TRAFFIC IMPACT ANALYSIS

Harvest Crossing Filing 3

Prepared for:

Jerry B. Richmond III
Integrity Land Ventures, LLC
7200 S Alton Way
Centennial, CO 80112

Prepared by:

Felsburg Holt & Ullevig
6400 S Fiddlers Green Circle, Suite 1500
Greenwood Village, CO 80111
303.721.1440

Project Manager: Philip Dunham, PE, PTOE
Principal-in-Charge: Christopher J. Fasching, PE, PTOE

FHU Reference No. 124082-01

August 2024

TABLE OF CONTENTS

Appendices

List of Figures

List of Tables

I. INTRODUCTION

Harvest Crossing is a planned development encompassing approximately 200 acres east of E-470 in Aurora, Colorado. The site is located in the southeast quadrant of the Harvest Rd / E. Jewell Ave intersection and is directly east of the Murphy Creek East development. The development stretches east to the future Kewaunee Street and south to the future Yale Ave. **Figure 1** shows the site location in relation to major roadways and developments in the area.

The Harvest Crossing development is anticipated to be constructed in several phases. Filing 1 (residential) was approved and is currently under construction with completion anticipated in late 2024. It is located between Pacific Ave and Warren Ave roughly representing the middle third of the site in the north-south direction. Filing 2 (commercial and additional residential) is proposed to be completed in 2026 (after Filing 1) and will be located between Jewell Ave and Pacific Ave immediately north of Filing 1. Filing 2 began its entitlement process with the City of Aurora in early 2024. Filing 3 (residential) is expected to follow as the final phase based on market conditions and includes the area south of Filing 1 between Warren Avenue and Yale Ave.

The proposed Harvest Crossing land uses include:

- The previously approved 145 single family dwelling units (DU) in Filing 1
- Filing 2, which is proposed to include 227 single family DU (which was analyzed as 230 units to remain conservative) and 76,500 square feet of commercial
- Filing 3, the subject of this study, which will include an additional 420 single family DUs

The total buildout of Harvest Crossing will include approximately 795 DUs and 76,500 square feet of commercial space. These land uses are anticipated maximums and represent a conservative analysis.

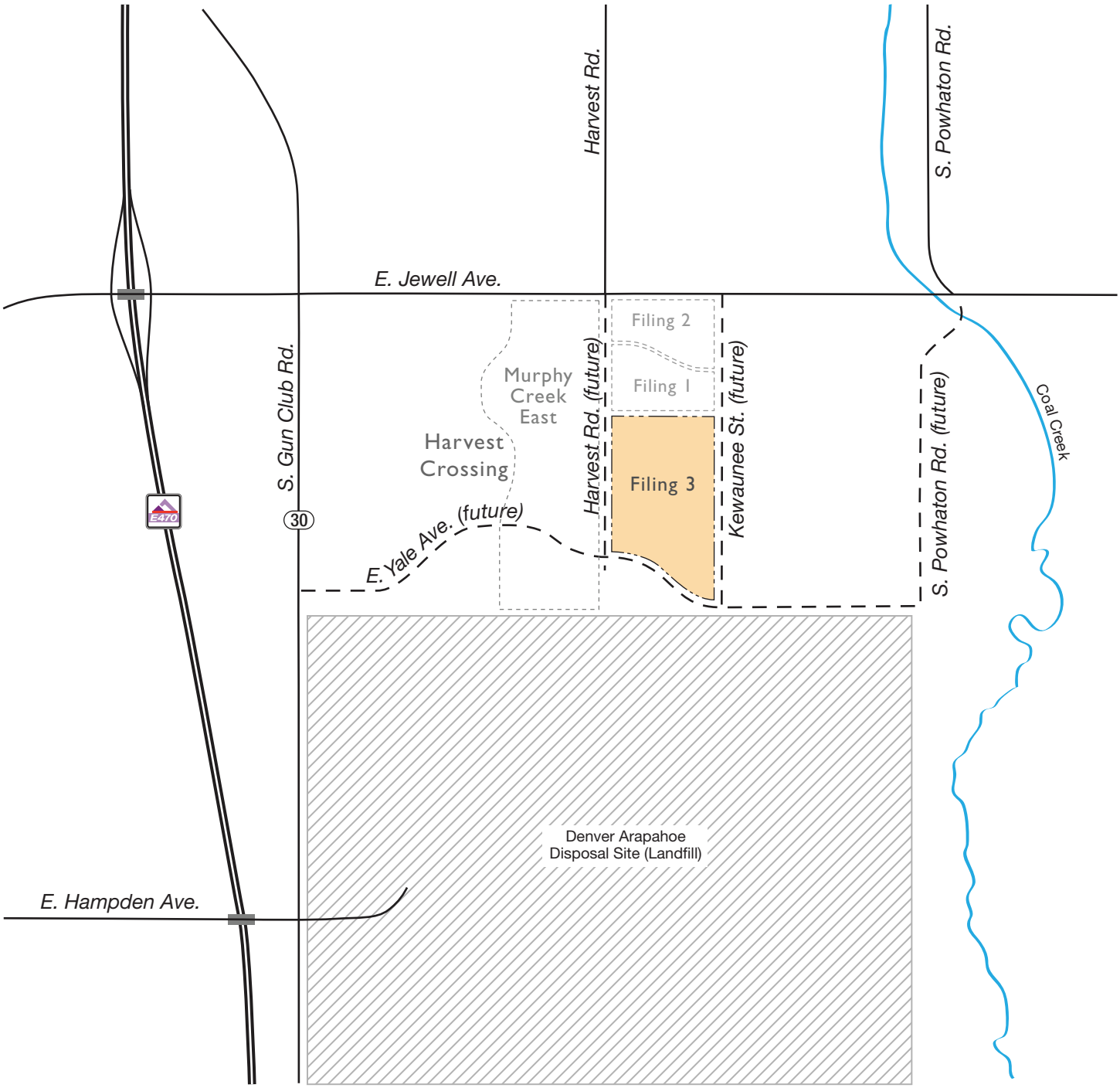
Several access points onto the adjacent roadway network will be provided in the short-term. Filing 1 is expected to add a fourth leg to the Pacific Ave / Harvest Rd and Warren Ave / Harvest Rd intersections. These will align with roadways constructed by Murphy Creek East west of Harvest Rd. Filing 2 is expected to add site access points to support the remaining development, including two accesses onto E. Jewell Ave, two accesses on Kewaunee St between E. Pacific Ave and E. Jewell Ave, and one access on Harvest Rd between E. Jewell and E. Pacific Ave. Filing 3 is anticipated to add the following:

- Five accesses onto Harvest Rd with one being Caspian Avenue
- Five accesses onto Kewaunee Street with one being Caspian Avenue
- Four accesses onto Warren Avenue, two of which will align with accesses into Filing 1
- One access onto Yale Avenue at Jackson Gap Street

Figure 2 shows the Filing 3 site plan and access points.

Two future planning horizons have been evaluated for the site:

- **Short-Term Future (Filing 3)**: The Year 2029 time-period (6-year horizon) was chosen to assess traffic related to the proposed Filing 3 development at buildout. It also includes full buildout of Filing 1 and Filing 2 as a background condition.
- **Long-Term Future**: Year 2040 was selected for long-term analyses, consistent with the current long-term planning timeframe used in the 2018 Refresh of the Northeast Area Transportation Study (NEATS). The 2040 time-period was chosen to determine the effects of proposed project-related traffic for the overall buildout of the site (825 DUs plus 76,500 square feet commercial).



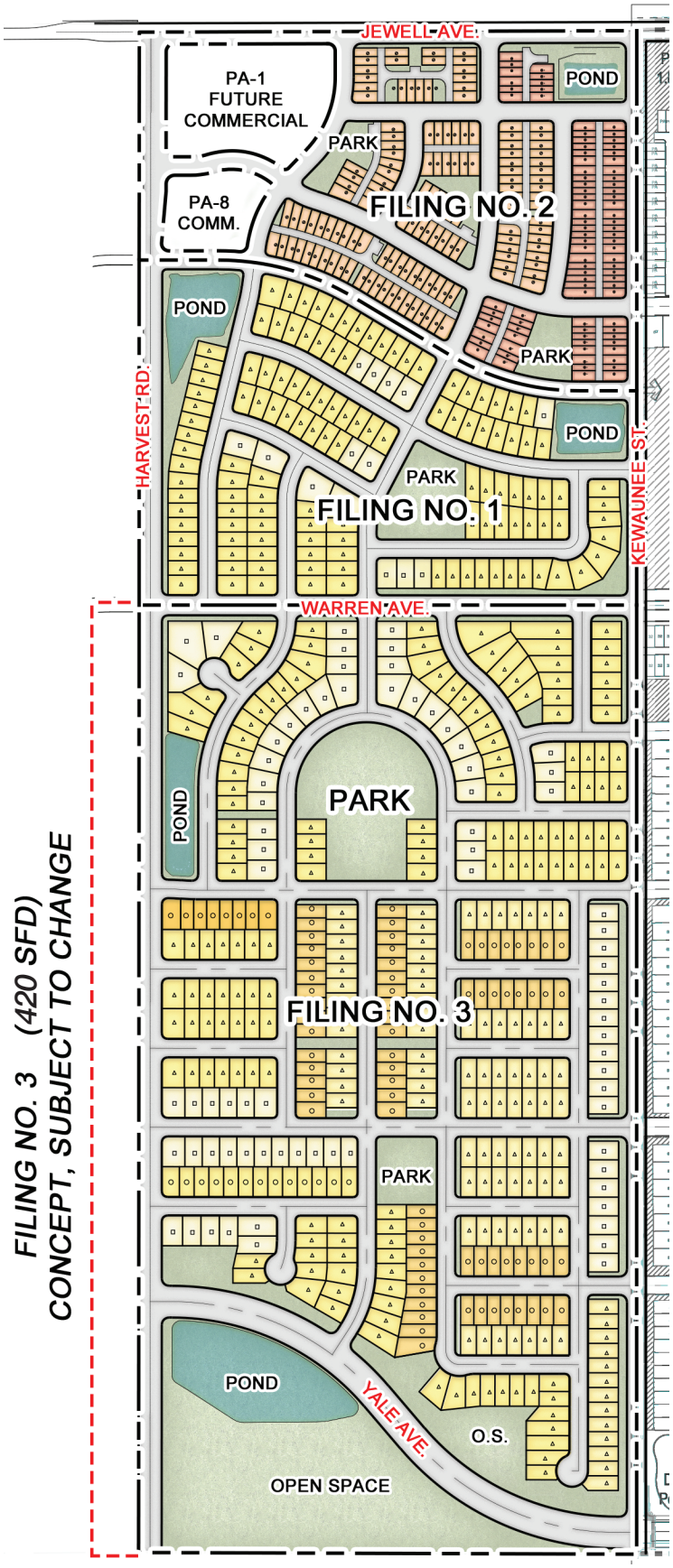
FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

NORTH

FIGURE 1
Vicinity Map

Harvest Crossing - Filing 3 124092-01 4/24/24



NORTH

FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

FIGURE 2
Site Plan

Harvest Crossing - Filing 3 124092-01 4/24/24

II. EXISTING (2023) CONDITIONS

The existing roadway network and local land uses near the proposed Harvest Crossing site are described below.

II.A. Surrounding Land Use

The area around the Harvest Crossing Filing 3 development is mostly vacant. The site is located approximately 1.5 miles east of E-470 along Jewell Ave. The anticipated Murphy Creek East development is located to the west, and the Denver Arapahoe Disposal Site (DADS) is located directly south of the site. The northern portion of the Murphy Creek East development (generally from Jewell Ave to Warren Ave north-south and between Harvest Rd and S. Flat Rock Trail east-west) has started construction and model homes are open. The roadway network required to support Harvest Crossing Filing 1 is also under construction, and site grading has begun.

II.B. Other Relevant Studies

Previous traffic analyses were identified as relevant for this evaluation:

- Felsburg Holt & Ullevig (FHU) had previously evaluated the site location for residential development in the *Villages at Murphy Creek Traffic Impact Analysis Report* dated December 2005.
- The *Murphy Creek East Traffic Impact Study* (dated March 2019) analyzed the development site directly to the west of the Harvest Crossing site. Given the lack of existing roadway network and nearby development, the Murphy Creek East study was used to provide background traffic and roadway geometry in the Harvest Crossing area, particularly along Harvest Rd.
- The *Harvest Crossing Traffic Impact Analysis* (dated August 2021) serves as the master traffic study for Harvest Crossing and also evaluated Filing 1 of the proposed development.

II.C. Transportation Network

The Harvest Crossing development site will be located southeast of the E. Jewell Ave and Harvest Rd intersection. The following roadways exist in the area today.

E. Jewell Avenue

E. Jewell Ave, generally an east-west two-lane arterial east of E-470, is the only existing roadway adjacent to the site. A 1-mile segment of E. Jewell Ave between Gun Club Rd and Harvest Rd has been improved to a 6-lane section (in accordance with NEATS), but it is currently striped as a two-lane facility east of S. Flat Rock Trail due to construction in Murphy Creek East. It remains a 2-lane roadway from that point east past the project site to Powhatan Rd. The posted speed limit is 40 miles per hour (mph).

Harvest Road

Between E. Mississippi Ave and E. Jewell Ave (north of Harvest Crossing), Harvest Rd has been constructed as a 2-lane roadway. In accordance with NEATS, this will be expanded to a 6-lane major arterial in the future. Harvest Rd is proposed as a 2-lane collector (with turn lanes) between E. Jewell Ave and E. Yale Ave (adjacent to Harvest Crossing). It is currently under construction between E. Jewell Ave and Warren Ave to provide access to Filing 1 and is planned to be extended south to Yale Ave as part of Filing 3.

II.D. Traffic Volumes

The project team collected intersection and daily counts along E. Jewell Ave in February 2020. The daily count (conducted adjacent to the site / east of Harvest Rd) indicated that E. Jewell Ave is carrying approximately 2,225 vehicles per day on a typical commuter day. At the request of City of Aurora staff, three years of background growth has been applied to these volumes using the 3.6 percent per year growth rate documented in the master traffic impact study. Hence, the volumes were increased by 11.1 percent to approximate current conditions, resulting in a daily volume of 2,475 vehicles per day along E. Jewell Ave.

The intersection traffic count was collected at the existing E. Jewell Ave / Harvest Rd intersection in 15-minute increments during the hours of 6:30 AM to 8:30 AM and from 4:00 PM to 6:00 PM. The counts were compiled and evaluated to determine peak hours. The morning peak hour was determined to be 6:45 AM to 7:45 AM, and the evening peak hour was determined to be 4:30 PM to 5:30 PM. These peak hour volumes have also been increased based on three years of background growth to achieve existing (2023) volumes.

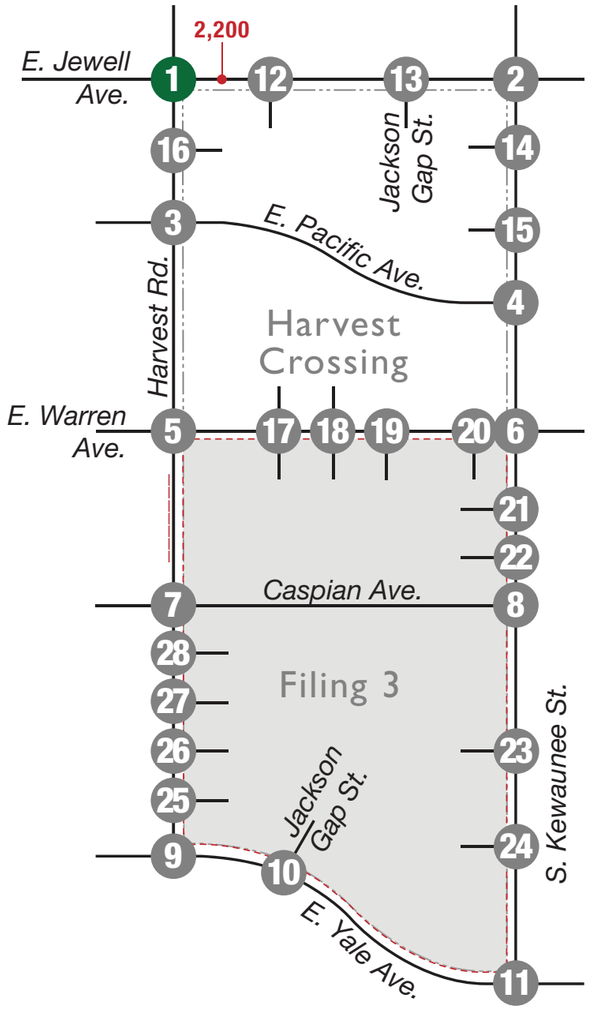
Figure 3 shows the existing (2023) traffic volumes, and **Appendix A** includes the traffic count data.

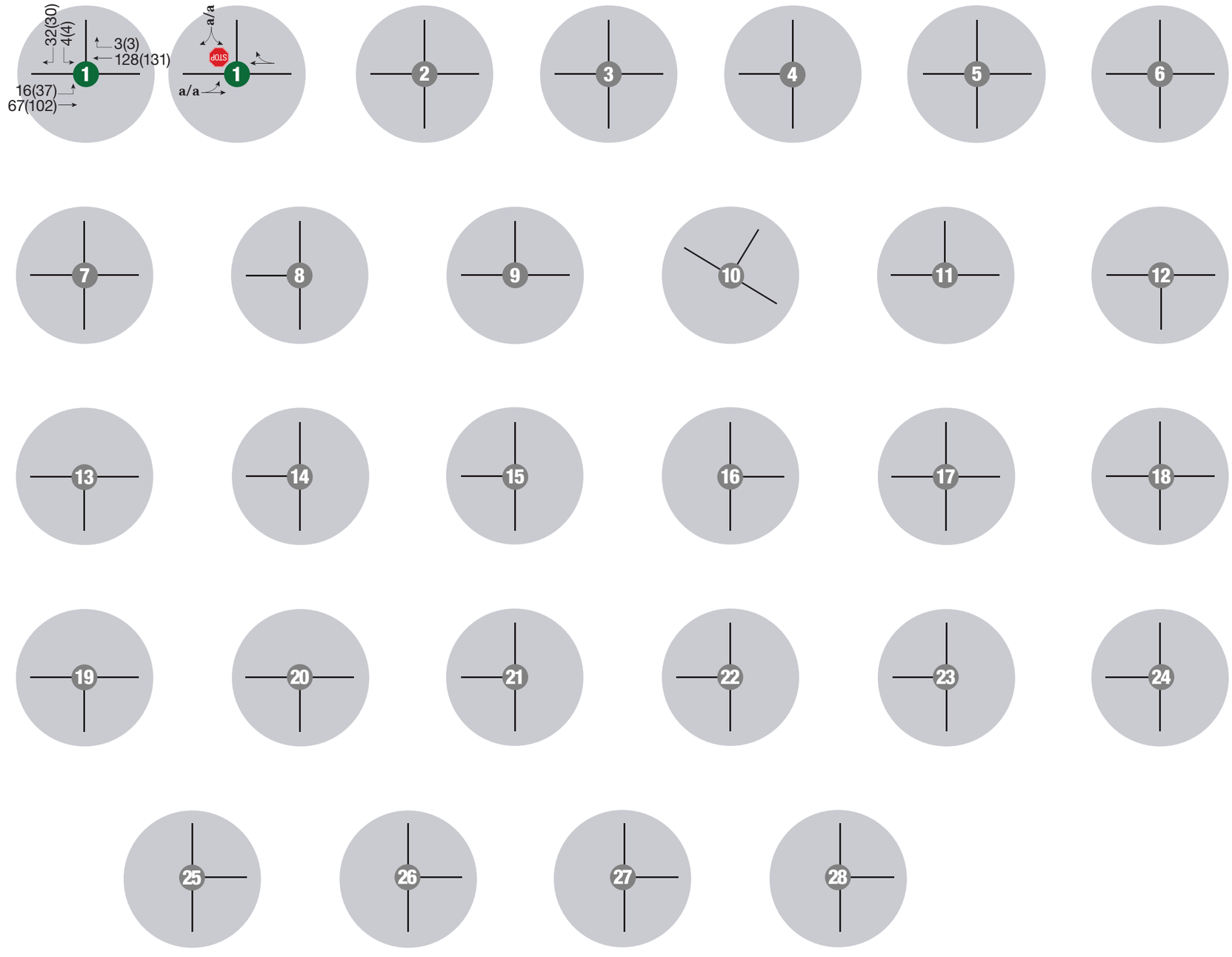
II.E. Traffic Operations

Existing (2023) operational conditions were analyzed at the existing E. Jewell Ave / Harvest Rd intersection near the project site. The analysis is based on procedures documented in the *Highway Capacity Manual*. This analysis procedure provides a Level of Service (LOS), a qualitative measure based on the average delay per vehicle at a controlled intersection described by a letter ranging from "A" to "F." LOS A represents minimal delay, while LOS F represents excessive congestion and delay. The City uses a target LOS D (indicative of an average of 35 seconds or 55 seconds [or less] of delay for vehicles passing through an unsignalized intersection or a signalized intersection, respectively) during the peak hours to determine acceptable vehicular delays. The signalized intersection analysis reports a LOS rating for the entire intersection, while the unsignalized analysis reports a movement LOS for left-turn movements and stop-controlled movements. Trafficware's Synchro traffic analysis software (Version 11.1) was used to perform the LOS calculations.

The existing (2023) conditions analysis evaluated the current intersection control. The individual movements at the unsignalized E. Jewell Ave with Harvest Rd intersection currently operate at LOS A, as shown in **Appendix B**. **Figure 3** shows existing (2023) traffic operations.

KEY MAP





LEGEND

XXX(XXX)	=	AM(PM) Peak Hour Traffic Volumes
XXXX	=	Daily Traffic Volumes
x/x	=	AM/PM Peak Hour Unsignalized Intersection Level of Service
STOP	=	Stop Sign
X	=	Study Intersection
X	=	Future Intersection

FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

NORTH

FIGURE 3

Existing (2023) Traffic Conditions

Harvest Crossing - Filing 3 124092-01 4/25/24

III. FUTURE ROADWAY NETWORK

As noted previously, the existing roadway network in the project area is limited. The conceptual future roadway network in the Harvest Crossing area was evaluated in the master traffic impact analysis. It examined the NEATS Refresh Study and other Aurora planning documents and traffic impact studies for nearby developments. Since the Murphy Creek East study was the most recent effort, the master traffic impact analysis maintained consistency with that report. The following sections detail internal Harvest Crossing roadways and site-related intersections (including any changes since the master traffic impact analysis).

As noted previously, Harvest Rd is anticipated to be constructed from E. Jewell Ave south to E. Yale Ave as a 2-lane collector. The northerly portion (from E. Jewell Ave to E. Warren Ave) is currently under construction and will be completed this year to provide access to Harvest Crossing Filing 1. Internal roadways needed to support Filing 1 are also under construction, as is Kewaunee St between Warren Ave and Pacific Ave.

III.A. Filing 2

The development of Harvest Crossing Filing 2 will include a supporting roadway network that was not evaluated in detail in the master traffic impact analysis. The site plan presented on **Figure 2** shows the roadway layout. The proposed Filing 2 roadway network includes the following boundary facilities:

- E. Pacific Ave is being constructed in Filing 1 and forms the southern boundary of Filing 2. No changes are proposed as part of Filing 2.
- Kewaunee St is being constructed between E. Pacific Ave and E. Warren Ave as part of Filing 1. Filing 2 will extend Kewaunee St north to E. Jewell Ave to form the eastern Filing 2 boundary, in accordance with the master traffic impact analysis.
- E. Jewell Ave exists today and forms the northern boundary of Filing 2. It will be widened to the south to complete the southerly half of the ultimate 6-lane cross-section in accordance with the master traffic impact analysis. The northerly half will be constructed by others.
- Harvest Rd is being constructed between E. Warren Ave and E. Jewell Ave in Filing 1 and forms the western boundary of Filing 2. No changes are proposed as part of Filing 2.

In addition, the following internal roadways are proposed:

- Road A is a local road that will extend east-west from Harvest Rd to Kewaunee St.
- Road B is a local road that will extend east-west from Road C (Irvington St) to Kewaunee St.
- Road C is the local road extension of Irvington St in Filing 1 north through Filing 2 to E. Jewell Ave.
- Road E is the local road extension of Jackson Gap St in Filing 1 north through Filing 2 to E. Jewell Ave. This connection was anticipated in the master traffic impact analysis.

It should be noted that the master traffic impact analysis assumed a ¾-movement access along E. Jewell Ave at Jackson Gap St, between Harvest Rd and Kewaunee St. Based on discussions with City staff since completion of the master traffic impact analysis, Filing 2 is now planned to have Road E (Jackson Gap St) meet E. Jewell Ave at a right-in / right-out intersection. A second full-movement access is proposed at Road C, approximately 660 feet east of Harvest Rd.

III.B. Filing 3

Filing 3 of the development is expected to extend Harvest Rd and Kewaunee St south to Yale Ave and complete Yale Ave between Harvest Rd and Kewaunee St in accordance with the master traffic impact analysis. This portion of the Harvest Crossing development would also construct Capsian Avenue.

IV. BACKGROUND TRAFFIC CONDITIONS

Background traffic has been estimated for the short-term and long-term timeframes and accounts for existing traffic already using the transportation system, expected growth in the study area, and the addition of anticipated trips from surrounding developments. It does not include traffic generated from the Harvest Crossing Filing 3 development.

IV.A. Short-Term Background Projections and Operations

The short-term background traffic reflects traffic growth to the year 2029, which is the year that Filing 3 of the Harvest Crossing development is anticipated to be completed. In general, traffic volumes at Harvest Rd and E. Jewell Ave were estimated to increase by approximately 23 percent (3.6 percent per year) over existing conditions. In addition to the projected growth, site generated trips from the Murphy Creek developments, as well as the Harvest Crossing Filing 1 and Filing 2 developments, were added to the roadway network. Harvest Crossing Filing 1 and 2 volumes have been distributed to the network in accordance with the long-term distribution in the approved Harvest Crossing master traffic impact analysis. **Figure 4** shows the final short-term background volumes.

The short-term background scenario would add several intersections to the study area, in addition to the existing Jewell Ave & Harvest Rd intersection. The anticipated roadway geometry used at each intersection is based on the master traffic impact analysis and is described as follows:

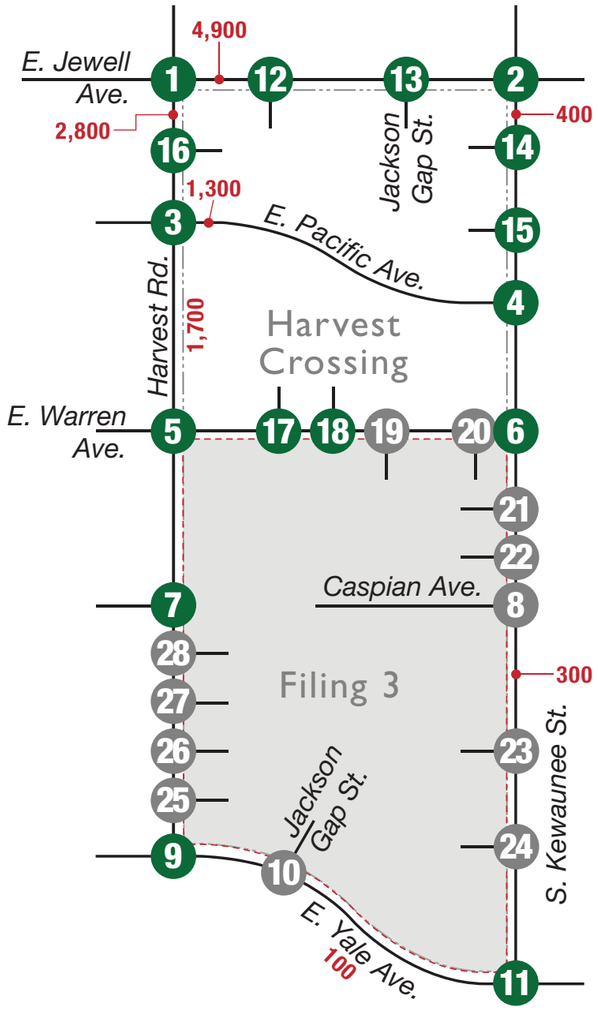
- **E. Jewell Ave & Harvest Rd** is an unsignalized four-leg intersection with two-way stop control on the north-south approaches. Both southbound and westbound approaches have one shared left/through/right lane, while the eastbound approach has an exclusive left turn lane and the northbound approach has both an exclusive left and right turn lane. The eastbound approach has been built to its final 6-lane cross-section as part of Murphy Creek. Since the roadway to the east is not assumed to be complete in the Harvest Crossing short-term background scenario, single eastbound and westbound through lanes have been assumed.
- **Harvest Rd & Pacific Dr** is an unsignalized four-leg intersection with two-way stop control on east and west approaches. East and westbound approaches share a single lane for all movements, while both northbound and southbound approaches have an exclusive left turn lane.
- **Harvest Rd & Warren Ave** is an unsignalized four-leg intersection with two-way stop control on east and west approaches. East and westbound approaches share a single lane for all movements, while both northbound and southbound approaches have an exclusive left turn lane.

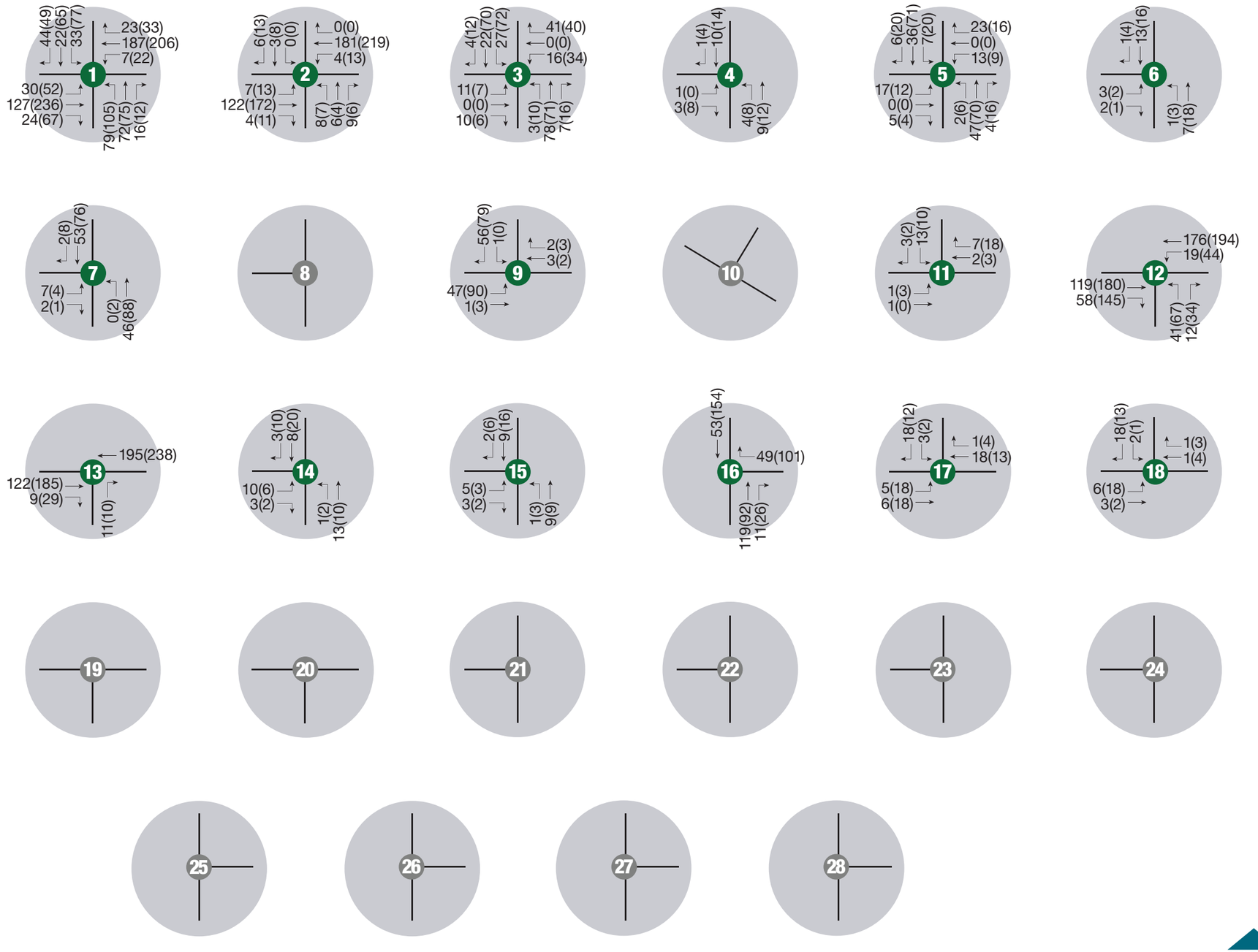
Although Kewaunee St will be constructed between E. Pacific Ave and E. Jewell Ave as part of Filing 2, some background traffic from Filing 1 will use this connection once it is opened. Hence, it is included in the short-term background analysis to appropriately reflect Filing 1 trips.

- **E. Jewell Ave & Kewaunee St** is an unsignalized three leg intersection with a stop sign on the northbound approach. All approaches are assumed to have one shared lane for each movement.
- **Kewaunee & Pacific Ave** is an unsignalized T intersection with all approaches sharing a single lane and a stop sign on the Pacific Avenue approach.
- **Kewaunee St & Warren Ave** is an unsignalized three leg intersection with each approach sharing a single lane and a stop sign on the Warren Avenue approach.
- **Harvest Rd & E. Yale Ave** is an unsignalized T intersection with a stop sign on the southbound approach. Eastbound and southbound approaches are assumed to have a dedicated left-turn lane. The westbound approach is assumed to have one shared lane for the thru/right movement. A single lane roundabout is assumed to be constructed at this intersection for the long-term conditions.

Figure 5 presents the intersection operational results for the short-term background traffic projections. Individual movements at the unsignalized intersections all operate at LOS D or better.

KEY MAP





LEGEND

XXX(XXX)	=	AM(PM) Peak Hour Traffic Volumes
XXXX	=	Daily Traffic Volumes
X	=	Study Intersection
X	=	Future Intersection

FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

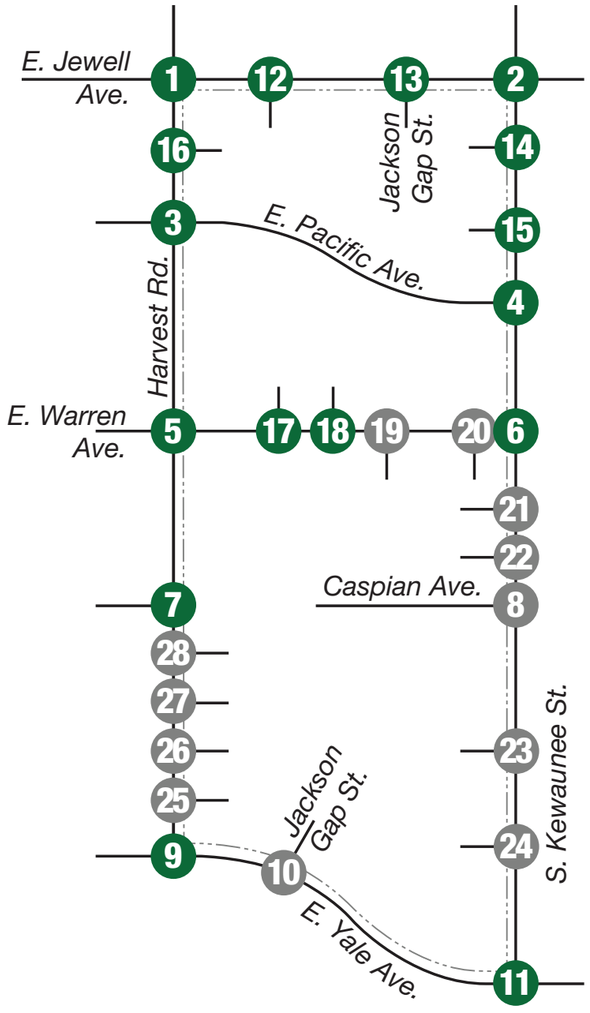
NORTH

FIGURE 4

Short Term (2029) Background Traffic Volumes

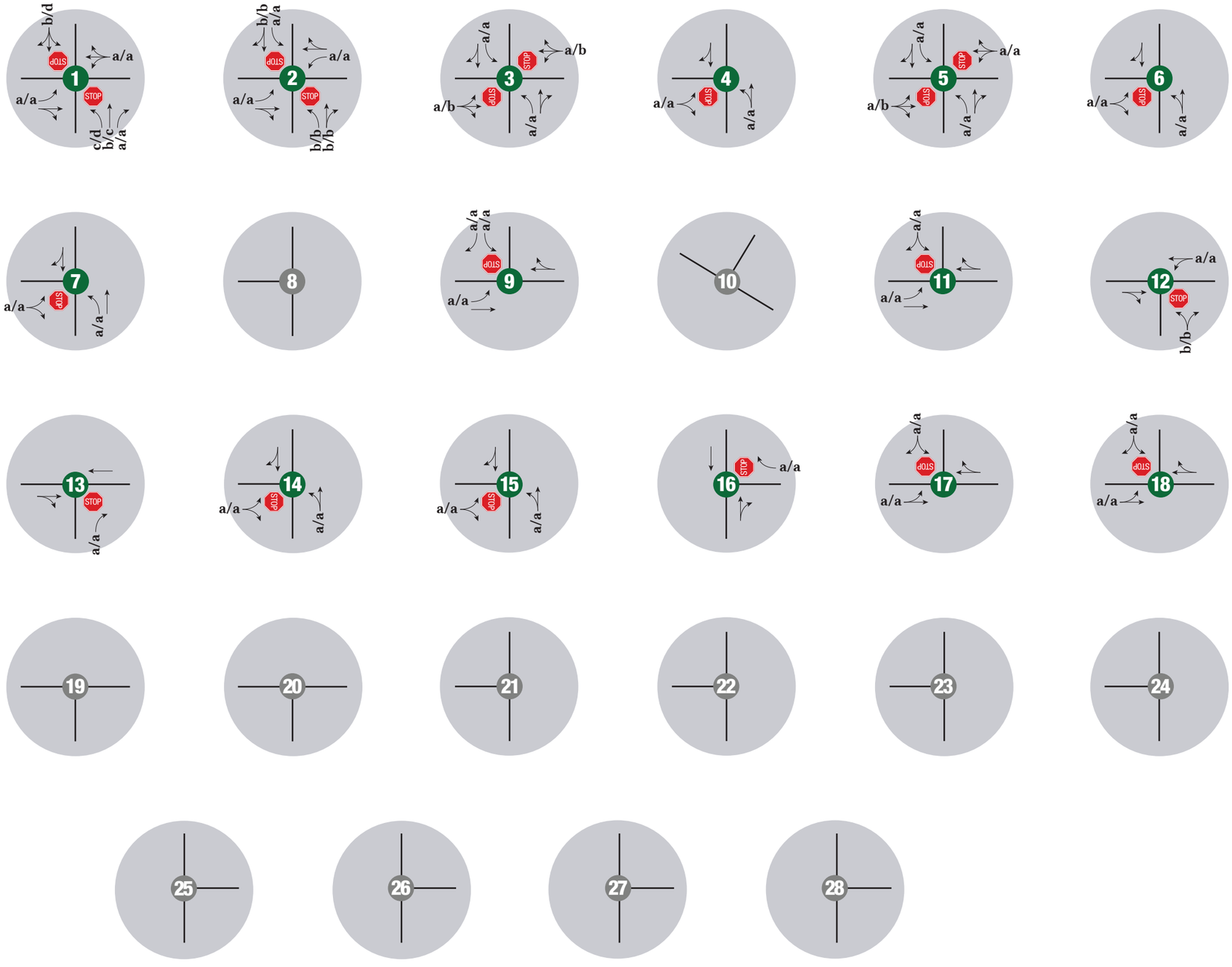
Harvest Crossing - Filing 3 124092-01 4/25/24

KEY MAP



LEGEND

x/x	=	AM/PM Peak Hour Unsignalized Intersection Level of Service
	=	Roundabout
STOP	=	Stop Sign
X	=	Study Intersection
X	=	Future Intersection



FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

NORTH

FIGURE 5

Short Term (2029) Background Lane Geometry and Level of Service

Harvest Crossing - Filing 3 124092-01 5/23/24

IV.B. Long-Term Background Projections and Operations

Long-term background traffic reflects growth to 2040 and includes full buildout of the Harvest Crossing development. Background volumes were taken from the Harvest Crossing master study. Site generated trips from Murphy Creek East, Harvest Crossing Filing 1, and Harvest Crossing Filing 2 were then added to represent 2040 conditions. **Figure 6** shows long-term background volumes.

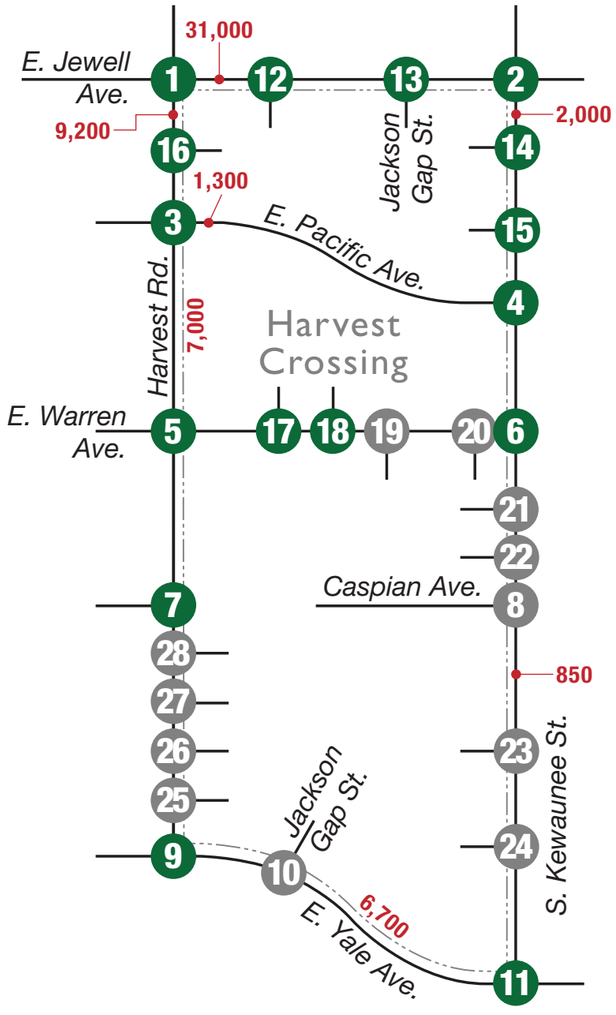
Similar to the short-term condition, both Filing 1 and Filing 2 volumes have been distributed through the network in based on the long-term distributions in the Harvest Crossing master traffic impact analysis.

The anticipated long-term background geometry along Harvest Rd was obtained from the master traffic impact analysis. Kewaunee St was assumed to be a 2-lane local street per the master traffic impact analysis. The various long-term geometric conditions are described as follows:

- **E. Jewell Ave & Harvest Rd** is a signalized four-leg intersection with the following geometry. The eastbound approach has two left turn lanes, two thru lanes, and a shared thru/right lane. The westbound approach has one left turn lane, three thru lanes, and a right turn lane. The northbound approach has a left turn lane, a thru lane, and a right turn lane. The southbound approach has two left turn lanes, a thru lane, and a right turn lane. Although the master Harvest Crossing TIS outlined dual left turn lanes for the northbound approach, a significant reduction in the commercial square footage in the Filing 2 development has resulted in the reduction to a single left turn lane.
- **Harvest Rd & Pacific Dr** is an unsignalized four-leg intersection with two-way stop control on the east and west approaches. East and westbound approaches have a single left/thru/right lane, while northbound and southbound approaches provide an exclusive left turn lane.
- **Harvest Rd & Warren Ave** is an unsignalized four-leg intersection with two-way stop control on east and west approaches. East and westbound approaches have a single left/thru/right lane. Northbound and southbound approaches provide an exclusive left turn lane.
- **Kewaunee St & Warren Ave** is an unsignalized four-leg intersection with two-way stop control on the east and west approaches. The easterly leg is anticipated to serve the undefined development east of Harvest Crossing. All approaches have a single left/thru/right lane.
- **Harvest Rd & Caspian Ave** is an unsignalized four-leg intersection with two-way stop control on the east and west approaches. East and westbound approaches have a single left/thru/right lane, while north and southbound approaches provide an exclusive left turn lane.
- **Kewaunee St & Caspian Ave** is an unsignalized three-leg intersection with two-way stop control on the west approach. All approaches have a single left/thru/right lane.
- **Harvest Rd & E. Yale Ave** is a three-leg single-lane roundabout. West of Harvest Rd, E. Yale Ave is anticipated to connect to Gun Club Rd, increasing volumes along E. Yale Ave and driving the need for the roundabout.
- **Jackson Gap St & E. Yale Ave** is an unsignalized three-leg intersection with side street stop control on the Jackson Gap St approach. The eastbound approach will have a dedicated left-turn lane and a thru/right lane. The southbound and westbound approaches will have one lane for all movements.
- **Kewaunee St & E. Yale Ave** is an unsignalized three-leg intersection with side street stop control on the Kewaunee St approach. The eastbound approach will have a dedicated left-turn lane and a thru/right lane. The southbound and westbound approaches will have one lane for all movements
- **E. Jewell Ave & Kewaunee St** is a signalized four-leg intersection with the following geometry. The eastbound approach has one left turn lane, two thru lanes, and a shared

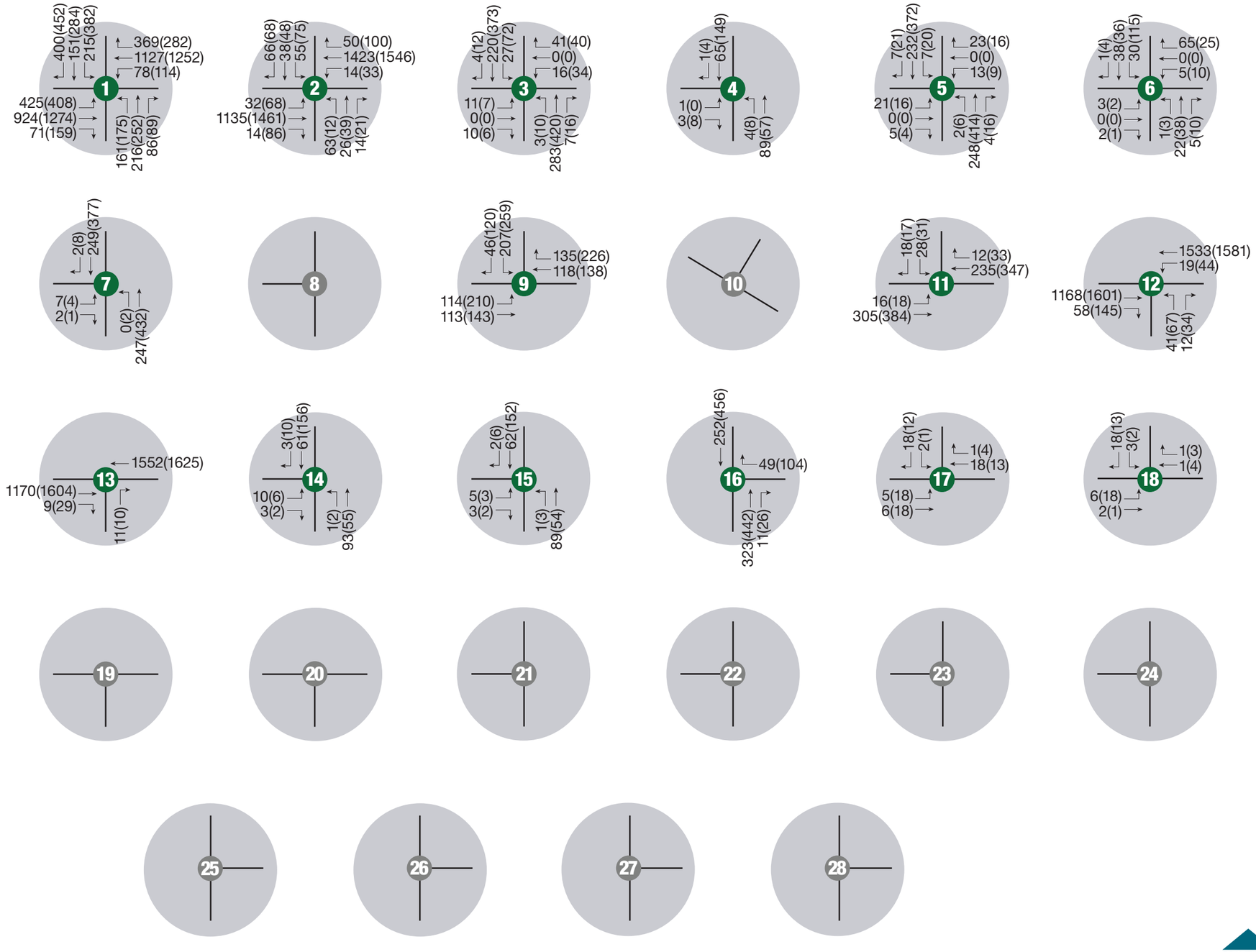
thru/right turn lane. The westbound approach has one left turn lane, two thru lanes, and a shared thru/right turn lane. The northbound approach has a left turn lane, one thru lane, and a shared thru/right turn lane. The southbound approach has a left turn lane and a shared thru/right lane.

KEY MAP



LEGEND

XXX(XXX)	=	AM(PM) Peak Hour Traffic Volumes
XXXX	=	Daily Traffic Volumes
X	=	Study Intersection
X	=	Future Intersection



NORTH

FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

FIGURE 6

Long Term (2040) Background Traffic Volumes

Harvest Crossing - Filing 3 124092-01 4/25/24

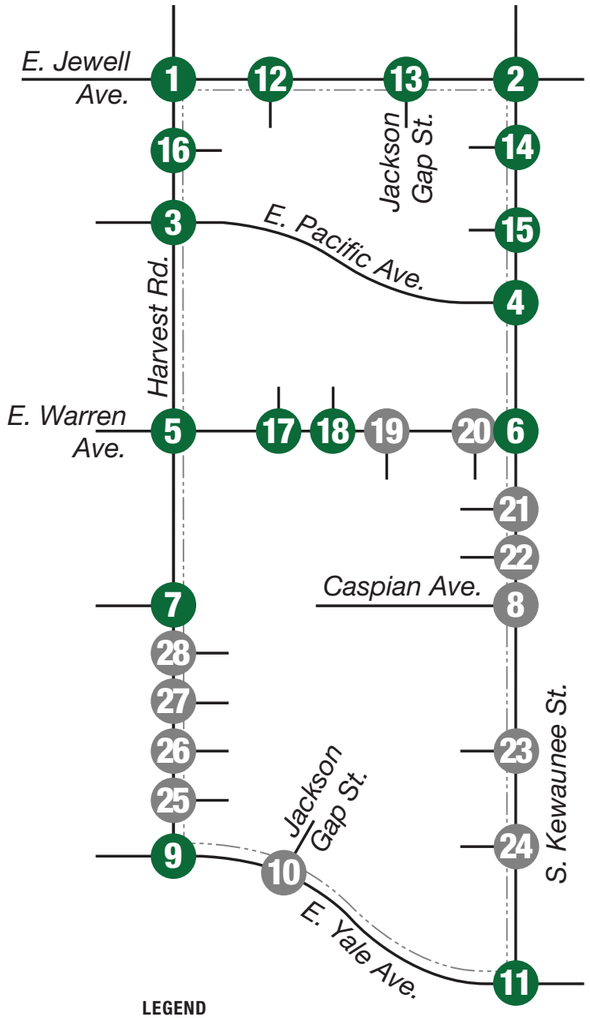
Figure 7 presents the intersection operational results for the long-term background traffic projections. The intersections of Jewell Ave with Harvest Rd and Kewaunee St are assumed to be signalized by the long-term scenario. Further detail of the signal warrant analyses is contained in the following subsection. All intersections, both signalized and unsignalized, evaluated in this study are forecasted to operate at or above City LOS standards in the long-term background scenario. **Appendix E** summarizes the short-term and long-term background LOS results.

Traffic Signalization Warrant Analyses – Long-Term

The *Manual on Uniform Traffic Control Devices* (MUTCD) identifies eight warrants that provide guidance to determine whether installation of a traffic signal is justified. Some of these warrants are based on traffic volume levels, while others are based on the accident history of an intersection or whether the intersection is a designated school crossing. The master traffic impact analysis conducted a long-term scenario warrant analysis and recommended monitoring the intersections of Jewell Ave with Harvest Rd and Kewaunee St for signalization between the short-term and long-term scenarios.

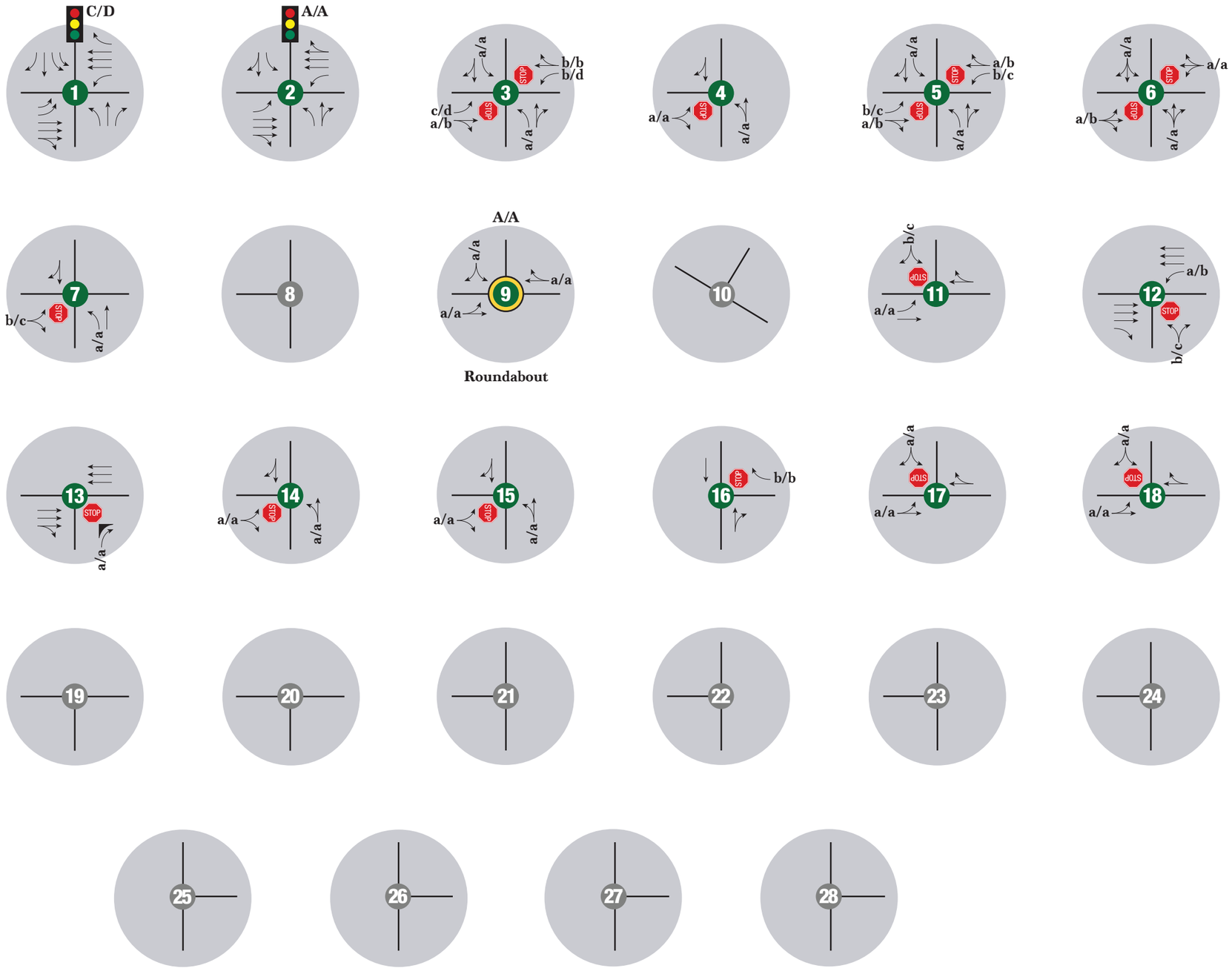
Based on the volumes calculated herein, the intersections of Jewell Ave with Kewaunee St and Harvest Rd would meet the eight-hour volume, four-hour volume, and peak hour volume warrants by the long-term background scenario. **Appendix E** contains signal warrant analysis results.

KEY MAP



LEGEND

- X/X = AM/PM Peak Hour Signalized Intersection Level of Service
- x/x = AM/PM Peak Hour Unsignalized Intersection Level of Service
- = Roundabout
- = Stop Sign
- = Traffic Signal
- = Study Intersection
- = Future Intersection



FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

NORTH

FIGURE 7

Long Term (2040) Background Lane Geometry and Level of Service

Harvest Crossing - Filing 3 124092-01 4/25/24

V. PROJECTED CONDITIONS

The proposed Harvest Crossing development will consist of residential and commercial land uses. The following subsections describe the proposed development and how it is anticipated to interact with the adjacent street network.

V.A. Site Trip Generation

The number of vehicle-trips that will be generated by the proposed development was forecast based on trip rates and procedures documented in *Trip Generation* (Institute of Transportation Engineers, 11th Edition, 2021). The categories used in this analysis include Single Family Detached Housing (ITE land use code 210), Single Family Attached Housing (ITE land use code 215), and two shopping center categories (ITE land use codes 821 and 822). Land use code 821 is used for small shopping plazas of 40k sf to 150k sf; whereas land use code 822 is used for small strip plazas of less than 40k sf.

Table 1 summarizes the trip generation rates.

Table 1. Trip Generation Rates

Land Use	LUC Code	Daily	AM	Distribution	PM	Distribution
Single Family Detached	210	T = X * 9.43	T = X * 0.7	In: 25%	T = X * 0.94	In: 63%
				Out: 75%		Out: 37%
Single Family Attached	215	T = X * 7.2	T = X * 0.48	In: 25%	T = X * 0.57	In: 59%
				Out: 75%		Out: 41%
Shopping Plaza	821	T = X * 67.52	T = X * 1.73	In: 62%	T = X * 5.19	In: 49%
				Out: 38%		Out: 51%
Strip Retail Plaza	822	T = X * 54.45	T = X * 2.36	In: 60%	T = X * 6.59	In: 50%
				Out: 40%		Out: 50%

Filing 3 is anticipated to include 420 single family detached DUs. The total buildout scenario includes 795 single family detached DUs and 76,500 square feet of commercial land use. Although limited internal capture may occur between some commercial land uses and residential units, this study did not adjust trips for internal capture as the nature of the commercial land use is unknown. Similarly, no pass-by trip credits were taken for the commercial area due to the unknown nature of the commercial land use.

Table 2 includes trip generation estimates by phases developed for purposes of traffic assignment. In total, the entire Harvest Crossing development is estimated to generate approximately 683 trips during the AM peak hour, 1,140 trips during the PM peak hour, and 12,174 trips per day. This represents a reduction of overall trips from the master traffic impact analysis. The reduction is due to the changes in land uses (and particularly a reduction in commercial space) and minor changes in ITE trip generation rates between the 10th Edition and the 11th Edition. Of these trips, the Filing 3 development is anticipated to contribute 294 trips in the AM, 393 trips in the PM, and 3,961 trips per day. Filing 3 contributes approximately 30 to 43 percent of the overall Harvest Crossing trips generated.

Table 2. Trip Generation Estimates

Filing	Land Use	LUC Code	Quantity	Units	Daily Trips	AM Peak Hour Trips*			PM Peak Hour Trips*		
						In	Out	Total	In	Out	Total
Filing 1	Single Family Detached	210	145	DU	1,367	25	76	101	86	51	137
Filing 1 Trips					**1,367**	**25**	**76**	**101**	**86**	**51**	**137**
Filing 2	Single Family Detached (north of Pacific)	210	140	DU	1,320	25	74	99	83	49	132
	Single Family Attached	215	90	DU	648	11	32	43	30	21	51
	Commercial (north of Pacific)	821	54.5	KSF	3,680	58	36	94	139	144	283
		822	22	KSF	1,198	31	21	52	72	72	144
Filing 2 Trips					**6,846**	**125**	**163**	**288**	**324**	**286**	**610**
Background Trips					**8,213**	**150**	**239**	**389**	**410**	**337**	**747**
Filing 3	Single Family Detached (south of Warren)	210	420	DU	3,961	74	220	294	248	145	393
Filing 3 Trips					**3,961**	**74**	**220**	**294**	**248**	**145**	**393**
Total Trips (Long-Term)					***12,174***	***224***	***459***	***683***	***658***	***482***	***1,140***

*Peak hour trips were calculated using the 11th edition of the ITE *Trip Generation Manual* and are based on peak hour of adjacent street traffic.

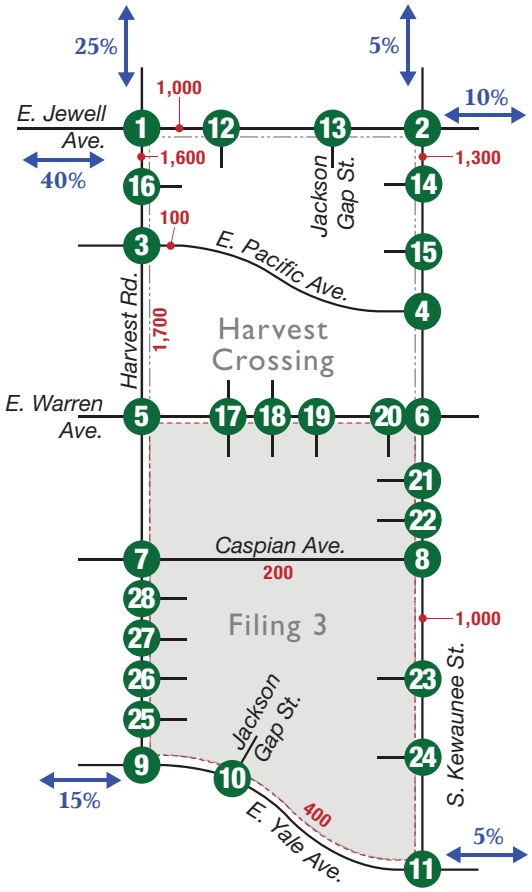
V.B. Trip Distribution and Traffic Assignment

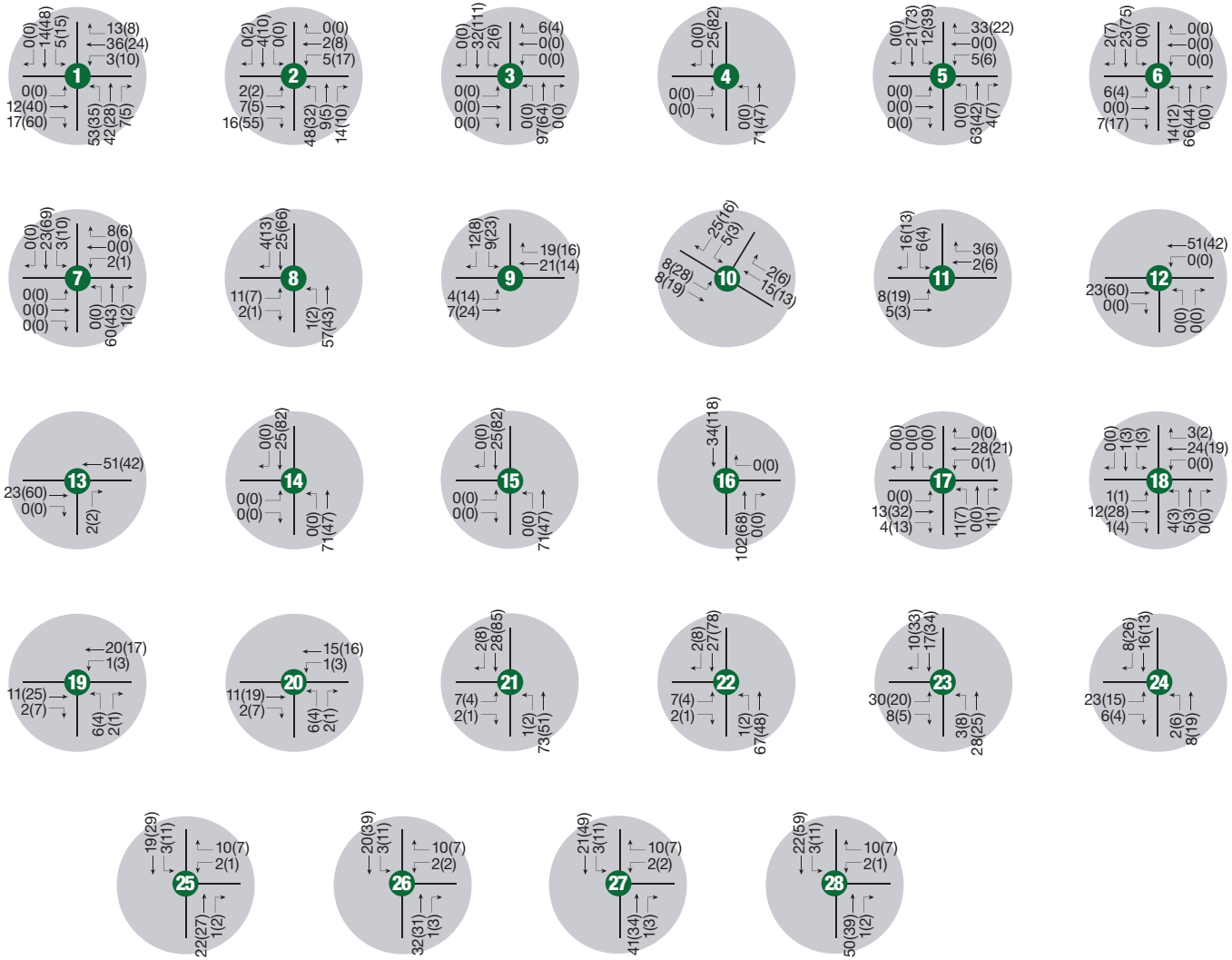
The external trips generated by the site were assigned to the study area roadway network using percentages of trips expected to travel in different directions to/from the site. Trip distribution percentages were carried forward from the master traffic impact analysis. Directional distributions for site-generated trips are illustrated on **Figure 8** and are described as follows:

- 40 percent to/from the west on E. Jewell Ave (west of Harvest Rd)
- 25 percent to/from the north on Harvest Rd (north of E. Jewell Ave)
- 15 percent to/from the west on Yale Ave (west of Harvest Rd)
- 10 percent to/from the east on E. Jewell Ave (east of Kewaunee St)
- 5 percent to/from the north on Kewaunee St (north of E. Jewell Ave)
- 5 percent to/from the east on Yale Ave (east of Kewaunee St)

The peak hour site generated traffic volumes were assigned to the roadway network and site access points based on these trip distribution percentages. **Figure 8** shows the trip distribution and the estimated site generated traffic for the proposed development for both planning horizons.

KEY MAP





LEGEND

XXX(XXX)	=	AM(PM) Peak Hour Traffic Volumes
XXXX	=	Daily Traffic Volumes
XX%	=	Site Trip Distribution
X	=	Study Intersection

FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

NORTH

FIGURE 8

Site Generated Traffic Volumes

Harvest Crossing - Filing 3 | 124092-01 | 4/24/24

VI. TOTAL TRAFFIC CONDITIONS

External site generated traffic was added to the short-term (2029) and long-term background (2040) volumes to develop total traffic volumes. These total traffic scenarios were then evaluated to determine LOS and project-related operational affects. LOS worksheets are included in **Appendix D**.

VI.A. Short-Term Total Projections and Operations

The short-term total traffic reflects traffic estimates for the short-term timeframe (year 2029), including short-term background traffic and trips generated from the Harvest Crossing Filing 3 development. These volumes are shown on **Figure 9**.

Figure 10 presents the intersection operational results for the short-term total traffic projections. All signalized intersections and unsignalized movements are projected to operate at LOS D or better. It should be noted that the intersection of Jewell Ave with Harvest Rd is anticipated to meet signal warrants by this scenario. Further signal warrant information is contained in the following subsection.

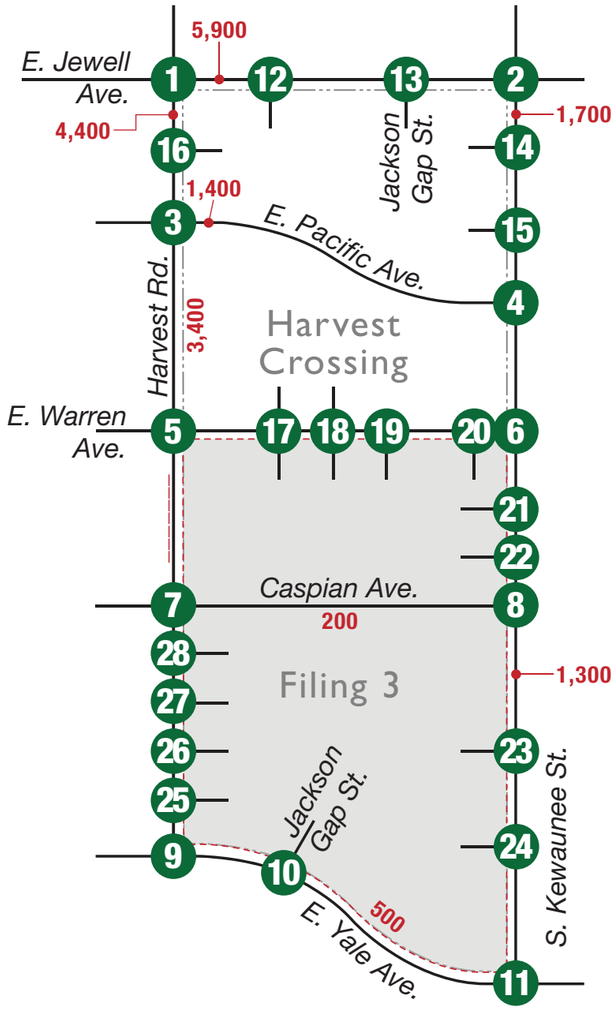
Traffic Signalization Warrant Analyses – Short-Term

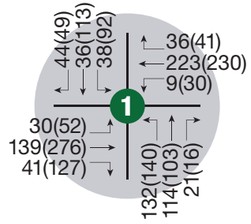
Based on the volumes calculated herein, the intersection of Jewell Ave with Harvest Rd would meet the eight-hour volume, four-hour volume, and peak hour volume warrants by the short-term total scenario. **Appendix E** contains signal warrant analysis results.

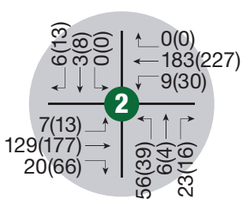
Internal Intersection Controls – Short-Term

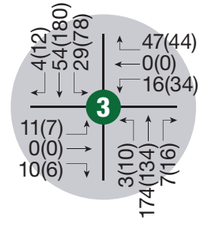
The local street network internal to the Filing 3 site was not analyzed for operations. The peak hour volumes are very low (typically less than 100 vehicles per hour), which is normal for local residential streets within subdivisions. All internal intersections are assumed to have minor street stop control, and no turn lanes are assumed at these internal intersections.

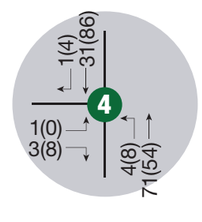
KEY MAP

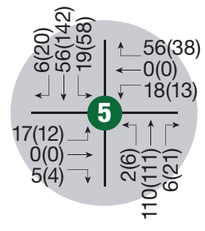


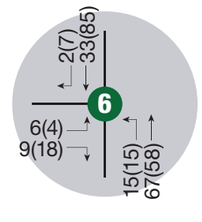


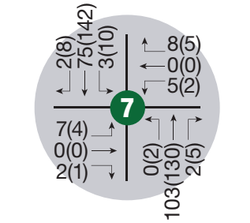


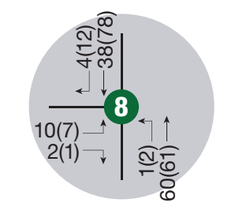


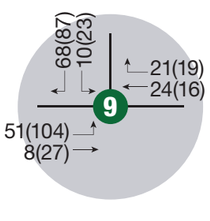


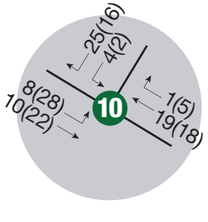


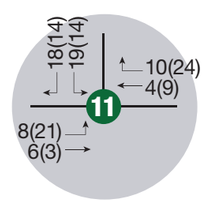


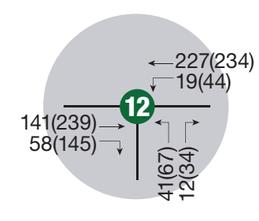


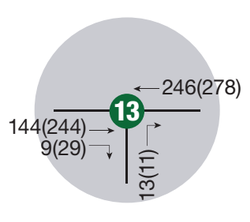


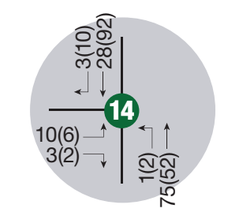


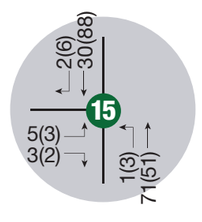


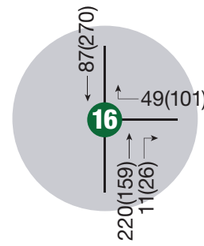


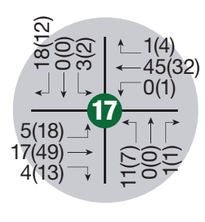


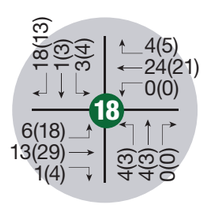


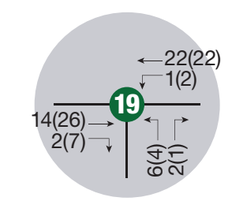


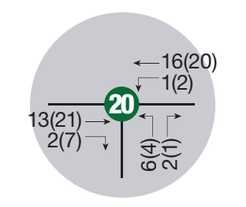


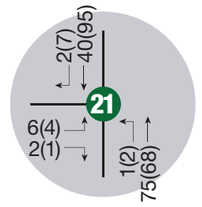


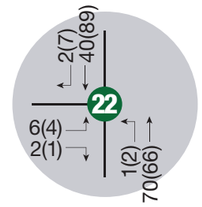


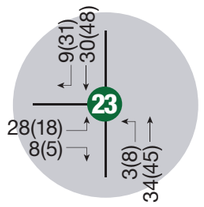


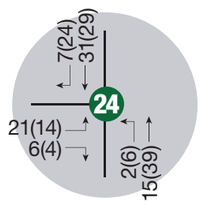


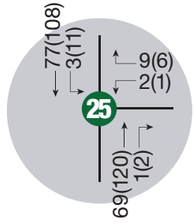


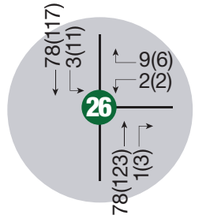


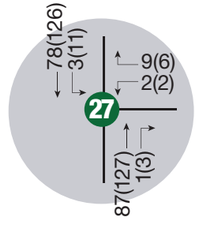


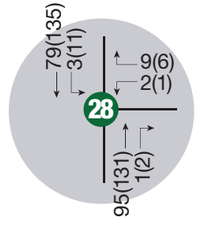












LEGEND

XXX(XXX)	=	AM(PM) Peak Hour Traffic Volumes
XXXX	=	Daily Traffic Volumes
X	=	Study Intersection

FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

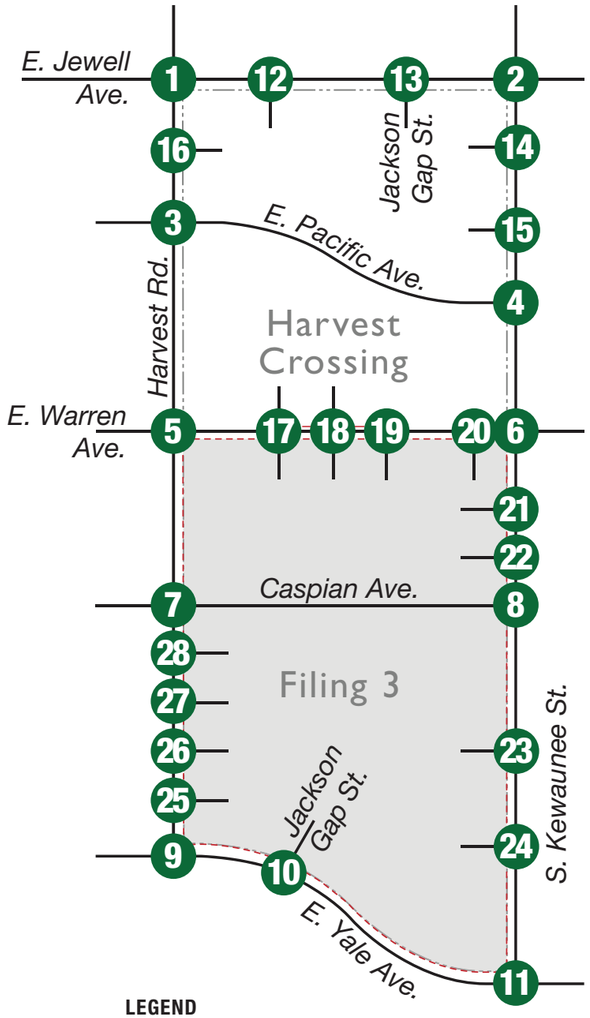
NORTH

FIGURE 9

Short Term (2029) Total Traffic Volumes

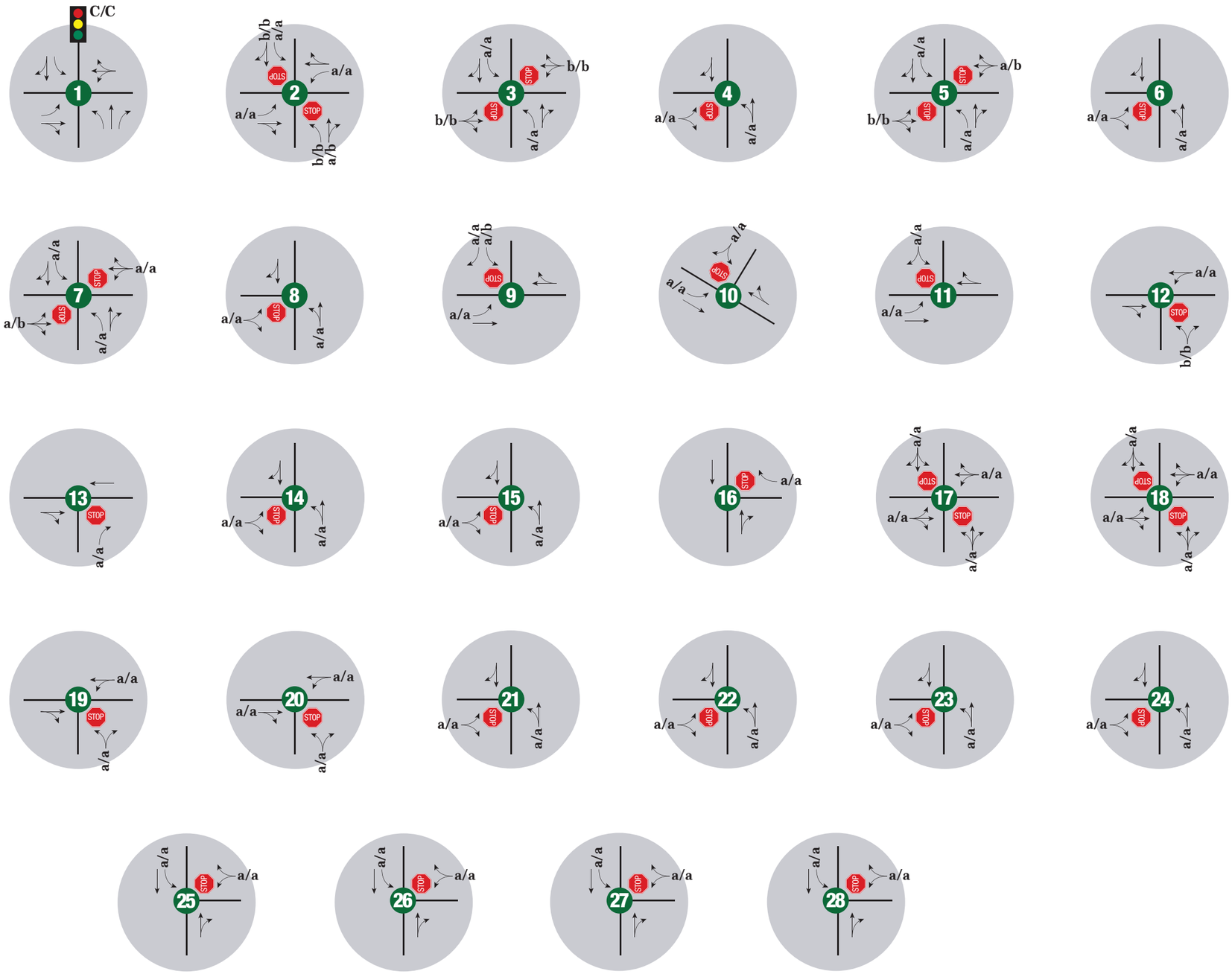
Harvest Crossing - Filing 3 124092-01 4/25/24

KEY MAP



LEGEND

X/X	=	AM/PM Peak Hour Signalized Intersection Level of Service
x/x	=	AM/PM Peak Hour Unsignalized Intersection Level of Service
	=	Roundabout
STOP	=	Stop Sign
	=	Traffic Signal
X	=	Study Intersection



FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

NORTH

FIGURE 10

Short Term (2029) Total Lane Geometry and Level of Service

Harvest Crossing - Filing 3 124092-01 5/23/24

VI.B. Long-Term Total Projections and Operations

Long-term total traffic reflects traffic estimates for the long-term timeframe (year 2040), including long-term background traffic and trips generated from the Harvest Crossing Filing 3 development. These volumes are shown on **Figure 11**.

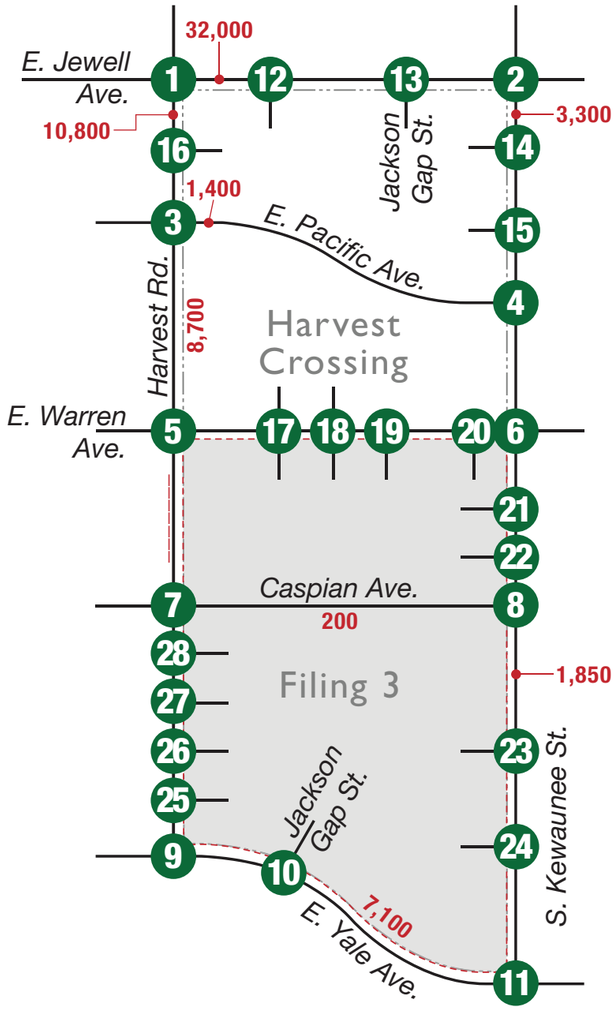
Figure 12 presents the intersection operational results for the long-term total traffic projections. The individual movements and overall intersection operations are projected to operate with acceptable LOS (LOS D and better) with the following exceptions:

- Harvest Rd & Pacific Ave
  - The eastbound left turn is projected to operate at LOS E in the PM peak hour.
  - The westbound left turn is projected to operate at LOS E in the PM peak hour.

Note: Higher than average delays are common during peak hours for side street stop control movements and these movements do not warrant mitigations.

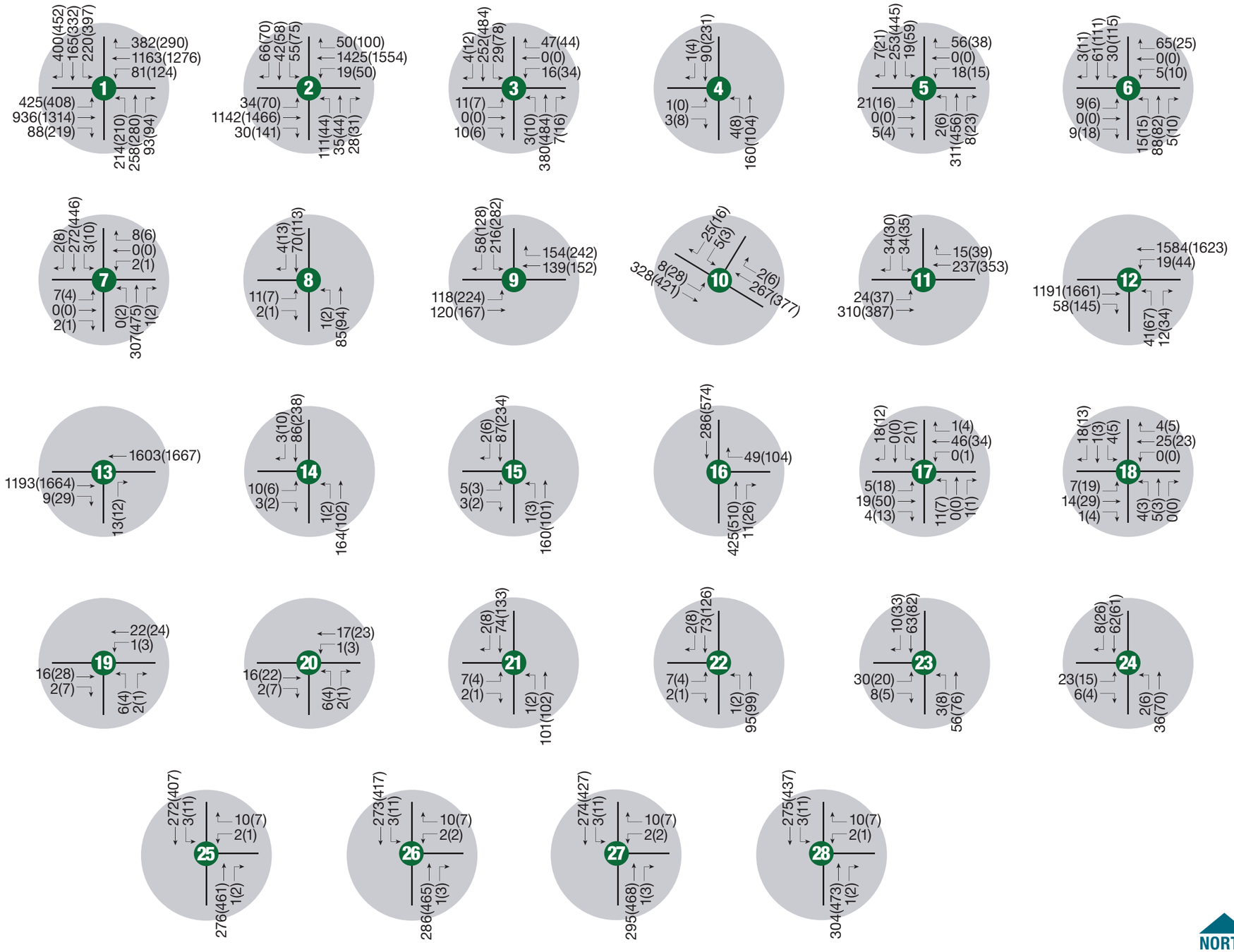
These operational analyses assumed signalization of the intersection of Jewell Ave with Kewaunee St and Harvest Rd as outlined in the long-term background condition. **Appendix F** summarizes all study intersections and the anticipated LOS results for both the short- and long-term scenarios. **Appendix D** contains LOS worksheets for both the short- and long-term scenarios.

KEY MAP



LEGEND

XXX(XXX)	=	AM(PM) Peak Hour Traffic Volumes
XXXX	=	Daily Traffic Volumes
X	=	Study Intersection



NORTH

FELSBURG HOLT & ULLEVIG

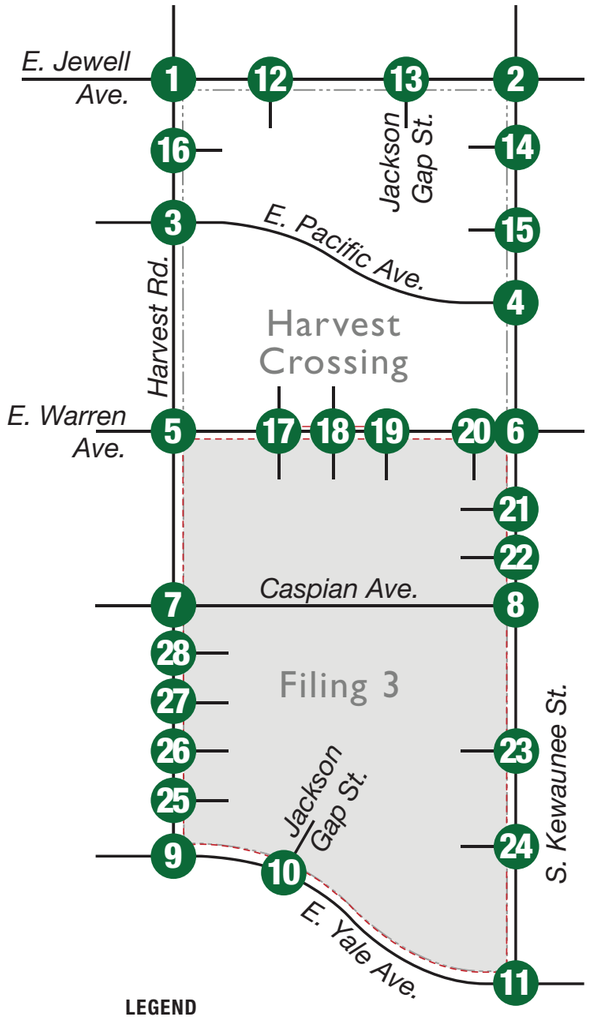
NOTE: Drawing Not to Scale

FIGURE 11

Long Term (2040) Total Traffic Volumes

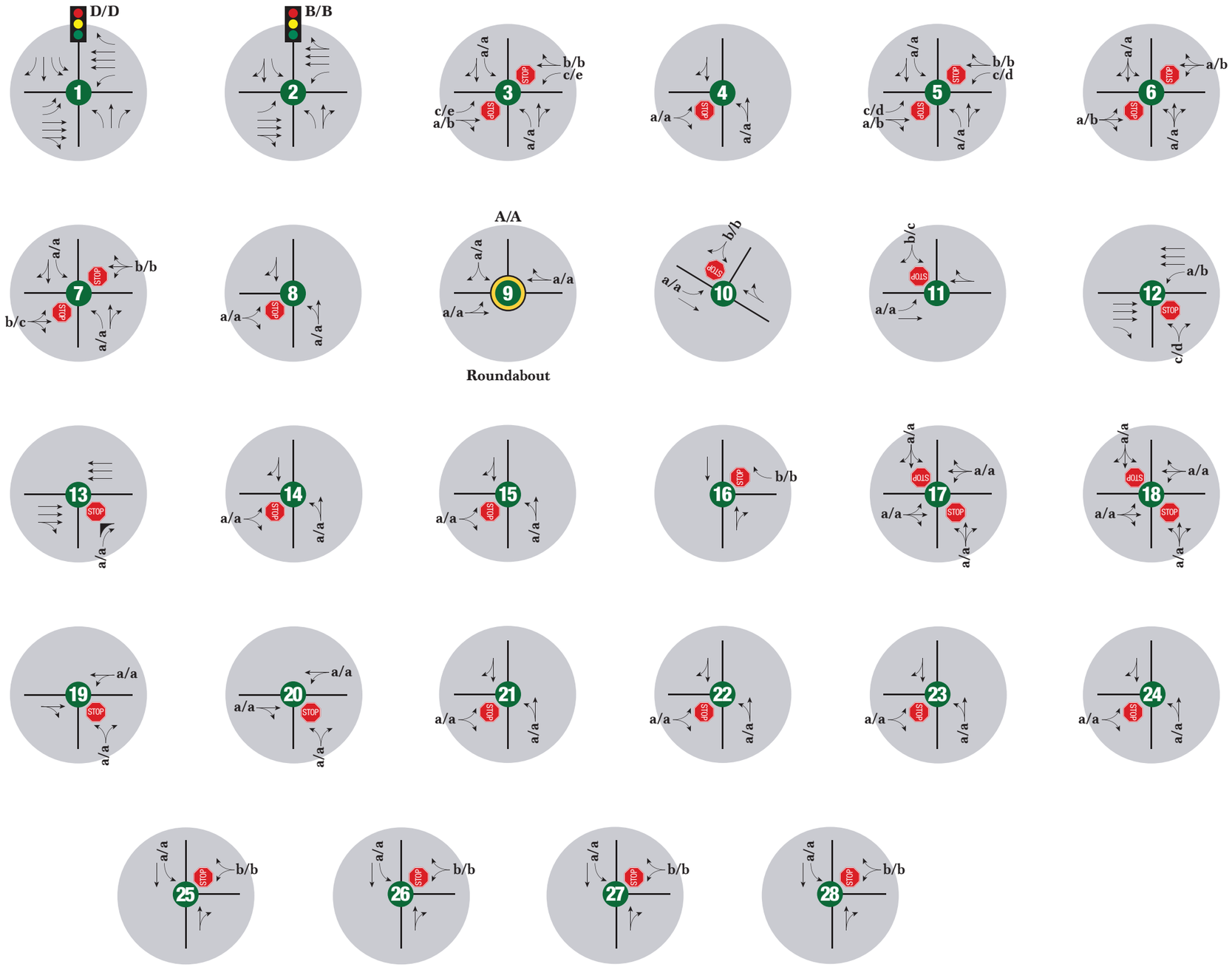
Harvest Crossing - Filing 3 124092-01 4/25/24

KEY MAP



LEGEND

X/X	=	AM/PM Peak Hour Signalized Intersection Level of Service
x/x	=	AM/PM Peak Hour Unsignalized Intersection Level of Service
	=	Roundabout
STOP	=	Stop Sign
	=	Traffic Signal
X	=	Study Intersection



NORTH

FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

FIGURE 12

Long Term (2040) Total Lane Geometry and Level of Service

Harvest Crossing - Filing 3 124092-01 5/23/24

Other Mitigations

Signalization of the E. Jewell Ave / Harvest Rd intersection will address identified operational issues at that location. The signal is reasonably anticipated in Aurora's long-range planning efforts and is shown to be warranted in the master traffic impact analysis. The remaining operational issues are addressed as follows:

- The eastbound and westbound left-turn movements at the Pacific Ave / Harvest Rd intersection are expected to operate at LOS E during the PM peak hour. The left turn volumes are low (less than 40 vehicles per hour in both peak periods), and the left turns operate from exclusive lanes. The recommended storage length for both the eastbound and westbound approach is 50 feet. This is not anticipated to interfere with nearby internal intersections. The poorly operating left-turn condition is common for left-turn movements from side streets onto collector roadways. Hence, no mitigations have been proposed.
- The northbound movement at the Jewell Ave / Western Site Access intersection is expected to operate at LOS E during the PM peak hour. The volumes are low at 111 vehicles per hour. The recommended 95th percentile queue is not anticipated to exceed 75 feet. This is not anticipated to interfere with nearby internal intersections. The poorly operating minor street condition is common for movements from side streets. Hence, no mitigations have been proposed.
- The E. Jewell Ave / Kewaunee St intersection does not meet signal warrants solely with Harvest Crossing traffic. It is anticipated that future development north of E. Jewell Ave and east of Kewaunee St will eventually result in a signal being warranted at this location. Hence, it should also be monitored for signalization.

Auxiliary Lane Requirements

Auxiliary lanes were evaluated using two methodologies. First, 95th percentile queues were extracted directly from the project's Synchro software analyses. These queue lengths are based on projected operating conditions (including heavy vehicles, opposing traffic flows, and signal timings). Second, City of Aurora *Traffic Impact Study Guidelines* indicate that the Colorado Department of Transportation's *State Highway Access Code* (SHAC) should be used to determine storage and taper lengths. However, the SHAC procedures do not account for other conditions in the intersection such as low opposing through movements if a left-turn movement is in question. The project team evaluated these two sets of results to develop ultimate recommendations for auxiliary lanes. These recommendations for vehicle storage lengths (in feet) are presented in **Table 3** for use in identifying construction needs for Harvest Crossing.

Output from the traffic analysis effort was used to recommend these storage lengths, using the following methodology:

- **Left turn lane storage lengths**. At signalized intersections, the greater of the HCM 6th Edition or Synchro methodology queue calculations were reported. For unsignalized intersections, the HCM 6th Edition calculation was reported.
- **Through movements**. For signalized intersections, Synchro calculation results were reported. No through movement queues are reported for unsignalized intersections as the through movements are free flowing.
- **Right turn movements**. The Synchro queue length was used. HCM 6th Edition information was not used because HCM's signalized intersection methodology does not account for right turns on red for signalized intersections. Stop controlled right turn movements use the HCM 6th Edition calculation.

The first column of queue lengths presented in **Table 3** is the long-term 95th percentile queue length results from Synchro/HCM, rounded up to the nearest 25 feet. These are shown for both AM and PM peak hours to account for directionality of traffic flows. These values are presented for all turn lanes included in the study except two-way left turn lanes. Generally, the higher of these two values is used for the storage length.

The second column of queue lengths presented in **Table 3** is the storage length recommendations from the SHAC. As noted previously, SHAC requirements are based on assumed arterial conditions. Hence, they have been applied to only the collector and arterial roadways, not local roadways. It was assumed E. Jewell Ave is classified as a NR-B Regional Highway operating at 40 mph adjacent to the project site, where a 12:1 transition taper ratio + storage length would be required. SHAC requirements for NR-C Arterials were applied to Harvest Rd, Yale Ave, and Warren Ave, and the operating speed was assumed to be 30 mph, where an 8:1 transition taper ratio + storage length would be required. The results of this evaluation are summarized in **Table 3**.

The final column in **Table 3** provides recommended auxiliary lane lengths along study area roadways based on results from both the 95th percentile and SHAC evaluations.

Table 3. Year 2040 Intersection Auxiliary Lane Results

Intersection	Movement	Existing Storage (ft)	95th Percentile Queue (ft) (AM/PM Peak)	SHAC Recommended Storage (ft)	Overall Recommended Storage (ft)
1. Harvest Rd & E Jewell Ave	EB Left	100	300 / 275	220	300
	EB Through	Continuous	Continuous	Continuous	Continuous
	EB Right	Continuous	Continuous	Continuous	Continuous
	WB Left	-	150 / 225	130	225
	WB Through	Continuous	Continuous	Continuous	Continuous
	WB Right	-	325 / 250	390	325
	NB Left	-	325 / 325	220	325
	NB Through	Continuous	Continuous	Continuous	Continuous
	NB Right	-	50 / 50	100	50
	SB Left	-	175 / 300	210	300
	SB Through	Continuous	Continuous	Continuous	Continuous
	SB Right	-	350 / 350	460	350
2. Kewaunee St & Jewell Avenue	EB Left	-	50 / 50	80	50
	EB Through	Continuous	Continuous	Continuous	Continuous
	EB Right	Continuous	Continuous	Continuous	Continuous
	WB Left	-	50 / 50	50	50
	WB Through	Continuous	Continuous	Continuous	Continuous
	WB Right	Continuous	Continuous	Continuous	Continuous
	NB Left	-	150 / 75	120	150
	NB Through/Right	Continuous	Continuous	Continuous	Continuous

Intersection	Movement	Existing Storage (ft)	95th Percentile Queue (ft) (AM/PM Peak)	SHAC Recommended Storage (ft)	Overall Recommended Storage (ft)
	SB Left	-	75 / 125	80	125
	SB Through/Right	Continuous	Continuous	Continuous	Continuous
3. Harvest Rd & Pacific Ave	EB Left	-	50 / 50	40	50
	EB Through/Right	Continuous	Continuous	Continuous	Continuous
	WB Left	-	50 / 50	40	50
	WB Through/Right	Continuous	Continuous	Continuous	Continuous
	NB Left	-	50 / 50	40	50
	SB Left	-	50 / 50	80	50
4. Kewaunee St & Pacific Ave	EB Left/Right	Continuous	Continuous	Continuous	Continuous
	NB Left/Through	-	50 / 50	40	50
5. Harvest Rd & Warren Ave	EB Left	-	50 / 50	40	50
	EB Through/Right	Continuous	Continuous	Continuous	Continuous
	WB Left	-	50 / 50	40	50
	WB Through/Right	Continuous	Continuous	Continuous	Continuous
	NB Left	-	50 / 50	40	50
	SB Left	-	50 / 50	60	50
6. Kewaunee St & Warren Ave	EB Left/Through/Right	Continuous	Continuous	Continuous	Continuous
	WB Left/Through/Right	Continuous	Continuous	Continuous	Continuous
	NB Left/Through/Right	-	50 / 50	40	50
	SB Left/Through/Right	-	50 / 50	120	50
7. Harvest Rd & Caspian Ave	EB Left/Through/Right	-	50 / 50	40	50
	WB Left/Through/Right	Continuous	Continuous	Continuous	Continuous
	NB Left	-	50 / 50	40	50
	SB Left	Continuous	Continuous	Continuous	Continuous
8. Kewaunee ST & Caspian Ave	EB Left/Right	-	50 / 50	40	50
	NB Left/Through	-	50 / 50	40	50
9. Harvest Rd & Yale Ave	EB Left/Through	Continuous	Continuous	Continuous	Continuous
	WB Through/Right	-	50 / 50	40	50
	SB Left/Right	Continuous	Continuous	Continuous	Continuous

Intersection	Movement	Existing Storage (ft)	95th Percentile Queue (ft) (AM/PM Peak)	SHAC Recommended Storage (ft)	Overall Recommended Storage (ft)
10. Yale Ave & Jackson Gap St	EB Left	Continuous	Continuous	Continuous	Continuous
	SB Left/Right	Continuous	Continuous	Continuous	Continuous
11. Yale Ave & Kewaunee St	EB Left	-	50 / 50	40	50
	SB Left/Right	Continuous	Continuous	Continuous	Continuous
12. Jewell Ave & Access	WB Left	-	50 / 50	60	50
	NB Left/Right	Continuous	Continuous	Continuous	Continuous
13. Jewell Ave & Jackson Gap St	NB Right	-	50 / 50	50	50
14. Kewaunee St & North Site Access	EB Left/Right	Continuous	Continuous	Continuous	Continuous
	NB Left/Through	Continuous	Continuous	Continuous	Continuous
15. Kewaunee St & South Site Access	EB Left/Right	Continuous	Continuous	Continuous	Continuous
	NB Left/Through	-	50 / 50	40	50
16. Harvest Rd & Access	WB Right	Continuous	Continuous	Continuous	Continuous

Bold storage lengths exceed the recommended storage stated in the Harvest Crossing Master TIS.

VII. SUMMARY AND RECOMMENDATIONS

Harvest Crossing is a planned development encompassing approximately 200 acres in Aurora, Colorado. The site is located in the southeast quadrant of the Harvest Rd / E. Jewell Ave intersection and is directly east of the Murphy Creek East development. The proposed land uses include 145 single family dwelling units in Filing 1, 230 single family dwelling units and 76,500 square feet of commercial in Filing 2, and 420 single family dwelling units in Filing 3 (year 2029). The buildout of 795 single family dwelling units and 76,500 square feet of commercial space is expected by 2040. The total buildout of the development is estimated to generate approximately 12,174 daily vehicle-trips per day. Filing 3 is anticipated to contribute 3,961 daily trips of this total, as well as 294 and 393 in the AM and PM peak hours, respectively.

Roadway classifications were based on the approved Harvest Crossing master traffic impact analysis. Traffic signals are anticipated to be installed at the major intersections, including:

- **E. Jewell Ave & Harvest Rd**, which is anticipated to meet warrants between 2026 and 2029. The developer should anticipate a 25 percent contribution to the signal construction at this location.
- **E. Jewell Ave & Kewaunee St**, which is anticipated to meet warrants when development north and east of Harvest Crossing begins. This is likely to occur beyond the 2029 buildout of Harvest Crossing Filing 3. The developer should anticipate a 25 percent contribution to the eventual signal construction at this location.

Most of the studied intersections operate at LOS D or better in the short-term and long-term total traffic scenarios. The individual movements at the unsignalized intersection operate with acceptable LOS (LOS D or better) except for the following:

- Harvest Rd / Pacific Ave
  - The eastbound left-turn is projected to operate at LOS E in the PM peak hour.
  - The westbound left-turn is projected to operate at LOS E in the PM peak hour.

It is common for side street stop controlled movement to experience higher than average delay and these movements do not warrant mitigations.

APPENDIX A. EXISTING (2020) TRAFFIC COUNTS

All Traffic Data Services

Wheat Ridge, CO 80033

Site Code: 2
Station ID: 2
JEWELL AVE E.O. HARVEST RD

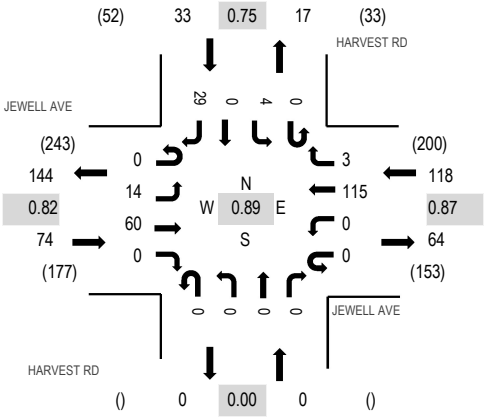
Start Time	13-Feb-20 Thu	EB	WB							Total
12:00 AM		5	17							22
01:00		3	8							11
02:00		7	3							10
03:00		6	4							10
04:00		21	1							22
05:00		74	21							95
06:00		**86**	69							155
07:00		59	**120**							**179**
08:00		65	63							128
09:00		45	56							101
10:00		38	52							90
11:00		34	52							86
12:00 PM		52	59							111
01:00		64	53							117
02:00		53	97							150
03:00		62	**114**							176
04:00		**90**	114							**204**
05:00		80	110							190
06:00		61	61							122
07:00		44	41							85
08:00		29	19							48
09:00		37	18							55
10:00		13	10							23
11:00		8	25							33
Total		1036	1187							2223
Percent		46.6%	53.4%							
AM Peak	-	06:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	86	120	-	-	-	-	-	-	179
PM Peak	-	16:00	15:00	-	-	-	-	-	-	16:00
Vol.	-	90	114	-	-	-	-	-	-	204
Grand Total		1036	1187							2223
Percent		46.6%	53.4%							
ADT		ADT 2,223		AADT 2,223						

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

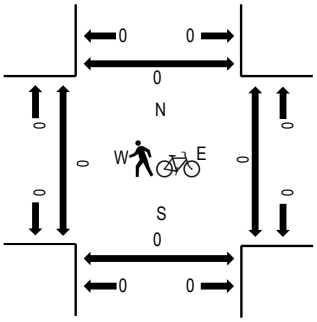
Location: 1 HARVEST RD & JEWELL AVE AM
Date: Thursday, February 13, 2020
Peak Hour: 06:45 AM - 07:45 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



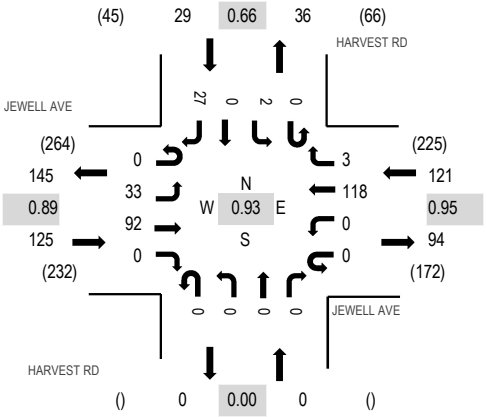
Traffic Counts

Interval Start Time	JEWELL AVE Eastbound				JEWELL AVE Westbound				HARVEST RD Northbound				HARVEST RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
6:30 AM	0	2	30	0	0	0	19	1	0	0	0	0	0	0	0	5	57	219	0	0	0	0
6:45 AM	0	4	22	0	0	0	29	0	0	0	0	0	0	1	0	4	60	225	0	0	0	0
7:00 AM	0	4	13	0	0	0	27	1	0	0	0	0	0	0	0	11	56	218	0	0	0	0
7:15 AM	0	4	9	0	0	0	25	2	0	0	0	0	0	0	0	6	46	210	0	0	0	0
7:30 AM	0	2	16	0	0	0	34	0	0	0	0	0	0	3	0	8	63	210	0	0	0	0
7:45 AM	0	1	18	0	0	0	29	0	0	0	0	0	0	0	0	5	53		0	0	0	0
8:00 AM	1	6	20	0	0	0	17	0	0	0	0	0	0	0	0	4	48		0	0	0	0
8:15 AM	0	5	20	0	0	0	15	1	0	0	0	0	0	1	0	4	46		0	0	0	0
Count Total	1	28	148	0	0	0	195	5	0	0	0	0	0	5	0	47	429		0	0	0	0
Peak Hour	0	14	60	0	0	0	115	3	0	0	0	0	0	4	0	29	225		0	0	0	0

All Traffic Data
Services Inc.
(303) 216-2439
www.alltrafficdata.net

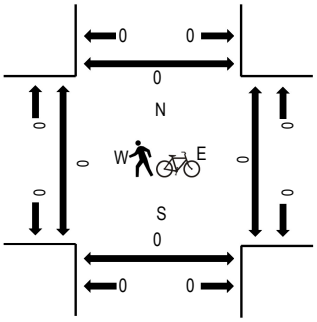
Location: 1 HARVEST RD & JEWELL AVE PM
Date: Thursday, February 13, 2020
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	JEWELL AVE Eastbound				JEWELL AVE Westbound				HARVEST RD Northbound				HARVEST RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	4	19	0	0	0	27	0	0	0	0	0	0	0	0	4	54	251	0	0	0	0
4:15 PM	0	8	19	0	0	0	27	1	0	0	0	0	0	1	0	4	60	261	0	0	0	0
4:30 PM	0	5	30	0	0	0	32	0	0	0	0	0	0	1	0	5	73	275	0	0	0	0
4:45 PM	0	10	20	0	0	0	27	1	0	0	0	0	0	1	0	5	64	269	0	0	0	0
5:00 PM	0	9	19	0	0	0	29	1	0	0	0	0	0	0	0	6	64	251	0	0	0	0
5:15 PM	0	9	23	0	0	0	30	1	0	0	0	0	0	0	0	11	74		0	0	0	0
5:30 PM	0	11	23	0	0	0	30	0	0	0	0	0	0	0	0	3	67		0	0	0	0
5:45 PM	1	6	16	0	0	0	19	0	0	0	0	0	0	0	0	4	46		0	0	0	0
Count Total	1	62	169	0	0	0	221	4	0	0	0	0	0	3	0	42	502		0	0	0	0
Peak Hour	0	33	92	0	0	0	118	3	0	0	0	0	0	2	0	27	275		0	0	0	0

APPENDIX B. EXISTING (2023) LEVEL OF SERVICE

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	60	115	3	4	29
Future Vol, veh/h	14	60	115	3	4	29
Conflicting Peds, #/hr	0	0	0	0	4	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	87	87	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	73	132	3	5	39

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	135	0	-	0	245	134
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1449	-	-	-	743	915
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1449	-	-	-	734	915
Mov Cap-2 Maneuver	-	-	-	-	734	-
Stage 1	-	-	-	-	881	-
Stage 2	-	-	-	-	914	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1449	-	-	-	888
HCM Lane V/C Ratio	0.012	-	-	-	0.05
HCM Control Delay (s)	7.5	0	-	-	9.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	92	118	3	4	27
Future Vol, veh/h	33	92	118	3	4	27
Conflicting Peds, #/hr	0	0	0	0	4	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	95	95	66	66
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	103	124	3	6	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	127	0	-	0	307	126
Stage 1	-	-	-	-	126	-
Stage 2	-	-	-	-	181	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1459	-	-	-	685	924
Stage 1	-	-	-	-	900	-
Stage 2	-	-	-	-	850	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1459	-	-	-	667	924
Mov Cap-2 Maneuver	-	-	-	-	667	-
Stage 1	-	-	-	-	876	-
Stage 2	-	-	-	-	850	-

Approach	EB	WB	SB
HCM Control Delay, s	2	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1459	-	-	-	880
HCM Lane V/C Ratio	0.025	-	-	-	0.053
HCM Control Delay (s)	7.5	0	-	-	9.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

APPENDIX C. BACKGROUND TRAFFIC LEVEL OF SERVICE WORKSHEETS

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	127	24	7	187	23	79	72	16	33	22	44
Future Vol, veh/h	30	127	24	7	187	23	79	72	16	33	22	44
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	250	-	-	-	-	-	250	-	250	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	138	26	8	203	25	86	78	17	36	24	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	228	0	0	164	0	0	485	461	151	497	462	216
Stage 1	-	-	-	-	-	-	217	217	-	232	232	-
Stage 2	-	-	-	-	-	-	268	244	-	265	230	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1340	-	-	1414	-	-	492	497	895	483	497	824
Stage 1	-	-	-	-	-	-	785	723	-	771	713	-
Stage 2	-	-	-	-	-	-	738	704	-	740	714	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1340	-	-	1414	-	-	435	481	895	405	481	824
Mov Cap-2 Maneuver	-	-	-	-	-	-	435	481	-	405	481	-
Stage 1	-	-	-	-	-	-	765	705	-	752	708	-
Stage 2	-	-	-	-	-	-	667	699	-	629	696	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.2	14.1	13.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	435	481	895	1340	-	-	1414	-	-	548
HCM Lane V/C Ratio	0.197	0.163	0.019	0.024	-	-	0.005	-	-	0.196
HCM Control Delay (s)	15.3	13.9	9.1	7.8	-	-	7.6	0	-	13.2
HCM Lane LOS	C	B	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.7	0.6	0.1	0.1	-	-	0	-	-	0.7

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	122	4	4	181	0	8	6	9	0	3	6
Future Vol, veh/h	7	122	4	4	181	0	8	6	9	0	3	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	250	-	-	250	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	133	4	4	197	0	9	7	10	0	3	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	197	0	0	137	0	0	361	356	135	365	358	197
Stage 1	-	-	-	-	-	-	151	151	-	205	205	-
Stage 2	-	-	-	-	-	-	210	205	-	160	153	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1376	-	-	1447	-	-	595	570	914	591	568	844
Stage 1	-	-	-	-	-	-	851	772	-	797	732	-
Stage 2	-	-	-	-	-	-	792	732	-	842	771	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1376	-	-	1447	-	-	584	565	914	576	563	844
Mov Cap-2 Maneuver	-	-	-	-	-	-	584	565	-	576	563	-
Stage 1	-	-	-	-	-	-	846	767	-	792	730	-
Stage 2	-	-	-	-	-	-	780	730	-	821	766	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.2	10.5	10
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	584	733	1376	-	-	1447	-	-	-	724
HCM Lane V/C Ratio	0.015	0.022	0.006	-	-	0.003	-	-	-	0.014
HCM Control Delay (s)	11.3	10	7.6	-	-	7.5	-	-	0	10
HCM Lane LOS	B	B	A	-	-	A	-	-	A	B
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0	-	-	-	0

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	10	16	0	41	3	78	7	27	22	4
Future Vol, veh/h	11	0	10	16	0	41	3	78	7	27	22	4
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	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	11	17	0	45	3	85	8	29	24	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	202	183	26	185	181	89	28	0	0	93	0	0
Stage 1	84	84	-	95	95	-	-	-	-	-	-	-
Stage 2	118	99	-	90	86	-	-	-	-	-	-	-
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	756	711	1050	776	713	969	1585	-	-	1501	-	-
Stage 1	924	825	-	912	816	-	-	-	-	-	-	-
Stage 2	887	813	-	917	824	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	710	696	1050	756	698	969	1585	-	-	1501	-	-
Mov Cap-2 Maneuver	710	696	-	756	698	-	-	-	-	-	-	-
Stage 1	922	809	-	910	814	-	-	-	-	-	-	-
Stage 2	845	811	-	890	808	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	9.3	0.2	3.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1585	-	-	839	898	1501	-	-
HCM Lane V/C Ratio	0.002	-	-	0.027	0.069	0.02	-	-
HCM Control Delay (s)	7.3	-	-	9.4	9.3	7.4	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	4	9	10	1
Future Vol, veh/h	1	3	4	9	10	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	4	10	11	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	30	12	12	0	-	0
Stage 1	12	-	-	-	-	-
Stage 2	18	-	-	-	-	-
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	984	1069	1607	-	-	-
Stage 1	1011	-	-	-	-	-
Stage 2	1005	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	981	1069	1607	-	-	-
Mov Cap-2 Maneuver	981	-	-	-	-	-
Stage 1	1008	-	-	-	-	-
Stage 2	1005	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	2.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1607	-	1046	-	-
HCM Lane V/C Ratio	0.003	-	0.004	-	-
HCM Control Delay (s)	7.2	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	0	5	13	0	23	2	47	4	7	36	6
Future Vol, veh/h	17	0	5	13	0	23	2	47	4	7	36	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	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	0	5	14	0	25	2	51	4	8	39	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	129	118	43	118	119	53	46	0	0	55	0	0
Stage 1	59	59	-	57	57	-	-	-	-	-	-	-
Stage 2	70	59	-	61	62	-	-	-	-	-	-	-
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	844	772	1027	858	771	1014	1562	-	-	1550	-	-
Stage 1	953	846	-	955	847	-	-	-	-	-	-	-
Stage 2	940	846	-	950	843	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	820	767	1027	849	766	1014	1562	-	-	1550	-	-
Mov Cap-2 Maneuver	820	767	-	849	766	-	-	-	-	-	-	-
Stage 1	952	842	-	954	846	-	-	-	-	-	-	-
Stage 2	916	845	-	940	839	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	9	0.3	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1562	-	-	859	948	1550	-	-
HCM Lane V/C Ratio	0.001	-	-	0.028	0.041	0.005	-	-
HCM Control Delay (s)	7.3	-	-	9.3	9	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	2	1	7	13	1
Future Vol, veh/h	3	2	1	7	13	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	2	1	8	14	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	25	15	15	0	-	0
Stage 1	15	-	-	-	-	-
Stage 2	10	-	-	-	-	-
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	991	1065	1603	-	-	-
Stage 1	1008	-	-	-	-	-
Stage 2	1013	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	990	1065	1603	-	-	-
Mov Cap-2 Maneuver	990	-	-	-	-	-
Stage 1	1007	-	-	-	-	-
Stage 2	1013	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1603	-	1019	-	-
HCM Lane V/C Ratio	0.001	-	0.005	-	-
HCM Control Delay (s)	7.2	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	2	0	46	53	2
Future Vol, veh/h	7	2	0	46	53	2
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	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	2	0	50	58	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	109	59	60	0	-	0
Stage 1	59	-	-	-	-	-
Stage 2	50	-	-	-	-	-
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	888	1007	1544	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	972	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	888	1007	1544	-	-	-
Mov Cap-2 Maneuver	888	-	-	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	972	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1544	-	912	-	-
HCM Lane V/C Ratio	-	-	0.011	-	-
HCM Control Delay (s)	0	-	9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	47	1	3	2	1	56
Future Vol, veh/h	47	1	3	2	1	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	1	3	2	1	61

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	5	0	-	0	107	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	103	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1616	-	-	-	891	1080
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	921	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1616	-	-	-	862	1080
Mov Cap-2 Maneuver	-	-	-	-	862	-
Stage 1	-	-	-	-	986	-
Stage 2	-	-	-	-	921	-

Approach	EB	WB	SB
HCM Control Delay, s	7.1	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1616	-	-	-	862	1080
HCM Lane V/C Ratio	0.032	-	-	-	0.001	0.056
HCM Control Delay (s)	7.3	-	-	-	9.2	8.5
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0	0.2

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	2	7	13	3
Future Vol, veh/h	1	1	2	7	13	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	1	2	8	14	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	10	0	-	0	9	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1610	-	-	-	1011	1077
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	1020	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1610	-	-	-	1010	1077
Mov Cap-2 Maneuver	-	-	-	-	1010	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1020	-

Approach	EB	WB	SB
HCM Control Delay, s	3.6	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1610	-	-	-	1022
HCM Lane V/C Ratio	0.001	-	-	-	0.017
HCM Control Delay (s)	7.2	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	119	58	19	176	41	12
Future Vol, veh/h	119	58	19	176	41	12
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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	129	63	21	191	45	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	192	0	394	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	233	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1381	-	611	884
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	806	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1381	-	601	884
Mov Cap-2 Maneuver	-	-	-	-	601	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	648	-	-	1381	-
HCM Lane V/C Ratio	0.089	-	-	0.015	-
HCM Control Delay (s)	11.1	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	122	9	0	195	0	11
Future Vol, veh/h	122	9	0	195	0	11
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
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	133	10	0	212	0	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	138
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	910
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	910
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	910	-	-	-
HCM Lane V/C Ratio	0.013	-	-	-
HCM Control Delay (s)	9	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	3	1	13	8	3
Future Vol, veh/h	10	3	1	13	8	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	3	1	14	9	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	27	11	12	0	-	0
Stage 1	11	-	-	-	-	-
Stage 2	16	-	-	-	-	-
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	988	1070	1607	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1007	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	987	1070	1607	-	-	-
Mov Cap-2 Maneuver	987	-	-	-	-	-
Stage 1	1011	-	-	-	-	-
Stage 2	1007	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1607	-	1005	-	-
HCM Lane V/C Ratio	0.001	-	0.014	-	-
HCM Control Delay (s)	7.2	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	1	9	9	2
Future Vol, veh/h	5	3	1	9	9	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	3	1	10	10	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	23	11	12	0	-	0
Stage 1	11	-	-	-	-	-
Stage 2	12	-	-	-	-	-
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	993	1070	1607	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	992	1070	1607	-	-	-
Mov Cap-2 Maneuver	992	-	-	-	-	-
Stage 1	1011	-	-	-	-	-
Stage 2	1011	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1607	-	1020	-	-
HCM Lane V/C Ratio	0.001	-	0.009	-	-
HCM Control Delay (s)	7.2	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	49	119	11	0	53
Future Vol, veh/h	0	49	119	11	0	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	53	129	12	0	58

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	135	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	914	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	914	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	914	-
HCM Lane V/C Ratio	-	-	0.058	-
HCM Control Delay (s)	-	-	9.2	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	6	18	1	3	18
Future Vol, veh/h	5	6	18	1	3	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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	7	20	1	3	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	21	0	-	0	38	21
Stage 1	-	-	-	-	21	-
Stage 2	-	-	-	-	17	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1595	-	-	-	974	1056
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	1006	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1595	-	-	-	971	1056
Mov Cap-2 Maneuver	-	-	-	-	971	-
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1006	-

Approach	EB	WB	SB
HCM Control Delay, s	3.3	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1595	-	-	-	1043
HCM Lane V/C Ratio	0.003	-	-	-	0.022
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	3	1	1	2	18
Future Vol, veh/h	6	3	1	1	2	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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	3	1	1	2	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2	0	-	0	19	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	17	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1620	-	-	-	998	1082
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1006	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1620	-	-	-	994	1082
Mov Cap-2 Maneuver	-	-	-	-	994	-
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	1006	-

Approach	EB	WB	SB
HCM Control Delay, s	4.8	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1620	-	-	-	1073
HCM Lane V/C Ratio	0.004	-	-	-	0.02
HCM Control Delay (s)	7.2	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	11.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	236	67	22	206	33	105	75	12	77	65	49
Future Vol, veh/h	52	236	67	22	206	33	105	75	12	77	65	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	250	-	-	-	-	-	250	-	250	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	57	257	73	24	224	36	114	82	13	84	71	53

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	260	0	0	330	0	0	760	716	294	745	734	242
Stage 1	-	-	-	-	-	-	408	408	-	290	290	-
Stage 2	-	-	-	-	-	-	352	308	-	455	444	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1304	-	-	1229	-	-	323	356	745	330	347	797
Stage 1	-	-	-	-	-	-	620	597	-	718	672	-
Stage 2	-	-	-	-	-	-	665	660	-	585	575	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1304	-	-	1229	-	-	239	333	745	250	324	797
Mov Cap-2 Maneuver	-	-	-	-	-	-	239	333	-	250	324	-
Stage 1	-	-	-	-	-	-	593	571	-	686	657	-
Stage 2	-	-	-	-	-	-	541	645	-	471	550	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0.7	26.3	31.8
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	239	333	745	1304	-	-	1229	-	-	335
HCM Lane V/C Ratio	0.478	0.245	0.018	0.043	-	-	0.019	-	-	0.62
HCM Control Delay (s)	33.1	19.3	9.9	7.9	-	-	8	0	-	31.8
HCM Lane LOS	D	C	A	A	-	-	A	A	-	D
HCM 95th %tile Q(veh)	2.4	0.9	0.1	0.1	-	-	0.1	-	-	3.9

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	172	11	13	219	0	7	4	6	0	8	13
Future Vol, veh/h	13	172	11	13	219	0	7	4	6	0	8	13
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	250	-	-	250	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	187	12	14	238	0	8	4	7	0	9	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	238	0	0	199	0	0	499	487	193	493	493	238
Stage 1	-	-	-	-	-	-	221	221	-	266	266	-
Stage 2	-	-	-	-	-	-	278	266	-	227	227	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1329	-	-	1373	-	-	482	481	849	486	477	801
Stage 1	-	-	-	-	-	-	781	720	-	739	689	-
Stage 2	-	-	-	-	-	-	728	689	-	776	716	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1329	-	-	1373	-	-	459	471	849	471	467	801
Mov Cap-2 Maneuver	-	-	-	-	-	-	459	471	-	471	467	-
Stage 1	-	-	-	-	-	-	772	712	-	731	682	-
Stage 2	-	-	-	-	-	-	699	682	-	757	708	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	11.6	10.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	459	643	1329	-	-	1373	-	-	-	629
HCM Lane V/C Ratio	0.017	0.017	0.011	-	-	0.01	-	-	-	0.036
HCM Control Delay (s)	13	10.7	7.7	-	-	7.6	-	-	0	10.9
HCM Lane LOS	B	B	A	-	-	A	-	-	A	B
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	6	34	0	40	10	71	16	72	70	12
Future Vol, veh/h	7	0	6	34	0	40	10	71	16	72	70	12
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	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	7	37	0	43	11	77	17	78	76	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	368	355	83	350	353	86	89	0	0	94	0	0
Stage 1	239	239	-	108	108	-	-	-	-	-	-	-
Stage 2	129	116	-	242	245	-	-	-	-	-	-	-
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	588	571	976	605	572	973	1506	-	-	1500	-	-
Stage 1	764	708	-	897	806	-	-	-	-	-	-	-
Stage 2	875	800	-	762	703	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	536	537	976	574	538	973	1506	-	-	1500	-	-
Mov Cap-2 Maneuver	536	537	-	574	538	-	-	-	-	-	-	-
Stage 1	759	671	-	891	800	-	-	-	-	-	-	-
Stage 2	830	794	-	718	666	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	10.5	0.8	3.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1506	-	-	677	737	1500	-	-
HCM Lane V/C Ratio	0.007	-	-	0.021	0.109	0.052	-	-
HCM Control Delay (s)	7.4	-	-	10.4	10.5	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.4	0.2	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	8	12	14	4
Future Vol, veh/h	0	8	8	12	14	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	9	13	15	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	48	17	19	0	-	0
Stage 1	17	-	-	-	-	-
Stage 2	31	-	-	-	-	-
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	962	1062	1597	-	-	-
Stage 1	1006	-	-	-	-	-
Stage 2	992	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	956	1062	1597	-	-	-
Mov Cap-2 Maneuver	956	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	992	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.4	2.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1597	-	1062	-	-
HCM Lane V/C Ratio	0.005	-	0.008	-	-
HCM Control Delay (s)	7.3	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	0	4	9	0	16	6	70	16	20	71	20
Future Vol, veh/h	12	0	4	9	0	16	6	70	16	20	71	20
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	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	0	4	10	0	17	7	76	17	22	77	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	239	239	88	233	242	85	99	0	0	93	0	0
Stage 1	132	132	-	99	99	-	-	-	-	-	-	-
Stage 2	107	107	-	134	143	-	-	-	-	-	-	-
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	715	662	970	722	660	974	1494	-	-	1501	-	-
Stage 1	871	787	-	907	813	-	-	-	-	-	-	-
Stage 2	898	807	-	869	779	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	692	649	970	708	647	974	1494	-	-	1501	-	-
Mov Cap-2 Maneuver	692	649	-	708	647	-	-	-	-	-	-	-
Stage 1	867	775	-	902	809	-	-	-	-	-	-	-
Stage 2	878	803	-	852	767	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	9.3	0.5	1.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1494	-	-	745	858	1501	-	-
HCM Lane V/C Ratio	0.004	-	-	0.023	0.032	0.014	-	-
HCM Control Delay (s)	7.4	-	-	9.9	9.3	7.4	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	3	18	16	4
Future Vol, veh/h	2	1	3	18	16	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1	3	20	17	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	45	19	21	0	-	0
Stage 1	19	-	-	-	-	-
Stage 2	26	-	-	-	-	-
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	965	1059	1595	-	-	-
Stage 1	1004	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	963	1059	1595	-	-	-
Mov Cap-2 Maneuver	963	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	997	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1595	-	993	-	-
HCM Lane V/C Ratio	0.002	-	0.003	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	1	2	88	76	8
Future Vol, veh/h	4	1	2	88	76	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	2	96	83	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	188	88	92	0	-	0
Stage 1	88	-	-	-	-	-
Stage 2	100	-	-	-	-	-
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	801	970	1503	-	-	-
Stage 1	935	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	800	970	1503	-	-	-
Mov Cap-2 Maneuver	800	-	-	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	924	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1503	-	829	-	-
HCM Lane V/C Ratio	0.001	-	0.007	-	-
HCM Control Delay (s)	7.4	-	9.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	90	3	2	3	0	79
Future Vol, veh/h	90	3	2	3	0	79
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	3	2	3	0	86

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	5	0	-	0	203	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	199	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1616	-	-	-	786	1080
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	835	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1616	-	-	-	738	1080
Mov Cap-2 Maneuver	-	-	-	-	738	-
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	835	-

Approach	EB	WB	SB
HCM Control Delay, s	7.1	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1616	-	-	-	-	1080
HCM Lane V/C Ratio	0.061	-	-	-	-	0.08
HCM Control Delay (s)	7.4	-	-	-	0	8.6
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.3

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	0	3	18	10	2
Future Vol, veh/h	3	0	3	18	10	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	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	0	3	20	11	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	23	0	-	0	19	13
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	6	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1592	-	-	-	998	1067
Stage 1	-	-	-	-	1010	-
Stage 2	-	-	-	-	1017	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1592	-	-	-	996	1067
Mov Cap-2 Maneuver	-	-	-	-	996	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	1017	-

Approach	EB	WB	SB
HCM Control Delay, s	7.3	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1592	-	-	-	1007
HCM Lane V/C Ratio	0.002	-	-	-	0.013
HCM Control Delay (s)	7.3	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	180	145	44	194	67	34
Future Vol, veh/h	180	145	44	194	67	34
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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	196	158	48	211	73	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	354	0	582	275
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	307	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1205	-	475	764
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	746	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1205	-	454	764
Mov Cap-2 Maneuver	-	-	-	-	454	-
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	712	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	13.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	526	-	-	1205	-
HCM Lane V/C Ratio	0.209	-	-	0.04	-
HCM Control Delay (s)	13.6	-	-	8.1	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	185	29	0	238	0	10
Future Vol, veh/h	185	29	0	238	0	10
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
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	201	32	0	259	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	217
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	823
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	823
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	823	-	-	-
HCM Lane V/C Ratio	0.013	-	-	-
HCM Control Delay (s)	9.4	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	2	2	10	20	10
Future Vol, veh/h	6	2	2	10	20	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	2	11	22	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	43	28	33	0	-	0
Stage 1	28	-	-	-	-	-
Stage 2	15	-	-	-	-	-
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	968	1047	1579	-	-	-
Stage 1	995	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	967	1047	1579	-	-	-
Mov Cap-2 Maneuver	967	-	-	-	-	-
Stage 1	994	-	-	-	-	-
Stage 2	1008	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	1.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1579	-	986	-	-
HCM Lane V/C Ratio	0.001	-	0.009	-	-
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	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	2	3	9	16	6
Future Vol, veh/h	3	2	3	9	16	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	2	3	10	17	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	37	21	24	0	-	0
Stage 1	21	-	-	-	-	-
Stage 2	16	-	-	-	-	-
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	975	1056	1591	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	1007	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	973	1056	1591	-	-	-
Mov Cap-2 Maneuver	973	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	1007	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1591	-	1005	-	-
HCM Lane V/C Ratio	0.002	-	0.005	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	101	92	26	0	154
Future Vol, veh/h	0	101	92	26	0	154
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	110	100	28	0	167

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	114	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	939	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	939	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	939	-
HCM Lane V/C Ratio	-	-	0.117	-
HCM Control Delay (s)	-	-	9.3	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.4	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	18	13	4	2	12
Future Vol, veh/h	18	18	13	4	2	12
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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	20	14	4	2	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	18	0	-	0	76	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	60	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1599	-	-	-	927	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	963	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1599	-	-	-	915	1063
Mov Cap-2 Maneuver	-	-	-	-	915	-
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	963	-

Approach	EB	WB	SB
HCM Control Delay, s	3.6	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1599	-	-	-	1039
HCM Lane V/C Ratio	0.012	-	-	-	0.015
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	2	4	3	1	13
Future Vol, veh/h	18	2	4	3	1	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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	2	4	3	1	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	7	0	-	0	48	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	42	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1614	-	-	-	962	1077
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	980	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1614	-	-	-	950	1077
Mov Cap-2 Maneuver	-	-	-	-	950	-
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	980	-

Approach	EB	WB	SB
HCM Control Delay, s	6.5	0	8.4
HCM LOS			A

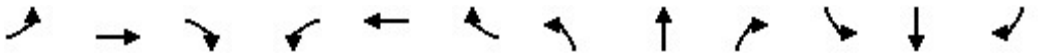
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1614	-	-	-	1067
HCM Lane V/C Ratio	0.012	-	-	-	0.014
HCM Control Delay (s)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	425	924	78	1127	369	161	216	86	215	151	400
Future Volume (vph)	425	924	78	1127	369	161	216	86	215	151	400
Lane Group Flow (vph)	462	1081	85	1225	401	175	235	93	234	164	435
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6		3	8		7	4	5
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	21.0	9.0	21.0	21.0	9.0	21.0	9.0
Total Split (s)	25.0	50.0	17.0	42.0	42.0	32.0	34.0	34.0	19.0	21.0	25.0
Total Split (%)	20.8%	41.7%	14.2%	35.0%	35.0%	26.7%	28.3%	28.3%	15.8%	17.5%	20.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
v/c Ratio	0.77	0.44	0.56	0.64	0.47	0.69	0.73	0.23	0.65	0.65	0.66
Control Delay	56.4	22.8	65.6	28.6	3.5	62.8	59.3	1.8	60.2	60.9	25.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.4	22.8	65.6	28.6	3.5	62.8	59.3	1.8	60.2	60.9	25.5
Queue Length 50th (ft)	173	203	64	198	0	131	175	0	90	121	179
Queue Length 95th (ft)	#252	285	121	234	42	196	242	4	132	190	295
Internal Link Dist (ft)		636		348			342			908	
Turn Bay Length (ft)	250		250		250	250		250	250		
Base Capacity (vph)	621	2456	180	1928	849	398	450	500	400	268	665
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.44	0.47	0.64	0.47	0.44	0.52	0.19	0.58	0.61	0.65

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Harvest Road & Jewell Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	425	924	71	78	1127	369	161	216	86	215	151	400
Future Volume (veh/h)	425	924	71	78	1127	369	161	216	86	215	151	400
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	462	1004	77	85	1225	401	175	235	93	234	164	435
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	525	2531	194	107	2203	684	208	307	260	297	249	452
Arrive On Green	0.15	0.52	0.53	0.12	0.86	0.86	0.12	0.16	0.16	0.09	0.13	0.13
Sat Flow, veh/h	3456	4837	370	1781	5106	1585	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	462	706	375	85	1225	401	175	235	93	234	164	435
Grp Sat Flow(s),veh/h/ln	1728	1702	1804	1781	1702	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	15.7	15.0	15.0	5.6	7.6	8.4	11.5	14.4	6.3	8.0	10.0	16.0
Cycle Q Clear(g_c), s	15.7	15.0	15.0	5.6	7.6	8.4	11.5	14.4	6.3	8.0	10.0	16.0
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	525	1781	944	107	2203	684	208	307	260	297	249	452
V/C Ratio(X)	0.88	0.40	0.40	0.80	0.56	0.59	0.84	0.77	0.36	0.79	0.66	0.96
Avail Cap(c_a), veh/h	576	1781	944	178	2203	684	401	452	383	403	249	452
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	17.2	17.1	52.1	5.2	5.3	51.9	48.0	44.5	53.8	49.4	42.3
Incr Delay (d2), s/veh	13.9	0.7	1.3	12.5	1.0	3.7	8.8	4.6	0.8	7.1	6.2	32.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.2	9.7	10.3	4.9	3.3	4.2	9.6	11.5	4.5	6.8	8.8	23.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.7	17.9	18.4	64.6	6.2	8.9	60.8	52.5	45.4	60.9	55.6	74.9
LnGrp LOS	E	B	B	E	A	A	E	D	D	E	E	E
Approach Vol, veh/h		1543			1711			503			833	
Approach Delay, s/veh		31.7			9.7			54.1			67.2	
Approach LOS		C			A			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	67.8	19.0	21.0	23.2	56.8	15.3	24.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.0	45.0	27.0	16.0	20.0	37.0	14.0	29.0
Max Q Clear Time (g_c+I1), s	7.6	17.0	13.5	18.0	17.7	10.4	10.0	16.4
Green Ext Time (p_c), s	0.1	5.2	0.5	0.0	0.5	9.2	0.4	1.0

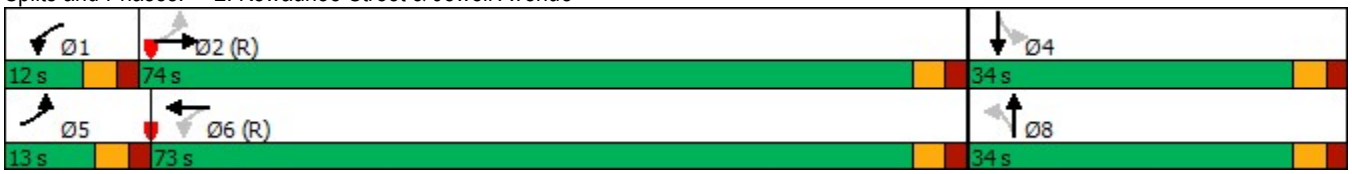
Intersection Summary	
HCM 6th Ctrl Delay	32.4
HCM 6th LOS	C

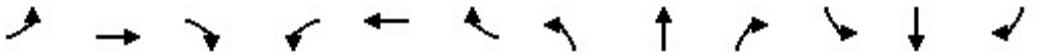
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	32	1135	14	1423	63	26	55	38
Future Volume (vph)	32	1135	14	1423	63	26	55	38
Lane Group Flow (vph)	35	1249	15	1601	68	43	60	113
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	13.0	74.0	12.0	73.0	34.0	34.0	34.0	34.0
Total Split (%)	10.8%	61.7%	10.0%	60.8%	28.3%	28.3%	28.3%	28.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
v/c Ratio	0.13	0.32	0.04	0.42	0.66	0.23	0.44	0.49
Control Delay	4.4	4.8	3.1	6.4	79.5	37.0	59.7	28.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.4	4.8	3.1	6.4	79.5	37.0	59.7	28.8
Queue Length 50th (ft)	5	72	2	159	52	20	44	32
Queue Length 95th (ft)	m12	88	7	228	98	54	86	87
Internal Link Dist (ft)		457		512		319		229
Turn Bay Length (ft)	250		250		250		250	
Base Capacity (vph)	293	3959	381	3849	250	438	328	459
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.32	0.04	0.42	0.27	0.10	0.18	0.25

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Kewaunee Street & Jewell Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	1135	14	14	1423	50	63	26	14	55	38	66
Future Volume (veh/h)	32	1135	14	14	1423	50	63	26	14	55	38	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	1234	15	15	1547	54	68	28	15	60	41	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	3785	46	403	3637	127	152	154	82	213	82	143
Arrive On Green	0.05	1.00	1.00	0.01	0.72	0.72	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1781	5200	63	1781	5066	177	1280	1146	614	1364	609	1069
Grp Volume(v), veh/h	35	808	441	15	1039	562	68	0	43	60	0	113
Grp Sat Flow(s),veh/h/ln	1781	1702	1859	1781	1702	1839	1280	0	1760	1364	0	1678
Q Serve(g_s), s	0.6	0.0	0.0	0.3	14.9	14.9	6.3	0.0	2.6	4.9	0.0	7.5
Cycle Q Clear(g_c), s	0.6	0.0	0.0	0.3	14.9	14.9	13.8	0.0	2.6	7.5	0.0	7.5
Prop In Lane	1.00		0.03	1.00		0.10	1.00		0.35	1.00		0.64
Lane Grp Cap(c), veh/h	289	2478	1353	403	2444	1320	152	0	236	213	0	225
V/C Ratio(X)	0.12	0.33	0.33	0.04	0.43	0.43	0.45	0.00	0.18	0.28	0.00	0.50
Avail Cap(c_a), veh/h	367	2478	1353	483	2444	1320	289	0	425	360	0	405
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.0	0.0	0.0	4.4	6.9	6.9	54.6	0.0	46.1	49.5	0.0	48.2
Incr Delay (d2), s/veh	0.2	0.4	0.6	0.0	0.5	1.0	2.1	0.0	0.4	0.7	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	0.2	0.4	0.2	8.3	9.1	3.8	0.0	2.1	3.1	0.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.2	0.4	0.6	4.4	7.4	7.9	56.7	0.0	46.5	50.2	0.0	50.0
LnGrp LOS	A	A	A	A	A	A	E	A	D	D	A	D
Approach Vol, veh/h		1284			1616			111			173	
Approach Delay, s/veh		0.6			7.5			52.7			50.0	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	92.3		21.1	7.8	91.2		21.1				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	7.0	69.0		29.0	8.0	68.0		29.0				
Max Q Clear Time (g_c+I1), s	2.3	2.0		9.5	2.6	16.9		15.8				
Green Ext Time (p_c), s	0.0	6.6		0.7	0.0	9.7		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		8.6
HCM 6th LOS		A

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	10	16	0	41	3	283	7	27	220	4
Future Vol, veh/h	11	0	10	16	0	41	3	283	7	27	220	4
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	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	11	17	0	45	3	308	8	29	239	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	640	621	241	623	619	312	243	0	0	316	0	0
Stage 1	299	299	-	318	318	-	-	-	-	-	-	-
Stage 2	341	322	-	305	301	-	-	-	-	-	-	-
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	388	403	798	398	404	728	1323	-	-	1244	-	-
Stage 1	710	666	-	693	654	-	-	-	-	-	-	-
Stage 2	674	651	-	705	665	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	357	393	798	385	394	728	1323	-	-	1244	-	-
Mov Cap-2 Maneuver	357	393	-	385	394	-	-	-	-	-	-	-
Stage 1	709	651	-	692	653	-	-	-	-	-	-	-
Stage 2	631	650	-	679	650	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.6	11.6	0.1	0.9
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1323	-	-	357	798	385	728	1244	-	-
HCM Lane V/C Ratio	0.002	-	-	0.033	0.014	0.045	0.061	0.024	-	-
HCM Control Delay (s)	7.7	-	-	15.4	9.6	14.8	10.3	8	-	-
HCM Lane LOS	A	-	-	C	A	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0.1	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	4	89	65	1
Future Vol, veh/h	1	3	4	89	65	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	4	97	71	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	177	72	72	0	-	0
Stage 1	72	-	-	-	-	-
Stage 2	105	-	-	-	-	-
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	832	1016	1539	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	830	1016	1539	-	-	-
Mov Cap-2 Maneuver	830	-	-	-	-	-
Stage 1	962	-	-	-	-	-
Stage 2	919	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1539	-	962	-	-
HCM Lane V/C Ratio	0.003	-	0.005	-	-
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	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	0	5	13	0	23	2	248	4	7	232	7
Future Vol, veh/h	21	0	5	13	0	23	2	248	4	7	232	7
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	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	0	5	14	0	25	2	270	4	8	252	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	561	550	256	551	552	272	260	0	0	274	0	0
Stage 1	272	272	-	276	276	-	-	-	-	-	-	-
Stage 2	289	278	-	275	276	-	-	-	-	-	-	-
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	438	443	783	445	442	767	1304	-	-	1289	-	-
Stage 1	734	685	-	730	682	-	-	-	-	-	-	-
Stage 2	719	680	-	731	682	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	421	439	783	439	438	767	1304	-	-	1289	-	-
Mov Cap-2 Maneuver	421	439	-	439	438	-	-	-	-	-	-	-
Stage 1	733	681	-	729	681	-	-	-	-	-	-	-
Stage 2	694	679	-	721	678	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	11.2	0.1	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1304	-	-	421	783	439	767	1289	-	-
HCM Lane V/C Ratio	0.002	-	-	0.054	0.007	0.032	0.033	0.006	-	-
HCM Control Delay (s)	7.8	-	-	14	9.6	13.5	9.9	7.8	-	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	0	2	5	0	65	1	22	5	30	38	1
Future Vol, veh/h	3	0	2	5	0	65	1	22	5	30	38	1
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	2	5	0	71	1	24	5	33	41	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	172	139	42	138	137	27	42	0	0	29	0	0
Stage 1	108	108	-	29	29	-	-	-	-	-	-	-
Stage 2	64	31	-	109	108	-	-	-	-	-	-	-
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	796	756	1035	839	758	1048	1569	-	-	1584	-	-
Stage 1	902	808	-	988	871	-	-	-	-	-	-	-
Stage 2	947	869	-	901	808	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	730	739	1035	823	741	1048	1569	-	-	1584	-	-
Mov Cap-2 Maneuver	730	739	-	823	741	-	-	-	-	-	-	-
Stage 1	901	791	-	987	870	-	-	-	-	-	-	-
Stage 2	882	868	-	880	791	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	8.8	0.3	3.2
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1569	-	-	828	1028	1584	-	-
HCM Lane V/C Ratio	0.001	-	-	0.007	0.074	0.021	-	-
HCM Control Delay (s)	7.3	0	-	9.4	8.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	2	0	247	249	2
Future Vol, veh/h	7	2	0	247	249	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	2	0	268	271	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	540	272	273	0	-	0
Stage 1	272	-	-	-	-	-
Stage 2	268	-	-	-	-	-
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	503	767	1290	-	-	-
Stage 1	774	-	-	-	-	-
Stage 2	777	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	503	767	1290	-	-	-
Mov Cap-2 Maneuver	503	-	-	-	-	-
Stage 1	774	-	-	-	-	-
Stage 2	777	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1290	-	545	-	-
HCM Lane V/C Ratio	-	-	0.018	-	-
HCM Control Delay (s)	0	-	11.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	305	235	12	28	18
Future Vol, veh/h	16	305	235	12	28	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	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	332	255	13	30	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	268	0	-	0	628	262
Stage 1	-	-	-	-	262	-
Stage 2	-	-	-	-	366	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1296	-	-	-	447	777
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	702	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	1296	-	-	-	441	777
Mov Cap-2 Maneuver	-	-	-	-	441	-
Stage 1	-	-	-	-	772	-
Stage 2	-	-	-	-	702	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1296	-	-	-	531
HCM Lane V/C Ratio	0.013	-	-	-	0.094
HCM Control Delay (s)	7.8	-	-	-	12.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1168	58	19	1533	41	12
Future Vol, veh/h	1168	58	19	1533	41	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1270	63	21	1666	45	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1333	0	1978	635
Stage 1	-	-	-	-	1270	-
Stage 2	-	-	-	-	708	-
Critical Hdwy	-	-	5.34	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	3.12	-	3.82	3.92
Pot Cap-1 Maneuver	-	-	776	-	*415	*653
Stage 1	-	-	-	-	*670	-
Stage 2	-	-	-	-	*582	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	776	-	*404	*653
Mov Cap-2 Maneuver	-	-	-	-	*404	-
Stage 1	-	-	-	-	*670	-
Stage 2	-	-	-	-	*566	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	442	-	-	776	-
HCM Lane V/C Ratio	0.13	-	-	0.027	-
HCM Control Delay (s)	14.4	-	-	9.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

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	1170	9	0	1552	0	11
Future Vol, veh/h	1170	9	0	1552	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1272	10	0	1687	0	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	-	-	0	-	0	0
Stage 1	-	-	0	-	0	0
Stage 2	-	-	0	-	0	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

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

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	3	1	93	61	3
Future Vol, veh/h	10	3	1	93	61	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	3	1	101	66	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	171	68	69	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	103	-	-	-	-	-
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	819	995	1532	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	921	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	818	995	1532	-	-	-
Mov Cap-2 Maneuver	818	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	921	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1532	-	853	-	-
HCM Lane V/C Ratio	0.001	-	0.017	-	-
HCM Control Delay (s)	7.4	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	1	89	62	2
Future Vol, veh/h	5	3	1	89	62	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	3	1	97	67	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	167	68	69	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	99	-	-	-	-	-
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	823	995	1532	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	822	995	1532	-	-	-
Mov Cap-2 Maneuver	822	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	925	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1532	-	879	-	-
HCM Lane V/C Ratio	0.001	-	0.01	-	-
HCM Control Delay (s)	7.4	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	49	323	11	0	252
Future Vol, veh/h	0	49	323	11	0	252
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	53	351	12	0	274

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	357	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	687	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	687	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	687	-
HCM Lane V/C Ratio	-	-	0.078	-
HCM Control Delay (s)	-	-	10.7	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	6	18	1	2	18
Future Vol, veh/h	5	6	18	1	2	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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	7	20	1	2	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	21	0	-	0	38	21
Stage 1	-	-	-	-	21	-
Stage 2	-	-	-	-	17	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1595	-	-	-	974	1056
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	1006	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1595	-	-	-	971	1056
Mov Cap-2 Maneuver	-	-	-	-	971	-
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1006	-

Approach	EB	WB	SB
HCM Control Delay, s	3.3	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1595	-	-	-	1047
HCM Lane V/C Ratio	0.003	-	-	-	0.021
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	2	1	1	3	18
Future Vol, veh/h	6	2	1	1	3	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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	1	1	3	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2	0	-	0	18	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	16	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1620	-	-	-	1000	1082
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1007	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1620	-	-	-	996	1082
Mov Cap-2 Maneuver	-	-	-	-	996	-
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	1007	-

Approach	EB	WB	SB
HCM Control Delay, s	5.4	0	8.4
HCM LOS			A

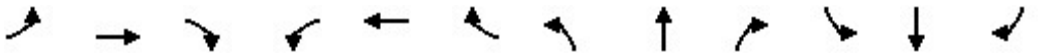
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1620	-	-	-	1069
HCM Lane V/C Ratio	0.004	-	-	-	0.021
HCM Control Delay (s)	7.2	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	408	1274	114	1252	282	175	252	89	382	284	452
Future Volume (vph)	408	1274	114	1252	282	175	252	89	382	284	452
Lane Group Flow (vph)	443	1558	124	1361	307	190	274	97	415	309	491
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6		3	8		7	4	5
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	21.0	9.0	21.0	21.0	9.0	21.0	9.0
Total Split (s)	24.0	48.0	18.0	42.0	42.0	21.0	33.0	33.0	21.0	33.0	24.0
Total Split (%)	20.0%	40.0%	15.0%	35.0%	35.0%	17.5%	27.5%	27.5%	17.5%	27.5%	20.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
v/c Ratio	0.80	0.77	0.70	0.78	0.42	0.84	0.75	0.22	0.91	0.82	0.72
Control Delay	60.4	34.9	66.3	42.8	12.0	81.3	57.8	2.0	76.0	63.2	32.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.4	34.9	66.3	42.8	12.0	81.3	57.8	2.0	76.0	63.2	32.2
Queue Length 50th (ft)	167	390	93	264	11	145	199	0	165	229	263
Queue Length 95th (ft)	#247	469	#175	382	129	#266	286	7	#257	324	392
Internal Link Dist (ft)		636		348			342			908	
Turn Bay Length (ft)	250		250		250	250		250	250		
Base Capacity (vph)	565	2024	193	1737	734	236	434	488	457	434	685
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.77	0.64	0.78	0.42	0.81	0.63	0.20	0.91	0.71	0.72

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Harvest Road & Jewell Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	408	1274	159	114	1252	282	175	252	89	382	284	452
Future Volume (veh/h)	408	1274	159	114	1252	282	175	252	89	382	284	452
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	443	1385	173	124	1361	307	190	274	97	415	309	491
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	504	1810	226	150	1696	527	217	415	352	461	436	601
Arrive On Green	0.15	0.39	0.40	0.11	0.44	0.44	0.12	0.22	0.22	0.13	0.23	0.23
Sat Flow, veh/h	3456	4597	574	1781	5106	1585	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	443	1026	532	124	1361	307	190	274	97	415	309	491
Grp Sat Flow(s),veh/h/ln	1728	1702	1767	1781	1702	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	15.1	31.4	31.3	8.2	27.7	17.5	12.6	16.0	6.1	14.2	18.2	28.0
Cycle Q Clear(g_c), s	15.1	31.4	31.3	8.2	27.7	17.5	12.6	16.0	6.1	14.2	18.2	28.0
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	504	1340	696	150	1696	527	217	415	352	461	436	601
V/C Ratio(X)	0.88	0.77	0.77	0.83	0.80	0.58	0.87	0.66	0.28	0.90	0.71	0.82
Avail Cap(c_a), veh/h	547	1340	696	193	1696	527	238	436	370	461	436	601
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	31.6	31.4	52.4	30.1	27.2	51.8	42.5	38.7	51.2	42.2	33.5
Incr Delay (d2), s/veh	14.4	4.2	7.9	20.1	4.1	4.7	26.8	3.4	0.4	20.5	5.2	8.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.9	19.1	20.5	7.8	15.9	11.1	11.6	12.4	4.4	11.9	13.9	20.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.7	35.8	39.3	72.5	34.2	31.9	78.5	46.0	39.1	71.7	47.5	42.2
LnGrp LOS	E	D	D	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		2001			1792			561			1215	
Approach Delay, s/veh		43.1			36.5			55.8			53.6	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	52.3	19.6	33.0	22.5	44.9	21.0	31.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	13.0	43.0	16.0	28.0	19.0	37.0	16.0	28.0
Max Q Clear Time (g_c+I1), s	10.2	33.4	14.6	30.0	17.1	29.7	16.2	18.0
Green Ext Time (p_c), s	0.1	5.1	0.1	0.0	0.4	4.6	0.0	1.1

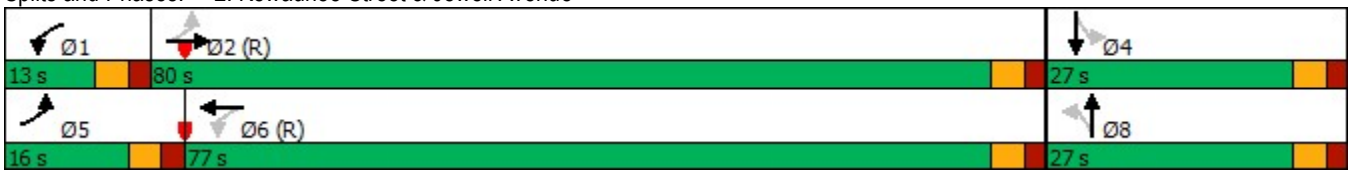
Intersection Summary	
HCM 6th Ctrl Delay	44.5
HCM 6th LOS	D

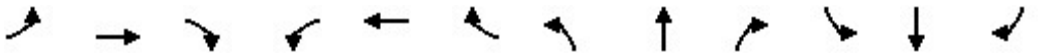
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	68	1461	33	1546	12	39	75	48
Future Volume (vph)	68	1461	33	1546	12	39	75	48
Lane Group Flow (vph)	74	1681	36	1789	13	65	82	126
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	16.0	80.0	13.0	77.0	27.0	27.0	27.0	27.0
Total Split (%)	13.3%	66.7%	10.8%	64.2%	22.5%	22.5%	22.5%	22.5%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
v/c Ratio	0.32	0.44	0.14	0.48	0.13	0.32	0.59	0.56
Control Delay	11.4	5.9	4.2	8.1	49.0	38.7	66.7	38.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.4	5.9	4.2	8.1	49.0	38.7	66.7	38.7
Queue Length 50th (ft)	13	121	4	196	9	32	61	55
Queue Length 95th (ft)	m21	137	13	282	28	74	111	112
Internal Link Dist (ft)		457		512		319		229
Turn Bay Length (ft)	250		250		250		250	
Base Capacity (vph)	293	3809	277	3695	174	339	244	353
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.44	0.13	0.48	0.07	0.19	0.34	0.36

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Kewaunee Street & Jewell Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	1461	86	33	1546	100	12	39	21	75	48	68
Future Volume (veh/h)	68	1461	86	33	1546	100	12	39	21	75	48	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	1588	93	36	1680	109	13	42	23	82	52	74
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	3633	213	316	3572	232	116	131	72	169	81	115
Arrive On Green	0.06	1.00	1.00	0.02	0.73	0.73	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1781	4934	289	1781	4900	318	1265	1136	622	1337	698	993
Grp Volume(v), veh/h	74	1095	586	36	1167	622	13	0	65	82	0	126
Grp Sat Flow(s),veh/h/ln	1781	1702	1818	1781	1702	1813	1265	0	1758	1337	0	1692
Q Serve(g_s), s	1.3	0.0	0.0	0.6	17.0	17.0	1.2	0.0	4.1	7.2	0.0	8.5
Cycle Q Clear(g_c), s	1.3	0.0	0.0	0.6	17.0	17.0	9.7	0.0	4.1	11.3	0.0	8.5
Prop In Lane	1.00		0.16	1.00		0.18	1.00		0.35	1.00		0.59
Lane Grp Cap(c), veh/h	270	2506	1339	316	2482	1322	116	0	203	169	0	195
V/C Ratio(X)	0.27	0.44	0.44	0.11	0.47	0.47	0.11	0.00	0.32	0.49	0.00	0.65
Avail Cap(c_a), veh/h	379	2506	1339	393	2482	1322	202	0	322	260	0	310
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.1	0.0	0.0	3.8	6.7	6.7	55.4	0.0	48.8	53.9	0.0	50.7
Incr Delay (d2), s/veh	0.5	0.6	1.0	0.2	0.6	1.2	0.4	0.0	0.9	2.2	0.0	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	0.3	0.7	0.3	9.0	9.8	0.7	0.0	3.3	4.5	0.0	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.6	0.6	1.0	3.9	7.3	7.9	55.8	0.0	49.7	56.1	0.0	54.3
LnGrp LOS	A	A	A	A	A	A	E	A	D	E	A	D
Approach Vol, veh/h		1755			1825			78			208	
Approach Delay, s/veh		0.9			7.5			50.7			55.0	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	93.4		18.9	8.7	92.5		18.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	8.0	75.0		22.0	11.0	72.0		22.0				
Max Q Clear Time (g_c+I1), s	2.6	2.0		13.3	3.3	19.0		11.7				
Green Ext Time (p_c), s	0.0	10.9		0.6	0.1	12.0		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			7.9									
HCM 6th LOS			A									

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	6	34	0	40	10	420	16	72	373	12
Future Vol, veh/h	7	0	6	34	0	40	10	420	16	72	373	12
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	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	7	37	0	43	11	457	17	78	405	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1077	1064	412	1059	1062	466	418	0	0	474	0	0
Stage 1	568	568	-	488	488	-	-	-	-	-	-	-
Stage 2	509	496	-	571	574	-	-	-	-	-	-	-
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	197	223	640	202	223	597	1141	-	-	1088	-	-
Stage 1	508	506	-	561	550	-	-	-	-	-	-	-
Stage 2	547	545	-	506	503	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	171	205	640	188	205	597	1141	-	-	1088	-	-
Mov Cap-2 Maneuver	171	205	-	188	205	-	-	-	-	-	-	-
Stage 1	503	470	-	555	545	-	-	-	-	-	-	-
Stage 2	502	540	-	465	467	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.5	19.4	0.2	1.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1141	-	-	171	640	188	597	1088	-	-
HCM Lane V/C Ratio	0.01	-	-	0.044	0.01	0.197	0.073	0.072	-	-
HCM Control Delay (s)	8.2	-	-	27	10.7	28.8	11.5	8.6	-	-
HCM Lane LOS	A	-	-	D	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0.7	0.2	0.2	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	8	57	149	4
Future Vol, veh/h	0	8	8	57	149	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	9	62	162	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	244	164	166	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	80	-	-	-	-	-
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	806	961	1440	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	801	961	1440	-	-	-
Mov Cap-2 Maneuver	801	-	-	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1440	-	961	-	-
HCM Lane V/C Ratio	0.006	-	0.009	-	-
HCM Control Delay (s)	7.5	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	0	4	9	0	16	6	414	16	20	372	21
Future Vol, veh/h	16	0	4	9	0	16	6	414	16	20	372	21
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	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	0	4	10	0	17	7	450	17	22	404	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	941	941	416	935	944	459	427	0	0	467	0	0
Stage 1	460	460	-	473	473	-	-	-	-	-	-	-
Stage 2	481	481	-	462	471	-	-	-	-	-	-	-
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	243	263	637	246	262	602	1132	-	-	1094	-	-
Stage 1	581	566	-	572	558	-	-	-	-	-	-	-
Stage 2	566	554	-	580	560	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	231	256	637	239	255	602	1132	-	-	1094	-	-
Mov Cap-2 Maneuver	231	256	-	239	255	-	-	-	-	-	-	-
Stage 1	578	555	-	569	555	-	-	-	-	-	-	-
Stage 2	546	551	-	564	549	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.6	14.6	0.1	0.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1132	-	-	231	637	239	602	1094	-	-
HCM Lane V/C Ratio	0.006	-	-	0.075	0.007	0.041	0.029	0.02	-	-
HCM Control Delay (s)	8.2	-	-	21.8	10.7	20.7	11.2	8.4	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0.1	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	2	0	1	10	0	25	3	38	10	115	36	4
Future Vol, veh/h	2	0	1	10	0	25	3	38	10	115	36	4
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	1	11	0	27	3	41	11	125	39	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	357	349	41	345	346	47	43	0	0	52	0	0
Stage 1	291	291	-	53	53	-	-	-	-	-	-	-
Stage 2	66	58	-	292	293	-	-	-	-	-	-	-
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	602	577	1036	613	579	1022	1568	-	-	1554	-	-
Stage 1	719	672	-	960	851	-	-	-	-	-	-	-
Stage 2	945	847	-	719	671	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	548	529	1036	573	530	1022	1568	-	-	1554	-	-
Mov Cap-2 Maneuver	548	529	-	573	530	-	-	-	-	-	-	-
Stage 1	718	617	-	958	849	-	-	-	-	-	-	-
Stage 2	918	845	-	659	616	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	9.5	0.4	5.6
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1568	-	-	650	835	1554	-	-
HCM Lane V/C Ratio	0.002	-	-	0.005	0.046	0.08	-	-
HCM Control Delay (s)	7.3	0	-	10.6	9.5	7.5	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.3	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	1	2	432	377	8
Future Vol, veh/h	4	1	2	432	377	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	2	470	410	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	889	415	419	0	-	0
Stage 1	415	-	-	-	-	-
Stage 2	474	-	-	-	-	-
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	314	637	1140	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	313	637	1140	-	-	-
Mov Cap-2 Maneuver	313	-	-	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	626	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1140	-	348	-	-
HCM Lane V/C Ratio	0.002	-	0.016	-	-
HCM Control Delay (s)	8.2	-	15.5	-	-
HCM Lane LOS	A	-	C	-	-
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	18	384	347	33	31	17
Future Vol, veh/h	18	384	347	33	31	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	417	377	36	34	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	413	0	-	0	852	395
Stage 1	-	-	-	-	395	-
Stage 2	-	-	-	-	457	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1146	-	-	-	330	654
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	638	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1146	-	-	-	324	654
Mov Cap-2 Maneuver	-	-	-	-	324	-
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	638	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	15.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1146	-	-	-	395
HCM Lane V/C Ratio	0.017	-	-	-	0.132
HCM Control Delay (s)	8.2	-	-	-	15.5
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1601	145	44	1581	67	34
Future Vol, veh/h	1601	145	44	1581	67	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1740	158	48	1718	73	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1898	0	2523	870
Stage 1	-	-	-	-	1740	-
Stage 2	-	-	-	-	783	-
Critical Hdwy	-	-	5.34	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	3.12	-	3.82	3.92
Pot Cap-1 Maneuver	-	-	643	-	*328	*536
Stage 1	-	-	-	-	*550	-
Stage 2	-	-	-	-	*550	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	643	-	*303	*536
Mov Cap-2 Maneuver	-	-	-	-	*303	-
Stage 1	-	-	-	-	*550	-
Stage 2	-	-	-	-	*508	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	19.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	355	-	-	643	-
HCM Lane V/C Ratio	0.309	-	-	0.074	-
HCM Control Delay (s)	19.6	-	-	11	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	1.3	-	-	0.2	-

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	1604	29	0	1625	0	10
Future Vol, veh/h	1604	29	0	1625	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1743	32	0	1766	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	-	-	0	-	0	0
Stage 1	-	-	0	-	0	0
Stage 2	-	-	0	-	0	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	2	2	55	156	10
Future Vol, veh/h	6	2	2	55	156	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	2	60	170	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	240	176	181	0	-	0
Stage 1	176	-	-	-	-	-
Stage 2	64	-	-	-	-	-
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	748	867	1394	-	-	-
Stage 1	855	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	747	867	1394	-	-	-
Mov Cap-2 Maneuver	747	-	-	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	959	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1394	-	774	-	-
HCM Lane V/C Ratio	0.002	-	0.011	-	-
HCM Control Delay (s)	7.6	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	2	3	54	152	6
Future Vol, veh/h	3	2	3	54	152	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	2	3	59	165	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	234	169	172	0	-	0
Stage 1	169	-	-	-	-	-
Stage 2	65	-	-	-	-	-
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	754	875	1405	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	958	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	752	875	1405	-	-	-
Mov Cap-2 Maneuver	752	-	-	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	958	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1405	-	797	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s)	7.6	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	104	442	26	0	456
Future Vol, veh/h	0	104	442	26	0	456
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	113	480	28	0	496

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	494	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	575	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	575	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	575	-
HCM Lane V/C Ratio	-	-	0.197	-
HCM Control Delay (s)	-	-	12.8	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.7	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	18	13	4	1	12
Future Vol, veh/h	18	18	13	4	1	12
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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	20	14	4	1	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	18	0	-	0	76	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	60	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1599	-	-	-	927	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	963	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1599	-	-	-	915	1063
Mov Cap-2 Maneuver	-	-	-	-	915	-
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	963	-

Approach	EB	WB	SB
HCM Control Delay, s	3.6	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1599	-	-	-	1050
HCM Lane V/C Ratio	0.012	-	-	-	0.013
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	1	4	3	2	13
Future Vol, veh/h	18	1	4	3	2	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	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	1	4	3	2	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	7	0	-	0	47	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	41	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1614	-	-	-	963	1077
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	981	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1614	-	-	-	951	1077
Mov Cap-2 Maneuver	-	-	-	-	951	-
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	981	-

Approach	EB	WB	SB
HCM Control Delay, s	6.9	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1614	-	-	-	1058
HCM Lane V/C Ratio	0.012	-	-	-	0.015
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

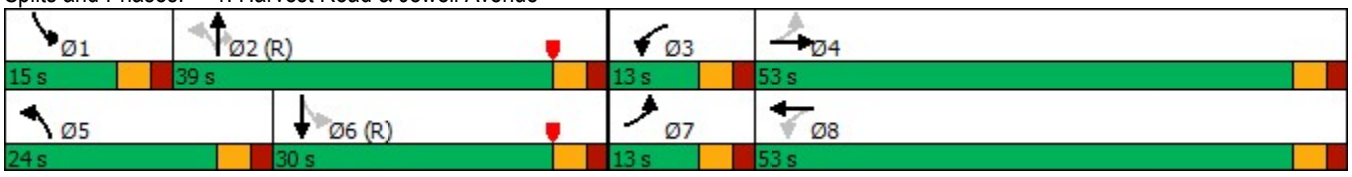
APPENDIX D. TOTAL TRAFFIC LEVEL OF SERVICE WORKSHEETS

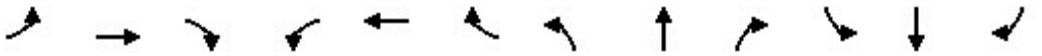
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	30	139	9	223	132	114	21	38	36
Future Volume (vph)	30	139	9	223	132	114	21	38	36
Lane Group Flow (vph)	33	196	10	281	143	124	23	41	87
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	9.0	21.0	21.0	9.0	21.0
Total Split (s)	13.0	53.0	13.0	53.0	24.0	39.0	39.0	15.0	30.0
Total Split (%)	10.8%	44.2%	10.8%	44.2%	20.0%	32.5%	32.5%	12.5%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
v/c Ratio	0.16	0.44	0.04	0.76	0.17	0.12	0.02	0.05	0.09
Control Delay	29.6	37.0	26.3	57.1	10.7	16.1	0.0	11.2	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.6	37.0	26.3	57.1	10.7	16.1	0.0	11.2	10.6
Queue Length 50th (ft)	18	109	6	202	43	48	0	12	16
Queue Length 95th (ft)	39	184	17	275	88	98	0	32	54
Internal Link Dist (ft)		1006		535		342			776
Turn Bay Length (ft)	250		250		250		250	250	
Base Capacity (vph)	213	728	298	734	887	1069	955	819	931
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.27	0.03	0.38	0.16	0.12	0.02	0.05	0.09

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 28 (23%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 1: Harvest Road & Jewell Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	139	41	9	223	36	132	114	21	38	36	44
Future Volume (veh/h)	30	139	41	9	223	36	132	114	21	38	36	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	151	45	10	242	39	143	124	23	41	39	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	267	80	189	283	46	881	1133	960	821	442	544
Arrive On Green	0.02	0.19	0.19	0.01	0.18	0.18	0.05	0.61	0.61	0.02	0.58	0.58
Sat Flow, veh/h	1781	1384	412	1781	1572	253	1781	1870	1585	1781	763	939
Grp Volume(v), veh/h	33	0	196	10	0	281	143	124	23	41	0	87
Grp Sat Flow(s),veh/h/ln	1781	0	1796	1781	0	1825	1781	1870	1585	1781	0	1701
Q Serve(g_s), s	1.8	0.0	11.9	0.5	0.0	17.9	3.9	3.4	0.7	1.1	0.0	2.7
Cycle Q Clear(g_c), s	1.8	0.0	11.9	0.5	0.0	17.9	3.9	3.4	0.7	1.1	0.0	2.7
Prop In Lane	1.00		0.23	1.00		0.14	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	134	0	347	189	0	329	881	1133	960	821	0	987
V/C Ratio(X)	0.25	0.00	0.56	0.05	0.00	0.85	0.16	0.11	0.02	0.05	0.00	0.09
Avail Cap(c_a), veh/h	213	0	718	291	0	730	1072	1133	960	926	0	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.2	0.0	43.8	40.1	0.0	47.6	8.9	10.0	9.5	9.6	0.0	11.2
Incr Delay (d2), s/veh	0.9	0.0	1.4	0.1	0.0	6.3	0.1	0.2	0.0	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	0.0	9.2	0.4	0.0	13.5	2.7	2.6	0.5	0.8	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.2	0.0	45.3	40.2	0.0	53.9	9.0	10.2	9.5	9.6	0.0	11.3
LnGrp LOS	D	A	D	D	A	D	A	B	A	A	A	B
Approach Vol, veh/h		229			291			290			128	
Approach Delay, s/veh		44.7			53.5			9.5			10.8	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	77.7	6.1	28.2	11.1	74.6	7.7	26.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	10.0	34.0	8.0	48.0	19.0	25.0	8.0	48.0
Max Q Clear Time (g_c+I1), s	3.1	5.4	2.5	13.9	5.9	4.7	3.8	19.9
Green Ext Time (p_c), s	0.0	0.7	0.0	1.2	0.3	0.4	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	129	20	9	183	0	56	6	23	0	3	6
Future Vol, veh/h	7	129	20	9	183	0	56	6	23	0	3	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	250	-	-	250	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	140	22	10	199	0	61	7	25	0	3	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	199	0	0	162	0	0	391	386	151	402	397	199
Stage 1	-	-	-	-	-	-	167	167	-	219	219	-
Stage 2	-	-	-	-	-	-	224	219	-	183	178	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1373	-	-	1437	-	-	605	571	956	594	563	842
Stage 1	-	-	-	-	-	-	884	784	-	783	722	-
Stage 2	-	-	-	-	-	-	779	722	-	866	774	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1373	-	-	1437	-	-	592	564	956	568	555	842
Mov Cap-2 Maneuver	-	-	-	-	-	-	592	564	-	568	555	-
Stage 1	-	-	-	-	-	-	879	779	-	778	717	-
Stage 2	-	-	-	-	-	-	764	717	-	831	770	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.4	11	10.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	592	836	1373	-	-	1437	-	-	-	718
HCM Lane V/C Ratio	0.103	0.038	0.006	-	-	0.007	-	-	-	0.014
HCM Control Delay (s)	11.8	9.5	7.6	-	-	7.5	-	-	0	10.1
HCM Lane LOS	B	A	A	-	-	A	-	-	A	B
HCM 95th %tile Q(veh)	0.3	0.1	0	-	-	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	11	0	10	16	0	47	3	174	7	29	54	4
Future Vol, veh/h	11	0	10	16	0	47	3	174	7	29	54	4
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	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	11	17	0	51	3	189	8	32	59	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	350	328	61	330	326	193	63	0	0	197	0	0
Stage 1	125	125	-	199	199	-	-	-	-	-	-	-
Stage 2	225	203	-	131	127	-	-	-	-	-	-	-
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	605	591	1004	623	592	849	1540	-	-	1376	-	-
Stage 1	879	792	-	803	736	-	-	-	-	-	-	-
Stage 2	778	733	-	873	791	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	558	576	1004	604	577	849	1540	-	-	1376	-	-
Mov Cap-2 Maneuver	558	576	-	604	577	-	-	-	-	-	-	-
Stage 1	877	774	-	801	735	-	-	-	-	-	-	-
Stage 2	730	732	-	843	773	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	10.1	0.1	2.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1540	-	-	708	770	1376	-	-
HCM Lane V/C Ratio	0.002	-	-	0.032	0.089	0.023	-	-
HCM Control Delay (s)	7.3	-	-	10.3	10.1	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	4	71	31	1
Future Vol, veh/h	1	3	4	71	31	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	4	77	34	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	120	35	35	0	-	0
Stage 1	35	-	-	-	-	-
Stage 2	85	-	-	-	-	-
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	876	1038	1576	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	938	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	873	1038	1576	-	-	-
Mov Cap-2 Maneuver	873	-	-	-	-	-
Stage 1	984	-	-	-	-	-
Stage 2	938	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1576	-	991	-	-
HCM Lane V/C Ratio	0.003	-	0.004	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	0	5	18	0	56	2	110	6	19	56	6
Future Vol, veh/h	17	0	5	18	0	56	2	110	6	19	56	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	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	0	5	20	0	61	2	120	7	21	61	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	265	238	65	237	238	124	68	0	0	127	0	0
Stage 1	107	107	-	128	128	-	-	-	-	-	-	-
Stage 2	158	131	-	109	110	-	-	-	-	-	-	-
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	688	663	999	717	663	927	1533	-	-	1459	-	-
Stage 1	898	807	-	876	790	-	-	-	-	-	-	-
Stage 2	844	788	-	896	804	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	635	653	999	705	653	927	1533	-	-	1459	-	-
Mov Cap-2 Maneuver	635	653	-	705	653	-	-	-	-	-	-	-
Stage 1	897	796	-	875	789	-	-	-	-	-	-	-
Stage 2	788	787	-	878	793	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	9.6	0.1	1.8
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1533	-	-	692	861	1459	-	-
HCM Lane V/C Ratio	0.001	-	-	0.035	0.093	0.014	-	-
HCM Control Delay (s)	7.4	-	-	10.4	9.6	7.5	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	9	15	67	33	2
Future Vol, veh/h	6	9	15	67	33	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	10	16	73	36	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	142	37	38	0	-	0
Stage 1	37	-	-	-	-	-
Stage 2	105	-	-	-	-	-
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	851	1035	1572	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	842	1035	1572	-	-	-
Mov Cap-2 Maneuver	842	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	919	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	1.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1572	-	948	-	-
HCM Lane V/C Ratio	0.01	-	0.017	-	-
HCM Control Delay (s)	7.3	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	2	5	0	8	0	103	2	3	75	2
Future Vol, veh/h	7	0	2	5	0	8	0	103	2	3	75	2
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	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	2	5	0	9	0	112	2	3	82	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	207	203	83	203	203	113	84	0	0	114	0	0
Stage 1	89	89	-	113	113	-	-	-	-	-	-	-
Stage 2	118	114	-	90	90	-	-	-	-	-	-	-
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	751	693	976	755	693	940	1513	-	-	1475	-	-
Stage 1	918	821	-	892	802	-	-	-	-	-	-	-
Stage 2	887	801	-	917	820	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	743	692	976	752	692	940	1513	-	-	1475	-	-
Mov Cap-2 Maneuver	743	692	-	752	692	-	-	-	-	-	-	-
Stage 1	918	819	-	892	802	-	-	-	-	-	-	-
Stage 2	879	801	-	913	818	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	9.3	0	0.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1513	-	-	785	858	1475	-	-
HCM Lane V/C Ratio	-	-	-	0.012	0.016	0.002	-	-
HCM Control Delay (s)	0	-	-	9.6	9.3	7.4	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	2	1	60	38	4
Future Vol, veh/h	10	2	1	60	38	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	2	1	65	41	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	110	43	45	0	-	0
Stage 1	43	-	-	-	-	-
Stage 2	67	-	-	-	-	-
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	887	1027	1563	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	886	1027	1563	-	-	-
Mov Cap-2 Maneuver	886	-	-	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	956	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1563	-	907	-	-
HCM Lane V/C Ratio	0.001	-	0.014	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	51	8	24	21	10	68
Future Vol, veh/h	51	8	24	21	10	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	9	26	23	11	74

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	49	0	-	0	157	38
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	119	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1558	-	-	-	834	1034
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	906	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1558	-	-	-	805	1034
Mov Cap-2 Maneuver	-	-	-	-	805	-
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	906	-

Approach	EB	WB	SB
HCM Control Delay, s	6.4	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1558	-	-	-	805	1034
HCM Lane V/C Ratio	0.036	-	-	-	0.014	0.071
HCM Control Delay (s)	7.4	-	-	-	9.5	8.7
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0	0.2

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	10	19	1	4	25
Future Vol, veh/h	8	10	19	1	4	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	11	21	1	4	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	22	0	-	0	51	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	29	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1593	-	-	-	958	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1593	-	-	-	952	1055
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	994	-

Approach	EB	WB	SB
HCM Control Delay, s	3.2	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1593	-	-	-	1039
HCM Lane V/C Ratio	0.005	-	-	-	0.03
HCM Control Delay (s)	7.3	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	6	4	10	19	18
Future Vol, veh/h	8	6	4	10	19	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	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	7	4	11	21	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	15	0	-	0	35	10
Stage 1	-	-	-	-	10	-
Stage 2	-	-	-	-	25	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1603	-	-	-	978	1071
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	998	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1603	-	-	-	972	1071
Mov Cap-2 Maneuver	-	-	-	-	972	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	998	-

Approach	EB	WB	SB
HCM Control Delay, s	4.1	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1603	-	-	-	1018
HCM Lane V/C Ratio	0.005	-	-	-	0.04
HCM Control Delay (s)	7.3	-	-	-	8.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	141	58	19	227	41	12
Future Vol, veh/h	141	58	19	227	41	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	153	63	21	247	45	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	216	0	474	185
Stage 1	-	-	-	-	185	-
Stage 2	-	-	-	-	289	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1375	-	576	933
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	760	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	1375	-	567	933
Mov Cap-2 Maneuver	-	-	-	-	567	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	749	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	622	-	-	1375	-
HCM Lane V/C Ratio	0.093	-	-	0.015	-
HCM Control Delay (s)	11.4	-	-	7.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	144	9	0	246	0	13
Future Vol, veh/h	144	9	0	246	0	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
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	157	10	0	267	0	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	162
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	963
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	963
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	963	-	-	-
HCM Lane V/C Ratio	0.015	-	-	-
HCM Control Delay (s)	8.8	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	3	1	75	28	3
Future Vol, veh/h	10	3	1	75	28	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	3	1	82	30	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	116	32	33	0	-	0
Stage 1	32	-	-	-	-	-
Stage 2	84	-	-	-	-	-
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	880	1042	1579	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	879	1042	1579	-	-	-
Mov Cap-2 Maneuver	879	-	-	-	-	-
Stage 1	990	-	-	-	-	-
Stage 2	939	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1579	-	912	-	-
HCM Lane V/C Ratio	0.001	-	0.015	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	1	71	30	2
Future Vol, veh/h	5	3	1	71	30	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	3	1	77	33	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	113	34	35	0	-	0
Stage 1	34	-	-	-	-	-
Stage 2	79	-	-	-	-	-
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	884	1039	1576	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	944	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	883	1039	1576	-	-	-
Mov Cap-2 Maneuver	883	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	944	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1576	-	936	-	-
HCM Lane V/C Ratio	0.001	-	0.009	-	-
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	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	49	220	11	0	87
Future Vol, veh/h	0	49	220	11	0	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	53	239	12	0	95

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	245	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	794	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	794	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	794	-
HCM Lane V/C Ratio	-	-	0.067	-
HCM Control Delay (s)	-	-	9.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.2	-

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	5	17	4	0	45	1	11	0	1	3	0	18
Future Vol, veh/h	5	17	4	0	45	1	11	0	1	3	0	18
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	18	4	0	49	1	12	0	1	3	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	50	0	0	22	0	0	90	80	20	81	82	50
Stage 1	-	-	-	-	-	-	30	30	-	50	50	-
Stage 2	-	-	-	-	-	-	60	50	-	31	32	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1557	-	-	1593	-	-	895	810	1058	907	808	1018
Stage 1	-	-	-	-	-	-	987	870	-	963	853	-
Stage 2	-	-	-	-	-	-	951	853	-	986	868	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1557	-	-	1593	-	-	876	808	1058	904	806	1018
Mov Cap-2 Maneuver	-	-	-	-	-	-	876	808	-	904	806	-
Stage 1	-	-	-	-	-	-	984	867	-	960	853	-
Stage 2	-	-	-	-	-	-	933	853	-	982	865	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0	9.1	8.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	889	1557	-	-	1593	-	-	1000
HCM Lane V/C Ratio	0.015	0.003	-	-	-	-	-	0.023
HCM Control Delay (s)	9.1	7.3	0	-	0	-	-	8.7
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

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	6	13	1	0	24	4	4	4	0	3	1	18
Future Vol, veh/h	6	13	1	0	24	4	4	4	0	3	1	18
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	14	1	0	26	4	4	4	0	3	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	30	0	0	15	0	0	68	59	15	59	57	28
Stage 1	-	-	-	-	-	-	29	29	-	28	28	-
Stage 2	-	-	-	-	-	-	39	30	-	31	29	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1583	-	-	1603	-	-	925	832	1065	937	834	1047
Stage 1	-	-	-	-	-	-	988	871	-	989	872	-
Stage 2	-	-	-	-	-	-	976	870	-	986	871	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1583	-	-	1603	-	-	904	829	1065	930	831	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	904	829	-	930	831	-
Stage 1	-	-	-	-	-	-	984	868	-	985	872	-
Stage 2	-	-	-	-	-	-	957	870	-	977	868	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.2	0	9.2	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	865	1583	-	-	1603	-	-	1018
HCM Lane V/C Ratio	0.01	0.004	-	-	-	-	-	0.023
HCM Control Delay (s)	9.2	7.3	0	-	0	-	-	8.6
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	2	1	22	6	2
Future Vol, veh/h	14	2	1	22	6	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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	2	1	24	7	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	17	0	42	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	26	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1600	-	969	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	997	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1600	-	968	1063
Mov Cap-2 Maneuver	-	-	-	-	968	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	996	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	990	-	-	1600	-
HCM Lane V/C Ratio	0.009	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	13	2	1	16	6	2
Future Vol, veh/h	13	2	1	16	6	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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	2	1	17	7	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	34	15
Stage 1	-	-	-	-	15	-
Stage 2	-	-	-	-	19	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	979	1065
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	1004	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	978	1065
Mov Cap-2 Maneuver	-	-	-	-	978	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	1003	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	998	-	-	1602	-
HCM Lane V/C Ratio	0.009	-	-	0.001	-
HCM Control Delay (s)	8.6	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	2	1	75	40	2
Future Vol, veh/h	6	2	1	75	40	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	1	82	43	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	128	44	45	0	-	0
Stage 1	44	-	-	-	-	-
Stage 2	84	-	-	-	-	-
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	1026	1563	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	865	1026	1563	-	-	-
Mov Cap-2 Maneuver	865	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	939	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1563	-	900	-	-
HCM Lane V/C Ratio	0.001	-	0.01	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	2	1	70	40	2
Future Vol, veh/h	6	2	1	70	40	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	1	76	43	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	122	44	45	0	-	0
Stage 1	44	-	-	-	-	-
Stage 2	78	-	-	-	-	-
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	873	1026	1563	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	872	1026	1563	-	-	-
Mov Cap-2 Maneuver	872	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	945	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1563	-	906	-	-
HCM Lane V/C Ratio	0.001	-	0.01	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	28	8	3	34	30	9
Future Vol, veh/h	28	8	3	34	30	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	9	3	37	33	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	81	38	43	0	-	0
Stage 1	38	-	-	-	-	-
Stage 2	43	-	-	-	-	-
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	921	1034	1566	-	-	-
Stage 1	984	-	-	-	-	-
Stage 2	979	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	919	1034	1566	-	-	-
Mov Cap-2 Maneuver	919	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	979	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1566	-	942	-	-
HCM Lane V/C Ratio	0.002	-	0.042	-	-
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	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	6	2	15	31	7
Future Vol, veh/h	21	6	2	15	31	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	7	2	16	34	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	58	38	42	0	-	0
Stage 1	38	-	-	-	-	-
Stage 2	20	-	-	-	-	-
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	949	1034	1567	-	-	-
Stage 1	984	-	-	-	-	-
Stage 2	1003	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	948	1034	1567	-	-	-
Mov Cap-2 Maneuver	948	-	-	-	-	-
Stage 1	983	-	-	-	-	-
Stage 2	1003	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1567	-	966	-	-
HCM Lane V/C Ratio	0.001	-	0.03	-	-
HCM Control Delay (s)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	9	69	1	3	77
Future Vol, veh/h	2	9	69	1	3	77
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	10	75	1	3	84

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	166	76	0	0	76	0
Stage 1	76	-	-	-	-	-
Stage 2	90	-	-	-	-	-
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	824	985	-	-	1523	-
Stage 1	947	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	822	985	-	-	1523	-
Mov Cap-2 Maneuver	822	-	-	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	951	1523	-
HCM Lane V/C Ratio	-	-	0.013	0.002	-
HCM Control Delay (s)	-	-	8.8	7.4	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	9	78	1	3	78
Future Vol, veh/h	2	9	78	1	3	78
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	10	85	1	3	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	177	86	0	0	86	0
Stage 1	86	-	-	-	-	-
Stage 2	91	-	-	-	-	-
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	813	973	-	-	1510	-
Stage 1	937	-	-	-	-	-
Stage 2	933	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	811	973	-	-	1510	-
Mov Cap-2 Maneuver	811	-	-	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	931	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	939	1510	-
HCM Lane V/C Ratio	-	-	0.013	0.002	-
HCM Control Delay (s)	-	-	8.9	7.4	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	9	87	1	3	78
Future Vol, veh/h	2	9	87	1	3	78
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	10	95	1	3	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	187	96	0	0	96	0
Stage 1	96	-	-	-	-	-
Stage 2	91	-	-	-	-	-
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	802	960	-	-	1498	-
Stage 1	928	-	-	-	-	-
Stage 2	933	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	800	960	-	-	1498	-
Mov Cap-2 Maneuver	800	-	-	-	-	-
Stage 1	928	-	-	-	-	-
Stage 2	931	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	926	1498	-
HCM Lane V/C Ratio	-	-	0.013	0.002	-
HCM Control Delay (s)	-	-	8.9	7.4	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	9	95	1	3	79
Future Vol, veh/h	2	9	95	1	3	79
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	10	103	1	3	86

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	196	104	0	0	104	0
Stage 1	104	-	-	-	-	-
Stage 2	92	-	-	-	-	-
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	793	951	-	-	1488	-
Stage 1	920	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	791	951	-	-	1488	-
Mov Cap-2 Maneuver	791	-	-	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	930	-	-	-	-	-

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

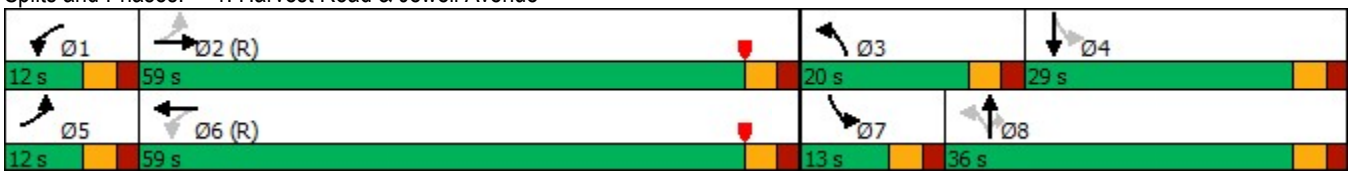
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	917	1488	-
HCM Lane V/C Ratio	-	-	0.013	0.002	-
HCM Control Delay (s)	-	-	9	7.4	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

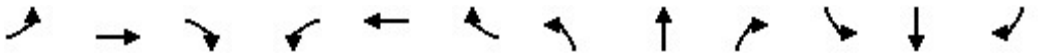
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	52	276	30	230	140	103	16	92	113
Future Volume (vph)	52	276	30	230	140	103	16	92	113
Lane Group Flow (vph)	57	438	33	295	152	112	17	100	176
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases	2		6		8		8	4	
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	9.0	21.0	21.0	9.0	21.0
Total Split (s)	12.0	59.0	12.0	59.0	20.0	36.0	36.0	13.0	29.0
Total Split (%)	10.0%	49.2%	10.0%	49.2%	16.7%	30.0%	30.0%	10.8%	24.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
v/c Ratio	0.09	0.42	0.06	0.29	0.50	0.33	0.04	0.32	0.66
Control Delay	10.1	17.1	10.2	16.6	37.4	43.1	0.2	33.3	55.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	17.1	10.2	16.6	37.4	43.1	0.2	33.3	55.4
Queue Length 50th (ft)	15	185	9	117	91	76	0	58	119
Queue Length 95th (ft)	38	317	25	208	134	120	0	93	184
Internal Link Dist (ft)		1006		535		342			776
Turn Bay Length (ft)	250		250		250		250	250	
Base Capacity (vph)	651	1043	550	1021	325	496	502	314	383
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.42	0.06	0.29	0.47	0.23	0.03	0.32	0.46

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 1: Harvest Road & Jewell Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	276	127	30	230	41	140	103	16	92	113	49
Future Volume (veh/h)	52	276	127	30	230	41	140	103	16	92	113	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	300	138	33	250	45	152	112	17	100	123	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	700	742	342	576	935	168	270	286	243	311	157	68
Arrive On Green	0.04	0.61	0.61	0.03	0.61	0.61	0.10	0.15	0.15	0.07	0.13	0.13
Sat Flow, veh/h	1781	1212	558	1781	1543	278	1781	1870	1585	1781	1240	534
Grp Volume(v), veh/h	57	0	438	33	0	295	152	112	17	100	0	176
Grp Sat Flow(s),veh/h/ln	1781	0	1770	1781	0	1820	1781	1870	1585	1781	0	1774
Q Serve(g_s), s	1.4	0.0	15.3	0.8	0.0	9.1	8.6	6.5	1.1	5.7	0.0	11.5
Cycle Q Clear(g_c), s	1.4	0.0	15.3	0.8	0.0	9.1	8.6	6.5	1.1	5.7	0.0	11.5
Prop In Lane	1.00		0.32	1.00		0.15	1.00		1.00	1.00		0.30
Lane Grp Cap(c), veh/h	700	0	1084	576	0	1104	270	286	243	311	0	224
V/C Ratio(X)	0.08	0.00	0.40	0.06	0.00	0.27	0.56	0.39	0.07	0.32	0.00	0.78
Avail Cap(c_a), veh/h	754	0	1084	640	0	1104	334	499	423	319	0	370
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.3	0.0	12.0	9.0	0.0	11.1	39.3	45.8	43.5	41.0	0.0	50.8
Incr Delay (d2), s/veh	0.0	0.0	1.1	0.0	0.0	0.6	1.8	0.9	0.1	0.6	0.0	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	9.9	0.5	0.0	6.5	7.0	5.6	0.8	4.6	0.0	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.3	0.0	13.1	9.0	0.0	11.7	41.1	46.6	43.6	41.6	0.0	56.8
LnGrp LOS	A	A	B	A	A	B	D	D	D	D	A	E
Approach Vol, veh/h		495			328			281			276	
Approach Delay, s/veh		12.5			11.4			43.5			51.3	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	77.5	15.7	19.2	8.4	76.8	12.5	22.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	54.0	15.0	24.0	7.0	54.0	8.0	31.0
Max Q Clear Time (g_c+I1), s	2.8	17.3	10.6	13.5	3.4	11.1	7.7	8.5
Green Ext Time (p_c), s	0.0	2.9	0.1	0.6	0.0	1.8	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	26.3
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	177	66	30	227	0	39	4	16	0	8	13
Future Vol, veh/h	13	177	66	30	227	0	39	4	16	0	8	13
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	250	-	-	250	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	192	72	33	247	0	42	4	17	0	9	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	247	0	0	264	0	0	581	569	228	580	605	247
Stage 1	-	-	-	-	-	-	256	256	-	313	313	-
Stage 2	-	-	-	-	-	-	325	313	-	267	292	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1319	-	-	1319	-	-	454	449	894	455	425	792
Stage 1	-	-	-	-	-	-	813	725	-	698	657	-
Stage 2	-	-	-	-	-	-	687	657	-	801	696	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1319	-	-	1319	-	-	427	433	894	431	410	792
Mov Cap-2 Maneuver	-	-	-	-	-	-	427	433	-	431	410	-
Stage 1	-	-	-	-	-	-	804	717	-	690	641	-
Stage 2	-	-	-	-	-	-	649	641	-	772	689	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.9	12.9	11.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	427	737	1319	-	-	1319	-	-	-	585
HCM Lane V/C Ratio	0.099	0.029	0.011	-	-	0.025	-	-	-	0.039
HCM Control Delay (s)	14.4	10	7.8	-	-	7.8	-	-	0	11.4
HCM Lane LOS	B	B	A	-	-	A	-	-	A	B
HCM 95th %tile Q(veh)	0.3	0.1	0	-	-	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	6	34	0	44	10	134	16	78	180	12
Future Vol, veh/h	7	0	6	34	0	44	10	134	16	78	180	12
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	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	7	37	0	48	11	146	17	85	196	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	574	558	203	553	556	155	209	0	0	163	0	0
Stage 1	373	373	-	177	177	-	-	-	-	-	-	-
Stage 2	201	185	-	376	379	-	-	-	-	-	-	-
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	461	457	930	478	459	891	1392	-	-	1416	-	-
Stage 1	692	636	-	825	753	-	-	-	-	-	-	-
Stage 2	801	747	-	689	632	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	414	426	930	451	428	891	1392	-	-	1416	-	-
Mov Cap-2 Maneuver	414	426	-	451	428	-	-	-	-	-	-	-
Stage 1	687	598	-	818	747	-	-	-	-	-	-	-
Stage 2	752	741	-	644	594	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	11.7	0.5	2.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1392	-	-	557	625	1416	-	-
HCM Lane V/C Ratio	0.008	-	-	0.025	0.136	0.06	-	-
HCM Control Delay (s)	7.6	-	-	11.6	11.7	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0.2	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	8	54	86	4
Future Vol, veh/h	0	8	8	54	86	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	9	59	93	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	172	95	97	0	-	0
Stage 1	95	-	-	-	-	-
Stage 2	77	-	-	-	-	-
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	818	962	1496	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	946	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	813	962	1496	-	-	-
Mov Cap-2 Maneuver	813	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	946	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1496	-	962	-	-
HCM Lane V/C Ratio	0.006	-	0.009	-	-
HCM Control Delay (s)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

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	12	0	4	13	0	38	6	111	21	58	142	20
Future Vol, veh/h	12	0	4	13	0	38	6	111	21	58	142	20
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	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	0	4	14	0	41	7	121	23	63	154	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	458	449	165	440	449	133	176	0	0	144	0	0
Stage 1	291	291	-	147	147	-	-	-	-	-	-	-
Stage 2	167	158	-	293	302	-	-	-	-	-	-	-
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	513	505	879	527	505	916	1400	-	-	1438	-	-
Stage 1	717	672	-	856	775	-	-	-	-	-	-	-
Stage 2	835	767	-	715	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	471	480	879	505	480	916	1400	-	-	1438	-	-
Mov Cap-2 Maneuver	471	480	-	505	480	-	-	-	-	-	-	-
Stage 1	713	642	-	852	771	-	-	-	-	-	-	-
Stage 2	793	763	-	680	635	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12	10.1	0.3	2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1400	-	-	533	759	1438	-	-
HCM Lane V/C Ratio	0.005	-	-	0.033	0.073	0.044	-	-
HCM Control Delay (s)	7.6	-	-	12	10.1	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	18	15	58	85	7
Future Vol, veh/h	4	18	15	58	85	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	20	16	63	92	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	191	96	100	0	-	0
Stage 1	96	-	-	-	-	-
Stage 2	95	-	-	-	-	-
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	798	960	1493	-	-	-
Stage 1	928	-	-	-	-	-
Stage 2	929	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	789	960	1493	-	-	-
Mov Cap-2 Maneuver	789	-	-	-	-	-
Stage 1	918	-	-	-	-	-
Stage 2	929	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1493	-	924	-	-
HCM Lane V/C Ratio	0.011	-	0.026	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	0	1	2	0	5	2	130	5	10	142	8
Future Vol, veh/h	4	0	1	2	0	5	2	130	5	10	142	8
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	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	1	2	0	5	2	141	5	11	154	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	331	331	159	329	333	144	163	0	0	146	0	0
Stage 1	181	181	-	148	148	-	-	-	-	-	-	-
Stage 2	150	150	-	181	185	-	-	-	-	-	-	-
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	622	588	886	624	587	903	1416	-	-	1436	-	-
Stage 1	821	750	-	855	775	-	-	-	-	-	-	-
Stage 2	853	773	-	821	747	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	614	583	886	619	582	903	1416	-	-	1436	-	-
Mov Cap-2 Maneuver	614	583	-	619	582	-	-	-	-	-	-	-
Stage 1	820	744	-	854	774	-	-	-	-	-	-	-
Stage 2	847	772	-	814	741	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	9.6	0.1	0.5
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1416	-	-	654	798	1436	-	-
HCM Lane V/C Ratio	0.002	-	-	0.008	0.01	0.008	-	-
HCM Control Delay (s)	7.5	-	-	10.6	9.6	7.5	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	1	2	61	78	12
Future Vol, veh/h	7	1	2	61	78	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	1	2	66	85	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	162	92	98	0	-	0
Stage 1	92	-	-	-	-	-
Stage 2	70	-	-	-	-	-
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	829	965	1495	-	-	-
Stage 1	932	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	828	965	1495	-	-	-
Mov Cap-2 Maneuver	828	-	-	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	953	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1495	-	843	-	-
HCM Lane V/C Ratio	0.001	-	0.01	-	-
HCM Control Delay (s)	7.4	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	104	27	16	19	23	87
Future Vol, veh/h	104	27	16	19	23	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	100	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	113	29	17	21	25	95

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	38	0	-	0	283	28
Stage 1	-	-	-	-	28	-
Stage 2	-	-	-	-	255	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1572	-	-	-	707	1047
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	788	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1572	-	-	-	656	1047
Mov Cap-2 Maneuver	-	-	-	-	656	-
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	788	-

Approach	EB	WB	SB
HCM Control Delay, s	5.9	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1572	-	-	-	656	1047
HCM Lane V/C Ratio	0.072	-	-	-	0.038	0.09
HCM Control Delay (s)	7.5	-	-	-	10.7	8.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.3

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	22	18	5	2	16
Future Vol, veh/h	28	22	18	5	2	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	24	20	5	2	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	25	0	-	0	107	23
Stage 1	-	-	-	-	23	-
Stage 2	-	-	-	-	84	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1589	-	-	-	891	1054
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	939	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1589	-	-	-	874	1054
Mov Cap-2 Maneuver	-	-	-	-	874	-
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	939	-

Approach	EB	WB	SB
HCM Control Delay, s	4.1	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1589	-	-	-	1030
HCM Lane V/C Ratio	0.019	-	-	-	0.019
HCM Control Delay (s)	7.3	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	3	9	24	14	14
Future Vol, veh/h	21	3	9	24	14	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	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	3	10	26	15	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	36	0	-	0	72	23
Stage 1	-	-	-	-	23	-
Stage 2	-	-	-	-	49	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1575	-	-	-	932	1054
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	973	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1575	-	-	-	918	1054
Mov Cap-2 Maneuver	-	-	-	-	918	-
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	973	-

Approach	EB	WB	SB
HCM Control Delay, s	6.4	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1575	-	-	-	981
HCM Lane V/C Ratio	0.014	-	-	-	0.031
HCM Control Delay (s)	7.3	-	-	-	8.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	239	145	44	234	67	34
Future Vol, veh/h	239	145	44	234	67	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	260	158	48	254	73	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	418	0	689	339
Stage 1	-	-	-	-	339	-
Stage 2	-	-	-	-	350	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1143	-	428	796
Stage 1	-	-	-	-	768	-
Stage 2	-	-	-	-	713	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	1143	-	410	796
Mov Cap-2 Maneuver	-	-	-	-	410	-
Stage 1	-	-	-	-	768	-
Stage 2	-	-	-	-	683	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	490	-	-	1143	-
HCM Lane V/C Ratio	0.224	-	-	0.042	-
HCM Control Delay (s)	14.5	-	-	8.3	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	244	29	0	278	0	11
Future Vol, veh/h	244	29	0	278	0	11
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
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	265	32	0	302	0	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	281
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	870
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	870
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	870	-	-	-
HCM Lane V/C Ratio	0.014	-	-	-
HCM Control Delay (s)	9.2	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	2	2	52	92	10
Future Vol, veh/h	6	2	2	52	92	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	2	57	100	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	167	106	111	0	-	0
Stage 1	106	-	-	-	-	-
Stage 2	61	-	-	-	-	-
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	823	948	1479	-	-	-
Stage 1	918	-	-	-	-	-
Stage 2	962	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	822	948	1479	-	-	-
Mov Cap-2 Maneuver	822	-	-	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	962	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1479	-	850	-	-
HCM Lane V/C Ratio	0.001	-	0.01	-	-
HCM Control Delay (s)	7.4	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	2	3	51	88	6
Future Vol, veh/h	3	2	3	51	88	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	2	3	55	96	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	161	100	103	0	-	0
Stage 1	100	-	-	-	-	-
Stage 2	61	-	-	-	-	-
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	830	956	1489	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	962	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	828	956	1489	-	-	-
Mov Cap-2 Maneuver	828	-	-	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	962	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1489	-	875	-	-
HCM Lane V/C Ratio	0.002	-	0.006	-	-
HCM Control Delay (s)	7.4	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	101	159	26	0	270
Future Vol, veh/h	0	101	159	26	0	270
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	110	173	28	0	293

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	187	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	855	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	855	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	855	-
HCM Lane V/C Ratio	-	-	0.128	-
HCM Control Delay (s)	-	-	9.8	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.4	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	18	49	13	1	32	4	7	0	1	2	0	12
Future Vol, veh/h	18	49	13	1	32	4	7	0	1	2	0	12
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	53	14	1	35	4	8	0	1	2	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	67	0	0	146	141	60	140	146	37
Stage 1	-	-	-	-	-	-	100	100	-	39	39	-
Stage 2	-	-	-	-	-	-	46	41	-	101	107	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1571	-	-	1535	-	-	823	750	1005	830	745	1035
Stage 1	-	-	-	-	-	-	906	812	-	976	862	-
Stage 2	-	-	-	-	-	-	968	861	-	905	807	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1571	-	-	1535	-	-	804	740	1005	820	735	1035
Mov Cap-2 Maneuver	-	-	-	-	-	-	804	740	-	820	735	-
Stage 1	-	-	-	-	-	-	894	801	-	963	861	-
Stage 2	-	-	-	-	-	-	955	860	-	892	797	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0.2	9.4	8.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	825	1571	-	-	1535	-	-	998
HCM Lane V/C Ratio	0.011	0.012	-	-	0.001	-	-	0.015
HCM Control Delay (s)	9.4	7.3	0	-	7.3	0	-	8.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	18	29	4	0	21	5	3	3	0	4	3	13
Future Vol, veh/h	18	29	4	0	21	5	3	3	0	4	3	13
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	32	4	0	23	5	3	3	0	4	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	28	0	0	36	0	0	108	102	34	102	102	26
Stage 1	-	-	-	-	-	-	74	74	-	26	26	-
Stage 2	-	-	-	-	-	-	34	28	-	76	76	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1585	-	-	1575	-	-	871	788	1039	879	788	1050
Stage 1	-	-	-	-	-	-	935	833	-	992	874	-
Stage 2	-	-	-	-	-	-	982	872	-	933	832	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1585	-	-	1575	-	-	848	778	1039	868	778	1050
Mov Cap-2 Maneuver	-	-	-	-	-	-	848	778	-	868	778	-
Stage 1	-	-	-	-	-	-	923	822	-	979	874	-
Stage 2	-	-	-	-	-	-	965	872	-	917	821	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.6	0	9.5	8.8
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	811	1585	-	-	1575	-	-	959
HCM Lane V/C Ratio	0.008	0.012	-	-	-	-	-	0.023
HCM Control Delay (s)	9.5	7.3	0	-	0	-	-	8.8
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	26	7	2	22	4	1
Future Vol, veh/h	26	7	2	22	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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	8	2	24	4	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	36	0	60	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1575	-	947	1042
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	995	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1575	-	946	1042
Mov Cap-2 Maneuver	-	-	-	-	946	-
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	994	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	964	-	-	1575	-
HCM Lane V/C Ratio	0.006	-	-	0.001	-
HCM Control Delay (s)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	21	7	2	20	4	1
Future Vol, veh/h	21	7	2	20	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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	8	2	22	4	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	31	0	53	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	26	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1582	-	955	1048
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	997	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1582	-	954	1048
Mov Cap-2 Maneuver	-	-	-	-	954	-
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	996	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	971	-	-	1582	-
HCM Lane V/C Ratio	0.006	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	1	2	68	95	7
Future Vol, veh/h	4	1	2	68	95	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	2	74	103	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	185	107	111	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	78	-	-	-	-	-
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	804	947	1479	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	803	947	1479	-	-	-
Mov Cap-2 Maneuver	803	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	945	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1479	-	828	-	-
HCM Lane V/C Ratio	0.001	-	0.007	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	1	2	66	89	7
Future Vol, veh/h	4	1	2	66	89	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	2	72	97	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	177	101	105	0	-	0
Stage 1	101	-	-	-	-	-
Stage 2	76	-	-	-	-	-
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	813	954	1486	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	812	954	1486	-	-	-
Mov Cap-2 Maneuver	812	-	-	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	947	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1486	-	837	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	7.4	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	5	8	45	48	31
Future Vol, veh/h	18	5	8	45	48	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	5	9	49	52	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	136	69	86	0	-	0
Stage 1	69	-	-	-	-	-
Stage 2	67	-	-	-	-	-
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	857	994	1510	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	852	994	1510	-	-	-
Mov Cap-2 Maneuver	852	-	-	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	1.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1510	-	879	-	-
HCM Lane V/C Ratio	0.006	-	0.028	-	-
HCM Control Delay (s)	7.4	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	4	6	39	29	24
Future Vol, veh/h	14	4	6	39	29	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	4	7	42	32	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	101	45	58	0	-	0
Stage 1	45	-	-	-	-	-
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	898	1025	1546	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	967	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	894	1025	1546	-	-	-
Mov Cap-2 Maneuver	894	-	-	-	-	-
Stage 1	972	-	-	-	-	-
Stage 2	967	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1546	-	920	-	-
HCM Lane V/C Ratio	0.004	-	0.021	-	-
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	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	6	120	2	11	108
Future Vol, veh/h	1	6	120	2	11	108
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	7	130	2	12	117

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	272	131	0	0	132	0
Stage 1	131	-	-	-	-	-
Stage 2	141	-	-	-	-	-
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	717	919	-	-	1453	-
Stage 1	895	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	711	919	-	-	1453	-
Mov Cap-2 Maneuver	711	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	879	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	882	1453	-
HCM Lane V/C Ratio	-	-	0.009	0.008	-
HCM Control Delay (s)	-	-	9.1	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	6	123	3	11	117
Future Vol, veh/h	2	6	123	3	11	117
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	7	134	3	12	127

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	287	136	0	0	137	0
Stage 1	136	-	-	-	-	-
Stage 2	151	-	-	-	-	-
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	703	913	-	-	1447	-
Stage 1	890	-	-	-	-	-
Stage 2	877	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	697	913	-	-	1447	-
Mov Cap-2 Maneuver	697	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	870	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	847	1447	-
HCM Lane V/C Ratio	-	-	0.01	0.008	-
HCM Control Delay (s)	-	-	9.3	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	6	127	3	11	126
Future Vol, veh/h	2	6	127	3	11	126
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	7	138	3	12	137

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	301	140	0	0	141	0
Stage 1	140	-	-	-	-	-
Stage 2	161	-	-	-	-	-
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	691	908	-	-	1442	-
Stage 1	887	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	685	908	-	-	1442	-
Mov Cap-2 Maneuver	685	-	-	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	861	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	840	1442	-
HCM Lane V/C Ratio	-	-	0.01	0.008	-
HCM Control Delay (s)	-	-	9.3	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	6	131	2	11	135
Future Vol, veh/h	1	6	131	2	11	135
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	7	142	2	12	147

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	314	143	0	0	144	0
Stage 1	143	-	-	-	-	-
Stage 2	171	-	-	-	-	-
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	679	905	-	-	1438	-
Stage 1	884	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	674	905	-	-	1438	-
Mov Cap-2 Maneuver	674	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	852	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0.6
HCM LOS	A		

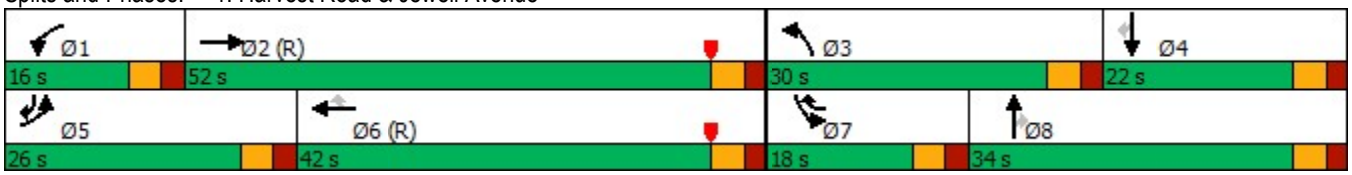
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	863	1438	-
HCM Lane V/C Ratio	-	-	0.009	0.008	-
HCM Control Delay (s)	-	-	9.2	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

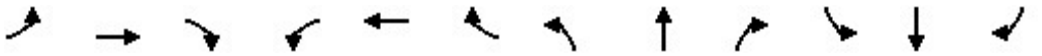
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	425	936	81	1163	382	214	258	93	220	165	400
Future Volume (vph)	425	936	81	1163	382	214	258	93	220	165	400
Lane Group Flow (vph)	462	1113	88	1264	415	233	280	101	239	179	435
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	7	3	8		7	4	5
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	7	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	9.0	9.0	21.0	21.0	9.0	21.0	9.0
Total Split (s)	26.0	52.0	16.0	42.0	18.0	30.0	34.0	34.0	18.0	22.0	26.0
Total Split (%)	21.7%	43.3%	13.3%	35.0%	15.0%	25.0%	28.3%	28.3%	15.0%	18.3%	21.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None	None
v/c Ratio	0.77	0.48	0.55	0.66	0.46	0.74	0.73	0.22	0.63	0.70	0.70
Control Delay	56.4	24.3	59.4	29.3	16.3	60.8	55.4	2.3	59.0	63.8	31.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.4	24.3	59.4	29.3	16.3	60.8	55.4	2.3	59.0	63.8	31.2
Queue Length 50th (ft)	173	222	50	319	188	171	202	0	92	132	210
Queue Length 95th (ft)	234	282	106	390	304	252	286	11	135	211	333
Internal Link Dist (ft)		1006		535			342			776	
Turn Bay Length (ft)	250		250		250	250		250	250		
Base Capacity (vph)	635	2312	178	1907	910	383	465	512	400	283	634
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.48	0.49	0.66	0.46	0.61	0.60	0.20	0.60	0.63	0.69

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 43 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 1: Harvest Road & Jewell Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	425	936	88	81	1163	382	214	258	93	220	165	400
Future Volume (veh/h)	425	936	88	81	1163	382	214	258	93	220	165	400
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	462	1017	96	88	1264	415	233	280	101	239	179	435
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	552	2328	219	126	2051	786	277	395	335	325	281	491
Arrive On Green	0.16	0.49	0.49	0.02	0.13	0.13	0.16	0.21	0.21	0.09	0.15	0.15
Sat Flow, veh/h	3456	4747	447	1781	5106	1585	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	462	729	384	88	1264	415	233	280	101	239	179	435
Grp Sat Flow(s),veh/h/ln	1728	1702	1790	1781	1702	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	15.6	16.7	16.7	5.9	28.1	25.1	15.3	16.7	6.4	8.1	10.8	18.0
Cycle Q Clear(g_c), s	15.6	16.7	16.7	5.9	28.1	25.1	15.3	16.7	6.4	8.1	10.8	18.0
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	552	1669	878	126	2051	786	277	395	335	325	281	491
V/C Ratio(X)	0.84	0.44	0.44	0.70	0.62	0.53	0.84	0.71	0.30	0.73	0.64	0.89
Avail Cap(c_a), veh/h	634	1669	878	178	2051	786	386	468	396	403	281	491
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	19.8	19.8	57.3	43.3	31.3	49.2	43.9	39.9	52.9	47.9	39.4
Incr Delay (d2), s/veh	8.6	0.8	1.6	6.7	1.4	2.5	11.3	4.0	0.5	5.3	4.8	17.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.7	10.7	11.4	5.3	19.0	16.7	12.2	12.8	4.6	6.7	9.2	20.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.5	20.7	21.4	64.1	44.7	33.8	60.6	47.9	40.4	58.2	52.7	56.9
LnGrp LOS	E	C	C	E	D	C	E	D	D	E	D	E
Approach Vol, veh/h		1575			1767			614			853	
Approach Delay, s/veh		31.7			43.1			51.5			56.4	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	62.8	22.6	22.0	23.2	52.2	15.3	29.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	47.0	25.0	17.0	21.0	37.0	13.0	29.0
Max Q Clear Time (g_c+I1), s	7.9	18.7	17.3	20.0	17.6	30.1	10.1	18.7
Green Ext Time (p_c), s	0.0	8.0	0.4	0.0	0.6	4.9	0.2	1.4

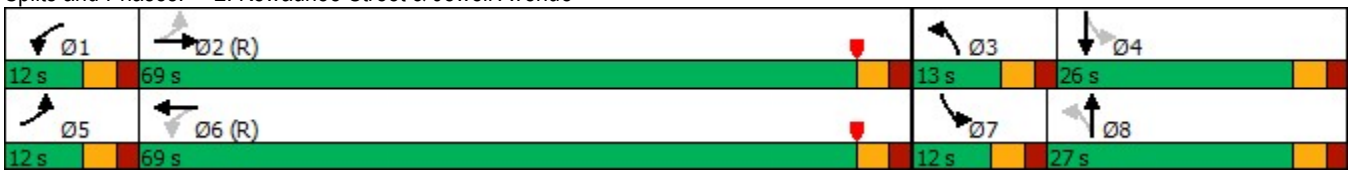
Intersection Summary	
HCM 6th Ctrl Delay	42.8
HCM 6th LOS	D

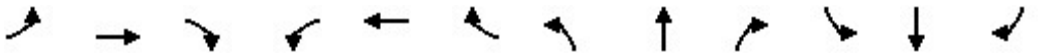
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	34	1142	19	1425	111	35	55	42
Future Volume (vph)	34	1142	19	1425	111	35	55	42
Lane Group Flow (vph)	37	1274	21	1603	121	68	60	118
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	12.0	69.0	12.0	69.0	13.0	27.0	12.0	26.0
Total Split (%)	10.0%	57.5%	10.0%	57.5%	10.8%	22.5%	10.0%	21.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
v/c Ratio	0.16	0.36	0.06	0.47	0.55	0.31	0.28	0.61
Control Delay	3.3	5.0	5.7	11.0	50.4	34.4	42.9	41.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.3	5.0	5.7	11.0	50.4	34.4	42.9	41.3
Queue Length 50th (ft)	1	8	4	219	81	29	39	46
Queue Length 95th (ft)	m7	291	13	300	131	71	75	103
Internal Link Dist (ft)		460		1800		300		328
Turn Bay Length (ft)	250		250		250		250	
Base Capacity (vph)	240	3521	339	3414	219	342	214	342
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.36	0.06	0.47	0.55	0.20	0.28	0.35

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Kewaunee Street & Jewell Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1142	30	19	1425	50	111	35	28	55	42	66
Future Volume (veh/h)	34	1142	30	19	1425	50	111	35	28	55	42	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	1241	33	21	1549	54	121	38	30	60	46	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	3425	91	393	3358	117	230	111	87	237	58	91
Arrive On Green	0.05	1.00	1.00	0.03	0.66	0.65	0.08	0.11	0.11	0.04	0.09	0.09
Sat Flow, veh/h	1781	5114	136	1781	5066	177	1781	968	764	1781	657	1028
Grp Volume(v), veh/h	37	826	448	21	1041	562	121	0	68	60	0	118
Grp Sat Flow(s),veh/h/ln	1781	1702	1846	1781	1702	1839	1781	0	1733	1781	0	1685
Q Serve(g_s), s	0.8	0.0	0.0	0.4	17.8	17.9	7.2	0.0	4.3	3.6	0.0	8.2
Cycle Q Clear(g_c), s	0.8	0.0	0.0	0.4	17.8	17.9	7.2	0.0	4.3	3.6	0.0	8.2
Prop In Lane	1.00		0.07	1.00		0.10	1.00		0.44	1.00		0.61
Lane Grp Cap(c), veh/h	262	2280	1236	393	2256	1219	230	0	198	237	0	149
V/C Ratio(X)	0.14	0.36	0.36	0.05	0.46	0.46	0.53	0.00	0.34	0.25	0.00	0.79
Avail Cap(c_a), veh/h	324	2280	1236	467	2256	1219	230	0	318	268	0	295
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.7	0.0	0.0	5.9	9.8	9.9	43.6	0.0	49.0	47.1	0.0	53.6
Incr Delay (d2), s/veh	0.2	0.4	0.8	0.1	0.7	1.3	2.2	0.0	1.0	0.6	0.0	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	0.3	0.5	0.3	10.2	11.1	5.9	0.0	3.5	3.0	0.0	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.9	0.4	0.8	6.0	10.5	11.1	45.8	0.0	50.0	47.6	0.0	62.6
LnGrp LOS	A	A	A	A	B	B	D	A	D	D	A	E
Approach Vol, veh/h		1311			1624			189			178	
Approach Delay, s/veh		0.8			10.7			47.3			57.6	
Approach LOS		A			B			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	84.4	13.0	15.6	7.8	83.5	9.9	18.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	64.0	8.0	21.0	7.0	64.0	7.0	22.0
Max Q Clear Time (g_c+I1), s	2.4	2.0	9.2	10.2	2.8	19.9	5.6	6.3
Green Ext Time (p_c), s	0.0	11.0	0.0	0.4	0.0	15.2	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	10	16	0	47	3	380	7	29	252	4
Future Vol, veh/h	11	0	10	16	0	47	3	380	7	29	252	4
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	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	11	17	0	51	3	413	8	32	274	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	789	767	276	769	765	417	278	0	0	421	0	0
Stage 1	340	340	-	423	423	-	-	-	-	-	-	-
Stage 2	449	427	-	346	342	-	-	-	-	-	-	-
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	308	332	763	318	333	636	1285	-	-	1138	-	-
Stage 1	675	639	-	609	588	-	-	-	-	-	-	-
Stage 2	589	585	-	670	638	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	277	322	763	306	323	636	1285	-	-	1138	-	-
Mov Cap-2 Maneuver	277	322	-	306	323	-	-	-	-	-	-	-
Stage 1	674	621	-	608	587	-	-	-	-	-	-	-
Stage 2	540	584	-	642	620	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.4	12.8	0.1	0.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1285	-	-	277	763	306	636	1138	-	-
HCM Lane V/C Ratio	0.003	-	-	0.043	0.014	0.057	0.08	0.028	-	-
HCM Control Delay (s)	7.8	-	-	18.6	9.8	17.5	11.2	8.3	-	-
HCM Lane LOS	A	-	-	C	A	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0.2	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	4	160	90	1
Future Vol, veh/h	1	3	4	160	90	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	4	174	98	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	281	99	99	0	-	0
Stage 1	99	-	-	-	-	-
Stage 2	182	-	-	-	-	-
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	735	1003	1512	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	849	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	733	1003	1512	-	-	-
Mov Cap-2 Maneuver	733	-	-	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	849	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1512	-	918	-	-
HCM Lane V/C Ratio	0.003	-	0.005	-	-
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	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	0	5	18	0	56	2	311	8	19	253	7
Future Vol, veh/h	21	0	5	18	0	56	2	311	8	19	253	7
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	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	0	5	20	0	61	2	338	9	21	275	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	698	672	279	671	672	343	283	0	0	347	0	0
Stage 1	321	321	-	347	347	-	-	-	-	-	-	-
Stage 2	377	351	-	324	325	-	-	-	-	-	-	-
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	355	377	760	370	377	700	1279	-	-	1212	-	-
Stage 1	691	652	-	669	635	-	-	-	-	-	-	-
Stage 2	644	632	-	688	649	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	320	370	760	362	370	700	1279	-	-	1212	-	-
Mov Cap-2 Maneuver	320	370	-	362	370	-	-	-	-	-	-	-
Stage 1	690	641	-	668	634	-	-	-	-	-	-	-
Stage 2	587	631	-	671	638	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.7	11.8	0	0.5
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1279	-	-	320	760	362	700	1212	-	-
HCM Lane V/C Ratio	0.002	-	-	0.071	0.007	0.054	0.087	0.017	-	-
HCM Control Delay (s)	7.8	-	-	17.1	9.8	15.5	10.6	8	-	-
HCM Lane LOS	A	-	-	C	A	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0.2	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	0	9	5	0	65	15	88	5	30	61	3
Future Vol, veh/h	9	0	9	5	0	65	15	88	5	30	61	3
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	10	5	0	71	16	96	5	33	66	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	300	267	68	270	266	99	69	0	0	101	0	0
Stage 1	134	134	-	131	131	-	-	-	-	-	-	-
Stage 2	166	133	-	139	135	-	-	-	-	-	-	-
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	670	651	1022	702	652	957	1543	-	-	1491	-	-
Stage 1	889	795	-	873	788	-	-	-	-	-	-	-
Stage 2	836	786	-	883	794	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	604	629	1022	677	630	957	1543	-	-	1491	-	-
Mov Cap-2 Maneuver	604	629	-	677	630	-	-	-	-	-	-	-
Stage 1	879	776	-	863	779	-	-	-	-	-	-	-
Stage 2	766	777	-	854	775	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	9.2	1	2.4
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1543	-	-	759	930	1491	-	-
HCM Lane V/C Ratio	0.011	-	-	0.026	0.082	0.022	-	-
HCM Control Delay (s)	7.4	0	-	9.9	9.2	7.5	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑		↰	↑	
Traffic Vol, veh/h	7	0	2	2	0	8	0	307	1	3	272	2
Future Vol, veh/h	7	0	2	2	0	8	0	307	1	3	272	2
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	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	2	2	0	9	0	334	1	3	296	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	642	638	297	639	639	335	298	0	0	335	0	0
Stage 1	303	303	-	335	335	-	-	-	-	-	-	-
Stage 2	339	335	-	304	304	-	-	-	-	-	-	-
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	387	394	742	389	394	707	1263	-	-	1224	-	-
Stage 1	706	664	-	679	643	-	-	-	-	-	-	-
Stage 2	676	643	-	705	663	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	382	393	742	387	393	707	1263	-	-	1224	-	-
Mov Cap-2 Maneuver	382	393	-	387	393	-	-	-	-	-	-	-
Stage 1	706	663	-	679	643	-	-	-	-	-	-	-
Stage 2	668	643	-	701	662	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.6	11	0	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1263	-	-	428	607	1224	-	-
HCM Lane V/C Ratio	-	-	-	0.023	0.018	0.003	-	-
HCM Control Delay (s)	0	-	-	13.6	11	7.9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	2	1	85	70	4
Future Vol, veh/h	11	2	1	85	70	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	2	1	92	76	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	172	78	80	0	-	0
Stage 1	78	-	-	-	-	-
Stage 2	94	-	-	-	-	-
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	818	983	1518	-	-	-
Stage 1	945	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	817	983	1518	-	-	-
Mov Cap-2 Maneuver	817	-	-	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	930	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1518	-	839	-	-
HCM Lane V/C Ratio	0.001	-	0.017	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	5.6
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	258	318	298
Demand Flow Rate, veh/h	264	324	304
Vehicles Circulating, veh/h	240	131	154
Vehicles Exiting, veh/h	218	373	301
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.7	5.5	5.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	264	324	304
Cap Entry Lane, veh/h	1080	1207	1179
Entry HV Adj Factor	0.979	0.981	0.980
Flow Entry, veh/h	258	318	298
Cap Entry, veh/h	1057	1185	1156
V/C Ratio	0.244	0.268	0.258
Control Delay, s/veh	5.7	5.5	5.5
LOS	A	A	A
95th %tile Queue, veh	1	1	1

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	328	267	2	5	25
Future Vol, veh/h	8	328	267	2	5	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	357	290	2	5	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	292	0	-	0	666	291
Stage 1	-	-	-	-	291	-
Stage 2	-	-	-	-	375	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1270	-	-	-	425	748
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	695	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1270	-	-	-	422	748
Mov Cap-2 Maneuver	-	-	-	-	422	-
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	695	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1270	-	-	-	663
HCM Lane V/C Ratio	0.007	-	-	-	0.049
HCM Control Delay (s)	7.9	-	-	-	10.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	310	237	15	34	34
Future Vol, veh/h	24	310	237	15	34	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	337	258	16	37	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	274	0	-	0	655	266
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	389	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1289	-	-	-	431	773
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	685	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1289	-	-	-	422	773
Mov Cap-2 Maneuver	-	-	-	-	422	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	685	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	12.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1289	-	-	-	546
HCM Lane V/C Ratio	0.02	-	-	-	0.135
HCM Control Delay (s)	7.9	-	-	-	12.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1191	58	19	1584	41	12
Future Vol, veh/h	1191	58	19	1584	41	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1295	63	21	1722	45	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1358	0	2026	648
Stage 1	-	-	-	-	1295	-
Stage 2	-	-	-	-	731	-
Critical Hdwy	-	-	5.34	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	3.12	-	3.82	3.92
Pot Cap-1 Maneuver	-	-	780	-	*303	*646
Stage 1	-	-	-	-	*663	-
Stage 2	-	-	-	-	*550	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	780	-	*295	*646
Mov Cap-2 Maneuver	-	-	-	-	*295	-
Stage 1	-	-	-	-	*663	-
Stage 2	-	-	-	-	*535	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	17.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	336	-	-	780	-
HCM Lane V/C Ratio	0.171	-	-	0.026	-
HCM Control Delay (s)	17.9	-	-	9.7	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

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	1193	9	0	1603	0	13
Future Vol, veh/h	1193	9	0	1603	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1297	10	0	1742	0	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	-	-	0	-	0	0
Stage 1	-	-	0	-	0	0
Stage 2	-	-	0	-	0	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

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

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	3	1	164	86	3
Future Vol, veh/h	10	3	1	164	86	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	3	1	178	93	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	275	95	96	0	-	0
Stage 1	95	-	-	-	-	-
Stage 2	180	-	-	-	-	-
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	742	1008	1516	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	741	1008	1516	-	-	-
Mov Cap-2 Maneuver	741	-	-	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	851	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1516	-	789	-	-
HCM Lane V/C Ratio	0.001	-	0.018	-	-
HCM Control Delay (s)	7.4	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	1	160	87	2
Future Vol, veh/h	5	3	1	160	87	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	3	1	174	95	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	272	96	97	0	-	0
Stage 1	96	-	-	-	-	-
Stage 2	176	-	-	-	-	-
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	745	1007	1514	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	855	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	744	1007	1514	-	-	-
Mov Cap-2 Maneuver	744	-	-	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	855	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1514	-	825	-	-
HCM Lane V/C Ratio	0.001	-	0.011	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	49	425	11	0	286
Future Vol, veh/h	0	49	425	11	0	286
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	53	462	12	0	311

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	468	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	595	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	595	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	595	-
HCM Lane V/C Ratio	-	-	0.09	-
HCM Control Delay (s)	-	-	11.6	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.3	-

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	5	19	4	0	46	1	11	0	1	2	0	18
Future Vol, veh/h	5	19	4	0	46	1	11	0	1	2	0	18
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	21	4	0	50	1	12	0	1	2	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	51	0	0	25	0	0	94	84	23	85	86	51
Stage 1	-	-	-	-	-	-	33	33	-	51	51	-
Stage 2	-	-	-	-	-	-	61	51	-	34	35	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1555	-	-	1589	-	-	889	806	1054	901	804	1017
Stage 1	-	-	-	-	-	-	983	868	-	962	852	-
Stage 2	-	-	-	-	-	-	950	852	-	982	866	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1555	-	-	1589	-	-	870	804	1054	898	802	1017
Mov Cap-2 Maneuver	-	-	-	-	-	-	870	804	-	898	802	-
Stage 1	-	-	-	-	-	-	980	865	-	959	852	-
Stage 2	-	-	-	-	-	-	932	852	-	978	863	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	9.1	8.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	883	1555	-	-	1589	-	-	1004
HCM Lane V/C Ratio	0.015	0.003	-	-	-	-	-	0.022
HCM Control Delay (s)	9.1	7.3	0	-	0	-	-	8.7
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	14	1	0	25	4	4	5	0	4	1	18
Future Vol, veh/h	7	14	1	0	25	4	4	5	0	4	1	18
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	15	1	0	27	4	4	5	0	4	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	31	0	0	16	0	0	72	63	16	63	61	29
Stage 1	-	-	-	-	-	-	32	32	-	29	29	-
Stage 2	-	-	-	-	-	-	40	31	-	34	32	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1582	-	-	1602	-	-	919	828	1063	932	830	1046
Stage 1	-	-	-	-	-	-	984	868	-	988	871	-
Stage 2	-	-	-	-	-	-	975	869	-	982	868	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1582	-	-	1602	-	-	898	824	1063	924	826	1046
Mov Cap-2 Maneuver	-	-	-	-	-	-	898	824	-	924	826	-
Stage 1	-	-	-	-	-	-	979	864	-	983	871	-
Stage 2	-	-	-	-	-	-	956	869	-	971	864	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	0	9.3	8.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	855	1582	-	-	1602	-	-	1011
HCM Lane V/C Ratio	0.011	0.005	-	-	-	-	-	0.025
HCM Control Delay (s)	9.3	7.3	0	-	0	-	-	8.7
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	16	2	1	22	6	2
Future Vol, veh/h	16	2	1	22	6	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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	2	1	24	7	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	19	0	44	18
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	26	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1597	-	967	1061
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	997	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1597	-	966	1061
Mov Cap-2 Maneuver	-	-	-	-	966	-
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	996	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	988	-	-	1597	-
HCM Lane V/C Ratio	0.009	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	16	2	1	17	6	2
Future Vol, veh/h	16	2	1	17	6	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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	2	1	18	7	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	19	0	38	18
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	20	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1597	-	974	1061
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	1003	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1597	-	973	1061
Mov Cap-2 Maneuver	-	-	-	-	973	-
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	1002	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	994	-	-	1597	-
HCM Lane V/C Ratio	0.009	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	2	1	101	74	2
Future Vol, veh/h	7	2	1	101	74	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	2	1	110	80	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	193	81	82	0	-	0
Stage 1	81	-	-	-	-	-
Stage 2	112	-	-	-	-	-
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	796	979	1515	-	-	-
Stage 1	942	-	-	-	-	-
Stage 2	913	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	795	979	1515	-	-	-
Mov Cap-2 Maneuver	795	-	-	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	913	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1515	-	830	-	-
HCM Lane V/C Ratio	0.001	-	0.012	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	2	1	95	73	2
Future Vol, veh/h	7	2	1	95	73	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	2	1	103	79	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	185	80	81	0	-	0
Stage 1	80	-	-	-	-	-
Stage 2	105	-	-	-	-	-
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	804	980	1517	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	803	980	1517	-	-	-
Mov Cap-2 Maneuver	803	-	-	-	-	-
Stage 1	942	-	-	-	-	-
Stage 2	919	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1517	-	837	-	-
HCM Lane V/C Ratio	0.001	-	0.012	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	8	3	56	63	10
Future Vol, veh/h	30	8	3	56	63	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	9	3	61	68	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	141	74	79	0	-	0
Stage 1	74	-	-	-	-	-
Stage 2	67	-	-	-	-	-
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	852	988	1519	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	850	988	1519	-	-	-
Mov Cap-2 Maneuver	850	-	-	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1519	-	876	-	-
HCM Lane V/C Ratio	0.002	-	0.047	-	-
HCM Control Delay (s)	7.4	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	6	2	36	62	8
Future Vol, veh/h	23	6	2	36	62	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	7	2	39	67	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	115	72	76	0	-	0
Stage 1	72	-	-	-	-	-
Stage 2	43	-	-	-	-	-
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	881	990	1523	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	979	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	880	990	1523	-	-	-
Mov Cap-2 Maneuver	880	-	-	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	979	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1523	-	901	-	-
HCM Lane V/C Ratio	0.001	-	0.035	-	-
HCM Control Delay (s)	7.4	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	10	276	1	3	272
Future Vol, veh/h	2	10	276	1	3	272
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	11	300	1	3	296

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	603	301	0	0	301	0
Stage 1	301	-	-	-	-	-
Stage 2	302	-	-	-	-	-
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	462	739	-	-	1260	-
Stage 1	751	-	-	-	-	-
Stage 2	750	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	461	739	-	-	1260	-
Mov Cap-2 Maneuver	461	-	-	-	-	-
Stage 1	751	-	-	-	-	-
Stage 2	749	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	672	1260	-
HCM Lane V/C Ratio	-	-	0.019	0.003	-
HCM Control Delay (s)	-	-	10.5	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	10	286	1	3	273
Future Vol, veh/h	2	10	286	1	3	273
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	11	311	1	3	297

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	615	312	0	0	312	0
Stage 1	312	-	-	-	-	-
Stage 2	303	-	-	-	-	-
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	455	728	-	-	1248	-
Stage 1	742	-	-	-	-	-
Stage 2	749	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	454	728	-	-	1248	-
Mov Cap-2 Maneuver	454	-	-	-	-	-
Stage 1	742	-	-	-	-	-
Stage 2	748	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	661	1248	-
HCM Lane V/C Ratio	-	-	0.02	0.003	-
HCM Control Delay (s)	-	-	10.6	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	10	295	1	3	274
Future Vol, veh/h	2	10	295	1	3	274
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	11	321	1	3	298

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	626	322	0	0	322	0
Stage 1	322	-	-	-	-	-
Stage 2	304	-	-	-	-	-
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	448	719	-	-	1238	-
Stage 1	735	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	447	719	-	-	1238	-
Mov Cap-2 Maneuver	447	-	-	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	747	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	653	1238	-
HCM Lane V/C Ratio	-	-	0.02	0.003	-
HCM Control Delay (s)	-	-	10.6	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	10	304	1	3	275
Future Vol, veh/h	2	10	304	1	3	275
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	11	330	1	3	299

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	636	331	0	0	331	0
Stage 1	331	-	-	-	-	-
Stage 2	305	-	-	-	-	-
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	442	711	-	-	1228	-
Stage 1	728	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	441	711	-	-	1228	-
Mov Cap-2 Maneuver	441	-	-	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	747	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0.1
HCM LOS	B		

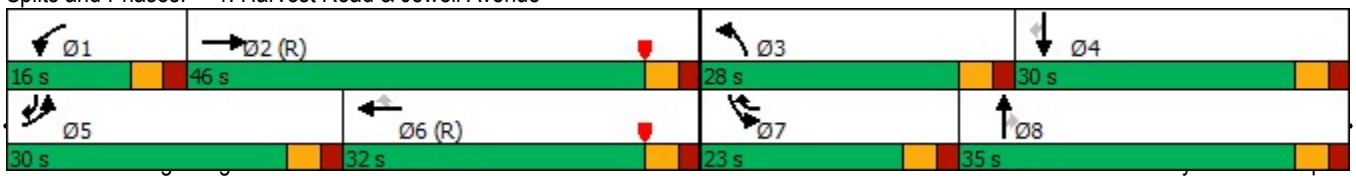
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	645	1228	-
HCM Lane V/C Ratio	-	-	0.02	0.003	-
HCM Control Delay (s)	-	-	10.7	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

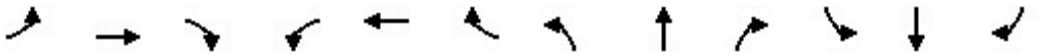
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	408	1314	124	1276	290	210	280	94	397	332	452
Future Volume (vph)	408	1314	124	1276	290	210	280	94	397	332	452
Lane Group Flow (vph)	443	1666	135	1387	315	228	304	102	432	361	491
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	7	3	8		7	4	5
Permitted Phases					6			8			4
Detector Phase	5	2	1	6	7	3	8	8	7	4	5
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	9.0	9.0	21.0	21.0	9.0	21.0	9.0
Total Split (s)	30.0	46.0	16.0	32.0	23.0	28.0	35.0	35.0	23.0	30.0	30.0
Total Split (%)	25.0%	38.3%	13.3%	26.7%	19.2%	23.3%	29.2%	29.2%	19.2%	25.0%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None	None
v/c Ratio	0.70	0.88	0.75	0.94	0.37	0.75	0.69	0.21	0.82	0.89	0.66
Control Delay	51.7	41.8	72.8	45.7	15.7	62.6	50.2	2.1	62.4	69.6	25.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.7	41.8	72.8	45.7	15.7	62.6	50.2	2.1	62.4	69.6	25.1
Queue Length 50th (ft)	166	449	89	~427	140	168	209	0	168	266	228
Queue Length 95th (ft)	215	#555	#200	#571	249	252	308	11	#237	#447	340
Internal Link Dist (ft)		1006		535			342			776	
Turn Bay Length (ft)	250		250		250	250		250	250		
Base Capacity (vph)	743	1887	183	1481	848	354	481	523	543	416	794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.88	0.74	0.94	0.37	0.64	0.63	0.20	0.80	0.87	0.62

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 44 (37%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Harvest Road & Jewell Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	408	1314	219	124	1276	290	210	280	94	397	332	452
Future Volume (veh/h)	408	1314	219	124	1276	290	210	280	94	397	332	452
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	443	1428	238	135	1387	315	228	304	102	432	361	491
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	544	1758	293	177	1738	775	271	411	349	514	405	593
Arrive On Green	0.16	0.40	0.40	0.03	0.11	0.11	0.15	0.22	0.22	0.15	0.22	0.22
Sat Flow, veh/h	3456	4408	734	1781	5106	1585	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	443	1102	564	135	1387	315	228	304	102	432	361	491
Grp Sat Flow(s),veh/h/ln	1728	1702	1738	1781	1702	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	14.9	34.6	34.6	9.0	31.8	17.5	14.9	18.2	6.4	14.6	22.5	26.0
Cycle Q Clear(g_c), s	14.9	34.6	34.6	9.0	31.8	17.5	14.9	18.2	6.4	14.6	22.5	26.0
Prop In Lane	1.00		0.42	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	544	1357	693	177	1738	775	271	411	349	514	405	593
V/C Ratio(X)	0.81	0.81	0.81	0.76	0.80	0.41	0.84	0.74	0.29	0.84	0.89	0.83
Avail Cap(c_a), veh/h	749	1357	693	178	1738	775	356	483	409	547	405	593
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	32.1	32.1	56.6	49.2	27.1	49.5	43.6	39.0	49.7	45.6	34.0
Incr Delay (d2), s/veh	4.9	5.4	10.1	17.6	3.9	1.6	13.0	5.0	0.5	10.7	21.0	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.9	20.9	22.4	8.8	21.5	12.3	12.1	13.9	4.6	11.4	18.6	20.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	37.5	42.2	74.2	53.2	28.7	62.4	48.6	39.5	60.4	66.7	43.5
LnGrp LOS	D	D	D	E	D	C	E	D	D	E	E	D
Approach Vol, veh/h		2109			1837			634			1284	
Approach Delay, s/veh		42.2			50.5			52.1			55.7	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	51.8	22.3	30.0	22.9	44.8	21.9	30.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	41.0	23.0	25.0	25.0	27.0	18.0	30.0
Max Q Clear Time (g_c+I1), s	11.0	36.6	16.9	28.0	16.9	33.8	16.6	20.2
Green Ext Time (p_c), s	0.0	3.4	0.3	0.0	1.0	0.0	0.3	1.5

Intersection Summary	
HCM 6th Ctrl Delay	48.8
HCM 6th LOS	D

Notes

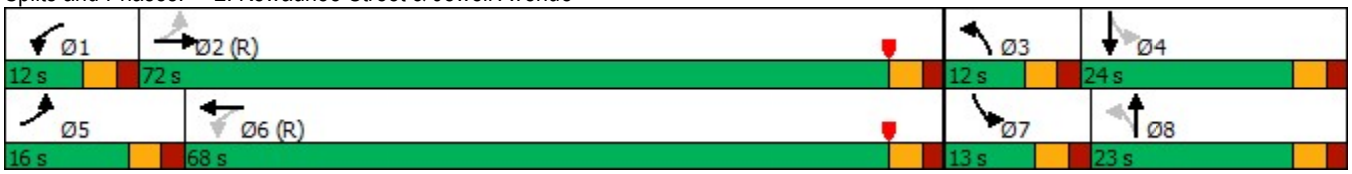
User approved pedestrian interval to be less than phase max green.

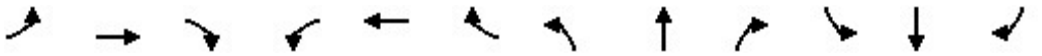
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	70	1466	50	1554	44	44	75	58
Future Volume (vph)	70	1466	50	1554	44	44	75	58
Lane Group Flow (vph)	76	1746	54	1798	48	82	82	139
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2		6		8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	16.0	72.0	12.0	68.0	12.0	23.0	13.0	24.0
Total Split (%)	13.3%	60.0%	10.0%	56.7%	10.0%	19.2%	10.8%	20.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
v/c Ratio	0.36	0.52	0.24	0.54	0.24	0.44	0.37	0.66
Control Delay	16.8	1.2	8.3	13.7	39.8	42.3	44.1	49.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.8	1.2	8.3	13.7	39.8	42.3	44.1	49.4
Queue Length 50th (ft)	2	13	11	276	30	42	54	72
Queue Length 95th (ft)	m11	17	26	391	61	90	94	134
Internal Link Dist (ft)		460		1800		300		328
Turn Bay Length (ft)	250		250		250		250	
Base Capacity (vph)	263	3341	234	3319	202	283	227	306
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.52	0.23	0.54	0.24	0.29	0.36	0.45

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Kewaunee Street & Jewell Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1466	141	50	1554	100	44	44	31	75	58	70
Future Volume (veh/h)	70	1466	141	50	1554	100	44	44	31	75	58	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	1593	153	54	1689	109	48	48	34	82	63	76
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	3229	310	312	3326	214	168	79	56	200	77	93
Arrive On Green	0.06	1.00	1.00	0.04	0.68	0.67	0.04	0.08	0.08	0.05	0.10	0.10
Sat Flow, veh/h	1781	4738	455	1781	4902	316	1781	1019	722	1781	772	931
Grp Volume(v), veh/h	76	1144	602	54	1172	626	48	0	82	82	0	139
Grp Sat Flow(s),veh/h/ln	1781	1702	1789	1781	1702	1813	1781	0	1740	1781	0	1703
Q Serve(g_s), s	1.6	0.0	0.0	1.1	20.3	20.4	2.9	0.0	5.5	5.0	0.0	9.6
Cycle Q Clear(g_c), s	1.6	0.0	0.0	1.1	20.3	20.4	2.9	0.0	5.5	5.0	0.0	9.6
Prop In Lane	1.00		0.25	1.00		0.17	1.00		0.41	1.00		0.55
Lane Grp Cap(c), veh/h	246	2320	1219	312	2310	1231	168	0	135	200	0	170
V/C Ratio(X)	0.31	0.49	0.49	0.17	0.51	0.51	0.29	0.00	0.61	0.41	0.00	0.82
Avail Cap(c_a), veh/h	355	2320	1219	366	2310	1231	214	0	261	221	0	270
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.8	0.0	0.0	5.0	9.5	9.5	47.2	0.0	53.6	47.5	0.0	52.9
Incr Delay (d2), s/veh	0.7	0.8	1.4	0.3	0.8	1.5	0.9	0.0	4.3	1.3	0.0	10.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	0.4	0.9	0.7	11.1	12.1	2.4	0.0	4.6	4.2	0.0	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.5	0.8	1.4	5.3	10.3	11.0	48.1	0.0	57.9	48.8	0.0	63.1
LnGrp LOS	A	A	A	A	B	B	D	A	E	D	A	E
Approach Vol, veh/h		1822			1852			130			221	
Approach Delay, s/veh		1.3			10.4			54.3			57.8	
Approach LOS		A			B			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	85.8	8.9	17.0	8.7	85.4	11.6	14.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	67.0	7.0	19.0	11.0	63.0	8.0	18.0
Max Q Clear Time (g_c+I1), s	3.1	2.0	4.9	11.6	3.6	22.4	7.0	7.5
Green Ext Time (p_c), s	0.0	19.6	0.0	0.4	0.1	17.9	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	6	34	0	44	10	484	16	78	484	12
Future Vol, veh/h	7	0	6	34	0	44	10	484	16	78	484	12
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	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	7	37	0	48	11	526	17	85	526	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1284	1268	533	1263	1266	535	539	0	0	543	0	0
Stage 1	703	703	-	557	557	-	-	-	-	-	-	-
Stage 2	581	565	-	706	709	-	-	-	-	-	-	-
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	142	168	547	147	169	545	1029	-	-	1026	-	-
Stage 1	428	440	-	515	512	-	-	-	-	-	-	-
Stage 2	499	508	-	427	437	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	120	152	547	135	153	545	1029	-	-	1026	-	-
Mov Cap-2 Maneuver	120	152	-	135	153	-	-	-	-	-	-	-
Stage 1	423	403	-	509	506	-	-	-	-	-	-	-
Stage 2	450	502	-	387	401	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.3	24.9	0.2	1.2
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1029	-	-	120	547	135	545	1026	-	-
HCM Lane V/C Ratio	0.011	-	-	0.063	0.012	0.274	0.088	0.083	-	-
HCM Control Delay (s)	8.5	-	-	37	11.7	41.4	12.2	8.8	-	-
HCM Lane LOS	A	-	-	E	B	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	1	0.3	0.3	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	8	104	231	4
Future Vol, veh/h	0	8	8	104	231	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	9	113	251	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	384	253	255	0	-	0
Stage 1	253	-	-	-	-	-
Stage 2	131	-	-	-	-	-
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	*698	*894	*1338	-	-	-
Stage 1	*843	-	-	-	-	-
Stage 2	*895	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	*693	*894	*1338	-	-	-
Mov Cap-2 Maneuver	*693	-	-	-	-	-
Stage 1	*837	-	-	-	-	-
Stage 2	*895	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	* 1338	-	894	-	-
HCM Lane V/C Ratio	0.006	-	0.01	-	-
HCM Control Delay (s)	7.7	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

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

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	0	4	15	0	38	6	456	23	59	445	21
Future Vol, veh/h	16	0	4	15	0	38	6	456	23	59	445	21
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	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	0	4	16	0	41	7	496	25	64	484	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1167	1159	496	1149	1158	509	507	0	0	521	0	0
Stage 1	624	624	-	523	523	-	-	-	-	-	-	-
Stage 2	543	535	-	626	635	-	-	-	-	-	-	-
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	171	196	574	176	196	564	1058	-	-	1045	-	-
Stage 1	473	478	-	537	530	-	-	-	-	-	-	-
Stage 2	524	524	-	472	472	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	150	183	574	166	183	564	1058	-	-	1045	-	-
Mov Cap-2 Maneuver	150	183	-	166	183	-	-	-	-	-	-	-
Stage 1	470	449	-	533	526	-	-	-	-	-	-	-
Stage 2	482	520	-	440	443	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.9	16.7	0.1	1
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1058	-	-	150	574	166	564	1045	-	-
HCM Lane V/C Ratio	0.006	-	-	0.116	0.008	0.098	0.073	0.061	-	-
HCM Control Delay (s)	8.4	-	-	32.1	11.3	29	11.9	8.7	-	-
HCM Lane LOS	A	-	-	D	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0.3	0.2	0.2	-	-

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	6	0	18	10	0	25	15	82	10	115	111	11
Future Vol, veh/h	6	0	18	10	0	25	15	82	10	115	111	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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	0	20	11	0	27	16	89	11	125	121	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	517	509	127	514	510	95	133	0	0	100	0	0
Stage 1	377	377	-	127	127	-	-	-	-	-	-	-
Stage 2	140	132	-	387	383	-	-	-	-	-	-	-
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	491	481	988	494	480	962	1475	-	-	1493	-	-
Stage 1	669	625	-	877	791	-	-	-	-	-	-	-
Stage 2	863	787	-	660	621	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	440	432	988	446	431	962	1475	-	-	1493	-	-
Mov Cap-2 Maneuver	440	432	-	446	431	-	-	-	-	-	-	-
Stage 1	661	568	-	866	782	-	-	-	-	-	-	-
Stage 2	829	778	-	588	564	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	10.3	1	3.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1475	-	-	753	723	1493	-	-
HCM Lane V/C Ratio	0.011	-	-	0.035	0.053	0.084	-	-
HCM Control Delay (s)	7.5	0	-	10	10.3	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.3	-	-

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	4	0	1	1	0	6	2	475	2	10	446	8
Future Vol, veh/h	4	0	1	1	0	6	2	475	2	10	446	8
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	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	1	1	0	7	2	516	2	11	485	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1037	1034	490	1033	1037	517	494	0	0	518	0	0
Stage 1	512	512	-	521	521	-	-	-	-	-	-	-
Stage 2	525	522	-	512	516	-	-	-	-	-	-	-
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	209	232	578	211	231	558	1070	-	-	1048	-	-
Stage 1	545	536	-	539	532	-	-	-	-	-	-	-
Stage 2	536	531	-	545	534	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	205	229	578	209	228	558	1070	-	-	1048	-	-
Mov Cap-2 Maneuver	205	229	-	209	228	-	-	-	-	-	-	-
Stage 1	544	531	-	538	531	-	-	-	-	-	-	-
Stage 2	529	530	-	538	529	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.7	13.1	0	0.2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1070	-	-	235	451	1048	-	-
HCM Lane V/C Ratio	0.002	-	-	0.023	0.017	0.01	-	-
HCM Control Delay (s)	8.4	-	-	20.7	13.1	8.5	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	1	2	94	113	13
Future Vol, veh/h	7	1	2	94	113	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	1	2	102	123	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	236	130	137	0	-	0
Stage 1	130	-	-	-	-	-
Stage 2	106	-	-	-	-	-
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	752	920	1447	-	-	-
Stage 1	896	-	-	-	-	-
Stage 2	918	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	751	920	1447	-	-	-
Mov Cap-2 Maneuver	751	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	918	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1447	-	769	-	-
HCM Lane V/C Ratio	0.002	-	0.011	-	-
HCM Control Delay (s)	7.5	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	425	428	446
Demand Flow Rate, veh/h	434	436	455
Vehicles Circulating, veh/h	313	248	168
Vehicles Exiting, veh/h	310	499	516
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	8.6	7.8	7.1
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	434	436	455
Cap Entry Lane, veh/h	1003	1071	1163
Entry HV Adj Factor	0.980	0.981	0.980
Flow Entry, veh/h	425	428	446
Cap Entry, veh/h	983	1051	1140
V/C Ratio	0.433	0.407	0.391
Control Delay, s/veh	8.6	7.8	7.1
LOS	A	A	A
95th %tile Queue, veh	2	2	2

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	421	377	6	3	16
Future Vol, veh/h	28	421	377	6	3	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	458	410	7	3	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	417	0	-	0	932	414
Stage 1	-	-	-	-	414	-
Stage 2	-	-	-	-	518	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1142	-	-	-	296	638
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	598	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1142	-	-	-	288	638
Mov Cap-2 Maneuver	-	-	-	-	288	-
Stage 1	-	-	-	-	650	-
Stage 2	-	-	-	-	598	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1142	-	-	-	535
HCM Lane V/C Ratio	0.027	-	-	-	0.039
HCM Control Delay (s)	8.2	-	-	-	12
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	387	353	39	35	30
Future Vol, veh/h	37	387	353	39	35	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	421	384	42	38	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	426	0	-	0	906	405
Stage 1	-	-	-	-	405	-
Stage 2	-	-	-	-	501	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1133	-	-	-	307	646
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	609	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1133	-	-	-	296	646
Mov Cap-2 Maneuver	-	-	-	-	296	-
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	609	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	16.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1133	-	-	-	395
HCM Lane V/C Ratio	0.035	-	-	-	0.179
HCM Control Delay (s)	8.3	-	-	-	16.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1661	145	44	1623	67	34
Future Vol, veh/h	1661	145	44	1623	67	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1805	158	48	1764	73	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1963	0	2607	903
Stage 1	-	-	-	-	1805	-
Stage 2	-	-	-	-	802	-
Critical Hdwy	-	-	5.34	-	5.74	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	3.12	-	3.82	3.92
Pot Cap-1 Maneuver	-	-	571	-	*201	*536
Stage 1	-	-	-	-	*550	-
Stage 2	-	-	-	-	*550	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	571	-	*184	*536
Mov Cap-2 Maneuver	-	-	-	-	*184	-
Stage 1	-	-	-	-	*550	-
Stage 2	-	-	-	-	*503	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	32.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	236	-	-	571	-
HCM Lane V/C Ratio	0.465	-	-	0.084	-
HCM Control Delay (s)	32.9	-	-	11.9	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	2.3	-	-	0.3	-

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	1664	29	0	1667	0	12
Future Vol, veh/h	1664	29	0	1667	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1809	32	0	1812	0	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	-	-	0	-	0	0
Stage 1	-	-	0	-	0	0
Stage 2	-	-	0	-	0	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

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

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	2	2	102	238	10
Future Vol, veh/h	6	2	2	102	238	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	2	111	259	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	380	265	270	0	-	0
Stage 1	265	-	-	-	-	-
Stage 2	115	-	-	-	-	-
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	702	892	1329	-	-	-
Stage 1	842	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	700	892	1329	-	-	-
Mov Cap-2 Maneuver	700	-	-	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	910	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1329	-	740	-	-
HCM Lane V/C Ratio	0.002	-	0.012	-	-
HCM Control Delay (s)	7.7	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	2	3	101	234	6
Future Vol, veh/h	3	2	3	101	234	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	2	3	110	254	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	374	258	261	0	-	0
Stage 1	258	-	-	-	-	-
Stage 2	116	-	-	-	-	-
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	*708	*894	*1338	-	-	-
Stage 1	*843	-	-	-	-	-
Stage 2	*909	-	-	-	-	-
Platoon blocked, %	1	1	1	-	-	-
Mov Cap-1 Maneuver	*707	*894	*1338	-	-	-
Mov Cap-2 Maneuver	*707	-	-	-	-	-
Stage 1	*841	-	-	-	-	-
Stage 2	*909	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	* 1338	-	772	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s)	7.7	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

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

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	104	510	26	0	574
Future Vol, veh/h	0	104	510	26	0	574
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	113	554	28	0	624

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	568	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	522	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	522	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	522	-
HCM Lane V/C Ratio	-	-	0.217	-
HCM Control Delay (s)	-	-	13.8	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.8	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	18	50	13	1	34	4	7	0	1	1	0	12
Future Vol, veh/h	18	50	13	1	34	4	7	0	1	1	0	12
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	54	14	1	37	4	8	0	1	1	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	41	0	0	68	0	0	149	144	61	143	149	39
Stage 1	-	-	-	-	-	-	101	101	-	41	41	-
Stage 2	-	-	-	-	-	-	48	43	-	102	108	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1568	-	-	1533	-	-	819	747	1004	826	743	1033
Stage 1	-	-	-	-	-	-	905	811	-	974	861	-
Stage 2	-	-	-	-	-	-	965	859	-	904	806	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1568	-	-	1533	-	-	800	737	1004	816	733	1033
Mov Cap-2 Maneuver	-	-	-	-	-	-	800	737	-	816	733	-
Stage 1	-	-	-	-	-	-	893	800	-	961	860	-
Stage 2	-	-	-	-	-	-	952	858	-	891	796	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0.2	9.4	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	821	1568	-	-	1533	-	-	1012
HCM Lane V/C Ratio	0.011	0.012	-	-	0.001	-	-	0.014
HCM Control Delay (s)	9.4	7.3	0	-	7.3	0	-	8.6
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	29	4	0	23	5	3	3	0	5	3	13
Future Vol, veh/h	19	29	4	0	23	5	3	3	0	5	3	13
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	32	4	0	25	5	3	3	0	5	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	30	0	0	36	0	0	112	106	34	106	106	28
Stage 1	-	-	-	-	-	-	76	76	-	28	28	-
Stage 2	-	-	-	-	-	-	36	30	-	78	78	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1583	-	-	1575	-	-	866	784	1039	873	784	1047
Stage 1	-	-	-	-	-	-	933	832	-	989	872	-
Stage 2	-	-	-	-	-	-	980	870	-	931	830	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1583	-	-	1575	-	-	843	773	1039	861	773	1047
Mov Cap-2 Maneuver	-	-	-	-	-	-	843	773	-	861	773	-
Stage 1	-	-	-	-	-	-	920	820	-	975	872	-
Stage 2	-	-	-	-	-	-	963	870	-	914	818	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.7	0	9.5	8.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	806	1583	-	-	1575	-	-	950
HCM Lane V/C Ratio	0.008	0.013	-	-	-	-	-	0.024
HCM Control Delay (s)	9.5	7.3	0	-	0	-	-	8.9
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	28	7	3	24	4	1
Future Vol, veh/h	28	7	3	24	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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	8	3	26	4	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	38	0	66	34
Stage 1	-	-	-	-	34	-
Stage 2	-	-	-	-	32	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1572	-	939	1039
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	991	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1572	-	937	1039
Mov Cap-2 Maneuver	-	-	-	-	937	-
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	989	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	956	-	-	1572	-
HCM Lane V/C Ratio	0.006	-	-	0.002	-
HCM Control Delay (s)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	22	7	3	23	4	1
Future Vol, veh/h	22	7	3	23	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	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	8	3	25	4	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	32	0	59	28
Stage 1	-	-	-	-	28	-
Stage 2	-	-	-	-	31	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1580	-	948	1047
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	992	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1580	-	946	1047
Mov Cap-2 Maneuver	-	-	-	-	946	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	990	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	965	-	-	1580	-
HCM Lane V/C Ratio	0.006	-	-	0.002	-
HCM Control Delay (s)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	1	2	102	133	8
Future Vol, veh/h	4	1	2	102	133	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	2	111	145	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	265	150	154	0	-	0
Stage 1	150	-	-	-	-	-
Stage 2	115	-	-	-	-	-
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	724	896	1426	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	723	896	1426	-	-	-
Mov Cap-2 Maneuver	723	-	-	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	910	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1426	-	752	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s)	7.5	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	1	2	99	126	8
Future Vol, veh/h	4	1	2	99	126	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	2	108	137	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	254	142	146	0	-	0
Stage 1	142	-	-	-	-	-
Stage 2	112	-	-	-	-	-
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	735	906	1436	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	913	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	734	906	1436	-	-	-
Mov Cap-2 Maneuver	734	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	913	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1436	-	763	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s)	7.5	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	5	8	76	82	33
Future Vol, veh/h	20	5	8	76	82	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	5	9	83	89	36

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	208	107	125	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	101	-	-	-	-	-
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	780	947	1462	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	923	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	775	947	1462	-	-	-
Mov Cap-2 Maneuver	775	-	-	-	-	-
Stage 1	911	-	-	-	-	-
Stage 2	923	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1462	-	804	-	-
HCM Lane V/C Ratio	0.006	-	0.034	-	-
HCM Control Delay (s)	7.5	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	4	6	70	61	26
Future Vol, veh/h	15	4	6	70	61	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	4	7	76	66	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	170	80	94	0	-	0
Stage 1	80	-	-	-	-	-
Stage 2	90	-	-	-	-	-
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	820	980	1500	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	816	980	1500	-	-	-
Mov Cap-2 Maneuver	816	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	934	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1500	-	846	-	-
HCM Lane V/C Ratio	0.004	-	0.024	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	7	461	2	11	407
Future Vol, veh/h	1	7	461	2	11	407
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	8	501	2	12	442

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	968	502	0	0	503	0
Stage 1	502	-	-	-	-	-
Stage 2	466	-	-	-	-	-
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	282	569	-	-	1061	-
Stage 1	608	-	-	-	-	-
Stage 2	632	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	279	569	-	-	1061	-
Mov Cap-2 Maneuver	279	-	-	-	-	-
Stage 1	608	-	-	-	-	-
Stage 2	625	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.3	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	504	1061	-
HCM Lane V/C Ratio	-	-	0.017	0.011	-
HCM Control Delay (s)	-	-	12.3	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	7	465	3	11	417
Future Vol, veh/h	2	7	465	3	11	417
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	8	505	3	12	453

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	984	507	0	0	508	0
Stage 1	507	-	-	-	-	-
Stage 2	477	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	275	566	-	-	1057	-
Stage 1	605	-	-	-	-	-
Stage 2	624	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	272	566	-	-	1057	-
Mov Cap-2 Maneuver	272	-	-	-	-	-
Stage 1	605	-	-	-	-	-
Stage 2	617	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	456	1057	-
HCM Lane V/C Ratio	-	-	0.021	0.011	-
HCM Control Delay (s)	-	-	13.1	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	7	468	3	11	427
Future Vol, veh/h	2	7	468	3	11	427
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	8	509	3	12	464

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	999	511	0	0	512	0
Stage 1	511	-	-	-	-	-
Stage 2	488	-	-	-	-	-
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	270	563	-	-	1053	-
Stage 1	602	-	-	-	-	-
Stage 2	617	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	267	563	-	-	1053	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	602	-	-	-	-	-
Stage 2	610	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	452	1053	-
HCM Lane V/C Ratio	-	-	0.022	0.011	-
HCM Control Delay (s)	-	-	13.1	8.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	7	473	2	11	437
Future Vol, veh/h	1	7	473	2	11	437
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	8	514	2	12	475

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1014	515	0	0	516	0
Stage 1	515	-	-	-	-	-
Stage 2	499	-	-	-	-	-
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	264	560	-	-	1050	-
Stage 1	600	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	261	560	-	-	1050	-
Mov Cap-2 Maneuver	261	-	-	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	603	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	490	1050	-
HCM Lane V/C Ratio	-	-	0.018	0.011	-
HCM Control Delay (s)	-	-	12.5	8.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

APPENDIX E. SIGNAL WARRANT ANALYSES

MUTCD Volume-based Warrant Evaluation
Harvest Road & Jewell Avenue
2029_ST Total

FELSBURG HOLT & ULLEVIG

Major Street: Jewell Avenue
Lanes Moving Traffic: 2 or more
Approach Speed: 30 MPH
Option: Rural Community

Minor Street: Harvest Road
Lanes Moving Traffic: 2 or more
Right Turn Volume Included: 0% SB, 0% NB per NCHRP 457 Methodology

WARRANT 1, Condition A - Minimum Vehicular Volume

70% Satisfied: Yes

	Vehicles per hour 70% (56%)	Peak Hour	2nd Highest	3rd Highest	4th Highest	5th Highest	6th Highest	7th Highest	8th Highest
Both Apprchs. Major Street	420 (336)	756	710	663	617	571	524	478	432
Highest Apprch. Minor Street	140 (112)	246	231	216	201	186	171	156	140

WARRANT 1, Condition B - Interruption of Continuous Traffic

70% Satisfied: No

	Vehicles per hour 70% (56%)	Peak Hour	2nd Highest	3rd Highest	4th Highest	5th Highest	6th Highest	7th Highest	8th Highest
Both Apprchs. Major Street	630 (504)	756	710	663	617	571	524	478	432
Highest Apprch. Minor Street	70 (56)	246	231	216	201	186	171	156	140

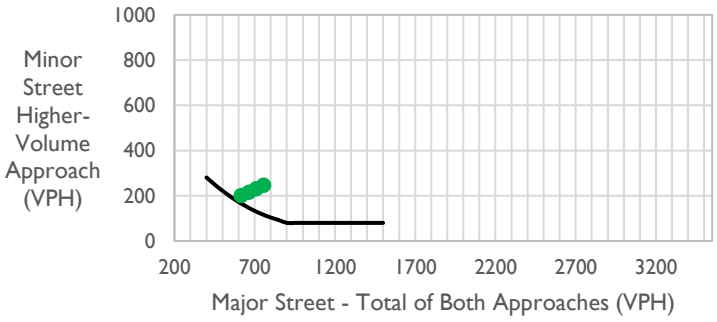
WARRANT 1, Condition A and Condition B

56% Satisfied: No

WARRANT 2, Four Hour Volume

70% Satisfied: Yes

	Both Apprchs. Major Street	Higher Vol. Apprch. Minor Street
Peak Hour	756	246
2nd Highest	710	231
3rd Highest	663	216
4th Highest	617	201



WARRANT 3, Peak Hour Volume

70% Satisfied: Yes

	Both Apprchs. Major Street	Higher Vol. Apprch. Minor Street
Peak Hour	756	246

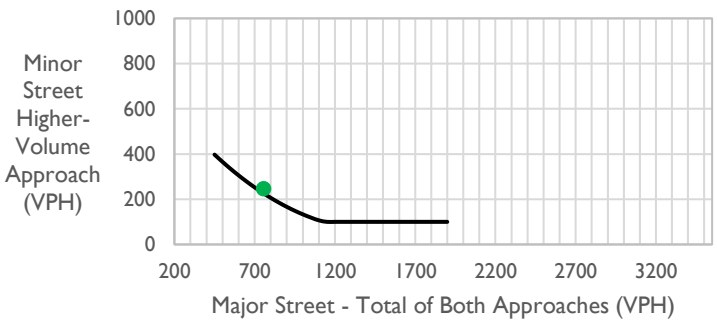
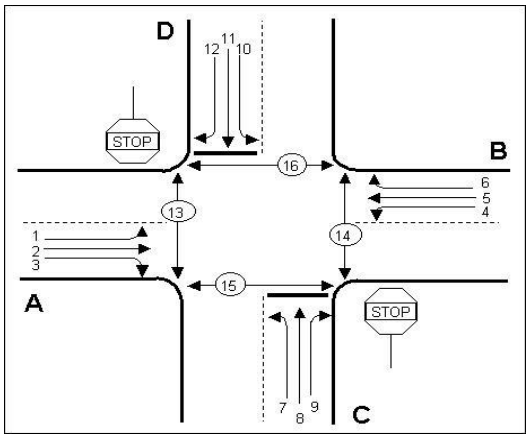


Figure 2 - 11. Minor-road right-turn volume reduction for warrant check.
Harvest Road & Jewell Avenue
2029_ST Total



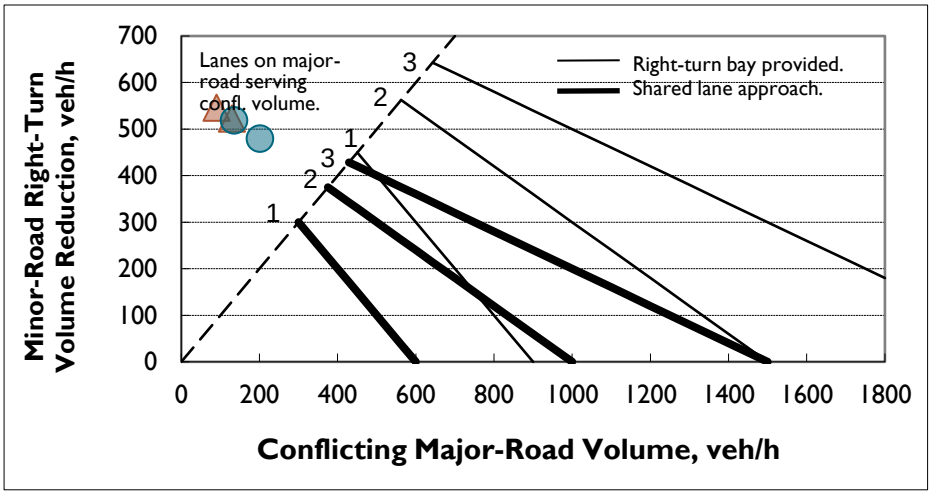
INPUT

Number of lanes on major-road approach:			2	
Right-turn geometry on minor-road:			Shared-lane approach	
Approach	Number	Movement	Volume (veh/hr) AM	PM
Major A	2	Through	139	276
	3	Right	41	127
Major B	5	Through	223	230
	6	Right	36	41
Minor C	7	Left	132	140
	8	Through	114	103
	9	Right	21	16
Minor D	10	Left	38	92
	11	Through	36	113
	12	Right	44	49

OUTPUT

Variable	Volume (veh/hr) AM	PM
Conflicting major-road volume (Vc9):	90	202
Conflicting major-road volume (Vc12):	130	136
Right-turn volume reduction (Vr9):	546	479
Right-turn volume reduction (Vr12):	522	519
Adjusted right-turn volume reduction (Vr9):	21	16
Adjusted right-turn volume reduction (Vr12):	44	49
Adjusted minor-road volume:	246	243

Chart Legend: ▲ ●



Source: NCHRP Report 457

MUTCD Volume-based Warrant Evaluation
Harvest Road & Jewell Avenue
2040_LT Background

FELSBURG HOLT & ULLEVIG

Major Street: Jewell Avenue
Lanes Moving Traffic: 2 or more
Approach Speed: 40 MPH
Option: Rural Community

Minor Street: Harvest Road
Lanes Moving Traffic: 2 or more
Right Turn Volume Included: 100% SB, 100% NB per NCHRP 457 Methodology

WARRANT 1, Condition A - Minimum Vehicular Volume

70% Satisfied	Yes

	Vehicles per hour 70% (56%)	Peak Hour	2nd Highest	3rd Highest	4th Highest	5th Highest	6th Highest	7th Highest	8th Highest
Both Apprchs. Major Street	420 (336)	3489	3275	3061	2848	2634	2420	2206	1992
Highest Apprch. Minor Street	140 (112)	978	918	858	798	738	678	618	558

WARRANT 1, Condition B - Interruption of Continuous Traffic

70% Satisfied	Yes

	Vehicles per hour 70% (56%)	Peak Hour	2nd Highest	3rd Highest	4th Highest	5th Highest	6th Highest	7th Highest	8th Highest
Both Apprchs. Major Street	630 (504)	3489	3275	3061	2848	2634	2420	2206	1992
Highest Apprch. Minor Street	70 (56)	978	918	858	798	738	678	618	558

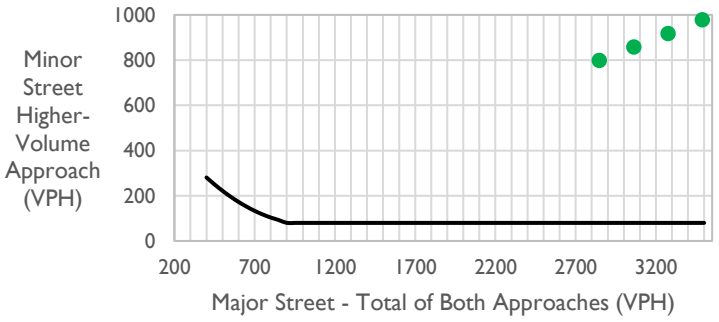
WARRANT 1, Condition A and Condition B

56% Satisfied	Yes

WARRANT 2, Four Hour Volume

70% Satisfied	Yes

	Both Apprchs. Major Street	Higher Vol. Apprch. Minor Street
Peak Hour	3489	978
2nd Highest	3275	918
3rd Highest	3061	858
4th Highest	2848	798

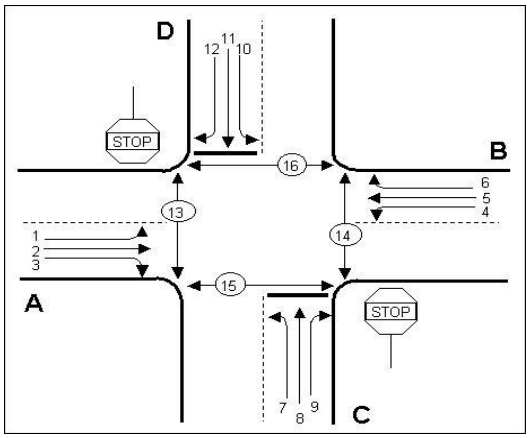


WARRANT 3, Peak Hour Volume

70% Satisfied	Yes

	Both Apprchs. Major Street	Higher Vol. Apprch. Minor Street
Peak Hour	3489	978

Figure 2 - 11. Minor-road right-turn volume reduction for warrant check.
Harvest Road & Jewell Avenue
2040_LT Background



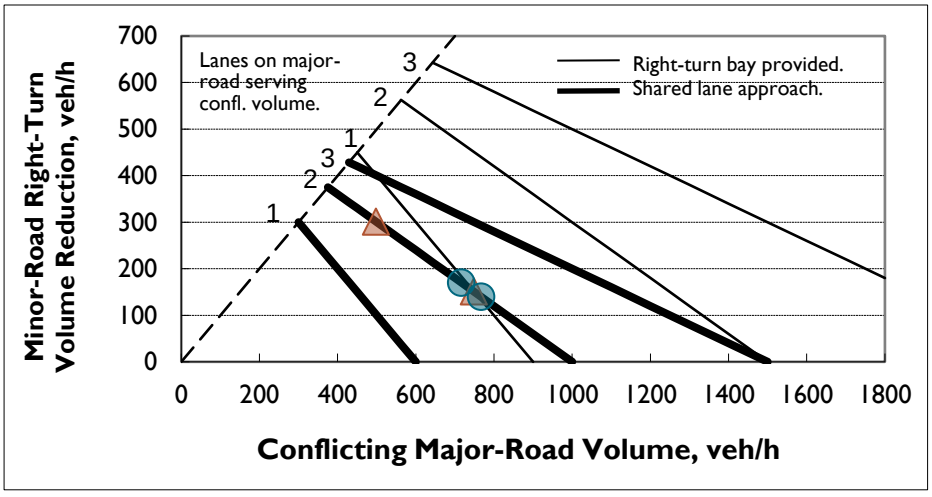
INPUT

Number of lanes on major-road approach:			2	
Right-turn geometry on minor-road:			Shared-lane approach	
Approach	Number	Movement	Volume (veh/hr) AM	PM
Major A	2	Through	924	1274
	3	Right	71	159
Major B	5	Through	1127	1252
	6	Right	369	282
Minor C	7	Left	161	175
	8	Through	216	252
	9	Right	86	89
Minor D	10	Left	215	382
	11	Through	151	284
	12	Right	400	452

OUTPUT

Variable	Volume (veh/hr) AM	PM
Conflicting major-road volume (Vc9):	498	717
Conflicting major-road volume (Vc12):	748	767
Right-turn volume reduction (Vr9):	302	170
Right-turn volume reduction (Vr12):	151	140
Adjusted right-turn volume reduction (Vr9):	86	89
Adjusted right-turn volume reduction (Vr12):	151	140
Adjusted minor-road volume:	615	978

Chart Legend: ▲ ●



Source: NCHRP Report 457

MUTCD Volume-based Warrant Evaluation
0 & Jewell Avenue
2040_LT Background

FELSBURG HOLT & ULLEVIG

Major Street: Jewell Avenue
Lanes Moving Traffic: 2 or more
Approach Speed: 40 MPH
Option: Rural Community

Minor Street: 0
Lanes Moving Traffic: 2 or more
Right Turn Volume Included: 0% SB, 0% NB per NCHRP 457 Methodology

WARRANT 1, Condition A - Minimum Vehicular Volume

70% Satisfied: No

	Vehicles per hour 70% (56%)	Peak Hour	2nd Highest	3rd Highest	4th Highest	5th Highest	6th Highest	7th Highest	8th Highest
Both Apprchs. Major Street	420 (336)	3294	3092	2890	2688	2486	2285	2083	1881
Highest Apprch. Minor Street	140 (112)	123	115	108	100	93	85	78	70

WARRANT 1, Condition B - Interruption of Continuous Traffic

70% Satisfied: Yes

	Vehicles per hour 70% (56%)	Peak Hour	2nd Highest	3rd Highest	4th Highest	5th Highest	6th Highest	7th Highest	8th Highest
Both Apprchs. Major Street	630 (504)	3294	3092	2890	2688	2486	2285	2083	1881
Highest Apprch. Minor Street	70 (56)	123	115	108	100	93	85	78	70

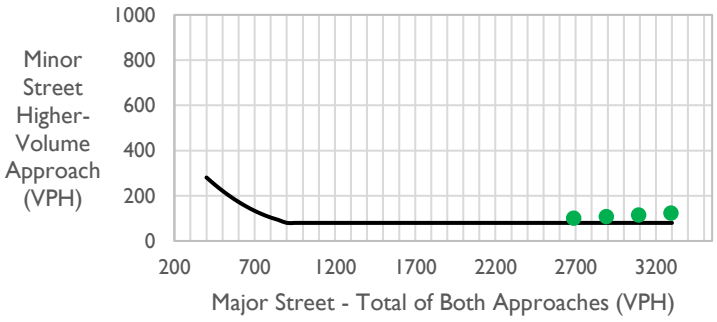
WARRANT 1, Condition A and Condition B

56% Satisfied: No

WARRANT 2, Four Hour Volume

70% Satisfied: Yes

	Both Apprchs. Major Street	Higher Vol. Apprch. Minor Street
Peak Hour	3294	123
2nd Highest	3092	115
3rd Highest	2890	108
4th Highest	2688	100

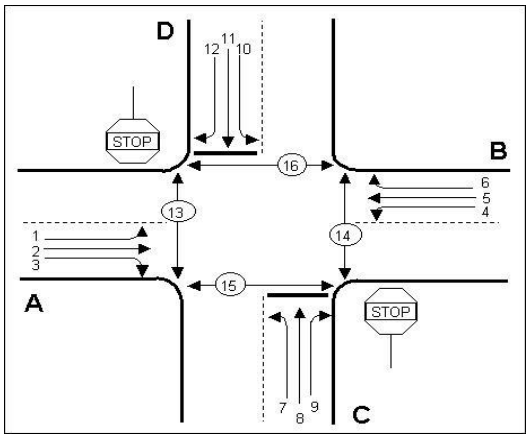


WARRANT 3, Peak Hour Volume

70% Satisfied: Yes

	Both Apprchs. Major Street	Higher Vol. Apprch. Minor Street
Peak Hour	3294	123

Figure 2 - 11. Minor-road right-turn volume reduction for warrant check.
0 & Jewell Avenue
2040_LT Background



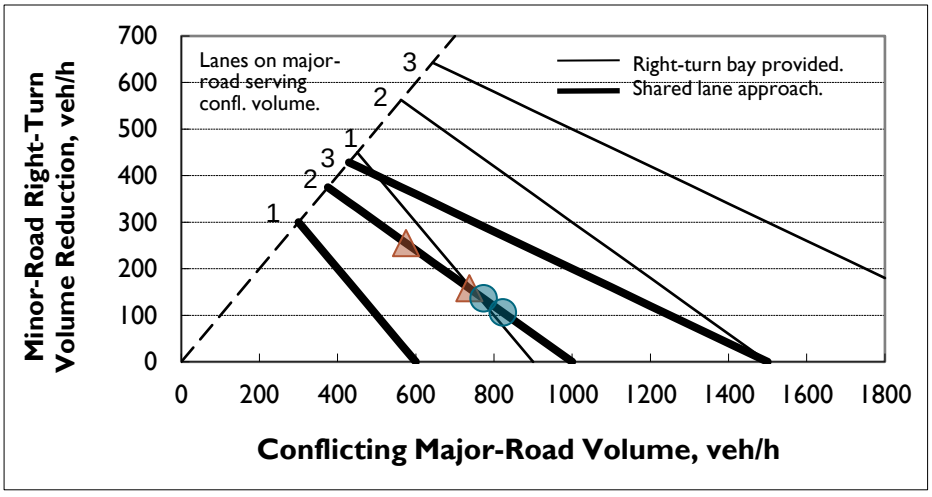
INPUT

Number of lanes on major-road approach:			2	
Right-turn geometry on minor-road:			Shared-lane approach	
Approach	Number	Movement	Volume (veh/hr) AM	PM
Major A	2	Through	1135	1461
	3	Right	14	86
Major B	5	Through	1423	1546
	6	Right	50	100
Minor C	7	Left	63	12
	8	Through	26	39
	9	Right	14	21
Minor D	10	Left	55	75
	11	Through	38	48
	12	Right	66	68

OUTPUT

Variable	Volume (veh/hr) AM	PM
Conflicting major-road volume (Vc9):	575	774
Conflicting major-road volume (Vc12):	737	823
Right-turn volume reduction (Vr9):	255	136
Right-turn volume reduction (Vr12):	158	106
Adjusted right-turn volume reduction (Vr9):	14	21
Adjusted right-turn volume reduction (Vr12):	66	68
Adjusted minor-road volume:	93	123

Chart Legend: ▲ ●



Source: NCHRP Report 457

APPENDIX F. LEVEL OF SERVICE AND DELAY SUMMARY TABLE

Intersection	Movement	AM LOS (Delay) / PM LOS (delay)				
		Existing	Short Term Background	Long Term Background	Short Term Total	Long Term Total
1. Harvest Rd & E Jewell Ave	EB Left	N/A	a (7.8) / a (7.9)	e (58.8) / e (64.7)	d (40.5) / a (8.5)	e (57.5) / d (53.8)
	EB Through	a (7.6) / a (7.6)	N/A	b (18.7) / d (36.6)	d (44.5) / b (13.5)	c (20.9) / d (44.6)
	EB Right	N/A	N/A	b (19.3) / d (40.4)	N/A	c (21.7) / d (51.7)
	WB Left	N/A	N/A	e (64.4) / e (72.7)	d (39.3) / a (9.3)	e (64) / e (74.4)
	WB Through	N/A	a (7.6) / a (8)	a (7.7) / c (34.8)	d (53.4) / b (12)	d (45) / d (58.3)
	WB Right	N/A	N/A	b (10.8) / c (32.6)	N/A	c (34.1) / c (30.8)
	NB Left	N/A	c (15.8) / e (37.2)	e (65.8) / e (79.4)	a (9.3) / d (41.2)	e (60.9) / e (62.9)
	NB Through	N/A	b (14.3) / c (20.1)	d (51.3) / e (68.9)	b (10.7) / d (46.9)	d (48.1) / d (63.5)
	NB Right	N/A	a (9.1) / b (10)	d (44) / d (38.8)	a (9.9) / d (43.8)	d (40.2) / d (36.9)
	SB Left	a (9.4) / a (9.4)	N/A	e (67.4) / e (75.5)	b (10.1) / d (41.4)	e (58.3) / e (60.9)
	SB Through	N/A	b (13.6) / e (38.7)	d (52.8) / d (47.6)	b (11.8) / e (56.7)	d (52.7) / e (52.7)
	SB Right	N/A	N/A	e (64.8) / d (42.2)	N/A	e (56.9) / d (37.4)
	Overall	N/A	N/A	C (32) / D (46.9)	C (32.1) / C (26.5)	D (43) / D (52)
2. Kewaunee St & Jewell Avenue	EB Left	N/A	a (7.6) / a (7.8)	a (5.2) / a (5.7)	a (7.6) / a (7.8)	a (7.9) / a (8.6)
	EB Through	N/A	N/A	a (0.4) / a (0.6)	N/A	a (0.5) / a (0.8)
	EB Right	N/A	N/A	a (0.6) / a (1)	N/A	a (0.8) / a (1.4)
	WB Left	N/A	a (7.5) / a (7.6)	a (4.4) / a (3.9)	a (7.5) / a (7.8)	a (6) / a (5.3)
	WB Through	N/A	N/A	a (7.4) / a (7.4)	N/A	b (10.5) / b (10.4)
	WB Right	N/A	N/A	a (7.9) / a (7.9)	N/A	b (11.1) / b (11.1)
	NB Left	N/A	b (11) / b (12.6)	e (56.7) / e (56)	b (11.9) / b (14.6)	d (45.8) / d (48)
	NB Through/Right	N/A	a (9.9) / b (10.4)	d (46.5) / d (49.6)	a (9.5) / b (10.1)	d (50) / e (57.5)
	SB Left	N/A	a (0) / a (0)	d (50.2) / e (56.1)	a (0) / a (0)	d (47.6) / d (48.7)
	SB Through/Right	N/A	b (10) / b (10.8)	d (50) / d (54.5)	b (10.1) / b (11.3)	e (62.6) / e (63.6)
	Overall	N/A	N/A	A (8.6) / A (8)	N/A	B (11.4) / B (10.4)
3. Harvest Rd & Pacific Ave	EB Left	N/A	N/A	c (15.5) / d (27.4)	N/A	c (18.6) / e (37.6)
	EB Through/Right	N/A	a (9.4) / b (10.5)	a (9.6) / b (10.7)	b (10.3) / b (11.7)	a (9.8) / b (11.7)
	WB Left	N/A	N/A	b (14.9) / d (29.8)	N/A	c (17.7) / e (43.8)
	WB Through/Right	N/A	a (9.4) / b (10.7)	b (10.3) / b (11.6)	b (10.3) / b (11.9)	b (11.2) / b (12.3)
	NB Left	N/A	a (7.3) / a (7.4)	a (7.7) / a (8.2)	a (7.3) / a (7.6)	a (7.8) / a (8.5)
	SB Left	N/A	a (7.4) / a (7.6)	a (8) / a (8.6)	a (7.7) / a (7.3)	a (8.3) / a (8.9)
4. Kewaunee St & Pacific Ave	EB Left/Right	N/A	a (8.4) / a (8.4)	a (8.7) / a (8.8)	a (8.6) / a (8.8)	a (8.9) / a (9.1)
	NB Left	N/A	a (7.2) / a (7.3)	a (7.3) / a (7.5)	a (7.3) / a (7.4)	a (7.4) / a (7.7)
5. Harvest Rd & Warren Ave	EB Left	N/A	N/A	b (14.1) / c (22.3)	N/A	c (17.2) / d (32.5)
	EB Through/Right	N/A	a (9.4) / b (10)	a (9.7) / b (10.7)	b (10.4) / b (12.1)	a (9.8) / b (11.4)
	WB Left	N/A	N/A	b (13.6) / c (21.1)	N/A	c (15.6) / d (29.7)
	WB Through/Right	N/A	a (9) / a (9.4)	a (9.9) / b (11.2)	a (9.6) / b (10.2)	b (10.6) / b (12)

Intersection	Movement	AM LOS (Delay) / PM LOS (delay)				
		Existing	Short Term Background	Long Term Background	Short Term Total	Long Term Total
	NB Left	N/A	a (7.3) / a (7.4)	a (7.8) / a (8.2)	a (7.4) / a (7.6)	a (7.8) / a (8.4)
	SB Left	N/A	a (7.3) / a (7.5)	a (7.8) / a (8.4)	a (7.5) / a (7.6)	a (8) / a (8.7)
6. Kewaunee St & Warren Ave	EB Left/Through/Right	N/A	a (8.6) / a (8.6)	a (9.4) / b (10.6)	a (8.9) / a (9)	a (9.9) / b (10)
	WB Left/Through/Right	N/A	N/A	a (8.8) / a (9.5)	N/A	a (9.2) / b (10.3)
	NB Left	N/A	a (7.2) / a (7.3)	a (7.3) / a (7.3)	a (7.3) / a (7.4)	a (7.4) / a (7.5)
	SB Left	N/A	N/A	a (7.3) / a (7.5)	N/A	a (7.5) / a (7.6)
7. Harvest Rd & Wesley Pl	EB Left	N/A	a (9.2) / a (9.8)	b (13.2) / c (19.1)	N/A	b (14.7) / c (23.3)
	EB Through/Right	N/A	a (8.6) / a (8.7)	a (9.7) / b (10.7)	a (9.7) / b (10.6)	a (9.9) / b (11.3)
	WB Left	N/A	a (9.2) / a (9.8)	b (13.1) / c (19)	N/A	b (14.5) / c (22.8)
	WB Through/Right	N/A	a (0) / a (0)	a (0) / a (0)	a (9.3) / a (9.6)	b (10.2) / b (11.6)
	NB Left	N/A	a (0) / a (7.4)	a (0) / a (8.2)	a (0) / a (7.6)	a (0) / a (8.4)
	SB Left	N/A	a (0) / a (0)	a (0) / a (0)	a (7.4) / a (7.5)	a (8) / a (8.5)
8. Kewaunee ST & Wesley Pl	EB Left/Right	N/A	N/A	a (0) / a (0)	a (9) / a (9.3)	a (9.4) / a (9.7)
	NB Left	N/A	N/A	a (0) / a (0)	a (7.3) / a (7.4)	a (7.4) / a (7.5)
9. Harvest Rd & Yale Ave	EB Left/Through	N/A	a (3) / a (3.3)	a (5.6) / a (7.9)	a (3.1) / a (3.7)	a (5.8) / a (8.9)
	WB Through/Right	N/A	a (2.9) / a (3)	a (5.2) / a (7.4)	a (3.2) / a (3.3)	a (5.6) / a (8.1)
	SB Left/Right	N/A	a (3.1) / a (3.2)	a (5.2) / a (6.8)	a (3.3) / a (3.5)	a (5.6) / a (7.3)
	Overall	N/A	a (3) / a (3.3)	A (5.3) / A (7.3)	a (3.2) / a (3.6)	A (5.7) / A (8.1)
10. Yale Ave & Jackson Gap St	EB Left/Through	N/A	N/A	a (0) / a (0)	a (7.3) / a (7.3)	a (7.9) / a (8.2)
	SB Left/Right	N/A	N/A	a (0) / a (0)	a (8.6) / a (8.6)	b (10.7) / b (12)
11. Yale Ave & Kewaunee St	EB Left/Through	N/A	a (7.2) / a (7.3)	a (7.9) / a (8.3)	a (7.3) / a (7.3)	a (7.9) / a (8.4)
	SB Left/Right	N/A	a (8.6) / a (8.7)	b (13) / c (16.3)	a (8.7) / a (8.9)	b (13.1) / c (17.1)
12. Jewell Ave & Access	WB Left	N/A	a (7.7) / a (8.2)	a (9.8) / b (11.4)	a (8.4) / a (7.7)	a (9.8) / b (12.3)
	NB Left/Right	N/A	b (11.4) / b (14.5)	b (14.9) / c (20.8)	c (15.5) / b (11.7)	c (19) / e (38.4)
13. Jewell Ave & Jackson Gap St	NB Right	N/A	a (9) / a (9.5)	a (0) / a (0)	a (9.2) / a (8.8)	a (0) / a (0)
14. Kewaunee St & North Site Access	EB Left/Right	N/A	a (8.6) / a (8.7)	a (9.3) / a (9.7)	a (9) / a (9.3)	a (9.7) / a (9.9)
	NB Left	N/A	a (7.2) / a (7.3)	a (7.4) / a (7.6)	a (7.3) / a (7.4)	a (7.4) / a (7.7)
15. Kewaunee St & South Site Access	EB Left/Right	N/A	a (8.6) / a (8.6)	a (9.1) / a (9.5)	a (8.9) / a (9.1)	a (9.4) / a (9.7)
	NB Left	N/A	a (7.2) / a (7.3)	a (7.4) / a (7.6)	a (7.3) / a (7.4)	a (7.4) / a (7.7)
16. Harvest Rd & Access	WB Right	N/A	a (9.2) / a (9.4)	b (10.8) / b (12.9)	a (9.9) / a (9.9)	b (11.8) / b (13.9)
17. Warren Ave & Access #17	EB Left/Through/Right	N/A	a (7.3) / a (7.3)	a (7.3) / a (7.3)	a (7.3) / a (7.3)	a (7.3) / a (7.3)
	WB Left/Through/Right	N/A	N/A	N/A	a (0) / a (7.4)	a (0) / a (7.4)

Intersection	Movement	AM LOS (Delay) / PM LOS (delay)				
		Existing	Short Term Background	Long Term Background	Short Term Total	Long Term Total
	NB Left/Through/Right	N/A	N/A	N/A	a (9.1) / a (9.3)	a (9.1) / a (9.3)
	SB Left/Through/Right	N/A	a (8.5) / a (8.4)	a (8.5) / a (8.4)	a (8.6) / a (8.5)	a (8.6) / a (8.5)
18. Warren Ave & Access #18	EB Left/Through/Right	N/A	a (7.2) / a (7.3)	a (7.2) / a (7.3)	a (7.3) / a (7.3)	a (7.3) / a (7.3)
	WB Left/Through/Right	N/A	N/A	N/A	a (0) / a (0)	a (0) / a (0)
	NB Left/Through/Right	N/A	N/A	N/A	a (9.2) / a (9.5)	a (9.2) / a (9.5)
	SB Left/Through/Right	N/A	a (8.4) / a (8.4)	a (8.4) / a (8.4)	a (8.6) / a (9)	a (8.6) / a (9)
19. Warren Ave & Access #19	WB Left/Through	N/A	N/A	N/A	a (7.3) / a (7.3)	a (7.3) / a (7.3)
	NB Left/Right	N/A	N/A	N/A	a (8.7) / a (8.8)	a (8.7) / a (8.8)
20. Warren Ave & Access #20	EB Left/Through/Right	N/A	a (7.2) / a (7.3)	a (7.2) / a (7.3)	a (7.3) / a (7.3)	a (7.3) / a (7.3)
	WB Left/Through/Right	N/A	N/A	N/A	a (7.2) / a (7.3)	a (7.2) / a (7.3)
	NB Left/Through/Right	N/A	N/A	N/A	a (8.7) / a (8.9)	a (8.7) / a (8.9)
	SB Left/Through/Right	N/A	a (8.4) / a (8.4)	a (8.4) / a (8.4)	a (8.4) / a (8.4)	a (8.4) / a (8.4)
21. Warren Ave & Access #21	EB Left/Right	N/A	N/A	N/A	a (9) / a (9.4)	a (9.4) / a (9.8)
	NB Left/Through	N/A	N/A	N/A	a (7.3) / a (7.4)	a (7.4) / a (7.5)
22. Warren Ave & Access #22	EB Left/Right	N/A	N/A	N/A	a (9) / a (9.3)	a (9.4) / a (9.8)
	NB Left/Through	N/A	N/A	N/A	a (7.3) / a (7.4)	a (7.4) / a (7.5)
23. Warren Ave & Access #23	EB Left/Right	N/A	N/A	N/A	a (9) / a (9.2)	a (9.3) / a (9.6)
	NB Left/Through	N/A	N/A	N/A	a (7.3) / a (7.4)	a (7.4) / a (7.5)
24. Warren Ave & Access #24	EB Left/Right	N/A	N/A	N/A	a (8.8) / a (9)	a (9.1) / a (9.4)
	NB Left/Through	N/A	N/A	N/A	a (7.3) / a (7.3)	a (7.4) / a (7.4)
25. Warren Ave & Access #25	WB Left/Right	N/A	N/A	N/A	a (8.8) / a (9.2)	b (10.4) / b (12.4)
	SB Left/Through	N/A	N/A	N/A	a (7.4) / a (7.5)	a (7.9) / a (8.5)
26. Warren Ave & Access #26	WB Left/Right	N/A	N/A	N/A	a (8.9) / a (9.3)	b (10.5) / b (13.2)
	SB Left/Through	N/A	N/A	N/A	a (7.4) / a (7.5)	a (7.9) / a (8.5)
27. Warren Ave & Access #27	WB Left/Right	N/A	N/A	N/A	a (8.9) / a (9.4)	b (10.6) / b (13.3)
	SB Left/Through	N/A	N/A	N/A	a (7.4) / a (7.5)	a (7.9) / a (8.5)
28. Warren Ave & Access #28	WB Left/Right	N/A	N/A	N/A	a (9) / a (9.3)	b (10.7) / b (12.6)
	SB Left/Through	N/A	N/A	N/A	a (7.4) / a (7.5)	a (7.9) / a (8.5)

*Overall results are presented for signalized intersections. Some signalized locations have movements below City LOS standards as outlined in the text.