road be widened to maintain the existing bike lanes, provide one (1) lane in each direction and a center turn lane to accommodate left turns into the project site and bike lanes. The recommended improvements include the installation of no parking along both sides of the roadway to maintain bike lanes along Old highway 395. The recommended minimum geometrics to provide are:



Old Highway 395

In summary the above geometrics for Old Highway 395 from south of Via Altamira north to the Via Belmonte (Private Road) is recommended.

Please call if you have any questions.

Sincerely,

Darnell & Associates,

Bill E. Darnell, P.E.
RCE: 22338

BED/vls
191201 -Revised 2050 Analysis for the Fallbrook Commercial -Old Highway 395_ 10.28.21

REGISTERED PROFESSIONAL ENGINEER
BILLY EVERETTE DARNELL
No. 22338
CIVIL
STATE OF CALIFORNIA

(Date) October 28, 2021

ATTACHMENT A

- AM/PM Turn Counts
- 24-Hour Machine Counts
- Fallbrook Mobility Element Network
- SANDAG 2050 Forecast

- AM/PM Turn Counts

National Data & Surveying Services

Intersection Turning Movement Count

Location: Old Hwy 395 & Via Altamira
City: Fallbrook
Control: Signalized

Project ID: 19-04467-001
Date: 12/10/2019

Total

NS/EW Streets:	Old Hwy 395				Old Hwy 395				Via Altamira				Via Altamira				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	25	2	0	8	138	0	0	1	0	7	0	28	0	4	0	213
7:15 AM	3	33	1	0	12	147	0	0	0	1	14	0	27	0	6	0	244
7:30 AM	3	41	0	0	3	123	0	0	0	0	6	0	27	0	5	0	208
7:45 AM	1	42	0	0	10	101	0	0	0	0	3	0	26	0	9	0	192
8:00 AM	0	36	0	0	3	74	0	0	0	0	3	0	38	0	3	0	157
8:15 AM	1	42	0	0	5	83	0	0	0	0	5	0	25	0	6	0	167
8:30 AM	1	37	1	0	2	64	0	0	0	0	3	0	28	0	8	0	144
8:45 AM	2	38	0	0	6	48	0	0	0	0	0	0	27	0	5	0	126
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	11	294	4	0	49	778	0	0	1	1	41	0	226	0	46	0	1451
APPROACH %'s :	3.56%	95.15%	1.29%	0.00%	5.93%	94.07%	0.00%	0.00%	2.33%	2.33%	95.35%	0.00%	83.09%	0.00%	16.91%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	7	141	3	0	33	509	0	0	1	1	30	0	108	0	24	0	857
PEAK HR FACTOR :	0.583	0.839	0.375	0.000	0.688	0.866	0.000	0.000	0.250	0.250	0.536	0.000	0.964	0.000	0.667	0.000	0.878
	0.858				0.852				0.533				0.943				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	136	0	0	3	34	1	0	1	1	0	0	37	0	28	0	245
4:15 PM	2	132	0	0	3	46	1	0	0	0	4	0	28	0	16	0	232
4:30 PM	1	155	0	0	3	54	0	0	0	0	0	0	37	0	13	0	263
4:45 PM	3	150	1	0	5	49	2	0	0	0	0	0	37	0	26	0	273
5:00 PM	5	153	0	0	0	47	1	0	2	0	3	0	21	0	14	0	246
5:15 PM	5	164	1	0	5	51	2	0	0	0	1	0	23	0	18	0	270
5:30 PM	3	161	1	1	1	37	0	0	1	0	3	0	32	1	19	0	260
5:45 PM	10	143	1	0	1	35	2	0	0	0	5	0	23	0	24	0	244
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	33	1194	4	1	21	353	9	0	4	1	16	0	238	1	158	0	2033
APPROACH %'s :	2.68%	96.92%	0.32%	0.08%	5.48%	92.17%	2.35%	0.00%	19.05%	4.76%	76.19%	0.00%	59.95%	0.25%	39.80%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	14	622	2	0	13	201	5	0	2	0	4	0	118	0	71	0	1052
PEAK HR FACTOR :	0.700	0.948	0.500	0.000	0.650	0.931	0.625	0.000	0.250	0.000	0.333	0.000	0.797	0.000	0.683	0.000	0.963
	0.938				0.944				0.300				0.750				

Prepared by National Data & Surveying Services

Old Hwy 395 & Via Altamira

Peak Hour Turning Movement Count

ID: 19-04467-001
City: Fallbrook

Day: Tuesday
Date: 12/10/2019

PEAK HOURS	COUNT PERIODS
07:00 AM - 08:00 AM	07:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

Old Hwy 395 — SOUTHBOUND

AM	0	509	33	0	166	AM
NOON	0	0	0	0	0	NOON
PM	5	201	13	0	695	PM

EASTBOUND — Via Altamira

AM	NOON	PM	
7	0	19	⇦
0	0	0	↶ 0
1	0	2	↱ 0
1	0	0	→ 1
30	0	4	↴ 0

WESTBOUND — Via Altamira

PM	NOON	AM	
71	0	24	↰ 0
0	0	0	← 1
118	0	108	↰ 0
0	0	0	↰ 0
15	0	37	⇨

CONTROL

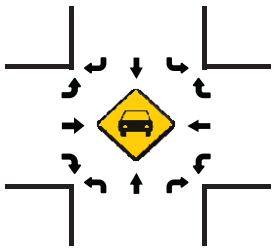
Signalized

TEV	857 AM	0 NOON	1052 PM
PHF	0.88		0.96

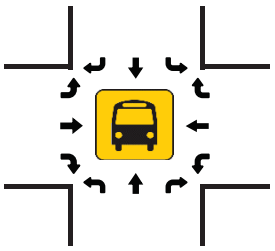
NORTHBOUND — Old Hwy 395

PM	323	0	14	622	2	PM
NOON	0	0	0	0	0	NOON
AM	647	0	7	141	3	AM

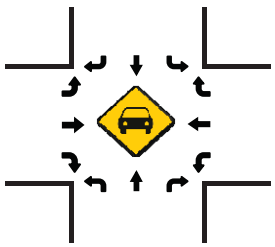
Total Vehicles (AM)



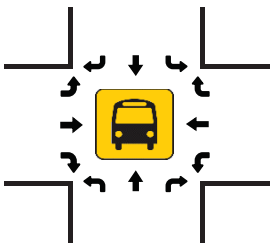
Total Vehicles (AM)



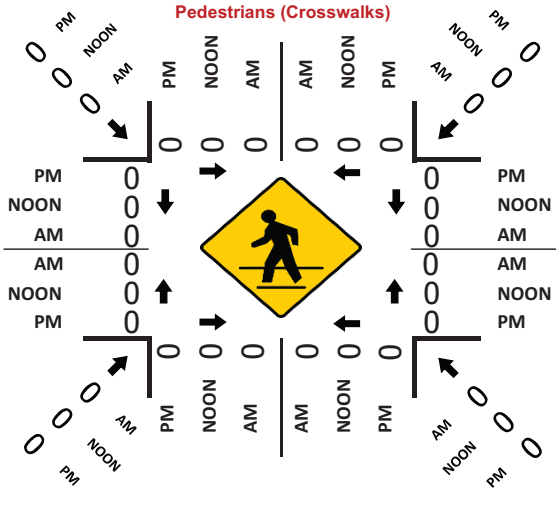
Total Vehicles (NOON)



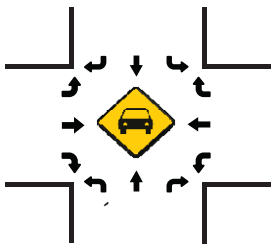
Total Vehicles (NOON)



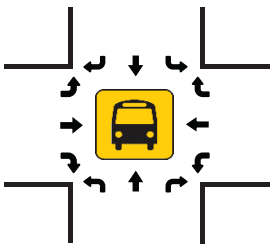
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Old Hwy 395 & Via Belmonte
City: Fallbrook
Control: 1-Way Stop(EB)

Project ID: 19-04467-002
Date: 12/10/2019

Total

NS/EW Streets:	Old Hwy 395				Old Hwy 395				Via Belmonte				Via Belmonte				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	31	0	0	0	143	1	0	0	0	1	0	0	0	0	0	176
7:15 AM	1	35	0	0	0	158	0	0	0	0	0	0	0	0	0	0	194
7:30 AM	1	46	0	0	0	128	0	0	0	0	0	0	0	0	0	0	175
7:45 AM	0	49	0	0	0	112	0	0	0	0	0	0	0	0	0	0	161
8:00 AM	1	45	0	0	0	76	1	0	1	0	0	0	0	0	0	0	124
8:15 AM	0	40	0	0	0	85	0	0	1	0	0	0	0	0	0	0	126
8:30 AM	3	35	0	0	0	64	0	1	2	0	0	0	0	0	0	0	105
8:45 AM	1	48	0	0	0	51	0	0	1	0	1	0	0	0	0	0	102
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	329	0	0	0	817	2	1	5	0	2	0	0	0	0	0	1163
APPROACH %'s :	2.08%	97.92%	0.00%	0.00%	0.00%	99.63%	0.24%	0.12%	71.43%	0.00%	28.57%	0.00%					
PEAK HR :	**07:00 AM - 08:00 AM**																TOTAL
PEAK HR VOL :	2	161	0	0	0	541	1	0	0	0	1	0	0	0	0	0	706
PEAK HR FACTOR :	0.500	0.821	0.000	0.000	0.000	0.856	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.910
		0.832				0.858				0.250							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	159	0	0	0	44	0	0	0	0	0	0	0	0	0	0	203
4:15 PM	0	141	0	0	0	42	1	0	0	0	0	0	0	0	0	0	184
4:30 PM	3	169	0	0	0	55	0	0	0	0	0	0	0	0	0	0	227
4:45 PM	1	176	0	1	0	50	0	0	0	0	0	0	0	0	0	0	228
5:00 PM	2	164	0	0	0	50	1	0	1	0	2	0	0	0	0	0	220
5:15 PM	1	176	0	0	0	55	1	0	0	0	0	0	0	0	0	0	233
5:30 PM	1	195	0	0	0	40	1	0	0	0	1	0	0	0	0	0	238
5:45 PM	0	161	0	0	0	36	0	0	2	0	0	0	0	0	0	0	199
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	8	1341	0	1	0	372	4	0	3	0	3	0	0	0	0	0	1732
APPROACH %'s :	0.59%	99.33%	0.00%	0.07%	0.00%	98.94%	1.06%	0.00%	50.00%	0.00%	50.00%	0.00%					
PEAK HR :	**04:45 PM - 05:45 PM**																TOTAL
PEAK HR VOL :	5	711	0	1	0	195	3	0	1	0	3	0	0	0	0	0	919
PEAK HR FACTOR :	0.625	0.912	0.000	0.250	0.000	0.886	0.750	0.000	0.250	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.965
		0.915				0.884				0.333							

Prepared by National Data & Surveying Services

Old Hwy 395 & Via Belmonte

Peak Hour Turning Movement Count

ID: 19-04467-002
City: Fallbrook

Day: Tuesday
Date: 12/10/2019

PEAK HOURS	
AM	07:00 AM - 08:00 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS	
AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Old Hwy 395 — SOUTHBOUND

AM	1	541	0	0	161	AM
NOON	0	0	0	0	0	NOON
PM	3	195	0	0	712	PM

EASTBOUND — Via Belmonte

AM	NOON	PM		
3	0	8	⇦	
0	0	0	↶	0
0	0	1	↱	0
0	0	0	→	1
1	0	3	↷	0
AM	NOON	PM		

WESTBOUND — Via Belmonte

PM	NOON	AM		
0	0	0	↶	0
0	0	0	←	0
0	0	0	↰	0
0	0	0	↰	0
0	0	0	⇨	
PM	NOON	AM		

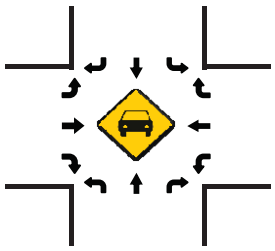
CONTROL: 1-Way Stop(EB)

TEV	706 AM	0 NOON	919 PM
PHF	0.91		0.97

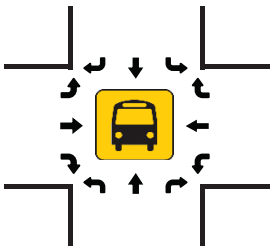
Old Hwy 395 — NORTHBOUND

PM	199	1	5	711	0	PM
NOON	0	0	0	0	0	NOON
AM	542	0	2	161	0	AM

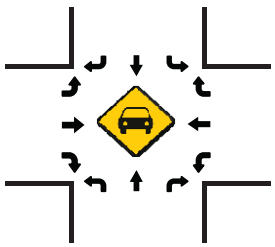
Total Vehicles (AM)



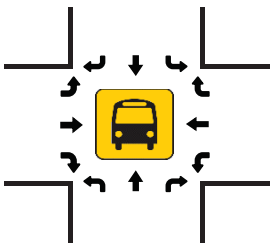
Total Vehicles (AM)



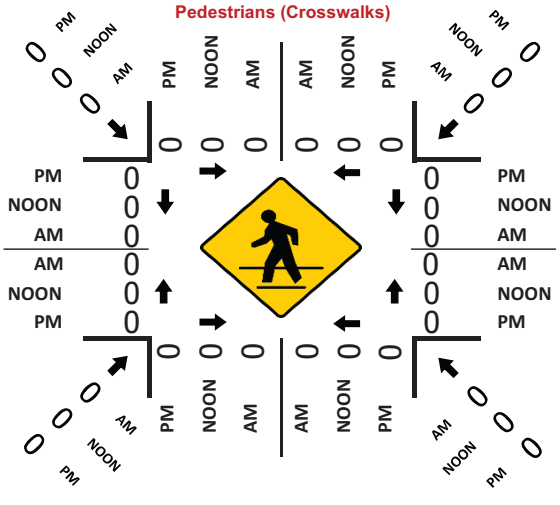
Total Vehicles (NOON)



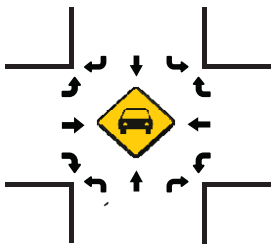
Total Vehicles (NOON)



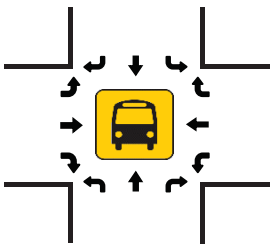
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



- 24-Hour Machine Counts

Prepared by National Data & Surveying Services

VOLUME

Old Hwy 395 Bet. Pala Rd & Vía Altamira

Day: Tuesday
Date: 12/10/2019

City: Fallbrook
Project #: CA19_4466_001

DAILY TOTALS	NB	SB	EB	WB	Total
	4,377	5,826	0	0	10,203

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	5		9						14		12:00	44		93						137	
0:15	5		7						12		12:15	57		75						132	
0:30	1		6						7		12:30	54		92						146	
0:45	3	14	4	26					7	40	12:45	56	211	93	353					149	564
1:00	4		7						11		13:00	58		70						128	
1:15	1		5						6		13:15	46		64						110	
1:30	1		0						1		13:30	62		83						145	
1:45	4	10	2	14					6	24	13:45	50	216	89	306					139	522
2:00	0		9						9		14:00	54		73						127	
2:15	1		5						6		14:15	71		65						136	
2:30	1		7						8		14:30	70		73						143	
2:45	0	2	5	26					5	28	14:45	92	287	79	290					171	577
3:00	1		4						5		15:00	92		80						172	
3:15	2		9						11		15:15	99		91						190	
3:30	2		12						14		15:30	119		90						209	
3:45	2	7	10	35					12	42	15:45	132	442	88	349					220	791
4:00	5		14						19		16:00	133		75						208	
4:15	4		29						33		16:15	140		76						216	
4:30	4		31						35		16:30	162		94						256	
4:45	3	16	44	118					47	134	16:45	152	587	80	325					232	912
5:00	3		57						60		17:00	160		72						232	
5:15	2		88						90		17:15	171		73						244	
5:30	8		105						113		17:30	167		79						246	
5:45	9	22	100	350					109	372	17:45	157	655	66	290					223	945
6:00	19		152						171		18:00	134		55						189	
6:15	11		161						172		18:15	116		60						176	
6:30	19		155						174		18:30	118		60						178	
6:45	25	74	179	647					204	721	18:45	108	476	57	232					165	708
7:00	34		178						212		19:00	98		42						140	
7:15	31		182						213		19:15	53		52						105	
7:30	49		156						205		19:30	40		36						76	
7:45	44	158	133	649					177	807	19:45	35	226	35	165					70	391
8:00	37		115						152		20:00	26		30						56	
8:15	45		114						159		20:15	34		33						67	
8:30	40		96						136		20:30	37		39						76	
8:45	50	172	80	405					130	577	20:45	19	116	19	121					38	237
9:00	39		80						119		21:00	25		33						58	
9:15	39		73						112		21:15	11		16						27	
9:30	33		101						134		21:30	27		18						45	
9:45	40	151	80	334					120	485	21:45	18	81	15	82					33	163
10:00	37		76						113		22:00	25		14						39	
10:15	43		79						122		22:15	14		17						31	
10:30	45		84						129		22:30	18		18						36	
10:45	37	162	81	320					118	482	22:45	7	64	7	56					14	120
11:00	54		75						129		23:00	3		8						11	
11:15	65		75						140		23:15	3		1						4	
11:30	47		77						124		23:30	8		9						17	
11:45	44	210	79	306					123	516	23:45	4	18	9	27					13	45
TOTALS		998		3230						4228	TOTALS		3379		2596						5975
SPLIT %		23.6%		76.4%						41.4%	SPLIT %		56.6%		43.4%						58.6%

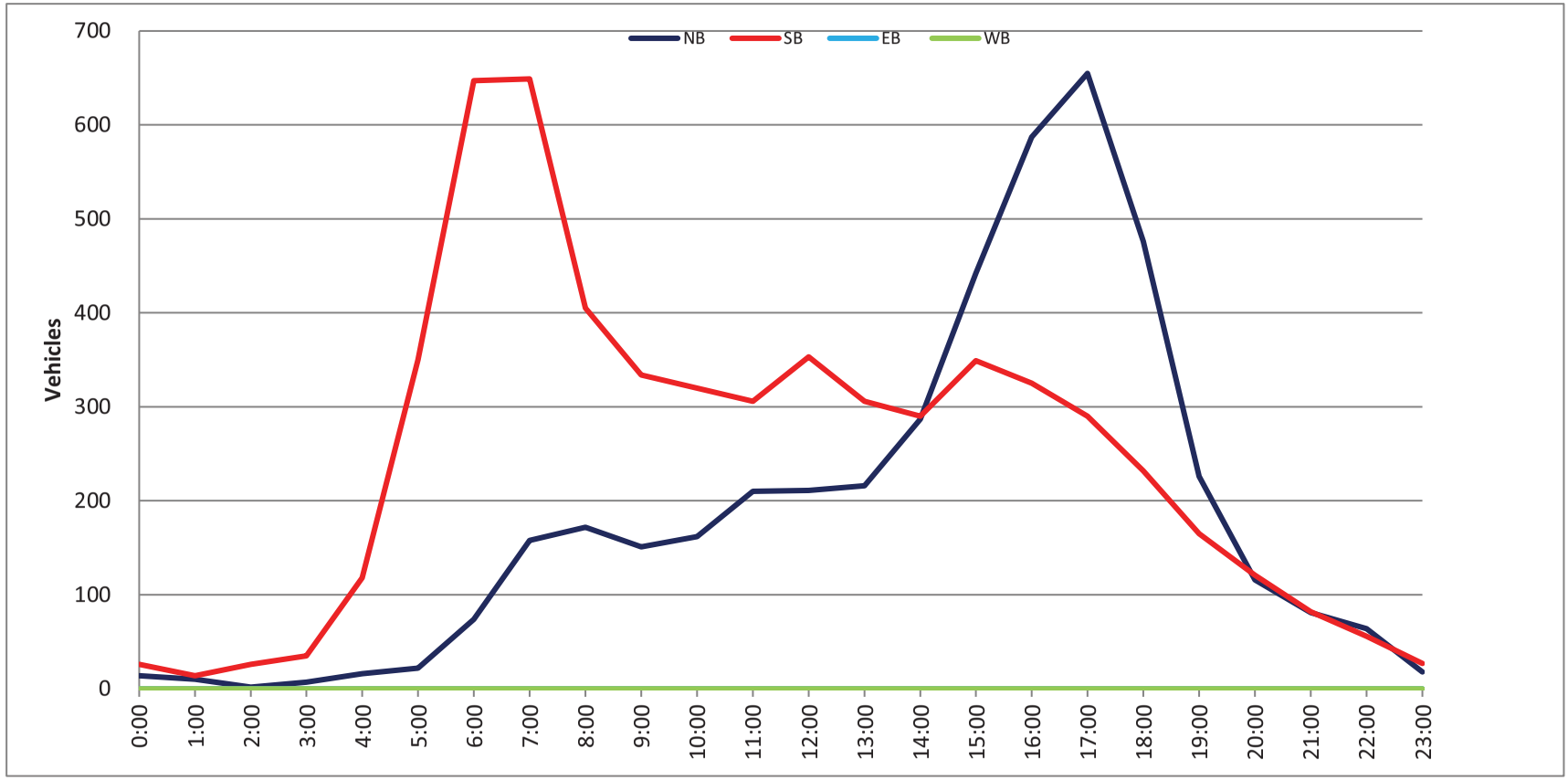
DAILY TOTALS	NB	SB	EB	WB	Total
	4,377	5,826	0	0	10,203

AM Peak Hour	11:00	6:45			6:45	PM Peak Hour	17:00	12:00			16:30
AM Pk Volume	210	695			834	PM Pk Volume	655	353			964
Pk Hr Factor	0.808	0.955			0.979	Pk Hr Factor	0.958	0.949			0.941
7 - 9 Volume	330	1054	0	0	1384	4 - 6 Volume	1242	615	0	0	1857
7 - 9 Peak Hour	7:30	7:00			7:00	4 - 6 Peak Hour	17:00	16:00			16:30
7 - 9 Pk Volume	175	649	0	0	807	4 - 6 Pk Volume	655	325	0	0	964
Pk Hr Factor	0.893	0.891	0.000	0.000	0.947	Pk Hr Factor	0.958	0.864	0.000	0.000	0.941

Prepared by National Data & Surveying Services

Project #: CA19_4466_001 **City:** Fallbrook

Location: Old Hwy 395 Bet. Pala Rd & Vía Altamira **Date:** 12/10/2019



Prepared by National Data & Surveying Services

VOLUME

Old Hwy 395 Bet. Pala Rd & Vía Altamira

Day: Wednesday
Date: 12/11/2019

City: Fallbrook
Project #: CA19_4466_001

DAILY TOTALS	NB	SB	EB	WB	Total
	4,337	5,881	0	0	10,218

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	6		4				10		12:00	64		86				150	
0:15	9		10				19		12:15	49		83				132	
0:30	2		9				11		12:30	65		90				155	
0:45	3	20	6	29			9	49	12:45	61	239	90	349			151	588
1:00	1		5				6		13:00	64		97				161	
1:15	6		5				11		13:15	55		62				117	
1:30	1		8				9		13:30	67		80				147	
1:45	2	10	4	22			6	32	13:45	54	240	88	327			142	567
2:00	3		9				12		14:00	64		82				146	
2:15	3		6				9		14:15	62		68				130	
2:30	1		5				6		14:30	78		85				163	
2:45	0	7	4	24			4	31	14:45	97	301	74	309			171	610
3:00	2		8				10		15:00	101		91				192	
3:15	6		7				13		15:15	109		90				199	
3:30	2		7				9		15:30	160		91				251	
3:45	0	10	9	31			9	41	15:45	130	500	87	359			217	859
4:00	2		19				21		16:00	120		105				225	
4:15	8		23				31		16:15	108		77				185	
4:30	4		30				34		16:30	131		91				222	
4:45	1	15	46	118			47	133	16:45	127	486	93	366			220	852
5:00	4		61				65		17:00	123		90				213	
5:15	4		92				96		17:15	121		91				212	
5:30	9		117				126		17:30	138		71				209	
5:45	10	27	130	400			140	427	17:45	136	518	69	321			205	839
6:00	16		158				174		18:00	134		64				198	
6:15	15		182				197		18:15	117		74				191	
6:30	31		167				198		18:30	104		47				151	
6:45	29	91	182	689			211	780	18:45	72	427	55	240			127	667
7:00	34		150				184		19:00	60		46				106	
7:15	35		149				184		19:15	49		43				92	
7:30	44		125				169		19:30	45		34				79	
7:45	55	168	117	541			172	709	19:45	34	188	36	159			70	347
8:00	57		103				160		20:00	33		39				72	
8:15	53		99				152		20:15	35		38				73	
8:30	53		94				147		20:30	28		25				53	
8:45	47	210	77	373			124	583	20:45	30	126	37	139			67	265
9:00	41		61				102		21:00	31		36				67	
9:15	29		82				111		21:15	29		17				46	
9:30	32		68				100		21:30	22		18				40	
9:45	44	146	76	287			120	433	21:45	25	107	19	90			44	197
10:00	56		71				127		22:00	11		16				27	
10:15	40		76				116		22:15	25		22				47	
10:30	56		100				156		22:30	10		11				21	
10:45	41	193	65	312			106	505	22:45	9	55	14	63			23	118
11:00	56		76				132		23:00	5		8				13	
11:15	53		82				135		23:15	5		10				15	
11:30	46		75				121		23:30	7		10				17	
11:45	77	232	67	300			144	532	23:45	4	21	5	33			9	54
TOTALS		1129		3126				4255	TOTALS		3208		2755				5963
SPLIT %		26.5%		73.5%				41.6%	SPLIT %		53.8%		46.2%				58.4%

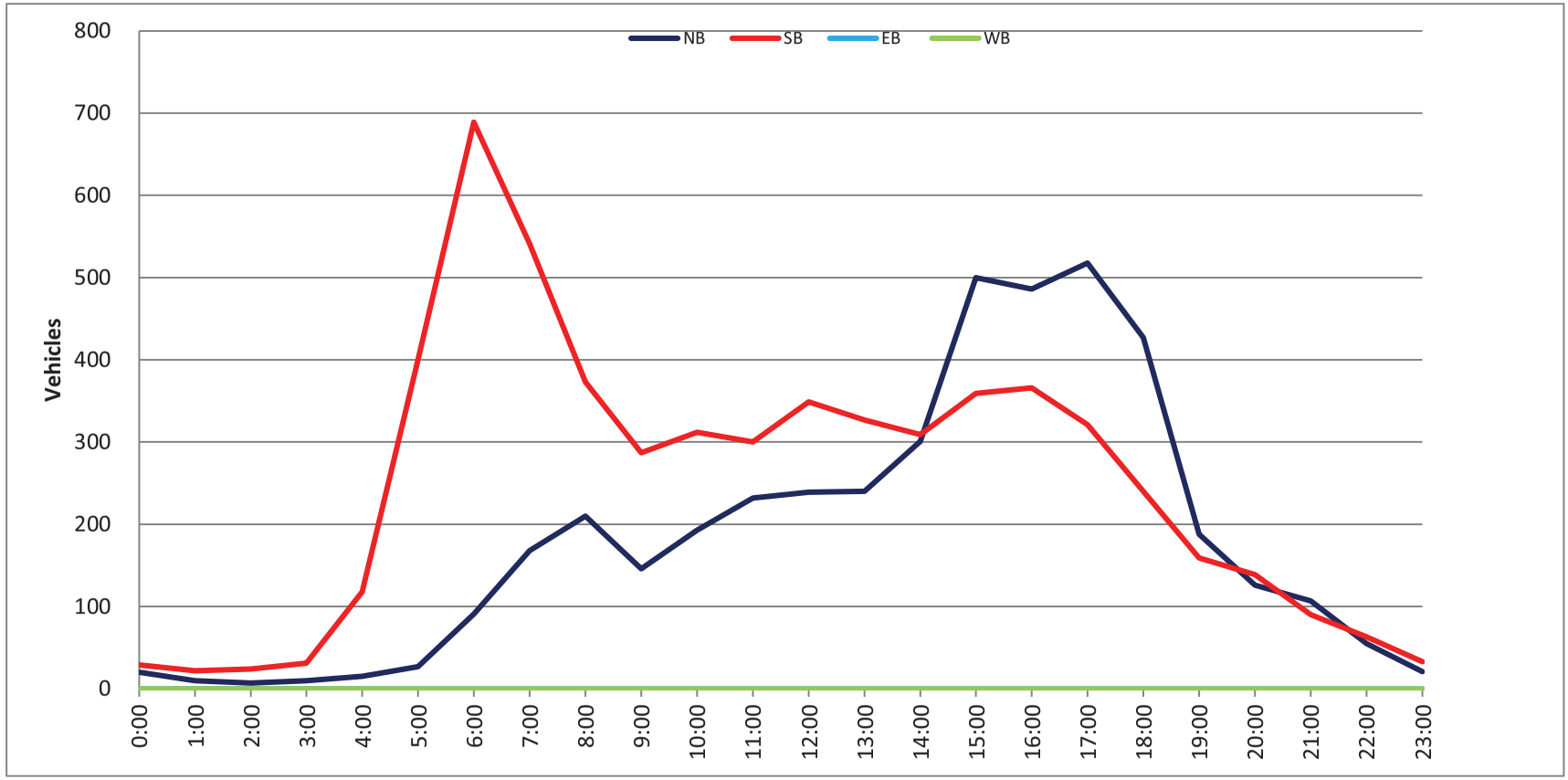
DAILY TOTALS	NB	SB	EB	WB	Total
	4,337	5,881	0	0	10,218

AM Peak Hour	11:45	6:00				6:15	PM Peak Hour	17:15	15:15				15:15
AM Pk Volume	255	689				790	PM Pk Volume	529	373				892
Pk Hr Factor	0.828	0.946				0.936	Pk Hr Factor	0.958	0.888				0.888
7 - 9 Volume	378	914	0	0		1292	4 - 6 Volume	1004	687	0	0		1691
7 - 9 Peak Hour	7:45	7:00				7:00	4 - 6 Peak Hour	17:00	16:00				16:30
7 - 9 Pk Volume	218	541	0	0		709	4 - 6 Pk Volume	518	366	0	0		867
Pk Hr Factor	0.956	0.902	0.000	0.000		0.963	Pk Hr Factor	0.938	0.871	0.000	0.000		0.976

Prepared by National Data & Surveying Services

Project #: CA19_4466_001 **City:** Fallbrook

Location: Old Hwy 395 Bet. Pala Rd & Vía Altamira **Date:** 12/11/2019



A-10

Prepared by National Data & Surveying Services

VOLUME

Old Hwy 395 Bet. Pala Rd & Vía Altamira

Day: Thursday
Date: 12/12/2019

City: Fallbrook
Project #: CA19_4466_001

DAILY TOTALS	NB	SB	EB	WB	Total
	4,674	6,099	0	0	10,773

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	2		9				11		12:00	71		76				147	
0:15	3		10				13		12:15	71		79				150	
0:30	3		5				8		12:30	56		88				144	
0:45	7	15	5	29			12	44	12:45	60	258	95	338			155	596
1:00	3		6				9		13:00	67		82				149	
1:15	3		7				10		13:15	67		98				165	
1:30	1		4				5		13:30	67		84				151	
1:45	1	8	5	22			6	30	13:45	53	254	84	348			137	602
2:00	4		5				9		14:00	68		66				134	
2:15	1		6				7		14:15	77		98				175	
2:30	1		6				7		14:30	69		77				146	
2:45	2	8	5	22			7	30	14:45	89	303	91	332			180	635
3:00	1		6				7		15:00	79		74				153	
3:15	4		10				14		15:15	119		88				207	
3:30	2		7				9		15:30	130		85				215	
3:45	5	12	6	29			11	41	15:45	115	443	100	347			215	790
4:00	5		13				18		16:00	111		101				212	
4:15	2		21				23		16:15	124		84				208	
4:30	5		27				32		16:30	139		93				232	
4:45	1	13	38	99			39	112	16:45	161	535	80	358			241	893
5:00	2		66				68		17:00	137		93				230	
5:15	3		96				99		17:15	158		104				262	
5:30	11		117				128		17:30	136		74				210	
5:45	6	22	114	393			120	415	17:45	156	587	57	328			213	915
6:00	14		175				189		18:00	174		75				249	
6:15	27		182				209		18:15	150		83				233	
6:30	29		156				185		18:30	169		63				232	
6:45	16	86	161	674			177	760	18:45	121	614	50	271			171	885
7:00	31		139				170		19:00	97		43				140	
7:15	49		183				232		19:15	64		47				111	
7:30	76		111				187		19:30	35		47				82	
7:45	54	210	116	549			170	759	19:45	44	240	60	197			104	437
8:00	44		81				125		20:00	40		34				74	
8:15	49		113				162		20:15	46		29				75	
8:30	43		110				153		20:30	25		23				48	
8:45	47	183	93	397			140	580	20:45	27	138	36	122			63	260
9:00	40		98				138		21:00	34		26				60	
9:15	35		86				121		21:15	38		31				69	
9:30	36		101				137		21:30	26		31				57	
9:45	44	155	105	390			149	545	21:45	28	126	23	111			51	237
10:00	34		85				119		22:00	25		24				49	
10:15	40		62				102		22:15	19		24				43	
10:30	43		82				125		22:30	12		17				29	
10:45	34	151	57	286			91	437	22:45	15	71	26	91			41	162
11:00	46		77				123		23:00	5		10				15	
11:15	53		80				133		23:15	11		15				26	
11:30	62		96				158		23:30	3		9				12	
11:45	51	212	72	325			123	537	23:45	11	30	7	41			18	71
TOTALS		1075		3215				4290	TOTALS		3599		2884				6483
SPLIT %		25.1%		74.9%				39.8%	SPLIT %		55.5%		44.5%				60.2%

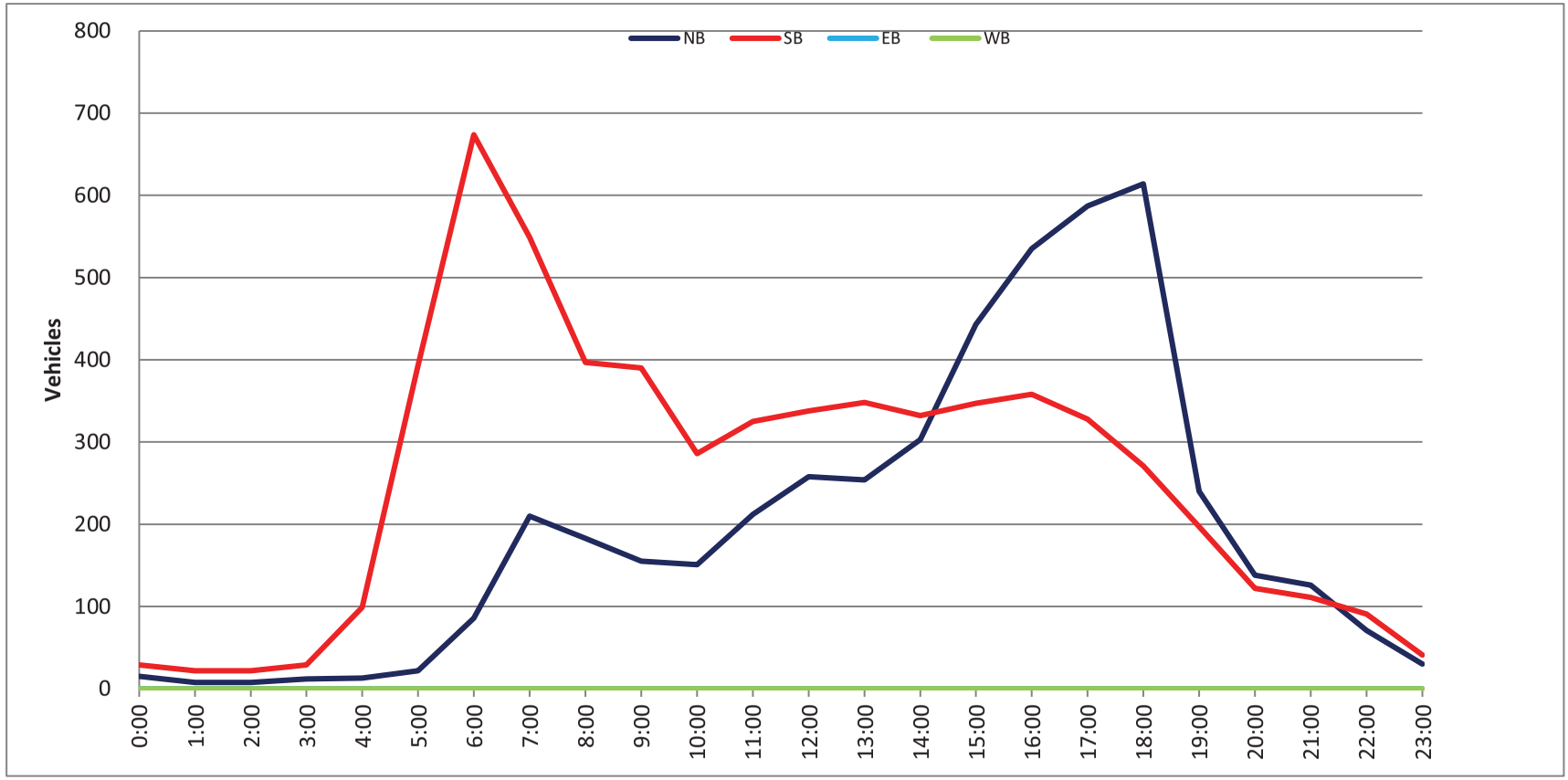
DAILY TOTALS	NB	SB	EB	WB	Total
	4,674	6,099	0	0	10,773

AM Peak Hour	11:30	6:00				6:45	PM Peak Hour	17:45	15:45				16:30
AM Pk Volume	255	674				766	PM Pk Volume	649	378				965
Pk Hr Factor	0.898	0.926				0.825	Pk Hr Factor	0.932	0.936				0.921
7 - 9 Volume	393	946	0	0		1339	4 - 6 Volume	1122	686	0	0		1808
7 - 9 Peak Hour	7:15	7:00				7:00	4 - 6 Peak Hour	16:30	16:30				16:30
7 - 9 Pk Volume	223	549	0	0		759	4 - 6 Pk Volume	595	370	0	0		965
Pk Hr Factor	0.734	0.750	0.000	0.000		0.818	Pk Hr Factor	0.924	0.889	0.000	0.000		0.921

Prepared by National Data & Surveying Services

Project #: CA19_4466_001 **City:** Fallbrook

Location: Old Hwy 395 Bet. Pala Rd & Vía Altamira **Date:** 12/12/2019



A-12

Prepared by National Data & Surveying Services

VOLUME

Old Hwy 395 Bet. Vía Altamira & Vía Belmonte

Day: Tuesday
Date: 12/10/2019

City: Fallbrook
Project #: CA19_4466_002

DAILY TOTALS	NB	SB	EB	WB	Total
	4,560	3,648	0	0	8,208

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	3		0				3		12:00	47		59				106	
0:15	7		3				10		12:15	70		42				112	
0:30	2		2				4		12:30	47		52				99	
0:45	3	15	1	6			4	21	12:45	55	219	53	206			108	425
1:00	5		1				6		13:00	60		28				88	
1:15	2		1				3		13:15	40		42				82	
1:30	1		0				1		13:30	54		39				93	
1:45	5	13	4	6			9	19	13:45	49	203	41	150			90	353
2:00	2		3				5		14:00	53		46				99	
2:15	2		3				5		14:15	65		29				94	
2:30	1		4				5		14:30	66		42				108	
2:45	1	6	2	12			3	18	14:45	89	273	36	153			125	426
3:00	1		4				5		15:00	104		37				141	
3:15	2		6				8		15:15	94		43				137	
3:30	2		5				7		15:30	129		52				181	
3:45	2	7	9	24			11	31	15:45	131	458	40	172			171	630
4:00	4		5				9		16:00	164		38				202	
4:15	3		22				25		16:15	140		52				192	
4:30	5		21				26		16:30	176		50				226	
4:45	3	15	27	75			30	90	16:45	169	649	61	201			230	850
5:00	4		40				44		17:00	171		41				212	
5:15	4		65				69		17:15	175		62				237	
5:30	6		75				81		17:30	195		35				230	
5:45	14	28	76	256			90	284	17:45	162	703	39	177			201	880
6:00	18		124				142		18:00	137		28				165	
6:15	12		133				145		18:15	126		29				155	
6:30	20		107				127		18:30	117		34				151	
6:45	23	73	147	511			170	584	18:45	117	497	17	108			134	605
7:00	32		143				175		19:00	110		20				130	
7:15	32		167				199		19:15	53		21				74	
7:30	42		122				164		19:30	53		16				69	
7:45	54	160	109	541			163	701	19:45	36	252	9	66			45	318
8:00	40		82				122		20:00	24		14				38	
8:15	43		82				125		20:15	28		14				42	
8:30	47		57				104		20:30	40		15				55	
8:45	47	177	60	281			107	458	20:45	22	114	9	52			31	166
9:00	41		55				96		21:00	25		12				37	
9:15	39		38				77		21:15	14		11				25	
9:30	32		59				91		21:30	31		4				35	
9:45	45	157	49	201			94	358	21:45	21	91	9	36			30	127
10:00	37		43				80		22:00	29		8				37	
10:15	42		52				94		22:15	15		7				22	
10:30	41		50				91		22:30	19		6				25	
10:45	37	157	45	190			82	347	22:45	9	72	4	25			13	97
11:00	48		49				97		23:00	3		4				7	
11:15	64		36				100		23:15	3		0				3	
11:30	46		52				98		23:30	7		5				12	
11:45	46	204	51	188			97	392	23:45	4	17	2	11			6	28
TOTALS		1012		2291				3303	TOTALS		3548		1357				4905
SPLIT %		30.6%		69.4%				40.2%	SPLIT %		72.3%		27.7%				59.8%

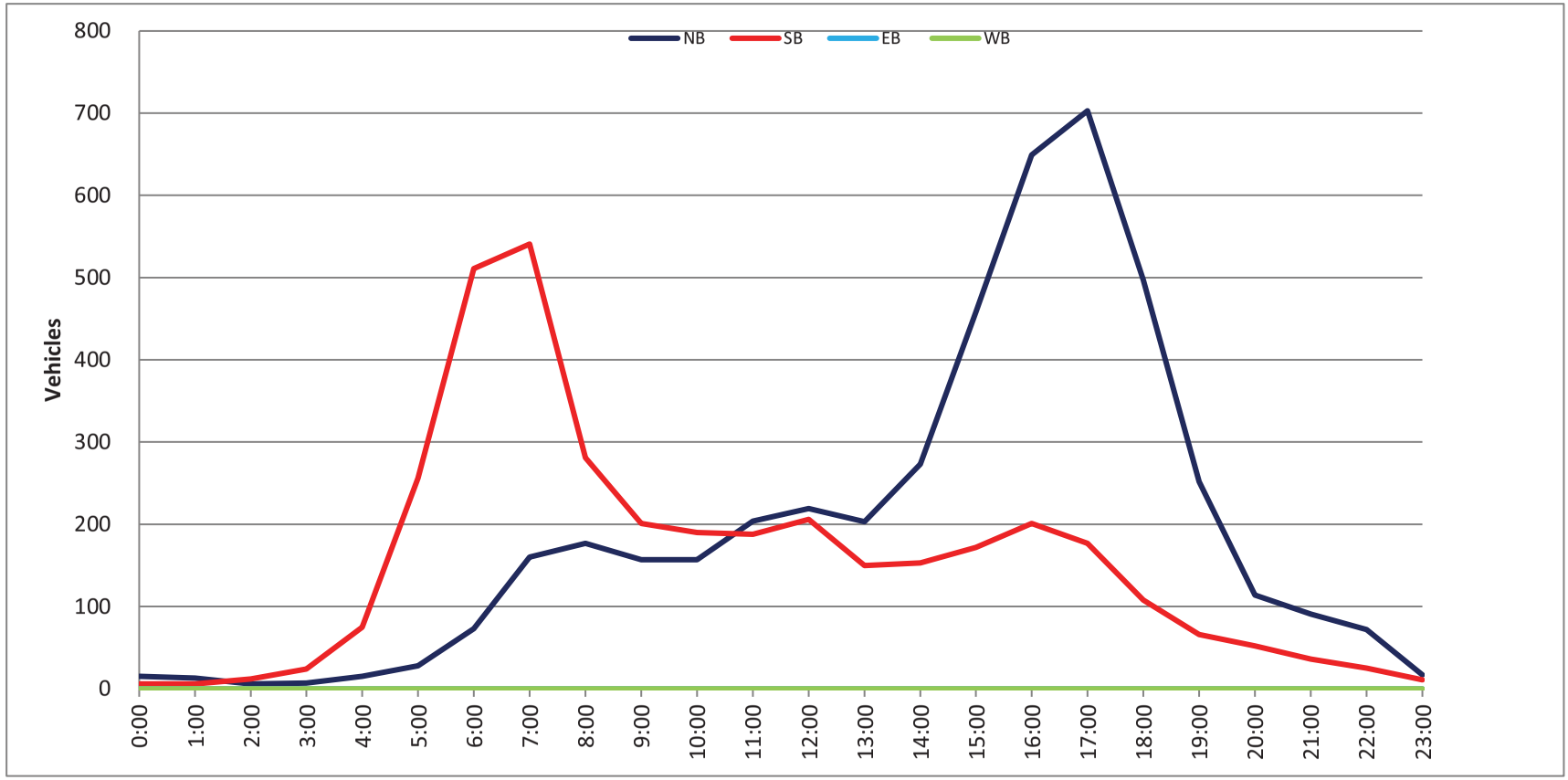
DAILY TOTALS	NB	SB	EB	WB	Total
	4,560	3,648	0	0	8,208

AM Peak Hour	11:45	6:45			6:45	PM Peak Hour	16:45	16:30			16:45
AM Pk Volume	210	579			708	PM Pk Volume	710	214			909
Pk Hr Factor	0.750	0.867			0.889	Pk Hr Factor	0.910	0.863			0.959
7 - 9 Volume	337	822	0	0	1159	4 - 6 Volume	1352	378	0	0	1730
7 - 9 Peak Hour	7:45	7:00			7:00	4 - 6 Peak Hour	16:45	16:30			16:45
7 - 9 Pk Volume	184	541	0	0	701	4 - 6 Pk Volume	710	214	0	0	909
Pk Hr Factor	0.852	0.810	0.000	0.000	0.881	Pk Hr Factor	0.910	0.863	0.000	0.000	0.959

Prepared by National Data & Surveying Services

Project #: CA19_4466_002 **City:** Fallbrook

Location: Old Hwy 395 Bet. Vía Altamira & Vía **Date:** 12/10/2019



A-14

Prepared by National Data & Surveying Services

VOLUME

Old Hwy 395 Bet. Vía Altamira & Vía Belmonte

Day: Wednesday
Date: 12/11/2019

City: Fallbrook
Project #: CA19_4466_002

DAILY TOTALS	NB	SB	EB	WB	Total
	4,384	3,472	0	0	7,856

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	6		3				9		12:00	58		47				105	
0:15	11		4				15		12:15	51		41				92	
0:30	4		5				9		12:30	62		40				102	
0:45	5	26	1	13			6	39	12:45	53	224	44	172			97	396
1:00	1		2				3		13:00	66		68				134	
1:15	5		2				7		13:15	60		31				91	
1:30	2		2				4		13:30	69		52				121	
1:45	2	10	1	7			3	17	13:45	51	246	37	188			88	434
2:00	2		4				6		14:00	66		52				118	
2:15	2		1				3		14:15	69		40				109	
2:30	1		4				5		14:30	77		43				120	
2:45	3	8	2	11			5	19	14:45	92	304	45	180			137	484
3:00	5		6				11		15:00	101		53				154	
3:15	2		4				6		15:15	104		45				149	
3:30	4		5				9		15:30	159		37				196	
3:45	0	11	4	19			4	30	15:45	124	488	50	185			174	673
4:00	2		8				10		16:00	135		55				190	
4:15	6		21				27		16:15	120		40				160	
4:30	6		7				13		16:30	138		46				184	
4:45	2	16	25	61			27	77	16:45	128	521	39	180			167	701
5:00	6		41				47		17:00	128		40				168	
5:15	5		64				69		17:15	129		46				175	
5:30	9		87				96		17:30	150		28				178	
5:45	11	31	89	281			100	312	17:45	134	541	27	141			161	682
6:00	13		126				139		18:00	133		29				162	
6:15	13		138				151		18:15	124		24				148	
6:30	24		124				148		18:30	98		17				115	
6:45	30	80	143	531			173	611	18:45	69	424	23	93			92	517
7:00	34		125				159		19:00	70		21				91	
7:15	30		124				154		19:15	55		17				72	
7:30	44		94				138		19:30	48		13				61	
7:45	55	163	65	408			120	571	19:45	41	214	19	70			60	284
8:00	62		66				128		20:00	38		20				58	
8:15	49		74				123		20:15	33		17				50	
8:30	50		60				110		20:30	26		12				38	
8:45	46	207	49	249			95	456	20:45	35	132	20	69			55	201
9:00	45		39				84		21:00	34		12				46	
9:15	32		46				78		21:15	30		7				37	
9:30	29		38				67		21:30	25		7				32	
9:45	35	141	54	177			89	318	21:45	23	112	10	36			33	148
10:00	45		37				82		22:00	20		8				28	
10:15	39		42				81		22:15	26		8				34	
10:30	44		71				115		22:30	14		5				19	
10:45	45	173	41	191			86	364	22:45	8	68	4	25			12	93
11:00	47		40				87		23:00	7		4				11	
11:15	62		46				108		23:15	6		4				10	
11:30	48		49				97		23:30	8		3				11	
11:45	61	218	35	170			96	388	23:45	5	26	4	15			9	41
TOTALS		1084		2118				3202	TOTALS		3300		1354				4654
SPLIT %		33.9%		66.1%				40.8%	SPLIT %		70.9%		29.1%				59.2%

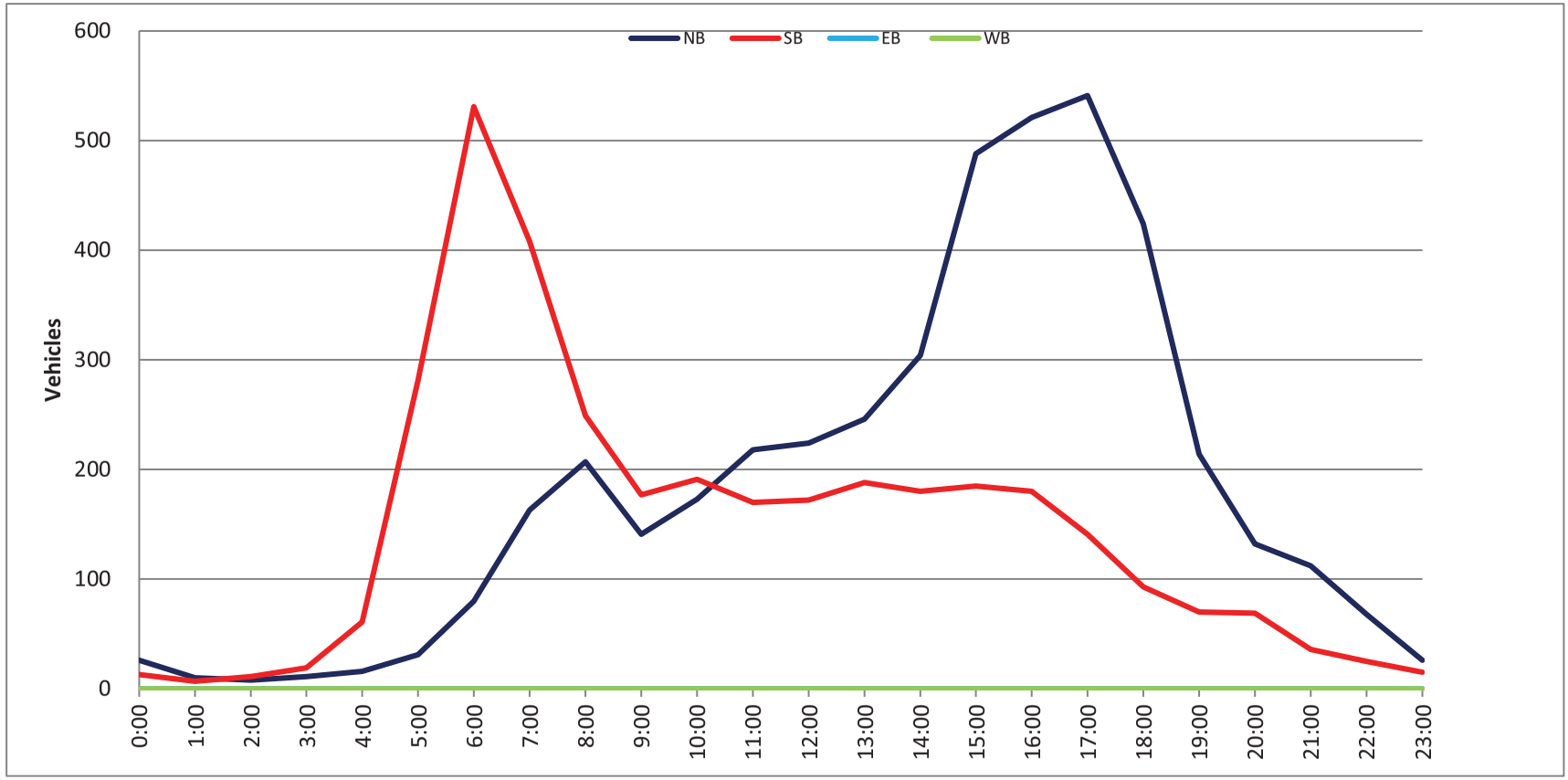
DAILY TOTALS	NB	SB	EB	WB	Total
	4,384	3,472	0	0	7,856

AM Peak Hour	11:45	6:00			6:30	PM Peak Hour	17:15	12:45			15:30
AM Pk Volume	232	531			634	PM Pk Volume	546	195			720
Pk Hr Factor	0.935	0.928			0.916	Pk Hr Factor	0.910	0.717			0.918
7 - 9 Volume	370	657	0	0	1027	4 - 6 Volume	1062	321	0	0	1383
7 - 9 Peak Hour	7:45	7:00			7:00	4 - 6 Peak Hour	17:00	16:00			16:00
7 - 9 Pk Volume	216	408	0	0	571	4 - 6 Pk Volume	541	180	0	0	701
Pk Hr Factor	0.871	0.816	0.000	0.000	0.898	Pk Hr Factor	0.902	0.818	0.000	0.000	0.922

Prepared by National Data & Surveying Services

Project #: CA19_4466_002 **City:** Fallbrook

Location: Old Hwy 395 Bet. Vía Altamira & Vía **Date:** 12/11/2019



Prepared by National Data & Surveying Services

VOLUME

Old Hwy 395 Bet. Vía Altamira & Vía Belmonte

Day: Thursday
Date: 12/12/2019

City: Fallbrook
Project #: CA19_4466_002

DAILY TOTALS	NB	SB	EB	WB	Total
	4,706	3,671	0	0	8,377

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	3		1				4		12:00	67		51				118	
0:15	3		2				5		12:15	73		47				120	
0:30	4		3				7		12:30	53		46				99	
0:45	6	16	3	9			9	25	12:45	64	257	53	197			117	454
1:00	5		4				9		13:00	63		47				110	
1:15	4		2				6		13:15	59		56				115	
1:30	1		3				4		13:30	68		46				114	
1:45	0	10	2	11			2	21	13:45	63	253	41	190			104	443
2:00	5		3				8		14:00	63		44				107	
2:15	4		1				5		14:15	76		50				126	
2:30	2		3				5		14:30	68		44				112	
2:45	2	13	3	10			5	23	14:45	80	287	43	181			123	468
3:00	2		3				5		15:00	75		35				110	
3:15	5		5				10		15:15	121		52				173	
3:30	2		3				5		15:30	130		58				188	
3:45	5	14	4	15			9	29	15:45	123	449	65	210			188	659
4:00	4		6				10		16:00	107		54				161	
4:15	2		19				21		16:15	117		54				171	
4:30	7		14				21		16:30	150		47				197	
4:45	2	15	28	67			30	82	16:45	152	526	36	191			188	717
5:00	1		37				38		17:00	139		38				177	
5:15	3		65				68		17:15	164		48				212	
5:30	13		91				104		17:30	124		36				160	
5:45	8	25	88	281			96	306	17:45	167	594	23	145			190	739
6:00	16		140				156		18:00	186		29				215	
6:15	23		151				174		18:15	165		38				203	
6:30	32		123				155		18:30	174		37				211	
6:45	18	89	124	538			142	627	18:45	123	648	23	127			146	775
7:00	27		101				128		19:00	107		26				133	
7:15	48		125				173		19:15	67		23				90	
7:30	72		86				158		19:30	39		18				57	
7:45	45	192	74	386			119	578	19:45	47	260	27	94			74	354
8:00	43		57				100		20:00	42		14				56	
8:15	40		86				126		20:15	46		13				59	
8:30	51		68				119		20:30	24		5				29	
8:45	38	172	55	266			93	438	20:45	24	136	17	49			41	185
9:00	33		62				95		21:00	35		14				49	
9:15	35		60				95		21:15	36		12				48	
9:30	31		70				101		21:30	29		17				46	
9:45	37	136	66	258			103	394	21:45	29	129	6	49			35	178
10:00	39		45				84		22:00	26		11				37	
10:15	43		47				90		22:15	19		8				27	
10:30	43		51				94		22:30	13		7				20	
10:45	38	163	42	185			80	348	22:45	15	73	5	31			20	104
11:00	44		48				92		23:00	12		6				18	
11:15	48		40				88		23:15	12		4				16	
11:30	61		44				105		23:30	3		2				5	
11:45	57	210	34	166			91	376	23:45	12	39	3	15			15	54
TOTALS		1055		2192				3247	TOTALS		3651		1479				5130
SPLIT %		32.5%		67.5%				38.8%	SPLIT %		71.2%		28.8%				61.2%

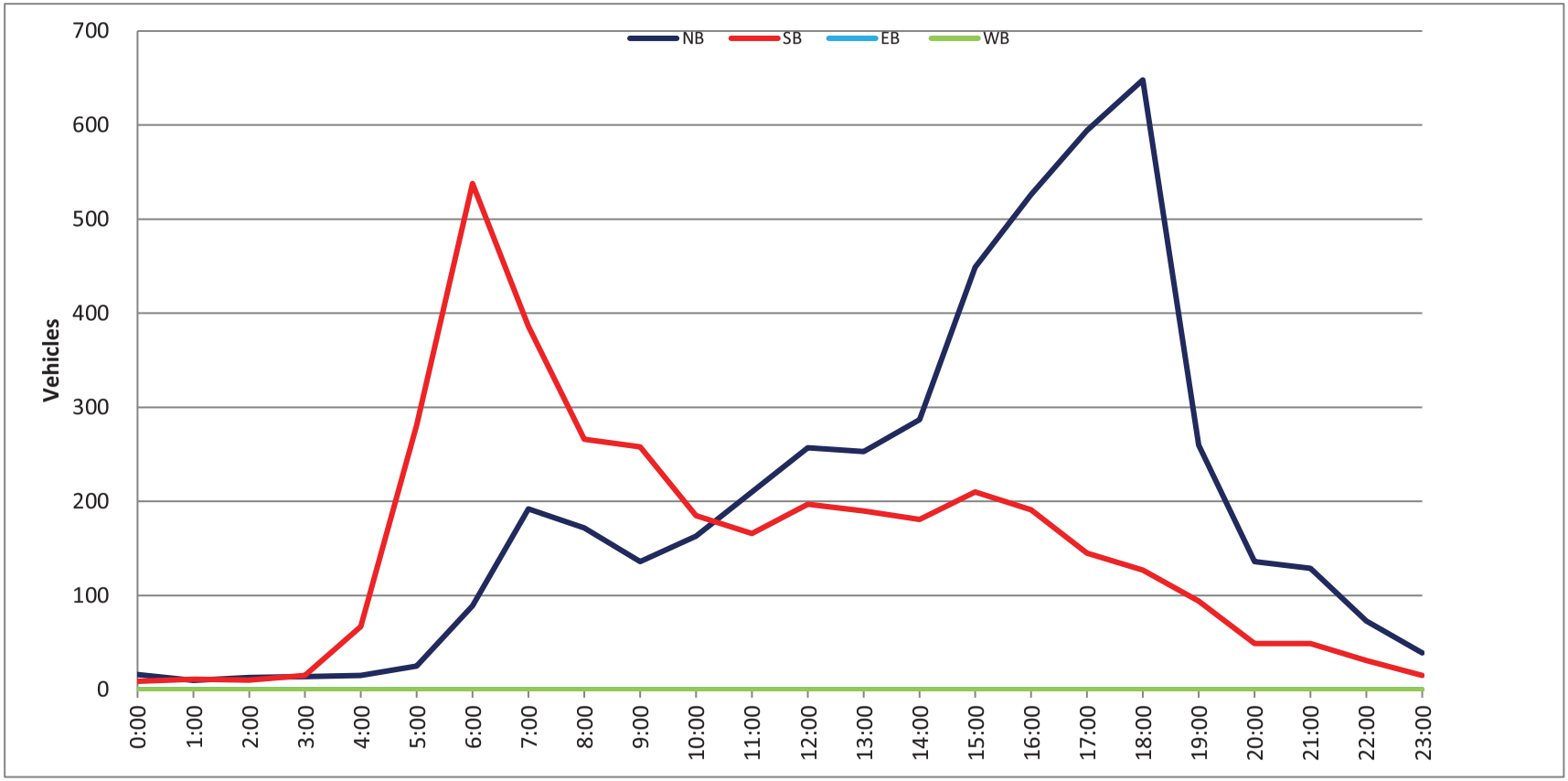
DAILY TOTALS	NB	SB	EB	WB	Total
	4,706	3,671	0	0	8,377

AM Peak Hour	11:30	6:00				6:00	PM Peak Hour	17:45	15:30				17:45
AM Pk Volume	258	538				627	PM Pk Volume	692	231				819
Pk Hr Factor	0.884	0.891				0.901	Pk Hr Factor	0.930	0.888				0.952
7 - 9 Volume	364	652	0	0		1016	4 - 6 Volume	1120	336	0	0		1456
7 - 9 Peak Hour	7:15	7:00				7:00	4 - 6 Peak Hour	16:30	16:00				16:30
7 - 9 Pk Volume	208	386	0	0		578	4 - 6 Pk Volume	605	191	0	0		774
Pk Hr Factor	0.722	0.772	0.000	0.000		0.835	Pk Hr Factor	0.922	0.884	0.000	0.000		0.913

Prepared by National Data & Surveying Services

Project #: CA19_4466_002 **City:** Fallbrook

Location: Old Hwy 395 Bet. Vía Altamira & Vía **Date:** 12/12/2019



A-18

Prepared by National Data & Surveying Services

VOLUME

Old Hwy 395 N/O Vía Belmonte

Day: Tuesday
Date: 12/10/2019

City: Fallbrook
Project #: CA19_4466_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,636	3,754	0	0	8,390

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	5		0				5		12:00	46		60				106	
0:15	7		3				10		12:15	76		47				123	
0:30	2		2				4		12:30	48		54				102	
0:45	3	17	1	6			4	23	12:45	53	223	54	215			107	438
1:00	4		2				6		13:00	59		29				88	
1:15	2		0				2		13:15	43		43				86	
1:30	1		0				1		13:30	62		39				101	
1:45	4	11	4	6			8	17	13:45	50	214	44	155			94	369
2:00	1		2				3		14:00	59		48				107	
2:15	2		3				5		14:15	77		39				116	
2:30	1		4				5		14:30	69		42				111	
2:45	1	5	1	10			2	15	14:45	91	296	38	167			129	463
3:00	1		4				5		15:00	106		43				149	
3:15	2		5				7		15:15	105		47				152	
3:30	2		6				8		15:30	131		59				190	
3:45	1	6	9	24			10	30	15:45	134	476	46	195			180	671
4:00	3		6				9		16:00	156		40				196	
4:15	2		21				23		16:15	145		47				192	
4:30	6		19				25		16:30	167		51				218	
4:45	3	14	26	72			29	86	16:45	172	640	53	191			225	831
5:00	4		40				44		17:00	162		55				217	
5:15	4		64				68		17:15	184		52				236	
5:30	2		74				76		17:30	190		44				234	
5:45	16	26	77	255			93	281	17:45	172	708	33	184			205	892
6:00	21		125				146		18:00	137		26				163	
6:15	10		137				147		18:15	120		36				156	
6:30	20		109				129		18:30	124		33				157	
6:45	30	81	153	524			183	605	18:45	119	500	16	111			135	611
7:00	31		140				171		19:00	118		20				138	
7:15	34		161				195		19:15	53		18				71	
7:30	49		122				171		19:30	53		15				68	
7:45	48	162	114	537			162	699	19:45	41	265	11	64			52	329
8:00	45		80				125		20:00	26		15				41	
8:15	43		84				127		20:15	28		14				42	
8:30	41		60				101		20:30	40		16				56	
8:45	46	175	56	280			102	455	20:45	24	118	10	55			34	173
9:00	44		54				98		21:00	26		13				39	
9:15	32		41				73		21:15	13		10				23	
9:30	33		67				100		21:30	33		7				40	
9:45	45	154	51	213			96	367	21:45	23	95	11	41			34	136
10:00	36		49				85		22:00	30		8				38	
10:15	46		56				102		22:15	14		6				20	
10:30	50		54				104		22:30	18		6				24	
10:45	39	171	50	209			89	380	22:45	8	70	4	24			12	94
11:00	47		52				99		23:00	4		4				8	
11:15	55		43				98		23:15	2		0				2	
11:30	48		52				100		23:30	7		5				12	
11:45	43	193	57	204			100	397	23:45	3	16	3	12			6	28
TOTALS		1015		2340				3355	TOTALS		3621		1414				5035
SPLIT %		30.3%		69.7%				40.0%	SPLIT %		71.9%		28.1%				60.0%

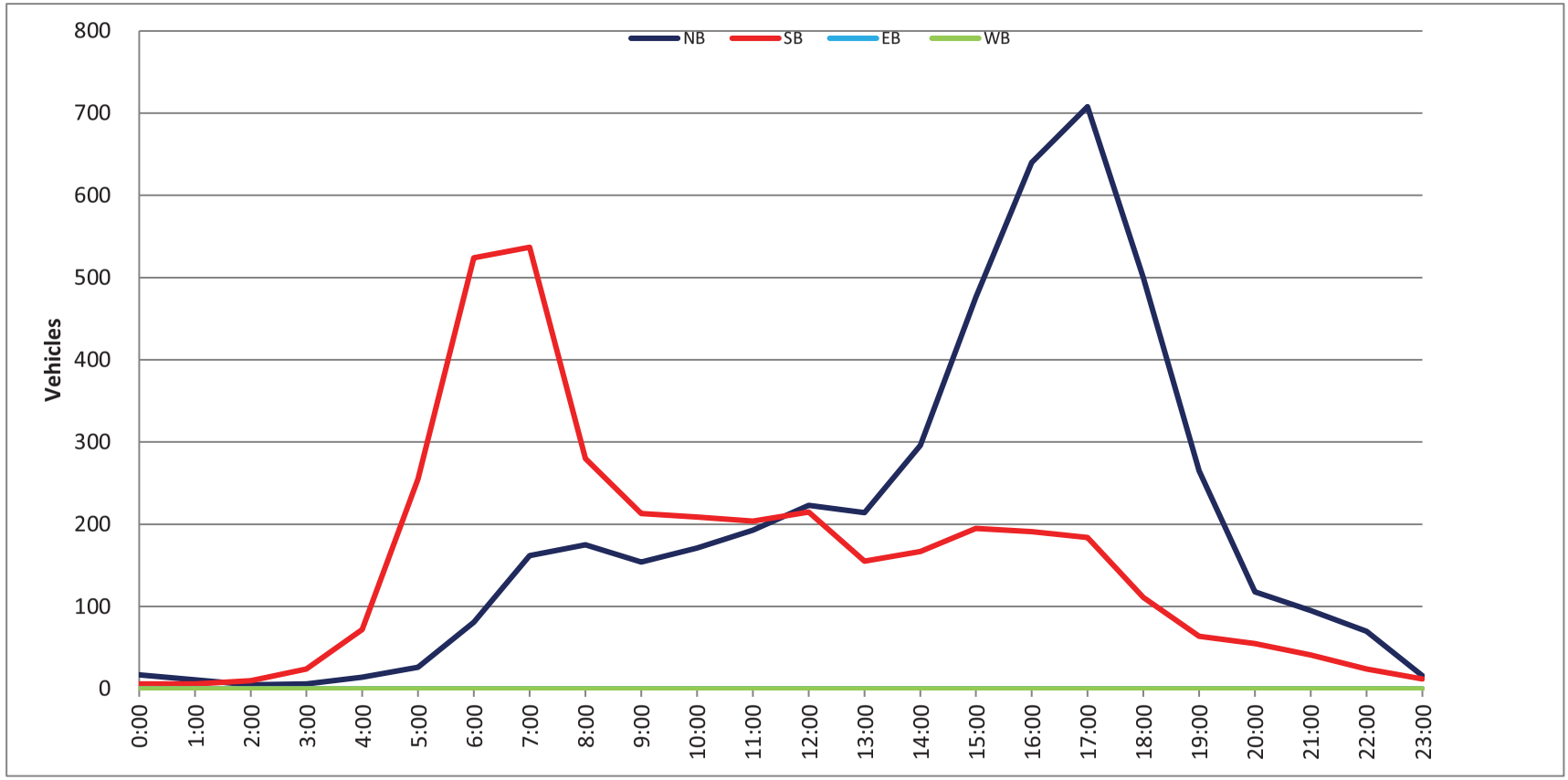
DAILY TOTALS	NB	SB	EB	WB	Total
	4,636	3,754	0	0	8,390

AM Peak Hour	11:30	6:45					6:45		PM Peak Hour	16:45	12:00					16:45		
AM Pk Volume	213	576					720		PM Pk Volume	708	215					912		
Pk Hr Factor	0.701	0.894					0.923		Pk Hr Factor	0.932	0.896					0.966		
7 - 9 Volume	337	817	0	0			1154		4 - 6 Volume	1348	375	0	0			1723		
7 - 9 Peak Hour	7:30	7:00					7:00		4 - 6 Peak Hour	16:45	16:30					16:45		
7 - 9 Pk Volume	185	537	0	0			699		4 - 6 Pk Volume	708	211	0	0			912		
Pk Hr Factor	0.944	0.834	0.000	0.000			0.896		Pk Hr Factor	0.932	0.959	0.000	0.000			0.966		

Prepared by National Data & Surveying Services

Project #: CA19_4466_003 **City:** Fallbrook

Location: Old Hwy 395 N/O Vía Belmonte **Date:** 12/10/2019



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Prepared by National Data & Surveying Services

VOLUME

Old Hwy 395 N/O Vía Belmonte

Day: Wednesday
Date: 12/11/2019

City: Fallbrook
Project #: CA19_4466_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,552	3,693	0	0	8,245

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	7		1				8		12:00	63		51				114	
0:15	10		5				15		12:15	50		41				91	
0:30	4		5				9		12:30	68		42				110	
0:45	4	25	2	13			6	38	12:45	55	236	55	189			110	425
1:00	1		2				3		13:00	59		65				124	
1:15	5		2				7		13:15	61		42				103	
1:30	1		2				3		13:30	74		54				128	
1:45	2	9	2	8			4	17	13:45	55	249	39	200			94	449
2:00	1		3				4		14:00	69		63				132	
2:15	2		1				3		14:15	67		40				107	
2:30	0		4				4		14:30	91		44				135	
2:45	4	7	2	10			6	17	14:45	97	324	45	192			142	516
3:00	4		6				10		15:00	104		52				156	
3:15	1		5				6		15:15	117		47				164	
3:30	8		5				13		15:30	168		47				215	
3:45	0	13	4	20			4	33	15:45	126	515	58	204			184	719
4:00	1		8				9		16:00	142		59				201	
4:15	8		21				29		16:15	123		45				168	
4:30	6		18				24		16:30	140		45				185	
4:45	2	17	24	71			26	88	16:45	133	538	41	190			174	728
5:00	6		40				46		17:00	123		50				173	
5:15	4		70				74		17:15	135		46				181	
5:30	12		79				91		17:30	160		34				194	
5:45	13	35	92	281			105	316	17:45	145	563	29	159			174	722
6:00	15		131				146		18:00	139		30				169	
6:15	15		138				153		18:15	121		27				148	
6:30	27		127				154		18:30	113		23				136	
6:45	35	92	149	545			184	637	18:45	71	444	21	101			92	545
7:00	41		126				167		19:00	69		19				88	
7:15	34		126				160		19:15	58		17				75	
7:30	47		101				148		19:30	49		16				65	
7:45	57	179	71	424			128	603	19:45	47	223	22	74			69	297
8:00	63		70				133		20:00	38		22				60	
8:15	55		77				132		20:15	35		18				53	
8:30	56		64				120		20:30	26		15				41	
8:45	44	218	55	266			99	484	20:45	33	132	21	76			54	208
9:00	49		44				93		21:00	33		14				47	
9:15	29		47				76		21:15	27		7				34	
9:30	33		42				75		21:30	24		8				32	
9:45	36	147	53	186			89	333	21:45	23	107	10	39			33	146
10:00	44		38				82		22:00	19		9				28	
10:15	44		46				90		22:15	25		10				35	
10:30	54		75				129		22:30	15		5				20	
10:45	44	186	46	205			90	391	22:45	7	66	5	29			12	95
11:00	44		50				94		23:00	8		3				11	
11:15	58		56				114		23:15	6		4				10	
11:30	46		51				97		23:30	6		3				9	
11:45	54	202	40	197			94	399	23:45	5	25	4	14			9	39
TOTALS		1130		2226				3356	TOTALS		3422		1467				4889
SPLIT %		33.7%		66.3%				40.7%	SPLIT %		70.0%		30.0%				59.3%

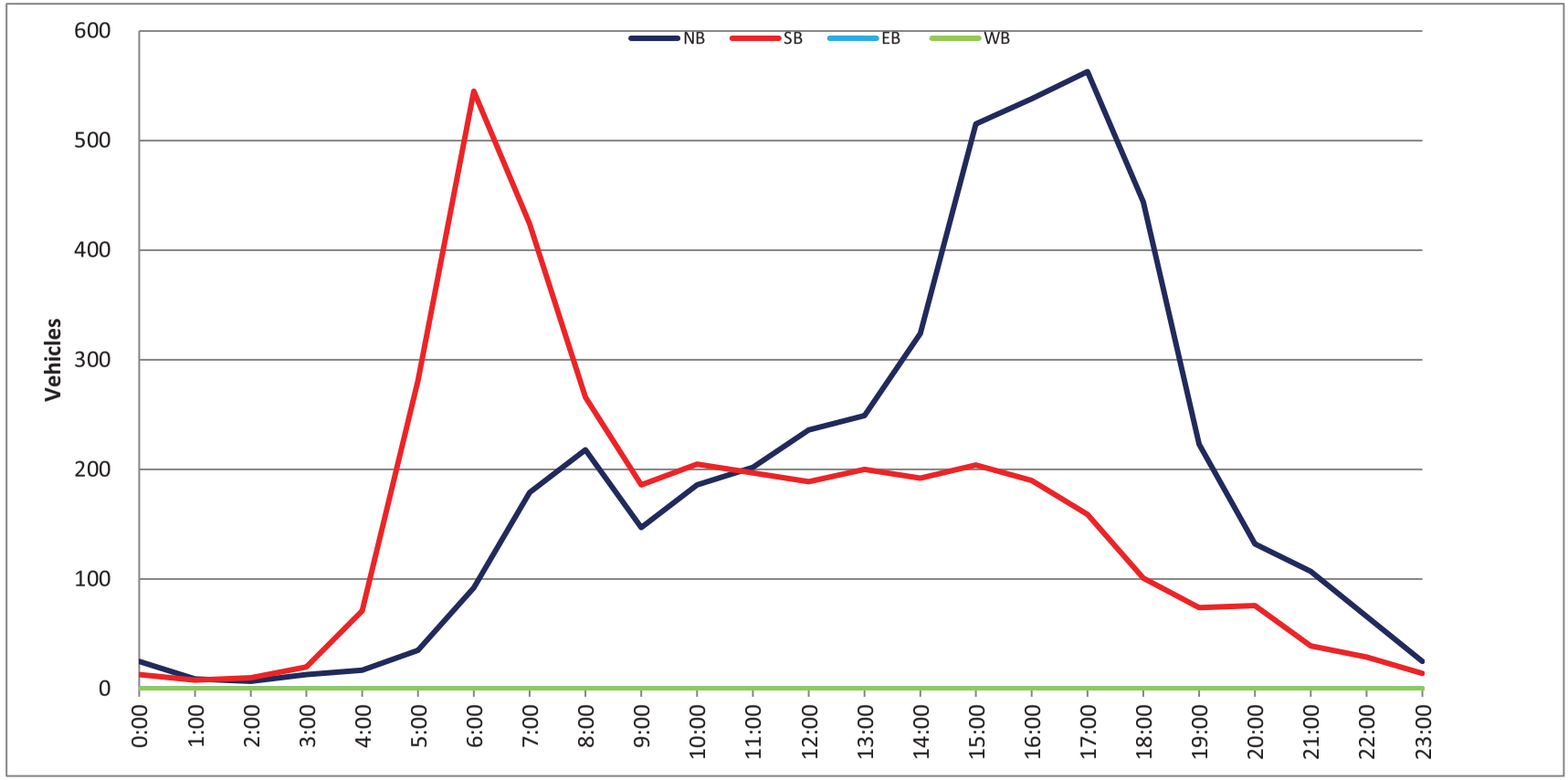
DAILY TOTALS	NB	SB	EB	WB	Total
	4,552	3,693	0	0	8,245

AM Peak Hour	11:45	6:00					6:30		PM Peak Hour	17:15	12:45					15:30		
AM Pk Volume	235	545					665		PM Pk Volume	579	216					768		
Pk Hr Factor	0.864	0.914					0.904		Pk Hr Factor	0.905	0.831					0.893		
7 - 9 Volume	397	690	0	0			1087		4 - 6 Volume	1101	349	0	0			1450		
7 - 9 Peak Hour	7:45	7:00					7:00		4 - 6 Peak Hour	17:00	16:00					16:00		
7 - 9 Pk Volume	231	424	0	0			603		4 - 6 Pk Volume	563	190	0	0			728		
Pk Hr Factor	0.917	0.841	0.000	0.000			0.903		Pk Hr Factor	0.880	0.805	0.000	0.000			0.905		

Prepared by National Data & Surveying Services

Project #: CA19_4466_003 **City:** Fallbrook

Location: Old Hwy 395 N/O Vía Belmonte **Date:** 12/11/2019



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Prepared by National Data & Surveying Services

VOLUME

Old Hwy 395 N/O Vía Belmonte

Day: Thursday
Date: 12/12/2019

City: Fallbrook
Project #: CA19_4466_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,905	3,854	0	0	8,759

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	5		1				6		12:00	68		45				113	
0:15	3		2				5		12:15	66		52				118	
0:30	4		3				7		12:30	52		51				103	
0:45	5	17	3	9			8	26	12:45	71	257	56	204			127	461
1:00	4		0				4		13:00	63		49				112	
1:15	3		2				5		13:15	64		55				119	
1:30	1		3				4		13:30	72		49				121	
1:45	0	8	2	7			2	15	13:45	60	259	50	203			110	462
2:00	5		2				7		14:00	67		46				113	
2:15	4		1				5		14:15	77		48				125	
2:30	1		3				4		14:30	72		51				123	
2:45	2	12	3	9			5	21	14:45	84	300	40	185			124	485
3:00	2		3				5		15:00	82		41				123	
3:15	4		6				10		15:15	121		53				174	
3:30	2		3				5		15:30	140		61				201	
3:45	5	13	4	16			9	29	15:45	135	478	71	226			206	704
4:00	4		6				10		16:00	119		55				174	
4:15	2		19				21		16:15	135		55				190	
4:30	6		14				20		16:30	152		56				208	
4:45	3	15	27	66			30	81	16:45	163	569	44	210			207	779
5:00	1		38				39		17:00	150		44				194	
5:15	4		66				70		17:15	163		54				217	
5:30	12		87				99		17:30	136		45				181	
5:45	9	26	90	281			99	307	17:45	174	623	28	171			202	794
6:00	17		143				160		18:00	195		31				226	
6:15	23		154				177		18:15	168		42				210	
6:30	30		128				158		18:30	174		33				207	
6:45	26	96	126	551			152	647	18:45	136	673	26	132			162	805
7:00	35		110				145		19:00	103		24				127	
7:15	51		125				176		19:15	66		22				88	
7:30	78		92				170		19:30	44		19				63	
7:45	47	211	80	407			127	618	19:45	46	259	26	91			72	350
8:00	49		62				111		20:00	38		17				55	
8:15	40		93				133		20:15	51		13				64	
8:30	58		67				125		20:30	25		10				35	
8:45	42	189	59	281			101	470	20:45	25	139	20	60			45	199
9:00	32		67				99		21:00	34		15				49	
9:15	45		67				112		21:15	36		11				47	
9:30	36		69				105		21:30	28		18				46	
9:45	39	152	67	270			106	422	21:45	26	124	7	51			33	175
10:00	38		54				92		22:00	29		11				40	
10:15	42		48				90		22:15	18		8				26	
10:30	43		50				93		22:30	13		6				19	
10:45	37	160	49	201			86	361	22:45	15	75	3	28			18	103
11:00	42		53				95		23:00	11		6				17	
11:15	50		42				92		23:15	11		5				16	
11:30	59		47				106		23:30	8		2				10	
11:45	58	209	37	179			95	388	23:45	11	41	3	16			14	57
TOTALS		1108		2277				3385	TOTALS		3797		1577				5374
SPLIT %		32.7%		67.3%				38.6%	SPLIT %		70.7%		29.3%				61.4%

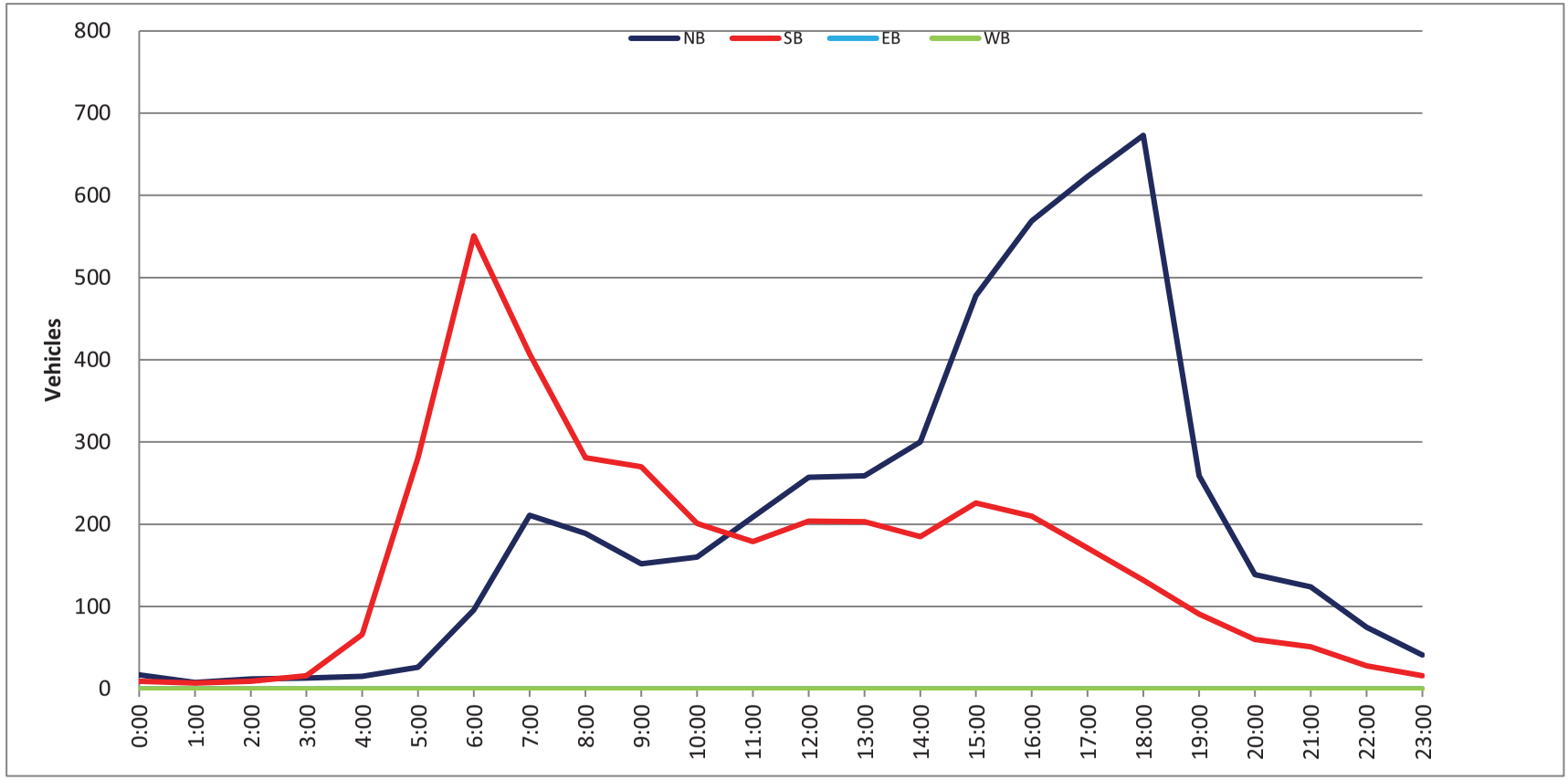
DAILY TOTALS	NB	SB	EB	WB	Total
	4,905	3,854	0	0	8,759

AM Peak Hour	11:30	6:00				6:00	PM Peak Hour	17:45	15:30				17:45
AM Pk Volume	251	551				647	PM Pk Volume	711	242				845
Pk Hr Factor	0.923	0.894				0.914	Pk Hr Factor	0.912	0.852				0.935
7 - 9 Volume	400	688	0	0		1088	4 - 6 Volume	1192	381	0	0		1573
7 - 9 Peak Hour	7:15	7:00				7:00	4 - 6 Peak Hour	16:30	16:00				16:30
7 - 9 Pk Volume	225	407	0	0		618	4 - 6 Pk Volume	628	210	0	0		826
Pk Hr Factor	0.721	0.814	0.000	0.000		0.878	Pk Hr Factor	0.963	0.938	0.000	0.000		0.952

Prepared by National Data & Surveying Services

Project #: CA19_4466_003 **City:** Fallbrook

Location: Old Hwy 395 N/O Vía Belmonte **Date:** 12/12/2019



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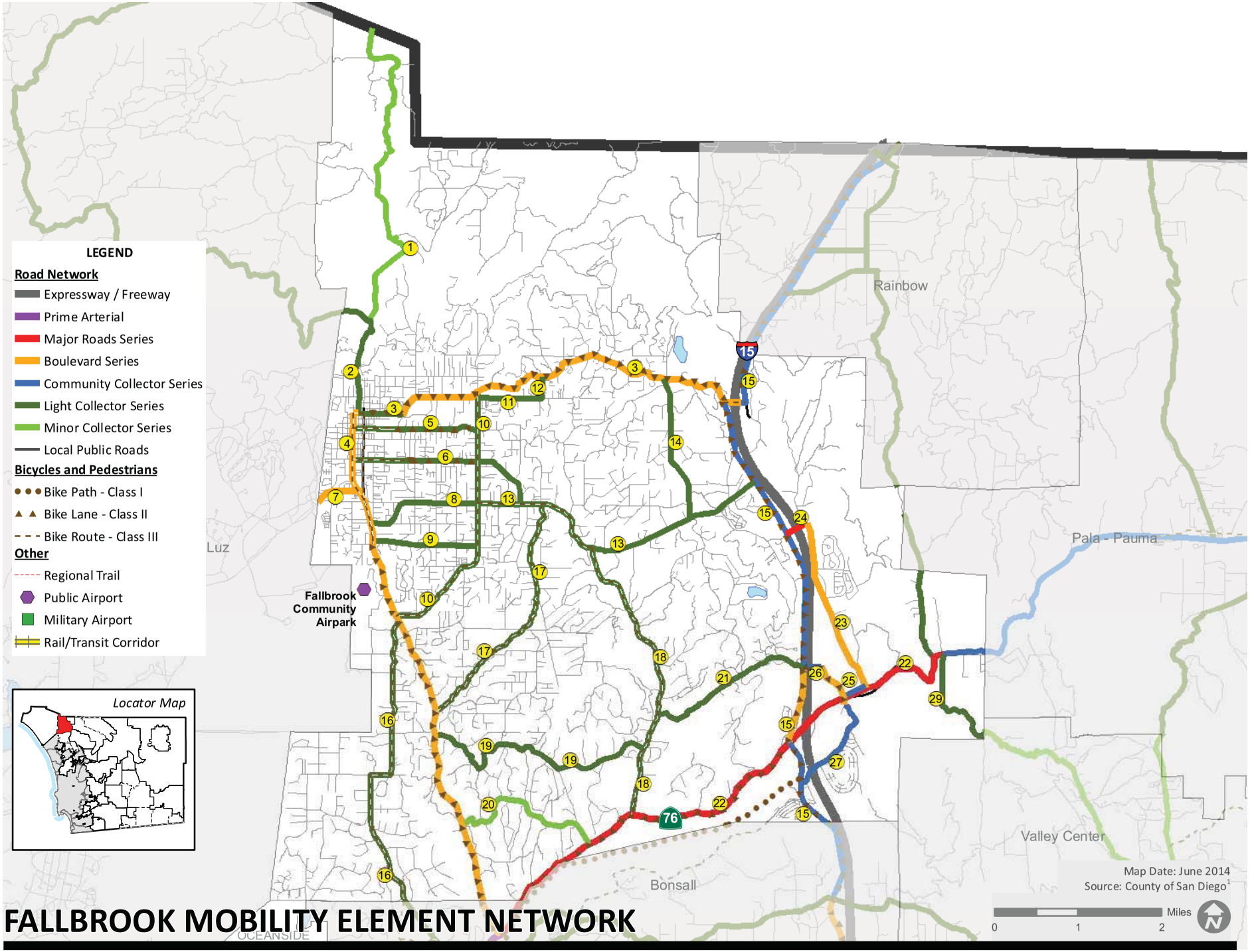
- Fallbrook Mobility Element Network



FALLBROOK MOBILITY ELEMENT NETWORK

San Diego County General Plan

Figure M-A-7

Mobility Element Network—Fallbrook Community Planning Area Matrix			
ID[a]	Road Segment	Designation/Improvement #.#X = [# of lanes].[roadway classification][improvement]	Special Circumstances
1	**Sandia Creek Drive (SC 21)** Segment: Riverside County line to DeLuz Road	**2.3C Minor Collector**	None
2	**DeLuz Road (SC 10)** Segment: Pendleton-DeLuz community boundary to West Mission Road	**2.2C Light Collector** Intermittent Turn Lanes	**Accepted at LOS E** Segments: Dougherty Street to Mission Road
3	**West / East Mission Road (SF 1305)** Segment: North Mission Road to Interstate 15 interchange northbound	**2.2B Light Collector** Continuous Turn Lane—N. Mission Road to Brandon Road **4.2B Boulevard** Intermittent Turn Lanes—Brandon Road to Interstate 15 interchange northbound	**Accepted at LOS E** Segments: Live Oak Park Road to I-15 southbound ramp **Shoulder as Parking Lane** Separate Bike Lane required—South Mission Road to Minnesota Street
4	**North / South Mission Road (SF 1305)** Segment: West Mission Road to Bonsall CPA boundary	**4.2B Boulevard** Intermittent Turn Lanes	**Shoulder as Parking Lane** Separate Bike Lane required—Mission Road to Alvarado Street
5	**Alvarado Street (SC 10)** Segment: South Mission Road to Stage Coach Lane	**2.2C Light Collector** Intermittent Turn Lanes	**Shoulder as Parking Lane** Separate Bike Lane required—Mission Road to Brandon Street
6	**Fallbrook Street (SF 1416)** Segment: South Mission Road to Reche Road	**2.2B Light Collector** Continuous Turn Lane—South Mission Road to Stage Coach Lane **2.2C Light Collector** Intermittent Turn Lanes—Stage Coach Lane to Reche Road	**Shoulder as Parking Lane** Separate Bike Lane required—Mission Road to Old Stage Coach Lane
7	**Ammunition Road (SC 20)** Segment: Pendleton-DeLuz boundary to South Main Avenue	**4.2B Boulevard** Intermittent Turn Lanes	None
8	**Palomino Road** Segment: Old Stage Road to Stage Coach Lane	**2.2C Light Collector** Intermittent Turn Lanes	None

Mobility Element Network—Fallbrook Community Planning Area Matrix			
ID[a]	Road Segment	Designation/Improvement #.#X = [# of lanes].[roadway classification][improvement]	Special Circumstances
9	**Pepper Tree Lane (SC 90)** Segment: South Mission Road to Stage Coach Lane	**2.2E Light Collector**	None
10	**Stage Coach Lane (SA 40)** Segment: South Mission Road to East Mission Road	**2.2C Light Collector** Intermittent Turn Lanes—South Mission Road to Reche Road **2.2B Light Collector** Continuous Turn Lane—Reche Road to East Mission Road	None
11	**Gumtree Lane (SC 30)** Segment: North Stagecoach Lane to Hamilton Lane	**2.2E Light Collector**	None
12	**Hamilton Lane** Segment: Guntree Lane to East Mission Road	**2.2E Light Collector**	None
13	**Reche Road (SF 1416)** Segment: Stage Coach Lane to Old Highway 395	**2.2B Light Collector** Continuous Turn Lane—Stage Coach Lane to Green Canyon Road **2.2C Light Collector** Intermittent Turn Lane—Green Canyon Road to Old Highway 395	None
14	**Yucca Road** Segment: East Mission Road to Reche Road	**2.2F Light Collector** Reduced Shoulder	None

Mobility Element Network—Fallbrook Community Planning Area Matrix			
ID[a]	Road Segment	Designation/Improvement #.#X = [# of lanes].[roadway classification][improvement]	Special Circumstances
15	**Old Highway 395 (SA 15)** Segment: Rainbow CPA boundary to Interstate 15 interchange northbound and East Mission Road to Bonsall CPA boundary	**2.1D Community Collector** Improvement Options [Unspecified]—Rainbow CPA boundary to Interstate15 interchange northbound **2.1A Community Collector** Raised Median—East Mission Road to Pala Mesa Drive **4.2B Boulevard** Intermittent Turn Lanes—Pala Mesa Drive to SR-76 **2.1D Community Collector** Improvement Options [Unspecified]—SR-76 to Bonsall CPA boundary	**Accepted at LOS E/F** Segment: Rainbow CPA boundary to Stewart Canyon Road and Dulin Road (W) to Pala Road Note: Although the Countywide traffic analysis forecast the Steward Canyon to Pala Mesa Drive segment to operate at LOS E/F, more project specific analysis forecast this segment to operate at an acceptable LOS. Therefore, this segment is not being accepted to operate at LOS E /F and any development projects would have to either mitigate their impacts or pursue a General Plan Amendment to change the classification of the road.
16	**Olive Hill Road (SC 100.5)** Segment: South Mission Road to Bonsall CPA boundary	**2.2F Light Collector** Reduced Shoulder	None
17	**Green Canyon Road (SA 60.2-SC 71)** Segment: Reche Road to S. Mission Road	**2.2E Light Collector**	None
18	**Gird Road (SA 80)** Segment: Reche Road to SR-76 / Pala Road	**2.2E Light Collector**	None
19	**Via Encinos / Knottwood Way** Segment: S. Mission Road to Gird Road	**2.2F Light Collector** Reduced Shoulder	None
20	**Via Monserate (SC 120)** Segment: S. Mission Road to SR-76 / Pala Road	**2.3C Minor Collector**	None
21	**Pala Mesa Drive** Segment: Gird Road to Pankey Road	**2.2F Light Collector** Reduced Shoulder—Gird Road to Old Highway 395 **2.1C Community Collector** Turn Lanes—Old Highway 395 to Pankey Road	Class III Bike Lane – Old Highway 395 to Pankey Road

Mobility Element Network—Fallbrook Community Planning Area Matrix			
ID[a]	Road Segment	Designation/Improvement #.#X = [# of lanes].[roadway classification][improvement]	Special Circumstances
22	**SR 76 (Pala Road)** Segment: Bonsall CPA boundary to Pala/Pauma Subregion boundary	**4.1A Major Road** Raised Median—Bonsall CPA boundary to Couser Canyon Road **2.1D Community Collector** Improvement Options [Passing Lanes]—Couser Canyon Road to Pala/Pauma Subregion boundary	**Accepted at LOS E** Segment: Old Highway 395 to I-15 southbound ramp OR **Increased Right-of-Way Required**—Operational improvements such as right turn lanes required to attain acceptable LOS Segment: Old Highway 395 to I-15 southbound ramp
23	**Horse Ranch Creek Road** Segment: SR-76/Pala Road to Stewart Canyon Road	**4.2A Boulevard** Raised Median	None
24	**Stewart Canyon Road** Segment: Old Highway 395 to Horse Ranch Creek Road	**4.1B Major Road** Intermittent Turn Lanes	None
25	**New Road 25** Segment: Pankey Road to Horse Ranch Creek Road	**2.1E Community Collector**	None
26	**Pankey Road (SC 260.2)** Segment: Pala Mesa Drive to East Dulin Road	**4.2A Boulevard** Raised Median	8-foot shoulder as Class II Bike Lane Parking prohibition in effect
27	**East Dulin Road (SC 260.2)** Segment: Old Highway 395 to Pankey Road	**2.1E Community Collector**	None
28	**Rice Canyon Road (SC 170)** Segment: Rainbow CPA boundary to SR-76	**2.2F Light Collector** Reduced Shoulder	None
29	**Couser Canyon Road (SC 240)** Segment: SR-76 / Pala Road to Valley Center CPA boundary	**2.2F Light Collector** Reduced Shoulder	None

a. ID = Roadway segment on Figure M-A-7

- SANDAG 2050 Forecast

SANDAG Series 12
County of San Diego
General Plan Update
2050 Base Forecast

Fallbrook and Rainbow

Model Run 10/29/13
2050hyb1 - October 2010 LU Map
2050 Network, 2050 Unincorporated LU,
2030 Incorporat
2050 Revenue Constrained

Levels of Service:

- LOS A - D
- LOS E
- LOS F
- Not Applicable

Forecasted Volumes:

- # Adjusted Volume
- # Unadjusted Volume
- # Traffic Analysis Zone

Feet 0 1,500 3,000
Meters 180 540 900

SANDAG
San Diego's Regional Planning Agency

February 20, 2014

RIVERSIDE COUNTY
Fallbrook

RIVERSIDE COUNTY
Rainbow

RIVERSIDE COUNTY
Pala-Pauma

Rainbow
Fallbrook

Rainbow
Pala-Pauma

Fallbrook
Pala-Pauma

Fallbrook
Valley Center

Fallbrook
Bonsall

Pendleton-De Luz
Fallbrook

Fallbrook

ATTACHMENT B

- Existing Synchro Worksheets

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	2	167	563	1
Future Vol, veh/h	0	1	2	167	563	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	2	184	619	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	808	620	620	0	-	0
Stage 1	620	-	-	-	-	-
Stage 2	188	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	350	488	960	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	349	488	960	-	-	-
Mov Cap-2 Maneuver	349	-	-	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	844	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	960	-	488	-	-
HCM Lane V/C Ratio	0.002	-	0.002	-	-
HCM Control Delay (s)	8.8	0	12.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	6	739	203	3
Future Vol, veh/h	1	3	6	739	203	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	6	762	209	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	985	211	212	0	-	0
Stage 1	211	-	-	-	-	-
Stage 2	774	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	275	829	1358	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	455	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	273	829	1358	-	-	-
Mov Cap-2 Maneuver	273	-	-	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	455	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1358	-	549	-	-
HCM Lane V/C Ratio	0.005	-	0.008	-	-
HCM Control Delay (s)	7.7	0	11.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	31	112	0	25	7	147	3	34	529	0
Future Volume (veh/h)	1	1	31	112	0	25	7	147	3	34	529	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	1	35	127	0	28	8	167	3	39	601	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	7	160	392	0	187	15	705	13	64	771	0
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.01	0.38	0.38	0.04	0.41	0.00
Sat Flow, veh/h	18	59	1360	1608	0	1585	1781	1832	33	1781	1870	0
Grp Volume(v), veh/h	37	0	0	127	0	28	8	0	170	39	601	0
Grp Sat Flow(s),veh/h/ln	1437	0	0	1608	0	1585	1781	0	1864	1781	1870	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0	2.2	0.8	9.9	0.0
Cycle Q Clear(g_c), s	2.4	0.0	0.0	2.4	0.0	0.6	0.2	0.0	2.2	0.8	9.9	0.0
Prop In Lane	0.03		0.95	1.00		1.00	1.00		0.02	1.00		0.00
Lane Grp Cap(c), veh/h	273	0	0	392	0	187	15	0	718	64	771	0
V/C Ratio(X)	0.14	0.00	0.00	0.32	0.00	0.15	0.53	0.00	0.24	0.61	0.78	0.00
Avail Cap(c_a), veh/h	2110	0	0	1982	0	2023	1037	0	2281	1037	2288	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.2	0.0	0.0	14.9	0.0	14.1	17.6	0.0	7.4	16.9	9.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.1	10.0	0.0	0.1	3.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.8	0.0	0.2	0.1	0.0	0.6	0.3	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.2	0.0	0.0	15.1	0.0	14.2	27.6	0.0	7.5	20.3	9.7	0.0
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		37			155			178			640	
Approach Delay, s/veh		14.2			14.9			8.4			10.4	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	20.2		8.8	5.6	21.2		8.8				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.8	4.2		4.4	2.2	11.9		4.4				
Green Ext Time (p_c), s	0.0	0.6		0.1	0.0	2.8		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			10.8									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	4	123	0	74	15	647	2	14	209	5
Future Volume (veh/h)	2	0	4	123	0	74	15	647	2	14	209	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	0	4	128	0	77	16	674	2	15	218	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	34	120	379	0	191	29	833	2	27	812	19
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.02	0.45	0.45	0.02	0.45	0.45
Sat Flow, veh/h	216	280	993	1621	0	1585	1781	1864	6	1781	1821	42
Grp Volume(v), veh/h	6	0	0	128	0	77	16	0	676	15	0	223
Grp Sat Flow(s),veh/h/ln	1489	0	0	1621	0	1585	1781	0	1869	1781	0	1863
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.8	0.4	0.0	12.3	0.3	0.0	3.0
Cycle Q Clear(g_c), s	2.7	0.0	0.0	2.7	0.0	1.8	0.4	0.0	12.3	0.3	0.0	3.0
Prop In Lane	0.33		0.67	1.00		1.00	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	302	0	0	379	0	191	29	0	835	27	0	830
V/C Ratio(X)	0.02	0.00	0.00	0.34	0.00	0.40	0.55	0.00	0.81	0.55	0.00	0.27
Avail Cap(c_a), veh/h	1839	0	0	1840	0	1831	938	0	2069	938	0	2062
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	0.0	16.4	0.0	16.0	19.2	0.0	9.4	19.2	0.0	6.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.5	5.9	0.0	0.7	6.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.9	0.0	0.6	0.2	0.0	3.5	0.2	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.3	0.0	0.0	16.6	0.0	16.5	25.1	0.0	10.2	25.4	0.0	6.9
LnGrp LOS	B	A	A	B	A	B	C	A	B	C	A	A
Approach Vol, veh/h		6			205			692			238	
Approach Delay, s/veh		15.3			16.5			10.5			8.1	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	24.1		9.3	5.9	24.0		9.3				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.3	14.3		4.7	2.4	5.0		4.7				
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	0.9		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		11.1	
HCM 6th LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	687	200	74	1123	59	201	72	39	131	204	119
Future Volume (veh/h)	58	687	200	74	1123	59	201	72	39	131	204	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	755	220	81	1234	65	221	79	43	144	224	131
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	2241	696	144	1565	1108	222	144	250	893	244	142
Arrive On Green	0.08	0.44	0.44	0.08	0.44	0.44	0.12	0.08	0.08	0.26	0.22	0.22
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	1107	647
Grp Volume(v), veh/h	64	755	220	81	1234	65	221	79	43	144	0	355
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1754
Q Serve(g_s), s	6.7	19.0	17.6	8.5	58.0	0.9	24.2	7.9	2.6	6.3	0.0	38.6
Cycle Q Clear(g_c), s	6.7	19.0	17.6	8.5	58.0	0.9	24.2	7.9	2.6	6.3	0.0	38.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	142	2241	696	144	1565	1108	222	144	250	893	0	386
V/C Ratio(X)	0.45	0.34	0.32	0.56	0.79	0.06	1.00	0.55	0.17	0.16	0.00	0.92
Avail Cap(c_a), veh/h	195	2241	696	231	1565	1108	222	245	336	1139	0	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	85.7	36.0	35.6	86.3	46.8	2.6	85.3	86.7	31.7	55.9	0.0	74.4
Incr Delay (d2), s/veh	2.2	0.4	1.2	3.4	4.1	0.1	59.1	3.2	0.3	0.1	0.0	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	8.2	7.3	4.1	26.8	0.5	14.9	4.0	1.2	2.8	0.0	19.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.9	36.4	36.8	89.6	50.9	2.7	144.4	90.0	32.0	56.0	0.0	88.8
LnGrp LOS	F	D	D	F	D	A	F	F	C	E	A	F
Approach Vol, veh/h		1039			1380			343			499	
Approach Delay, s/veh		39.7			50.9			117.8			79.3	
Approach LOS		D			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	93.1	30.0	50.4	21.2	93.4	57.9	22.5
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	25	53.5	* 24	65.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	10.5	21.0	26.2	40.6	8.7	60.0	8.3	9.9
Green Ext Time (p_c), s	0.1	7.0	0.0	2.3	0.1	0.0	0.5	0.4

Intersection Summary	
HCM 6th Ctrl Delay	58.7
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	1032	125	26	831	306	96	161	43	146	58	86
Future Volume (veh/h)	204	1032	125	26	831	306	96	161	43	146	58	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	215	1086	132	27	875	322	101	169	45	154	61	91
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	3158	980	112	2034	1021	120	191	262	248	78	117
Arrive On Green	0.11	0.62	0.62	0.06	0.57	0.57	0.07	0.10	0.10	0.07	0.12	0.12
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	678	1011
Grp Volume(v), veh/h	215	1086	132	27	875	322	101	169	45	154	0	152
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1688
Q Serve(g_s), s	21.3	20.1	6.8	2.8	27.2	6.9	10.9	17.4	3.7	8.4	0.0	17.1
Cycle Q Clear(g_c), s	21.3	20.1	6.8	2.8	27.2	6.9	10.9	17.4	3.7	8.4	0.0	17.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	195	3158	980	112	2034	1021	120	191	262	248	0	195
V/C Ratio(X)	1.10	0.34	0.13	0.24	0.43	0.32	0.84	0.89	0.17	0.62	0.00	0.78
Avail Cap(c_a), veh/h	195	3158	980	231	2034	1021	322	245	307	1139	0	472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	86.8	18.0	15.5	86.9	23.7	4.8	89.9	86.4	44.5	87.9	0.0	83.8
Incr Delay (d2), s/veh	95.4	0.3	0.3	1.1	0.7	0.8	14.5	25.3	0.3	2.5	0.0	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.1	8.3	2.6	1.3	12.0	3.4	5.6	9.8	1.7	3.9	0.0	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	182.3	18.3	15.8	88.0	24.3	5.6	104.4	111.7	44.8	90.5	0.0	90.3
LnGrp LOS	F	B	B	F	C	A	F	F	D	F	A	F
Approach Vol, veh/h		1433			1224			315			306	
Approach Delay, s/veh		42.7			20.8			99.8			90.4	
Approach LOS		D			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	128.1	18.8	30.1	27.0	119.1	21.5	27.4
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	25	53.5	* 35	54.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	14.8	22.1	12.9	19.1	23.3	29.2	10.4	19.4
Green Ext Time (p_c), s	0.0	10.0	0.2	1.0	0.0	8.5	0.5	0.5

Intersection Summary	
HCM 6th Ctrl Delay	44.5
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	4	7	166	560	4
Future Vol, veh/h	3	4	7	166	560	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	4	8	180	609	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	807	611	613	0	-	0
Stage 1	611	-	-	-	-	-
Stage 2	196	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	351	494	966	-	-	-
Stage 1	542	-	-	-	-	-
Stage 2	837	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	348	494	966	-	-	-
Mov Cap-2 Maneuver	348	-	-	-	-	-
Stage 1	537	-	-	-	-	-
Stage 2	837	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	966	-	419	-	-
HCM Lane V/C Ratio	0.008	-	0.018	-	-
HCM Control Delay (s)	8.8	0	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	6	6	742	202	4
Future Vol, veh/h	4	6	6	742	202	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	7	7	807	220	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1043	222	224	0	-	0
Stage 1	222	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	254	818	1345	-	-	-
Stage 1	815	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	252	818	1345	-	-	-
Mov Cap-2 Maneuver	252	-	-	-	-	-
Stage 1	808	-	-	-	-	-
Stage 2	432	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.6	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1345	-	431	-	-
HCM Lane V/C Ratio	0.005	-	0.025	-	-
HCM Control Delay (s)	7.7	0	13.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	8	13	160	564	8
Future Vol, veh/h	6	8	13	160	564	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	9	14	174	613	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	820	618	622	0	-	0
Stage 1	618	-	-	-	-	-
Stage 2	202	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	345	489	959	-	-	-
Stage 1	538	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	339	489	959	-	-	-
Mov Cap-2 Maneuver	339	-	-	-	-	-
Stage 1	529	-	-	-	-	-
Stage 2	832	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.1	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	959	-	411	-	-
HCM Lane V/C Ratio	0.015	-	0.037	-	-
HCM Control Delay (s)	8.8	0	14.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	26	27	725	208	18
Future Vol, veh/h	17	26	27	725	208	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	28	29	788	226	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1082	236	246	0	-	0
Stage 1	236	-	-	-	-	-
Stage 2	846	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	241	803	1320	-	-	-
Stage 1	803	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	232	803	1320	-	-	-
Mov Cap-2 Maneuver	232	-	-	-	-	-
Stage 1	772	-	-	-	-	-
Stage 2	421	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1320	-	407	-	-
HCM Lane V/C Ratio	0.022	-	0.115	-	-
HCM Control Delay (s)	7.8	0	15	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

ATTACHMENT C

- Buildout 2050 Synchro Worksheets
- Buildout 2050 Plus Project Synchro Work Sheets

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	2	170	574	1
Future Vol, veh/h	0	1	2	170	574	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	2	187	631	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	823	632	632	0	-	0
Stage 1	632	-	-	-	-	-
Stage 2	191	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	343	480	951	-	-	-
Stage 1	530	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	342	480	951	-	-	-
Mov Cap-2 Maneuver	342	-	-	-	-	-
Stage 1	529	-	-	-	-	-
Stage 2	841	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	951	-	480	-	-
HCM Lane V/C Ratio	0.002	-	0.002	-	-
HCM Control Delay (s)	8.8	0	12.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	6	754	207	3
Future Vol, veh/h	1	3	6	754	207	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	6	777	213	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1004	215	216	0	-	0
Stage 1	215	-	-	-	-	-
Stage 2	789	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	268	825	1354	-	-	-
Stage 1	821	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	266	825	1354	-	-	-
Mov Cap-2 Maneuver	266	-	-	-	-	-
Stage 1	814	-	-	-	-	-
Stage 2	448	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1354	-	541	-	-
HCM Lane V/C Ratio	0.005	-	0.008	-	-
HCM Control Delay (s)	7.7	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	32	114	0	26	7	150	3	35	540	0
Future Volume (veh/h)	1	1	32	114	0	26	7	150	3	35	540	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	1	36	130	0	30	8	170	3	40	614	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	7	167	392	0	191	15	715	13	65	782	0
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.01	0.39	0.39	0.04	0.42	0.00
Sat Flow, veh/h	18	59	1387	1608	0	1585	1781	1832	32	1781	1870	0
Grp Volume(v), veh/h	38	0	0	130	0	30	8	0	173	40	614	0
Grp Sat Flow(s),veh/h/ln	1464	0	0	1608	0	1585	1781	0	1865	1781	1870	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0	2.3	0.8	10.3	0.0
Cycle Q Clear(g_c), s	2.5	0.0	0.0	2.5	0.0	0.6	0.2	0.0	2.3	0.8	10.3	0.0
Prop In Lane	0.03		0.95	1.00		1.00	1.00		0.02	1.00		0.00
Lane Grp Cap(c), veh/h	278	0	0	392	0	191	15	0	728	65	782	0
V/C Ratio(X)	0.14	0.00	0.00	0.33	0.00	0.16	0.53	0.00	0.24	0.61	0.78	0.00
Avail Cap(c_a), veh/h	2075	0	0	1946	0	1987	1018	0	2239	1018	2246	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.4	0.0	0.0	15.1	0.0	14.3	17.9	0.0	7.4	17.2	9.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.1	10.1	0.0	0.1	3.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.9	0.0	0.2	0.1	0.0	0.6	0.3	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.4	0.0	0.0	15.3	0.0	14.4	27.9	0.0	7.5	20.6	9.8	0.0
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		38			160			181			654	
Approach Delay, s/veh		14.4			15.1			8.4			10.5	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	20.6		9.0	5.6	21.6		9.0				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.8	4.3		4.5	2.2	12.3		4.5				
Green Ext Time (p_c), s	0.0	0.6		0.1	0.0	2.9		0.5				

Intersection Summary		
HCM 6th Ctrl Delay	11.0	
HCM 6th LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	4	125	0	75	15	660	2	14	213	5
Future Volume (veh/h)	2	0	4	125	0	75	15	660	2	14	213	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	0	4	130	0	78	16	688	2	15	222	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	35	122	377	0	193	29	845	2	27	824	19
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.02	0.45	0.45	0.02	0.45	0.45
Sat Flow, veh/h	214	286	1000	1622	0	1585	1781	1864	5	1781	1822	41
Grp Volume(v), veh/h	6	0	0	130	0	78	16	0	690	15	0	227
Grp Sat Flow(s),veh/h/ln	1500	0	0	1622	0	1585	1781	0	1869	1781	0	1863
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.8	0.4	0.0	12.8	0.3	0.0	3.0
Cycle Q Clear(g_c), s	2.8	0.0	0.0	2.8	0.0	1.8	0.4	0.0	12.8	0.3	0.0	3.0
Prop In Lane	0.33		0.67	1.00		1.00	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	303	0	0	377	0	193	29	0	847	27	0	842
V/C Ratio(X)	0.02	0.00	0.00	0.34	0.00	0.40	0.55	0.00	0.81	0.55	0.00	0.27
Avail Cap(c_a), veh/h	1807	0	0	1808	0	1798	921	0	2032	921	0	2025
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	0.0	16.7	0.0	16.2	19.5	0.0	9.5	19.6	0.0	6.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.5	5.9	0.0	0.7	6.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.0	0.0	0.6	0.2	0.0	3.7	0.2	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	0.0	0.0	16.9	0.0	16.7	25.5	0.0	10.2	25.8	0.0	6.9
LnGrp LOS	B	A	A	B	A	B	C	A	B	C	A	A
Approach Vol, veh/h		6			208			706			242	
Approach Delay, s/veh		15.5			16.8			10.6			8.1	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	24.6		9.5	6.0	24.6		9.5				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.3	14.8		4.8	2.4	5.0		4.8				
Green Ext Time (p_c), s	0.0	3.3		0.0	0.0	0.9		0.6				

Intersection Summary		
HCM 6th Ctrl Delay	11.2	
HCM 6th LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	701	204	75	1145	60	205	73	40	134	208	121
Future Volume (veh/h)	59	701	204	75	1145	60	205	73	40	134	208	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	770	224	82	1258	66	225	80	44	147	229	133
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	2167	673	144	1513	1108	244	144	250	943	246	143
Arrive On Green	0.08	0.42	0.42	0.08	0.43	0.43	0.14	0.08	0.08	0.27	0.22	0.22
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	1110	645
Grp Volume(v), veh/h	65	770	224	82	1258	66	225	80	44	147	0	362
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1754
Q Serve(g_s), s	6.8	19.9	18.5	8.6	61.4	0.9	24.3	8.0	2.6	6.3	0.0	39.4
Cycle Q Clear(g_c), s	6.8	19.9	18.5	8.6	61.4	0.9	24.3	8.0	2.6	6.3	0.0	39.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	142	2167	673	144	1513	1108	244	144	250	943	0	389
V/C Ratio(X)	0.46	0.36	0.33	0.57	0.83	0.06	0.92	0.56	0.18	0.16	0.00	0.93
Avail Cap(c_a), veh/h	195	2167	673	231	1513	1108	322	245	336	1139	0	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	85.7	38.0	37.6	86.3	49.8	2.6	83.1	86.8	31.2	53.8	0.0	74.4
Incr Delay (d2), s/veh	2.3	0.5	1.3	3.5	5.5	0.1	26.1	3.3	0.3	0.1	0.0	21.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	8.6	7.6	4.2	28.6	0.5	13.1	4.1	1.2	2.8	0.0	20.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.0	38.5	39.0	89.8	55.2	2.7	109.2	90.1	31.5	53.9	0.0	95.8
LnGrp LOS	F	D	D	F	E	A	F	F	C	D	A	F
Approach Vol, veh/h		1059			1406			349			509	
Approach Delay, s/veh		41.6			54.8			95.0			83.7	
Approach LOS		D			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	90.3	32.4	50.8	21.2	90.5	60.7	22.5
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	25	53.5	* 35	54.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	10.6	21.9	26.3	41.4	8.8	63.4	8.3	10.0
Green Ext Time (p_c), s	0.1	7.1	0.4	1.8	0.1	0.0	0.5	0.4

Intersection Summary	
HCM 6th Ctrl Delay	59.2
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	1053	128	27	848	312	98	164	44	149	59	88
Future Volume (veh/h)	208	1053	128	27	848	312	98	164	44	149	59	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	219	1108	135	28	893	328	103	173	46	157	62	93
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	3143	976	114	2027	1018	122	195	266	248	79	118
Arrive On Green	0.11	0.62	0.62	0.06	0.57	0.57	0.07	0.10	0.10	0.07	0.12	0.12
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	675	1013
Grp Volume(v), veh/h	219	1108	135	28	893	328	103	173	46	157	0	155
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1688
Q Serve(g_s), s	21.3	20.8	7.0	2.9	28.1	7.0	11.1	17.8	3.8	8.6	0.0	17.4
Cycle Q Clear(g_c), s	21.3	20.8	7.0	2.9	28.1	7.0	11.1	17.8	3.8	8.6	0.0	17.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	195	3143	976	114	2027	1018	122	195	266	248	0	197
V/C Ratio(X)	1.13	0.35	0.14	0.25	0.44	0.32	0.85	0.89	0.17	0.63	0.00	0.79
Avail Cap(c_a), veh/h	195	3143	976	231	2027	1018	322	245	309	1139	0	472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	86.8	18.4	15.8	86.8	24.0	4.9	89.8	86.2	44.2	88.0	0.0	83.8
Incr Delay (d2), s/veh	102.3	0.3	0.3	1.1	0.7	0.8	14.5	26.3	0.3	2.7	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.4	8.6	2.7	1.4	12.4	3.5	5.7	10.1	1.7	4.0	0.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	189.1	18.7	16.1	87.9	24.7	5.7	104.3	112.5	44.5	90.7	0.0	90.6
LnGrp LOS	F	B	B	F	C	A	F	F	D	F	A	F
Approach Vol, veh/h		1462			1249			322			312	
Approach Delay, s/veh		44.0			21.2			100.2			90.6	
Approach LOS		D			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	38.2	127.5	19.0	30.3	27.0	118.7	21.5	27.8
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	25	53.5	* 35	54.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	14.9	22.8	13.1	19.4	23.3	30.1	10.6	19.8
Green Ext Time (p_c), s	0.0	10.2	0.2	1.0	0.0	8.7	0.6	0.5

Intersection Summary	
HCM 6th Ctrl Delay	45.2
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	4	7	169	571	4
Future Vol, veh/h	3	4	7	169	571	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	4	8	184	621	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	823	623	625	0	-	0
Stage 1	623	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	343	486	956	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	340	486	956	-	-	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	530	-	-	-	-	-
Stage 2	834	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.9	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	956	-	410	-	-
HCM Lane V/C Ratio	0.008	-	0.019	-	-
HCM Control Delay (s)	8.8	0	13.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	6	6	757	206	4
Future Vol, veh/h	4	6	6	757	206	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	7	7	823	224	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1063	226	228	0	-	0
Stage 1	226	-	-	-	-	-
Stage 2	837	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	247	813	1340	-	-	-
Stage 1	812	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	245	813	1340	-	-	-
Mov Cap-2 Maneuver	245	-	-	-	-	-
Stage 1	804	-	-	-	-	-
Stage 2	425	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1340	-	422	-	-
HCM Lane V/C Ratio	0.005	-	0.026	-	-
HCM Control Delay (s)	7.7	0	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	8	13	163	575	8
Future Vol, veh/h	6	8	13	163	575	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	9	14	177	625	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	835	630	634	0	-	0
Stage 1	630	-	-	-	-	-
Stage 2	205	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	338	482	949	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	333	482	949	-	-	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	829	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.3	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	949	-	404	-	-
HCM Lane V/C Ratio	0.015	-	0.038	-	-
HCM Control Delay (s)	8.9	0	14.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	27	28	740	212	18
Future Vol, veh/h	17	27	28	740	212	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	29	30	804	230	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1104	240	250	0	-	0
Stage 1	240	-	-	-	-	-
Stage 2	864	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	234	799	1316	-	-	-
Stage 1	800	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	224	799	1316	-	-	-
Mov Cap-2 Maneuver	224	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	413	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.2	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1316	-	401	-	-
HCM Lane V/C Ratio	0.023	-	0.119	-	-
HCM Control Delay (s)	7.8	0	15.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	2	182	587	1
Future Vol, veh/h	0	1	2	182	587	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	2	200	645	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	850	646	646	0	-	0
Stage 1	646	-	-	-	-	-
Stage 2	204	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	331	472	939	-	-	-
Stage 1	522	-	-	-	-	-
Stage 2	830	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	330	472	939	-	-	-
Mov Cap-2 Maneuver	330	-	-	-	-	-
Stage 1	521	-	-	-	-	-
Stage 2	830	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	939	-	472	-	-
HCM Lane V/C Ratio	0.002	-	0.002	-	-
HCM Control Delay (s)	8.8	0	12.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	6	773	226	3
Future Vol, veh/h	1	3	6	773	226	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	6	797	233	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1044	235	236	0	-	0
Stage 1	235	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	254	804	1331	-	-	-
Stage 1	804	-	-	-	-	-
Stage 2	438	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	252	804	1331	-	-	-
Mov Cap-2 Maneuver	252	-	-	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	438	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1331	-	520	-	-
HCM Lane V/C Ratio	0.005	-	0.008	-	-
HCM Control Delay (s)	7.7	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	32	114	0	26	7	170	3	35	558	0
Future Volume (veh/h)	1	1	32	114	0	26	7	170	3	35	558	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	1	36	130	0	30	8	193	3	40	634	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	7	167	388	0	190	15	735	11	65	800	0
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.01	0.40	0.40	0.04	0.43	0.00
Sat Flow, veh/h	18	60	1394	1609	0	1585	1781	1837	29	1781	1870	0
Grp Volume(v), veh/h	38	0	0	130	0	30	8	0	196	40	634	0
Grp Sat Flow(s),veh/h/ln	1472	0	0	1609	0	1585	1781	0	1865	1781	1870	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0	2.6	0.8	10.8	0.0
Cycle Q Clear(g_c), s	2.6	0.0	0.0	2.6	0.0	0.6	0.2	0.0	2.6	0.8	10.8	0.0
Prop In Lane	0.03		0.95	1.00		1.00	1.00		0.02	1.00		0.00
Lane Grp Cap(c), veh/h	277	0	0	388	0	190	15	0	746	65	800	0
V/C Ratio(X)	0.14	0.00	0.00	0.34	0.00	0.16	0.53	0.00	0.26	0.62	0.79	0.00
Avail Cap(c_a), veh/h	2033	0	0	1907	0	1946	997	0	2195	997	2201	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.7	0.0	0.0	15.4	0.0	14.6	18.3	0.0	7.4	17.6	9.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.1	10.1	0.0	0.1	3.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.9	0.0	0.2	0.1	0.0	0.7	0.3	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	0.0	0.0	15.6	0.0	14.7	28.3	0.0	7.5	21.1	9.8	0.0
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		38			160			204			674	
Approach Delay, s/veh		14.7			15.5			8.3			10.5	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	21.3		9.0	5.6	22.3		9.0				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.8	4.6		4.6	2.2	12.8		4.6				
Green Ext Time (p_c), s	0.0	0.7		0.1	0.0	3.0		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		11.0	
HCM 6th LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	4	125	0	75	15	689	2	14	242	5
Future Volume (veh/h)	2	0	4	125	0	75	15	689	2	14	242	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	0	4	130	0	78	16	718	2	15	252	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	34	120	370	0	192	29	871	2	27	852	17
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.02	0.47	0.47	0.02	0.47	0.47
Sat Flow, veh/h	212	284	991	1624	0	1585	1781	1864	5	1781	1828	36
Grp Volume(v), veh/h	6	0	0	130	0	78	16	0	720	15	0	257
Grp Sat Flow(s),veh/h/ln	1486	0	0	1624	0	1585	1781	0	1869	1781	0	1864
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.9	0.4	0.0	13.8	0.3	0.0	3.5
Cycle Q Clear(g_c), s	2.9	0.0	0.0	2.9	0.0	1.9	0.4	0.0	13.8	0.3	0.0	3.5
Prop In Lane	0.33		0.67	1.00		1.00	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	296	0	0	370	0	192	29	0	874	27	0	869
V/C Ratio(X)	0.02	0.00	0.00	0.35	0.00	0.41	0.55	0.00	0.82	0.55	0.00	0.30
Avail Cap(c_a), veh/h	1747	0	0	1750	0	1740	892	0	1966	892	0	1960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.0	0.0	0.0	17.2	0.0	16.8	20.2	0.0	9.5	20.2	0.0	6.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.5	6.0	0.0	0.8	6.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.0	0.0	0.6	0.2	0.0	4.0	0.2	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	0.0	0.0	17.5	0.0	17.3	26.2	0.0	10.3	26.5	0.0	6.9
LnGrp LOS	B	A	A	B	A	B	C	A	B	C	A	A
Approach Vol, veh/h		6			208			736			272	
Approach Delay, s/veh		16.1			17.4			10.7			8.0	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	25.8		9.6	6.0	25.8		9.6				
Change Period (Y+Rc), s	5.3	6.5		4.6	5.3	6.5		4.6				
Max Green Setting (Gmax), s	20.7	43.5		45.4	20.7	43.5		45.4				
Max Q Clear Time (g_c+I1), s	2.3	15.8		4.9	2.4	5.5		4.9				
Green Ext Time (p_c), s	0.0	3.5		0.0	0.0	1.0		0.6				

Intersection Summary		
HCM 6th Ctrl Delay	11.2	
HCM 6th LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	701	204	75	1145	68	205	76	40	142	211	129
Future Volume (veh/h)	67	701	204	75	1145	68	205	76	40	142	211	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	770	224	82	1258	75	225	84	44	156	232	142
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	2131	662	144	1485	1106	244	144	250	968	249	152
Arrive On Green	0.08	0.42	0.42	0.08	0.42	0.42	0.14	0.08	0.08	0.28	0.23	0.23
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	1086	665
Grp Volume(v), veh/h	74	770	224	82	1258	75	225	84	44	156	0	374
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1751
Q Serve(g_s), s	7.8	20.2	18.7	8.6	62.2	1.1	24.3	8.5	2.5	6.6	0.0	40.8
Cycle Q Clear(g_c), s	7.8	20.2	18.7	8.6	62.2	1.1	24.3	8.5	2.5	6.6	0.0	40.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	144	2131	662	144	1485	1106	244	144	250	968	0	401
V/C Ratio(X)	0.52	0.36	0.34	0.57	0.85	0.07	0.92	0.58	0.18	0.16	0.00	0.93
Avail Cap(c_a), veh/h	195	2131	662	231	1485	1106	322	245	336	1139	0	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	86.0	39.0	38.5	86.3	51.1	2.6	83.1	87.0	31.0	52.9	0.0	73.7
Incr Delay (d2), s/veh	2.8	0.5	1.4	3.5	6.2	0.1	26.1	3.7	0.3	0.1	0.0	22.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	8.8	7.7	4.2	29.2	0.6	13.1	4.3	1.2	3.0	0.0	21.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.8	39.4	39.9	89.8	57.3	2.7	109.2	90.7	31.3	53.0	0.0	96.2
LnGrp LOS	F	D	D	F	E	A	F	F	C	D	A	F
Approach Vol, veh/h		1068			1415			353			530	
Approach Delay, s/veh		43.0			56.3			95.1			83.5	
Approach LOS		D			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	88.9	32.4	52.2	21.4	89.0	62.1	22.5
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	25	53.5	* 35	54.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	10.6	22.2	26.3	42.8	9.8	64.2	8.6	10.5
Green Ext Time (p_c), s	0.1	7.1	0.4	1.8	0.1	0.0	0.6	0.4

Intersection Summary	
HCM 6th Ctrl Delay	60.4
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1053	128	27	848	324	98	169	44	161	64	100
Future Volume (veh/h)	220	1053	128	27	848	324	98	169	44	161	64	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	1108	135	28	893	341	103	178	46	169	67	105
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	3130	972	114	2018	1014	122	199	270	248	78	123
Arrive On Green	0.11	0.61	0.61	0.06	0.57	0.57	0.07	0.11	0.11	0.07	0.12	0.12
Sat Flow, veh/h	1781	5106	1585	1781	3554	1585	1781	1870	1585	3456	656	1029
Grp Volume(v), veh/h	232	1108	135	28	893	341	103	178	46	169	0	172
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1777	1585	1781	1870	1585	1728	0	1685
Q Serve(g_s), s	21.3	20.9	7.0	2.9	28.3	7.4	11.1	18.3	3.8	9.3	0.0	19.5
Cycle Q Clear(g_c), s	21.3	20.9	7.0	2.9	28.3	7.4	11.1	18.3	3.8	9.3	0.0	19.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	195	3130	972	114	2018	1014	122	199	270	248	0	201
V/C Ratio(X)	1.19	0.35	0.14	0.25	0.44	0.34	0.85	0.89	0.17	0.68	0.00	0.86
Avail Cap(c_a), veh/h	195	3130	972	231	2018	1014	322	245	309	1139	0	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	86.8	18.7	16.0	86.8	24.3	5.0	89.8	86.0	43.8	88.3	0.0	84.2
Incr Delay (d2), s/veh	126.0	0.3	0.3	1.1	0.7	0.9	14.5	27.5	0.3	3.3	0.0	10.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.7	8.6	2.7	1.4	12.4	3.7	5.7	10.5	1.7	4.3	0.0	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	212.8	19.0	16.3	87.9	25.0	5.9	104.3	113.5	44.1	91.6	0.0	94.2
LnGrp LOS	F	B	B	F	C	A	F	F	D	F	A	F
Approach Vol, veh/h		1475			1262			327			341	
Approach Delay, s/veh		49.2			21.3			100.8			92.9	
Approach LOS		D			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	127.0	19.0	30.7	27.0	118.2	21.5	28.3
Change Period (Y+Rc), s	5.7	7.5	* 5.7	7.5	* 5.7	7.5	7.5	* 7.5
Max Green Setting (Gmax), s	12.5	53.5	* 35	54.5	* 21	57.5	64.3	* 26
Max Q Clear Time (g_c+I1), s	14.9	22.9	13.1	21.5	23.3	30.3	11.3	20.3
Green Ext Time (p_c), s	0.0	10.2	0.2	1.1	0.0	8.7	0.6	0.5

Intersection Summary	
HCM 6th Ctrl Delay	48.2
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	19	23	177	581	20
Future Vol, veh/h	18	19	23	177	581	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	21	25	192	632	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	885	643	654	0	-	0
Stage 1	643	-	-	-	-	-
Stage 2	242	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	315	473	933	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	798	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	306	473	933	-	-	-
Mov Cap-2 Maneuver	306	-	-	-	-	-
Stage 1	507	-	-	-	-	-
Stage 2	798	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.8	1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	933	-	374	-	-
HCM Lane V/C Ratio	0.027	-	0.108	-	-
HCM Control Delay (s)	9	0	15.8	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	25	26	770	220	24
Future Vol, veh/h	23	25	26	770	220	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	27	28	837	239	26

Major/Minor	Minor2	Major1			Major2	
Conflicting Flow All	1145	252	265	0	-	0
Stage 1	252	-	-	-	-	-
Stage 2	893	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	221	787	1299	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	400	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	212	787	1299	-	-	-
Mov Cap-2 Maneuver	212	-	-	-	-	-
Stage 1	758	-	-	-	-	-
Stage 2	400	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.4	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1299	-	342	-	-
HCM Lane V/C Ratio	0.022	-	0.153	-	-
HCM Control Delay (s)	7.8	0	17.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	27	34	43	166	577	31
Future Vol, veh/h	27	34	43	166	577	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	37	47	180	627	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	918	644	661	0	-	0
Stage 1	644	-	-	-	-	-
Stage 2	274	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	302	473	927	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	285	473	927	-	-	-
Mov Cap-2 Maneuver	285	-	-	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	772	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17	1.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	927	-	366	-	-
HCM Lane V/C Ratio	0.05	-	0.181	-	-
HCM Control Delay (s)	9.1	0	17	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.7	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	45	66	68	745	216	47
Future Vol, veh/h	45	66	68	745	216	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	72	74	810	235	51

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1219	261	286	0	-	0
Stage 1	261	-	-	-	-	-
Stage 2	958	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	199	778	1276	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	373	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	178	778	1276	-	-	-
Mov Cap-2 Maneuver	178	-	-	-	-	-
Stage 1	701	-	-	-	-	-
Stage 2	373	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.1	0.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1276	-	329	-	-
HCM Lane V/C Ratio	0.058	-	0.367	-	-
HCM Control Delay (s)	8	0	22.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1.6	-	-