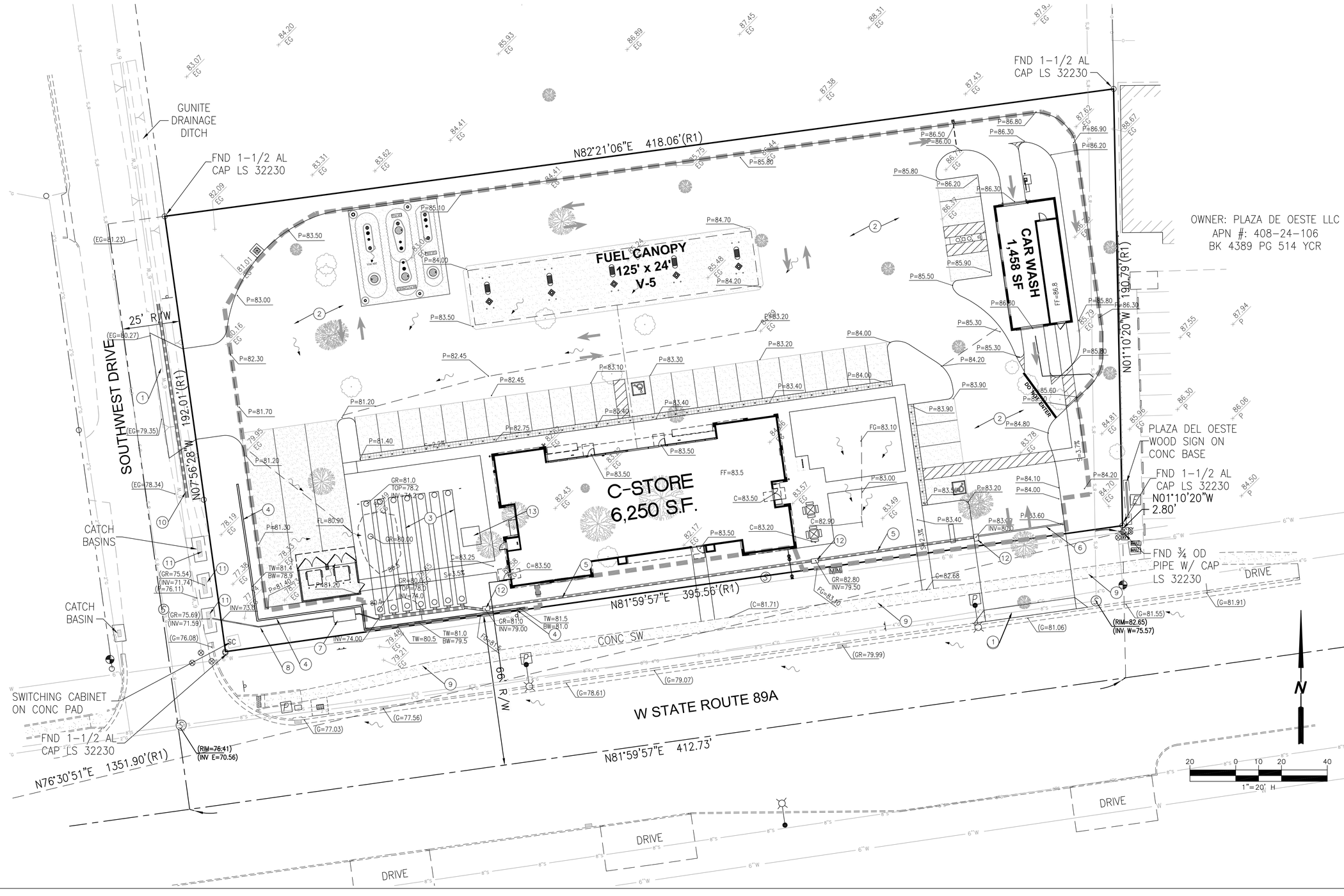
KEYED NOTES

(X)
1. NEW DRIVEWAY
2. NEW ONSITE PAVING
3. CONSTRUCT DETENTION BASIN – 7x50' 48" CMP UNDERGROUND RETENTION
4. NEW RETAINING WALL
5. NEW ONSITE STORM DRAIN
6. NEW VANE DRAIN
7. NEW PRECAST SEPARATOR WITH COALESCING PACK
8. NEW 4" BLEED LINE
9. SIDEWALK TO REMAIN
10. NEW PIPE CULVERT – 15" RGRCP PIPE WITH TONGUE AND GROOVE JOINTS (NO BELL JOINTS)
11. EXISTING GRATE INLETS TO REMAIN
12. NEW ONSITE INLET
13. NEW APS TRANSFORMER



CLIENT:
Land Development Consultants, LLC
11811 N. Tatum Boulevard, Suite 1051
Phoenix, AZ 85028
ph: 602-684-5210
fax: 480-393-0946
contact: Michael Scarbrough

PRELIMINARY

Registered Professional Engineer
CERTIFICATE NO.
30489
STEVEN R. BOWSER
6-4-21
ARIZONA U.S.A.
Expires 09/30/2023

Helix Engineering, LLC
Engineering / Surveying / Consulting
3240 E Union Hills
Suite 113
Phoenix AZ 85050
ph) 602-788-2616
www.hxeng.com

RELEASE	
DATE	
2-15-21	DRAFT GD
3-1-21	UG RETENTION
6-4-21	REV SP

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or click Arizona811.com

PROJECT NAME
CIRCLE K

PROJECT ADDRESS
W. AZ-89A
Sedona, AZ
86336

PROJECT AREA
89A / Southwest Dr.

HELIX JOB NUMBER: 470
IN HOUSE
DRAWN BY: HXE
CHECKED BY: SB

SHEET TITLE
PRELIM G / D PLAN

SHEET: GD-1
PAGE: SHEET 2 OF 23

PLOT SCALE: 1:1 @ 24"x36"; 1:2.2 @ 11"x17"

Jun 04, 2021 – 4:32pm
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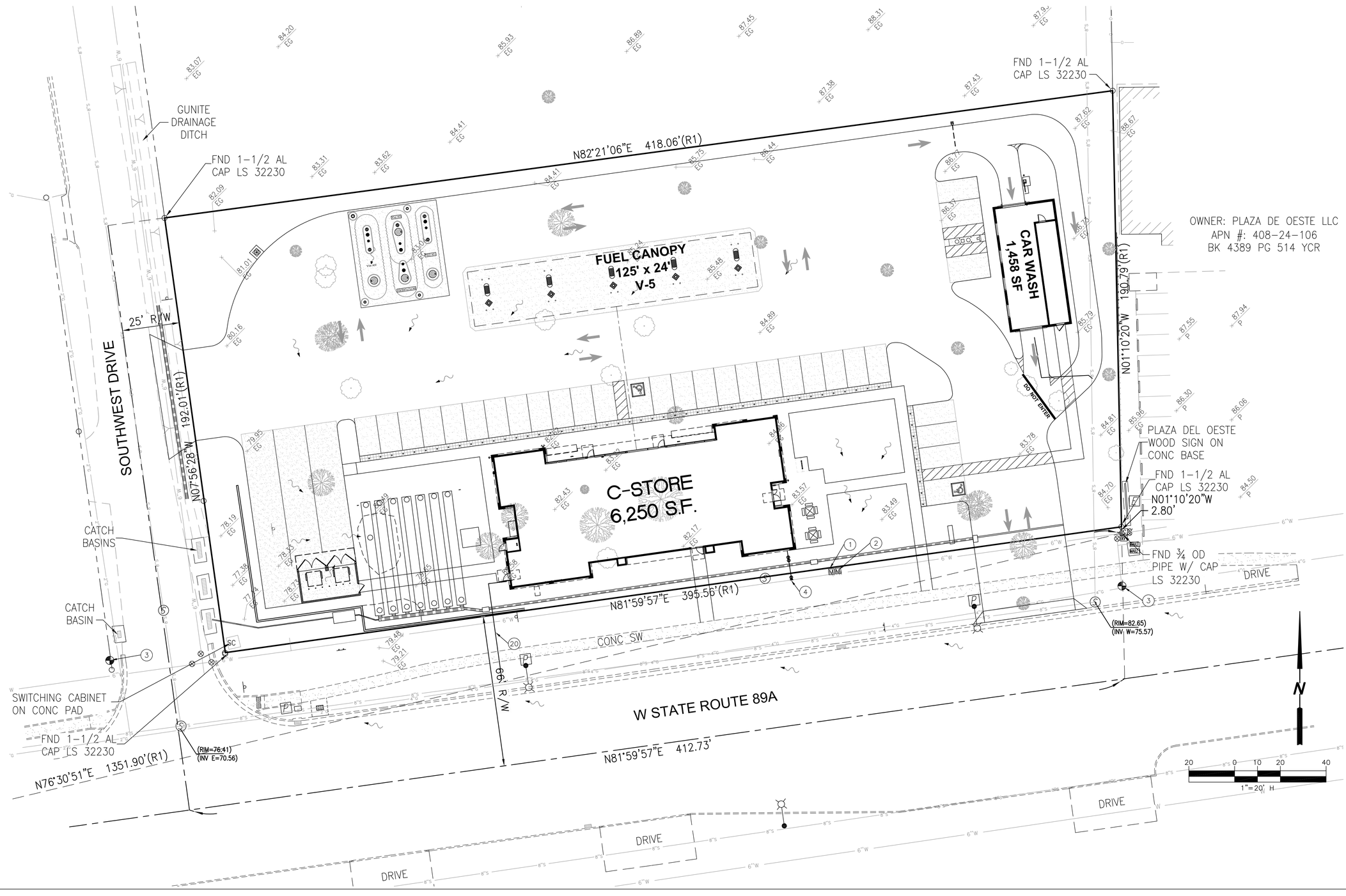
KEYED NOTES

(X)
1. ISNTALL NEW 2" METER PER AWC DETAILS
2. INSTALL NWE 1" METER PER AWC DETAILS (LDSC)
3. EXISTING FH TO REMAIN
4. CONSTRUCT 6" TS&V AND DOUBLE CHECK FOR FIRELINE

20. INSTALL NEW 6" SEWER TAP TO CITY MAIN



CLIENT:
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PRELIMINARY

Registered Professional Engineer (Civil) CERTIFICATE NO. 30489 STEVEN R. BOWSER 6-4-21 ARIZONA U.S.A. Expires 09/30/2023

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Call 811 or click Arizona811.com

PROJECT NAME
CIRCLE K

PROJECT ADDRESS
W. AZ-89A
Sedona, AZ
86336

PROJECT AREA
89A / Southwest Dr.

HELIX JOB NUMBER
470

IN HOUSE
DRAWN BY: HXE
CHECKED BY: SB

SHEET TITLE
PRELIM UTIL PLAN

SHEET
UT-1

PAGE
SHEET 3 OF 23

PLOT SCALE: 1:1 @ 24"x36"; 1:2.2 @ 11"x17"

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Final Sewer Report

For

Circle K

NE corner W. State Route 89A / Southwest Dr

Sedona, AZ

City Case :
Job: 470
May 2019

Prepared by:

Steve Bowser, PE
Helix Engineering, LLC
3240 E. Union Hills Dr #113
Phoenix, AZ 85050
602-788-2616

EXPIRES 9-30-23

Sewer Report
FOR
Circle K
NE corner W. State Route 89A / Southwest Dr

Sedona, AZ

A. INTRODUCTION

B. SEWER DESIGN DOCUMENTATION

Figure 1 – Vicinity Map

A. Introduction

The proposed site is located at the northeast corner of W. State Route 89A and Southwest Drive located withing the City of Sedona, Arizona. The site is situated within the Southwest Quarter of Section 11, Township 17 North, Range 5 East of the Gila and Salt River Base and Meridian, Yavapai County, Arizona. The site is currently vacant with developed streets on the west and south boundaries of the site. This project will develop a convenience store building, fuel canopy and car wash on the site.

See Figure 1 for the vicinity map.

B. Sewer Design Documentation

An Existing city 8" main is located on the north side of Highway 89 flowing east to west. Project will connect to this sewer main.

Based on 18 AAC 9 Table 1:

Auto Wash: per manufacturers recommendation:

ADF = 15 cars per hour x 24 hours x 30 gallons per car = 10,800 GPD.

Use AAC Peak factor of 3.62 due to small size of site.

Max Daily Flow (MDF) = ADF x PF = 10,800 GPD x 3.62 = 39,096 GPD

Project may be operational 24 hours, however main usage will be 5 AM to 11 PM. Conservatively, use 18 hour operational day.

GPM of MDF = 39,096 GPD / 18 HRS/DAY / 60 MIN/HR = 36.2 GPM

Retail Store plus public Restroom: (20 gal per employee per day + 0.1 gal per sf per day). Based on 8 employees per day

ADF = 20 gal per employee per day x 8 employee per day + 0.1 gal per sf per day x 5200 sf = 680 gal per day

Use AAC Peak factor of 3.62 due to small size of site.

Max Daily Flow (MDF) = ADF x PF = 680 GPD x 3.62 = 2462 GPD

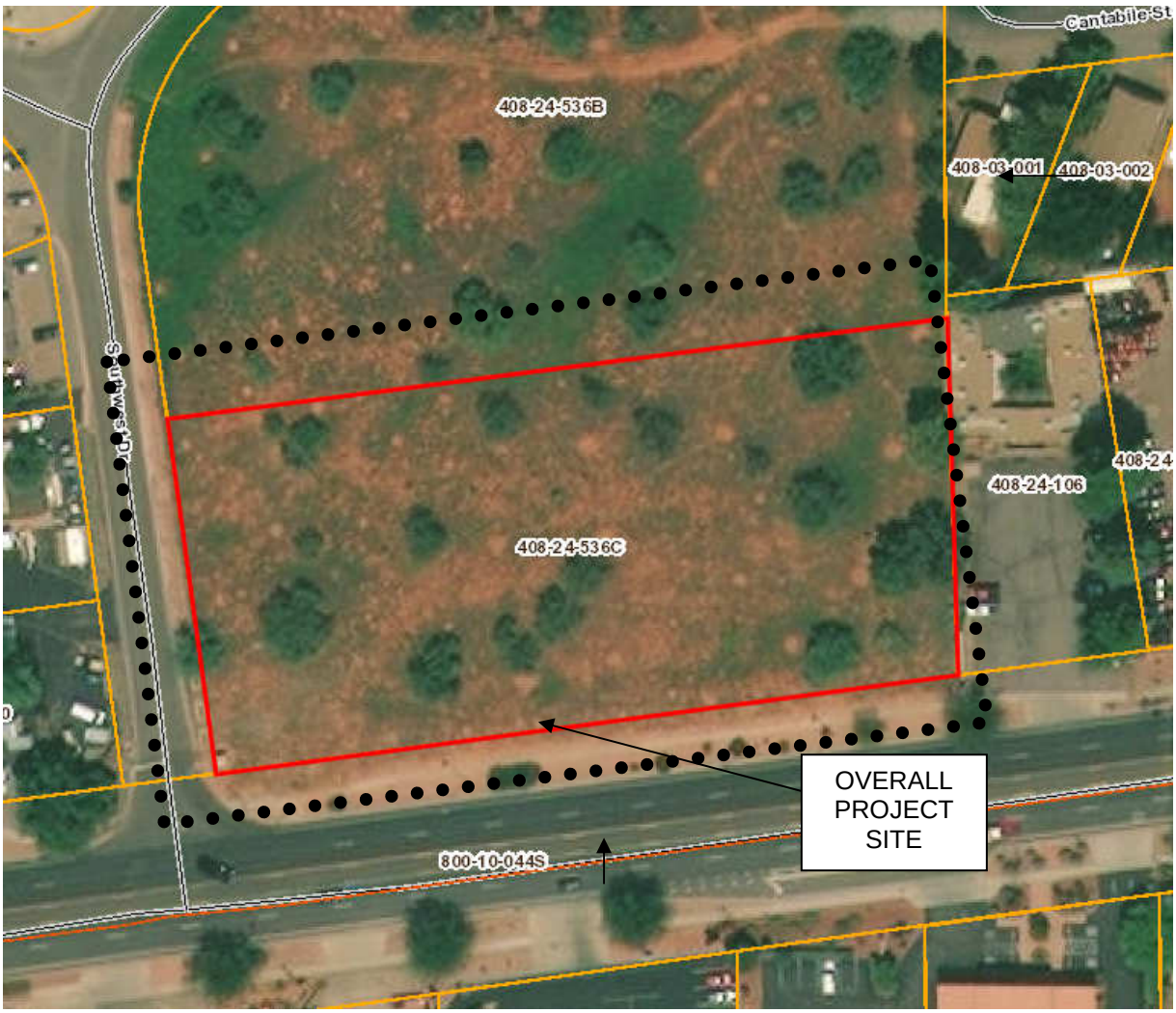
Project may be operational 24 hours, however main usage will be 5 AM to 11 PM. Conservatively, use 18 hour operational day.

GPM of MDF = 2462 GPD / 18 HRS/DAY / 60 MIN/HR = 2.3 GPM

Project Peak flow = 36.2 gpm (car wash) + 2.3 gpm (retail) = 38.5 gpm

This project will have a single 6” sewer tap to the main in street fronragee. This tap shall be 1.04% min slope per plumbing code. At this slope, pipe capacity is 255 GPM flowing full, therefore sewer pipe for this project is adequate.

Figure 1-VICINITY MAP



SOUTHWEST TRAFFIC ENGINEERING, LLC

TRAFFIC IMPACT ANALYSIS

SOUTHWEST CIRCLE K

SOUTHWEST DRIVE/SR 89A

1 NOVEMBER 2021

PREPARED FOR

LAND DEVELOPMENT CONSULTANTS
11811 NORTH TATUM BOULEVARD, SUITE 1051
PHOENIX, ARIZONA 85028

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 NORTH CENTRAL AVENUE, SUITE 1810
PHOENIX, AZ 85012
T 602.266.SWTE (7983) F 602.266.1115

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Trip Generation Calculations
Pass-By Trip Assignment
Capacity Calculations
Traffic Signal Warrant Analysis
Crash Data

Prepared By:
Andrew Smigielski, PE, PTOE, PTP
Amy Forsythe, EIT

SOUTHWEST CIRCLE K
SOUTHWEST DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS

Executive Summary

The purpose of this traffic study is to evaluate the current and future transportation system within the project study area surrounding the site without and with the proposed project.

Existing Traffic Data

The northbound approach to the intersection of Tortilla Drive/SR 89A currently experiences an inadequate delay during the weekday AM peak hour.

The remaining study intersections currently operate at an adequate level of service (LOS) during the weekday peak hours.

Future Traffic Data Without Project

An adjacent development, Navajo Lofts, is planned to be constructed in the near future. This development is located directly north of the Southwest Circle K project site. The expected trip assignment from this development was added to this analysis based on the traffic assignment form the following report: *Navajo Lofts Traffic Impact Analysis* (Navajo Lofts TIA) written by Lee Engineering, LLC, dated August 2021.

The northbound approach to the intersection of Tortilla Drive/SR 89A is anticipated to experience an inadequate delay during the weekday AM peak hour in 2022 without traffic from the project. In 2025 without traffic from the project, the northbound and southbound approaches to the intersection of Tortilla Drive/SR 89A are expected to experience inadequate delays during the weekday peak hours.

The southbound approach to the intersection of Plaza de Oeste Driveway/SR 89A is expected to operate at a LOS E during the weekday PM peak hour in 2025 without traffic from the project.

The remaining study intersections are expected to operate at an adequate LOS during the weekday peak hours in 2022 and 2025 without traffic from the project.

Future Traffic Data With Project

The northbound and southbound approaches to the intersection of Tortilla Drive/SR 89A are anticipated to experience inadequate delays during the weekday peak hours in 2022 and 2025 without and with traffic from the project.

The southbound approaches to Southwest Drive/SR 89A and East Access/SR 89A are expected to experience inadequate delays during the weekday peak hours in 2022 and 2025 with traffic from the project.

The northbound and southbound approaches to the intersection of Plaza de Oeste Driveway/SR 89A are expected to operate at a LOS E during the weekday PM peak hour in 2022 with the project and in 2025 without and with traffic from the project.

The remaining study intersections are expected to operate at an adequate LOS during the weekday peak hours in 2022 and 2025 without traffic from the project.

Turn Lane Analysis
A westbound right turn lane is warranted at Southwest Drive/SR 89A in 2025 without and with traffic from the project.

A westbound right turn lane is also warranted at East Access/SR 89A in 2025 with the project.

Traffic Signal Warrant Analysis
The intersection of Southwest Drive/ SR 89A does not currently meet and is not expected to meet traffic signal warrants #1 or #2 in 2022 or 2025 without traffic from the project. In 2022 and 2025, traffic signal warrants #1 and #2 are expected to be met with the project and with the adjacent Navajo Lofts development.

Crash Analysis
Six collisions were reported at the intersection of Tortilla Drive/SR 89A during the five-year study period. None of the crashes resulted in injury.

A total of nine crashes were reported at the intersection of Southwest Drive/SR 89A during the five-year study period, four of which resulted in injury.

One crash was reported at the intersection of Slingshot Rentals Driveway/SR 89A within the five-year study period. The collision was a rear-end.

No crashes were reported at the remaining study intersections. This limited crash data provides no observable crash pattern for the area.

Mitigation
The delays at the intersections of Tortilla Drive/SR 89A, Southwest Drive/SR 89A, East Access/SR 89A, and Plaza de Oeste Driveway/SR 89A are due to the relatively high through traffic volumes along SR 89A not providing adequate gaps for vehicles turning from the minor approaches. Unsignalized, minor approaches to four or more lane major streets such as SR 89A tend to operate at a LOS E or F during the weekday peak hours.

Mitigation measures at these closely spaced intersections are limited. While a traffic signal would be expected to alleviate these delays, the intersections are too closely spaced for traffic signals to be installed at each intersection. Moreover, traffic signals are not appropriate for delays experienced by a relatively low number of vehicles for only a few hours of the day.

The installation of a traffic signal at Southwest Drive/SR 89A is expected to alleviate the delays at this intersection.

Recommendations
The westbound right turn lanes at Southwest Drive/SR 89A and East Access/SR 89A should be constructed to provide minimum turn lane lengths of 150 feet.

SOUTHWEST CIRCLE K
SOUTHWEST DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS

Project Description

Circle K is proposing a new ten (10) fueling station gas station and convenience store and a single tunnel car wash on the northeast corner of Southwest Drive/SR 89A in Sedona, Arizona. The vicinity of the project is shown in **Figure 1**. The site is located as shown in **Figure 2**. The project will be served by two proposed access points.

The purpose of this traffic impact analysis is to:

- Evaluate the current and future operational characteristics of the adjacent roadway network surrounding the project site.
- Estimate the traffic generation associated with the project and assign that traffic to the existing roadway system.
- Analyze future traffic operations at nine existing intersections and two proposed access points serving the project area.
- Determine the need for auxiliary (left and right turn) lanes at the proposed driveways that will serve the project site.
- Conduct traffic signal warrant analyses at the intersection of Southwest Drive/SR 89A.
- Perform a crash analysis to identify any specific crash trends within the study area.

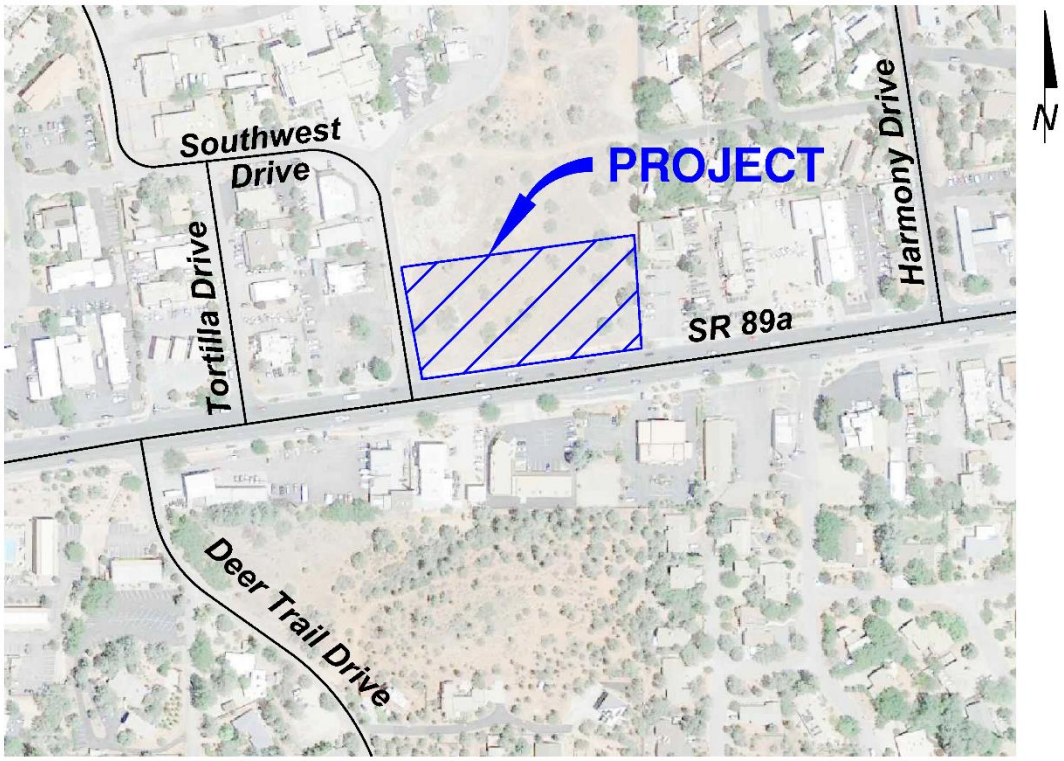
The author of this report is a registered professional engineer (civil) in the State of Arizona having specific expertise and experience in the preparation of traffic impact analyses.

Study Methodology

In order to analyze and evaluate the potential traffic impacts of the proposed development, the following tasks were undertaken:

- Field observation of the proposed site and surrounding area was conducted to evaluate the existing physical and operational characteristics of the adjacent roadway network.
- Site traffic volumes generated by the proposed site were calculated using the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition,* 2017.
- Calculated site traffic was distributed based on existing traffic patterns and assigned to the primary roadways within the project study limits.
- Capacity analyses were performed for the existing conditions and future conditions without and with the project based on an opening year of 2022 and a horizon year of 2025 using methodology presented in the *2016 Highway Capacity Manual (HCM 6).*
- The need for auxiliary turn lanes at the study driveways was evaluated based on ADOT guidelines.
- Traffic signal warrant analyses were completed for the existing conditions, 2022 and 2025 without and with traffic from the proposed site.
- Crash records were obtained from the Arizona Department of Transportation (ADOT) database to identify any specific crash trends within the study area.

Figure 1 – Vicinity Map



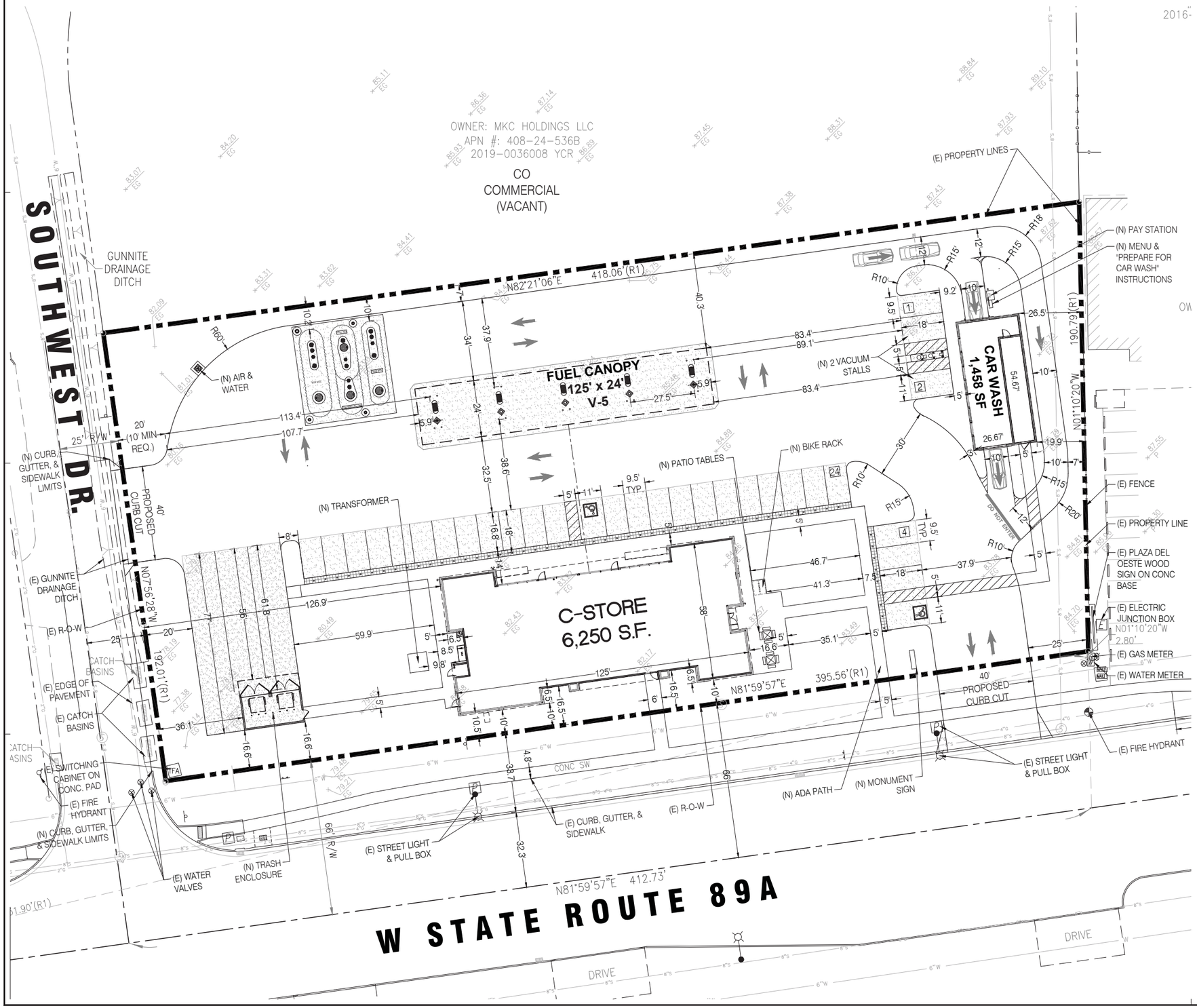
LEGEND:

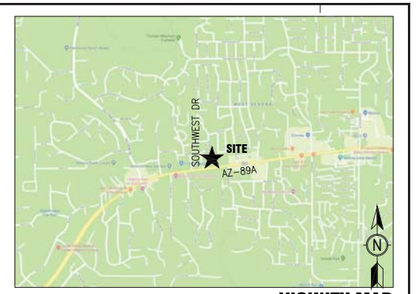
EXISTING ROAD

PROJECT SITE

CIRCLE K STORE
SITE PLAN

NEC ARIZONA STATE HIGHWAY 89A & SOUTHWEST DRIVE, SEDONA, AZ





VICINITY MAP

OWNER:
CIRCLE K STORES INC.
1120 WEST WARNER ROAD
TEMPE, ARIZONA 85284

OWNER REPRESENTATIVE:
LAND DEVELOPMENT CONSULTANTS, LLC
11811 N. TATUM BLVD. #1051
PHOENIX, ARIZONA 85028
PHONE: (602) 850-8101
FAX: (602) 997-9807
CONTACT: MIKE SCARBROUGH

ARCHITECT :
GREENBERG FARROW
30 EXECUTIVE PARK, SUITE 100
IRVINE, CA 92614
PHONE: (949) 296-0450
FAX: (949) 296-0479
CONTACT: DOUG COUPER

PROJECT INFORMATION

PROJECT NAME:	CIRCLE K CONVENIENCE STORE
PROJECT ADDRESS:	NEC AZ-89A & SOUTHWEST DRIVE, SEDONA, AZ
PROJECT DESCRIPTION:	PROPOSAL FOR A NEW CONVENIENCE STORE WITH ASSOCIATED FUEL SALES CONSISTING OF A 6,250 S.F. CONVENIENCE STORE, A 1,458 S.F. CAR WASH, AND A FUEL CANOPY WITH 5 FUEL PUMPS.

ZONING INFORMATION

JURISDICTION:	CITY OF SEDONA, AZ
EXISTING ZONING:	CO (COMMERCIAL)
PROPOSED ZONING:	CO (COMMERCIAL)
MAX. BLDG HEIGHT ALLOWED: 40' OVERALL	BLDG HEIGHT PROVIDED: 23'-0"

SETBACKS:
- FRONT: 10'
- SIDE: 0'
- REAR: 0'
- STREET: 10'
- ABUTTING RESIDENTIAL: 20'

SITE DATA

PARCEL:	APN: 408-24-536C
CIRCLE K NET SITE AREA:	±1.781 AC (± 77,602 SF)

BUILDING AREA

CONVENIENCE STORE BLDG AREA	6,250 SF
FUEL CANOPY AREA	3,000 SF
CAR WASH AREA	1,458 SF
CIRCLE K SITE COVERAGE (BASED ON 6,250 SF BLDG AREA PLUS 1,458 SF CAR WASH AREA AND ±1.781 AC OF NET SITE AREA)	±9.93% (4,327 SF/AC)

PARKING REQUIREMENTS

CIRCLE K PARKING REQUIRED	
RETAIL: 1 SP/250 SF	25 SP
CIRCLE K PARKING PROVIDED	
STANDARD PARKING SPACES	27 SP
ACCESSIBLE PARKING SPACES	2 SP
TOTAL CIRCLE K PARKING PROVIDED	29 SP
BICYCLE PARKING PROVIDED	2 SP
VENDOR PARKING PROVIDED	3 SP
VACUUM PARKING PROVIDED	2 SP

GENERAL NOTES

1. THIS IS A CONCEPTUAL SITE PLAN AND IS FOR PLANNING PURPOSES ONLY.
2. THIS SITE PLAN IS BASED ON A PDF OF THE ALTA SURVEY PREPARED BY HELIX ENGINEERING, LLC, DATED 04/02/2020, AND AN AERIAL.

SCALE: 1"= 20'

0 10' 20' 40' 60'

GreenbergFarrow
30 Executive Park, Suite 100
Irvine, CA 92614

ISSUE/REVISION RECORD

DATE	DESCRIPTION
09/18/19	PREP SP-1
10/02/19	PREP SP-2
02/25/20	PREP SP-3
02/26/20	PREP SP-4
07/14/20	PREP SP-5
08/28/20	PREP SP-6
08/28/20	PREP SP-7
09/15/20	PREP SP-8
09/24/20	REV SP-8
01/26/21	PREP SP-9
03/02/21	PREP SP-10
03/11/21	PREP SP-11
05/25/21	PREP SP-12

PROFESSIONAL IN CHARGE
ARCH PROF IN CHARGE
DOUGLAS S. COUPER

PROJECT MANAGER
DC

QUALITY CONTROL

DRAWN BY
JN

PROJECT NAME
CIRCLE K STORE #

SEDONA, ARIZONA
NEC AZ-89A & SOUTHWEST DRIVE

LAND DEVELOPMENT CONSULTANTS, LLC
11811 N. TATUM BLVD. #1051
PHOENIX, AZ 85028

CIRCLE K STORES INC.

PROJECT NUMBER
20191225.0

SHEET TITLE
SITE PLAN

SHEET NUMBER
CSP 12.0W

Existing Conditions

The proposed project will be located on the northeast corner of Southwest Drive/SR 89A.

SR 89A is aligned north/south aligned roadway serving as a scenic route between Prescott, Arizona and Flagstaff, Arizona. However, adjacent to the project site, the roadway is aligned east/west. Two through lanes are provided for each direction of travel, separated by a two-way center left turn lane. The posted speed limit on SR 89A is 35 miles per hour (mph) near the project site.

Southwest Drive is a two-lane roadway that extends north from SR 89A. Approximately 380 feet north of SR 89A, Southwest Drive curves west and then ends after approximately 650 feet at Sinagua Drive. The roadway serves a fire department and various land uses. There is a posted speed limit of 25 mph on Southwest Drive.

Navajo Drive extends to the north from Southwest Drive, approximately 380 feet north of SR 89A. The roadway continues north for approximately 820 feet, ending at an apartment complex. Functionally, Navajo Drive serves as a continuation of Southwest Drive. There is no posted speed limit on Navajo Drive.

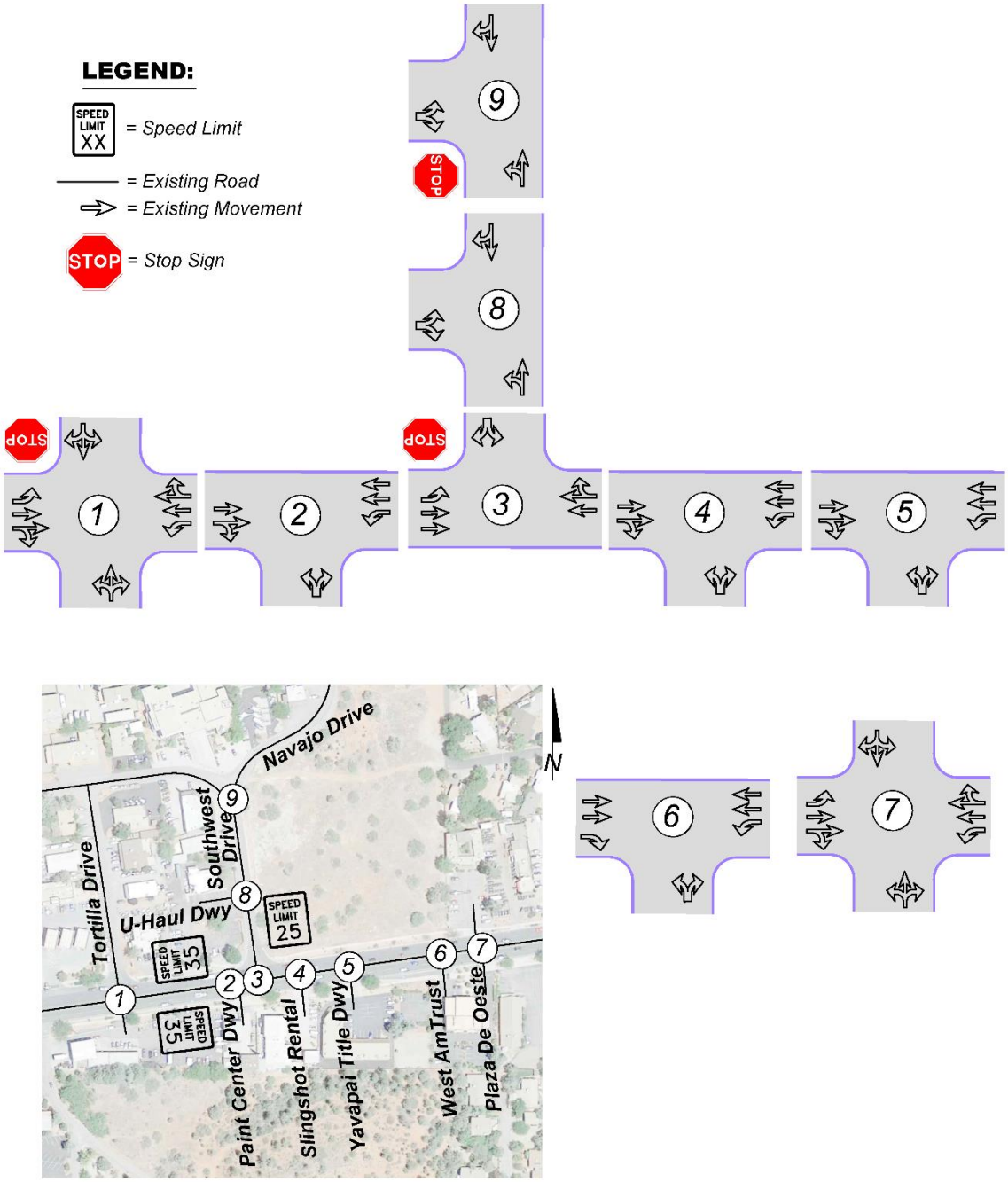
Tortilla Drive is a two-lane street that serves as a connection between SR 89A and Southwest Drive. There is no posted speed limit on Tortilla Drive. A driveway to Big O Tires, located on the south side of SR 89A, aligns with Tortilla Drive.

Several closely spaced driveways are located along SR 89A. Paint Center Driveway is located on the south side of SR 89A, immediately west of Southwest Drive. Slingshot Rentals Driveway, Yavapai Title Driveway, and West AmTrust Driveway are located approximately 30 feet, 150 feet, and 350 feet east of Southwest Drive, on the south side of SR 89A.

Plaza de Oeste Driveway is located approximately 430 feet east of Southwest Drive on the north side of SR 89A. This driveway aligns with a driveway for the AmTrust Bank on the south side of SR 89A. The driveway on the south side of SR 89A is intended as an exit-only from the bank and is marked with STOP (R1-1) signs and northbound pavement marking arrows to discourage vehicles from entering.

The study intersection locations, lane configurations, and intersection control are shown in **Figure 3**.

Figure 3 – Existing Lane Configurations and Traffic Control



Existing Traffic Data

In order to form a basis for analysis of the project impacts, weekday AM and PM peak hour turning movement counts were conducted at the following intersections:

- Tortilla Drive/SR 89A
- Paint Center Driveway/SR 89A
- Southwest Drive/SR 89A
- Slingshot Rental Driveway/SR 89A
- Yavapai Title Driveway/SR 89A
- West Amtrust Driveway/SR 89A
- Plaza de Oeste Driveway/SR 89A
- Uhaul Driveway/Southwest Drive
- Navajo Drive/Southwest Drive

In addition, a weekday 24-hour intersection approach count was taken at Southwest Drive/SR 89A.

The weekday turning movement counts were conducted from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM. All traffic data was collected in September 2021 while school was in session. The existing weekday traffic volumes are shown in **Figure 4**. Complete traffic count data can be found in the Appendix.

Access

Two full access points are proposed to serve the site, East Access is proposed on SR 89A and North Access is proposed on Southwest Drive.

East Access is proposed on the north side of SR 89A, approximately 335 feet east of Southwest Drive. This driveway will align with the existing West AmTrust Driveway.

North Access is proposed on the east side of Southwest Drive approximately 95 feet north of SR 89A. This Driveway will align with Uhaul Driveway.

The adjacent Navajo Lofts site to the north is expected to construct an east leg at the intersection of Navajo Drive/Southwest Drive.

Figure 5 shows the locations, geometry and spacing for the proposed driveways serving the project site that will serve as a baseline of analysis in the report.

Figure 4 – Existing Weekday Peak Hour Traffic Volumes

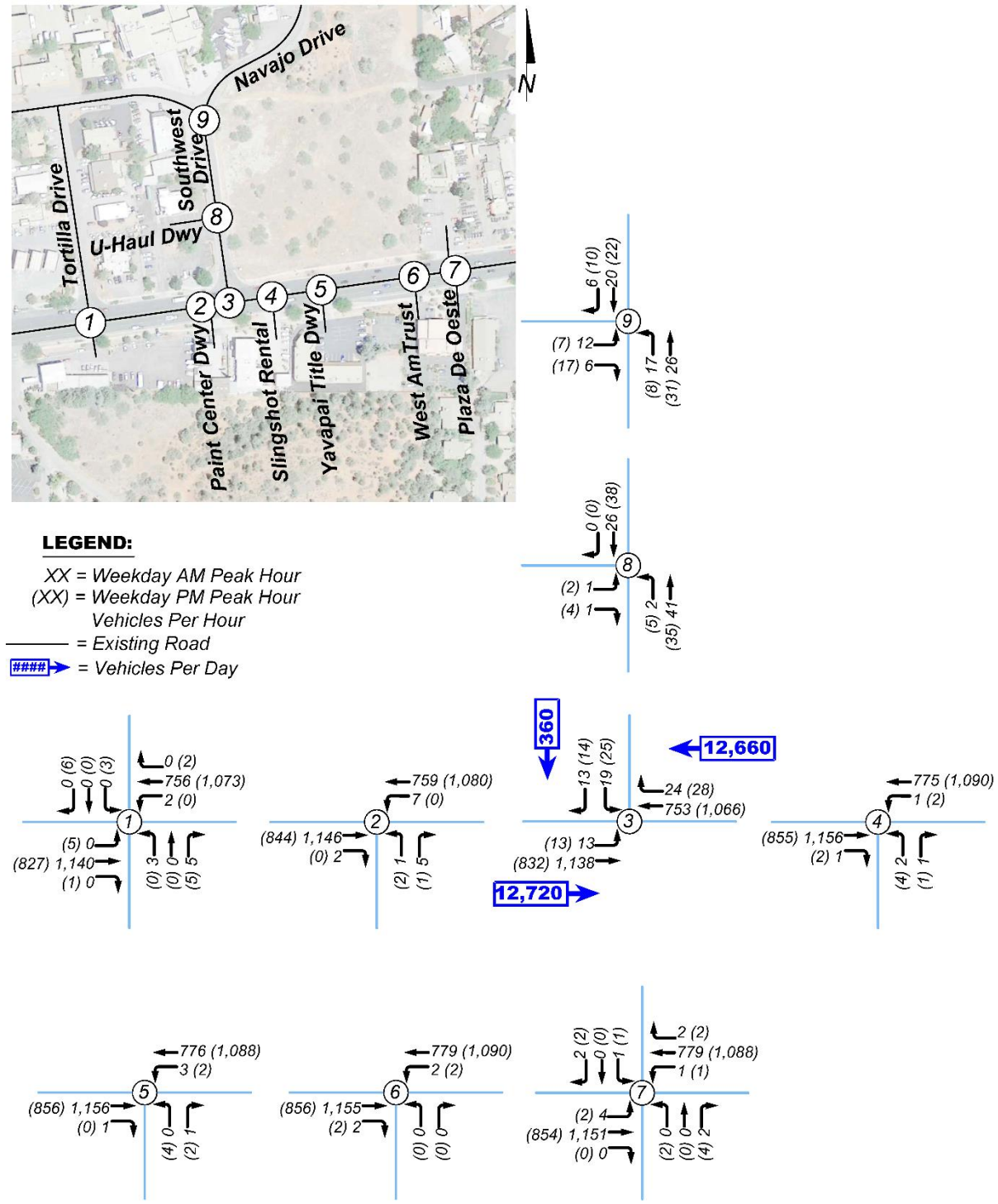
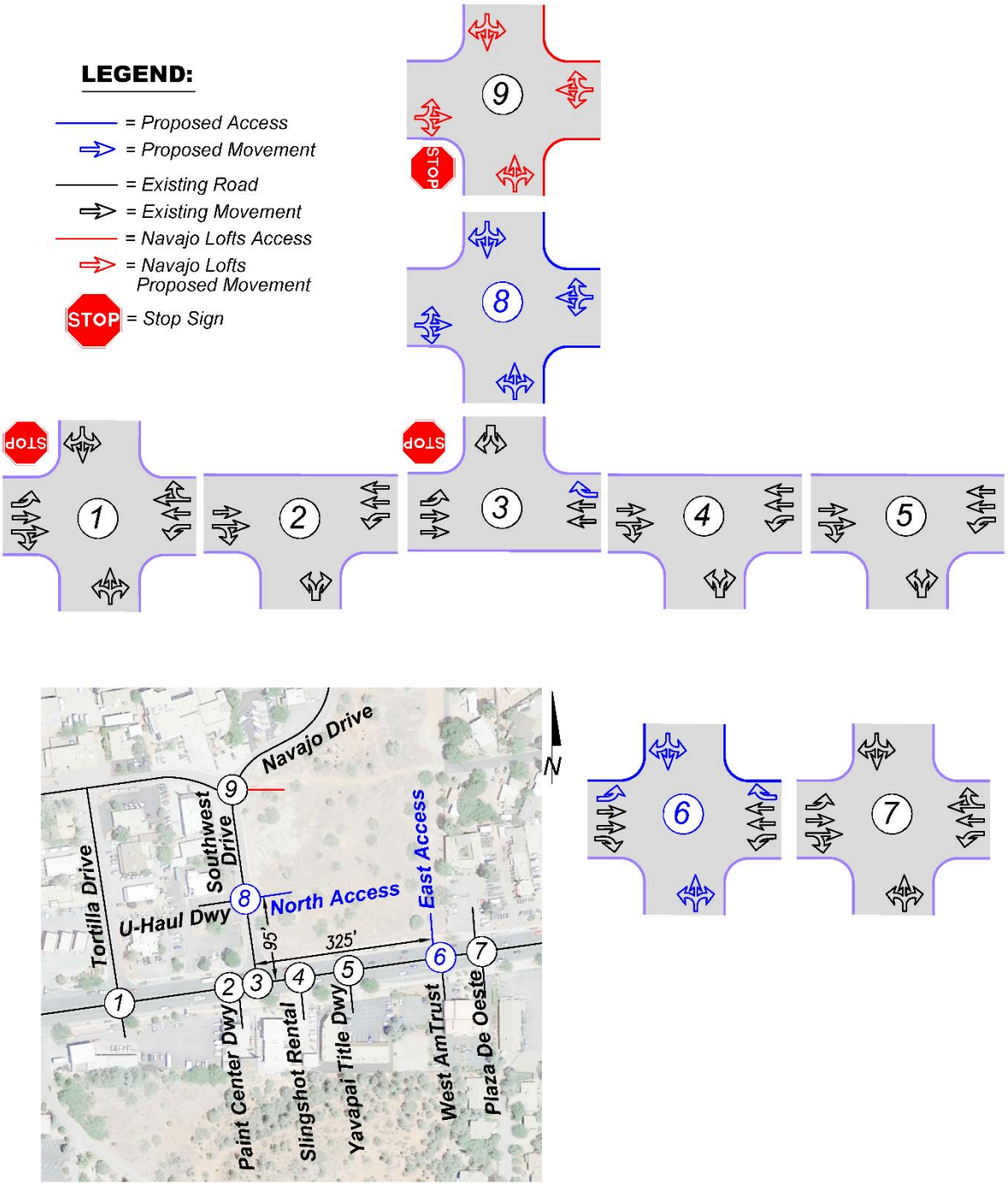


Figure 5 – Baseline Access Point and Intersection Configuration Assumptions



Trip Generation

Trip generation was developed utilizing nationally agreed upon data contained in the Institute of Transportation Engineers (ITE) publication *Trip Generation, 10th Edition*, 2017. The project trip generation was estimated for a ten (10) fueling station gas station based on ITE Land Use Code 960, Super Convenience Market/Gas Station (LUC 960) and a single tunnel car wash based on LUC 948, Automated Car Wash. The result is the expected weekday trip generation for the project as shown in **Table 1**. The complete trip generation calculations can be found in the Appendix.

Table 1 – Project Site Generated Trips

Time Period	10 Fueling Station Super Convenience Market/Gas Station (LUC 960)	Single Tunnel Automated Car Wash (LUC 948)	Total
Average Daily, Inbound (vtpd)	1,153	390	1,543
Average Daily, Outbound (vtpd)	1,153	390	1,543
Total Daily	**2,306**	**780**	**3,086**
AM Peak Hour, Inbound (vtph)	141	N/A	141
AM Peak Hour, Outbound (vtph)	141	N/A	141
Total AM Peak	**282**	**N/A**	**282**
PM Peak Hour, Inbound (vtph)	115	39	154
PM Peak Hour, Outbound (vtph)	115	39	154
Total PM Peak	**230**	**78**	**308**

vtpd - vehicle trips per day, vtph - vehicle trips per hour

*Weekday daily volume based on 10% peak hour assumption

Pass-By Reduction

Gas stations do not typically generate all new traffic on a roadway system, many are 'pass-by' trips. The Institute of Transportation Engineers' (ITE) publication *Trip Generation, 10th Edition, 2017* defines pass-by trips as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Primary trips are trips where the primary purpose of the trip is to visit a specific location (i.e. gas station). Pass-by trips are trips where the secondary purpose of the trip is to visit the gas station, in conjunction with some other primary trip purpose (such as driving home from work).

ITE estimates that 62% of the external weekday AM peak hour trips and 56% of the external weekday PM peak hour trips will be from pass-by. Pass-By trips lower the through traffic volumes at project access points as vehicles choose to turn into the site instead of continuing through the intersection. **Table 2** shows the pass-by reductions expected at the project site.

Table 2 – Pass-By Reduction

Time Period	10 Fueling Stations Super Convenience Market/ Gas Station	Pass-By Reduction	Total (Primary Trips)
AM Peak Hour, Inbound (vtph)	141	-88	53
AM Peak Hour, Outbound (vtph)	141	-88	53
Total AM Peak	**282**	**-176**	**106**
PM Peak Hour, Inbound (vtph)	115	-64	51
PM Peak Hour, Outbound (vtph)	115	-64	51
Total PM Peak	**230**	**-128**	**102**

vtph - vehicle trips per hour

Trip Distribution & Assignment

Trip distribution for the project was based on existing traffic volume patterns near the proposed site. **Figure 6** shows the weekday trip distribution for the project as a percentage of net new primary trips.

Figure 7 shows the assignment of the new site generated trips to the project intersections, including the pass-by trip reduction. The pass-by trip assignment for the gas station be found in the Appendix.

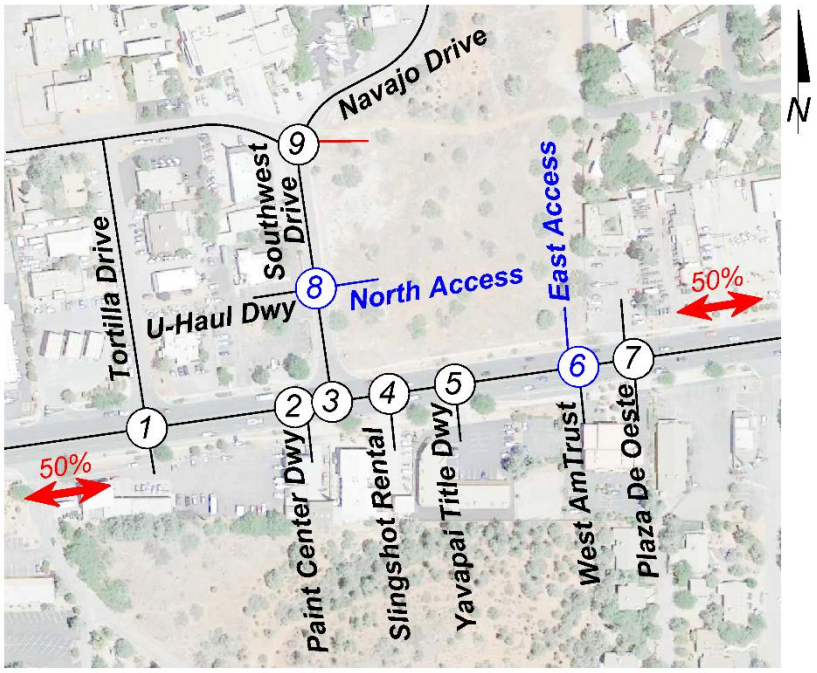
Existing Traffic Operations

Analysis of current intersection operations was conducted for the weekday AM and PM peak hours using the nationally accepted methodology set forth in the *Highway Capacity Manual*, Transportation Research Board, 2016 (HCM 6). The computer software Synchro 10 was utilized to calculate the levels of service for individual movements and approaches.

LOS is a qualitative measure of the traffic operations at an intersection or on a roadway segment. Level of service is ranked from LOS A, which signifies little or no congestion and is the highest rank, to LOS F, which signifies congestion and jam conditions. LOS D is typically considered adequate operation at signalized and un-signalized intersections in developed areas.

At un-signalized intersections, level of service is predicted/calculated for those movements, which must either stop for or yield to oncoming traffic and is based on average control delay for the particular movement. Control delay is the portion of total delay attributed to traffic control measures such as stop signs and traffic signals. The criteria for level of service at un-signalized intersections are shown in **Table 3.**

Figure 6 – Weekday Peak Hour Trip Distribution



LEGEND:

= Existing Road

XX% = Distribution of Vehicle Trips

= New Access

= Navajo Lofts Access

Figure 7 – Weekday Peak Hour Trip Assignment

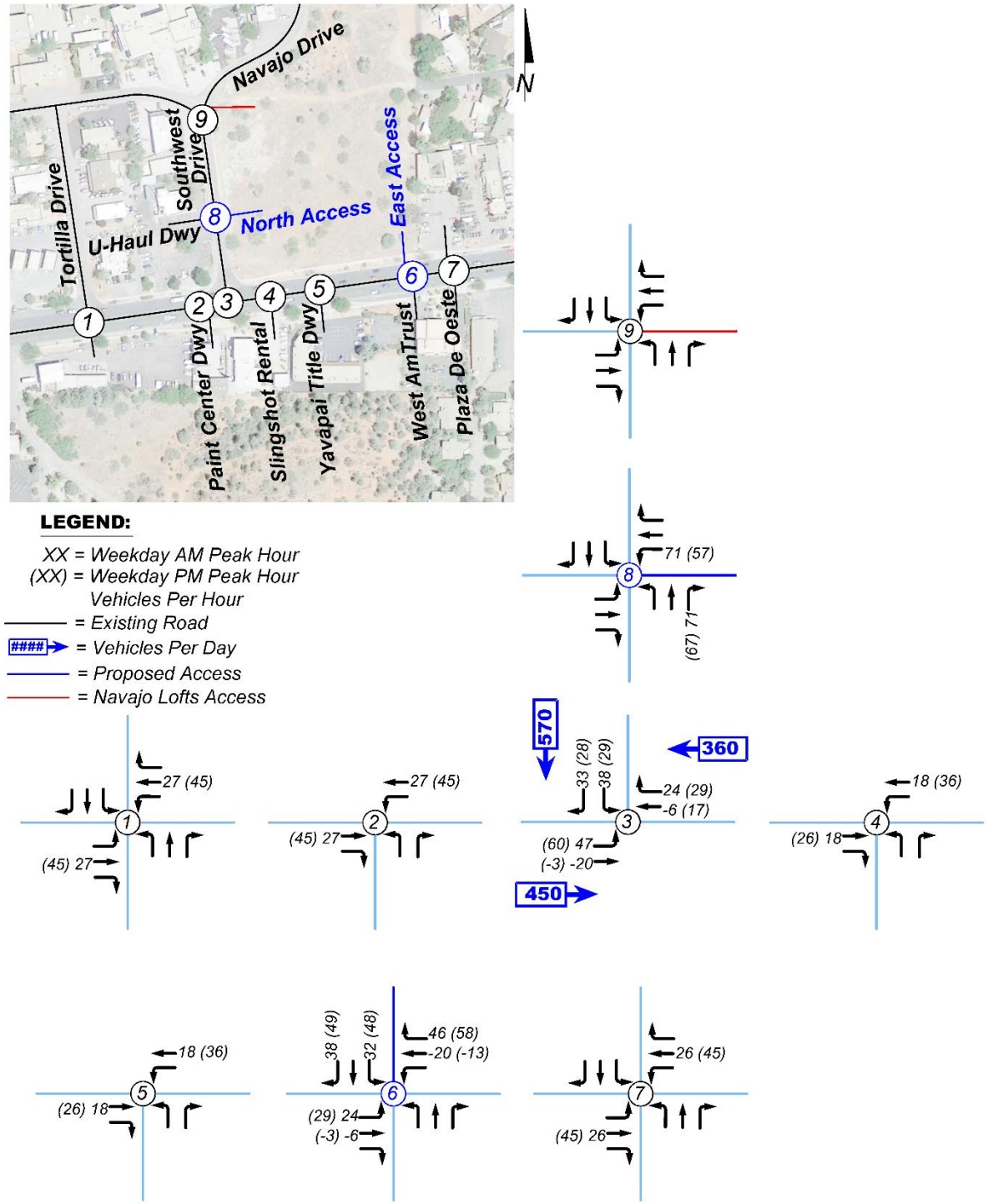


Table 3 – Level of Service Criteria – Un-signalized Intersections

Level-of-Service	Delay
A	< 10 seconds/vehicle
B	> 10 and < 15 seconds/vehicle
C	> 15 and < 25 seconds/vehicle
D	> 25 and < 35 seconds/vehicle
E	> 35 and < 50 seconds/vehicle
F	> 50 seconds/vehicle

Table 4 shows the existing levels of service that were calculated for the study intersections. Complete capacity calculations are included in the Appendix.

Table 4 – Existing Weekday Peak Hour Levels of Service

Intersection	AM Peak		PM Peak	
	LOS	Delay	LOS	Delay
Un-signalized Intersections				
Tortilla Drive/SR 89a				
Eastbound Left	A	0.0	B	11.3
Westbound Left	B	11.6	A	0.0
Northbound Left/Through/Right	E	35.2	B	11.6
Southbound Left/Through/Right	A	0.0	D	31.7
Paint Center Driveway/SR 89a				
Westbound Left	B	11.8	A	0.0
Northbound Left/Right	C	15.8	C	17.7
Southwest Drive/SR 89a				
Eastbound Left	A	9.8	B	11.5
Southbound Left/Right	C	18.2	C	24.5
Slingshot Rental Driveway/SR 89a				
Westbound Left	B	11.7	B	10.0
Northbound Left/Right	C	21.7	C	19.3
Yavapai Title Driveway/SR 89a				
Westbound Left	B	11.8	B	10.0
Northbound Left/Right	B	13.7	C	17.2
West AmTrust Driveway/SR 89a				
Westbound Left	B	11.8	B	10.0
Northbound Left/Right	A	0.0	A	0.0
Plaza de Oeste Driveway/SR 89a				
Eastbound Left	A	9.7	B	11.3
Westbound Left	B	11.7	B	10.0
Northbound Left/Through/Right	B	13.7	D	26.4
Southbound Left/Through/Right	C	24.4	D	31.4
Uhaul Driveway/Southwest Drive				
Eastbound Left/Right	A	8.7	A	8.7
Northbound Left/Through	A	7.3	A	7.3
Navajo Drive/Southwest Drive				
Eastbound Left/Right	A	9.0	A	8.7
Northbound Left/Through	A	7.3	A	7.3

Delay - seconds per vehicle

As shown in **Table 4**, the northbound approach to the intersection of Tortilla Drive/SR 89A currently experiences an inadequate delay during the weekday AM peak hour. This delay is due to the relatively high through traffic volumes along SR 89A not providing adequate gaps for vehicles turning from the minor approach.

The remaining study intersections currently operate at an adequate LOS during the weekday peak hours.

Future Traffic Operations Without Project

In order to assess the impacts of the project on future traffic operations, traffic projections were made for the opening year of 2022 and the horizon year of 2025.

A review of historical traffic data in the vicinity of the project showed increasing and decreasing traffic volumes along SR 89A. Due to this, a conservative 2% growth rate was used to account for future development near the project area. Weekday peak hour traffic volumes without the project in 2022 and 2025 were estimated using a 2% annual traffic growth rate, as shown in **Figures 8** and **9**.

An adjacent development, Navajo Lofts, is planned to be constructed in the near future. This development is located directly north of the Southwest Circle K project site. The expected trip assignment from this development was added to this analysis based on the traffic assignment form the following report: *Navajo Lofts TIA* written by Lee Engineering, LLC, dated August 2021. The trip assignment from the *Navajo Lofts TIA* can be found in the Appendix.

Traffic volumes from Navajo Lofts were then combined with the estimated 2022 and 2025 traffic volumes without the project (**Figures 8** and **9**) to yield 2022 and 2025 weekday AM and PM peak hour traffic volumes, without the project, with adjacent developments, as shown in **Figure 10** and **11.**

As with the current volumes, levels of service were calculated for the study intersection in 2022 and 2025 without the project, with the adjacent development. Intersection levels of service for 2022 and 2025 without the project are shown in **Tables 5** and **6**. Complete capacity calculations are included in the Appendix.

Figure 8 – 2022 Weekday Peak Hour Traffic Volumes Without Project

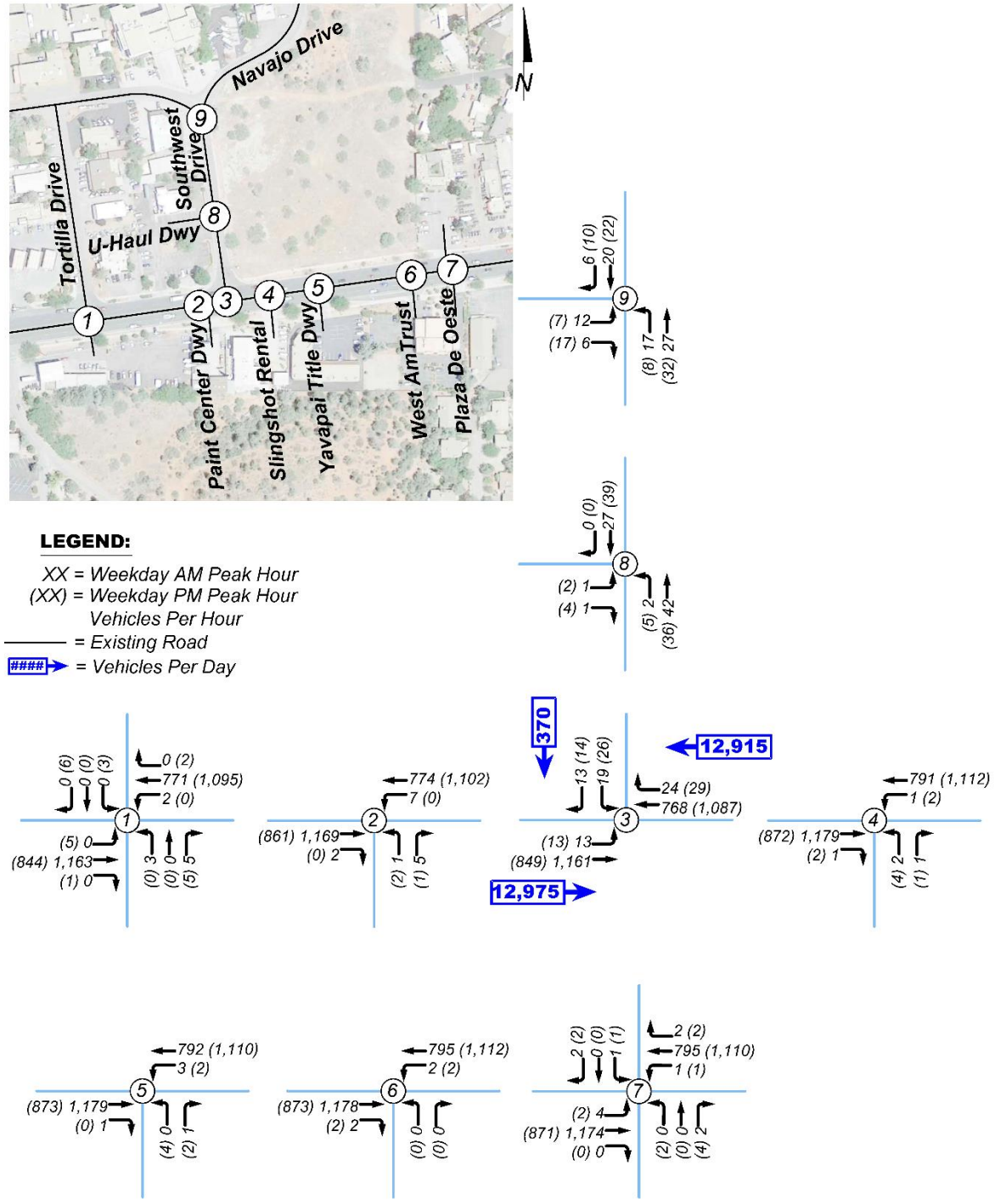


Figure 9 – 2025 Weekday Peak Hour Traffic Volumes Without Project

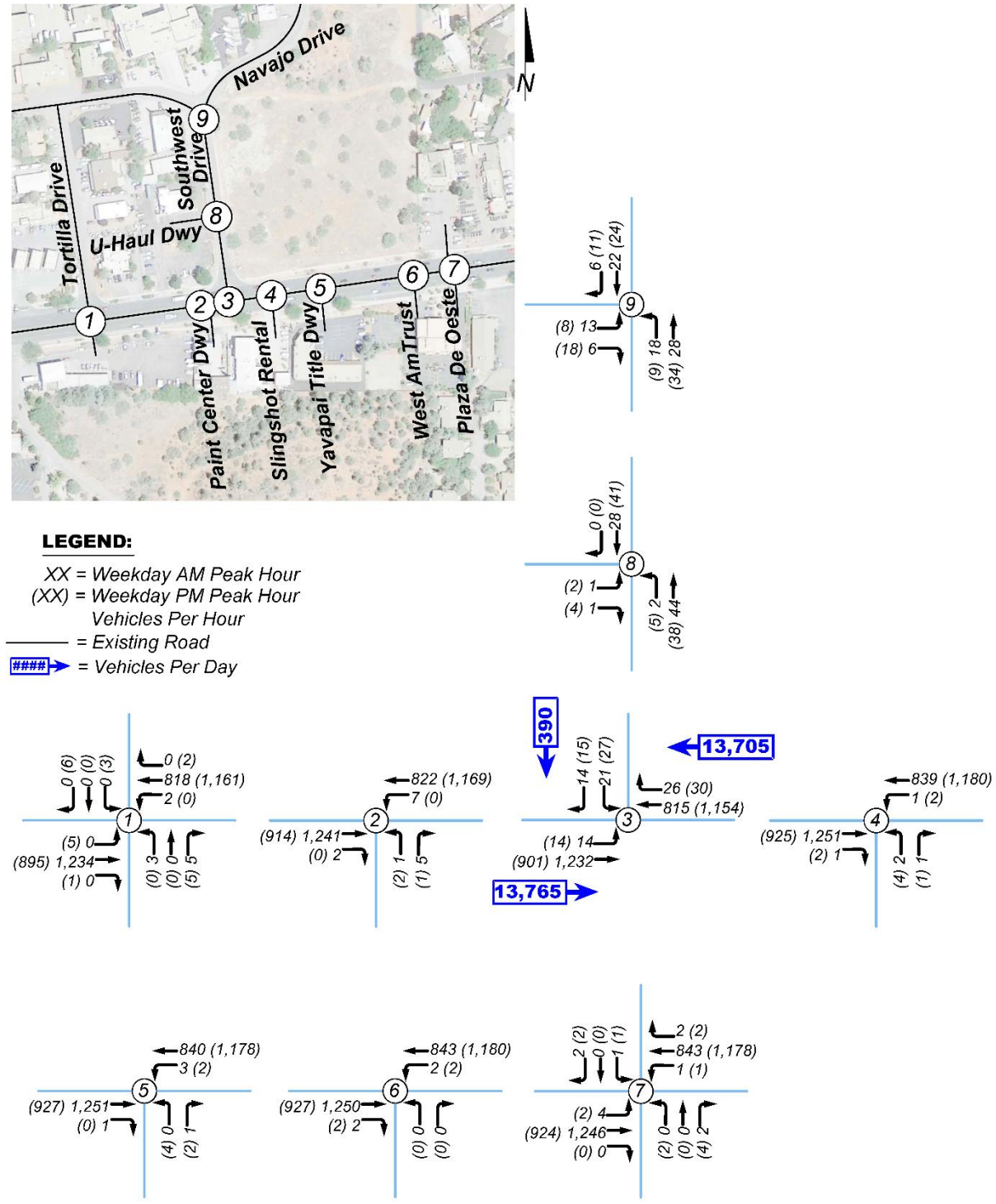


Figure 10 – 2022 Weekday Peak Hour Traffic Volumes Without Project With Navajo Lofts

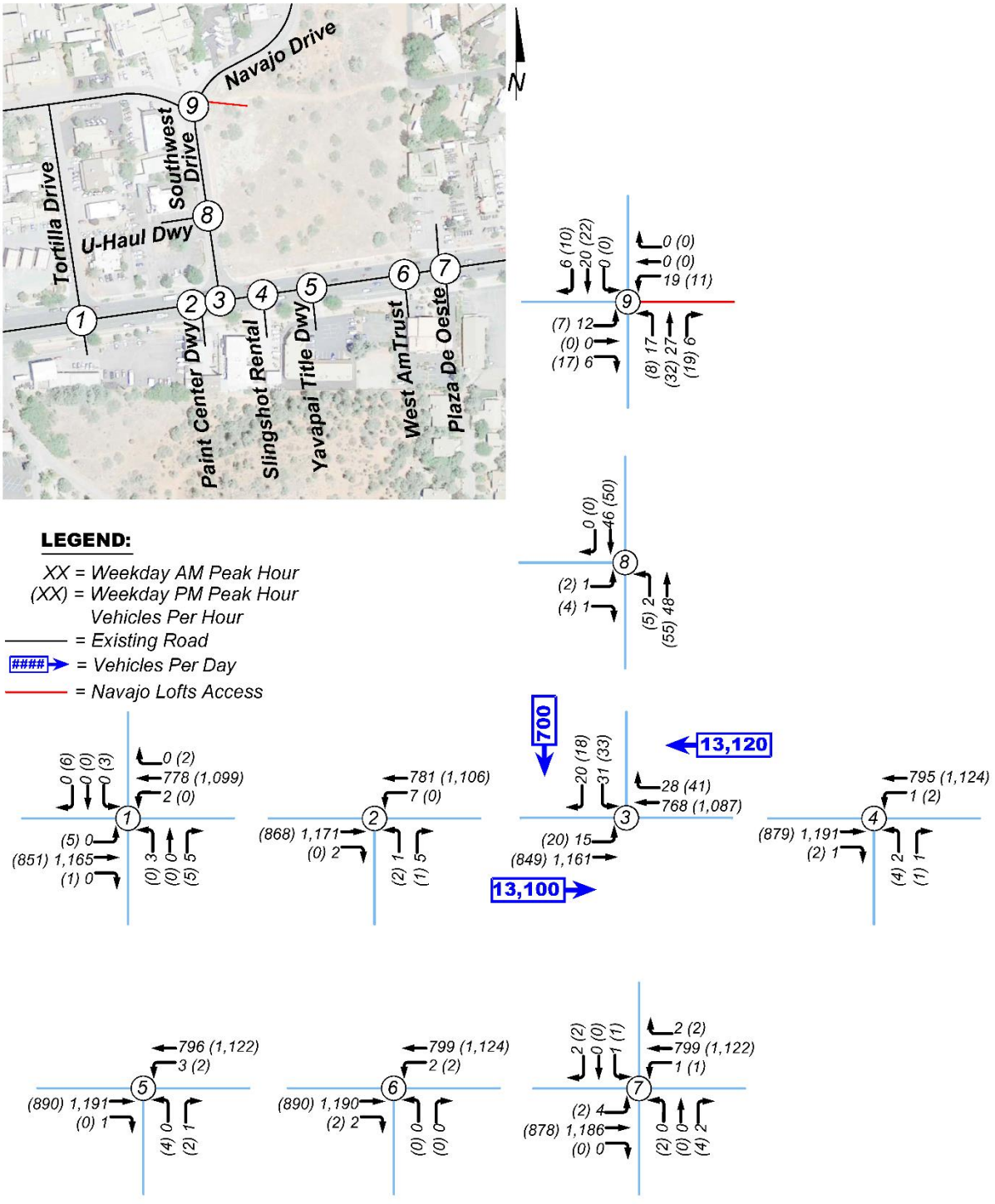


Figure 11 – 2025 Weekday Peak Hour Traffic Volumes Without Project With Navajo Lofts

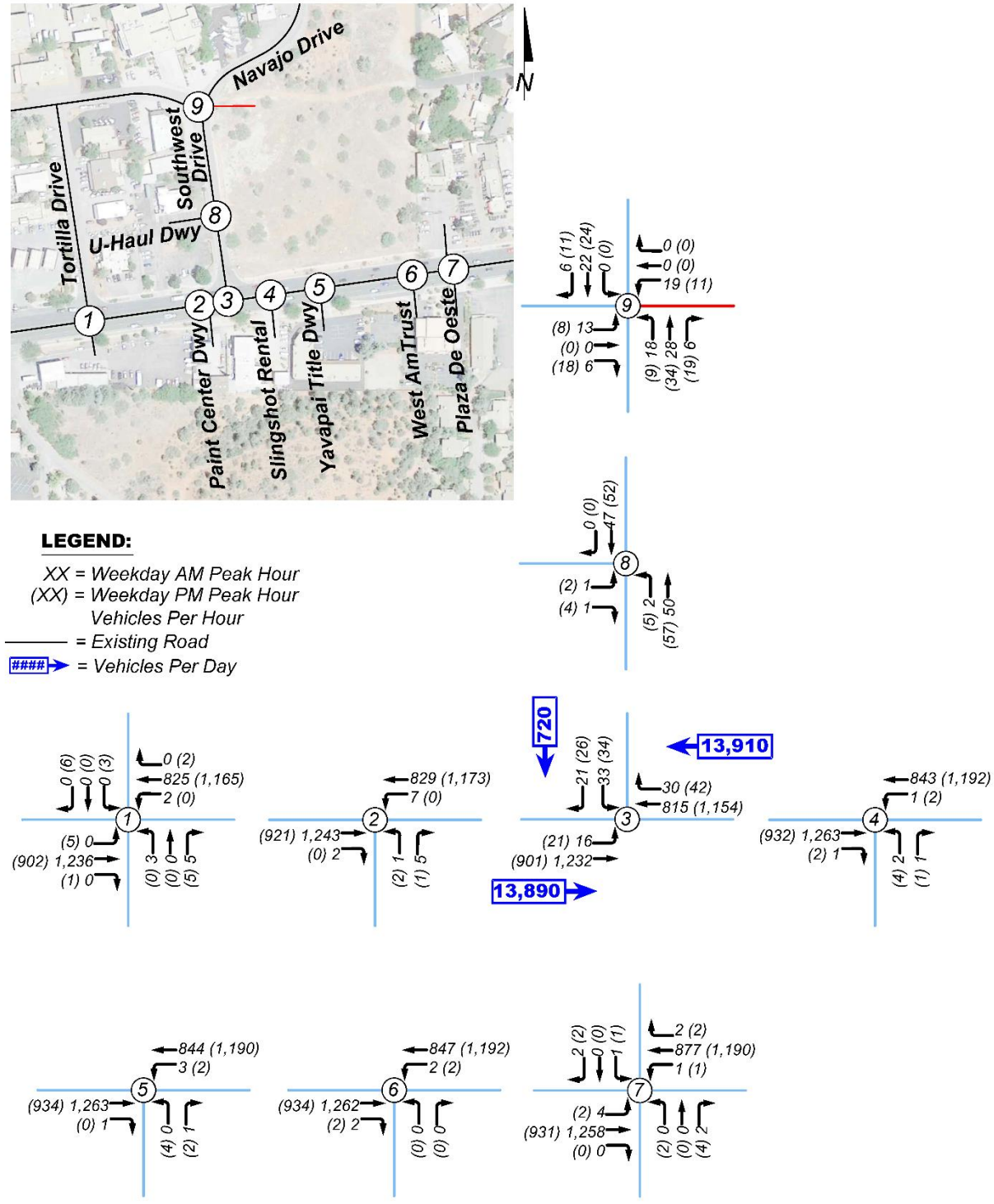


Table 5 – 2022 Weekday Peak Hour Levels of Service Without Project With Navajo Lofts

Intersection	AM Peak		PM Peak	
	LOS	Delay	LOS	Delay
Un-signalized Intersections				
Tortilla Drive/SR 89a				
Eastbound Left	A	0.0	B	11.4
Westbound Left	B	11.8	A	0.0
Northbound Left/Through/Right	E	37.1	B	11.8
Southbound Left/Through/Right	A	0.0	D	33.6
Paint Center Driveway/SR 89a				
Westbound Left	B	11.9	A	0.0
Northbound Left/Right	C	16.0	C	18.1
Southwest Drive/SR 89a				
Eastbound Left	A	9.8	B	11.8
Southbound Left/Right	C	20.2	D	27.9
Slingshot Rental Driveway/SR 89a				
Westbound Left	B	12.0	B	10.2
Northbound Left/Right	C	22.5	C	19.9
Yavapai Title Driveway/SR 89a				
Westbound Left	B	12.0	B	10.2
Northbound Left/Right	B	13.9	C	17.7
West AmTrust Driveway/SR 89a				
Westbound Left	B	12.0	B	10.2
Northbound Left/Right	A	0.0	A	0.0
Plaza de Oeste Driveway/SR 89a				
Eastbound Left	A	9.8	B	11.5
Westbound Left	B	11.9	B	10.1
Northbound Left/Through/Right	B	13.9	D	28.0
Southbound Left/Through/Right	D	25.7	D	33.7
Uhaul Driveway/Southwest Drive				
Eastbound Left/Right	A	8.7	A	8.8
Northbound Left/Through	A	7.3	A	7.3
Navajo Drive/Southwest Drive				
Eastbound Left/Through/Right	A	9.0	A	8.8
Westbound Left/Through/Right	A	9.4	A	9.4
Northbound Left/Through	A	7.3	A	7.3
Southbound Left/Through/Right	A	0.0	A	0.0

Delay - seconds per vehicle

Table 6 – 2025 Weekday Peak Hour Levels of Service Without Project With Navajo Lofts

Intersection	AM Peak		PM Peak	
	LOS	Delay	LOS	Delay
Un-signalized Intersections				
Tortilla Drive/SR 89a				
Eastbound Left	A	0.0	B	11.9
Westbound Left	B	12.3	A	0.0
Northbound Left/Through/Right	E	43.3	B	12.1
Southbound Left/Through/Right	A	0.0	E	39.0
Paint Center Driveway/SR 89a				
Westbound Left	B	12.5	A	0.0
Northbound Left/Right	C	16.9	C	19.1
Southwest Drive/SR 89a				
Eastbound Left	B	10.1	B	12.4
Southbound Left/Right	C	22.0	D	30.5
Slingshot Rental Driveway/SR 89a				
Westbound Left	B	12.5	B	10.4
Northbound Left/Right	C	24.2	C	21.1
Yavapai Title Driveway/SR 89a				
Westbound Left	B	12.5	B	10.4
Northbound Left/Right	B	14.5	C	18.6
West AmTrust Driveway/SR 89a				
Westbound Left	B	12.5	B	10.4
Northbound Left/Right	A	0.0	A	0.0
Plaza de Oeste Driveway/SR 89a				
Eastbound Left	B	10.2	B	12.0
Westbound Left	B	12.4	B	10.4
Northbound Left/Through/Right	B	14.5	D	32.0
Southbound Left/Through/Right	D	30.1	E	38.9
Uhaul Driveway/Southwest Drive				
Eastbound Left/Right	A	8.9	A	8.9
Northbound Left/Through	A	7.3	A	7.4
Navajo Drive/Southwest Drive				
Eastbound Left/Through/Right	A	9.1	A	8.8
Westbound Left/Through/Right	A	9.4	A	9.4
Northbound Left/Through	A	7.3	A	7.3
Southbound Left/Through/Right	A	0.0	A	0.0

Delay - seconds per vehicle

As shown in **Table 5** and **6**, the northbound approach to the intersection of Tortilla Drive/SR 89A is anticipated to experience an inadequate delay during the weekday AM peak hour in 2022 without traffic from the project. In 2025 without traffic from the project, the northbound and southbound approaches to the intersection of Tortilla Drive/SR 89A are expected to experience inadequate delays during the weekday peak hours.

The southbound approach to the intersection of Plaza de Oeste Driveway/SR 89A is expected to operate at a LOS E during the weekday PM peak hour in 2025 without traffic from the project.

The delays at the intersections of Tortilla Drive/SR 89A and Plaza de Oeste Driveway/SR 89A are due to the relatively high through traffic volumes along SR 89A not providing adequate gaps for vehicles turning from the minor approaches.

The remaining study intersections are expected to operate at an adequate LOS during the weekday peak hours in 2022 and 2025 without traffic from the project.

Future Traffic Operations With Project

In order to assess the impacts of the project on future traffic operations, levels of service were calculated for each project intersection in 2022 and 2025, with the project.

Weekday peak hour traffic volumes for 2022 and 2025 without the project were combined with the estimated trips generated by the project to yield weekday peak hour traffic volumes with the project as shown in **Figures 12** and **13**.

Weekday intersection levels of service for 2022 and 2025, with the project, were then calculated as shown in **Tables 7** and **8**. Complete capacity calculations are included in the Appendix.

As shown in **Tables 7** and **8**, the northbound and southbound approaches to the intersection of Tortilla Drive/SR 89A are anticipated to experience inadequate delays during the weekday peak hours in 2022 and 2025 without and with traffic from the project.

The southbound approach to Southwest Drive/SR 89A is expected to experience an inadequate delay during the weekday peak hours in 2022 and 2025 with traffic from the project.

The southbound approach to East Access/SR 89A is anticipated to operate at a LOS F in 2022 and 2025 with traffic from the project.

The southbound approach to the intersection of Plaza de Oeste Driveway/SR 89A is expected to operate at a LOS E during the weekday PM peak hour in 2022 with the project and in 2025 without and with traffic from the project. The northbound approach is also expected to experience an inadequate delay in 2025 with traffic from the project.

The delays at these intersections are due to the relatively high through traffic volumes along SR 89A not providing adequate gaps for vehicles turning from the minor approaches.

The remaining study intersections are expected to operate at an adequate LOS during the weekday peak hours in 2022 and 2025 without traffic from the project.

Figure 12 – 2022 Weekday Peak Hour Traffic Volumes With Project

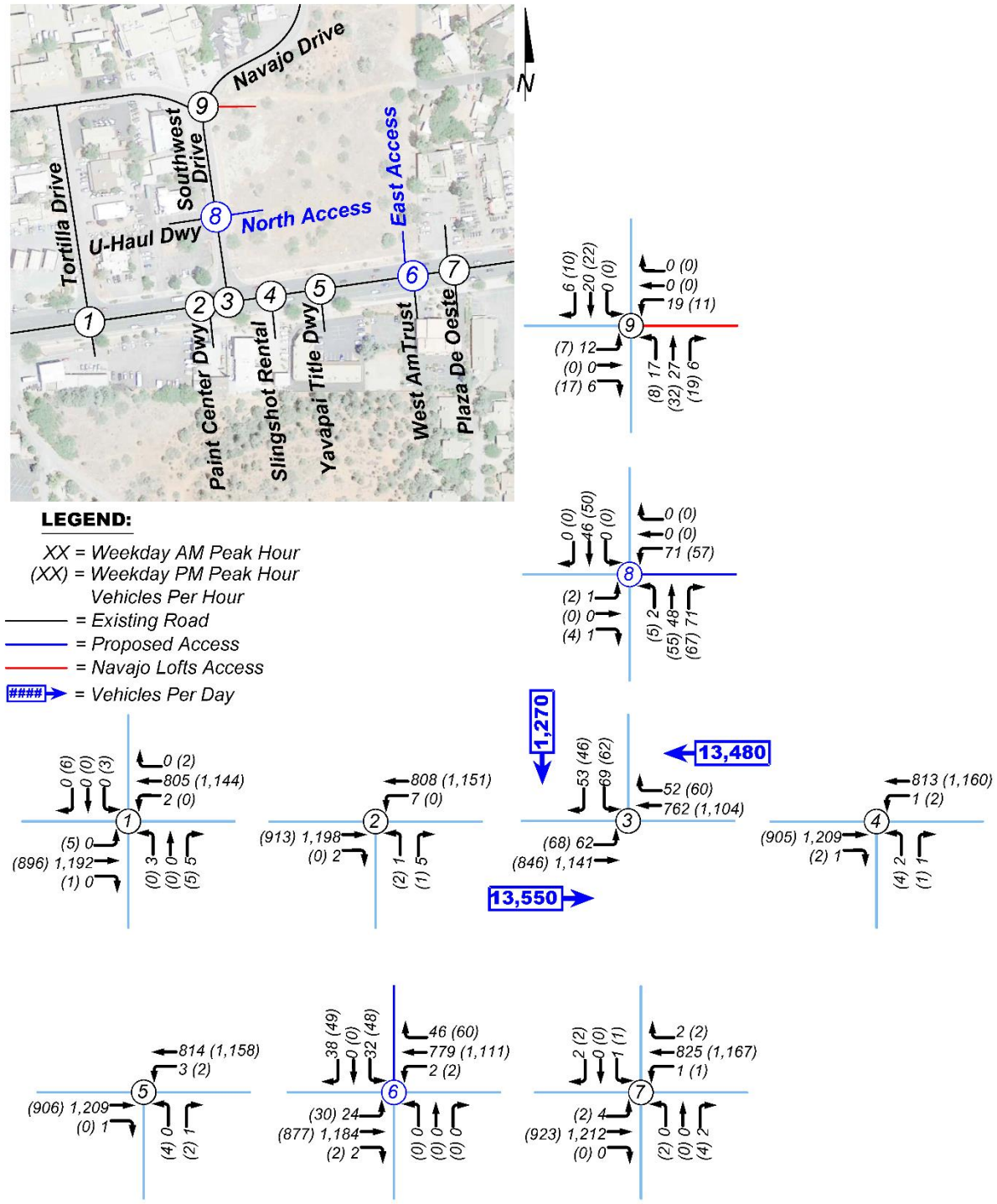


Figure 13 – 2025 Weekday Peak Hour Traffic Volumes With Project

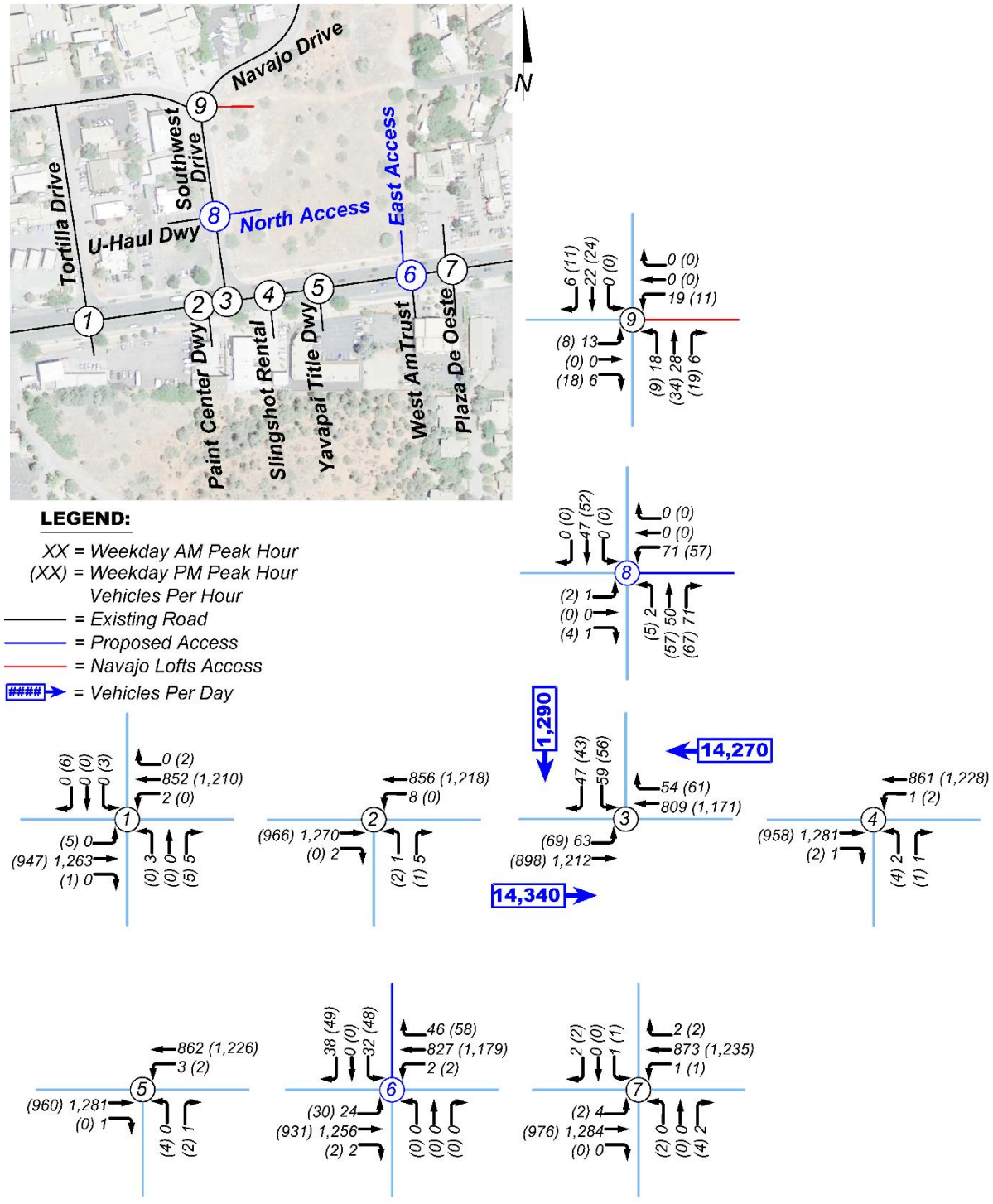


Table 7 – 2022 Weekday Peak Hour Levels of Service With Project

Intersection	2022 Without Project				2022 With Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Un-signalized Intersections								
Tortilla Drive/SR 89a								
Eastbound Left	A	0.0	B	11.4	A	0.0	B	11.7
Westbound Left	B	11.8	A	0.0	B	12.0	A	0.0
Northbound Left/Through/Right	E	37.1	B	11.8	E	39.6	B	12.0
Southbound Left/Through/Right	A	0.0	D	33.6	A	0.0	E	37.2
Paint Center Driveway/SR 89a								
Westbound Left	B	11.9	A	0.0	B	12.1	A	0.0
Northbound Left/Right	C	16.0	C	18.1	C	16.4	C	18.9
Southwest Drive/SR 89a								
Eastbound Left	A	9.8	B	11.8	B	10.4	B	13.1
Southbound Left/Right	C	20.2	D	27.9	D	30.8	F	50.4
Slingshot Rental Driveway/SR 89a								
Westbound Left	B	12.0	B	10.2	B	12.1	B	10.3
Northbound Left/Right	C	22.5	C	19.9	C	23.0	C	20.5
Yavapai Title Driveway/SR 89a								
Westbound Left	B	12.0	B	10.2	B	12.1	B	10.3
Northbound Left/Right	B	13.9	C	17.7	B	14.1	C	18.1
East Access/SR 89a								
Eastbound Left	N/A		N/A		B	10.1	B	12.3
Westbound Left	B	12.0	B	10.2	B	12.0	B	10.1
Northbound Left/Right	A	0.0	A	0.0	N/A		N/A	
Northbound Left/Through/Right	N/A		N/A		A	0.0	A	0.0
Southbound Left/Through/Right					F	79.1	F	>120
Plaza de Oeste Driveway/SR 89a								
Eastbound Left	A	9.8	B	11.5	A	9.9	B	11.8
Westbound Left	B	11.9	B	10.1	B	12.1	B	10.4
Northbound Left/Through/Right	B	13.9	D	28.0	B	14.1	D	31.2
Southbound Left/Through/Right	D	25.7	D	33.7	D	27.3	E	37.4
Uhaul Driveway/Southwest Drive								
Eastbound Left/Right	A	8.7	A	8.8	N/A		N/A	
Eastbound Left/Through/Right	N/A		N/A		A	9.0	A	9.0
Westbound Left/Through/Right					A	10.0	A	10.1
Northbound Left/Through	A	7.3	A	7.3	N/A		N/A	
Northbound Left/Through/Right	N/A		N/A		A	7.3	A	7.3
Southbound Left/Through/Right					A	0.0	A	0.0
Navajo Drive/Southwest Drive								
Eastbound Left/Through/Right	A	9.0	A	8.8	A	9.0	A	8.8
Westbound Left/Through/Right	A	9.4	A	9.4	A	9.4	A	9.4
Northbound Left/Through	A	7.3	A	7.3	A	7.3	A	7.3
Southbound Left/Through/Right	A	0.0	A	0.0	A	0.0	A	0.0

Delay - seconds per vehicle

Table 8 – 2025 Weekday Peak Hour Levels of Service With Project

Intersection	2025 Without Project				2025 With Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Un-signalized Intersections								
Tortilla Drive/SR 89a								
Eastbound Left	A	0.0	B	11.9	A	0.0	B	12.2
Westbound Left	B	12.3	A	0.0	B	12.5	A	0.0
Northbound Left/Through/Right	E	43.3	B	12.1	E	46.3	B	12.4
Southbound Left/Through/Right	A	0.0	E	39.0	A	0.0	E	43.8
Paint Center Driveway/SR 89a								
Westbound Left	B	12.5	A	0.0	B	12.7	A	0.0
Northbound Left/Right	C	16.9	C	19.1	C	17.3	C	19.9
Southwest Drive/SR 89a								
Eastbound Left	B	10.1	B	12.4	B	10.7	B	13.8
Southbound Left/Right	C	22.0	D	30.5	E	35.5	F	61.7
Slingshot Rental Driveway/SR 89a								
Westbound Left	B	12.5	B	10.4	B	12.6	B	10.6
Northbound Left/Right	C	24.2	C	21.1	C	24.8	C	21.7
Yavapai Title Driveway/SR 89a								
Westbound Left	B	12.5	B	10.4	B	12.7	B	10.6
Northbound Left/Right	B	14.5	C	18.6	B	14.6	C	19.0
East Access/SR 89a								
Eastbound Left	N/A		N/A		B	10.3	B	12.9
Westbound Left	B	12.5	B	10.4	B	12.5	B	10.4
Northbound Left/Right	A	0.0	A	0.0	N/A		N/A	
Northbound Left/Through/Right	N/A		N/A		A	0.0	A	0.0
Southbound Left/Through/Right					F	107.2	F	>120
Plaza de Oeste Driveway/SR 89a								
Eastbound Left	B	10.2	B	12.0	B	10.1	B	12.3
Westbound Left	B	12.4	B	10.4	B	12.6	B	10.6
Northbound Left/Through/Right	B	14.5	D	32.0	B	14.7	E	35.4
Southbound Left/Through/Right	D	30.1	E	38.9	D	30.5	E	43.6
Uhaul Driveway/Southwest Drive								
Eastbound Left/Right	A	8.7	A	8.7	N/A		N/A	
Eastbound Left/Through/Right	N/A		N/A		A	9.0	A	9.0
Westbound Left/Through/Right					A	10.1	B	10.1
Northbound Left/Through	A	7.3	A	7.3	N/A		N/A	
Northbound Left/Through/Right	N/A		N/A		A	7.3	A	7.4
Southbound Left/Through/Right					A	0.0	A	0.0
Navajo Drive/Southwest Drive								
Eastbound Left/Through/Right	A	9.1	A	8.8	A	9.1	A	8.8
Westbound Left/Through/Right	A	9.4	A	9.4	A	9.4	A	9.4
Northbound Left/Through	A	7.3	A	7.3	A	7.3	A	7.3
Southbound Left/Through/Right	A	0.0	A	0.0	A	0.0	A	0.0

Delay - seconds per vehicle

Turn Lane Analysis

A key element of this traffic analysis is to determine if left or right turn lanes are required at the intersections providing direct access to the project. The need for a northbound right turn lane and a southbound left turn lane at North Access/Southwest Drive was not evaluated due to the low-speed, low-volume nature of Southwest Drive. Additionally, the need for eastbound left turn lanes at Southwest Drive/SR 89A and East Access/SR 89A was not analyzed due to the existing two-way center left turn lane on SR 89A that will be available for eastbound left turning vehicles.

The need for right turn lanes was based on the ADOT's *Traffic Guidelines and Processes 245 – Turn Lane Warrants* (TGP 245). The criteria for determining if right turn lanes are needed are based on speed, through traffic volume, and turning traffic volume during the peak hour. **Table 9** shows ADOT's right turn lane warrant requirements.

Table 9 – ADOT Right Turn Lane Requirements

Peak Hour Traffic Volume on the Highway in Advancing Direction	Minimum Peak Hour Right-turn Traffic Volume				
	# of thru lanes per direction				
	1		2		3
	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	All Speeds
≤ 200					
201 – 300	-	30	-	-	-
301 – 400	-	19	-	55	-
401 – 500	85	14	-	30	-
501 – 600	58	12	140	25	-
601 – 700	27	9	80	18	-
701 – 800	20	8	53	15	-
801 – 900	12	7	40	12	-
901 – 1000	9	6	30	11	-
1001 – 1100	8	5	23	9	18
1101 – 1200	7	5	18	8	16
1201 – 1300	6	4	14	8	15
1301 – 1400	6	4	11	6	12
1400+	5	3	8	6	10

When needed, turn lanes remove the slowing turning traffic from the through traffic stream, improving capacity. **Tables 10** and **11** show the locations that were evaluated for right turn lanes based on traffic volumes in 2025 without and with the project.

Table 10 – Right Turn Lane Warrants, Without Project

Intersection	Direction	Peak Hour	# of Thru Lanes per Direction	Posted Speed	Peak Hour Traffic Volume in Advancing Direction	Right Turn Volume (vph)	Minimum Right Turn Volume Criteria	Warranted
Southwest Drive/SR 89A	Westbound	AM	2	35 mph	845 vph	30	40	Yes
		PM			1196 vph	42	18	

vph - vehicles per hour, mph - miles per hour

Table 11 – Right Turn Lane Warrants, With Project

Intersection	Direction	Peak Hour	# of Thru Lanes per Direction	Posted Speed	Peak Hour Traffic Volume in Advancing Direction	Right Turn Volume (vph)	Minimum Right Turn Volume Criteria	Warranted
Southwest Drive/SR 89A	Westbound	AM	2	35 mph	863 vph	54	40	Yes
		PM			1232 vph	61	14	
East Access/SR 89A	Westbound	AM	2	35 mph	873 vph	46	40	Yes
		PM			1237 vph	58	14	

vph - vehicles per hour, mph - miles per hour

Tables 10 and **11** show that a westbound right turn lane is warranted at Southwest Drive/SR 89A in 2025 without and with traffic from the project. A westbound right turn lane is also warranted at East Access/SR 89A in 2025 with the project.

The right turning movement from SR 89A to Southwest Drive and East Access is not expected to generate a queue, as it will be a free flow movement. Based on an average vehicle length of 25 feet, ADOT requires a minimum queue length of 50 feet for turn lanes.

Once the queue length is determined, gap and braking distance must be calculated for turn lanes on ADOT controlled roadways. *ADOT TGP 430 – Turn Lane Design* provides gap and braking distance criteria based on the posted roadway speed limit. The speed limit at the project site on SR 89A is 35 mph. The minimum total turn length is shown in **Table 12**.

Table 12 – Turn Lane Lengths

Intersection	Queue	Minimum Braking Distance	Gap	Minimum Total
Southwest Drive/SR 89A				
Westbound Right Turn Lane	50	40	60	150
East Access/SR 89A				
Westbound Right Turn Lane	50	40	60	150

All Lengths in Feet, Calculations Based on Posted Speed, Minimum Requirements

As shown in **Table 13**, the westbound right turn lanes at Southwest Drive/SR 89A and East Access/SR 89A should be constructed to provide minimum turn lane lengths of 150 feet.

Traffic Signal Warrant Analysis

Traffic signal warrant analyses were performed at the intersection of Southwest Drive/SR 89A to determine if and/or when a traffic signal will be needed. The study intersection was analyzed for the existing conditions and in 2022 and 2025 without and with the project.

The *Manual on Uniform Traffic Control Devices (MUTCD),* Federal Highway Administration, 2009, lists nine warrants that are used to determine if a traffic signal should be considered for installation at an intersection. A traffic signal may be warranted if one or more of the warrants are satisfied. Warrants #1 (Eight Hour Volume) and #2 (Four Hour Vehicular Volume) were used to evaluate the need to signalize the intersection. Based on existing conditions, availability of information, and applicability, the remaining warrants (#3, #4, #5, #6, #7, #8, and #9) do not apply to the given conditions.

Warrant #1 (Eight Hour Volume) is satisfied when for at least eight (8) hours of an average day, specific traffic volume levels are met for both the major and minor streets (Condition A – Minimum Vehicular Volume). The MUTCD states these volumes depend on the vehicles per hour (vph) combined for both approaches of the major street, and for the highest volume approach on the minor street. The values vary depending on the number of approach lanes and the 85th percentile speed of the roadways.

Warrant #1 also applies to operating conditions where the major street traffic levels are sufficiently high that traffic entering or crossing from a minor street suffers excessive delay (Condition B – Interruption of Continuous Traffic). Once again, the warrant is satisfied when for each of any of the same eight (8) hours of an average day, specific traffic volume levels are met for both the major and minor streets.

Warrant #2 (Four Hour Volume) is met when, for any four hours of the average day on both the major and minor streets, the hourly approach volumes are above the plotted curve contained in the MUTCD (see Appendix F).

Daily traffic generated by the project was distributed throughout the 24 hours of a day based on existing daily traffic distributions and included in the future 2022 and 2025 calculations. **Table 13** shows the results of the warrant analyses at the study intersection. A complete set of the warrant analyses can be found in the Appendix.

Table 13 – Traffic Signal Warrant Analysis (Southwest Drive/SR 89A)

Southwest Drive/SR 89A	Warrant Number									
	1		2	3	4	5	6	7	8	9
	Condition A	Condition B								
Existing	No	No	No	*	*	*	*	*	*	*
Hours Met	0	0	0	*	*	*	*	*	*	*
2022 Without Project	No	No	No	*	*	*	*	*	*	*
Hours Met	0	0	0	*	*	*	*	*	*	*
2025 Without Project	No	No	No	*	*	*	*	*	*	*
Hours Met	0	0	0	*	*	*	*	*	*	*
2022 With Project	No	Yes	Yes	*	*	*	*	*	*	*
Hours Met	0	10	10	*	*	*	*	*	*	*
2025 With Project	No	Yes	Yes	*	*	*	*	*	*	*
Hours Met	0	10	10	*	*	*	*	*	*	*

* Warrant Does Not Apply

As shown in **Table 13**, the intersection of Southwest Drive/ SR 89A does not currently meet and is not expected to meet traffic signal warrants #1 or #2 in 2022 or 2025 without traffic from the project. In 2022 and 2025, traffic signal warrants #1 and #2 are expected to be met with the project and with the adjacent Navajo Lofts development.

It is important to mention that traffic signals should not be installed because one or more of the warrants are satisfied. The MUTCD warrants reflect only the lowest minimum levels on which traffic engineers agree. It also states that, "The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal."

Crash Analysis

Crash history for the existing study intersections was obtained from ADOT from 1 January 2016 to 31 December 2020. The results of the crash analysis at the nine existing study intersections are shown in **Table 14** through **16**. A summary of the crash data can be found in the Appendix.

Table 14 – Tortilla Drive/SR 89A

Year	Crash Type							Fatal	Injury	Crash Totals
	Angle	Left Turn	Rear-End	Sideswipe	Single Vehicle	Head On	Other			
2016		1								1
2017			1							1
2018	1									1
2019			1	1						2
2020		1								1
5-Year Total	**1**	**2**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**6**

As shown in **Table 14**, six collisions were reported at the intersection of Tortilla Drive/SR 89A during the five-year study period. None of the crashes resulted in injury.

Table 15 – Southwest Drive/SR 89A

Year	Crash Type							Fatal	Injury	Crash Totals
	Angle	Left Turn	Rear-End	Sideswipe	Single Vehicle	Head On	Other			
2016		1							1	1
2017			1		1				1	2
2018	2								2	2
2019				1						1
2020		1	1	1						3
5-Year Total	**2**	**2**	**2**	**2**	**1**	**0**	**0**	**0**	**4**	**9**

Table 15 shows that a total of nine crashes were reported at the intersection of Southwest Drive/SR 89A during the five-year study period, four of which resulted in injury.

Table 16 – Slingshot Rentals Driveway/SR 89A

Year	Crash Type							Fatal	Injury	Crash Totals
	Angle	Left Turn	Rear-End	Sideswipe	Single Vehicle	Head On	Other			
2016										0
2017										0
2018			1							1
2019										0
2020										0
5-Year Total	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

As shown in **Table 16**, one crash was reported at the intersection of Slingshot Rentals Driveway/SR 89A within the five-year study period. The collision was a rear-end.

No crashes were reported at the remaining study intersections. This limited crash data provides no observable crash pattern for the area.

It should be noted that this crash summary only includes crashes where a police officer was contacted and wrote a report, otherwise, there is no record of the incident. It is possible that other minor crashes occurred in the area where the Police Department was not contacted, and no official record of these crashes exists.

Mitigation

The delays at the intersections of Tortilla Drive/SR 89A, Southwest Drive/SR 89A, East Access/SR 89A, and Plaza de Oeste Driveway/SR 89A are due to the relatively high through traffic volumes along SR 89A not providing adequate gaps for vehicles turning from the minor approaches. Unsignalized, minor approaches to four or more lane major streets such as SR 89A tend to operate at a LOS E or F during the weekday peak hours.

Mitigation measures at these closely spaced intersections are limited. While a traffic signal would be expected to alleviate these delays, the intersections are too closely spaced for traffic signals to be installed at each intersection. Moreover, traffic signals are not appropriate for delays experienced by a relatively low number of vehicles for only a few hours of the day.

The installation of a traffic signal at Southwest Drive/SR 89A is expected to alleviate the delays at this intersection.

Table 17 shows the corresponding levels of service with the proposed mitigation measure described above using 2025 peak hour traffic volumes with traffic from the project. Complete capacity calculations can be found in the Appendix.

Table 17 – Mitigation Measures, 2025 With Project

Intersection	Mitigation Measure	2025 Without Mitigation				2025 With Mitigation			
		AM Peak		PM Peak		AM Peak		PM Peak	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Southwest Drive/SR 89a	Install a Traffic Signal								
Overall Intersection		N/A		N/A		B	15.1	B	13.4
Eastbound Left		B	10.7	B	13.8	B	12.2	B	12.8
Eastbound Through		N/A		N/A		B	13.1	A	7.8
Westbound Through						B	17.8	B	16.5
Westbound Through/Right						B	17.8	B	16.5
Southbound Left/Right		E	35.5	F	61.7	B	17.0	C	23.1

Delay - seconds per vehicle

Conclusion

When fully completed, the proposed project is predicted to generate an additional 3,086 vehicle trips per day (vtpd) on weekdays to the adjacent street system from the new project site. Fifty percent of these new trips (1,543 vehicle trips) will be into the project and fifty percent will be out of the project.

The northbound approach to the intersection of Tortilla Drive/SR 89A currently experiences an inadequate delay during the weekday AM peak hour.

The remaining study intersections currently operate at an adequate level of service (LOS) during the weekday peak hours.

An adjacent development, Navajo Lofts, is planned to be constructed in the near future. This development is located directly north of the Southwest Circle K project site. The expected trip assignment from this development was added to this analysis based on the traffic assignment form the following report: *Navajo Lofts Traffic Impact Analysis* (Navajo Lofts TIA) written by Lee Engineering, LLC, dated August 2021.

The northbound approach to the intersection of Tortilla Drive/SR 89A is anticipated to experience an inadequate delay during the weekday AM peak hour in 2022 without traffic from the project. In 2025 without traffic from the project, the northbound and southbound approaches to the intersection of Tortilla Drive/SR 89A are expected to experience inadequate delays during the weekday peak hours.

The southbound approach to the intersection of Plaza de Oeste Driveway/SR 89A is expected to operate at a LOS E during the weekday PM peak hour in 2025 without traffic from the project.

The remaining study intersections are expected to operate at an adequate LOS during the weekday peak hours in 2022 and 2025 without traffic from the project.

The northbound and southbound approaches to the intersection of Tortilla Drive/SR 89A are anticipated to experience inadequate delays during the weekday peak hours in 2022 and 2025 without and with traffic from the project.

The southbound approaches to Southwest Drive/SR 89A and East Access/SR 89A are expected to experience inadequate delays during the weekday peak hours in 2022 and 2025 with traffic from the project.

The northbound and southbound approaches to the intersection of Plaza de Oeste Driveway/SR 89A are expected to operate at a LOS E during the weekday PM peak hour in 2022 with the project and in 2025 without and with traffic from the project.

The remaining study intersections are expected to operate at an adequate LOS during the weekday peak hours in 2022 and 2025 without traffic from the project.

A westbound right turn lane is warranted at Southwest Drive/SR 89A in 2025 without and with traffic from the project.

A westbound right turn lane is also warranted at East Access/SR 89A in 2025 with the project.

The intersection of Southwest Drive/ SR 89A does not currently meet and is not expected to meet traffic signal warrants #1 or #2 in 2022 or 2025 without traffic from the project. In 2022 and 2025, traffic signal warrants #1 and #2 are expected to be met with the project and with the adjacent Navajo Lofts development.

Six collisions were reported at the intersection of Tortilla Drive/SR 89A during the five-year study period. None of the crashes resulted in injury.

A total of nine crashes were reported at the intersection of Southwest Drive/SR 89A during the five-year study period, four of which resulted in injury.

One crash was reported at the intersection of Slingshot Rentals Driveway/SR 89A within the five-year study period. The collision was a rear-end.

No crashes were reported at the remaining study intersections. This limited crash data provides no observable crash pattern for the area.

The delays at the intersections of Tortilla Drive/SR 89A, Southwest Drive/SR 89A, East Access/SR 89A, and Plaza de Oeste Driveway/SR 89A are due to the relatively high through traffic volumes along SR 89A not providing adequate gaps for vehicles turning from the minor approaches. Unsignalized, minor approaches to four or more lane major streets such as SR 89A tend to operate at a LOS E or F during the weekday peak hours.

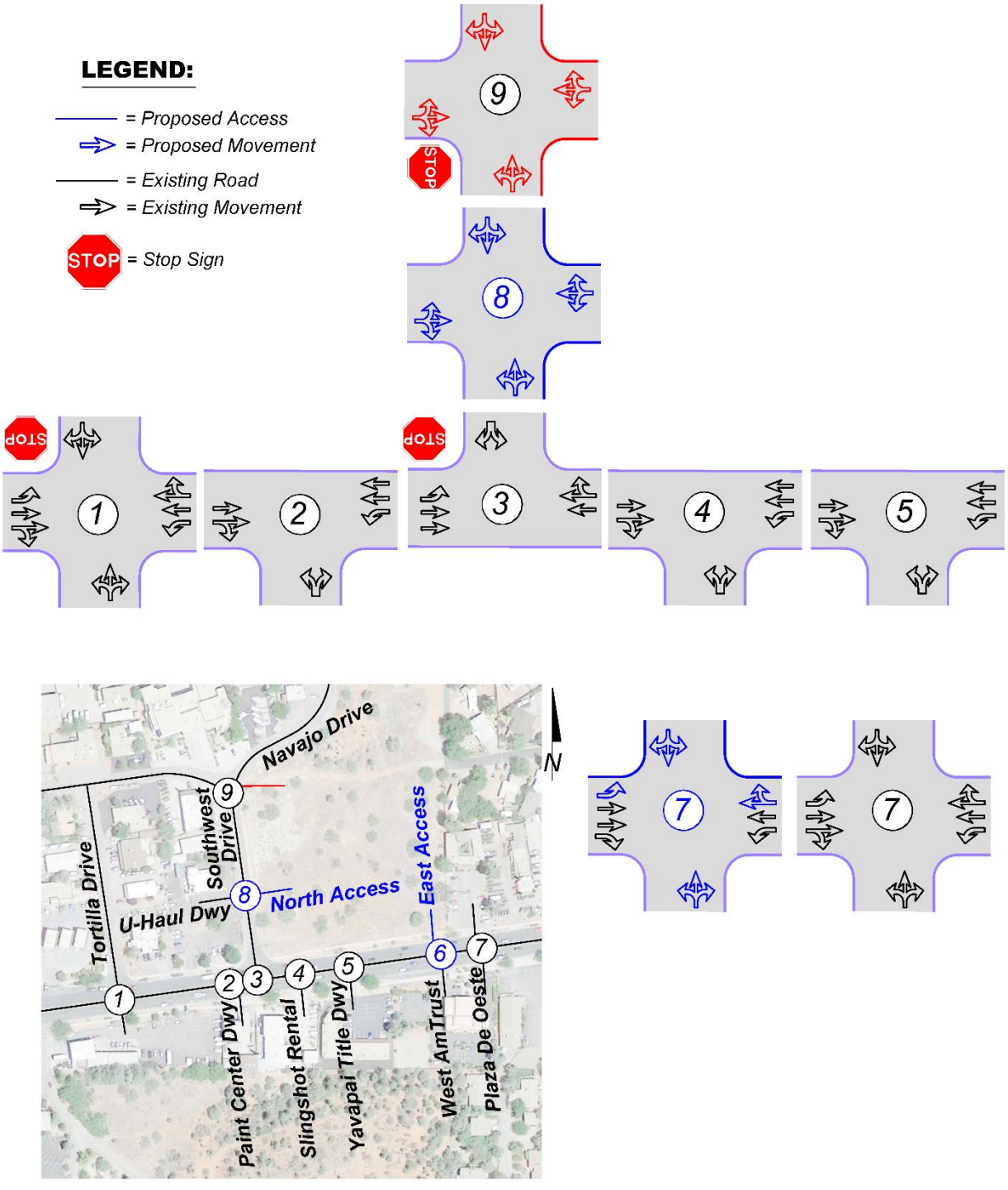
Mitigation measures at these closely spaced intersections are limited. While a traffic signal would be expected to alleviate these delays, the intersections are too closely spaced for traffic signals to be installed at each intersection. Moreover, traffic signals are not appropriate for delays experienced by a relatively low number of vehicles for only a few hours of the day.

The installation of a traffic signal at Southwest Drive/SR 89A is expected to alleviate the delays at this intersection.

The westbound right turn lanes at Southwest Drive/SR 89A and East Access/SR 89A should be constructed to provide minimum turn lane lengths of 150 feet.

Proposed lane configurations and traffic control are shown in **Figure 14**.

Figure 14 – Proposed Lane Configurations and Traffic Control



SOUTHWEST CIRCLE K
SOUTHWEST DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS

APPENDIX

Traffic Counts

Trip Generation Calculations

Pass-By Trip Assignment

Capacity Calculations

Traffic Signal Warrant Analysis

Crash Data

SOUTHWEST CIRCLE K
SOUTHWEST DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS

APPENDIX

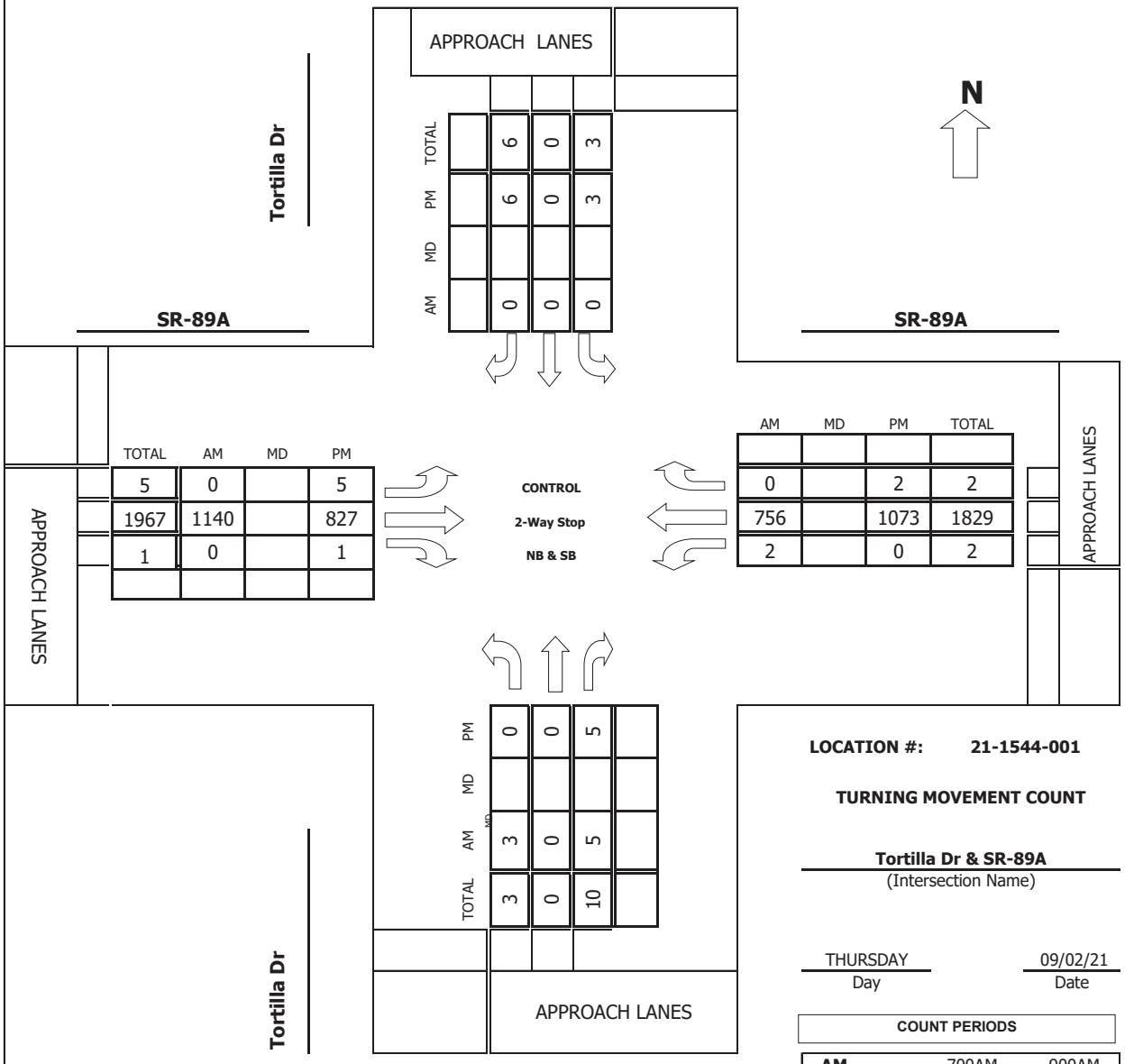
Traffic Counts

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 21-1544-001

TMC SUMMARY OF Tortilla Dr & SR-89A



LOCATION #: 21-1544-001

TURNING MOVEMENT COUNT

Tortilla Dr & SR-89A
(Intersection Name)

THURSDAY (Day) 09/02/21 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Tortilla Dr	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	2	0	0	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	2	0	0	0	1	168	1	4	115	0	291
7:15 AM	2	0	1	0	0	0	0	181	1	2	116	0	303
7:30 AM	0	0	0	0	0	1	0	249	0	0	133	0	383
7:45 AM	0	0	1	0	0	2	1	261	2	2	138	0	407
8:00 AM	2	0	1	0	0	0	0	285	0	0	185	0	473
8:15 AM	1	0	1	0	0	0	0	292	0	1	211	0	506
8:30 AM	0	0	1	0	0	0	0	308	0	0	196	0	505
8:45 AM	0	0	2	0	0	0	0	255	0	1	164	0	422
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	5	0	9	0	0	3	2	1999	4	10	1258	0	3290
Approach %	35.71	0.00	64.29	0.00	0.00	100.00	0.10	99.70	0.20	0.79	99.21	0.00	
App/Depart	14	/	2	3	/	14	2005	/	2008	1268	/	1266	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	3	0	5	0	0	0	0	1140	0	2	756	0	1906
Approach %	37.50	0.00	62.50	####	####	####	0.00	100.00	0.00	0.26	99.74	0.00	
PEAK HR. FACTOR:		0.667			0.000			0.925			0.894		0.942

CONTROL:	2-Way Stop (NB & SB)
COMMENT 1:	
GPS:	34.862163, -111.811080

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Tortilla Dr	DATE:	09/02/21	LOCATION:	Sedona
	0				
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	2	0	0	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	3	2	0	1	2	218	0	1	242	1	470
4:15 PM	0	0	1	1	0	2	4	208	1	0	232	0	449
4:30 PM	0	0	2	1	0	0	1	215	0	0	271	2	492
4:45 PM	0	0	0	1	0	4	0	191	0	0	262	0	458
5:00 PM	0	0	2	0	0	0	0	213	0	0	308	0	523
5:15 PM	0	0	1	0	0	0	0	179	1	0	238	0	419
5:30 PM	0	0	0	0	0	1	0	179	0	0	202	0	382
5:45 PM	0	0	0	1	0	2	0	170	0	0	201	0	374
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	9	6	0	10	7	1573	2	1	1956	3	3567
Approach %	0.00	0.00	100.00	37.50	0.00	62.50	0.44	99.43	0.13	0.05	99.80	0.15	
App/Depart	9	/	10	16	/	3	1582	/	1588	1960	/	1966	

PM Peak Hr Begins at: 415 PM

PEAK													
Volumes	0	0	5	3	0	6	5	827	1	0	1073	2	1922
Approach %	0.00	0.00	100.00	33.33	0.00	66.67	0.60	99.28	0.12	0.00	99.81	0.19	

PEAK HR. FACTOR:	0.625	0.450	0.964	0.873	0.919

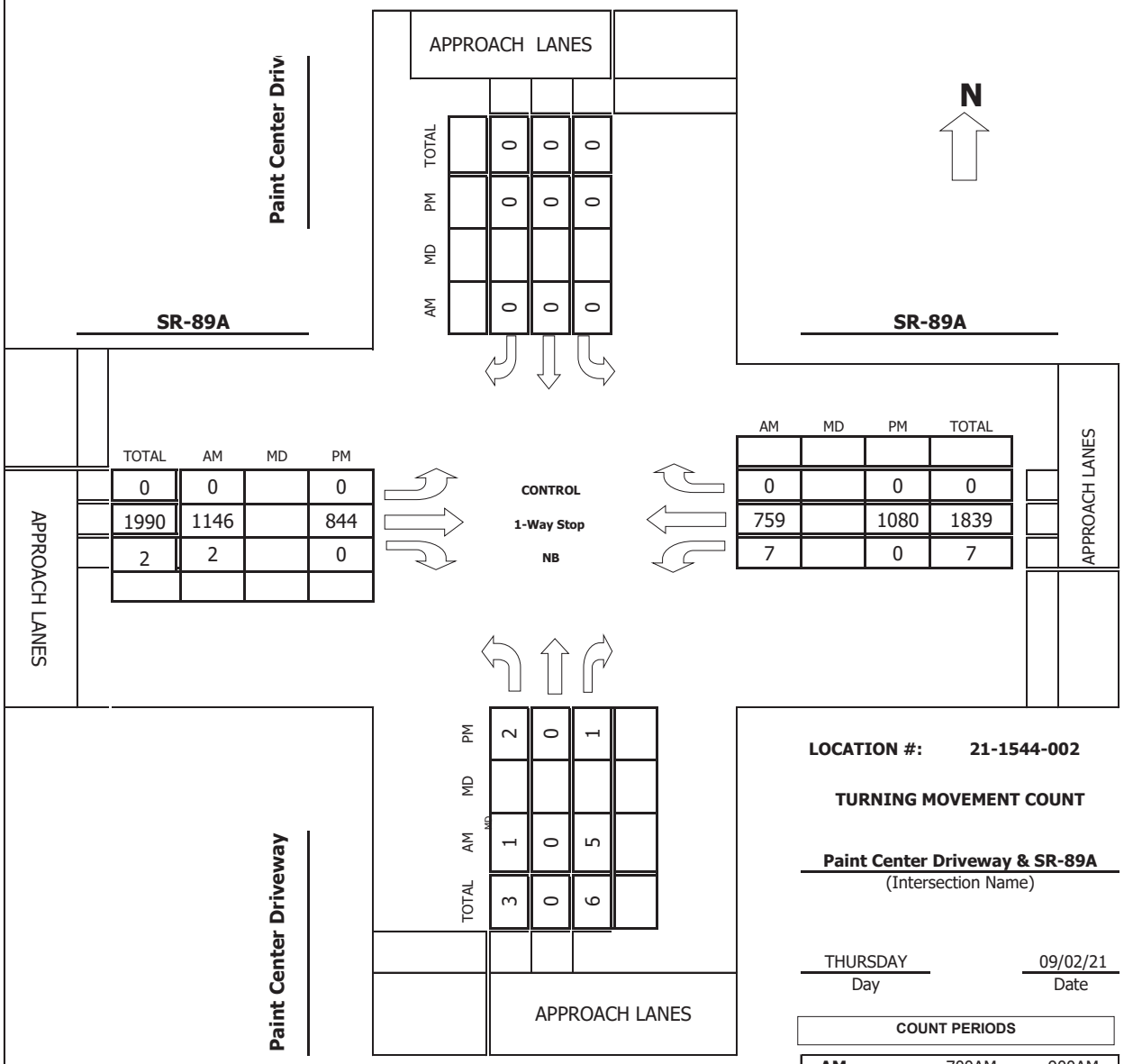
CONTROL: 2-Way Stop (NB & SB)
COMMENT 1: 0
GPS: 34.862163, -111.811080

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 21-1544-002

TMC SUMMARY OF Paint Center Driveway & SR-89A



LOCATION #: 21-1544-002

TURNING MOVEMENT COUNT

Paint Center Driveway & SR-89A
(Intersection Name)

THURSDAY (Day) 09/02/21 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Paint Center Driveway	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	0	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	2	0	0	0	0	164	0	1	121	0	288
7:15 AM	1	0	1	0	0	0	0	186	0	2	119	0	309
7:30 AM	0	0	3	0	0	0	0	245	1	1	134	0	384
7:45 AM	0	0	0	0	0	0	0	263	0	0	139	0	402
8:00 AM	1	0	0	0	0	0	0	284	1	3	183	0	472
8:15 AM	0	0	3	0	0	0	0	299	0	0	214	0	516
8:30 AM	0	0	1	0	0	0	0	305	1	2	198	0	507
8:45 AM	0	0	1	0	0	0	0	258	0	2	164	0	425
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	2	0	11	0	0	0	0	2004	3	11	1272	0	3303
Approach %	15.38	0.00	84.62	####	####	####	0.00	99.85	0.15	0.86	99.14	0.00	
App/Depart	13	/	0	0	/	14	2007	/	2015	1283	/	1274	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	1	0	5	0	0	0	0	1146	2	7	759	0	1920
Approach %	16.67	0.00	83.33	####	####	####	0.00	99.83	0.17	0.91	99.09	0.00	
PEAK HR. FACTOR:		0.500			0.000			0.938			0.895		0.930

CONTROL: 1-Way Stop (NB)
COMMENT 1:
GPS: 34.862252, -111.810185

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Paint Center Driveway 0	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	0	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	2	0	0	0	0	223	1	0	243	0	469
4:15 PM	0	0	0	0	0	0	0	214	0	0	236	0	450
4:30 PM	1	0	1	0	0	0	0	220	0	0	269	0	491
4:45 PM	1	0	0	0	0	0	0	193	0	0	264	0	458
5:00 PM	0	0	0	0	0	0	0	217	0	0	311	0	528
5:15 PM	0	0	0	0	0	0	0	183	0	0	236	0	419
5:30 PM	0	0	0	0	0	0	0	176	0	0	203	0	379
5:45 PM	1	0	0	0	0	0	0	164	2	0	202	0	369
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	3	0	3	0	0	0	0	1590	3	0	1964	0	3563
Approach %	50.00	0.00	50.00	####	####	####	0.00	99.81	0.19	0.00	100.00	0.00	
App/Depart	6	/	0	0	/	3	1593	/	1593	1964	/	1967	

PM Peak Hr Begins at: 415 PM

PEAK													
Volumes	2	0	1	0	0	0	0	844	0	0	1080	0	1927
Approach %	66.67	0.00	33.33	####	####	####	0.00	100.00	0.00	0.00	100.00	0.00	

PEAK HR. FACTOR:	0.375	0.000	0.959	0.868	0.912

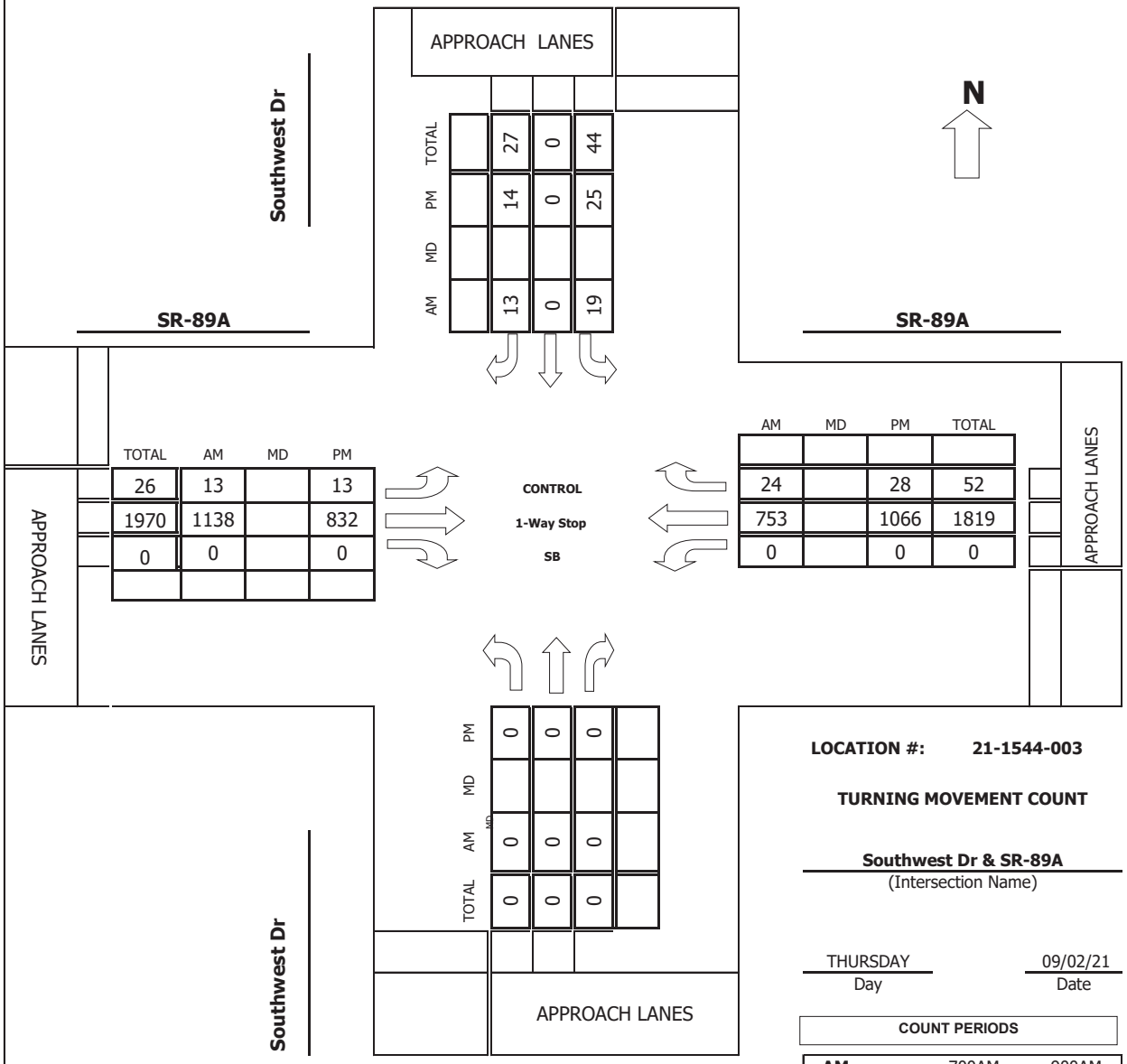
CONTROL: 1-Way Stop (NB)
COMMENT 1: 0
GPS: 34.862252, -111.810185

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 21-1544-003

TMC SUMMARY OF Southwest Dr & SR-89A



LOCATION #: 21-1544-003

TURNING MOVEMENT COUNT

Southwest Dr & SR-89A
(Intersection Name)

THURSDAY (Day) 09/02/21 (Date)

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Southwest Dr	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	2	0	0	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	3	0	1	1	165	0	0	121	5	296
7:15 AM	0	0	0	2	0	4	2	185	0	0	117	6	316
7:30 AM	0	0	0	2	0	1	6	242	0	0	134	9	394
7:45 AM	0	0	0	2	0	2	1	262	0	0	137	9	413
8:00 AM	0	0	0	3	0	3	1	283	0	0	183	8	481
8:15 AM	0	0	0	7	0	3	5	297	0	0	211	5	528
8:30 AM	0	0	0	4	0	3	5	301	0	0	197	9	519
8:45 AM	0	0	0	5	0	4	2	257	0	0	162	2	432
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	28	0	21	23	1992	0	0	1262	53	3379
Approach %	####	####	####	57.14	0.00	42.86	1.14	98.86	0.00	0.00	95.97	4.03	
App/Depart	0	/	76	49	/	0	2015	/	2020	1315	/	1283	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	0	0	0	19	0	13	13	1138	0	0	753	24	1960
Approach %	####	####	####	59.38	0.00	40.63	1.13	98.87	0.00	0.00	96.91	3.09	

PEAK HR. FACTOR:	0.000	0.800	0.940	0.899	0.928

CONTROL: 1-Way Stop (SB)
COMMENT 1:
GPS: 34.862276, -111.810032

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Southwest Dr 0	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	2	0	0	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	0	7	0	4	5	220	0	0	239	6	481
4:15 PM	0	0	0	5	0	4	4	210	0	0	232	4	459
4:30 PM	0	0	0	10	0	2	1	220	0	0	267	7	507
4:45 PM	0	0	0	6	0	4	4	189	0	0	260	9	472
5:00 PM	0	0	0	4	0	4	4	213	0	0	307	8	540
5:15 PM	0	0	0	6	0	2	2	181	0	0	234	6	431
5:30 PM	0	0	0	4	0	3	4	172	0	0	200	4	387
5:45 PM	0	0	0	8	0	7	1	163	0	0	195	6	380
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	50	0	30	25	1568	0	0	1934	50	3657
Approach %	####	####	####	62.50	0.00	37.50	1.57	98.43	0.00	0.00	97.48	2.52	
App/Depart	0	/	75	80	/	0	1593	/	1618	1984	/	1964	

PM Peak Hr Begins at: 415 PM

PEAK													
Volumes	0	0	0	25	0	14	13	832	0	0	1066	28	1978
Approach %	####	####	####	64.10	0.00	35.90	1.54	98.46	0.00	0.00	97.44	2.56	

PEAK HR. FACTOR:	0.000	0.813	0.956	0.868	0.916

CONTROL: 1-Way Stop (SB)
COMMENT 1: 0
GPS: 34.862276, -111.810032

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Thursday, September 02, 2021 City: Sedona Project #: 21-1544-010

Location: Southwest Dr & SR-89A

AM Period	NB	SB		EB		WB			PM Period	NB	SB		EB		WB		
00:00		0		8		7			12:00		4		272		262		
00:15		0		2		7			12:15		8		244		191		
00:30		1		5		6			12:30		5		237		232		
00:45		0	1	6	21	4	24	46	12:45		9	26	243	996	238	923	1945
01:00		2		3		4			13:00		6		250		223		
01:15		0		2		3			13:15		8		215		255		
01:30		0		4		1			13:30		5		236		241		
01:45		0	2	4	13	0	8	23	13:45		7	26	243	944	213	932	1902
02:00		1		2		1			14:00		11		221		283		
02:15		0		4		5			14:15		10		214		266		
02:30		1		2		2			14:30		7		240		281		
02:45		1	3	3	11	5	13	27	14:45		4	32	252	927	300	1130	2089
03:00		0		3		3			15:00		8		259		330		
03:15		0		6		4			15:15		5		251		280		
03:30		0		7		3			15:30		9		303		292		
03:45		1	1	11	27	5	15	43	15:45		6	28	203	1016	278	1180	2224
04:00		2		6		5			16:00		11		225		245		
04:15		1		10		5			16:15		9		214		236		
04:30		0		15		14			16:30		12		221		274		
04:45		0	3	25	56	9	33	92	16:45		10	42	193	853	269	1024	1919
05:00		0		27		14			17:00		8		217		315		
05:15		1		29		32			17:15		8		183		240		
05:30		0		68		29			17:30		7		176		204		
05:45		0	1	96	220	39	114	335	17:45		15	38	164	740	201	960	1738
06:00		0		80		46			18:00		7		165		201		
06:15		1		96		71			18:15		4		169		174		
06:30		2		155		73			18:30		5		146		170		
06:45		3	6	158	489	83	273	768	18:45		2	18	130	610	143	688	1316
07:00		4		166		126			19:00		6		133		163		
07:15		6		187		123			19:15		3		136		165		
07:30		3		248		143			19:30		2		93		126		
07:45		4	17	263	864	146	538	1419	19:45		1	12	108	470	123	577	1059
08:00		6		284		191			20:00		0		54		133		
08:15		10		302		216			20:15		1		45		95		
08:30		7		306		206			20:30		2		49		107		
08:45		9	32	259	1151	164	777	1960	20:45		1	4	47	195	103	438	637
09:00		7		222		175			21:00		0		52		102		
09:15		4		234		185			21:15		0		38		74		
09:30		8		249		197			21:30		1		28		86		
09:45		5	24	254	959	222	779	1762	21:45		0	1	32	150	84	346	497
10:00		9		240		188			22:00		1		28		52		
10:15		6		224		195			22:15		0		28		37		
10:30		3		250		191			22:30		0		21		67		
10:45		2	20	239	953	182	756	1729	22:45		2	3	16	93	39	195	291
11:00		5		258		214			23:00		0		12		33		
11:15		2		212		213			23:15		1		11		19		
11:30		4		211		197			23:30		2		8		18		
11:45		7	18	237	918	231	855	1791	23:45		0	3	12	43	13	83	129
Total Vol.			128		5682		4185	**9995**				233		7037		8476	**15746**

GPS Coordinates: 34.862276, -111.810032

Daily Totals

NB	SB	EB	WB	**Combined**
	361	12719	12661	**25741**

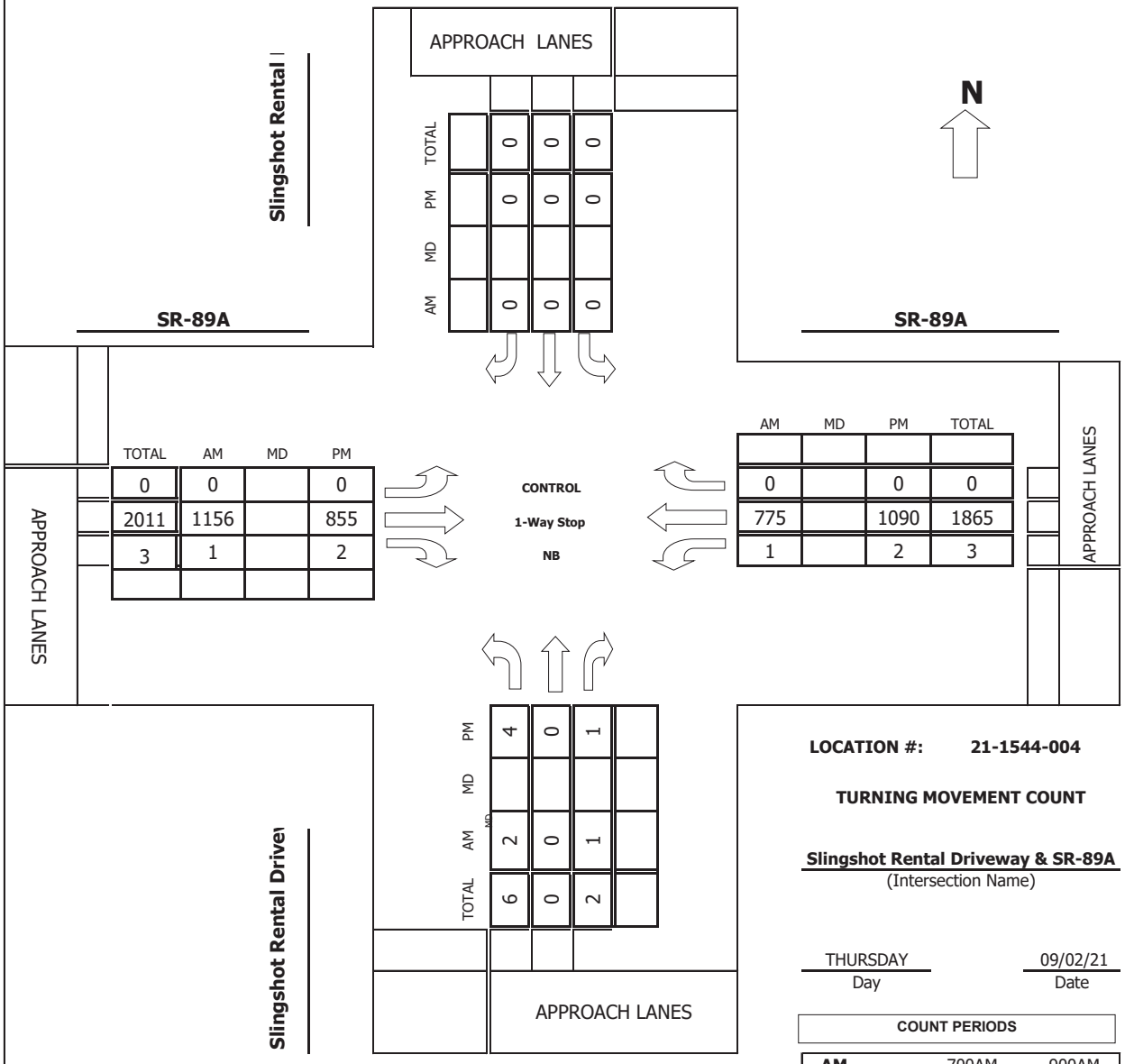
	AM				PM			
Split %	1.3%	56.8%	41.9%	**38.8%**	1.5%	44.7%	53.8%	**61.2%**
Peak Hour	08:15	07:45	11:45	**08:00**	16:00	14:45	14:45	**14:45**
Volume	33	1155	916	**1960**	42	1065	1202	**2293**
P.H.F.	0.83	0.94	0.87	**0.93**	0.88	0.88	0.91	**0.95**

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 21-1544-004

TMC SUMMARY OF Slingshot Rental Driveway & SR-89A



LOCATION #: 21-1544-004

TURNING MOVEMENT COUNT

Slingshot Rental Driveway & SR-89A
(Intersection Name)

THURSDAY (Day) 09/02/21 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Slingshot Rental Driveway	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	0	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	0	0	0	0	167	1	0	126	0	294
7:15 AM	0	0	0	0	0	0	0	187	0	2	123	0	312
7:30 AM	0	0	0	0	0	0	0	243	1	0	143	0	387
7:45 AM	0	0	0	0	0	0	0	264	0	0	146	0	410
8:00 AM	1	0	1	0	0	0	0	285	1	1	190	0	479
8:15 AM	1	0	0	0	0	0	0	304	0	0	215	0	520
8:30 AM	0	0	0	0	0	0	0	305	0	0	206	0	511
8:45 AM	0	0	0	0	0	0	0	262	0	0	164	0	426
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	2	0	1	0	0	0	0	2017	3	3	1313	0	3339
Approach %	66.67	0.00	33.33	####	####	####	0.00	99.85	0.15	0.23	99.77	0.00	
App/Depart	3	/	0	0	/	6	2020	/	2018	1316	/	1315	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	2	0	1	0	0	0	0	1156	1	1	775	0	1936
Approach %	66.67	0.00	33.33	####	####	####	0.00	99.91	0.09	0.13	99.87	0.00	
PEAK HR. FACTOR:		0.375			0.000			0.948			0.902		0.931

CONTROL: 1-Way Stop (NB)
COMMENT 1:
GPS: 34.862298, -111.809787

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Slingshot Rental Driveway 0	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	0	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	0	0	0	0	0	227	0	0	245	0	472
4:15 PM	4	0	0	0	0	0	0	213	2	2	232	0	453
4:30 PM	0	0	0	0	0	0	0	230	0	0	274	0	504
4:45 PM	0	0	0	0	0	0	0	195	0	0	269	0	464
5:00 PM	0	0	1	0	0	0	0	217	0	0	315	0	533
5:15 PM	0	0	0	0	0	0	0	187	0	0	240	0	427
5:30 PM	0	0	1	0	0	0	0	176	0	1	204	0	382
5:45 PM	0	0	1	0	0	0	0	171	0	0	201	0	373
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	4	0	3	0	0	0	0	1616	2	3	1980	0	3608
Approach %	57.14	0.00	42.86	####	####	####	0.00	99.88	0.12	0.15	99.85	0.00	
App/Depart	7	/	0	0	/	5	1618	/	1619	1983	/	1984	

PM Peak Hr Begins at: 415 PM

PEAK													
Volumes	4	0	1	0	0	0	0	855	2	2	1090	0	1954
Approach %	80.00	0.00	20.00	####	####	####	0.00	99.77	0.23	0.18	99.82	0.00	
PEAK HR. FACTOR:		0.313			0.000			0.932			0.867		0.917

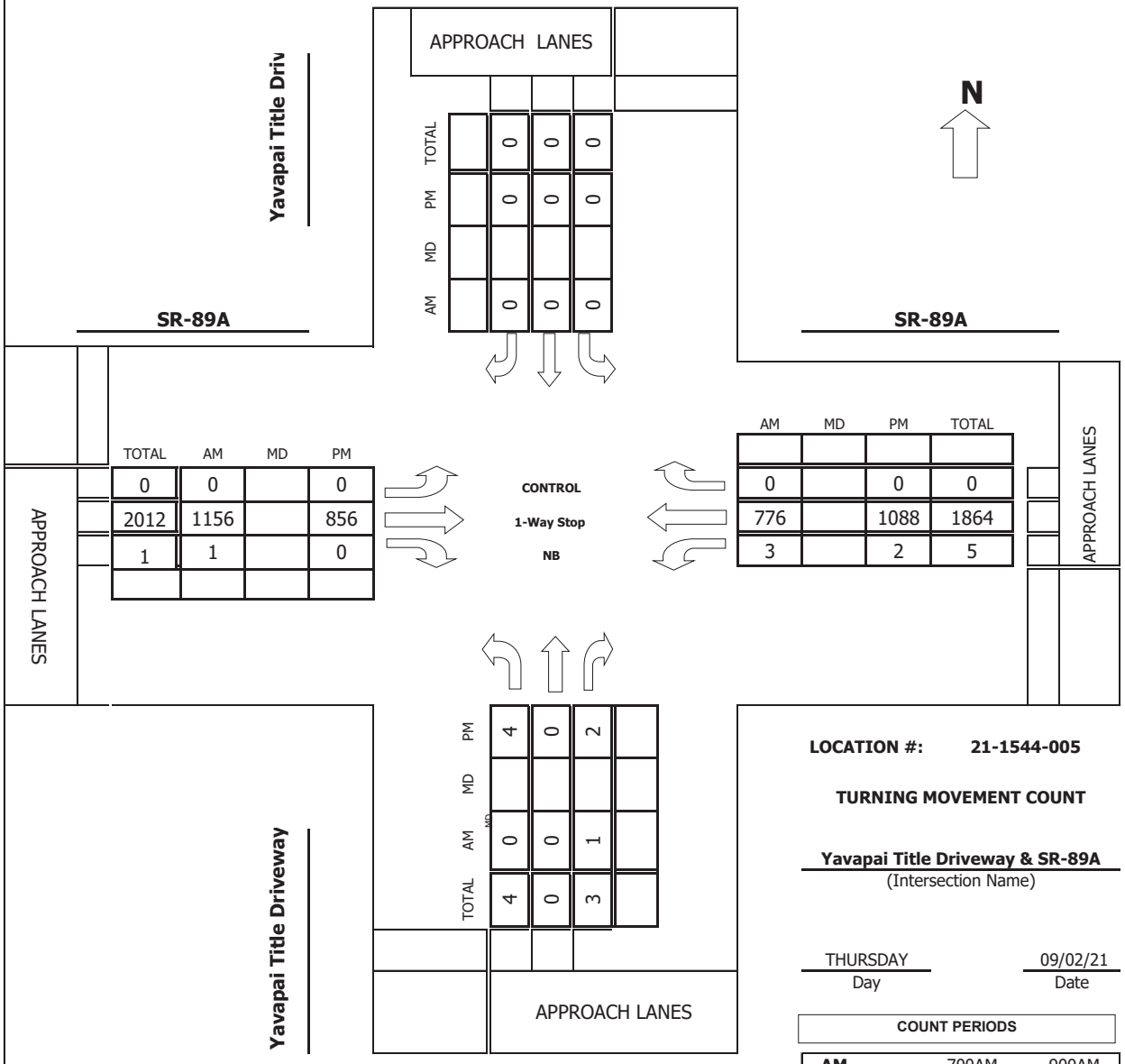
CONTROL:	1-Way Stop (NB)
COMMENT 1:	0
GPS:	34.862298, -111.809787

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 21-1544-005

TMC SUMMARY OF Yavapai Title Driveway & SR-89A



LOCATION #: 21-1544-005

TURNING MOVEMENT COUNT

Yavapai Title Driveway & SR-89A
(Intersection Name)

THURSDAY (Day) 09/02/21 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Yavapai Title Driveway	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	0	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	0	0	0	0	167	0	1	126	0	294
7:15 AM	0	0	0	0	0	0	0	187	0	0	125	0	312
7:30 AM	0	0	0	0	0	0	0	241	2	0	143	0	386
7:45 AM	0	0	0	0	0	0	0	263	1	0	146	0	410
8:00 AM	0	0	0	0	0	0	0	285	1	0	191	0	477
8:15 AM	0	0	0	0	0	0	0	304	0	2	215	0	521
8:30 AM	0	0	0	0	0	0	0	305	0	1	206	0	512
8:45 AM	0	0	1	0	0	0	0	262	0	0	164	0	427
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	1	0	0	0	0	2014	4	4	1316	0	3339
Approach %	0.00	0.00	100.00	####	####	####	0.00	99.80	0.20	0.30	99.70	0.00	
App/Depart	1	/	0	0	/	8	2018	/	2015	1320	/	1316	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	0	0	1	0	0	0	0	1156	1	3	776	0	1937
Approach %	0.00	0.00	100.00	####	####	####	0.00	99.91	0.09	0.39	99.61	0.00	

PEAK HR. FACTOR:	0.250	0.000	0.948	0.897	0.929

CONTROL: 1-Way Stop (NB)
COMMENT 1:
GPS: 34.862342, -111.809399

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Yavapai Title Driveway 0	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	0	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	2	0	0	0	0	226	1	2	245	0	476
4:15 PM	0	0	1	0	0	0	0	213	0	1	234	0	449
4:30 PM	1	0	0	0	0	0	0	230	0	0	273	0	504
4:45 PM	3	0	0	0	0	0	0	195	0	0	266	0	464
5:00 PM	0	0	1	0	0	0	0	218	0	1	315	0	535
5:15 PM	0	0	0	0	0	0	0	187	0	0	240	0	427
5:30 PM	1	0	1	0	0	0	0	177	0	0	204	0	383
5:45 PM	1	0	0	0	0	0	0	172	0	0	200	0	373
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	6	0	5	0	0	0	0	1618	1	4	1977	0	3611
Approach %	54.55	0.00	45.45	####	####	####	0.00	99.94	0.06	0.20	99.80	0.00	
App/Depart	11	/	0	0	/	5	1619	/	1623	1981	/	1983	

PM Peak Hr Begins at: 415 PM

PEAK													
Volumes	4	0	2	0	0	0	0	856	0	2	1088	0	1952
Approach %	66.67	0.00	33.33	####	####	####	0.00	100.00	0.00	0.18	99.82	0.00	

PEAK HR. FACTOR:	0.500	0.000	0.930	0.862	0.912

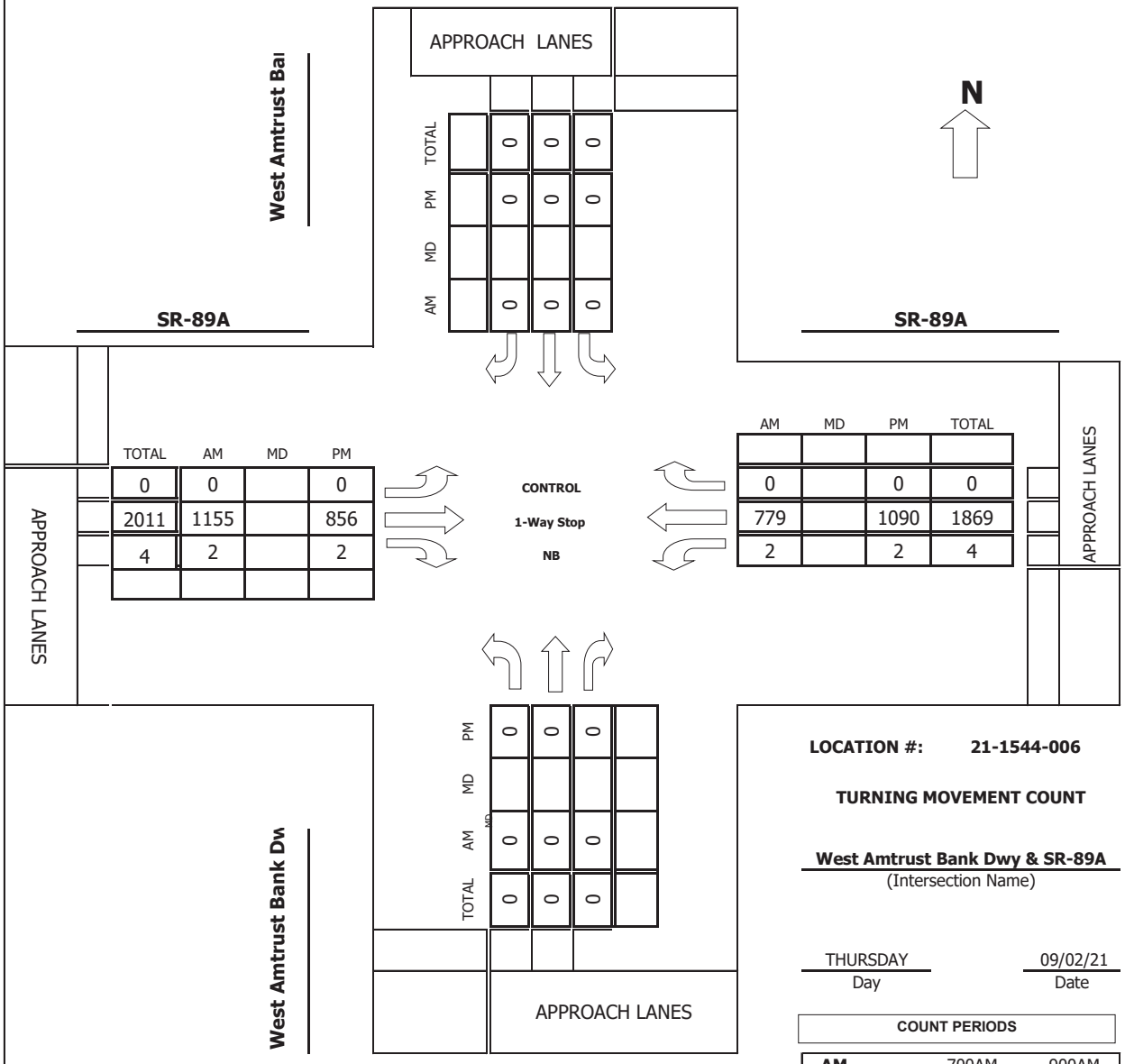
CONTROL: 1-Way Stop (NB)
COMMENT 1: 0
GPS: 34.862342, -111.809399

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 21-1544-006

TMC SUMMARY OF West Amtrust Bank Dwy & SR-89A



LOCATION #: 21-1544-006

TURNING MOVEMENT COUNT

West Amtrust Bank Dwy & SR-89A
(Intersection Name)

THURSDAY (Day) 09/02/21 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	West Amtrust Bank Dwy	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	1	0	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	0	0	0	0	166	1	0	127	0	294
7:15 AM	0	0	0	0	0	0	0	187	0	0	125	0	312
7:30 AM	0	0	0	0	0	0	0	240	1	1	143	0	385
7:45 AM	0	0	0	0	0	0	0	262	1	0	146	0	409
8:00 AM	0	0	0	0	0	0	0	284	1	0	191	0	476
8:15 AM	0	0	0	0	0	0	0	303	1	0	217	0	521
8:30 AM	0	0	0	0	0	0	0	305	0	0	207	0	512
8:45 AM	0	0	0	0	0	0	0	263	0	2	164	0	429
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	0	0	0	0	2010	5	3	1320	0	3338
Approach %	####	####	####	####	####	####	0.00	99.75	0.25	0.23	99.77	0.00	
App/Depart	0	/	0	0	/	8	2015	/	2010	1323	/	1320	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	0	0	0	0	0	0	0	1155	2	2	779	0	1938
Approach %	####	####	####	####	####	####	0.00	99.83	0.17	0.26	99.74	0.00	

PEAK HR. FACTOR:	0.000	0.000	0.948	0.900	0.930

CONTROL: 1-Way Stop (NB)
COMMENT 1:
GPS: 34.862426, -111.808727

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	West Amtrust Bank Dwy 0	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-006

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	1	0	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	1	0	1	0	0	0	0	228	0	1	246	0	477
4:15 PM	0	0	0	0	0	0	0	214	0	0	235	0	449
4:30 PM	0	0	0	0	0	0	0	229	1	0	273	0	503
4:45 PM	0	0	0	0	0	0	0	194	1	2	266	0	463
5:00 PM	0	0	0	0	0	0	0	219	0	0	316	0	535
5:15 PM	0	0	0	0	0	0	0	187	0	0	240	0	427
5:30 PM	0	0	0	0	0	0	0	178	0	0	204	0	382
5:45 PM	1	0	0	0	0	0	0	172	0	1	199	0	373
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	2	0	1	0	0	0	0	1621	2	4	1979	0	3609
Approach %	66.67	0.00	33.33	####	####	####	0.00	99.88	0.12	0.20	99.80	0.00	
App/Depart	3	/	0	0	/	6	1623	/	1622	1983	/	1981	

PM Peak Hr Begins at: 415 PM

PEAK													
Volumes	0	0	0	0	0	0	0	856	2	2	1090	0	1950
Approach %	####	####	####	####	####	####	0.00	99.77	0.23	0.18	99.82	0.00	

PEAK HR. FACTOR:	0.000	0.000	0.933	0.864	0.911

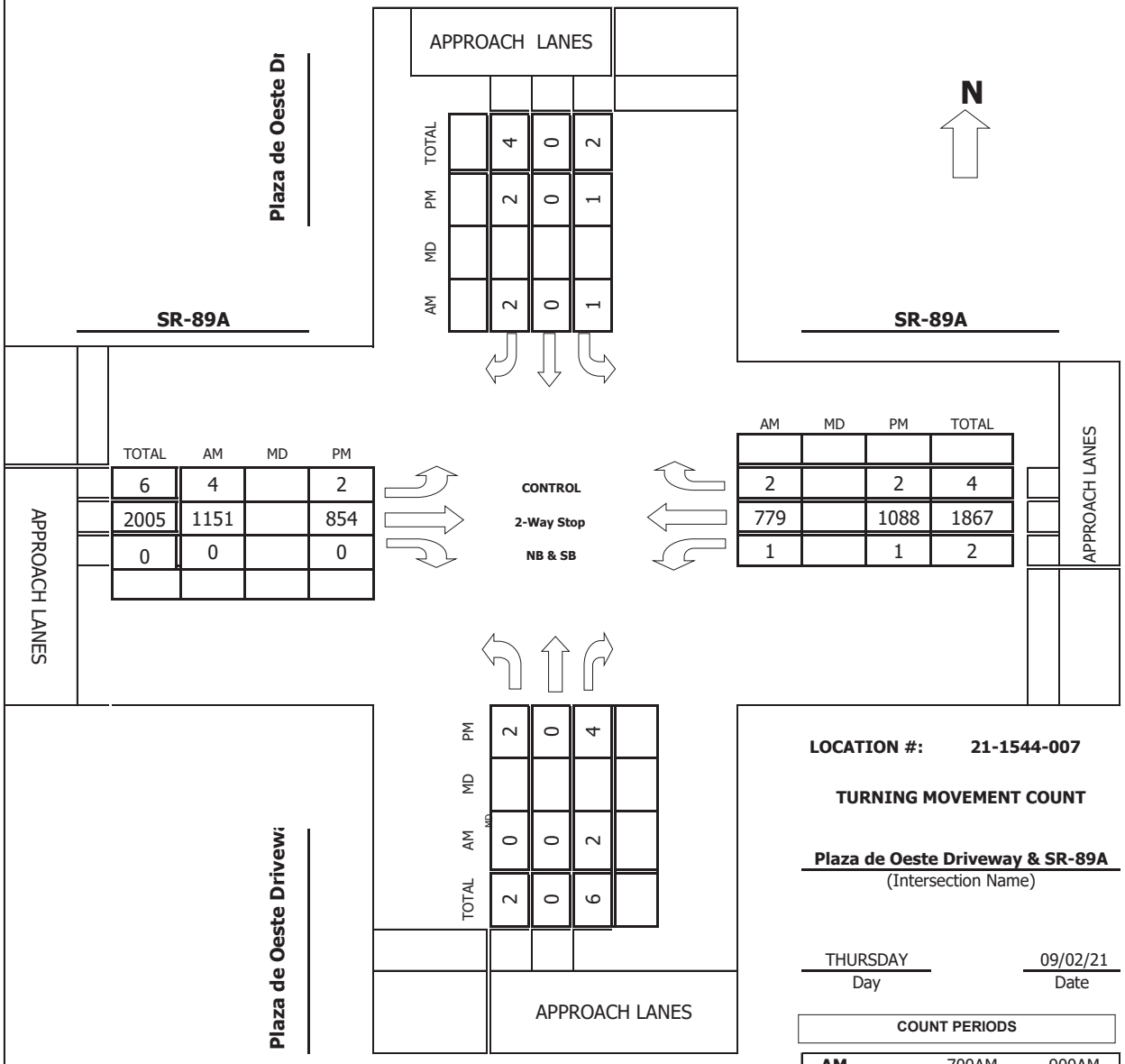
CONTROL: 1-Way Stop (NB)
COMMENT 1: 0
GPS: 34.862426, -111.808727

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 21-1544-007

TMC SUMMARY OF Plaza de Oeste Driveway & SR-89A



LOCATION #: 21-1544-007

TURNING MOVEMENT COUNT

Plaza de Oeste Driveway & SR-89A
(Intersection Name)

THURSDAY (Day) 09/02/21 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Plaza de Oeste Driveway	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	2	0	0	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	0	0	0	0	166	0	0	127	0	293
7:15 AM	0	0	1	0	0	0	0	187	0	0	125	0	313
7:30 AM	0	0	1	0	0	0	0	240	0	0	144	0	385
7:45 AM	0	0	0	0	0	0	0	262	0	0	146	0	408
8:00 AM	0	0	0	0	0	0	0	284	0	0	191	0	475
8:15 AM	0	0	0	0	0	0	0	303	0	0	217	0	520
8:30 AM	0	0	1	1	0	1	3	302	0	1	206	1	516
8:45 AM	0	0	1	0	0	1	1	262	0	0	165	1	431
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	4	1	0	2	4	2006	0	1	1321	2	3341
Approach %	0.00	0.00	100.00	33.33	0.00	66.67	0.20	99.80	0.00	0.08	99.77	0.15	
App/Depart	4	/	6	3	/	1	2010	/	2011	1324	/	1323	

AM Peak Hr Begins at: 800 AM

PEAK													
Volumes	0	0	2	1	0	2	4	1151	0	1	779	2	1942
Approach %	0.00	0.00	100.00	33.33	0.00	66.67	0.35	99.65	0.00	0.13	99.62	0.26	
PEAK HR. FACTOR:	0.500			0.375			0.947			0.901			0.934

CONTROL:	2-Way Stop (NB & SB)
COMMENT 1:	
GPS:	34.862466, -111.808478

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Plaza de Oeste Driveway 0	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	SR-89A	DAY:	THURSDAY	PROJECT#	21-1544-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	2	0	0	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	3	0	2	2	0	3	1	228	0	0	241	2	482
4:15 PM	0	0	1	0	0	0	0	214	0	1	235	0	451
4:30 PM	0	0	1	1	0	1	0	229	0	0	272	1	505
4:45 PM	2	0	1	0	0	1	1	193	0	0	265	0	463
5:00 PM	0	0	1	0	0	0	1	218	0	0	316	1	537
5:15 PM	0	0	0	0	0	0	0	187	0	1	240	0	428
5:30 PM	0	0	0	3	0	0	0	178	0	1	204	0	386
5:45 PM	0	0	0	0	0	0	0	172	0	0	200	0	372
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	5	0	6	6	0	5	3	1619	0	3	1973	4	3624
Approach %	45.45	0.00	54.55	54.55	0.00	45.45	0.18	99.82	0.00	0.15	99.65	0.20	
App/Depart	11	/	7	11	/	3	1622	/	1631	1980	/	1983	

PM Peak Hr Begins at: 415 PM

PEAK													
Volumes	2	0	4	1	0	2	2	854	0	1	1088	2	1956
Approach %	33.33	0.00	66.67	33.33	0.00	66.67	0.23	99.77	0.00	0.09	99.73	0.18	
PEAK HR. FACTOR:	0.500			0.375			0.934			0.860			0.911

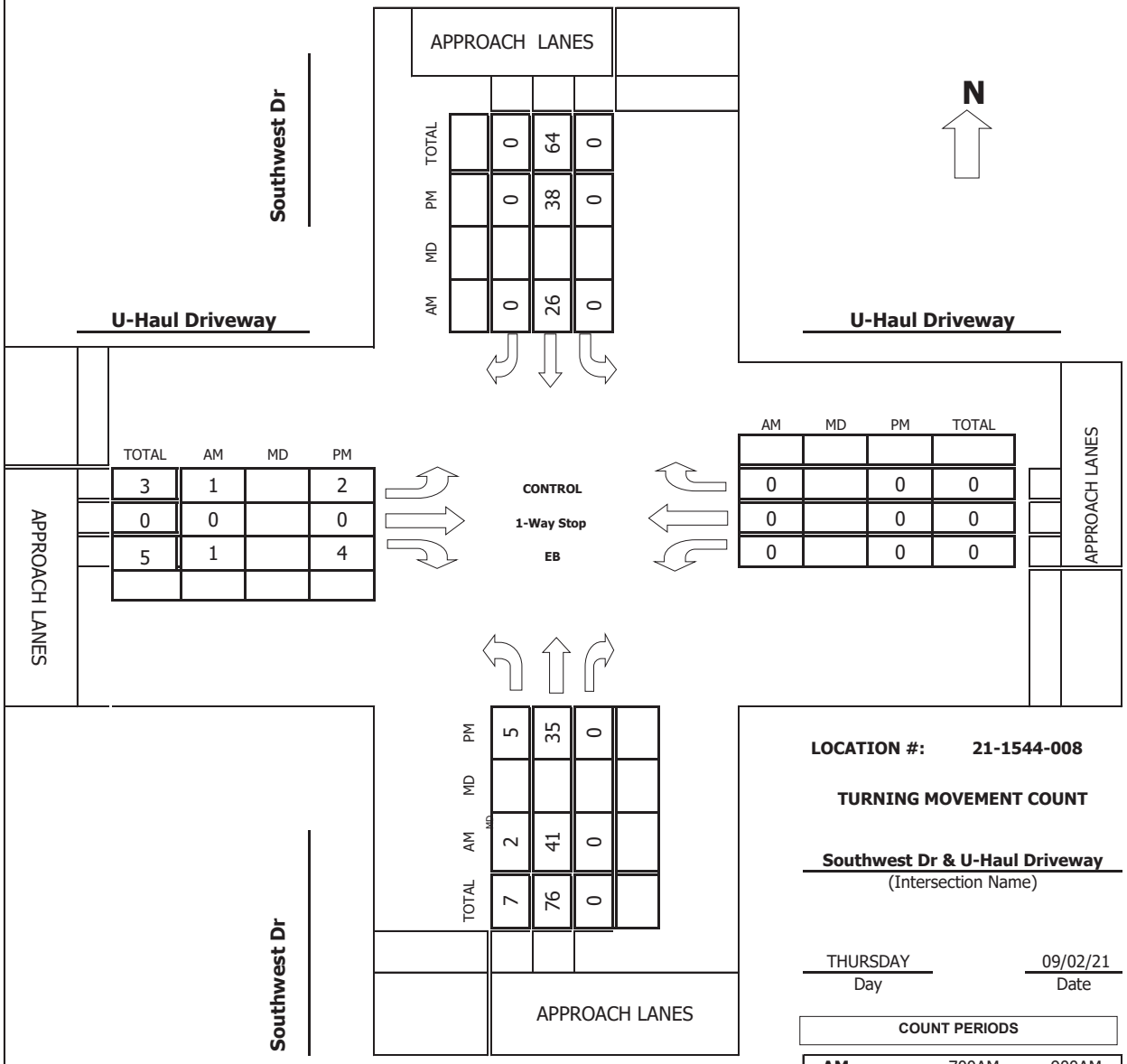
CONTROL:	2-Way Stop (NB & SB)
COMMENT 1:	0
GPS:	34.862466, -111.808478

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 21-1544-008

TMC SUMMARY OF Southwest Dr & U-Haul Driveway



LOCATION #: 21-1544-008

TURNING MOVEMENT COUNT

Southwest Dr & U-Haul Driveway
(Intersection Name)

THURSDAY (Day) 09/02/21 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 745 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Southwest Dr	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	U-Haul Driveway	DAY:	THURSDAY	PROJECT#	21-1544-008

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	3	3	0	0	4	0	0	0	0	0	0	0	10
7:15 AM	3	5	0	0	6	0	0	0	0	0	0	0	14
7:30 AM	1	14	0	0	3	0	0	0	0	0	0	0	18
7:45 AM	1	9	0	0	4	0	0	0	0	0	0	0	14
8:00 AM	0	9	0	0	6	0	0	0	0	0	0	0	15
8:15 AM	0	10	0	0	10	0	1	0	0	0	0	0	21
8:30 AM	1	13	0	0	6	0	0	0	1	0	0	0	21
8:45 AM	0	4	0	0	9	0	0	0	0	0	0	0	13
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	9	67	0	0	48	0	1	0	1	0	0	0	126
Approach %	11.84	88.16	0.00	0.00	100.00	0.00	50.00	0.00	50.00	####	####	####	
App/Depart	76	/	68	48	/	49	2	/	0	0	/	9	

AM Peak Hr Begins at: 745 AM

PEAK													
Volumes	2	41	0	0	26	0	1	0	1	0	0	0	71
Approach %	4.65	95.35	0.00	0.00	100.00	0.00	50.00	0.00	50.00	####	####	####	
PEAK HR. FACTOR:		0.768			0.650			0.500			0.000		0.845

CONTROL: 1-Way Stop (EB)
COMMENT 1:
GPS: 34.862694, -111.810137

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Southwest Dr 0	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	U-Haul Driveway	DAY:	THURSDAY	PROJECT#	21-1544-008

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	0	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	3	8	0	0	9	0	0	0	2	0	0	0	22
4:15 PM	1	7	0	0	8	0	1	0	1	0	0	0	18
4:30 PM	1	7	0	0	11	0	1	0	1	0	0	0	21
4:45 PM	0	13	0	0	10	0	0	0	0	0	0	0	23
5:00 PM	0	12	0	0	8	0	0	0	0	0	0	0	20
5:15 PM	1	7	0	0	7	0	0	0	1	0	0	0	16
5:30 PM	1	7	0	0	7	0	0	0	0	0	0	0	15
5:45 PM	1	6	0	0	15	0	0	0	0	0	0	0	22
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	8	67	0	0	75	0	2	0	5	0	0	0	157
Approach %	10.67	89.33	0.00	0.00	100.00	0.00	28.57	0.00	71.43	####	####	####	
App/Depart	75	/	69	75	/	80	7	/	0	0	/	8	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	5	35	0	0	38	0	2	0	4	0	0	0	84
Approach %	12.50	87.50	0.00	0.00	100.00	0.00	33.33	0.00	66.67	####	####	####	
PEAK HR. FACTOR:		0.769			0.864			0.750			0.000		0.913

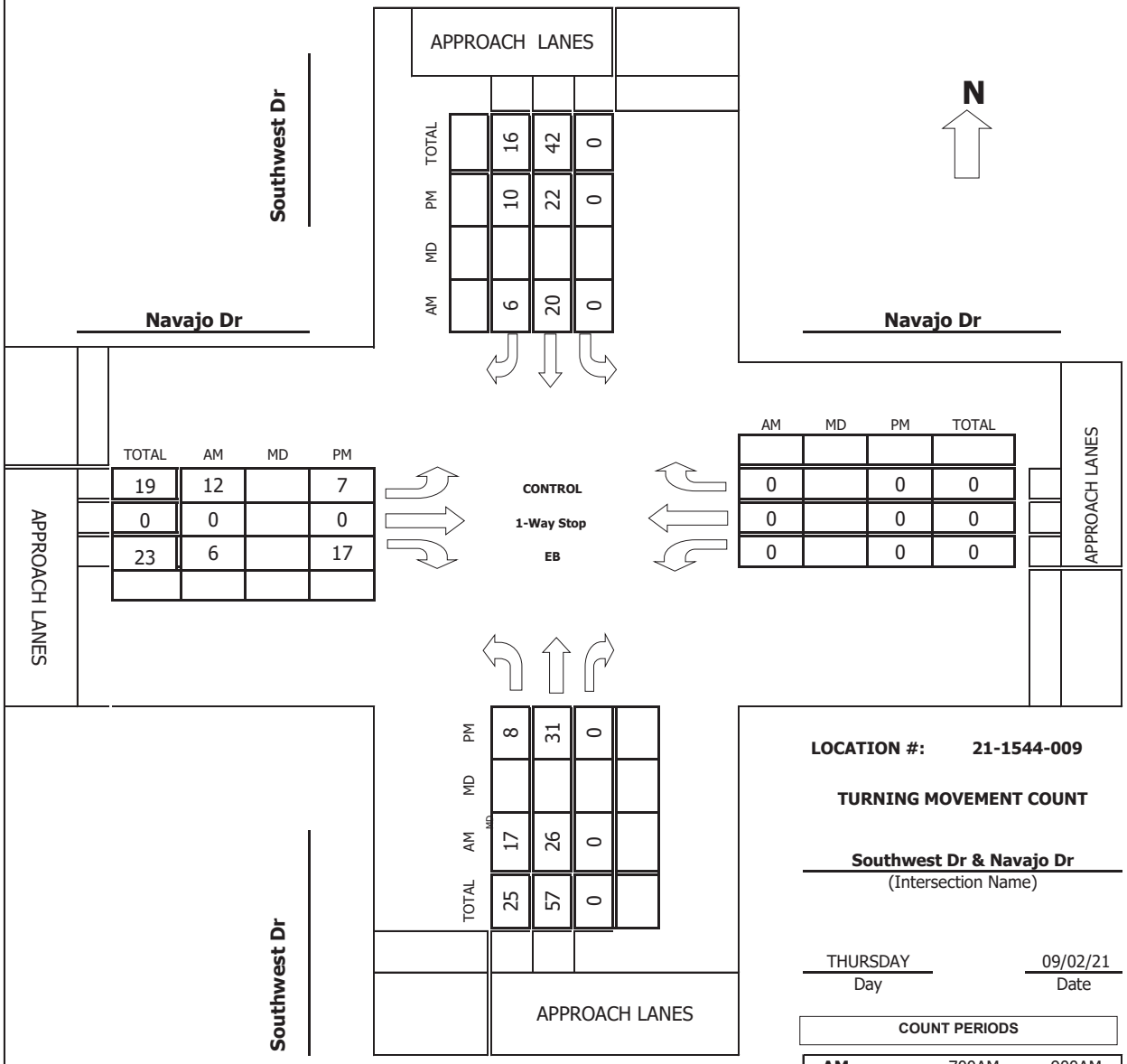
CONTROL:	1-Way Stop (EB)
COMMENT 1:	0
GPS:	34.862694, -111.810137

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 21-1544-009

TMC SUMMARY OF Southwest Dr & Navajo Dr



LOCATION #: 21-1544-009

TURNING MOVEMENT COUNT

Southwest Dr & Navajo Dr
(Intersection Name)

THURSDAY (Day) 09/02/21 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Southwest Dr	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	Navajo Dr	DAY:	THURSDAY	PROJECT#	21-1544-009

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	1	3	0	0	4	1	1	0	0	0	0	0	10
7:15 AM	0	5	0	0	4	0	1	0	2	0	0	0	12
7:30 AM	4	9	0	0	4	0	3	0	0	0	0	0	20
7:45 AM	5	4	0	0	3	5	1	0	1	0	0	0	19
8:00 AM	4	5	0	0	6	1	1	0	1	0	0	0	18
8:15 AM	4	8	0	0	7	0	7	0	4	0	0	0	30
8:30 AM	2	10	0	0	3	2	0	0	2	0	0	0	19
8:45 AM	1	4	0	0	7	1	3	0	1	0	0	0	17
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	21	48	0	0	38	10	17	0	11	0	0	0	145
Approach %	30.43	69.57	0.00	0.00	79.17	20.83	60.71	0.00	39.29	####	####	####	
App/Depart	69	/	65	48	/	49	28	/	0	0	/	31	

AM Peak Hr Begins at: 730 AM

PEAK													
Volumes	17	26	0	0	20	6	12	0	6	0	0	0	87
Approach %	39.53	60.47	0.00	0.00	76.92	23.08	66.67	0.00	33.33	####	####	####	
PEAK HR. FACTOR:	0.827			0.813			0.409			0.000			0.725

CONTROL: 1-Way Stop (EB)
COMMENT 1:
GPS: 34.863466, -111.810273

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Southwest Dr 0	DATE:	09/02/21	LOCATION:	Sedona
E-W STREET:	Navajo Dr	DAY:	THURSDAY	PROJECT#	21-1544-009

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	0	1	0	0	0	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	2	7	0	0	7	1	5	0	1	0	0	0	23
4:15 PM	1	7	0	0	7	0	3	0	1	0	0	0	19
4:30 PM	4	4	0	0	5	1	3	0	7	0	0	0	24
4:45 PM	1	11	0	0	4	4	0	0	6	0	0	0	26
5:00 PM	2	9	0	0	6	5	1	0	3	0	0	0	26
5:15 PM	4	4	0	0	3	1	2	0	4	0	0	0	18
5:30 PM	1	5	0	0	4	1	1	0	2	0	0	0	14
5:45 PM	0	6	0	0	10	1	1	0	6	0	0	0	24
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	15	53	0	0	46	14	16	0	30	0	0	0	174
Approach %	22.06	77.94	0.00	0.00	76.67	23.33	34.78	0.00	65.22	####	####	####	
App/Depart	68	/	69	60	/	76	46	/	0	0	/	29	

PM Peak Hr Begins at: 415 PM

PEAK													
Volumes	8	31	0	0	22	10	7	0	17	0	0	0	95
Approach %	20.51	79.49	0.00	0.00	68.75	31.25	29.17	0.00	70.83	####	####	####	

PEAK HR. FACTOR:	0.813	0.727	0.600	0.000	0.913

CONTROL: 1-Way Stop (EB)
COMMENT 1: 0
GPS: 34.863466, -111.810273

SOUTHWEST CIRCLE K
SOUTHWEST DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS

APPENDIX

Trip Generation Calculations

Super Convenience Market/Gas Station (LUC 960)

LAND USE: 10 Vehicle Fueling Positions Super Convenience Market/Gas Station

TRIP GENERATION CALCULATIONS ARE BASED ON THE INSTITUTE OF TRANSPORTATION ENGINEERS' TRIP GENERATION, 10TH EDITION. THE ITE LAND USE CODE IS Super Convenience Market/Gas Station (960), General Urban/Suburban

Weekday

Average Rate = 230.52 Trips per Vehicle Fueling Position
T = 230.52 Trips x 10 Vehicle Fueling Positions
T = 2,306 VTPD
ENTER: (0.5)*(2306) = **1,153 VTPD**
EXIT: (0.5)*(2306) = **1,153 VTPD**

AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)

Average Rate = 28.08 Trips per Vehicle Fueling Position
T = 28.08 Trips x 10 Vehicle Fueling Positions
T = 282 VPH
ENTER: (0.5)*(282) = **141 VPH**
EXIT: (0.5)*(282) = **141 VPH**

PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)

Average Rate = 22.96 Trips per Vehicle Fueling Position
T = 22.96 Trips x 10 Vehicle Fueling Positions
T = 230 VPH
ENTER: (0.5)*(230) = **115 VPH**
EXIT: (0.5)*(230) = **115 VPH**

*where, T = trip ends

TRIP GENERATION SUMMARY

WEEKDAY	**2,306 VTPD**
AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)	**282 VPH**
PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)	**230 VPH**

Automated Car Wash

LAND USE: 1 Car Wash Tunnels Automated Car Wash

TRIP GENERATION CALCULATIONS ARE BASED ON THE INSTITUTE OF TRANSPORTATION ENGINEERS' TRIP GENERATION, 10TH EDITION. THE ITE LAND USE CODE IS Automated Car Wash (948), General Urban/Suburban

WEEKDAY

Average Rate = N/A Trips per Car Wash Tunnel (CWT)

T = N/A Trips x 1 CWT

T = N/A VTPD

ENTER: (0)*(N/A) = **N/A VTPD**

EXIT: (0)*(N/A) = **N/A VTPD**

AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)

Average Rate = N/A Trips per Car Wash Tunnel (CWT)

T = N/A Trips x 1 CWT

T = N/A VPH

ENTER: (0)*(N/A) = **N/A VPH**

EXIT: (0)*(N/A) = **N/A VPH**

PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)

Average Rate = 77.5 Trips per Car Wash Tunnel (CWT)

T = 77.5 Trips x 1 CWT

T = 78 VPH

ENTER: (0.5)*(78) = **39 VPH**

EXIT: (0.5)*(78) = **39 VPH**

*where, T = trip ends

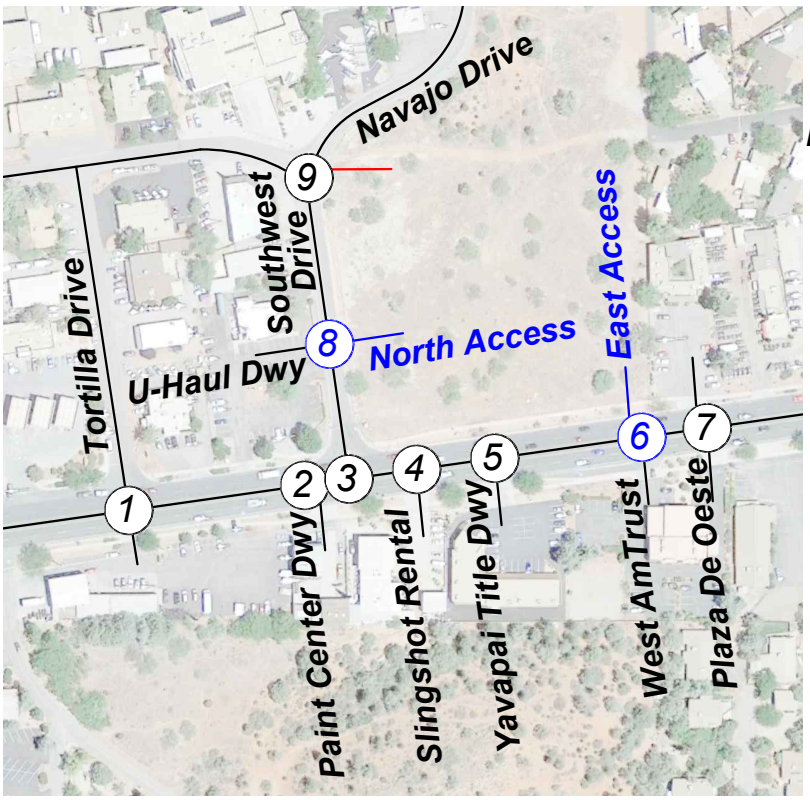
TRIP GENERATION SUMMARY

WEEKDAY	**N/A**	**VTPD**
AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)	**N/A**	**VPH**
PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)	**78**	**VPH**

SOUTHWEST CIRCLE K
SOUTHWEST DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS

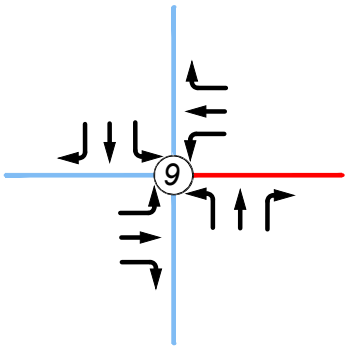
APPENDIX

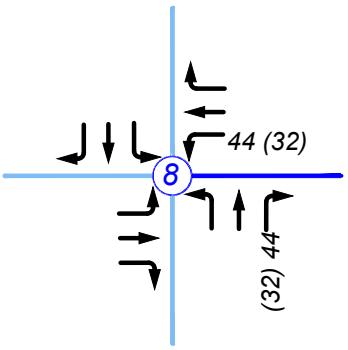
Pass-By Trip Assignment

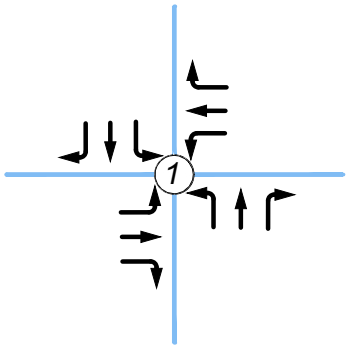


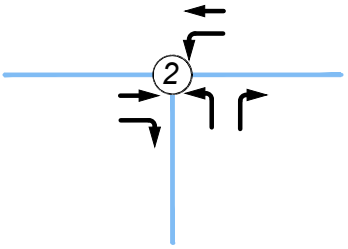
LEGEND:

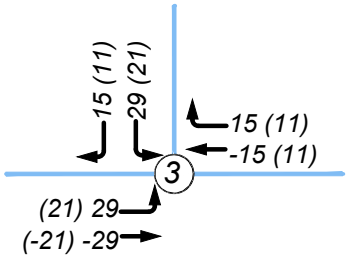
XX = Weekday AM Peak Hour
(XX) = Weekday PM Peak Hour
Vehicles Per Hour
= Existing Road
= Proposed Access
= Navajo Lofts Access

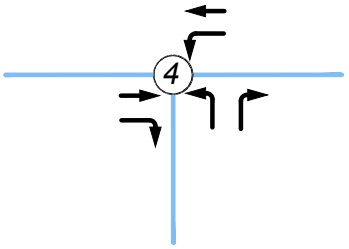


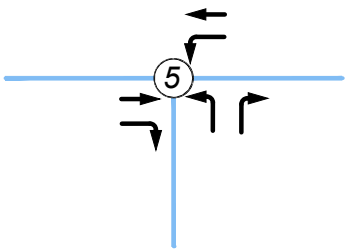


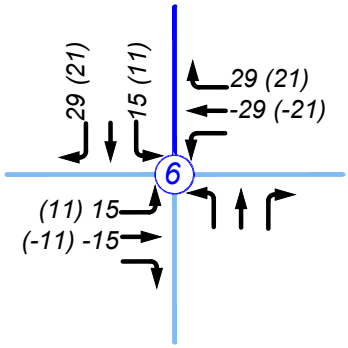


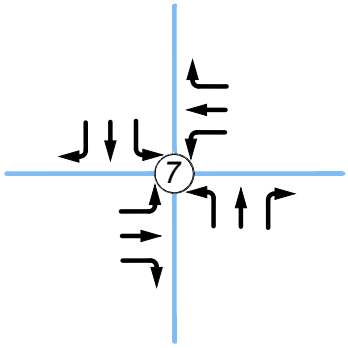












SOUTHWEST CIRCLE K
SOUTHWEST DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS

APPENDIX

Capacity Calculations

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1140	0	2	756	0	3	0	5	0	0	0
Future Vol, veh/h	0	1140	0	2	756	0	3	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1267	0	3	840	0	4	0	6	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	840	0	0	1267	0	0	1693	2113	634	1480	2113	420
Stage 1	-	-	-	-	-	-	1267	1267	-	846	846	-
Stage 2	-	-	-	-	-	-	426	846	-	634	1267	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	791	-	-	544	-	-	60	50	422	87	50	582
Stage 1	-	-	-	-	-	-	179	238	-	323	377	-
Stage 2	-	-	-	-	-	-	577	377	-	434	238	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	791	-	-	544	-	-	60	50	422	85	50	582
Mov Cap-2 Maneuver	-	-	-	-	-	-	60	50	-	85	50	-
Stage 1	-	-	-	-	-	-	179	238	-	323	375	-
Stage 2	-	-	-	-	-	-	574	375	-	428	238	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	35.2	0
HCM LOS			E	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	129	791	-	-	544	-	-	-
HCM Lane V/C Ratio	0.078	-	-	-	0.005	-	-	-
HCM Control Delay (s)	35.2	0	-	-	11.6	-	-	0
HCM Lane LOS	E	A	-	-	B	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1146	2	7	759	1	5
Future Vol, veh/h	1146	2	7	759	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1273	2	9	843	1	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1275	0	1714	638
Stage 1	-	-	-	-	1274	-
Stage 2	-	-	-	-	440	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	540	-	81	419
Stage 1	-	-	-	-	226	-
Stage 2	-	-	-	-	616	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	540	-	80	419
Mov Cap-2 Maneuver	-	-	-	-	177	-
Stage 1	-	-	-	-	226	-
Stage 2	-	-	-	-	606	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	15.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	341	-	-	540	-
HCM Lane V/C Ratio	0.022	-	-	0.016	-
HCM Control Delay (s)	15.8	-	-	11.8	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	1138	753	24	19	13
Future Vol, veh/h	13	1138	753	24	19	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	90	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	1264	837	27	24	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	864	0	-	0	1515	432
Stage 1	-	-	-	-	851	-
Stage 2	-	-	-	-	664	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	774	-	-	-	110	572
Stage 1	-	-	-	-	379	-
Stage 2	-	-	-	-	474	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	774	-	-	-	108	572
Mov Cap-2 Maneuver	-	-	-	-	238	-
Stage 1	-	-	-	-	371	-
Stage 2	-	-	-	-	474	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	18.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	774	-	-	-	312
HCM Lane V/C Ratio	0.021	-	-	-	0.128
HCM Control Delay (s)	9.8	-	-	-	18.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1156	1	1	775	2	1
Future Vol, veh/h	1156	1	1	775	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1284	1	1	861	3	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1285	0	1718	643
Stage 1	-	-	-	-	1285	-
Stage 2	-	-	-	-	433	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	536	-	81	416
Stage 1	-	-	-	-	223	-
Stage 2	-	-	-	-	621	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	536	-	81	416
Mov Cap-2 Maneuver	-	-	-	-	177	-
Stage 1	-	-	-	-	223	-
Stage 2	-	-	-	-	620	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	21.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	219	-	-	536	-
HCM Lane V/C Ratio	0.017	-	-	0.002	-
HCM Control Delay (s)	21.7	-	-	11.7	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1156	1	3	776	0	1
Future Vol, veh/h	1156	1	3	776	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1284	1	4	862	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1285	0	1638	643
Stage 1	-	-	-	-	1285	-
Stage 2	-	-	-	-	353	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	536	-	115	416
Stage 1	-	-	-	-	219	-
Stage 2	-	-	-	-	646	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	536	-	114	416
Mov Cap-2 Maneuver	-	-	-	-	184	-
Stage 1	-	-	-	-	219	-
Stage 2	-	-	-	-	641	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	416	-	-	536	-
HCM Lane V/C Ratio	0.003	-	-	0.007	-
HCM Control Delay (s)	13.7	-	-	11.8	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1155	2	2	779	0	0
Future Vol, veh/h	1155	2	2	779	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	80	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1283	3	3	866	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1286	0	1722	642
Stage 1	-	-	-	-	1283	-
Stage 2	-	-	-	-	439	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	535	-	80	417
Stage 1	-	-	-	-	224	-
Stage 2	-	-	-	-	617	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	535	-	80	417
Mov Cap-2 Maneuver	-	-	-	-	177	-
Stage 1	-	-	-	-	224	-
Stage 2	-	-	-	-	613	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	535	-
HCM Lane V/C Ratio	-	-	-	0.005	-
HCM Control Delay (s)	0	-	-	11.8	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1151	0	1	779	2	0	0	2	1	0	2
Future Vol, veh/h	4	1151	0	1	779	2	0	0	2	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1279	0	1	866	2	0	0	3	1	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	868	0	0	1279	0	0	1724	2159	640	1519	2158	434
Stage 1	-	-	-	-	-	-	1289	1289	-	869	869	-
Stage 2	-	-	-	-	-	-	435	870	-	650	1289	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	772	-	-	539	-	-	57	47	418	82	47	570
Stage 1	-	-	-	-	-	-	173	232	-	313	367	-
Stage 2	-	-	-	-	-	-	570	367	-	424	232	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	772	-	-	539	-	-	56	47	418	81	47	570
Mov Cap-2 Maneuver	-	-	-	-	-	-	56	47	-	81	47	-
Stage 1	-	-	-	-	-	-	172	231	-	311	366	-
Stage 2	-	-	-	-	-	-	566	366	-	419	231	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	13.7	24.4
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	418	772	-	-	539	-	-	189
HCM Lane V/C Ratio	0.006	0.006	-	-	0.002	-	-	0.02
HCM Control Delay (s)	13.7	9.7	-	-	11.7	-	-	24.4
HCM Lane LOS	B	A	-	-	B	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	2	41	26	0
Future Vol, veh/h	1	1	2	41	26	0
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	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	1	3	51	33	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	90	33	33	0	-	0
Stage 1	33	-	-	-	-	-
Stage 2	57	-	-	-	-	-
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	910	1041	1579	-	-	-
Stage 1	989	-	-	-	-	-
Stage 2	966	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	908	1041	1579	-	-	-
Mov Cap-2 Maneuver	908	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	966	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1579	-	970	-	-
HCM Lane V/C Ratio	0.002	-	0.003	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	6	17	26	20	6
Future Vol, veh/h	12	6	17	26	20	6
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	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	8	21	33	25	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	104	29	33	0	-	0
Stage 1	29	-	-	-	-	-
Stage 2	75	-	-	-	-	-
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	894	1046	1579	-	-	-
Stage 1	994	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	881	1046	1579	-	-	-
Mov Cap-2 Maneuver	881	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	948	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	2.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1579	-	930	-	-
HCM Lane V/C Ratio	0.013	-	0.024	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	827	1	0	1073	2	0	0	5	3	0	6
Future Vol, veh/h	5	827	1	0	1073	2	0	0	5	3	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	919	1	0	1192	2	0	0	6	4	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1194	0	0	920	0	0	1528	2126	460	1665	2125	597
Stage 1	-	-	-	-	-	-	932	932	-	1193	1193	-
Stage 2	-	-	-	-	-	-	596	1194	-	472	932	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	580	-	-	738	-	-	80	49	548	63	49	446
Stage 1	-	-	-	-	-	-	287	343	-	198	258	-
Stage 2	-	-	-	-	-	-	457	258	-	542	343	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	580	-	-	738	-	-	78	49	548	62	49	446
Mov Cap-2 Maneuver	-	-	-	-	-	-	78	49	-	62	49	-
Stage 1	-	-	-	-	-	-	284	340	-	196	258	-
Stage 2	-	-	-	-	-	-	449	258	-	530	340	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	11.6	31.7
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	548	580	-	-	738	-	-	146
HCM Lane V/C Ratio	0.011	0.011	-	-	-	-	-	0.077
HCM Control Delay (s)	11.6	11.3	-	-	0	-	-	31.7
HCM Lane LOS	B	B	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	844	0	0	1080	2	1
Future Vol, veh/h	844	0	0	1080	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	938	0	0	1200	3	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	938	0	1538	469
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	600	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	726	-	106	541
Stage 1	-	-	-	-	341	-
Stage 2	-	-	-	-	511	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	726	-	106	541
Mov Cap-2 Maneuver	-	-	-	-	232	-
Stage 1	-	-	-	-	341	-
Stage 2	-	-	-	-	511	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	287	-	-	726	-
HCM Lane V/C Ratio	0.013	-	-	-	-
HCM Control Delay (s)	17.7	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	832	1066	28	25	14
Future Vol, veh/h	13	832	1066	28	25	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	90	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	924	1184	31	31	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1215	0	-	0	1694	608
Stage 1	-	-	-	-	1200	-
Stage 2	-	-	-	-	494	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	570	-	-	-	84	439
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	579	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	570	-	-	-	82	439
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	241	-
Stage 2	-	-	-	-	579	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	24.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	570	-	-	-	233
HCM Lane V/C Ratio	0.029	-	-	-	0.209
HCM Control Delay (s)	11.5	-	-	-	24.5
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	855	2	2	1090	4	1
Future Vol, veh/h	855	2	2	1090	4	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	950	2	3	1211	5	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	952	0	1563	476
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	612	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	717	-	102	535
Stage 1	-	-	-	-	336	-
Stage 2	-	-	-	-	504	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	717	-	102	535
Mov Cap-2 Maneuver	-	-	-	-	228	-
Stage 1	-	-	-	-	336	-
Stage 2	-	-	-	-	502	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	258	-	-	717	-
HCM Lane V/C Ratio	0.024	-	-	0.003	-
HCM Control Delay (s)	19.3	-	-	10	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	856	0	2	1088	4	2
Future Vol, veh/h	856	0	2	1088	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	951	0	3	1209	5	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	951	0	1441	476
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	490	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	718	-	151	535
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	548	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	718	-	150	535
Mov Cap-2 Maneuver	-	-	-	-	249	-
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	546	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	303	-	-	718	-
HCM Lane V/C Ratio	0.025	-	-	0.003	-
HCM Control Delay (s)	17.2	-	-	10	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	856	2	2	1090	0	0
Future Vol, veh/h	856	2	2	1090	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	80	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	951	3	3	1211	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	954	0	1563	476
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	612	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	716	-	102	535
Stage 1	-	-	-	-	336	-
Stage 2	-	-	-	-	504	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	716	-	102	535
Mov Cap-2 Maneuver	-	-	-	-	228	-
Stage 1	-	-	-	-	336	-
Stage 2	-	-	-	-	502	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	716	-
HCM Lane V/C Ratio	-	-	-	0.003	-
HCM Control Delay (s)	0	-	-	10	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	854	0	1	1088	2	2	0	4	1	0	2
Future Vol, veh/h	2	854	0	1	1088	2	2	0	4	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	949	0	1	1209	2	3	0	5	1	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1211	0	0	949	0	0	1562	2168	475	1693	2167	606
Stage 1	-	-	-	-	-	-	955	955	-	1212	1212	-
Stage 2	-	-	-	-	-	-	607	1213	-	481	955	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	572	-	-	719	-	-	76	46	536	60	46	440
Stage 1	-	-	-	-	-	-	278	335	-	193	253	-
Stage 2	-	-	-	-	-	-	450	253	-	535	335	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	572	-	-	719	-	-	75	46	536	59	46	440
Mov Cap-2 Maneuver	-	-	-	-	-	-	75	46	-	59	46	-
Stage 1	-	-	-	-	-	-	277	333	-	192	253	-
Stage 2	-	-	-	-	-	-	447	253	-	527	333	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	26.4	31.4
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	176	572	-	-	719	-	-	140
HCM Lane V/C Ratio	0.043	0.004	-	-	0.002	-	-	0.027
HCM Control Delay (s)	26.4	11.3	-	-	10	-	-	31.4
HCM Lane LOS	D	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	4	5	35	38	0
Future Vol, veh/h	2	4	5	35	38	0
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	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	5	6	44	48	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	104	48	48	0	-	0
Stage 1	48	-	-	-	-	-
Stage 2	56	-	-	-	-	-
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	894	1021	1559	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	967	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	890	1021	1559	-	-	-
Mov Cap-2 Maneuver	890	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	967	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1559	-	973	-	-
HCM Lane V/C Ratio	0.004	-	0.008	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	17	8	31	22	10
Future Vol, veh/h	7	17	8	31	22	10
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	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	21	10	39	28	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	94	35	41	0	-	0
Stage 1	35	-	-	-	-	-
Stage 2	59	-	-	-	-	-
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	906	1038	1568	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	964	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	900	1038	1568	-	-	-
Mov Cap-2 Maneuver	900	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	964	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	1.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1568	-	994	-	-
HCM Lane V/C Ratio	0.006	-	0.03	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1165	0	2	778	0	3	0	5	0	0	0
Future Vol, veh/h	0	1165	0	2	778	0	3	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1294	0	3	864	0	4	0	6	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	864	0	0	1294	0	0	1732	2164	647	1517	2164	432
Stage 1	-	-	-	-	-	-	1294	1294	-	870	870	-
Stage 2	-	-	-	-	-	-	438	870	-	647	1294	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	774	-	-	531	-	-	56	47	414	82	47	572
Stage 1	-	-	-	-	-	-	172	231	-	313	367	-
Stage 2	-	-	-	-	-	-	567	367	-	426	231	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	774	-	-	531	-	-	56	47	414	80	47	572
Mov Cap-2 Maneuver	-	-	-	-	-	-	56	47	-	80	47	-
Stage 1	-	-	-	-	-	-	172	231	-	313	365	-
Stage 2	-	-	-	-	-	-	564	365	-	420	231	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	37.1	0
HCM LOS			E	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	122	774	-	-	531	-	-	-
HCM Lane V/C Ratio	0.082	-	-	-	0.005	-	-	-
HCM Control Delay (s)	37.1	0	-	-	11.8	-	-	0
HCM Lane LOS	E	A	-	-	B	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1171	2	7	781	1	5
Future Vol, veh/h	1171	2	7	781	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1301	2	9	868	1	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1303	0	1754	652
Stage 1	-	-	-	-	1302	-
Stage 2	-	-	-	-	452	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	527	-	76	411
Stage 1	-	-	-	-	219	-
Stage 2	-	-	-	-	608	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	527	-	75	411
Mov Cap-2 Maneuver	-	-	-	-	172	-
Stage 1	-	-	-	-	219	-
Stage 2	-	-	-	-	598	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	16
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	334	-	-	527	-
HCM Lane V/C Ratio	0.022	-	-	0.017	-
HCM Control Delay (s)	16	-	-	11.9	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	1161	768	28	31	20
Future Vol, veh/h	15	1161	768	28	31	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	90	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	1290	853	31	39	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	884	0	-	0	1552	442
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	683	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	761	-	-	-	104	563
Stage 1	-	-	-	-	371	-
Stage 2	-	-	-	-	463	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	761	-	-	-	101	563
Mov Cap-2 Maneuver	-	-	-	-	231	-
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	463	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	20.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	761	-	-	-	300
HCM Lane V/C Ratio	0.025	-	-	-	0.213
HCM Control Delay (s)	9.8	-	-	-	20.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1191	1	1	795	2	1
Future Vol, veh/h	1191	1	1	795	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1323	1	1	883	3	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1324	0	1768	662
Stage 1	-	-	-	-	1324	-
Stage 2	-	-	-	-	444	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	518	-	75	404
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	614	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	518	-	75	404
Mov Cap-2 Maneuver	-	-	-	-	169	-
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	613	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	22.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	210	-	-	518	-
HCM Lane V/C Ratio	0.018	-	-	0.002	-
HCM Control Delay (s)	22.5	-	-	12	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1191	1	3	796	0	1
Future Vol, veh/h	1191	1	3	796	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1323	1	4	884	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1324	0	1686	662
Stage 1	-	-	-	-	1324	-
Stage 2	-	-	-	-	362	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	518	-	108	404
Stage 1	-	-	-	-	209	-
Stage 2	-	-	-	-	639	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	518	-	107	404
Mov Cap-2 Maneuver	-	-	-	-	176	-
Stage 1	-	-	-	-	209	-
Stage 2	-	-	-	-	634	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	404	-	-	518	-
HCM Lane V/C Ratio	0.003	-	-	0.007	-
HCM Control Delay (s)	13.9	-	-	12	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1190	2	2	799	0	0
Future Vol, veh/h	1190	2	2	799	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	80	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1322	3	3	888	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1325	0	1772	661
Stage 1	-	-	-	-	1322	-
Stage 2	-	-	-	-	450	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	517	-	74	405
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	609	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	517	-	74	405
Mov Cap-2 Maneuver	-	-	-	-	168	-
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	605	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	517	-
HCM Lane V/C Ratio	-	-	-	0.005	-
HCM Control Delay (s)	0	-	-	12	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1186	0	1	799	2	0	0	2	1	0	2
Future Vol, veh/h	4	1186	0	1	799	2	0	0	2	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1318	0	1	888	2	0	0	3	1	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	890	0	0	1318	0	0	1774	2220	659	1560	2219	445
Stage 1	-	-	-	-	-	-	1328	1328	-	891	891	-
Stage 2	-	-	-	-	-	-	446	892	-	669	1328	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	757	-	-	520	-	-	52	43	406	76	43	561
Stage 1	-	-	-	-	-	-	164	223	-	304	359	-
Stage 2	-	-	-	-	-	-	561	358	-	413	223	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	757	-	-	520	-	-	51	43	406	75	43	561
Mov Cap-2 Maneuver	-	-	-	-	-	-	51	43	-	75	43	-
Stage 1	-	-	-	-	-	-	163	221	-	302	358	-
Stage 2	-	-	-	-	-	-	557	357	-	408	221	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	13.9	25.7
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	406	757	-	-	520	-	-	178
HCM Lane V/C Ratio	0.006	0.007	-	-	0.002	-	-	0.021
HCM Control Delay (s)	13.9	9.8	-	-	11.9	-	-	25.7
HCM Lane LOS	B	A	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	2	48	46	0
Future Vol, veh/h	1	1	2	48	46	0
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	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	1	3	60	58	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	124	58	58	0	-	0
Stage 1	58	-	-	-	-	-
Stage 2	66	-	-	-	-	-
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	871	1008	1546	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	957	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	869	1008	1546	-	-	-
Mov Cap-2 Maneuver	869	-	-	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	957	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1546	-	933	-	-
HCM Lane V/C Ratio	0.002	-	0.003	-	-
HCM Control Delay (s)	7.3	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	0	6	19	0	0	17	27	6	0	20	6
Future Vol, veh/h	12	0	6	19	0	0	17	27	6	0	20	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	0	8	24	0	0	21	34	8	0	25	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	109	113	29	113	113	38	33	0	0	42	0	0
Stage 1	29	29	-	80	80	-	-	-	-	-	-	-
Stage 2	80	84	-	33	33	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	870	777	1046	864	777	1034	1579	-	-	1567	-	-
Stage 1	988	871	-	929	828	-	-	-	-	-	-	-
Stage 2	929	825	-	983	868	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	860	766	1046	848	766	1034	1579	-	-	1567	-	-
Mov Cap-2 Maneuver	860	766	-	848	766	-	-	-	-	-	-	-
Stage 1	974	871	-	916	816	-	-	-	-	-	-	-
Stage 2	916	813	-	976	868	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	9.4	2.5	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1579	-	-	914	848	1567	-	-
HCM Lane V/C Ratio	0.013	-	-	0.025	0.028	-	-	-
HCM Control Delay (s)	7.3	0	-	9	9.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	851	1	0	1099	2	0	0	5	3	0	6
Future Vol, veh/h	5	851	1	0	1099	2	0	0	5	3	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	946	1	0	1221	2	0	0	6	4	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1223	0	0	947	0	0	1570	2182	474	1707	2181	612
Stage 1	-	-	-	-	-	-	959	959	-	1222	1222	-
Stage 2	-	-	-	-	-	-	611	1223	-	485	959	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	566	-	-	721	-	-	75	45	537	59	45	436
Stage 1	-	-	-	-	-	-	276	334	-	190	250	-
Stage 2	-	-	-	-	-	-	448	250	-	532	334	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	566	-	-	721	-	-	73	45	537	58	45	436
Mov Cap-2 Maneuver	-	-	-	-	-	-	73	45	-	58	45	-
Stage 1	-	-	-	-	-	-	273	330	-	188	250	-
Stage 2	-	-	-	-	-	-	440	250	-	520	330	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	11.8	33.6
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	537	566	-	-	721	-	-	137
HCM Lane V/C Ratio	0.012	0.011	-	-	-	-	-	0.082
HCM Control Delay (s)	11.8	11.4	-	-	0	-	-	33.6
HCM Lane LOS	B	B	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	868	0	0	1106	2	1
Future Vol, veh/h	868	0	0	1106	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	964	0	0	1229	3	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	964	0	1579	482
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	615	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	710	-	100	530
Stage 1	-	-	-	-	331	-
Stage 2	-	-	-	-	502	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	710	-	100	530
Mov Cap-2 Maneuver	-	-	-	-	225	-
Stage 1	-	-	-	-	331	-
Stage 2	-	-	-	-	502	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	278	-	-	710	-
HCM Lane V/C Ratio	0.013	-	-	-	-
HCM Control Delay (s)	18.1	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	849	1087	41	33	18
Future Vol, veh/h	20	849	1087	41	33	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	90	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	943	1208	46	41	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1254	0	-	0	1753	627
Stage 1	-	-	-	-	1231	-
Stage 2	-	-	-	-	522	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	551	-	-	-	76	426
Stage 1	-	-	-	-	239	-
Stage 2	-	-	-	-	560	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	551	-	-	-	73	426
Mov Cap-2 Maneuver	-	-	-	-	174	-
Stage 1	-	-	-	-	228	-
Stage 2	-	-	-	-	560	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	27.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	551	-	-	-	220
HCM Lane V/C Ratio	0.045	-	-	-	0.29
HCM Control Delay (s)	11.8	-	-	-	27.9
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	879	2	2	1124	4	1
Future Vol, veh/h	879	2	2	1124	4	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	977	2	3	1249	5	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	979	0	1609	490
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	631	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	701	-	95	524
Stage 1	-	-	-	-	325	-
Stage 2	-	-	-	-	492	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	701	-	95	524
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	325	-
Stage 2	-	-	-	-	490	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	248	-	-	701	-
HCM Lane V/C Ratio	0.025	-	-	0.004	-
HCM Control Delay (s)	19.9	-	-	10.2	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	890	0	2	1122	4	2
Future Vol, veh/h	890	0	2	1122	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	989	0	3	1247	5	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	989	0	1494	495
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	505	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	695	-	140	520
Stage 1	-	-	-	-	313	-
Stage 2	-	-	-	-	538	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	695	-	139	520
Mov Cap-2 Maneuver	-	-	-	-	237	-
Stage 1	-	-	-	-	313	-
Stage 2	-	-	-	-	536	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	290	-	-	695	-
HCM Lane V/C Ratio	0.026	-	-	0.004	-
HCM Control Delay (s)	17.7	-	-	10.2	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	890	2	2	1124	0	0
Future Vol, veh/h	890	2	2	1124	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	80	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	989	3	3	1249	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	992	0	1620	495
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	631	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	693	-	94	520
Stage 1	-	-	-	-	321	-
Stage 2	-	-	-	-	492	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	693	-	94	520
Mov Cap-2 Maneuver	-	-	-	-	218	-
Stage 1	-	-	-	-	321	-
Stage 2	-	-	-	-	490	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	693	-
HCM Lane V/C Ratio	-	-	-	0.004	-
HCM Control Delay (s)	0	-	-	10.2	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	878	0	1	1122	2	2	0	4	1	0	2
Future Vol, veh/h	2	878	0	1	1122	2	2	0	4	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	976	0	1	1247	2	3	0	5	1	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1249	0	0	976	0	0	1608	2233	488	1744	2232	625
Stage 1	-	-	-	-	-	-	982	982	-	1250	1250	-
Stage 2	-	-	-	-	-	-	626	1251	-	494	982	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	553	-	-	703	-	-	70	42	526	55	42	428
Stage 1	-	-	-	-	-	-	267	325	-	183	243	-
Stage 2	-	-	-	-	-	-	439	242	-	526	325	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	553	-	-	703	-	-	69	42	526	54	42	428
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	42	-	54	42	-
Stage 1	-	-	-	-	-	-	266	323	-	182	243	-
Stage 2	-	-	-	-	-	-	436	242	-	518	323	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	28	33.7
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	164	553	-	-	703	-	-	129
HCM Lane V/C Ratio	0.046	0.005	-	-	0.002	-	-	0.029
HCM Control Delay (s)	28	11.5	-	-	10.1	-	-	33.7
HCM Lane LOS	D	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	4	5	55	50	0
Future Vol, veh/h	2	4	5	55	50	0
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	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	5	6	69	63	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	144	63	63	0	-	0
Stage 1	63	-	-	-	-	-
Stage 2	81	-	-	-	-	-
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	849	1002	1540	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	846	1002	1540	-	-	-
Mov Cap-2 Maneuver	846	-	-	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	942	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1540	-	944	-	-
HCM Lane V/C Ratio	0.004	-	0.008	-	-
HCM Control Delay (s)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	0	17	11	0	0	8	32	19	0	22	10
Future Vol, veh/h	7	0	17	11	0	0	8	32	19	0	22	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	21	14	0	0	10	40	24	0	28	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	107	119	35	117	113	52	41	0	0	64	0	0
Stage 1	35	35	-	72	72	-	-	-	-	-	-	-
Stage 2	72	84	-	45	41	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	872	771	1038	859	777	1016	1568	-	-	1538	-	-
Stage 1	981	866	-	938	835	-	-	-	-	-	-	-
Stage 2	938	825	-	969	861	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	868	766	1038	837	772	1016	1568	-	-	1538	-	-
Mov Cap-2 Maneuver	868	766	-	837	772	-	-	-	-	-	-	-
Stage 1	974	866	-	931	829	-	-	-	-	-	-	-
Stage 2	931	819	-	949	861	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	9.4	1	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1568	-	-	982	837	1538	-	-
HCM Lane V/C Ratio	0.006	-	-	0.031	0.016	-	-	-
HCM Control Delay (s)	7.3	0	-	8.8	9.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1236	0	2	825	0	3	0	5	0	0	0
Future Vol, veh/h	0	1236	0	2	825	0	3	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1373	0	3	917	0	4	0	6	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	917	0	0	1373	0	0	1838	2296	687	1610	2296	459
Stage 1	-	-	-	-	-	-	1373	1373	-	923	923	-
Stage 2	-	-	-	-	-	-	465	923	-	687	1373	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	740	-	-	496	-	-	47	38	389	70	38	549
Stage 1	-	-	-	-	-	-	153	212	-	290	347	-
Stage 2	-	-	-	-	-	-	547	347	-	403	212	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	740	-	-	496	-	-	47	38	389	69	38	549
Mov Cap-2 Maneuver	-	-	-	-	-	-	47	38	-	69	38	-
Stage 1	-	-	-	-	-	-	153	212	-	290	345	-
Stage 2	-	-	-	-	-	-	544	345	-	397	212	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	43.3	0
HCM LOS			E	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	104	740	-	-	496	-	-	-
HCM Lane V/C Ratio	0.096	-	-	-	0.005	-	-	-
HCM Control Delay (s)	43.3	0	-	-	12.3	-	-	0
HCM Lane LOS	E	A	-	-	B	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1243	2	8	829	1	5
Future Vol, veh/h	1243	2	8	829	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1381	2	10	921	1	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1383	0	1863	692
Stage 1	-	-	-	-	1382	-
Stage 2	-	-	-	-	481	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	491	-	65	386
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	588	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	491	-	64	386
Mov Cap-2 Maneuver	-	-	-	-	155	-
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	576	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	16.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	309	-	-	491	-
HCM Lane V/C Ratio	0.024	-	-	0.02	-
HCM Control Delay (s)	16.9	-	-	12.5	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	1232	815	30	33	21
Future Vol, veh/h	16	1232	815	30	33	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	90	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	1369	906	33	41	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	939	0	-	0	1648	470
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	725	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	726	-	-	-	90	540
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	440	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	726	-	-	-	87	540
Mov Cap-2 Maneuver	-	-	-	-	213	-
Stage 1	-	-	-	-	337	-
Stage 2	-	-	-	-	440	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	22
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	726	-	-	-	279
HCM Lane V/C Ratio	0.028	-	-	-	0.242
HCM Control Delay (s)	10.1	-	-	-	22
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1263	1	1	843	2	1
Future Vol, veh/h	1263	1	1	843	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1403	1	1	937	3	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1404	0	1875	702
Stage 1	-	-	-	-	1404	-
Stage 2	-	-	-	-	471	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	482	-	63	381
Stage 1	-	-	-	-	193	-
Stage 2	-	-	-	-	594	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	482	-	63	381
Mov Cap-2 Maneuver	-	-	-	-	153	-
Stage 1	-	-	-	-	193	-
Stage 2	-	-	-	-	593	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	24.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	191	-	-	482	-
HCM Lane V/C Ratio	0.02	-	-	0.003	-
HCM Control Delay (s)	24.2	-	-	12.5	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1263	1	3	844	0	1
Future Vol, veh/h	1263	1	3	844	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1403	1	4	938	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1404	0	1787	702
Stage 1	-	-	-	-	1404	-
Stage 2	-	-	-	-	383	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	482	-	94	381
Stage 1	-	-	-	-	189	-
Stage 2	-	-	-	-	623	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	482	-	93	381
Mov Cap-2 Maneuver	-	-	-	-	159	-
Stage 1	-	-	-	-	189	-
Stage 2	-	-	-	-	618	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	381	-	-	482	-
HCM Lane V/C Ratio	0.003	-	-	0.008	-
HCM Control Delay (s)	14.5	-	-	12.5	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1262	2	2	847	0	0
Future Vol, veh/h	1262	2	2	847	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	80	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1402	3	3	941	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1405	0	1879	701
Stage 1	-	-	-	-	1402	-
Stage 2	-	-	-	-	477	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	482	-	63	381
Stage 1	-	-	-	-	193	-
Stage 2	-	-	-	-	590	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	482	-	63	381
Mov Cap-2 Maneuver	-	-	-	-	153	-
Stage 1	-	-	-	-	193	-
Stage 2	-	-	-	-	586	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	482	-
HCM Lane V/C Ratio	-	-	-	0.005	-
HCM Control Delay (s)	0	-	-	12.5	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1258	0	1	877	2	0	0	2	1	0	2
Future Vol, veh/h	4	1258	0	1	877	2	0	0	2	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1398	0	1	974	2	0	0	3	1	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	976	0	0	1398	0	0	1897	2386	699	1686	2385	488
Stage 1	-	-	-	-	-	-	1408	1408	-	977	977	-
Stage 2	-	-	-	-	-	-	489	978	-	709	1408	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	703	-	-	485	-	-	42	34	382	61	34	526
Stage 1	-	-	-	-	-	-	146	204	-	269	327	-
Stage 2	-	-	-	-	-	-	529	327	-	391	204	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	703	-	-	485	-	-	41	34	382	60	34	526
Mov Cap-2 Maneuver	-	-	-	-	-	-	41	34	-	60	34	-
Stage 1	-	-	-	-	-	-	145	203	-	267	326	-
Stage 2	-	-	-	-	-	-	525	326	-	386	203	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	14.5	30.1
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	382	703	-	-	485	-	-	147
HCM Lane V/C Ratio	0.007	0.007	-	-	0.003	-	-	0.026
HCM Control Delay (s)	14.5	10.2	-	-	12.4	-	-	30.1
HCM Lane LOS	B	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	2	50	47	0
Future Vol, veh/h	1	1	2	50	47	0
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	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	1	3	63	59	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	128	59	59	0	-	0
Stage 1	59	-	-	-	-	-
Stage 2	69	-	-	-	-	-
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	866	1007	1545	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	954	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	864	1007	1545	-	-	-
Mov Cap-2 Maneuver	864	-	-	-	-	-
Stage 1	962	-	-	-	-	-
Stage 2	954	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1545	-	930	-	-
HCM Lane V/C Ratio	0.002	-	0.003	-	-
HCM Control Delay (s)	7.3	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	0	6	19	0	0	18	28	6	0	22	6
Future Vol, veh/h	13	0	6	19	0	0	18	28	6	0	22	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	8	24	0	0	23	35	8	0	28	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	117	121	32	121	121	39	36	0	0	43	0	0
Stage 1	32	32	-	85	85	-	-	-	-	-	-	-
Stage 2	85	89	-	36	36	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	859	769	1042	854	769	1033	1575	-	-	1566	-	-
Stage 1	984	868	-	923	824	-	-	-	-	-	-	-
Stage 2	923	821	-	980	865	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	850	757	1042	838	757	1033	1575	-	-	1566	-	-
Mov Cap-2 Maneuver	850	757	-	838	757	-	-	-	-	-	-	-
Stage 1	969	868	-	909	812	-	-	-	-	-	-	-
Stage 2	909	809	-	973	865	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	9.4	2.5	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1575	-	-	903	838	1566	-	-
HCM Lane V/C Ratio	0.014	-	-	0.026	0.028	-	-	-
HCM Control Delay (s)	7.3	0	-	9.1	9.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	902	1	0	1165	2	0	0	5	3	0	6
Future Vol, veh/h	5	902	1	0	1165	2	0	0	5	3	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	1002	1	0	1294	2	0	0	6	4	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1296	0	0	1003	0	0	1662	2311	502	1808	2310	648
Stage 1	-	-	-	-	-	-	1015	1015	-	1295	1295	-
Stage 2	-	-	-	-	-	-	647	1296	-	513	1015	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	531	-	-	686	-	-	64	38	515	49	38	413
Stage 1	-	-	-	-	-	-	255	314	-	172	231	-
Stage 2	-	-	-	-	-	-	426	231	-	512	314	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	531	-	-	686	-	-	62	38	515	48	38	413
Mov Cap-2 Maneuver	-	-	-	-	-	-	62	38	-	48	38	-
Stage 1	-	-	-	-	-	-	252	311	-	170	231	-
Stage 2	-	-	-	-	-	-	418	231	-	500	311	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	12.1	39
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	515	531	-	-	686	-	-	117
HCM Lane V/C Ratio	0.012	0.012	-	-	-	-	-	0.096
HCM Control Delay (s)	12.1	11.9	-	-	0	-	-	39
HCM Lane LOS	B	B	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	921	0	0	1173	2	1
Future Vol, veh/h	921	0	0	1173	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1023	0	0	1303	3	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1023	0	1675	512
Stage 1	-	-	-	-	1023	-
Stage 2	-	-	-	-	652	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	674	-	86	507
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	480	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	674	-	86	507
Mov Cap-2 Maneuver	-	-	-	-	208	-
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	480	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	259	-	-	674	-
HCM Lane V/C Ratio	0.014	-	-	-	-
HCM Control Delay (s)	19.1	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	901	1154	42	34	26
Future Vol, veh/h	21	901	1154	42	34	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	90	90	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	1001	1282	47	43	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1329	0	-	0	1859	665
Stage 1	-	-	-	-	1306	-
Stage 2	-	-	-	-	553	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	515	-	-	-	65	403
Stage 1	-	-	-	-	218	-
Stage 2	-	-	-	-	540	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	515	-	-	-	62	403
Mov Cap-2 Maneuver	-	-	-	-	158	-
Stage 1	-	-	-	-	207	-
Stage 2	-	-	-	-	540	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	30.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	515	-	-	-	215
HCM Lane V/C Ratio	0.051	-	-	-	0.349
HCM Control Delay (s)	12.4	-	-	-	30.5
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	1.5

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	932	2	2	1192	4	1
Future Vol, veh/h	932	2	2	1192	4	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1036	2	3	1324	5	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1038	0	1705	519
Stage 1	-	-	-	-	1037	-
Stage 2	-	-	-	-	668	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	665	-	82	502
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	471	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	665	-	82	502
Mov Cap-2 Maneuver	-	-	-	-	203	-
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	469	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	21.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	230	-	-	665	-
HCM Lane V/C Ratio	0.027	-	-	0.004	-
HCM Control Delay (s)	21.1	-	-	10.4	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	934	0	2	1190	4	2
Future Vol, veh/h	934	0	2	1190	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1038	0	3	1322	5	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1038	0	1573	519
Stage 1	-	-	-	-	1038	-
Stage 2	-	-	-	-	535	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	665	-	126	502
Stage 1	-	-	-	-	295	-
Stage 2	-	-	-	-	519	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	665	-	125	502
Mov Cap-2 Maneuver	-	-	-	-	222	-
Stage 1	-	-	-	-	295	-
Stage 2	-	-	-	-	516	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	273	-	-	665	-
HCM Lane V/C Ratio	0.027	-	-	0.004	-
HCM Control Delay (s)	18.6	-	-	10.4	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	934	2	2	1192	0	0
Future Vol, veh/h	934	2	2	1192	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	80	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1038	3	3	1324	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1041	0	1706	519
Stage 1	-	-	-	-	1038	-
Stage 2	-	-	-	-	668	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	664	-	82	502
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	471	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	664	-	82	502
Mov Cap-2 Maneuver	-	-	-	-	203	-
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	469	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	664	-
HCM Lane V/C Ratio	-	-	-	0.004	-
HCM Control Delay (s)	0	-	-	10.4	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	931	0	1	1190	2	2	0	4	1	0	2
Future Vol, veh/h	2	931	0	1	1190	2	2	0	4	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1034	0	1	1322	2	3	0	5	1	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1324	0	0	1034	0	0	1703	2366	517	1848	2365	662
Stage 1	-	-	-	-	-	-	1040	1040	-	1325	1325	-
Stage 2	-	-	-	-	-	-	663	1326	-	523	1040	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	518	-	-	668	-	-	59	35	503	46	35	404
Stage 1	-	-	-	-	-	-	246	306	-	164	223	-
Stage 2	-	-	-	-	-	-	417	223	-	505	306	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	518	-	-	668	-	-	58	35	503	45	35	404
Mov Cap-2 Maneuver	-	-	-	-	-	-	58	35	-	45	35	-
Stage 1	-	-	-	-	-	-	245	304	-	163	223	-
Stage 2	-	-	-	-	-	-	414	223	-	497	304	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	32	38.9
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	141	518	-	-	668	-	-	110
HCM Lane V/C Ratio	0.053	0.005	-	-	0.002	-	-	0.034
HCM Control Delay (s)	32	12	-	-	10.4	-	-	38.9
HCM Lane LOS	D	B	-	-	B	-	-	E
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	4	5	57	52	0
Future Vol, veh/h	2	4	5	57	52	0
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	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	5	6	71	65	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	148	65	65	0	-	0
Stage 1	65	-	-	-	-	-
Stage 2	83	-	-	-	-	-
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	844	999	1537	-	-	-
Stage 1	958	-	-	-	-	-
Stage 2	940	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	841	999	1537	-	-	-
Mov Cap-2 Maneuver	841	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	940	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1537	-	940	-	-
HCM Lane V/C Ratio	0.004	-	0.008	-	-
HCM Control Delay (s)	7.4	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	0	18	11	0	0	9	34	19	0	24	11
Future Vol, veh/h	8	0	18	11	0	0	9	34	19	0	24	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	23	14	0	0	11	43	24	0	30	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	114	126	37	126	121	55	44	0	0	67	0	0
Stage 1	37	37	-	77	77	-	-	-	-	-	-	-
Stage 2	77	89	-	49	44	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	863	764	1035	848	769	1012	1564	-	-	1535	-	-
Stage 1	978	864	-	932	831	-	-	-	-	-	-	-
Stage 2	932	821	-	964	858	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	859	759	1035	825	764	1012	1564	-	-	1535	-	-
Mov Cap-2 Maneuver	859	759	-	825	764	-	-	-	-	-	-	-
Stage 1	971	864	-	925	825	-	-	-	-	-	-	-
Stage 2	925	815	-	943	858	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	9.4	1.1	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1564	-	-	974	825	1535	-	-
HCM Lane V/C Ratio	0.007	-	-	0.033	0.017	-	-	-
HCM Control Delay (s)	7.3	0	-	8.8	9.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1192	0	2	805	0	3	0	5	0	0	0
Future Vol, veh/h	0	1192	0	2	805	0	3	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1324	0	3	894	0	4	0	6	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	894	0	0	1324	0	0	1777	2224	662	1562	2224	447
Stage 1	-	-	-	-	-	-	1324	1324	-	900	900	-
Stage 2	-	-	-	-	-	-	453	900	-	662	1324	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	755	-	-	518	-	-	52	43	404	76	43	559
Stage 1	-	-	-	-	-	-	165	224	-	300	355	-
Stage 2	-	-	-	-	-	-	556	355	-	417	224	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	755	-	-	518	-	-	52	43	404	74	43	559
Mov Cap-2 Maneuver	-	-	-	-	-	-	52	43	-	74	43	-
Stage 1	-	-	-	-	-	-	165	224	-	300	353	-
Stage 2	-	-	-	-	-	-	553	353	-	411	224	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	39.6	0
HCM LOS			E	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	114	755	-	-	518	-	-	-
HCM Lane V/C Ratio	0.088	-	-	-	0.005	-	-	-
HCM Control Delay (s)	39.6	0	-	-	12	-	-	0
HCM Lane LOS	E	A	-	-	B	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1198	2	7	808	1	5
Future Vol, veh/h	1198	2	7	808	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1331	2	9	898	1	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1333	0	1799	667
Stage 1	-	-	-	-	1332	-
Stage 2	-	-	-	-	467	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	513	-	71	401
Stage 1	-	-	-	-	211	-
Stage 2	-	-	-	-	597	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	513	-	70	401
Mov Cap-2 Maneuver	-	-	-	-	165	-
Stage 1	-	-	-	-	211	-
Stage 2	-	-	-	-	586	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	16.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	324	-	-	513	-
HCM Lane V/C Ratio	0.023	-	-	0.017	-
HCM Control Delay (s)	16.4	-	-	12.1	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	62	1141	762	52	69	53
Future Vol, veh/h	62	1141	762	52	69	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	90	90	90	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	1268	847	58	81	62

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	905	0	-	0	1666	453
Stage 1	-	-	-	-	876	-
Stage 2	-	-	-	-	790	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	747	-	-	-	87	554
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	408	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	747	-	-	-	~ 78	554
Mov Cap-2 Maneuver	-	-	-	-	202	-
Stage 1	-	-	-	-	330	-
Stage 2	-	-	-	-	408	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	30.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	747	-	-	-	279
HCM Lane V/C Ratio	0.104	-	-	-	0.514
HCM Control Delay (s)	10.4	-	-	-	30.8
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.3	-	-	-	2.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1209	1	1	813	2	1
Future Vol, veh/h	1209	1	1	813	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1343	1	1	903	3	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1344	0	1798	672
Stage 1	-	-	-	-	1344	-
Stage 2	-	-	-	-	454	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	509	-	71	398
Stage 1	-	-	-	-	208	-
Stage 2	-	-	-	-	606	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	509	-	71	398
Mov Cap-2 Maneuver	-	-	-	-	164	-
Stage 1	-	-	-	-	208	-
Stage 2	-	-	-	-	605	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	23
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	204	-	-	509	-
HCM Lane V/C Ratio	0.018	-	-	0.002	-
HCM Control Delay (s)	23	-	-	12.1	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1209	1	3	814	0	1
Future Vol, veh/h	1209	1	3	814	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1343	1	4	904	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1344	0	1714	672
Stage 1	-	-	-	-	1344	-
Stage 2	-	-	-	-	370	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	509	-	104	398
Stage 1	-	-	-	-	204	-
Stage 2	-	-	-	-	633	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	509	-	103	398
Mov Cap-2 Maneuver	-	-	-	-	171	-
Stage 1	-	-	-	-	204	-
Stage 2	-	-	-	-	628	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	398	-	-	509	-
HCM Lane V/C Ratio	0.003	-	-	0.007	-
HCM Control Delay (s)	14.1	-	-	12.1	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	1184	2	2	779	46	0	0	0	32	0	38
Future Vol, veh/h	24	1184	2	2	779	46	0	0	0	32	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	80	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	1316	3	3	866	51	0	0	0	40	0	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	917	0	0	1319	0	0	1815	2299	658	1616	2277	459
Stage 1	-	-	-	-	-	-	1376	1376	-	898	898	-
Stage 2	-	-	-	-	-	-	439	923	-	718	1379	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	740	-	-	520	-	-	49	38	407	69	39	549
Stage 1	-	-	-	-	-	-	153	211	-	301	356	-
Stage 2	-	-	-	-	-	-	567	347	-	386	210	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	740	-	-	520	-	-	43	36	407	67	37	549
Mov Cap-2 Maneuver	-	-	-	-	-	-	43	36	-	67	37	-
Stage 1	-	-	-	-	-	-	147	202	-	289	354	-
Stage 2	-	-	-	-	-	-	515	345	-	370	201	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	0	79.1
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	740	-	-	520	-	-	128
HCM Lane V/C Ratio	-	0.041	-	-	0.005	-	-	0.684
HCM Control Delay (s)	0	10.1	-	-	12	-	-	79.1
HCM Lane LOS	A	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	3.7

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1212	0	1	825	2	0	0	2	1	0	2
Future Vol, veh/h	4	1212	0	1	825	2	0	0	2	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1347	0	1	917	2	0	0	3	1	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	919	0	0	1347	0	0	1818	2278	674	1604	2277	460
Stage 1	-	-	-	-	-	-	1357	1357	-	920	920	-
Stage 2	-	-	-	-	-	-	461	921	-	684	1357	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	738	-	-	507	-	-	49	39	397	70	39	548
Stage 1	-	-	-	-	-	-	157	215	-	292	348	-
Stage 2	-	-	-	-	-	-	550	347	-	405	215	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	738	-	-	507	-	-	48	39	397	69	39	548
Mov Cap-2 Maneuver	-	-	-	-	-	-	48	39	-	69	39	-
Stage 1	-	-	-	-	-	-	156	213	-	290	347	-
Stage 2	-	-	-	-	-	-	546	346	-	400	213	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	14.1	27.3
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	397	738	-	-	507	-	-	165
HCM Lane V/C Ratio	0.006	0.007	-	-	0.002	-	-	0.023
HCM Control Delay (s)	14.1	9.9	-	-	12.1	-	-	27.3
HCM Lane LOS	B	A	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	0	1	71	0	0	2	48	71	0	46	0
Future Vol, veh/h	1	0	1	71	0	0	2	48	71	0	46	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	85	85	85	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	1	89	0	0	2	56	84	0	58	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	160	202	58	161	160	98	58	0	0	140	0	0
Stage 1	58	58	-	102	102	-	-	-	-	-	-	-
Stage 2	102	144	-	59	58	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	806	694	1008	804	732	958	1546	-	-	1443	-	-
Stage 1	954	847	-	904	811	-	-	-	-	-	-	-
Stage 2	904	778	-	953	847	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	805	693	1008	802	731	958	1546	-	-	1443	-	-
Mov Cap-2 Maneuver	805	693	-	802	731	-	-	-	-	-	-	-
Stage 1	953	847	-	903	810	-	-	-	-	-	-	-
Stage 2	903	777	-	952	847	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10	0.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1546	-	-	895	802	1443	-	-
HCM Lane V/C Ratio	0.002	-	-	0.003	0.111	-	-	-
HCM Control Delay (s)	7.3	0	-	9	10	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	12	0	6	19	0	0	17	27	6	0	20	6
Future Vol, veh/h	12	0	6	19	0	0	17	27	6	0	20	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	0	8	24	0	0	21	34	8	0	25	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	109	113	29	113	113	38	33	0	0	42	0	0
Stage 1	29	29	-	80	80	-	-	-	-	-	-	-
Stage 2	80	84	-	33	33	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	870	777	1046	864	777	1034	1579	-	-	1567	-	-
Stage 1	988	871	-	929	828	-	-	-	-	-	-	-
Stage 2	929	825	-	983	868	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	860	766	1046	848	766	1034	1579	-	-	1567	-	-
Mov Cap-2 Maneuver	860	766	-	848	766	-	-	-	-	-	-	-
Stage 1	974	871	-	916	816	-	-	-	-	-	-	-
Stage 2	916	813	-	976	868	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	9.4	2.5	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1579	-	-	914	848	1567	-	-
HCM Lane V/C Ratio	0.013	-	-	0.025	0.028	-	-	-
HCM Control Delay (s)	7.3	0	-	9	9.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	896	1	0	1144	2	0	0	5	3	0	6
Future Vol, veh/h	5	896	1	0	1144	2	0	0	5	3	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	996	1	0	1271	2	0	0	6	4	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1273	0	0	997	0	0	1645	2282	499	1782	2281	637
Stage 1	-	-	-	-	-	-	1009	1009	-	1272	1272	-
Stage 2	-	-	-	-	-	-	636	1273	-	510	1009	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	541	-	-	690	-	-	66	39	517	52	39	420
Stage 1	-	-	-	-	-	-	257	316	-	177	237	-
Stage 2	-	-	-	-	-	-	433	237	-	514	316	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	541	-	-	690	-	-	64	39	517	51	39	420
Mov Cap-2 Maneuver	-	-	-	-	-	-	64	39	-	51	39	-
Stage 1	-	-	-	-	-	-	254	313	-	175	237	-
Stage 2	-	-	-	-	-	-	425	237	-	502	313	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	12	37.2
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	517	541	-	-	690	-	-	123
HCM Lane V/C Ratio	0.012	0.012	-	-	-	-	-	0.091
HCM Control Delay (s)	12	11.7	-	-	0	-	-	37.2
HCM Lane LOS	B	B	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	913	0	0	1151	2	1
Future Vol, veh/h	913	0	0	1151	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1014	0	0	1279	3	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1014	0	1654	507
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	640	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	680	-	89	511
Stage 1	-	-	-	-	311	-
Stage 2	-	-	-	-	487	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	680	-	89	511
Mov Cap-2 Maneuver	-	-	-	-	211	-
Stage 1	-	-	-	-	311	-
Stage 2	-	-	-	-	487	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	262	-	-	680	-
HCM Lane V/C Ratio	0.014	-	-	-	-
HCM Control Delay (s)	18.9	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	68	846	1104	60	62	46
Future Vol, veh/h	68	846	1104	60	62	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	90	90	90	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	85	940	1227	67	73	54

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1294	0	-	0	1901	647
Stage 1	-	-	-	-	1261	-
Stage 2	-	-	-	-	640	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	531	-	-	-	~ 61	414
Stage 1	-	-	-	-	230	-
Stage 2	-	-	-	-	487	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	531	-	-	-	~ 51	414
Mov Cap-2 Maneuver	-	-	-	-	144	-
Stage 1	-	-	-	-	193	-
Stage 2	-	-	-	-	487	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	50.4
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	531	-	-	-	199
HCM Lane V/C Ratio	0.16	-	-	-	0.638
HCM Control Delay (s)	13.1	-	-	-	50.4
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.6	-	-	-	3.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	905	2	2	1160	4	1
Future Vol, veh/h	905	2	2	1160	4	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1006	2	3	1289	5	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1008	0	1658	504
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	651	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	683	-	89	513
Stage 1	-	-	-	-	314	-
Stage 2	-	-	-	-	481	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	683	-	89	513
Mov Cap-2 Maneuver	-	-	-	-	211	-
Stage 1	-	-	-	-	314	-
Stage 2	-	-	-	-	479	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	20.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	239	-	-	683	-
HCM Lane V/C Ratio	0.026	-	-	0.004	-
HCM Control Delay (s)	20.5	-	-	10.3	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	906	0	2	1158	4	2
Future Vol, veh/h	906	0	2	1158	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1007	0	3	1287	5	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1007	0	1528	504
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	521	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	684	-	134	513
Stage 1	-	-	-	-	306	-
Stage 2	-	-	-	-	528	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	684	-	133	513
Mov Cap-2 Maneuver	-	-	-	-	231	-
Stage 1	-	-	-	-	306	-
Stage 2	-	-	-	-	526	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	283	-	-	684	-
HCM Lane V/C Ratio	0.027	-	-	0.004	-
HCM Control Delay (s)	18.1	-	-	10.3	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	18.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	877	2	2	1111	60	0	0	0	48	0	49
Future Vol, veh/h	30	877	2	2	1111	60	0	0	0	48	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	80	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	974	3	3	1234	67	0	0	0	60	0	61

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1301	0	0	977	0	0	1673	2357	487	1837	2327	651
Stage 1	-	-	-	-	-	-	1050	1050	-	1274	1274	-
Stage 2	-	-	-	-	-	-	623	1307	-	563	1053	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	528	-	-	702	-	-	62	35	526	~ 47	37	411
Stage 1	-	-	-	-	-	-	243	302	-	177	236	-
Stage 2	-	-	-	-	-	-	440	228	-	478	301	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	528	-	-	702	-	-	50	32	526	~ 44	34	411
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	32	-	~ 44	34	-
Stage 1	-	-	-	-	-	-	226	280	-	164	235	-
Stage 2	-	-	-	-	-	-	373	227	-	444	279	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	0	$ 376.1
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	528	-	-	702	-	-	80
HCM Lane V/C Ratio	-	0.071	-	-	0.004	-	-	1.516
HCM Control Delay (s)	0	12.3	-	-	10.1	-	-	$ 376.1
HCM Lane LOS	A	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	-	0.2	-	-	0	-	-	9.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	923	0	1	1167	2	2	0	4	1	0	2
Future Vol, veh/h	2	923	0	1	1167	2	2	0	4	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1026	0	1	1297	2	3	0	5	1	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1299	0	0	1026	0	0	1683	2333	513	1819	2332	650
Stage 1	-	-	-	-	-	-	1032	1032	-	1300	1300	-
Stage 2	-	-	-	-	-	-	651	1301	-	519	1032	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	529	-	-	673	-	-	61	36	506	48	36	412
Stage 1	-	-	-	-	-	-	249	308	-	170	230	-
Stage 2	-	-	-	-	-	-	424	229	-	508	308	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	529	-	-	673	-	-	60	36	506	47	36	412
Mov Cap-2 Maneuver	-	-	-	-	-	-	60	36	-	47	36	-
Stage 1	-	-	-	-	-	-	248	306	-	169	230	-
Stage 2	-	-	-	-	-	-	421	229	-	500	306	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	31.2	37.4
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	145	529	-	-	673	-	-	115
HCM Lane V/C Ratio	0.052	0.005	-	-	0.002	-	-	0.033
HCM Control Delay (s)	31.2	11.8	-	-	10.4	-	-	37.4
HCM Lane LOS	D	B	-	-	B	-	-	E
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	2	0	4	57	0	0	5	55	67	0	50	0
Future Vol, veh/h	2	0	4	57	0	0	5	55	67	0	50	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	85	85	85	85	85	85	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	5	67	0	0	6	65	79	0	63	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	180	219	63	183	180	105	63	0	0	144	0	0
Stage 1	63	63	-	117	117	-	-	-	-	-	-	-
Stage 2	117	156	-	66	63	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	782	679	1002	778	714	949	1540	-	-	1438	-	-
Stage 1	948	842	-	888	799	-	-	-	-	-	-	-
Stage 2	888	769	-	945	842	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	780	676	1002	772	711	949	1540	-	-	1438	-	-
Mov Cap-2 Maneuver	780	676	-	772	711	-	-	-	-	-	-	-
Stage 1	944	842	-	884	796	-	-	-	-	-	-	-
Stage 2	884	766	-	940	842	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.1	0.3	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1540	-	-	915	772	1438	-	-
HCM Lane V/C Ratio	0.004	-	-	0.008	0.087	-	-	-
HCM Control Delay (s)	7.3	0	-	9	10.1	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	0	17	11	0	0	8	32	19	0	22	10
Future Vol, veh/h	7	0	17	11	0	0	8	32	19	0	22	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	21	14	0	0	10	40	24	0	28	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	107	119	35	117	113	52	41	0	0	64	0	0
Stage 1	35	35	-	72	72	-	-	-	-	-	-	-
Stage 2	72	84	-	45	41	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	872	771	1038	859	777	1016	1568	-	-	1538	-	-
Stage 1	981	866	-	938	835	-	-	-	-	-	-	-
Stage 2	938	825	-	969	861	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	868	766	1038	837	772	1016	1568	-	-	1538	-	-
Mov Cap-2 Maneuver	868	766	-	837	772	-	-	-	-	-	-	-
Stage 1	974	866	-	931	829	-	-	-	-	-	-	-
Stage 2	931	819	-	949	861	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	9.4	1	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1568	-	-	982	837	1538	-	-
HCM Lane V/C Ratio	0.006	-	-	0.031	0.016	-	-	-
HCM Control Delay (s)	7.3	0	-	8.8	9.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1263	0	2	852	0	3	0	5	0	0	0
Future Vol, veh/h	0	1263	0	2	852	0	3	0	5	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1403	0	3	947	0	4	0	6	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	947	0	0	1403	0	0	1883	2356	702	1655	2356	474
Stage 1	-	-	-	-	-	-	1403	1403	-	953	953	-
Stage 2	-	-	-	-	-	-	480	953	-	702	1403	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	721	-	-	483	-	-	43	35	381	64	35	537
Stage 1	-	-	-	-	-	-	147	205	-	278	336	-
Stage 2	-	-	-	-	-	-	536	336	-	395	205	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	721	-	-	483	-	-	43	35	381	63	35	537
Mov Cap-2 Maneuver	-	-	-	-	-	-	43	35	-	63	35	-
Stage 1	-	-	-	-	-	-	147	205	-	278	334	-
Stage 2	-	-	-	-	-	-	533	334	-	389	205	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	46.3	0
HCM LOS			E	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	97	721	-	-	483	-	-	-
HCM Lane V/C Ratio	0.103	-	-	-	0.005	-	-	-
HCM Control Delay (s)	46.3	0	-	-	12.5	-	-	0
HCM Lane LOS	E	A	-	-	B	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1270	2	8	856	1	5
Future Vol, veh/h	1270	2	8	856	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1411	2	10	951	1	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1413	0	1908	707
Stage 1	-	-	-	-	1412	-
Stage 2	-	-	-	-	496	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	478	-	60	378
Stage 1	-	-	-	-	191	-
Stage 2	-	-	-	-	577	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	478	-	59	378
Mov Cap-2 Maneuver	-	-	-	-	149	-
Stage 1	-	-	-	-	191	-
Stage 2	-	-	-	-	565	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	17.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	301	-	-	478	-
HCM Lane V/C Ratio	0.025	-	-	0.021	-
HCM Control Delay (s)	17.3	-	-	12.7	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	63	1212	809	54	71	54
Future Vol, veh/h	63	1212	809	54	71	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	90	90	90	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	79	1347	899	60	84	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	959	0	-	0	1761	480
Stage 1	-	-	-	-	929	-
Stage 2	-	-	-	-	832	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	713	-	-	-	~ 76	532
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	388	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	713	-	-	-	~ 68	532
Mov Cap-2 Maneuver	-	-	-	-	187	-
Stage 1	-	-	-	-	307	-
Stage 2	-	-	-	-	388	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	35.5
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	713	-	-	-	260
HCM Lane V/C Ratio	0.11	-	-	-	0.566
HCM Control Delay (s)	10.7	-	-	-	35.5
HCM Lane LOS	B	-	-	-	E
HCM 95th %tile Q(veh)	0.4	-	-	-	3.2

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1281	1	1	861	2	1
Future Vol, veh/h	1281	1	1	861	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1423	1	1	957	3	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1424	0	1905	712
Stage 1	-	-	-	-	1424	-
Stage 2	-	-	-	-	481	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	474	-	60	375
Stage 1	-	-	-	-	188	-
Stage 2	-	-	-	-	588	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	474	-	60	375
Mov Cap-2 Maneuver	-	-	-	-	149	-
Stage 1	-	-	-	-	188	-
Stage 2	-	-	-	-	587	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	24.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	186	-	-	474	-
HCM Lane V/C Ratio	0.02	-	-	0.003	-
HCM Control Delay (s)	24.8	-	-	12.6	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1281	1	3	862	0	1
Future Vol, veh/h	1281	1	3	862	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1423	1	4	958	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1424	0	1815	712
Stage 1	-	-	-	-	1424	-
Stage 2	-	-	-	-	391	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	474	-	90	375
Stage 1	-	-	-	-	185	-
Stage 2	-	-	-	-	617	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	474	-	89	375
Mov Cap-2 Maneuver	-	-	-	-	155	-
Stage 1	-	-	-	-	185	-
Stage 2	-	-	-	-	612	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	375	-	-	474	-
HCM Lane V/C Ratio	0.003	-	-	0.008	-
HCM Control Delay (s)	14.6	-	-	12.7	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	1256	2	2	827	46	0	0	0	32	0	38
Future Vol, veh/h	24	1256	2	2	827	46	0	0	0	32	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	80	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	1396	3	3	919	51	0	0	0	40	0	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	970	0	0	1399	0	0	1922	2432	698	1709	2410	485
Stage 1	-	-	-	-	-	-	1456	1456	-	951	951	-
Stage 2	-	-	-	-	-	-	466	976	-	758	1459	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	706	-	-	484	-	-	40	31	383	59	32	528
Stage 1	-	-	-	-	-	-	136	193	-	279	336	-
Stage 2	-	-	-	-	-	-	546	327	-	365	192	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	706	-	-	484	-	-	35	30	383	57	30	528
Mov Cap-2 Maneuver	-	-	-	-	-	-	35	30	-	57	30	-
Stage 1	-	-	-	-	-	-	130	185	-	267	334	-
Stage 2	-	-	-	-	-	-	494	325	-	349	184	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	0	107.2
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	706	-	-	484	-	-	111
HCM Lane V/C Ratio	-	0.042	-	-	0.005	-	-	0.788
HCM Control Delay (s)	0	10.3	-	-	12.5	-	-	107.2
HCM Lane LOS	A	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	4.4

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1284	0	1	873	2	0	0	2	1	0	2
Future Vol, veh/h	4	1284	0	1	873	2	0	0	2	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1427	0	1	970	2	0	0	3	1	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	972	0	0	1427	0	0	1924	2411	714	1697	2410	486
Stage 1	-	-	-	-	-	-	1437	1437	-	973	973	-
Stage 2	-	-	-	-	-	-	487	974	-	724	1437	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	705	-	-	473	-	-	40	32	374	60	32	527
Stage 1	-	-	-	-	-	-	140	197	-	271	329	-
Stage 2	-	-	-	-	-	-	531	328	-	383	197	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	705	-	-	473	-	-	40	32	374	59	32	527
Mov Cap-2 Maneuver	-	-	-	-	-	-	40	32	-	59	32	-
Stage 1	-	-	-	-	-	-	139	196	-	269	328	-
Stage 2	-	-	-	-	-	-	527	327	-	378	196	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	14.7	30.5
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	374	705	-	-	473	-	-	145
HCM Lane V/C Ratio	0.007	0.007	-	-	0.003	-	-	0.026
HCM Control Delay (s)	14.7	10.1	-	-	12.6	-	-	30.5
HCM Lane LOS	B	B	-	-	B	-	-	D
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	1	71	0	0	2	50	71	0	47	0
Future Vol, veh/h	1	0	1	71	0	0	2	50	71	0	47	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	85	85	85	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	1	89	0	0	2	59	84	0	59	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	164	206	59	165	164	101	59	0	0	143	0	0
Stage 1	59	59	-	105	105	-	-	-	-	-	-	-
Stage 2	105	147	-	60	59	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	801	691	1007	800	729	954	1545	-	-	1440	-	-
Stage 1	953	846	-	901	808	-	-	-	-	-	-	-
Stage 2	901	775	-	951	846	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	800	690	1007	798	728	954	1545	-	-	1440	-	-
Mov Cap-2 Maneuver	800	690	-	798	728	-	-	-	-	-	-	-
Stage 1	952	846	-	900	807	-	-	-	-	-	-	-
Stage 2	900	774	-	950	846	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.1	0.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1545	-	-	892	798	1440	-	-
HCM Lane V/C Ratio	0.002	-	-	0.003	0.111	-	-	-
HCM Control Delay (s)	7.3	0	-	9	10.1	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	13	0	6	19	0	0	18	28	6	0	22	6
Future Vol, veh/h	13	0	6	19	0	0	18	28	6	0	22	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	8	24	0	0	23	35	8	0	28	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	117	121	32	121	121	39	36	0	0	43	0	0
Stage 1	32	32	-	85	85	-	-	-	-	-	-	-
Stage 2	85	89	-	36	36	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	859	769	1042	854	769	1033	1575	-	-	1566	-	-
Stage 1	984	868	-	923	824	-	-	-	-	-	-	-
Stage 2	923	821	-	980	865	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	850	757	1042	838	757	1033	1575	-	-	1566	-	-
Mov Cap-2 Maneuver	850	757	-	838	757	-	-	-	-	-	-	-
Stage 1	969	868	-	909	812	-	-	-	-	-	-	-
Stage 2	909	809	-	973	865	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	9.4	2.5	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1575	-	-	903	838	1566	-	-
HCM Lane V/C Ratio	0.014	-	-	0.026	0.028	-	-	-
HCM Control Delay (s)	7.3	0	-	9.1	9.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	947	1	0	1210	2	0	0	5	3	0	6
Future Vol, veh/h	5	947	1	0	1210	2	0	0	5	3	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	1052	1	0	1344	2	0	0	6	4	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1346	0	0	1053	0	0	1737	2411	527	1883	2410	673
Stage 1	-	-	-	-	-	-	1065	1065	-	1345	1345	-
Stage 2	-	-	-	-	-	-	672	1346	-	538	1065	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	508	-	-	657	-	-	56	32	496	43	32	398
Stage 1	-	-	-	-	-	-	238	297	-	160	218	-
Stage 2	-	-	-	-	-	-	412	218	-	495	297	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	508	-	-	657	-	-	54	32	496	42	32	398
Mov Cap-2 Maneuver	-	-	-	-	-	-	54	32	-	42	32	-
Stage 1	-	-	-	-	-	-	235	293	-	158	218	-
Stage 2	-	-	-	-	-	-	404	218	-	483	293	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	12.4	43.8
HCM LOS			B	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	496	508	-	-	657	-	-	104
HCM Lane V/C Ratio	0.013	0.012	-	-	-	-	-	0.108
HCM Control Delay (s)	12.4	12.2	-	-	0	-	-	43.8
HCM Lane LOS	B	B	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	966	0	0	1218	2	1
Future Vol, veh/h	966	0	0	1218	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1073	0	0	1353	3	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1073	0	1750	537
Stage 1	-	-	-	-	1073	-
Stage 2	-	-	-	-	677	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	645	-	77	488
Stage 1	-	-	-	-	290	-
Stage 2	-	-	-	-	466	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	645	-	77	488
Mov Cap-2 Maneuver	-	-	-	-	196	-
Stage 1	-	-	-	-	290	-
Stage 2	-	-	-	-	466	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	245	-	-	645	-
HCM Lane V/C Ratio	0.015	-	-	-	-
HCM Control Delay (s)	19.9	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	69	898	1171	61	63	47
Future Vol, veh/h	69	898	1171	61	63	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	90	90	90	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	998	1301	68	74	55

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1369	0	-	0	2006	685
Stage 1	-	-	-	-	1335	-
Stage 2	-	-	-	-	671	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	497	-	-	-	~ 52	391
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	470	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	497	-	-	-	~ 43	391
Mov Cap-2 Maneuver	-	-	-	-	131	-
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	470	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	61.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	497	-	-	-	183
HCM Lane V/C Ratio	0.174	-	-	-	0.707
HCM Control Delay (s)	13.8	-	-	-	61.7
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.6	-	-	-	4.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	958	2	2	1228	4	1
Future Vol, veh/h	958	2	2	1228	4	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1064	2	3	1364	5	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1066	0	1753	533
Stage 1	-	-	-	-	1065	-
Stage 2	-	-	-	-	688	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	649	-	76	491
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	460	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	649	-	76	491
Mov Cap-2 Maneuver	-	-	-	-	195	-
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	458	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	21.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	222	-	-	649	-
HCM Lane V/C Ratio	0.028	-	-	0.004	-
HCM Control Delay (s)	21.7	-	-	10.6	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	960	0	2	1226	4	2
Future Vol, veh/h	960	0	2	1226	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	80	90	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1067	0	3	1362	5	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1067	0	1618	534
Stage 1	-	-	-	-	1067	-
Stage 2	-	-	-	-	551	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	649	-	119	491
Stage 1	-	-	-	-	285	-
Stage 2	-	-	-	-	509	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	649	-	118	491
Mov Cap-2 Maneuver	-	-	-	-	214	-
Stage 1	-	-	-	-	285	-
Stage 2	-	-	-	-	506	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	264	-	-	649	-
HCM Lane V/C Ratio	0.028	-	-	0.004	-
HCM Control Delay (s)	19	-	-	10.6	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	24

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	931	2	2	1179	58	0	0	0	48	0	49
Future Vol, veh/h	30	931	2	2	1179	58	0	0	0	48	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	80	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	1034	3	3	1310	64	0	0	0	60	0	61

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1374	0	0	1037	0	0	1771	2490	517	1941	2461	687
Stage 1	-	-	-	-	-	-	1110	1110	-	1348	1348	-
Stage 2	-	-	-	-	-	-	661	1380	-	593	1113	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	495	-	-	666	-	-	53	29	503	~ 39	30	389
Stage 1	-	-	-	-	-	-	223	283	-	159	218	-
Stage 2	-	-	-	-	-	-	418	210	-	459	282	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	495	-	-	666	-	-	42	27	503	~ 37	28	389
Mov Cap-2 Maneuver	-	-	-	-	-	-	42	27	-	~ 37	28	-
Stage 1	-	-	-	-	-	-	206	261	-	147	217	-
Stage 2	-	-	-	-	-	-	351	209	-	424	260	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0	0	$ 505.3
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	495	-	-	666	-	-	68
HCM Lane V/C Ratio	-	0.076	-	-	0.004	-	-	1.783
HCM Control Delay (s)	0	12.9	-	-	10.4	-	-	$ 505.3
HCM Lane LOS	A	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	-	0.2	-	-	0	-	-	10.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	976	0	1	1235	2	2	0	4	1	0	2
Future Vol, veh/h	2	976	0	1	1235	2	2	0	4	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	90	90	80	90	90	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1084	0	1	1372	2	3	0	5	1	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1374	0	0	1084	0	0	1778	2466	542	1923	2465	687
Stage 1	-	-	-	-	-	-	1090	1090	-	1375	1375	-
Stage 2	-	-	-	-	-	-	688	1376	-	548	1090	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	495	-	-	639	-	-	52	30	485	40	30	389
Stage 1	-	-	-	-	-	-	230	289	-	153	211	-
Stage 2	-	-	-	-	-	-	403	211	-	488	289	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	495	-	-	639	-	-	51	30	485	39	30	389
Mov Cap-2 Maneuver	-	-	-	-	-	-	51	30	-	39	30	-
Stage 1	-	-	-	-	-	-	229	287	-	152	211	-
Stage 2	-	-	-	-	-	-	400	211	-	480	287	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	35.4	43.6
HCM LOS			E	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	126	495	-	-	639	-	-	97
HCM Lane V/C Ratio	0.06	0.005	-	-	0.002	-	-	0.039
HCM Control Delay (s)	35.4	12.3	-	-	10.6	-	-	43.6
HCM Lane LOS	E	B	-	-	B	-	-	E
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	0	4	57	0	0	5	57	67	0	52	0
Future Vol, veh/h	2	0	4	57	0	0	5	57	67	0	52	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	85	85	85	85	85	85	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	5	67	0	0	6	67	79	0	65	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	184	223	65	187	184	107	65	0	0	146	0	0
Stage 1	65	65	-	119	119	-	-	-	-	-	-	-
Stage 2	119	158	-	68	65	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	777	676	999	774	710	947	1537	-	-	1436	-	-
Stage 1	946	841	-	885	797	-	-	-	-	-	-	-
Stage 2	885	767	-	942	841	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	775	673	999	768	707	947	1537	-	-	1436	-	-
Mov Cap-2 Maneuver	775	673	-	768	707	-	-	-	-	-	-	-
Stage 1	942	841	-	881	794	-	-	-	-	-	-	-
Stage 2	881	764	-	937	841	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	10.1	0.3	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1537	-	-	911	768	1436	-	-
HCM Lane V/C Ratio	0.004	-	-	0.008	0.087	-	-	-
HCM Control Delay (s)	7.4	0	-	9	10.1	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0	-	-

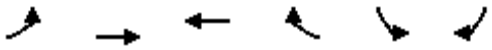
Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	0	17	11	0	0	8	32	19	0	22	10
Future Vol, veh/h	7	0	17	11	0	0	8	32	19	0	22	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	21	14	0	0	10	40	24	0	28	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	107	119	35	117	113	52	41	0	0	64	0	0
Stage 1	35	35	-	72	72	-	-	-	-	-	-	-
Stage 2	72	84	-	45	41	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	872	771	1038	859	777	1016	1568	-	-	1538	-	-
Stage 1	981	866	-	938	835	-	-	-	-	-	-	-
Stage 2	938	825	-	969	861	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	868	766	1038	837	772	1016	1568	-	-	1538	-	-
Mov Cap-2 Maneuver	868	766	-	837	772	-	-	-	-	-	-	-
Stage 1	974	866	-	931	829	-	-	-	-	-	-	-
Stage 2	931	819	-	949	861	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	9.4	1	0
HCM LOS	A	A		

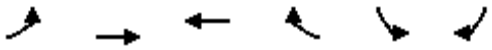
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1568	-	-	982	837	1538	-	-
HCM Lane V/C Ratio	0.006	-	-	0.031	0.016	-	-	-
HCM Control Delay (s)	7.3	0	-	8.8	9.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	63	1212	809	54	71	54
Future Volume (veh/h)	63	1212	809	54	71	54
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	1347	899	60	84	64
Peak Hour Factor	0.80	0.90	0.90	0.90	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	313	1854	1348	90	330	251
Arrive On Green	0.06	0.52	0.40	0.40	0.35	0.35
Sat Flow, veh/h	1781	3647	3474	226	954	727
Grp Volume(v), veh/h	79	1347	472	487	149	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1830	1692	0
Q Serve(g_s), s	1.6	19.8	14.8	14.8	4.3	0.0
Cycle Q Clear(g_c), s	1.6	19.8	14.8	14.8	4.3	0.0
Prop In Lane	1.00			0.12	0.56	0.43
Lane Grp Cap(c), veh/h	313	1854	708	729	585	0
V/C Ratio(X)	0.25	0.73	0.67	0.67	0.25	0.00
Avail Cap(c_a), veh/h	343	3006	1503	1548	585	0
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	11.8	12.5	16.7	16.7	16.0	0.0
Incr Delay (d2), s/veh	0.4	0.6	1.1	1.1	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	6.8	5.4	5.5	1.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.2	13.1	17.8	17.8	17.0	0.0
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h		1426	959		149	
Approach Delay, s/veh		13.0	17.8		17.0	
Approach LOS		B	B		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	40.0	28.0	8.4	31.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	57.5	23.5	5.0	57.5
Max Q Clear Time (g_c+I1), s	21.8	6.3	3.6	16.8
Green Ext Time (p_c), s	13.6	0.4	0.0	6.8

Intersection Summary	
HCM 6th Ctrl Delay	15.1
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	69	898	1171	61	63	47
Future Volume (veh/h)	69	898	1171	61	63	47
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	998	1301	68	74	55
Peak Hour Factor	0.80	0.90	0.90	0.90	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	272	2175	1699	89	256	190
Arrive On Green	0.06	0.61	0.49	0.49	0.27	0.27
Sat Flow, veh/h	1781	3647	3529	179	964	716
Grp Volume(v), veh/h	86	998	672	697	130	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1838	1693	0
Q Serve(g_s), s	1.6	11.1	22.6	22.7	4.5	0.0
Cycle Q Clear(g_c), s	1.6	11.1	22.6	22.7	4.5	0.0
Prop In Lane	1.00			0.10	0.57	0.42
Lane Grp Cap(c), veh/h	272	2175	879	909	449	0
V/C Ratio(X)	0.32	0.46	0.76	0.77	0.29	0.00
Avail Cap(c_a), veh/h	293	2975	1487	1539	449	0
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	12.2	7.7	15.1	15.1	21.5	0.0
Incr Delay (d2), s/veh	0.7	0.2	1.4	1.4	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.5	7.9	8.2	1.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.8	7.8	16.5	16.5	23.1	0.0
LnGrp LOS	B	A	B	B	C	A
Approach Vol, veh/h		1084	1369		130	
Approach Delay, s/veh		8.2	16.5		23.1	
Approach LOS		A	B		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	49.5	24.0	8.6	40.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	61.5	19.5	5.0	61.5
Max Q Clear Time (g_c+I1), s	13.1	6.5	3.6	24.7
Green Ext Time (p_c), s	9.3	0.3	0.0	11.7

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

SOUTHWEST CIRCLE K
SOUTHWEST DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS

APPENDIX

Traffic Signal Warrant Analysis

General Description of Intersection

Project Number: 21130

Existing

Name of Major Roadway:	SR 89A
Direction:	E/W
# of EB Lanes:	2
# of WB Lanes:	2
85th percentile speed:	40 *mph*
Control #:	
Section #:	
Route #:	
Name of Minor Roadway:	Southwest Drive
Direction:	N/S
# of NB Lanes:	0
# of SB Lanes:	1
85th percentile speed:	25 *mph*
Control #:	
Section #:	
Route #:	
City:	Sedona
Population:	10,300
County:	
District:	
Data Source:	24-hour approach
Date of Survey:	9/2/2021 *(press Ctrl + ;)*
Day of Week:	Thursday
Weather:	Sunny
Surface Conditions:	Dry
	Smooth

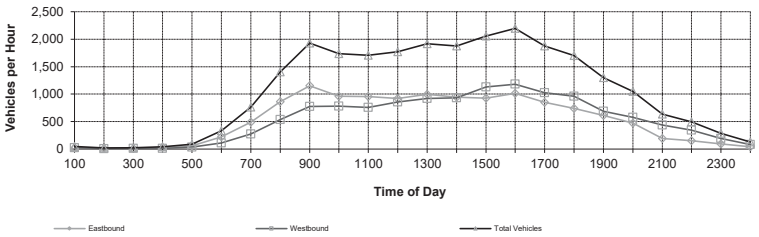
Enter Traffic Volumes:

Automated Traffic Counts

Street: **SR 89A**
Location: **Southwest Drive**

City/State: **Sedona, AZ**
Project #: **21130**
Date: **9/2/2021**
Day of Week: **Thursday**
Data Source: **24-hour approach**

24-Hour Volume: **25,380**



Time	Eastbound		Westbound	
	Vehicles	Peds	Vehicles	Peds
12:00 AM				
12:15 AM				
12:30 AM				
12:45 AM				
1:00 AM	21		24	
1:15 AM				
1:30 AM				
1:45 AM				
2:00 AM	13		8	
2:15 AM				
2:30 AM				
2:45 AM				
3:00 AM	11		13	
3:15 AM				
3:30 AM				
3:45 AM				
4:00 AM	27		15	
4:15 AM				
4:30 AM				
4:45 AM				
5:00 AM	56		33	
5:15 AM				
5:30 AM				
5:45 AM				
6:00 AM	220		114	
6:15 AM				
6:30 AM				
6:45 AM				
7:00 AM	489		273	
7:15 AM				
7:30 AM				
7:45 AM				
8:00 AM	864		538	
8:15 AM				
8:30 AM				
8:45 AM				
9:00 AM	1151		777	
9:15 AM				
9:30 AM				
9:45 AM				
10:00 AM	959		779	
10:15 AM				
10:30 AM				
10:45 AM				
11:00 AM	953		756	
11:15 AM				
11:30 AM				
11:45 AM				
12:00 PM	918		855	

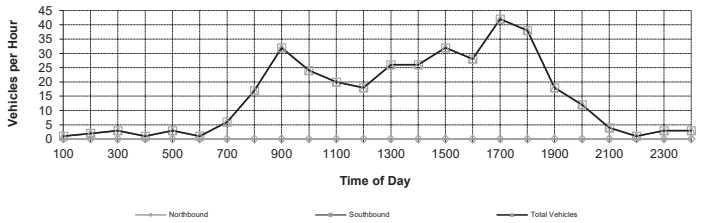
Time	Eastbound		Westbound	
	Vehicles	Peds	Vehicles	Peds
12:00 PM				
12:15 PM				
12:30 PM				
12:45 PM				
1:00 PM	996		923	
1:15 PM				
1:30 PM				
1:45 PM				
2:00 PM	944		932	
2:15 PM				
2:30 PM				
2:45 PM				
3:00 PM	927		1130	
3:15 PM				
3:30 PM				
3:45 PM				
4:00 PM	1016		1180	
4:15 PM				
4:30 PM				
4:45 PM				
5:00 PM	853		1024	
5:15 PM				
5:30 PM				
5:45 PM				
6:00 PM	740		960	
6:15 PM				
6:30 PM				
6:45 PM				
7:00 PM	610		688	
7:15 PM				
7:30 PM				
7:45 PM				
8:00 PM	470		577	
8:15 PM				
8:30 PM				
8:45 PM				
9:00 PM	195		438	
9:15 PM				
9:30 PM				
9:45 PM				
10:00 PM	150		346	
10:15 PM				
10:30 PM				
10:45 PM				
11:00 PM	93		195	
11:15 PM				
11:30 PM				
11:45 PM				
12:00 AM	43		83	
	12,719		12,661	
	24-Hour Volume		25,380	

Equipment ID#:

Automated Traffic Counts

Street: **Southwest Drive**
Location: **SR 89A**

City/State: **Sedona, AZ**
Project #:
Date: **9/2/2021**
Day of Week: **Thursday**
Data Source: **24-hour approach**



24-Hour Volume: **361**

Time	Northbound		Southbound	
	Vehicles	Peds	Vehicles	Peds
12:00 AM				
12:15 AM				
12:30 AM				
12:45 AM				
1:00 AM	0		1	
1:15 AM				
1:30 AM				
1:45 AM				
2:00 AM	0		2	
2:15 AM				
2:30 AM				
2:45 AM				
3:00 AM	0		3	
3:15 AM				
3:30 AM				
3:45 AM				
4:00 AM	0		1	
4:15 AM				
4:30 AM				
4:45 AM				
5:00 AM	0		3	
5:15 AM				
5:30 AM				
5:45 AM				
6:00 AM	0		1	
6:15 AM				
6:30 AM				
6:45 AM				
7:00 AM	0		6	
7:15 AM				
7:30 AM				
7:45 AM				
8:00 AM	0		17	
8:15 AM				
8:30 AM				
8:45 AM				
9:00 AM	0		32	
9:15 AM				
9:30 AM				
9:45 AM				
10:00 AM	0		24	
10:15 AM				
10:30 AM				
10:45 AM				
11:00 AM	0		20	
11:15 AM				
11:30 AM				
11:45 AM				
12:00 PM	0		18	

Time	Northbound		Southbound	
	Vehicles	Peds	Vehicles	Peds
12:00 PM				
12:59 PM				
12:30 PM				
12:45 PM				
1:00 PM	0		26	
1:59 PM				
1:30 PM				
1:45 PM				
2:00 PM	0		26	
2:59 PM				
2:30 PM				
2:45 PM				
3:00 PM	0		32	
3:59 PM				
3:30 PM				
3:45 PM				
4:00 PM	0		28	
4:59 PM				
4:30 PM				
12:00 AM				
5:00 PM	0		42	
5:59 PM				
5:30 PM				
5:45 PM				
6:00 PM	0		38	
6:59 PM				
6:30 PM				
6:45 PM				
7:00 PM	0		18	
7:59 PM				
7:30 PM				
7:45 PM				
8:00 PM	0		12	
8:59 PM				
8:30 PM				
8:45 PM				
9:00 PM	0		4	
9:59 PM				
9:30 PM				
9:45 PM				
10:00 PM	0		1	
10:59 PM				
10:30 PM				
10:45 PM				
11:00 PM	0		3	
11:59 PM				
11:30 PM				
11:45 PM				
12:00 AM	0		3	
	0		361	
		24-Hour Volume	361	

Equipment ID#:

TRAFFIC SURVEY - COUNT ANALYSIS
2009 MUTCD WARRANTS

Existing

County: _____ **District No.:** _____

City: Sedona **Population:** 10,300 **Survey Date:** 9/2/2021

	Route #	Name	Control	Section	85% Speed
Major	_____	SR 89A	_____	- _____	40
Minor	_____	Southwest Drive	_____	- _____	25

Warrant 1: Eight- Hour Volumes

Condition A

Number of Lanes			Major Street Both Approaches Required		Minor Street High Volume Approach Required	
Major	Street	Minor Street	Urban	Rural*	Urban	Rural
1		1	500	350	150	105
2 or more		1	**600**	420	**150**	105
2 or more		2 or more	600	420	200	140
1		2 or more	500	350	200	140

*Criteria when the 85th percentile speed is greater than 40 mph or when the population is less than 10,000

Warrant 1

Time		Volume		Criteria		
Begin	End	Major	Minor	Major >= 600	Minor >= 150	Both Meet
12:00 AM	1:00 AM	45	1	N	N	N
1:00 AM	2:00 AM	21	2	N	N	N
2:00 AM	3:00 AM	24	3	N	N	N
3:00 AM	4:00 AM	42	1	N	N	N
4:00 AM	5:00 AM	89	3	N	N	N
5:00 AM	6:00 AM	334	1	N	N	N
6:00 AM	7:00 AM	762	6	Y	N	N
7:00 AM	8:00 AM	1402	17	Y	N	N
8:00 AM	9:00 AM	1928	32	Y	N	N
9:00 AM	10:00 AM	1738	24	Y	N	N
10:00 AM	11:00 AM	1709	20	Y	N	N
11:00 AM	12:00 PM	1773	18	Y	N	N
12:00 PM	1:00 PM	1919	26	Y	N	N
1:00 PM	2:00 PM	1876	26	Y	N	N
2:00 PM	3:00 PM	2057	32	Y	N	N
3:00 PM	4:00 PM	2196	28	Y	N	N
4:00 PM	5:00 PM	1877	42	Y	N	N
5:00 PM	6:00 PM	1700	38	Y	N	N
6:00 PM	7:00 PM	1298	18	Y	N	N
7:00 PM	8:00 PM	1047	12	Y	N	N
8:00 PM	9:00 PM	633	4	Y	N	N
9:00 PM	10:00 PM	496	1	N	N	N
10:00 PM	11:00 PM	288	3	N	N	N
11:00 PM	12:00 AM	126	3	N	N	N

Total number of hours, both the major(both approaches) and minor(high volume approach) met: 0

Hours Required: 8

Condition A is not satisfied

Warrant 1 not satisfied.

Warrant 1: Eight- Hour Volumes

Condition B

Number of Lanes			Major Street Both Approaches Required		Minor Street High Volume Approach Required	
Major	Street	Minor Street	Urban	Rural*	Urban	Rural*
1		1	750	525	75	53
2 or more		1	**900**	630	**75**	53
2 or more		2 or more	900	630	100	70
1		2 or more	750	525	100	70

*Criteria when the 85th percentile speed is greater than 40 mph or when the population is less than 10,000

Warrant 2

Time		Volume		Criteria		
				Major	Minor	
Begin	End	Major	Minor	>= 900	>=75	Both Meet
12:00 AM	1:00 AM	45	1	N	N	N
1:00 AM	2:00 AM	21	2	N	N	N
2:00 AM	3:00 AM	24	3	N	N	N
3:00 AM	4:00 AM	42	1	N	N	N
4:00 AM	5:00 AM	89	3	N	N	N
5:00 AM	6:00 AM	334	1	N	N	N
6:00 AM	7:00 AM	762	6	N	N	N
7:00 AM	8:00 AM	1402	17	Y	N	N
8:00 AM	9:00 AM	1928	32	Y	N	N
9:00 AM	10:00 AM	1738	24	Y	N	N
10:00 AM	11:00 AM	1709	20	Y	N	N
11:00 AM	12:00 PM	1773	18	Y	N	N
12:00 PM	1:00 PM	1919	26	Y	N	N
1:00 PM	2:00 PM	1876	26	Y	N	N
2:00 PM	3:00 PM	2057	32	Y	N	N
3:00 PM	4:00 PM	2196	28	Y	N	N
4:00 PM	5:00 PM	1877	42	Y	N	N
5:00 PM	6:00 PM	1700	38	Y	N	N
6:00 PM	7:00 PM	1298	18	Y	N	N
7:00 PM	8:00 PM	1047	12	Y	N	N
8:00 PM	9:00 PM	633	4	N	N	N
9:00 PM	10:00 PM	496	1	N	N	N
10:00 PM	11:00 PM	288	3	N	N	N
11:00 PM	12:00 AM	126	3	N	N	N

Total number of hours, both the major(both approaches) and minor(high volume approach) met:	0
Hours Required:	8

Condition B is not satisfied

Warrant 1 not satisfied.

Warrant 2: Four Hour Vehicular Volumes

This warrant is similar to Warrant 1A, except that the required traffic volumes must be present for at least four hours of an average day. The traffic volumes required are based on curves (Figure 4C-2) shown in the MUTCD.

*** The required traffic volumes for Warrant 2 do not meet for any one hour.**

Warrant 2 is not satisfied

Warrant 3, Condition A- Peak Hour Delay

This warrant is intended for application where traffic conditions will cause undue delay to traffic entering or crossing the major street. The peak hour delay warrant is satisfied when the following conditions exist for one hour (any four consecutive 15-minute periods) of an average weekday:

(1) The total delay by the traffic on a side street controlled by a stop sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach, **and**

(2) the volume on the side street (one direction) equals or exceeds 100 vph for one moving lane of traffic and 150 vph for two moving lanes, **and**

(3) the total traffic volume serviced during 1 hour equals or exceeds 800 vph for an intersection with four (or more) approaches or 650 vph for three approaches.

***Part 1 - N/A**
***Part 2 - N/A**
***Part 3 - N/A**

Warrant 3, Condition B - Peak Hour Volume

This warrant applies to traffic entering from the minor street which encounters undue delay crossing the main street. This wa is satisfied when the main street and side street traffic volumes satisfy the curves shown in Figure 4C-4 of the TMUTCD.

Warrant 3 is N/A.

Warrant 4: Pedestrian Volume

Required*	Existing
100 or more for each of any four hours	_____
OR	
190 or more during any one hour	_____

* For predominant pedestrian crossing speeds less than 3.5 ft/sec, the pedestrian volume may be reduced as much as 50 percent.

Gap Requirements

YES	NO	Is the nearest signal located more than 300 feet away?
YES	NO	For traffic flow which is not platooned, are there less than 60 gaps per hour of adequate length for the pedestrians to cross the street?

Warrant 4 is N/A.

Warrant 5: School Crossing

YES NO Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?

Warrant 5 is N/A.

Warrant 6: Coordinate Systems

YES NO Are the adjacent signals in a signal system?
YES NO Would the resultant spacing be 1000 feet or more?

Warrant 6 is N/A.

Warrant 7: Crash Experience

YES NO Is 80% or more of one of Warrants #1, #2, or #3 met?
YES NO Have there been more than five accidents susceptible to correction by a traffic signal in 12 months?

Warrant 7 is N/A.

Warrant 8: Roadway Network

YES NO Does the major street having an existing or immediately projected entering volume of > 1000 vehicles per hour of a typical weekday?

YES NO Do 5-year projected traffic volumes meet Warrants 1, 2, or 3?

YES NO Is there an entering traffic volume of at least 1000 vehicles per hour for each of any 5 hours on a Saturday or Sunday?

Warrant 8 is N/A.

Summary:

Warrants satisfied: none

Warrants not satisfied: 1, 2

Warrants not applicable: 3, 4, 5, 6, 7, 8

Warrants not included in study: none

Warrant 2 - Four Hour Vehicular Volumes

85th % speed: <= 40 mph
Population: >= 10,000

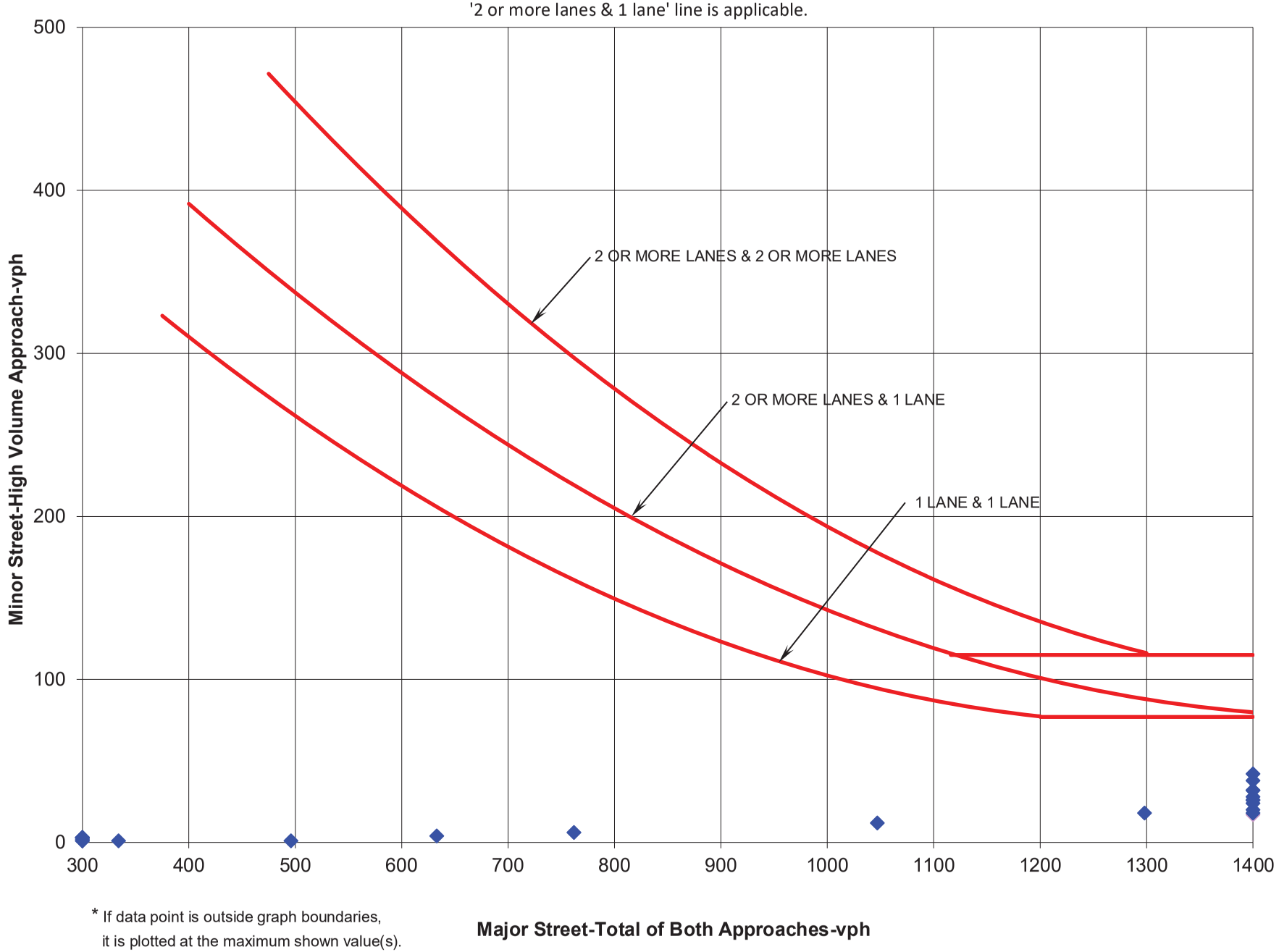
Major Street Lanes: 2
Minor Street Lanes: 1

Use Figure: 4C-1 2&1

Rank	Major Street Volume	Minor Street Volume	Figure 4C-1			Figure 4C-2		
			1&1	2&1	2&2	1&1	2&1	2&2
1	126	3	-	N	-	-	-	-
2	45	1	-	N	-	-	-	-
3	21	2	-	N	-	-	-	-
4	24	3	-	N	-	-	-	-
5	42	1	-	N	-	-	-	-
6	89	3	-	N	-	-	-	-
7	334	1	-	N	-	-	-	-
8	762	6	-	N	-	-	-	-
9	1402	17	-	N	-	-	-	-
10	1928	32	-	N	-	-	-	-
11	1738	24	-	N	-	-	-	-
12	1709	20	-	N	-	-	-	-
13	1773	18	-	N	-	-	-	-
14	1919	26	-	N	-	-	-	-
15	1876	26	-	N	-	-	-	-
16	2057	32	-	N	-	-	-	-
17	2196	28	-	N	-	-	-	-
18	1877	42	-	N	-	-	-	-
19	1700	38	-	N	-	-	-	-
20	1298	18	-	N	-	-	-	-
21	1047	12	-	N	-	-	-	-
22	633	4	-	N	-	-	-	-
23	496	1	-	N	-	-	-	-
24	288	3	-	N	-	-	-	-
			0	0	0	0	0	0
Warrant 2 is not satisfied.			N	N	N	N	N	N

Warrant 2

Figure 4C-1 Four Hour Volume Warrant



* If data point is outside graph boundaries, it is plotted at the maximum shown value(s).

General Description of Intersection

Project Number: 21166

2022 Without

Name of Major Roadway:	SR 89A
Direction:	E/W
# of EB Lanes:	2
# of WB Lanes:	2
85th percentile speed:	40 *mph*
Control #:	
Section #:	
Route #:	
Name of Minor Roadway:	Southwest Drive
Direction:	N/S
# of NB Lanes:	0
# of SB Lanes:	1
85th percentile speed:	25 *mph*
Control #:	
Section #:	
Route #:	
City:	Sedona
Population:	10,300
County:	
District:	
Data Source:	24-hour approach
Date of Survey:	9/2/2021 *(press Ctrl + ;)*
Day of Week:	Thursday
Weather:	Sunny
Surface Conditions:	Dry
	Smooth

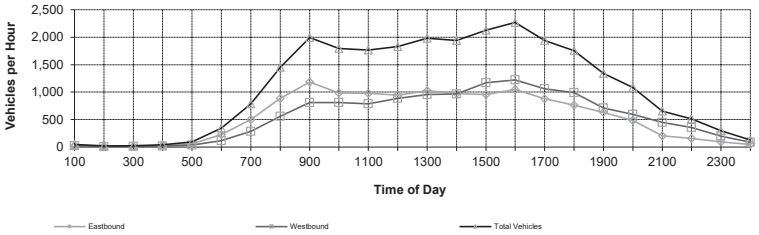
Enter Traffic Volumes:

Automated Traffic Counts

Street: **SR 89A**
Location: **Southwest Drive**

City/State: **Sedona, AZ**
Project #: **21166**
Date: **9/2/2021**
Day of Week: **Thursday**
Data Source: **24-hour approach**

24-Hour Volume: **26,219**



Time	Eastbound		Westbound	
	Vehicles	Peds	Vehicles	Peds
12:00 AM				
12:15 AM				
12:30 AM				
12:45 AM				
1:00 AM	22		25	
1:15 AM				
1:30 AM				
1:45 AM				
2:00 AM	13		8	
2:15 AM				
2:30 AM				
2:45 AM				
3:00 AM	11		13	
3:15 AM				
3:30 AM				
3:45 AM				
4:00 AM	28		16	
4:15 AM				
4:30 AM				
4:45 AM				
5:00 AM	58		34	
5:15 AM				
5:30 AM				
5:45 AM				
6:00 AM	226		119	
6:15 AM				
6:30 AM				
6:45 AM				
7:00 AM	502		285	
7:15 AM				
7:30 AM				
7:45 AM				
8:00 AM	888		560	
8:15 AM				
8:30 AM				
8:45 AM				
9:00 AM	1183		808	
9:15 AM				
9:30 AM				
9:45 AM				
10:00 AM	987		809	
10:15 AM				
10:30 AM				
10:45 AM				
11:00 AM	980		785	
11:15 AM				
11:30 AM				
11:45 AM				
12:00 PM	945		887	

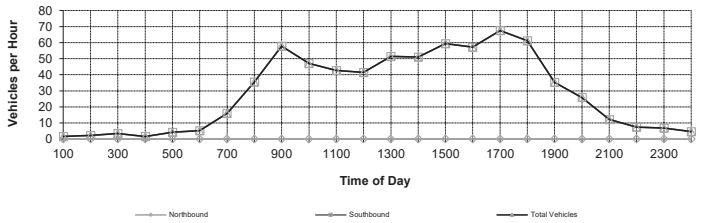
Time	Eastbound		Westbound	
	Vehicles	Peds	Vehicles	Peds
12:00 PM				
12:15 PM				
12:30 PM				
12:45 PM				
1:00 PM	1025		957	
1:15 PM				
1:30 PM				
1:45 PM				
2:00 PM	972		966	
2:15 PM				
2:30 PM				
2:45 PM				
3:00 PM	956		1169	
3:15 PM				
3:30 PM				
3:45 PM				
4:00 PM	1047		1221	
4:15 PM				
4:30 PM				
4:45 PM				
5:00 PM	879		1060	
5:15 PM				
5:30 PM				
5:45 PM				
6:00 PM	763		993	
6:15 PM				
6:30 PM				
6:45 PM				
7:00 PM	629		712	
7:15 PM				
7:30 PM				
7:45 PM				
8:00 PM	485		597	
8:15 PM				
8:30 PM				
8:45 PM				
9:00 PM	202		452	
9:15 PM				
9:30 PM				
9:45 PM				
10:00 PM	155		357	
10:15 PM				
10:30 PM				
10:45 PM				
11:00 PM	96		201	
11:15 PM				
11:30 PM				
11:45 PM				
12:00 AM	44		86	
	13,097		13,121	
	24-Hour Volume		26,219	

Equipment ID#:

Automated Traffic Counts

Street: **Southwest Drive**
Location: **SR 89A**

City/State: **Sedona, AZ**
Project #:
Date: **9/2/2021**
Day of Week: **Thursday**
Data Source: **24-hour approach**



24-Hour Volume: **699**

Time	Northbound		Southbound	
	Vehicles	Peds	Vehicles	Peds
12:00 AM				
12:15 AM				
12:30 AM				
12:45 AM				
1:00 AM	0		2	
1:15 AM				
1:30 AM				
1:45 AM				
2:00 AM	0		2	
2:15 AM				
2:30 AM				
2:45 AM				
3:00 AM	0		3	
3:15 AM				
3:30 AM				
3:45 AM				
4:00 AM	0		2	
4:15 AM				
4:30 AM				
4:45 AM				
5:00 AM	0		4	
5:15 AM				
5:30 AM				
5:45 AM				
6:00 AM	0		5	
6:15 AM				
6:30 AM				
6:45 AM				
7:00 AM	0		16	
7:15 AM				
7:30 AM				
7:45 AM				
8:00 AM	0		36	
8:15 AM				
8:30 AM				
8:45 AM				
9:00 AM	0		58	
9:15 AM				
9:30 AM				
9:45 AM				
10:00 AM	0		47	
10:15 AM				
10:30 AM				
10:45 AM				
11:00 AM	0		43	
11:15 AM				
11:30 AM				
11:45 AM				
12:00 PM	0		41	

Time	Northbound		Southbound	
	Vehicles	Peds	Vehicles	Peds
12:00 PM				
12:59 PM				
12:30 PM				
12:45 PM				
1:00 PM	0		52	
1:59 PM				
1:30 PM				
1:45 PM				
2:00 PM	0		51	
2:59 PM				
2:30 PM				
2:45 PM				
3:00 PM	0		60	
3:59 PM				
3:30 PM				
3:45 PM				
4:00 PM	0		57	
4:59 PM				
4:30 PM				
12:00 AM				
5:00 PM	0		68	
5:59 PM				
5:30 PM				
5:45 PM				
6:00 PM	0		61	
6:59 PM				
6:30 PM				
6:45 PM				
7:00 PM	0		35	
7:59 PM				
7:30 PM				
7:45 PM				
8:00 PM	0		26	
8:59 PM				
8:30 PM				
8:45 PM				
9:00 PM	0		12	
9:59 PM				
9:30 PM				
9:45 PM				
10:00 PM	0		7	
10:59 PM				
10:30 PM				
10:45 PM				
11:00 PM	0		7	
11:59 PM				
11:30 PM				
11:45 PM				
12:00 AM	0		5	
	0		699	
	24-Hour Volume		699	

Equipment ID#:

TRAFFIC SURVEY - COUNT ANALYSIS

2009 MUTCD WARRANTS

2022 Without

County:					**District No.:**	
City:	Sedona	**Population:**	10,300		**Survey Date:**	9/2/2021
	Route #	**Name**		**Control**	**Section**	**85% Speed**
Major		SR 89A			-	40
Minor		Southwest Drive			-	25

Warrant 1: Eight- Hour Volumes

Condition A

Number of Lanes			Major Street Both Approaches Required		Minor Street High Volume Approach Required	
Major	Street	Minor Street	Urban	Rural*	Urban	Rural
1		1	500	350	150	105
2 or more		1	**600**	420	**150**	105
2 or more		2 or more	600	420	200	140
1		2 or more	500	350	200	140

*Criteria when the 85th percentile speed is greater than 40 mph or when the population is less than 10,000

Warrant 1

Time		Volume		Criteria		
				Major	Minor	
Begin	End	Major	Minor	>= 600	>= 150	Both Meet
12:00 AM	1:00 AM	46.49151	1.6115077	N	N	N
1:00 AM	2:00 AM	21.71575	2.3357539	N	N	N
2:00 AM	3:00 AM	24.82719	3.4071893	N	N	N
3:00 AM	4:00 AM	43.39293	1.5729311	N	N	N
4:00 AM	5:00 AM	91.96302	4.2430154	N	N	N
5:00 AM	6:00 AM	344.9877	5.3277192	N	N	N
6:00 AM	7:00 AM	787.1156	15.995607	Y	N	N
7:00 AM	8:00 AM	1448.287	35.586727	Y	N	N
8:00 AM	9:00 AM	1991.763	57.843372	Y	N	N
9:00 AM	10:00 AM	1795.417	47.137317	Y	N	N
10:00 AM	11:00 AM	1765.413	42.632975	Y	N	N
11:00 AM	12:00 PM	1831.49	41.390224	Y	N	N
12:00 PM	1:00 PM	1982.39	51.530489	Y	N	N
1:00 PM	2:00 PM	1937.978	50.977558	Y	N	N
2:00 PM	3:00 PM	2125.002	59.502165	Y	N	N
3:00 PM	4:00 PM	2268.518	57.158112	Y	N	N
4:00 PM	5:00 PM	1939.216	67.516159	Y	N	N
5:00 PM	6:00 PM	1756.349	61.108704	Y	N	N
6:00 PM	7:00 PM	1340.882	35.282264	Y	N	N
7:00 PM	8:00 PM	1081.558	25.857536	Y	N	N
8:00 PM	9:00 PM	653.8511	12.271096	Y	N	N
9:00 PM	10:00 PM	512.3109	7.4108551	N	N	N
10:00 PM	11:00 PM	297.5019	6.8019292	N	N	N
11:00 PM	12:00 AM	130.1788	4.7187934	N	N	N

Total number of hours, both the major(both approaches) and minor(high volume approach) met: 0

Hours Required: 8

Condition A is not satisfied

Warrant 1 not satisfied.

Warrant 1: Eight- Hour Volumes

Condition B

Number of Lanes			Major Street Both Approaches Required		Minor Street High Volume Approach Required	
Major	Street	Minor Street	Urban	Rural*	Urban	Rural*
1		1	750	525	75	53
2 or more		1	**900**	630	**75**	53
2 or more		2 or more	900	630	100	70
1		2 or more	750	525	100	70

*Criteria when the 85th percentile speed is greater than 40 mph or when the population is less than 10,000

Warrant 2

Time		Volume		Criteria		
				Major	Minor	
Begin	End	Major	Minor	>= 900	>=75	Both Meet
12:00 AM	1:00 AM	46.49151	1.6115077	N	N	N
1:00 AM	2:00 AM	21.71575	2.3357539	N	N	N
2:00 AM	3:00 AM	24.82719	3.4071893	N	N	N
3:00 AM	4:00 AM	43.39293	1.5729311	N	N	N
4:00 AM	5:00 AM	91.96302	4.2430154	N	N	N
5:00 AM	6:00 AM	344.9877	5.3277192	N	N	N
6:00 AM	7:00 AM	787.1156	15.995607	N	N	N
7:00 AM	8:00 AM	1448.287	35.586727	Y	N	N
8:00 AM	9:00 AM	1991.763	57.843372	Y	N	N
9:00 AM	10:00 AM	1795.417	47.137317	Y	N	N
10:00 AM	11:00 AM	1765.413	42.632975	Y	N	N
11:00 AM	12:00 PM	1831.49	41.390224	Y	N	N
12:00 PM	1:00 PM	1982.39	51.530489	Y	N	N
1:00 PM	2:00 PM	1937.978	50.977558	Y	N	N
2:00 PM	3:00 PM	2125.002	59.502165	Y	N	N
3:00 PM	4:00 PM	2268.518	57.158112	Y	N	N
4:00 PM	5:00 PM	1939.216	67.516159	Y	N	N
5:00 PM	6:00 PM	1756.349	61.108704	Y	N	N
6:00 PM	7:00 PM	1340.882	35.282264	Y	N	N
7:00 PM	8:00 PM	1081.558	25.857536	Y	N	N
8:00 PM	9:00 PM	653.8511	12.271096	N	N	N
9:00 PM	10:00 PM	512.3109	7.4108551	N	N	N
10:00 PM	11:00 PM	297.5019	6.8019292	N	N	N
11:00 PM	12:00 AM	130.1788	4.7187934	N	N	N

Total number of hours, both the major(both approaches) and minor(high volume approach) met:	0
Hours Required:	8

Condition B is not satisfied

Warrant 1 not satisfied.

Warrant 2: Four Hour Vehicular Volumes

This warrant is similar to Warrant 1A, except that the required traffic volumes must be present for at least four hours of an average day. The traffic volumes required are based on curves (Figure 4C-2) shown in the MUTCD.

*** The required traffic volumes for Warrant 2 do not meet for any one hour.**

Warrant 2 is not satisfied

Warrant 3, Condition A- Peak Hour Delay

This warrant is intended for application where traffic conditions will cause undue delay to traffic entering or crossing the major street. The peak hour delay warrant is satisfied when the following conditions exist for one hour (any four consecutive 15-minute periods) of an average weekday:

(1) The total delay by the traffic on a side street controlled by a stop sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach, **and**

(2) the volume on the side street (one direction) equals or exceeds 100 vph for one moving lane of traffic and 150 vph for two moving lanes, **and**

(3) the total traffic volume serviced during 1 hour equals or exceeds 800 vph for an intersection with four (or more) approaches or 650 vph for three approaches.

***Part 1 - N/A**
***Part 2 - N/A**
***Part 3 - N/A**

Warrant 3, Condition B - Peak Hour Volume

This warrant applies to traffic entering from the minor street which encounters undue delay crossing the main street. This wa is satisfied when the main street and side street traffic volumes satisfy the curves shown in Figure 4C-4 of the TMUTCD.

Warrant 3 is N/A.

Warrant 4: Pedestrian Volume

Required*	Existing
100 or more for each of any four hours	_____
OR	
190 or more during any one hour	_____

* For predominant pedestrian crossing speeds less than 3.5 ft/sec, the pedestrian volume may be reduced as much as 50 percent.

Gap Requirements

YES	NO	Is the nearest signal located more than 300 feet away?
YES	NO	For traffic flow which is not platooned, are there less than 60 gaps per hour of adequate length for the pedestrians to cross the street?

Warrant 4 is N/A.

Warrant 5: School Crossing

YES NO Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?

Warrant 5 is N/A.

Warrant 6: Coordinate Systems

YES NO Are the adjacent signals in a signal system?
YES NO Would the resultant spacing be 1000 feet or more?

Warrant 6 is N/A.

Warrant 7: Crash Experience

YES NO Is 80% or more of one of Warrants #1, #2, or #3 met?
YES NO Have there been more than five accidents susceptible to correction by a traffic signal in 12 months?

Warrant 7 is N/A.

Warrant 8: Roadway Network

YES NO Does the major street having an existing or immediately projected entering volume of > 1000 vehicles per hour of a typical weekday?

YES NO Do 5-year projected traffic volumes meet Warrants 1, 2, or 3?

YES NO Is there an entering traffic volume of at least 1000 vehicles per hour for each of any 5 hours on a Saturday or Sunday?

Warrant 8 is N/A.

Summary:

Warrants satisfied: none

Warrants not satisfied: 1, 2

Warrants not applicable: 3, 4, 5, 6, 7, 8

Warrants not included in study: none

Warrant 2 - Four Hour Vehicular Volumes

85th % speed: <= 40 mph
Population: >= 10,000

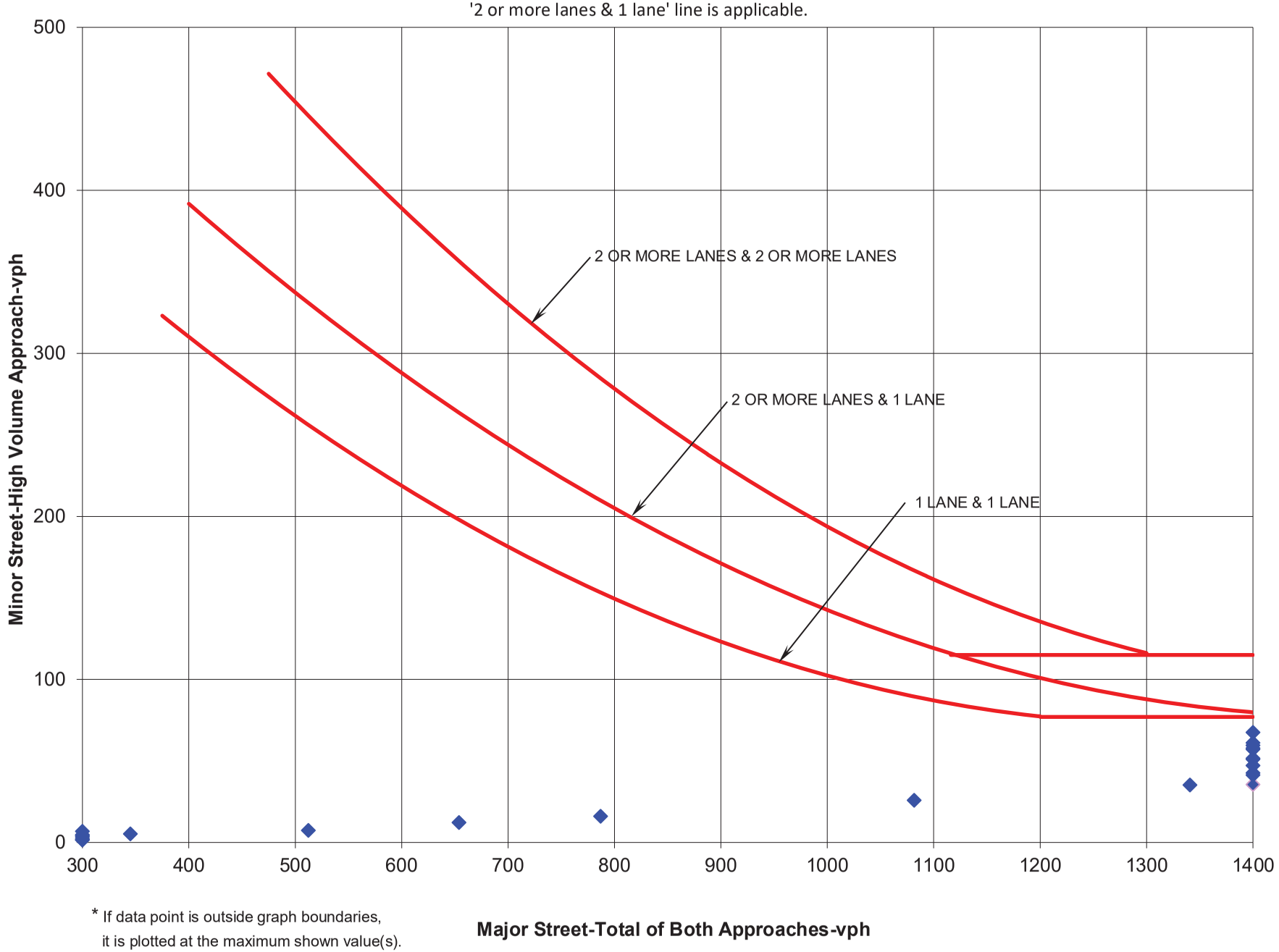
Major Street Lanes: 2
Minor Street Lanes: 1

Use Figure: 4C-1 2&1

Rank	Major Street Volume	Minor Street Volume	Figure 4C-1			Figure 4C-2		
			1&1	2&1	2&2	1&1	2&1	2&2
1	130.1787934	4.71879336	-	N	-	-	-	-
2	46.49150771	1.61150771	-	N	-	-	-	-
3	21.71575386	2.33575386	-	N	-	-	-	-
4	24.82718931	3.40718931	-	N	-	-	-	-
5	43.39293112	1.57293112	-	N	-	-	-	-
6	91.96301542	4.24301542	-	N	-	-	-	-
7	344.9877192	5.3277192	-	N	-	-	-	-
8	787.115607	15.995607	-	N	-	-	-	-
9	1448.286727	35.586727	-	N	-	-	-	-
10	1991.763372	57.8433721	-	N	-	-	-	-
11	1795.417317	47.1373171	-	N	-	-	-	-
12	1765.412975	42.6329746	-	N	-	-	-	-
13	1831.490224	41.3902242	-	N	-	-	-	-
14	1982.390489	51.5304891	-	N	-	-	-	-
15	1937.977558	50.977558	-	N	-	-	-	-
16	2125.002165	59.5021654	-	N	-	-	-	-
17	2268.518112	57.158112	-	N	-	-	-	-
18	1939.216159	67.5161587	-	N	-	-	-	-
19	1756.348704	61.1087044	-	N	-	-	-	-
20	1340.882264	35.2822641	-	N	-	-	-	-
21	1081.557536	25.8575362	-	N	-	-	-	-
22	653.8510959	12.2710959	-	N	-	-	-	-
23	512.3108551	7.41085506	-	N	-	-	-	-
24	297.5019292	6.80192922	-	N	-	-	-	-
			0	0	0	0	0	0
Warrant 2 is not satisfied.			N	N	N	N	N	N

Warrant 2

Figure 4C-1 Four Hour Volume Warrant



* If data point is outside graph boundaries, it is plotted at the maximum shown value(s).

General Description of Intersection

Project Number: 21166

2025 Without

Name of Major Roadway:	SR 89A
Direction:	E/W
# of EB Lanes:	2
# of WB Lanes:	2
85th percentile speed:	40 *mph*
Control #:	
Section #:	
Route #:	
Name of Minor Roadway:	Southwest Drive
Direction:	N/S
# of NB Lanes:	0
# of SB Lanes:	1
85th percentile speed:	25 *mph*
Control #:	
Section #:	
Route #:	
City:	Sedona
Population:	10,300
County:	
District:	
Data Source:	24-hour approach
Date of Survey:	9/2/2021 *(press Ctrl + ;)*
Day of Week:	Thursday
Weather:	Sunny
Surface Conditions:	Dry
	Smooth

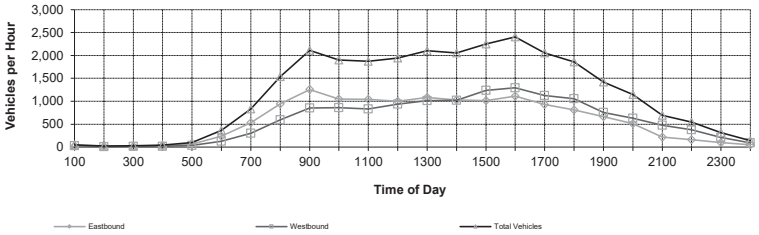
Enter Traffic Volumes:

Automated Traffic Counts

Street: **SR 89A**
Location: **Southwest Drive**

City/State: **Sedona, AZ**
Project #: **21166**
Date: **9/2/2021**
Day of Week: **Thursday**
Data Source: **24-hour approach**

24-Hour Volume: **27,803**



Time	Eastbound		Westbound	
	Vehicles	Peds	Vehicles	Peds
12:00 AM				
12:15 AM				
12:30 AM				
12:45 AM				
1:00 AM	23		26	
1:15 AM				
1:30 AM				
1:45 AM				
2:00 AM	14		9	
2:15 AM				
2:30 AM				
2:45 AM				
3:00 AM	12		14	
3:15 AM				
3:30 AM				
3:45 AM				
4:00 AM	29		17	
4:15 AM				
4:30 AM				
4:45 AM				
5:00 AM	61		36	
5:15 AM				
5:30 AM				
5:45 AM				
6:00 AM	240		126	
6:15 AM				
6:30 AM				
6:45 AM				
7:00 AM	533		302	
7:15 AM				
7:30 AM				
7:45 AM				
8:00 AM	942		594	
8:15 AM				
8:30 AM				
8:45 AM				
9:00 AM	1255		857	
9:15 AM				
9:30 AM				
9:45 AM				
10:00 AM	1047		857	
10:15 AM				
10:30 AM				
10:45 AM				
11:00 AM	1040		832	
11:15 AM				
11:30 AM				
11:45 AM				
12:00 PM	1002		940	

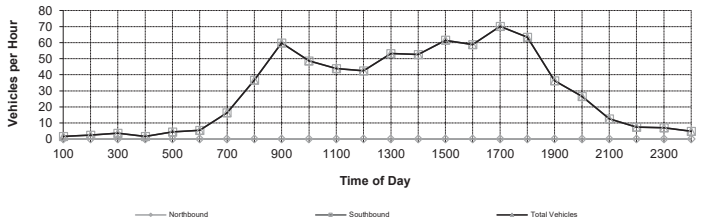
Time	Eastbound		Westbound	
	Vehicles	Peds	Vehicles	Peds
12:00 PM				
12:15 PM				
12:30 PM				
12:45 PM				
1:00 PM	1087		1015	
1:15 PM				
1:30 PM				
1:45 PM				
2:00 PM	1031		1024	
2:15 PM				
2:30 PM				
2:45 PM				
3:00 PM	1013		1240	
3:15 PM				
3:30 PM				
3:45 PM				
4:00 PM	1110		1295	
4:15 PM				
4:30 PM				
4:45 PM				
5:00 PM	933		1124	
5:15 PM				
5:30 PM				
5:45 PM				
6:00 PM	809		1053	
6:15 PM				
6:30 PM				
6:45 PM				
7:00 PM	667		755	
7:15 PM				
7:30 PM				
7:45 PM				
8:00 PM	514		633	
8:15 PM				
8:30 PM				
8:45 PM				
9:00 PM	214		479	
9:15 PM				
9:30 PM				
9:45 PM				
10:00 PM	165		379	
10:15 PM				
10:30 PM				
10:45 PM				
11:00 PM	102		213	
11:15 PM				
11:30 PM				
11:45 PM				
12:00 AM	47		91	
	13,891		13,912	
			24-Hour Volume	27,803

Equipment ID#:

Automated Traffic Counts

Street: **Southwest Drive**
Location: **SR 89A**

City/State: **Sedona, AZ**
Project #:
Date: **9/2/2021**
Day of Week: **Thursday**
Data Source: **24-hour approach**



24-Hour Volume: **722**

Time	Northbound		Southbound	
	Vehicles	Peds	Vehicles	Peds
12:00 AM				
12:15 AM				
12:30 AM				
12:45 AM				
1:00 AM	0		2	
1:15 AM				
1:30 AM				
1:45 AM				
2:00 AM	0		2	
2:15 AM				
2:30 AM				
2:45 AM				
3:00 AM	0		4	
3:15 AM				
3:30 AM				
3:45 AM				
4:00 AM	0		2	
4:15 AM				
4:30 AM				
4:45 AM				
5:00 AM	0		4	
5:15 AM				
5:30 AM				
5:45 AM				
6:00 AM	0		5	
6:15 AM				
6:30 AM				
6:45 AM				
7:00 AM	0		16	
7:15 AM				
7:30 AM				
7:45 AM				
8:00 AM	0		37	
8:15 AM				
8:30 AM				
8:45 AM				
9:00 AM	0		60	
9:15 AM				
9:30 AM				
9:45 AM				
10:00 AM	0		49	
10:15 AM				
10:30 AM				
10:45 AM				
11:00 AM	0		44	
11:15 AM				
11:30 AM				
11:45 AM				
12:00 PM	0		43	

Time	Northbound		Southbound	
	Vehicles	Peds	Vehicles	Peds
12:00 PM				
12:59 PM				
12:30 PM				
12:45 PM				
1:00 PM	0		53	
1:59 PM				
1:30 PM				
1:45 PM				
2:00 PM	0		53	
2:59 PM				
2:30 PM				
2:45 PM				
3:00 PM	0		61	
3:59 PM				
3:30 PM				
3:45 PM				
4:00 PM	0		59	
4:59 PM				
4:30 PM				
12:00 AM				
5:00 PM	0		70	
5:59 PM				
5:30 PM				
5:45 PM				
6:00 PM	0		63	
6:59 PM				
6:30 PM				
6:45 PM				
7:00 PM	0		36	
7:59 PM				
7:30 PM				
7:45 PM				
8:00 PM	0		27	
8:59 PM				
8:30 PM				
8:45 PM				
9:00 PM	0		13	
9:59 PM				
9:30 PM				
9:45 PM				
10:00 PM	0		7	
10:59 PM				
10:30 PM				
10:45 PM				
11:00 PM	0		7	
11:59 PM				
11:30 PM				
11:45 PM				
12:00 AM	0		5	
	0		722	
		24-Hour Volume	722	

Equipment ID#:

TRAFFIC SURVEY - COUNT ANALYSIS

2009 MUTCD WARRANTS

2025 Without

	County:				**District No.:**	
	City:	Sedona	**Population:**	10,300	**Survey Date:**	9/2/2021
	Route #	**Name**		**Control**	**Section**	**85% Speed**
Major		SR 89A			-	40
Minor		Southwest Drive			-	25

Warrant 1: Eight- Hour Volumes

Condition A

Number of Lanes			Major Street Both Approaches Required		Minor Street High Volume Approach Required	
Major	Street	Minor Street	Urban	Rural*	Urban	Rural
1		1	500	350	150	105
2 or more		1	**600**	420	**150**	105
2 or more		2 or more	600	420	200	140
1		2 or more	500	350	200	140

*Criteria when the 85th percentile speed is greater than 40 mph or when the population is less than 10,000

Warrant 1

Time		Volume		Criteria		
Begin	End	Major	Minor	Major >= 600	Minor >= 150	Both Meet
12:00 AM	1:00 AM	49.30095	1.6739399	N	N	N
1:00 AM	2:00 AM	23.02683	2.4606182	N	N	N
2:00 AM	3:00 AM	26.32556	3.5944858	N	N	N
3:00 AM	4:00 AM	46.01508	1.6353633	N	N	N
4:00 AM	5:00 AM	97.51948	4.4303119	N	N	N
5:00 AM	6:00 AM	365.8401	5.3901514	N	N	N
6:00 AM	7:00 AM	834.6889	16.3702	Y	N	N
7:00 AM	8:00 AM	1535.817	36.648074	Y	N	N
8:00 AM	9:00 AM	2112.133	59.841201	Y	N	N
9:00 AM	10:00 AM	1903.924	48.635689	Y	N	N
10:00 AM	11:00 AM	1872.11	43.881618	Y	N	N
11:00 AM	12:00 PM	1942.182	42.514003	Y	N	N
12:00 PM	1:00 PM	2102.198	53.153725	Y	N	N
1:00 PM	2:00 PM	2055.1	52.600794	Y	N	N
2:00 PM	3:00 PM	2253.425	61.499995	Y	N	N
3:00 PM	4:00 PM	2405.619	58.906212	Y	N	N
4:00 PM	5:00 PM	2056.401	70.138309	Y	N	N
5:00 PM	6:00 PM	1862.483	63.481126	Y	N	N
6:00 PM	7:00 PM	1421.919	36.406043	Y	N	N
7:00 PM	8:00 PM	1146.924	26.606722	Y	N	N
8:00 PM	9:00 PM	693.3707	12.520825	Y	N	N
9:00 PM	10:00 PM	543.2772	7.4732872	N	N	N
10:00 PM	11:00 PM	315.4824	6.9892257	N	N	N
11:00 PM	12:00 AM	138.0452	4.9060898	N	N	N

Total number of hours, both the major(both approaches) and minor(high volume approach) met: 0

Hours Required: 8

Condition A is not satisfied

Warrant 1 not satisfied.

Warrant 1: Eight- Hour Volumes

Condition B

Number of Lanes			Major Street Both Approaches Required		Minor Street High Volume Approach Required	
Major	Street	Minor Street	Urban	Rural*	Urban	Rural*
1		1	750	525	75	53
2 or more		1	**900**	630	**75**	53
2 or more		2 or more	900	630	100	70
1		2 or more	750	525	100	70

*Criteria when the 85th percentile speed is greater than 40 mph or when the population is less than 10,000

Warrant 2

Time		Volume		Criteria		
				Major	Minor	
Begin	End	Major	Minor	>= 900	>=75	Both Meet
12:00 AM	1:00 AM	49.30095	1.6739399	N	N	N
1:00 AM	2:00 AM	23.02683	2.4606182	N	N	N
2:00 AM	3:00 AM	26.32556	3.5944858	N	N	N
3:00 AM	4:00 AM	46.01508	1.6353633	N	N	N
4:00 AM	5:00 AM	97.51948	4.4303119	N	N	N
5:00 AM	6:00 AM	365.8401	5.3901514	N	N	N
6:00 AM	7:00 AM	834.6889	16.3702	N	N	N
7:00 AM	8:00 AM	1535.817	36.648074	Y	N	N
8:00 AM	9:00 AM	2112.133	59.841201	Y	N	N
9:00 AM	10:00 AM	1903.924	48.635689	Y	N	N
10:00 AM	11:00 AM	1872.11	43.881618	Y	N	N
11:00 AM	12:00 PM	1942.182	42.514003	Y	N	N
12:00 PM	1:00 PM	2102.198	53.153725	Y	N	N
1:00 PM	2:00 PM	2055.1	52.600794	Y	N	N
2:00 PM	3:00 PM	2253.425	61.499995	Y	N	N
3:00 PM	4:00 PM	2405.619	58.906212	Y	N	N
4:00 PM	5:00 PM	2056.401	70.138309	Y	N	N
5:00 PM	6:00 PM	1862.483	63.481126	Y	N	N
6:00 PM	7:00 PM	1421.919	36.406043	Y	N	N
7:00 PM	8:00 PM	1146.924	26.606722	Y	N	N
8:00 PM	9:00 PM	693.3707	12.520825	N	N	N
9:00 PM	10:00 PM	543.2772	7.4732872	N	N	N
10:00 PM	11:00 PM	315.4824	6.9892257	N	N	N
11:00 PM	12:00 AM	138.0452	4.9060898	N	N	N

Total number of hours, both the major(both approaches) and minor(high volume approach) met:	0
Hours Required:	8

Condition B is not satisfied

Warrant 1 not satisfied.

Warrant 2: Four Hour Vehicular Volumes

This warrant is similar to Warrant 1A, except that the required traffic volumes must be present for at least four hours of an average day. The traffic volumes required are based on curves (Figure 4C-2) shown in the MUTCD.

*** The required traffic volumes for Warrant 2 do not meet for any one hour.**

Warrant 2 is not satisfied

Warrant 3, Condition A- Peak Hour Delay

This warrant is intended for application where traffic conditions will cause undue delay to traffic entering or crossing the major street. The peak hour delay warrant is satisfied when the following conditions exist for one hour (any four consecutive 15-minute periods) of an average weekday:

(1) The total delay by the traffic on a side street controlled by a stop sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach, **and**

(2) the volume on the side street (one direction) equals or exceeds 100 vph for one moving lane of traffic and 150 vph for two moving lanes, **and**

(3) the total traffic volume serviced during 1 hour equals or exceeds 800 vph for an intersection with four (or more) approaches or 650 vph for three approaches.

***Part 1 - N/A**
***Part 2 - N/A**
***Part 3 - N/A**

Warrant 3, Condition B - Peak Hour Volume

This warrant applies to traffic entering from the minor street which encounters undue delay crossing the main street. This wa is satisfied when the main street and side street traffic volumes satisfy the curves shown in Figure 4C-4 of the TMUTCD.

Warrant 3 is N/A.

Warrant 4: Pedestrian Volume

Required*	Existing
100 or more for each of any four hours	_____
OR	
190 or more during any one hour	_____

* For predominant pedestrian crossing speeds less than 3.5 ft/sec, the pedestrian volume may be reduced as much as 50 percent.

Gap Requirements

YES	NO	Is the nearest signal located more than 300 feet away?
YES	NO	For traffic flow which is not platooned, are there less than 60 gaps per hour of adequate length for the pedestrians to cross the street?

Warrant 4 is N/A.

Warrant 5: School Crossing

YES NO Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?

Warrant 5 is N/A.

Warrant 6: Coordinate Systems

YES NO Are the adjacent signals in a signal system?
YES NO Would the resultant spacing be 1000 feet or more?

Warrant 6 is N/A.

Warrant 7: Crash Experience

YES NO Is 80% or more of one of Warrants #1, #2, or #3 met?
YES NO Have there been more than five accidents susceptible to correction by a traffic signal in 12 months?

Warrant 7 is N/A.

Warrant 8: Roadway Network

YES NO Does the major street having an existing or immediately projected entering volume of > 1000 vehicles per hour of a typical weekday?

YES NO Do 5-year projected traffic volumes meet Warrants 1, 2, or 3?

YES NO Is there an entering traffic volume of at least 1000 vehicles per hour for each of any 5 hours on a Saturday or Sunday?

Warrant 8 is N/A.

Summary:

Warrants satisfied: none

Warrants not satisfied: 1, 2

Warrants not applicable: 3, 4, 5, 6, 7, 8

Warrants not included in study: none

Warrant 2 - Four Hour Vehicular Volumes

85th % speed: <= 40 mph
Population: >= 10,000

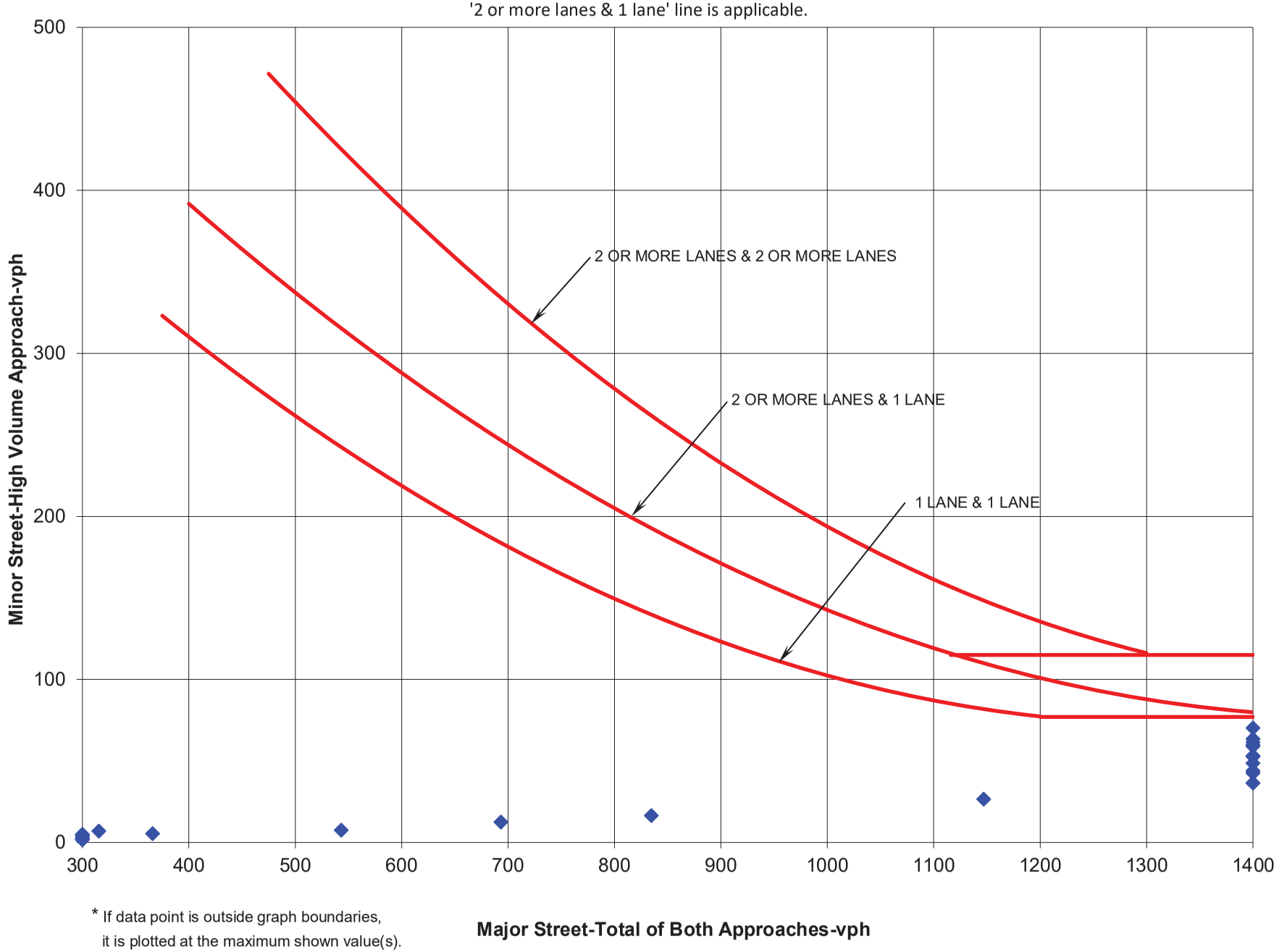
Major Street Lanes: 2
Minor Street Lanes: 1

Use Figure: 4C-1 2&1

Rank	Major Street Volume	Minor Street Volume	Figure 4C-1			Figure 4C-2		
			1&1	2&1	2&2	1&1	2&1	2&2
1	138.0452455	4.90608984	-	N	-	-	-	-
2	49.30095491	1.67393987	-	N	-	-	-	-
3	23.02682922	2.46061818	-	N	-	-	-	-
4	26.32556115	3.59448579	-	N	-	-	-	-
5	46.01508184	1.63536328	-	N	-	-	-	-
6	97.51947766	4.4303119	-	N	-	-	-	-
7	365.8400606	5.39015136	-	N	-	-	-	-
8	834.6889129	16.3702	-	N	-	-	-	-
9	1535.816615	36.6480737	-	N	-	-	-	-
10	2112.132577	59.8412012	-	N	-	-	-	-
11	1903.924411	48.635689	-	N	-	-	-	-
12	1872.109536	43.8816178	-	N	-	-	-	-
13	1942.182444	42.514003	-	N	-	-	-	-
14	2102.197804	53.1537253	-	N	-	-	-	-
15	2055.10029	52.6007941	-	N	-	-	-	-
16	2253.425119	61.4999945	-	N	-	-	-	-
17	2405.619135	58.9062124	-	N	-	-	-	-
18	2056.401323	70.1383094	-	N	-	-	-	-
19	1862.483376	63.4811265	-	N	-	-	-	-
20	1421.919208	36.406043	-	N	-	-	-	-
21	1146.924008	26.6067221	-	N	-	-	-	-
22	693.3706532	12.5208246	-	N	-	-	-	-
23	543.2772064	7.47328722	-	N	-	-	-	-
24	315.4823913	6.9892257	-	N	-	-	-	-
			0	0	0	0	0	0
Warrant 2 is not satisfied.			N	N	N	N	N	N

Warrant 2

Figure 4C-1 Four Hour Volume Warrant



* If data point is outside graph boundaries, it is plotted at the maximum shown value(s).

General Description of Intersection

Project Number:	21166

2022 With

Name of Major Roadway:	SR 89A
Direction:	E/W
# of EB Lanes:	2
# of WB Lanes:	2
85th percentile speed:	35 mph
Control #:	
Section #:	
Route #:	

Name of Minor Roadway:	Southwest Drive
Direction:	N/S
# of NB Lanes:	0
# of SB Lanes:	1
85th percentile speed:	25 mph
Control #:	
Section #:	
Route #:	

City:	Sedona
Population:	10,300
County:	
District:	
Data Source:	24-hour approach
Date of Survey:	9/2/2021 *(press Ctrl + ;)*
Day of Week:	Thursday
Weather:	Sunny
Surface Conditions:	Dry
	Smooth

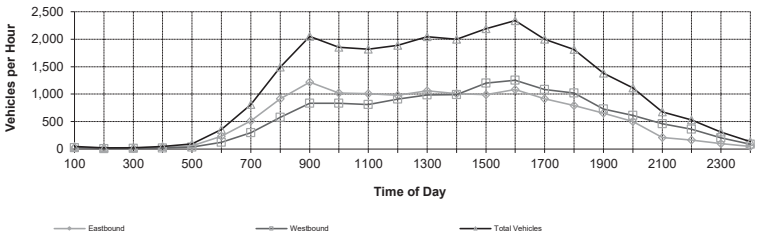
Enter Traffic Volumes:

Automated Traffic Counts

Street: **SR 89A**
Location: **Southwest Drive**

City/State: **Sedona, AZ**
Project #: **21166**
Date: **9/2/2021**
Day of Week: **Thursday**
Data Source: **24-hour approach**

24-Hour Volume: **27,030**



Time	Eastbound		Westbound	
	Vehicles	Peds	Vehicles	Peds
12:00 AM				
12:15 AM				
12:30 AM				
12:45 AM				
1:00 AM	22		25	
1:15 AM				
1:30 AM				
1:45 AM				
2:00 AM	14		9	
2:15 AM				
2:30 AM				
2:45 AM				
3:00 AM	12		14	
3:15 AM				
3:30 AM				
3:45 AM				
4:00 AM	29		16	
4:15 AM				
4:30 AM				
4:45 AM				
5:00 AM	59		36	
5:15 AM				
5:30 AM				
5:45 AM				
6:00 AM	232		124	
6:15 AM				
6:30 AM				
6:45 AM				
7:00 AM	516		295	
7:15 AM				
7:30 AM				
7:45 AM				
8:00 AM	913		580	
8:15 AM				
8:30 AM				
8:45 AM				
9:00 AM	1218		836	
9:15 AM				
9:30 AM				
9:45 AM				
10:00 AM	1018		833	
10:15 AM				
10:30 AM				
10:45 AM				
11:00 AM	1011		809	
11:15 AM				
11:30 AM				
11:45 AM				
12:00 PM	976		912	

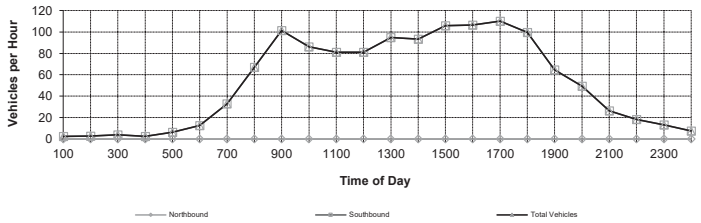
Time	Eastbound		Westbound	
	Vehicles	Peds	Vehicles	Peds
12:00 PM				
12:15 PM				
12:30 PM				
12:45 PM				
1:00 PM	1059		984	
1:15 PM				
1:30 PM				
1:45 PM				
2:00 PM	1005		993	
2:15 PM				
2:30 PM				
2:45 PM				
3:00 PM	992		1199	
3:15 PM				
3:30 PM				
3:45 PM				
4:00 PM	1086		1253	
4:15 PM				
4:30 PM				
4:45 PM				
5:00 PM	913		1087	
5:15 PM				
5:30 PM				
5:45 PM				
6:00 PM	794		1017	
6:15 PM				
6:30 PM				
6:45 PM				
7:00 PM	652		731	
7:15 PM				
7:30 PM				
7:45 PM				
8:00 PM	503		612	
8:15 PM				
8:30 PM				
8:45 PM				
9:00 PM	213		461	
9:15 PM				
9:30 PM				
9:45 PM				
10:00 PM	164		364	
10:15 PM				
10:30 PM				
10:45 PM				
11:00 PM	101		205	
11:15 PM				
11:30 PM				
11:45 PM				
12:00 AM	47		88	
	13,548		13,481	
	24-Hour Volume		27,030	

Equipment ID#:

Automated Traffic Counts

Street: **Southwest Drive**
Location: **SR 89A**

City/State: **Sedona, AZ**
Project #:
Date: **9/2/2021**
Day of Week: **Thursday**
Data Source: **24-hour approach**



24-Hour Volume: **1,270**

Time	Northbound		Southbound	
	Vehicles	Peds	Vehicles	Peds
12:00 AM				
12:15 AM				
12:30 AM				
12:45 AM				
1:00 AM	0		3	
1:15 AM				
1:30 AM				
1:45 AM				
2:00 AM	0		3	
2:15 AM				
2:30 AM				
2:45 AM				
3:00 AM	0		4	
3:15 AM				
3:30 AM				
3:45 AM				
4:00 AM	0		3	
4:15 AM				
4:30 AM				
4:45 AM				
5:00 AM	0		6	
5:15 AM				
5:30 AM				
5:45 AM				
6:00 AM	0		13	
6:15 AM				
6:30 AM				
6:45 AM				
7:00 AM	0		33	
7:15 AM				
7:30 AM				
7:45 AM				
8:00 AM	0		67	
8:15 AM				
8:30 AM				
8:45 AM				
9:00 AM	0		101	
9:15 AM				
9:30 AM				
9:45 AM				
10:00 AM	0		86	
10:15 AM				
10:30 AM				
10:45 AM				
11:00 AM	0		81	
11:15 AM				
11:30 AM				
11:45 AM				
12:00 PM	0		81	

Time	Northbound		Southbound	
	Vehicles	Peds	Vehicles	Peds
12:00 PM				
12:59 PM				
12:30 PM				
12:45 PM				
1:00 PM	0		95	
1:59 PM				
1:30 PM				
1:45 PM				
2:00 PM	0		93	
2:59 PM				
2:30 PM				
2:45 PM				
3:00 PM	0		106	
3:59 PM				
3:30 PM				
3:45 PM				
4:00 PM	0		106	
4:59 PM				
4:30 PM				
12:00 AM				
5:00 PM	0		110	
5:59 PM				
5:30 PM				
5:45 PM				
6:00 PM	0		100	
6:59 PM				
6:30 PM				
6:45 PM				
7:00 PM	0		64	
7:59 PM				
7:30 PM				
7:45 PM				
8:00 PM	0		49	
8:59 PM				
8:30 PM				
8:45 PM				
9:00 PM	0		26	
9:59 PM				
9:30 PM				
9:45 PM				
10:00 PM	0		18	
10:59 PM				
10:30 PM				
10:45 PM				
11:00 PM	0		13	
11:59 PM				
11:30 PM				
11:45 PM				
12:00 AM	0		8	
	0		1,270	
			24-Hour Volume	1,270

Equipment ID#:

TRAFFIC SURVEY - COUNT ANALYSIS
2009 MUTCD WARRANTS

2022 With

	County:				**District No.:**	
	City:	Sedona	**Population:**	10,300	**Survey Date:**	9/2/2021
	Route #	**Name**		**Control**	**Section**	**85% Speed**
Major		SR 89A			-	35
Minor		Southwest Drive			-	25

Warrant 1: Eight- Hour Volumes

Condition A

Number of Lanes			Major Street Both Approaches Required		Minor Street High Volume Approach Required	
Major	Street	Minor Street	Urban	Rural*	Urban	Rural
1		1	500	350	150	105
2 or more		1	**600**	420	**150**	105
2 or more		2 or more	600	420	200	140
1		2 or more	500	350	200	140

*Criteria when the 85th percentile speed is greater than 40 mph or when the population is less than 10,000

Warrant 1

Time		Volume		Criteria		
Begin	End	Major	Minor	Major >= 600	Minor >= 150	Both Meet
12:00 AM	1:00 AM	47.94079	2.6319032	N	N	N
1:00 AM	2:00 AM	22.4404	2.8459516	N	N	N
2:00 AM	3:00 AM	25.67786	4.0061171	N	N	N
3:00 AM	4:00 AM	44.7477	2.5267791	N	N	N
4:00 AM	5:00 AM	94.86158	6.2838064	N	N	N
5:00 AM	6:00 AM	355.5423	12.75886	N	N	N
6:00 AM	7:00 AM	811.3123	33.031775	Y	N	N
7:00 AM	8:00 AM	1492.994	67.063709	Y	N	N
8:00 AM	9:00 AM	2053.515	101.32109	Y	N	N
9:00 AM	10:00 AM	1850.931	86.2229	Y	N	N
10:00 AM	11:00 AM	1819.887	80.986535	Y	N	N
11:00 AM	12:00 PM	1887.918	81.1191	Y	N	N
12:00 PM	1:00 PM	2043.67	94.675472	Y	N	N
1:00 PM	2:00 PM	1997.902	93.168693	Y	N	N
2:00 PM	3:00 PM	2190.819	105.84143	Y	N	N
3:00 PM	4:00 PM	2338.588	106.49202	Y	N	N
4:00 PM	5:00 PM	1999.676	110.0844	Y	N	N
5:00 PM	6:00 PM	1811.106	99.661907	Y	N	N
6:00 PM	7:00 PM	1382.344	64.474448	Y	N	N
7:00 PM	8:00 PM	1114.923	49.348815	Y	N	N
8:00 PM	9:00 PM	673.9205	26.401355	Y	N	N
9:00 PM	10:00 PM	527.9694	18.435563	N	N	N
10:00 PM	11:00 PM	306.6702	13.25704	N	N	N
11:00 PM	12:00 AM	134.2431	7.5803372	N	N	N

Total number of hours, both the major(both approaches) and minor(high volume approach) met: 0

Hours Required: 8

Condition A is not satisfied

Warrant 1 satisfied.

Warrant 1: Eight- Hour Volumes

Condition B

Number of Lanes			Major Street Both Approaches Required		Minor Street High Volume Approach Required	
Major	Street	Minor Street	Urban	Rural*	Urban	Rural*
1		1	750	525	75	53
2 or more		1	**900**	630	**75**	53
2 or more		2 or more	900	630	100	70
1		2 or more	750	525	100	70

*Criteria when the 85th percentile speed is greater than 40 mph or when the population is less than 10,000

Warrant 2

Time		Volume		Criteria		
				Major	Minor	
Begin	End	Major	Minor	>= 900	>=75	Both Meet
12:00 AM	1:00 AM	47.94079	2.6319032	N	N	N
1:00 AM	2:00 AM	22.4404	2.8459516	N	N	N
2:00 AM	3:00 AM	25.67786	4.0061171	N	N	N
3:00 AM	4:00 AM	44.7477	2.5267791	N	N	N
4:00 AM	5:00 AM	94.86158	6.2838064	N	N	N
5:00 AM	6:00 AM	355.5423	12.75886	N	N	N
6:00 AM	7:00 AM	811.3123	33.031775	N	N	N
7:00 AM	8:00 AM	1492.994	67.063709	Y	N	N
8:00 AM	9:00 AM	2053.515	101.32109	Y	Y	Y
9:00 AM	10:00 AM	1850.931	86.2229	Y	Y	Y
10:00 AM	11:00 AM	1819.887	80.986535	Y	Y	Y
11:00 AM	12:00 PM	1887.918	81.1191	Y	Y	Y
12:00 PM	1:00 PM	2043.67	94.675472	Y	Y	Y
1:00 PM	2:00 PM	1997.902	93.168693	Y	Y	Y
2:00 PM	3:00 PM	2190.819	105.84143	Y	Y	Y
3:00 PM	4:00 PM	2338.588	106.49202	Y	Y	Y
4:00 PM	5:00 PM	1999.676	110.0844	Y	Y	Y
5:00 PM	6:00 PM	1811.106	99.661907	Y	Y	Y
6:00 PM	7:00 PM	1382.344	64.474448	Y	N	N
7:00 PM	8:00 PM	1114.923	49.348815	Y	N	N
8:00 PM	9:00 PM	673.9205	26.401355	N	N	N
9:00 PM	10:00 PM	527.9694	18.435563	N	N	N
10:00 PM	11:00 PM	306.6702	13.25704	N	N	N
11:00 PM	12:00 AM	134.2431	7.5803372	N	N	N

Total number of hours, both the major(both approaches) and minor(high volume approach) met: 10

Hours Required: 8

Condition B is satisfied

Warrant 1 satisfied.

Warrant 2: Four Hour Vehicular Volumes

This warrant is similar to Warrant 1A, except that the required traffic volumes must be present for at least four hours of an average day. The traffic volumes required are based on curves (Figure 4C-2) shown in the MUTCD.

*** The required traffic is present for at least four hours.**

Warrant 2 is satisfied

Warrant 3, Condition A- Peak Hour Delay

This warrant is intended for application where traffic conditions will cause undue delay to traffic entering or crossing the major street. The peak hour delay warrant is satisfied when the following conditions exist for one hour (any four consecutive 15-minute periods) of an average weekday:

(1) The total delay by the traffic on a side street controlled by a stop sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach, **and**

(2) the volume on the side street (one direction) equals or exceeds 100 vph for one moving lane of traffic and 150 vph for two moving lanes, **and**

(3) the total traffic volume serviced during 1 hour equals or exceeds 800 vph for an intersection with four (or more) approaches or 650 vph for three approaches.

***Part 1 - N/A**
***Part 2 - N/A**
***Part 3 - N/A**

Warrant 3, Condition B - Peak Hour Volume

This warrant applies to traffic entering from the minor street which encounters undue delay crossing the main street. This wa is satisfied when the main street and side street traffic volumes satisfy the curves shown in Figure 4C-4 of the TMUTCD.

Warrant 3 is N/A.

Warrant 4: Pedestrian Volume

Required*	Existing
100 or more for each of any four hours	_____
OR	
190 or more during any one hour	_____

* For predominant pedestrian crossing speeds less than 3.5 ft/sec, the pedestrian volume may be reduced as much as 50 percent.

Gap Requirements

YES	NO	Is the nearest signal located more than 300 feet away?
YES	NO	For traffic flow which is not platooned, are there less than 60 gaps per hour of adequate length for the pedestrians to cross the street?

Warrant 4 is N/A.

Warrant 5: School Crossing

YES NO Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?

Warrant 5 is N/A.

Warrant 6: Coordinate Systems

YES NO Are the adjacent signals in a signal system?
YES NO Would the resultant spacing be 1000 feet or more?

Warrant 6 is N/A.

Warrant 7: Crash Experience

YES NO Is 80% or more of one of Warrants #1, #2, or #3 met?
YES NO Have there been more than five accidents susceptible to correction by a traffic signal in 12 months?

Warrant 7 is N/A.

Warrant 8: Roadway Network

YES NO Does the major street having an existing or immediately projected entering volume of > 1000 vehicles per hour of a typical weekday?

YES NO Do 5-year projected traffic volumes meet Warrants 1, 2, or 3?

YES NO Is there an entering traffic volume of at least 1000 vehicles per hour for each of any 5 hours on a Saturday or Sunday?

Warrant 8 is N/A.

Summary:

Warrants satisfied: 1, 2

Warrants not satisfied: none

Warrants not applicable: 3, 4, 5, 6, 7, 8

Warrants not included in study: none

Warrant 2 - Four Hour Vehicular Volumes

85th % speed: <= 40 mph
Population: >= 10,000

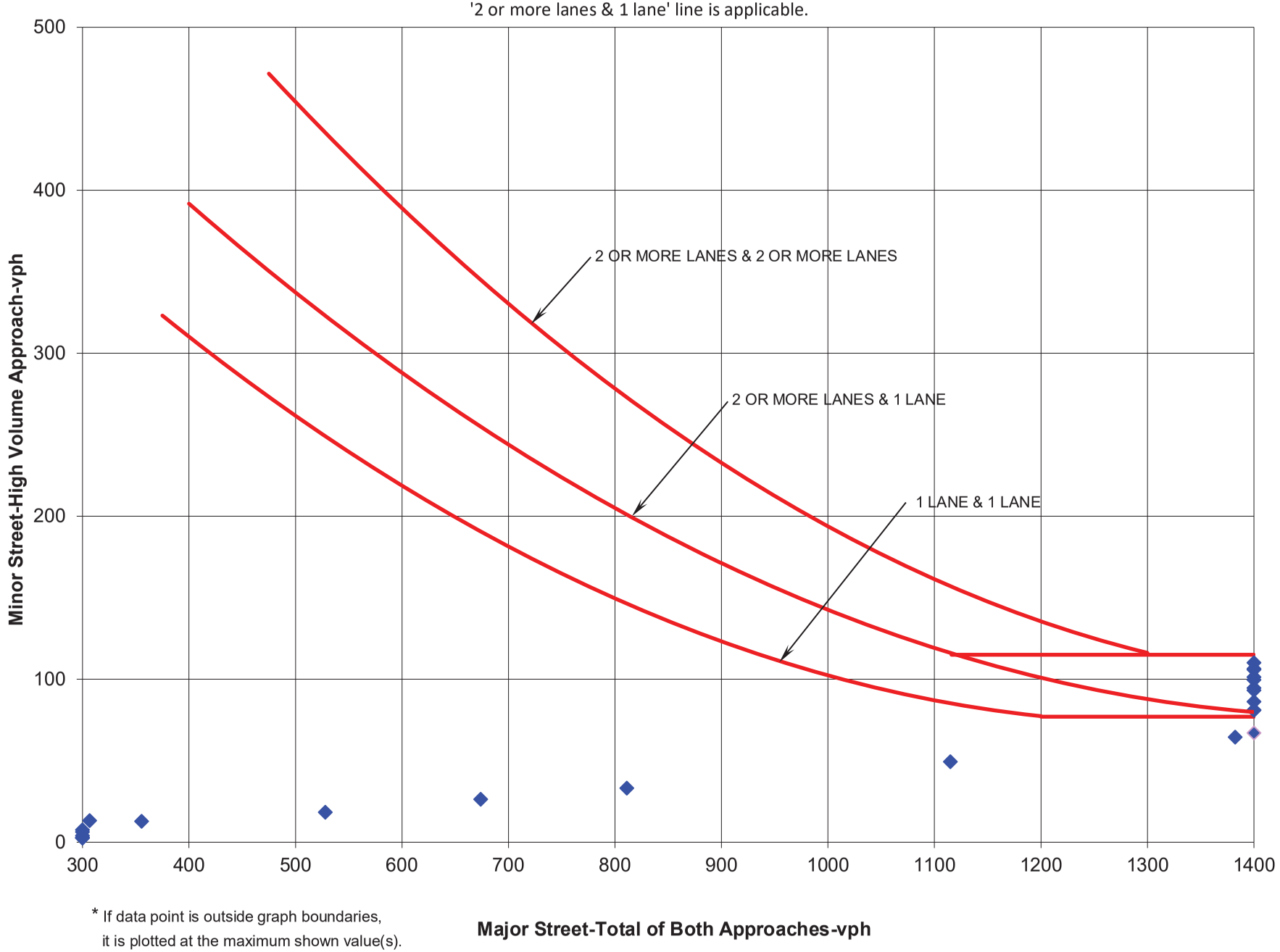
Major Street Lanes: 2
Minor Street Lanes: 1

Use Figure: 4C-1 2&1

Rank	Major Street Volume	Minor Street Volume	Figure 4C-1			Figure 4C-2		
			1&1	2&1	2&2	1&1	2&1	2&2
1	134.2430877	7.58033721	-	N	-	-	-	-
2	47.94079096	2.63190319	-	N	-	-	-	-
3	22.44039548	2.84595159	-	N	-	-	-	-
4	25.67785556	4.00611709	-	N	-	-	-	-
5	44.74769589	2.52677907	-	N	-	-	-	-
6	94.86158191	6.28380638	-	N	-	-	-	-
7	355.542282	12.7588602	-	N	-	-	-	-
8	811.312336	33.031775	-	N	-	-	-	-
9	1492.993964	67.0637093	-	N	-	-	-	-
10	2053.515441	101.321092	-	Y	-	-	-	-
11	1850.931167	86.2229004	-	Y	-	-	-	-
12	1819.887121	80.9865351	-	Y	-	-	-	-
13	1887.917752	81.1191003	-	Y	-	-	-	-
14	2043.669965	94.6754718	-	Y	-	-	-	-
15	1997.90227	93.1686927	-	Y	-	-	-	-
16	2190.818528	105.84143	-	Y	-	-	-	-
17	2338.587806	106.492015	-	Y	-	-	-	-
18	1999.676475	110.084396	-	Y	-	-	-	-
19	1811.106406	99.6619075	-	Y	-	-	-	-
20	1382.344367	64.4744478	-	N	-	-	-	-
21	1114.922557	49.3488147	-	N	-	-	-	-
22	673.9205182	26.401355	-	N	-	-	-	-
23	527.9694153	18.4355627	-	N	-	-	-	-
24	306.670221	13.2570397	-	N	-	-	-	-
			0	10	0	0	0	0
Warrant 2 is satisfied.			N	Y	N	N	N	N

Warrant 2

Figure 4C-1 Four Hour Volume Warrant



* If data point is outside graph boundaries, it is plotted at the maximum shown value(s).

General Description of Intersection

2025 With

Project Number:	21166
Name of Major Roadway:	SR 89A
Direction:	E/W
# of EB Lanes:	2
# of WB Lanes:	2
85th percentile speed:	40 mph
Control #:	
Section #:	
Route #:	
Name of Minor Roadway:	Southwest Drive
Direction:	N/S
# of NB Lanes:	0
# of SB Lanes:	1
85th percentile speed:	25 mph
Control #:	
Section #:	
Route #:	
City:	Sedona
Population:	10,300
County:	
District:	
Data Source:	24-hour approach
Date of Survey:	9/2/2021 *(press Ctrl + ;)*
Day of Week:	Thursday
Weather:	Sunny
Surface Conditions:	Dry
	Smooth

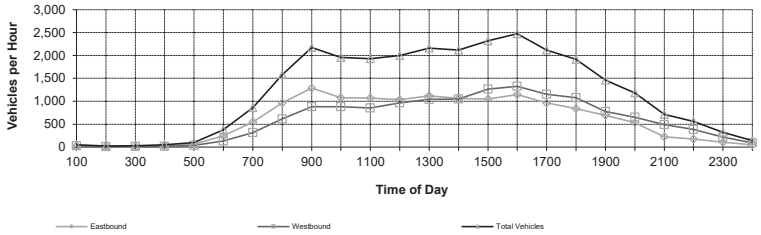
Enter Traffic Volumes:

Automated Traffic Counts

Street: **SR 89A**
Location: **Southwest Drive**

City/State: **Sedona, AZ**
Project #: **21166**
Date: **9/2/2021**
Day of Week: **Thursday**
Data Source: **24-hour approach**

24-Hour Volume: **28,614**



Time	Eastbound		Westbound	
	Vehicles	Peds	Vehicles	Peds
12:00 AM				
12:15 AM				
12:30 AM				
12:45 AM				
1:00 AM	24		27	
1:15 AM				
1:30 AM				
1:45 AM				
2:00 AM	15		9	
2:15 AM				
2:30 AM				
2:45 AM				
3:00 AM	13		15	
3:15 AM				
3:30 AM				
3:45 AM				
4:00 AM	30		17	
4:15 AM				
4:30 AM				
4:45 AM				
5:00 AM	63		38	
5:15 AM				
5:30 AM				
5:45 AM				
6:00 AM	246		131	
6:15 AM				
6:30 AM				
6:45 AM				
7:00 AM	546		312	
7:15 AM				
7:30 AM				
7:45 AM				
8:00 AM	967		614	
8:15 AM				
8:30 AM				
8:45 AM				
9:00 AM	1290		884	
9:15 AM				
9:30 AM				
9:45 AM				
10:00 AM	1077		882	
10:15 AM				
10:30 AM				
10:45 AM				
11:00 AM	1070		856	
11:15 AM				
11:30 AM				
11:45 AM				
12:00 PM	1034		965	

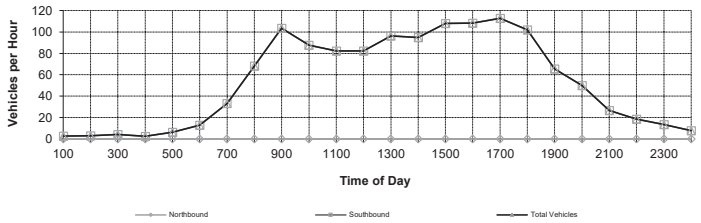
Time	Eastbound		Westbound	
	Vehicles	Peds	Vehicles	Peds
12:00 PM				
12:15 PM				
12:30 PM				
12:45 PM				
1:00 PM	1122		1042	
1:15 PM				
1:30 PM				
1:45 PM				
2:00 PM	1064		1051	
2:15 PM				
2:30 PM				
2:45 PM				
3:00 PM	1050		1269	
3:15 PM				
3:30 PM				
3:45 PM				
4:00 PM	1149		1326	
4:15 PM				
4:30 PM				
4:45 PM				
5:00 PM	966		1151	
5:15 PM				
5:30 PM				
5:45 PM				
6:00 PM	840		1077	
6:15 PM				
6:30 PM				
6:45 PM				
7:00 PM	690		774	
7:15 PM				
7:30 PM				
7:45 PM				
8:00 PM	532		648	
8:15 PM				
8:30 PM				
8:45 PM				
9:00 PM	225		488	
9:15 PM				
9:30 PM				
9:45 PM				
10:00 PM	173		385	
10:15 PM				
10:30 PM				
10:45 PM				
11:00 PM	107		217	
11:15 PM				
11:30 PM				
11:45 PM				
12:00 AM	49		93	
	14,342		14,272	
	24-Hour Volume		28,614	

Equipment ID#:

Automated Traffic Counts

Street: **Southwest Drive**
Location: **SR 89A**

City/State: **Sedona, AZ**
Project #:
Date: **9/2/2021**
Day of Week: **Thursday**
Data Source: **24-hour approach**



24-Hour Volume: **1,293**

Time	Northbound		Southbound	
	Vehicles	Peds	Vehicles	Peds
12:00 AM				
12:15 AM				
12:30 AM				
12:45 AM				
1:00 AM	0		3	
1:15 AM				
1:30 AM				
1:45 AM				
2:00 AM	0		3	
2:15 AM				
2:30 AM				
2:45 AM				
3:00 AM	0		4	
3:15 AM				
3:30 AM				
3:45 AM				
4:00 AM	0		3	
4:15 AM				
4:30 AM				
4:45 AM				
5:00 AM	0		6	
5:15 AM				
5:30 AM				
5:45 AM				
6:00 AM	0		13	
6:15 AM				
6:30 AM				
6:45 AM				
7:00 AM	0		33	
7:15 AM				
7:30 AM				
7:45 AM				
8:00 AM	0		68	
8:15 AM				
8:30 AM				
8:45 AM				
9:00 AM	0		103	
9:15 AM				
9:30 AM				
9:45 AM				
10:00 AM	0		88	
10:15 AM				
10:30 AM				
10:45 AM				
11:00 AM	0		82	
11:15 AM				
11:30 AM				
11:45 AM				
12:00 PM	0		82	

Time	Northbound		Southbound	
	Vehicles	Peds	Vehicles	Peds
12:00 PM				
12:59 PM				
12:30 PM				
12:45 PM				
1:00 PM	0		96	
1:59 PM				
1:30 PM				
1:45 PM				
2:00 PM	0		95	
2:59 PM				
2:30 PM				
2:45 PM				
3:00 PM	0		108	
3:59 PM				
3:30 PM				
3:45 PM				
4:00 PM	0		108	
4:59 PM				
4:30 PM				
12:00 AM				
5:00 PM	0		113	
5:59 PM				
5:30 PM				
5:45 PM				
6:00 PM	0		102	
6:59 PM				
6:30 PM				
6:45 PM				
7:00 PM	0		66	
7:59 PM				
7:30 PM				
7:45 PM				
8:00 PM	0		50	
8:59 PM				
8:30 PM				
8:45 PM				
9:00 PM	0		27	
9:59 PM				
9:30 PM				
9:45 PM				
10:00 PM	0		18	
10:59 PM				
10:30 PM				
10:45 PM				
11:00 PM	0		13	
11:59 PM				
11:30 PM				
11:45 PM				
12:00 AM	0		8	
	0		1,293	
		24-Hour Volume	1,293	

Equipment ID#:

TRAFFIC SURVEY - COUNT ANALYSIS

2009 MUTCD WARRANTS

2025 With

County:					**District No.:**	
City:	Sedona	**Population:**	10,300		**Survey Date:**	9/2/2021
	Route #	**Name**		**Control**	**Section**	**85% Speed**
Major		SR 89A			-	40
Minor		Southwest Drive			-	25

Warrant 1: Eight- Hour Volumes

Condition A

Number of Lanes			Major Street Both Approaches Required		Minor Street High Volume Approach Required	
Major	Street	Minor Street	Urban	Rural*	Urban	Rural
1		1	500	350	150	105
2 or more		1	**600**	420	**150**	105
2 or more		2 or more	600	420	200	140
1		2 or more	500	350	200	140

*Criteria when the 85th percentile speed is greater than 40 mph or when the population is less than 10,000

Warrant 1

Time		Volume		Criteria		
				Major	Minor	
Begin	End	Major	Minor	>= 600	>= 150	Both Meet
12:00 AM	1:00 AM	50.75024	2.6943353	N	N	N
1:00 AM	2:00 AM	23.75147	2.9708159	N	N	N
2:00 AM	3:00 AM	27.17623	4.1934136	N	N	N
3:00 AM	4:00 AM	47.36985	2.5892112	N	N	N
4:00 AM	5:00 AM	100.418	6.4711029	N	N	N
5:00 AM	6:00 AM	376.3946	12.821292	N	N	N
6:00 AM	7:00 AM	858.8856	33.406368	Y	N	N
7:00 AM	8:00 AM	1580.524	68.125056	Y	N	N
8:00 AM	9:00 AM	2173.885	103.31892	Y	N	N
9:00 AM	10:00 AM	1959.438	87.721272	Y	N	N
10:00 AM	11:00 AM	1926.584	82.235178	Y	N	N
11:00 AM	12:00 PM	1998.61	82.242879	Y	N	N
12:00 PM	1:00 PM	2163.477	96.298708	Y	N	N
1:00 PM	2:00 PM	2115.025	94.791929	Y	N	N
2:00 PM	3:00 PM	2319.241	107.83926	Y	N	N
3:00 PM	4:00 PM	2475.689	108.24012	Y	N	N
4:00 PM	5:00 PM	2116.862	112.70655	Y	N	N
5:00 PM	6:00 PM	1917.241	102.03433	Y	N	N
6:00 PM	7:00 PM	1463.381	65.598227	Y	N	N
7:00 PM	8:00 PM	1180.289	50.098001	Y	N	N
8:00 PM	9:00 PM	713.4401	26.651084	Y	N	N
9:00 PM	10:00 PM	558.9358	18.497995	N	N	N
10:00 PM	11:00 PM	324.6507	13.444336	N	N	N
11:00 PM	12:00 AM	142.1095	7.7676337	N	N	N

Total number of hours, both the major(both approaches) and minor(high volume approach) met: 0

Hours Required: 8

Condition A is not satisfied

Warrant 1 satisfied.

Warrant 1: Eight- Hour Volumes

Condition B

Number of Lanes			Major Street Both Approaches Required		Minor Street High Volume Approach Required	
Major	Street	Minor Street	Urban	Rural*	Urban	Rural*
1		1	750	525	75	53
2 or more		1	**900**	630	**75**	53
2 or more		2 or more	900	630	100	70
1		2 or more	750	525	100	70

*Criteria when the 85th percentile speed is greater than 40 mph or when the population is less than 10,000

Warrant 2

Time		Volume		Criteria		
Begin	End	Major	Minor	Major >= 900	Minor >=75	Both Meet
12:00 AM	1:00 AM	50.75024	2.6943353	N	N	N
1:00 AM	2:00 AM	23.75147	2.9708159	N	N	N
2:00 AM	3:00 AM	27.17623	4.1934136	N	N	N
3:00 AM	4:00 AM	47.36985	2.5892112	N	N	N
4:00 AM	5:00 AM	100.418	6.4711029	N	N	N
5:00 AM	6:00 AM	376.3946	12.821292	N	N	N
6:00 AM	7:00 AM	858.8856	33.406368	N	N	N
7:00 AM	8:00 AM	1580.524	68.125056	Y	N	N
8:00 AM	9:00 AM	2173.885	103.31892	Y	Y	Y
9:00 AM	10:00 AM	1959.438	87.721272	Y	Y	Y
10:00 AM	11:00 AM	1926.584	82.235178	Y	Y	Y
11:00 AM	12:00 PM	1998.61	82.242879	Y	Y	Y
12:00 PM	1:00 PM	2163.477	96.298708	Y	Y	Y
1:00 PM	2:00 PM	2115.025	94.791929	Y	Y	Y
2:00 PM	3:00 PM	2319.241	107.83926	Y	Y	Y
3:00 PM	4:00 PM	2475.689	108.24012	Y	Y	Y
4:00 PM	5:00 PM	2116.862	112.70655	Y	Y	Y
5:00 PM	6:00 PM	1917.241	102.03433	Y	Y	Y
6:00 PM	7:00 PM	1463.381	65.598227	Y	N	N
7:00 PM	8:00 PM	1180.289	50.098001	Y	N	N
8:00 PM	9:00 PM	713.4401	26.651084	N	N	N
9:00 PM	10:00 PM	558.9358	18.497995	N	N	N
10:00 PM	11:00 PM	324.6507	13.444336	N	N	N
11:00 PM	12:00 AM	142.1095	7.7676337	N	N	N

Total number of hours, both the major(both approaches) and minor(high volume approach) met:	10
Hours Required:	8

Condition B is satisfied

Warrant 1 satisfied.

Warrant 2: Four Hour Vehicular Volumes

This warrant is similar to Warrant 1A, except that the required traffic volumes must be present for at least four hours of an average day. The traffic volumes required are based on curves (Figure 4C-2) shown in the MUTCD.

*** The required traffic is present for at least four hours.**

Warrant 2 is satisfied

Warrant 3, Condition A- Peak Hour Delay

This warrant is intended for application where traffic conditions will cause undue delay to traffic entering or crossing the major street. The peak hour delay warrant is satisfied when the following conditions exist for one hour (any four consecutive 15-minute periods) of an average weekday:

(1) The total delay by the traffic on a side street controlled by a stop sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach, **and**

(2) the volume on the side street (one direction) equals or exceeds 100 vph for one moving lane of traffic and 150 vph for two moving lanes, **and**

(3) the total traffic volume serviced during 1 hour equals or exceeds 800 vph for an intersection with four (or more) approaches or 650 vph for three approaches.

***Part 1 - N/A**
***Part 2 - N/A**
***Part 3 - N/A**

Warrant 3, Condition B - Peak Hour Volume

This warrant applies to traffic entering from the minor street which encounters undue delay crossing the main street. This wa is satisfied when the main street and side street traffic volumes satisfy the curves shown in Figure 4C-4 of the TMUTCD.

Warrant 3 is N/A.

Warrant 4: Pedestrian Volume

Required*	Existing
100 or more for each of any four hours	_____
OR	
190 or more during any one hour	_____

* For predominant pedestrian crossing speeds less than 3.5 ft/sec, the pedestrian volume may be reduced as much as 50 percent.

Gap Requirements

YES	NO	Is the nearest signal located more than 300 feet away?
YES	NO	For traffic flow which is not platooned, are there less than 60 gaps per hour of adequate length for the pedestrians to cross the street?

Warrant 4 is N/A.

Warrant 5: School Crossing

YES NO Is the number of adequate gaps in traffic stream during the period when the children are using the crossing less than the number of minutes in the same period?

Warrant 5 is N/A.

Warrant 6: Coordinate Systems

YES NO Are the adjacent signals in a signal system?
YES NO Would the resultant spacing be 1000 feet or more?

Warrant 6 is N/A.

Warrant 7: Crash Experience

YES NO Is 80% or more of one of Warrants #1, #2, or #3 met?
YES NO Have there been more than five accidents susceptible to correction by a traffic signal in 12 months?

Warrant 7 is N/A.

Warrant 8: Roadway Network

YES NO Does the major street having an existing or immediately projected entering volume of > 1000 vehicles per hour of a typical weekday?

YES NO Do 5-year projected traffic volumes meet Warrants 1, 2, or 3?

YES NO Is there an entering traffic volume of at least 1000 vehicles per hour for each of any 5 hours on a Saturday or Sunday?

Warrant 8 is N/A.

Summary:

Warrants satisfied: 1, 2

Warrants not satisfied: none

Warrants not applicable: 3, 4, 5, 6, 7, 8

Warrants not included in study: none

Warrant 2 - Four Hour Vehicular Volumes

85th % speed: <= 40 mph
Population: >= 10,000

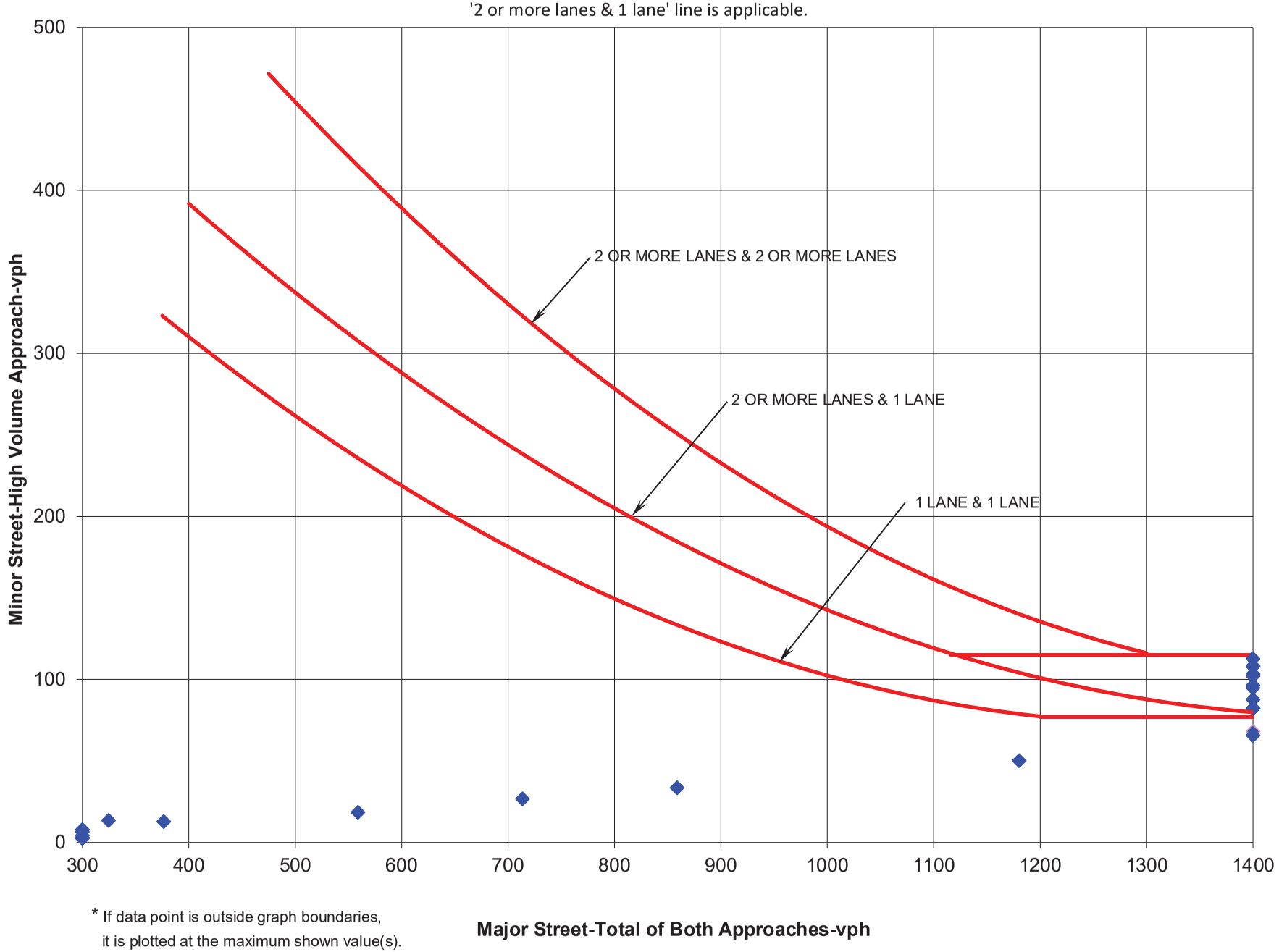
Major Street Lanes: 2
Minor Street Lanes: 1

Use Figure: 4C-1 2&1

Rank	Major Street Volume	Minor Street Volume	Figure 4C-1			Figure 4C-2		
			1&1	2&1	2&2	1&1	2&1	2&2
1	142.1095398	7.76763369	-	N	-	-	-	-
2	50.75023816	2.69433535	-	N	-	-	-	-
3	23.75147084	2.97081591	-	N	-	-	-	-
4	27.1762274	4.19341357	-	N	-	-	-	-
5	47.36984661	2.58921123	-	N	-	-	-	-
6	100.4180442	6.47110286	-	N	-	-	-	-
7	376.3946234	12.8212923	-	N	-	-	-	-
8	858.8856419	33.4063679	-	N	-	-	-	-
9	1580.523853	68.125056	-	N	-	-	-	-
10	2173.884645	103.318922	-	Y	-	-	-	-
11	1959.438261	87.7212723	-	Y	-	-	-	-
12	1926.583682	82.2351783	-	Y	-	-	-	-
13	1998.609972	82.2428791	-	Y	-	-	-	-
14	2163.47728	96.298708	-	Y	-	-	-	-
15	2115.025002	94.7919289	-	Y	-	-	-	-
16	2319.241482	107.839259	-	Y	-	-	-	-
17	2475.68883	108.240116	-	Y	-	-	-	-
18	2116.861639	112.706547	-	Y	-	-	-	-
19	1917.241078	102.03433	-	Y	-	-	-	-
20	1463.381311	65.5982266	-	N	-	-	-	-
21	1180.289029	50.0980007	-	N	-	-	-	-
22	713.4400755	26.6510837	-	N	-	-	-	-
23	558.9357667	18.4979949	-	N	-	-	-	-
24	324.6506831	13.4443362	-	N	-	-	-	-
			0	10	0	0	0	0
Warrant 2 is satisfied.			N	Y	N	N	N	N

Warrant 2

Figure 4C-1 Four Hour Volume Warrant



* If data point is outside graph boundaries, it is plotted at the maximum shown value(s).

SOUTHWEST CIRCLE K
SOUTHWEST DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS

APPENDIX

Crash Data

Southwest Circle K TIA
2016-2020 Crash Summary

IncidentID	IncidentDate	CollisionManner	TotalInjuries	TotalFatalities	Onroad	CrossingFeature
3727397	11/20/2020	3	0	0	SR-89A	Tortilla Dr
3608757	10/11/2019	4	0	0	SR-89A	Tortilla Dr
3525388	4/25/2019	6	0	0	Tortilla Dr	SR-89A
3457437	11/6/2018	2	0	0	SR-89A	Tortilla Dr
3234849	5/16/2017	4	0	0	SR-89A	Tortilla Dr
3058684	2/15/2016	3	0	0	SR-89A	Tortilla Dr
3506508	3/19/2019	6	0	0	SR-89A	Southwest Dr
3566494	8/22/2019	4	0	0	SR-89A	Southwest Dr
3608755	10/7/2019	3	0	0	SR-89A	Southwest Dr
3405734	6/9/2018	6	0	0	SR-89A	Tortilla Dr
3379115	5/11/2018	2	2	0	SR-89A	Southwest Dr
3379117	5/8/2018	2	1	0	SR-89A	Southwest Dr
3204850	2/24/2017	1	0	0	SR-89A	Southwest Dr
3234851	4/28/2017	4	1	0	SR-89A	Southwest Dr
3187800	11/26/2016	3	2	0	SR-89A	Southwest Dr
3426852	9/24/2018	4	0	0	SR-89A	Tortilla Dr

LEGEND

Collision Manner

1 - Single Vehicle
2 - Angle
3 - Left Turn
4 - Rear End
5 - Head On
6 - Sideswipe Same Direction
7 - Sideswipe Opposite Direction
8 - Rear to Side
9 - Rear to Rear
10 - U Turn
97 - Other
99 - Unknown