The Hingham Center for Active Living Traffic Impact Study

Town of Hingham, Massachusetts

Prepared for:

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SLR Project No.: 141.051021.00001

Client Reference No: 21840.00008

December 4, 2025 *Revised January 30, 2026*

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1.0 Introduction

The senior population in Hingham is growing, and the Town of Hingham (Town) would like to expand upon its programing and services to improve the quality of life for its residents. Currently, the Town has a senior center; however, this existing facility is old and undersized.

Hingham would like to be known as a town that promotes an age-friendly community as residents strive to “Age in Place,” and a new senior center is a key step in supporting the residents. The proposed facility is expected to be approximately 28,000 square feet (SF) in size, roughly five times the size of the existing center located at 224 Central Street in Hingham, Massachusetts. The Locus Map is shown in Figure 1.

As part of the Feasibility Study for the new The Hingham Center for Active Living (HCAL) project, SLR International Corporation (SLR) previously prepared a traffic assessment to evaluate the site alternatives presented by EDM Studio and assist in the selection of a final site. The site alternatives were:

- Existing Town Hall, 210 Central Street
- Bare Cove Park – Building 12, 25 Bare Cove Park Drive

Ultimately, the site off of Bare Cove Park Drive was chosen as the preferred site for the HCAL. Access to the site will be via two full access unsignalized driveways located on Bear Cove Park Drive.

This Traffic Impact Report (TIR) provides an assessment of safety, traffic circulation, and traffic access/egress associated with the proposed HCAL Development project to be constructed at the Bare Cove Park site in Hingham, Massachusetts. This report also outlines the existing and future traffic volumes, operations, and safety of the adjacent surrounding roadways and intersections.

The standards used for analysis conform to the most recent edition of the *Manual on Uniform Traffic Control Devices* (MUTCD) and the 7th edition of the *Highway Capacity Manual* (2022).

The following conditions are analyzed in this report:

- 2025 Existing Conditions
- Future 2032 No-Build
- Future 2032 Build

2.0 Existing Conditions

2.1 Study Area Roadways

The following are general descriptions of the characteristics of the roadways within the study area:

Bare Cove Park Drive

Bare Cove Park Drive is classified as a local roadway that runs generally in the east-west direction through Hingham. The posted speed limit along Bare Cove Park Drive is 20 miles per hour (MPH). Bare Cove Park Drive functions as a two-way roadway with one lane in each direction, separated by a double yellow centerline (DYCL). In the vicinity of the Project Site, the roadway transitions into two one-lane, one-way roadways operating in opposite directions and separated by a 55-foot-wide grass median. There are no sidewalks present along Bare Cove Park Drive. The roadway is under the jurisdiction of the Town. The center island of Bare Cove Park Drive will be extended at the westerly end and Bare Cove Park Drive will be repaved and restriped to improve safety and circulation of HCAL and Park users.

Fort Hill Street

Fort Hill Street is classified by the Massachusetts Department of Transportation (MassDOT) as an urban minor arterial and runs in a north-south direction. Fort Hill Street runs from its northern terminus at the intersection of South Street at West Street to its southern terminus at Fresh River Avenue. The posted speed limit on Fort Hill Street is 30 MPH. The land use along the roadway is primarily residential. The roadway is maintained by the Town.

South Street

South Street is classified by MassDOT as an urban minor arterial and runs in a north-south direction. South Street begins at its northern terminus at North Street and ends at its southern terminus at Fort Hil Street. The posted speed limit on South Street is 30 MPH. The land use along the roadway is primarily residential. The roadway is maintained by the Town.

West Street

West Street is classified by MassDOT as an urban major collector and runs in a northwest-southeast direction. West Street intersects with North Street at its northern terminus at North Street and ends at its southern terminus at Fort Hill Street. The posted speed limit on West Street is 20 MPH. The land use along the roadway is primarily residential. The roadway is maintained by the Town.

2.2 Study Area Intersections

For this traffic study, the following major intersections were included in the study area and are shown in Figure 1.

1. Fort Hill Street at Bare Cove Park Drive
2. Fort Hill Street at South Street and West Street

Fort Hill Street at Bare Cove Park Drive

Fort Hill Street and Bare Cove Park Drive intersect to form a four-way unsignalized intersection with Fort Hill Street approaching from the north and south, Bare Cove Park Drive approaching

from the west, and the Massachusetts Bay Transportation Authority (MBTA) Commuter Parking Driveway (Driveway) approaching from the east. Fort Hill Street operates freely with no control while both Bare Cove Park Drive and the Driveway operate under "STOP" control. There are crosswalks across the eastbound and westbound approaches to the intersection, with sidewalk ramps only at the westbound approach (MBTA Driveway).

From the north, Fort Hill Street is a two-way roadway with one lane in each direction, separated by a DYCL. The approach to the intersection consists of a single general-purpose lane and an exclusive left-turn lane. There is one southbound receiving lane. Fort Hill Street is approximately 50 feet wide at the intersection, with sidewalks along both sides.

From the south, Fort Hill Street is a two-way roadway with one lane in each direction, separated by a DYCL. The approach to the intersection consists of a single general-purpose lane and an exclusive left-turn lane. There is one northbound receiving lane. Fort Hill Street is approximately 50 feet wide at the intersection, with sidewalks along both sides.

From the west, Bare Cove Park Drive is a two-way roadway with one lane in each direction, separated by a DYCL. The approach to the intersection consists of a shared left-turn and through lane and an exclusive right-turn lane. Bare Cove Park Drive is approximately 45 feet wide at the intersection, with sidewalks along the southern side of the road.

From the east, the Driveway is a two-way roadway with one lane in each direction, with no pavement markings separating the lanes. The approach to the intersection consists of a single general-purpose lane. The Driveway is approximately 32 feet wide at the intersection.

Fort Hill Street at South Street and West Street

Fort Hill Street, South Street, and West Street intersect to form a three-way signalized intersection with Fort Hill Street approaching from the south, South Street approaching from the east, and West Street approaching from the northwest. This intersection also has an at-grade railroad crossing.

From the south, Fort Hill Street is a two-way roadway with one lane in each direction, separated by a DYCL. The approach to the intersection includes an exclusive through lane and an exclusive right-turn lane. Sidewalks are provided on both sides, and the roadway is approximately 38 feet wide at the intersection.

From the east, South Street is a two-way roadway with one lane in each direction, separated by a DYCL. The approach to the intersection consists of a single general-purpose lane. A railroad crossing is located immediately before the intersection, with gates and signals to control vehicle movements when a train is approaching. The width of South Street at the intersection is approximately 38 feet. Sidewalks are present on both sides of the street.

From the northwest, West Street is a two-way roadway with one lane in each direction, separated by a DYCL. The approach to the intersection consists of an exclusive left-turn lane and an exclusive through lane. The width of South Street at the intersection is approximately 42 feet. A sidewalk is present on westerly side of the street.

3.0 Safety Analysis

3.1 Crash Data

SLR reviewed the crash data from MassDOT for the 5 most recent years available (completed) – 2017 to 2021 – for the study intersections. A summary of the crashes, including the severity and the manner of collision, are shown in Table 1.

Table 1 – Crash Summary

Location	Number of Crashes			Severity				Manner of Collision					Percent During	
	Year	Total Crashes	Average	PD[a]	PI[b]	NR[c]	F[d]	A[e]	RE[f]	HO[g]	Other[h]	Incl. Ped-Bike[j]	Peak Hrs[k]	Wet/Icy Cond.
Fort Hill Street at Bare Cove Park Drive	2017	1	0.4	1	0	0	0	0	0	0	1	0	100%	0%
	2018	1		1	0	0	0	0	0	0	1	0	0%	100%
	2019	0		0	0	0	0	0	0	0	0	0	0%	0%
	2020	0		0	0	0	0	0	0	0	0	0	0%	0%
	2021	0		0	0	0	0	0	0	0	0	0	0%	0%
	TOTAL	2		2	0	0	0	0	0	0	2	0	0%	0%
Fort Hill Street at South Street and West Street	2017	1	1.20	1	0	0	0	0	1	0	0	0	0%	100%
	2018	3		3	0	0	0	0	1	0	2	0	33%	0%
	2019	0		0	0	0	0	0	0	0	0	0	0%	0%
	2020	0		0	0	0	0	0	0	0	0	0	0%	0%
	2021	2		1	1	0	0	1	0	0	1	0	50%	50%
	TOTAL	6		5	1	0	0	1	2	0	3	0	0%	0%
TOTAL		***8***	**1.60**	***7***	***1***	***0***	***0***	***1***	***2***	***0***	***5***	***0***	***43%***	***43%***

[a]Property Damage Only; [b]Personal Injury Only (non-Fatal Injury); [c]Not Reported; [d]Fatality; [e]Angle; [f]Rear end; [g]Head on; [h]Sideswipe, opposite direction; sideswipe, same direction, single vehicle crash, rear-to-rear, not reported, unknown, etc.; [j]Includes pedestrian or cyclist; [k]Occurred between 7 a.m. to 9:00 a.m. or 4:00 p.m. to 6:00 p.m.

A total of eight crashes were reported within the study areas for the two intersections from 2017 to 2021. In terms of severity, seven of the crashes involved property damage, and one reported personal injury. In terms of manner of collision, one of the crashes was an angle collision, two were rear-end crashes, four were sideswipe, and one was a single-vehicle crash. None of the crashes involved a pedestrian or bicyclist. Approximately 43 percent of the crashes occurred during the peak hours of 7:00 a.m. to 9:00 a.m. or 3:00 p.m. to 6:00 p.m., and 43 percent occurred during wet/icy conditions. Analyzing the crash data, as most crashes were sideswipe, the crashes were most likely caused by driver carelessness or inattentiveness.

3.2 Intersection Crash Rates

The intersection crash rate is recognized as an effective tool to measure the safety of intersections. For intersections, crash rates are expressed by the number of crashes per million entering vehicles (MEV). As of June 26, 2018, the average statewide crash rate for unsignalized

intersections is 0.57 crashes per MEV and 0.78 crashes per MEV for signalized intersections. For District 5, which includes the Town of Hingham, the rate for unsignalized intersections is 0.57 crashes per MEV and 0.75 crashes per MEV for signalized intersections. As shown in Table 2 – Crash Rate Summary, crash rates at both study intersections are below both statewide and districtwide averages. Intersection crash rate worksheets can be found in Appendix C.

Table 2 – Crash Rate Summary

Location	Control	Total Crashes	Crash Rate	Compared to Average			
				Statewide		District 5	
Fort Hill Street at Bare Cove Park Drive	Unsignalized	2	0.09	0.75	Below	0.57	Below
Fort Hill Street at South Street and West Street	Signalized	6	0.26	0.78	Below	0.57	Below

3.3 Existing Public Transportation Facilities

The Project Site is not directly served by any bus routes. However, it is within walking distance of the MBTA Greenbush Line at the West Hingham Train Station, located at 20 Fort Hill Street. This station is situated directly across Bare Cove Park Drive from the intersection of Fort Hill Street and Bare Cove Park Drive. The Greenbush Line provides commuter rail service between Boston's South Station and Greenbush, offering convenient access to downtown Boston and the surrounding areas. The Greenbush Line schedule can be found in Appendix D.

3.4 The RIDE

The RIDE paratransit service provides door-to-door, shared-ride public transportation to people who can't use the subway, bus, or trolley all or some of the time due to temporary or permanent disability. The RIDE is available year-round in Hingham, with similar operating hours to the MBTA—generally from 5 AM to 1 AM daily.

4.0 Existing (2025) Traffic Conditions

4.1 2025 Traffic Data

SLR completed a traffic data collection effort within the study area, including both Automatic Traffic Recorder (ATR) counts and Turning Movement Counts (TMCs), to fully characterize existing conditions within the study area.

4.1.1 Automatic Traffic Recorder Data

New Egland Traffic Counts (NETC) of Westfield, Massachusetts, collected ATR counts for a continuous 48-hour period at Fort Hill Street, approximately midway between Bare Cove Park Drive and South Street. The ATR counts were collected from Tuesday, June 9, 2025, to Wednesday, June 10, 2025. The goal of the ATRs is to establish an Average Daily Traffic (ADT) and to note the fluctuation in traffic throughout the day. The traffic counts between the two daily 24-hour periods were averaged. The ATR counts are summarized in Table 3. Additional detail is available in Appendix A.

Table 3 – Automatic Traffic Recorder (ATR) Summary

Location	Period	ADT[a]		Peak-Hour Traffic			K factor[d]
		Volumes (VPD)[B]	Directional Distribution	Period	Volumes (VPH)[C]	Directional Distribution	
Fort Hill Street, approximately midway between Bare Cove Park Drive and South Street	Weekday	16,447	60% NB 40% SB	Morning	1,360	57% NB	0.83
				Evening	1,198	57% NB	0.73

[a] Average Daily Traffic; [b] Vehicles per day; [c] Vehicles per hour; [d] Percent of daily traffic

4.1.2 Turning Movement Count (TMC) Data

NETC also collected TMC data at the study intersections on Wednesday, June 10, 2025, from 7:00 a.m. to 9:00 a.m. and 3:00 p.m. to 6:00 p.m. and on Saturday, June 14, 2025, from 11:00 a.m. to 1:00 p.m. to capture both the morning and afternoon weekday peak periods as well as the weekend midday peak period, including bicycle and pedestrian counts.

Based on the counts, the peak hours within the study area were established as 8:00 a.m. to 9:00 a.m. during the weekday morning period, 4:30 p.m. to 5:30 p.m. during the evening period, and 11:30 a.m. to 12:30 p.m. during the Saturday midday peak period. The 2025 existing traffic volumes are shown in Figure 2.

4.1.3 Seasonal Adjustment

SLR researched data from MassDOT to establish if any seasonal adjustment to the traffic counts was necessary. We researched and used MassDOT's 2024 Weekday Seasonal Adjustment Factors, which is the latest data set available. The data compares monthly traffic volumes from different types of roadways across the Commonwealth to compare the traffic volumes from each individual month to the annual average. The composition of the study area falls within "U4-7 – Urban Arterials, and Collectors." Counts within Group U4-7 collected during

the month of June are 10 percent higher than the average counted volume. To present conservative traffic volumes in this study, we made no reduction in the counted volumes. The Weekday Seasonal Adjustment Factors are included in Appendix B.

4.1.4 Vehicle Travel Speeds

NETC measured vehicle travel speeds at the ATR location at the time of the traffic count. The 85th percentile speed, meaning the speed at which 85 percent of the vehicles are at or below, is noted because of its importance in determining appropriate roadway speed limits. The speed data is shown in Table 4.

Table 4 – Vehicle Travel Speeds

Intersection	Posted Speed (MPH[a])	85th Percentile Speed (MPH[a])
Fort Hill Street, approximately midway between Bare Cove Park Drive and South Street		
Northbound	30	24
Southbound	30	28

a = Miles per hour

Note: 85th Percentile Speeds were averaged between the full 2 days of data collected.

5.0 Future No-Build (2032) Traffic Conditions

The Future No-Build (2032) Condition reflects a future scenario that incorporates anticipated traffic volume changes associated with other planned specific developments and planned infrastructure improvements that will affect travel patterns throughout the study area.

5.1 Proposed Background Developments

The traffic volumes associated with known, larger, or adjacent development projects can affect traffic patterns throughout the study area within the future analysis time horizon. We understand that a **Nine-Court Pickleball Facility** is proposed to be constructed adjacent to the project site, and a 100-unit senior housing development will be constructed at **100 Beal Street** in Hingham. In addition, the Town of Hingham has recently approved the reconstruction of the pool facility located at the South Shore Country Club on Bishops Lane. The trip generation, distribution and assignments associated with these developments are included in Appendix E.

5.2 Background Growth

MassDOT records traffic volumes at various stations throughout the Commonwealth over multiple years to establish the growth rate and identify regional shifts in traffic. SLR researched MassDOT count stations in the vicinity of the study area, limiting the search to stations that included data for multiple years in order to determine a traffic volume trend and to calculate the growth rate. SLR used the previous 10-year data from MassDOT count station #7002, located on South Street west of Main Street approximately 0.75 miles northeast of the intersection of Fort Hill Street at Bare Cove Park Drive, to calculate the background traffic growth. The volume trend at this count station indicates an average annual growth rate of approximately 0.5 percent over the past 10 years. To be extremely conservative and also include the additional traffic associated with the Proposed Pickleball Facility and the 100-Unit senior housing development, we used an annual background traffic growth factor of 1 percent, which is also consistent with recent MassDOT projects in eastern Massachusetts.

5.3 No-Build Traffic Volumes

SLR used the 2025 existing traffic volumes as the baseline for projecting traffic volumes to the future 2032 condition. To determine the future 2032 condition, the following steps are included:

- Project existing 2025 traffic volumes 7 years in the future to the horizon year (2032) using the annual background traffic growth factor.
- Analyze the study area location to determine future operational statistics.

Figure 3 shows the 2032 Future No-Build Traffic Volumes used in the traffic analysis.

6.0 Future Build (2032) Traffic Conditions

6.1 Proposed Hingham Center for Active Living Development

The proposed facility is expected to be approximately 28,000 SF in size, roughly five times the size of the existing center located at 224 Central Street in Hingham, Massachusetts.

The site is located at the end of Bare Cove Park Drive across from the South Shore Model Railway Club & Museum and adjacent to the Bare Cove Fire Museum. The area identified for development is approximately 5.4 acres.

6.1.1 Site Access

The site will be accessed by two entry driveways:

- The first driveway (easterly driveway will be a right-in/right-out two-way 35-foot driveway with two 12-foot lanes and a 10-foot median island between). This driveway will allow vehicle access to a drop-off area and parking for staff and visitors.
- The second driveway (westerly driveway) will be a two-way 24-foot full-access driveway.

6.2 Proposed Trip Generation

SLR based the trip generation rates for the proposed HCAL on Land Use Code (LUC) 495 (Recreational Community Center) from the Institute of Transportation Engineers (ITE) *Trip Generation*, 11th Edition, to estimate vehicle trip rates for the proposed HCAL. Table 5 presents the site trips associated with the proposed HCAL during the weekday morning, weekday afternoon, and Saturday midday peak periods.

Table 5 – Proposed Trip Generation

Time Period		Center with 28,000 SF GFA (LUC 495)
Weekday	Entering	403
	Exiting	404
	Total	807
Weekday a.m.	**Entering**	35
	Exiting	18
	Total	53
Weekday p.m.	**Entering**	50
	Exiting	57
	Total	107
Saturday Midday	**Entering**	16
	Exiting	14
	Total	30

Based on ITE *Trip Generation*, the proposed HCAL with 28,000-foot gross floor area (GFA) would result in approximately 807 new daily trips (403 trips in and 404 trips out), with 53 trips (35 trips in and 18 trips out) during the weekday morning peak hour, 107 trips (50 trips in and 57 trips out) during the weekday afternoon peak hour, and 30 trips (16 trips in and 14 trips out) during the Saturday peak hour.

6.3 Trip Distribution, Diversion, and Assignment

The trips to/from the development were distributed and assigned to the surrounding roadway network based on the existing travel patterns at the study area intersections and logical travel routes. The trip distribution percentages specific to the project are shown in Figure 4.

In order to properly assess the effect of trips associated with the development, projected peak-hour trips generated by the development as described in Section 6.2 were then assigned to study intersections based on the trip distribution percentages.

6.4 Proposed 2032 Build Volumes

SLR added the corresponding trip assignment volumes to the 2032 No-Build Volumes to yield the 2032 Build Volumes. These volumes are representative of future 2032 conditions with the proposed development in place. The 2032 Build Volumes for the development are shown in Figure 6.

6.5 Parking Generation and Adequacy

SLR utilized the Town's Zoning Bylaws for Recreational Facility which requires 1 parking space per 3 users/people. Based upon a projected building occupancy of 420 people this facility will require 140 parking spaces. This approach reflects established practice in comparable community and senior center projects in other municipalities and has been positively received. When completed, the proposed parking lot will provide 140 parking spaces.

6.6 Sight Distance

Stopping Sight Distance (SSD) is the length of the roadway ahead that is visible to the driver and should be sufficiently long to enable a vehicle traveling at or near the design speed to stop before reaching a stationary object in its path. Stopping sight distance is the sum of the distance traversed by the vehicle from the instant the driver sights an object necessitating a stop to the instant the brakes are applied and the distance needed to stop the vehicle from the instant brake application begins.

Intersection Sight Distance (ISD) was also evaluated for the proposed development. ISD is the length of the leg of the departure sight triangle along the major road in both directions for a vehicle stopped on the minor road waiting to depart. The critical departure sight triangles for the development driveway are for traffic approaching from either the left or right for left turns from the site driveway onto the Bare Cove Park Drive. The site distance evaluations for the driveways are shown in Table 6.

The SSD and ISD values associated with a given design speed are shown in Table 6. The site distance evaluations for the driveway are shown in Table 7.

Table 6 – Sight Distance Criteria

DESIGN SPEED	DESIGN STOPPING SIGHT DISTANCE VALUE[1] (SSD)	RECOMMENDED INTERSECTION SIGHT DISTANCE VALUE[2] (ISD)
(MPH)	(FT)	(FT)
15	80	170
20	115	225
25	155	280
30	200	335
35	250	390
40	305	445
45	360	500
50	425	555
55	495	610
60	570	665
65	645	720
70	730	775
75	820	830
80	910	885

Source: *A Policy on Geometric Design of Highways and Streets, AASHTO, Washington DC (2011)*

[1]Design value based on a grade of less than 3%, a brake reaction distance predicted on a time of 2.5 seconds and a deceleration rate of 11.2 ft/s^2

[2]Recommended value based on Case B1 - a stopped passenger car to turn left onto a two-lane highway with no median and grades 3% or less

Bare Cove Park Drive in the study area is posted with an advisory speed limit of 20 MPH. To be conservative in our analysis, we used a speed limit of 30 MPH, which is 10 MPH above the posted speed limit. This assumed speed is also consistent with the Town's prima facie speed limit in the absence of a regulatory speed limit.

At the intersection of Bare Cove Park Drive and the site driveway, the SSD in both direction of Bare Cove Park Drive approaching the site driveway exceeds the minimum values. Similarly, the

ISD for right-turning and left-turning vehicles onto Bare Cove Park Drive meet the minimum requirements.

Table 7 - Proposed Sight Distance Evaluation

INTERSECTION	POSTED SPEED (MPH)	Speed used for the Analysis(MPH)	MINIMUM (FEET)[1,2]	MEASURED (FEET)	OBSTRUCTION
Bare Cove Park Drive at Site Driveway					
Stopping Sight Distance:					
Bare Cove Park Drive WB	20	30	200	>350	n/a
Bare Cove Park Drive EB	20	30	200	>350	n/a
Intersection Sight Distance:					
Looking to the right from Site Driveway	20	30	335	>350	n/a
Looking to the left from Site Driveway	20	30	335	>350	n/a

Source: A Policy on Geometric Design of Highways and Streets, AASHTO, Washington DC (2011)

[1] Table 3-1. Stopping Sight Distance on Level Roadways

[2] Table 9-6. Design Intersection Sight Distance - Case B1, Left Turn from Stop

7.0 Operations Analysis

7.1 Level of Service Criteria

Level of Service (LOS) is a qualitative measure describing operational conditions within a traffic stream. Six LOS criteria are used to describe the quality of traffic flow for any type of facility controls. LOS A represents the best operating conditions, and LOS F represents the worst operating conditions. LOS D or better is generally considered acceptable LOS in an urban or suburban setting. SLR analyzed the LOS for the study intersections using *Synchro 8* software, which is based on the traffic operational analysis methodology of the *Highway Capacity Manual*[1] (HCM). The methodology for signalized intersections assesses the effects of signal type, timing, phasing, progression, vehicle mix, and geometrics on control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Table 8 summarizes the relationship between LOS and average control delay for signalized and unsignalized intersections.

Table 8 – Level of Service Criteria

Signalized Intersections		Unsignalized Intersections		
Level of Service	Control Delay (seconds/vehicle)	Level of Service by Volume-to-Capacity (v/c) Ratio		Control Delay (seconds/vehicle)
		v/c ≤ 1.0	v/c > 1.0	
A	0 to 10	A	F	0 to 10
B	>10 to 20	B	F	>10 to 15
C	>20 to 35	C	F	>15 to 25
D	>35 to 55	D	F	>25 to 35
E	>55 to 80	E	F	>35 to 50
F	>80	F	F	>50
Source: 2010 *Highway Capacity Manual*, Transportation Research Board, Washington D.C. 2010				

7.2 Capacity Analysis

SLR performed traffic analyses to evaluate traffic operations for the 2025 Existing Conditions, 2032 No-Build Conditions, and 2032 Build Conditions during the weekday morning, weekday afternoon, and Saturday midday peak hours at the study intersections. The analyses determine the volume-to-capacity (v/c) ratio, vehicle delay, LOS, and the 50th/95th percentile vehicle queues.

[1] *Highway Capacity Manual*, 2010 Edition, Transportation Research Board (TRB), Washington, D.C.

7.3 2025 Existing Capacity Analysis

SLR analyzed the 2025 Existing Conditions traffic operations at the study intersections based on the existing traffic counts. The LOS summaries are shown in Tables 9A and 9B. The analysis worksheets are provided in Appendix F.

Table 9A – Level of Service Summary – 2025 Existing Conditions - Weekday

Location	Direction / Movement	Weekday Morning Peak Hour					Weekday Evening Peak Hour				
		V/C	Delay	LOS	50th Q	95th Q	V/C	Delay	LOS	50th Q	95th Q
Fort Hill Street at Bare Cove Park Drive	Bare Cove Park Dr EB-LT	0.40	53.0	F	-	43	0.16	31.0	D	-	14
	Bare Cove Park Dr EB-R	0.40	53.0	F	-	43	0.16	31.0	D	-	14
	T Parking Dr WB-LTR	0.06	31.2	D	-	6	0.55	43.9	E	-	72
	Fort Hill St NB-L	0.02	8.9	A	-	1	0.01	9.3	A	-	0
	Fort Hill St NB-TR	0.48	0.0	A	-	0	0.39	0.0	A	-	0
	Fort Hill S SB-L	0.02	9.5	A	-	1	0.0	8.8	A	-	0
	Fort Hill St SB-TR	0.37	0.0	A	-	0	0.42	0.0	A	-	0
Fort Hill Street at South Street and West Street	South St WB-LR	0.70	44.9	D	105	134	0.66	43.0	D	97	128
	Fort Hill St NB-T	0.81	41.2	D	228	#520	069	33.8	C	190	#402
	Fort Hill St NB-R	0.44	7.6	A	14	89	0.34	5.8	A	3	51
	West St SB- L	0.16	41.6	D	10	32	0.20	42.2	D	13	40
	West St SB- T	0.56	24.8	C	169	257	0.81	33.9	C	278	#502
	Total	***0.81***	***29.9***	***C***			***0.81***	***30.7***	***C***		

Table 9B – LOS – 2025 Existing Conditions - Saturday

Location	Direction / Movement[1]	Saturday Peak Hour				
		V/C[2]	Delay[3]	LOS	50th Q	95th Q
Fort Hill Street at Bare Cove Park Drive	Bare Cove Park Dr EB-LT	2.12	584.4	F	-	571
	Bare Cove Park Dr EB-R	2.12	584.4	F	-	571
	T Parking Dr WB-LTR	0.00	0.0	-	-	-
	Fort Hill St NB-L	0.05	9.7	A	-	4
	Fort Hill St NB-TR	0.38	0.0	A	-	0
	Fort Hill S SB-L	0.00	8.8	A	-	0
	Fort Hill St SB-TR	0.44	0.0	A	-	0
Fort Hill Street at South Street and West Street	South St WB-LR	0.84	55.0	D	161	195
	Fort Hill St NB-T	0.79	40.6	D	238	#454
	Fort Hill St NB-R	0.47	7.4	A	15	74
	West St SB- L	0.15	42.1	D	10	31
	West St SB- T	0.73	31.4	C	254	378
	Total	***0.84***	***33.5***	***C***		

As shown in Tables 8A and 8B, under existing conditions, the study area intersections generally operate at acceptable LOS during the a.m., p.m., and Saturday peak hours, with the exception of the Bare Cove Park Drive and T Parking Lot Driveway approaches, which operate at failing LOS (LOS E and F). All other individual intersection approaches operate at LOS D or better during the a.m., p.m., and Saturday peak hours. Currently in the northbound direction, the analysis indicates queue lengths exceeding the approximately 380-foot segment of Fort Hill Street between the two intersections. As a result, queues extend south beyond the intersection of Fort Hill Street and Bare Cove Park Drive. This condition effectively blocks all eastbound movements from the MBTA driveway, as well as left-turn and through movements from Bare Cove Park Drive, contributing to a degradation of operations and a reduction in level of service for these approaches. This is a pre-existing condition and is expected to persist under all future conditions assuming existing operational controls remain unchanged.

7.4 2032 No-Build Capacity Analysis

SLR analyzed the 2032 No-Build Conditions traffic operations at the study intersections. The 2032 No-Build Condition represents future 2032 conditions without the proposed HCAL development. The LOS summaries are shown in Tables 10A and 10B. The analysis worksheets are provided in Appendix F.

Table 10A – Level of Service Summary – 2032 Future No-Build Conditions

Location	Direction / Movement[1]	Weekday Morning Peak Hour					Weekday Evening Peak Hour				
		V/C	Delay	LOS	50th Q	95th Q	V/C	Delay	LOS	50th Q	95th Q
Fort Hill Street at Bare Cove Park Drive	Bare Cove Park Dr EB-LT	0.76	109.4	F	-	97	0.56	75.3	F	-	66
	Bare Cove Park Dr EB-R	0.76	109.4	F	-	97	0.56	75.3	F	-	66
	T Parking Dr WB-LTR	0.11	42.2	E	-	9	0.88	112.6	F	-	1140
	Fort Hill St NB-L	0.04	9.3	A	-	3	0.03	9.9	A	-	2
	Fort Hill St NB-TR	0.52	0.0	A	-	0	0.42	0.0	A	-	0
	Fort Hill S SB-L	0.02	9.7	A	-	2	0.0	9.0	A	-	0
	Fort Hill St SB-TR	0.41	0.0	A	-	0	0.46	0.0	A	-	0
Fort Hill Street at South Street and West Street	South St WB-LR	0.77	48.8	D	126	157	0.74	46.3	D	122	155
	Fort Hill St NB-T	0.95	62.0	E	~361	#570	0.83	44.2	D	274	#452
	Fort Hill St NB-R	0.51	9.6	A	28	111	0.41	7.5	A	13	64
	West St SB- L	0.27	4.9	D	19	46	0.28	45.1	D	20	51
	West St SB- T	0.63	27.2	C	202	289	0.90	44.0	D	337	#577
	Total	***0.95***	***38.8***	***C***			***0.90***	***38.6***	***D***		

Table 10B – LOS – 2032 Future No-Build - Saturday

Location	Direction / Movement[1]	Saturday Peak Hour				
		V/C	Delay	LOS	50th Q	95th Q
Fort Hill Street at Bare Cove Park Drive	Bare Cove Park Dr EB-LT	3.86	>1000.0	F		>800
	Bare Cove Park Dr EB-R	3.86	>1000.0	F		>800
	T Parking Dr WB-LTR	-	-	-		-
	Fort Hill St NB-L	0.09	10.4	B		7
	Fort Hill St NB-TR	0.41	0.0	A		0
	Fort Hill S SB-L	0.00	9.0	A		0
	Fort Hill St SB-TR	0.49	0.0	A		0
Fort Hill Street at South Street and West Street	South St WB-LR	0.92	65.4	E	191	#239
	Fort Hill St NB-T	0.88	48.7	D	270	#514
	Fort Hill St NB-R	0.52	9.2	A	28	99
	West St SB- L	0.21	43.6	D	14	40
	West St SB- T	0.82	36.7	D	291	#468
	Total	***0.92***	***40.0***	***D***		

Tables 9A and 9B show that under the 2032 No-Build conditions, all intersections will continue to operate at acceptable LOS during a.m., p.m., and Saturday peak hours, with again the exception of the Bare Cove Park Drive and T Parking Lot Driveway approaches, which will operate at failing LOS (LOS E and F). All other individual approaches at the intersections will operate at LOS D or better.

7.5 2032 Build Capacity Analysis

SLR analyzed the 2032 Build Conditions traffic operations at the study intersections. The 2032 Build Conditions represents the 2032 conditions with the proposed development in place. The LOS summaries are shown in Tables 11A and 11B. The analysis worksheets are provided in Appendix F.

Table 11A – Level of Service Summary – 2032 Future Build Conditions

Location	Direction / Movement	Weekday Morning Peak Hour					Weekday Evening Peak Hour				
		V/C	Delay	LOS	50th Q	95th Q	V/C	Delay	LOS	50th Q	95th Q
Drop-off Driveway at Bare Cove Park Drive	Bare Cove Park Dr WB-TR	0.02	0.0	A	-	0	0.03	0.0	A	-	0
	Driveway SB-R	0.01	8.5	A	-	1	0.04	8.6	A	-	3
Parking Driveway at Bare Cove Park Drive	Bare Cove Park Dr WB-LR	0.02	8.8	A	-	2	0.06	8.7	A	-	5
	Driveway SB-T	0.00	0.0	A	-	0	0.01	0.0	A	-	0
Fort Hill Street at Bare Cove Park Drive	Bare Cove Park Dr EB-LT	1.13	180.4	F	-	165	1.74	476.1	F	-	276
	Bare Cove Park Dr EB-R	1.13	180.4	F	-	165	1.74	476.1	F	-	276
	T Parking Dr WB-LTR	0.13	48.0	E	-	10	1.12	202.0	F	-	183
	Fort Hill St NB-L	0.06	9.6	A	-	5	0.07	10.2	B	-	6
	Fort Hill St NB-TR	0.52	0.0	A	-	0	0.42	0.0	A	-	0
	Fort Hill S SB-L	0.02	9.7	A	-	2	0.0	9.0	A	-	0
	Fort Hill St SB-TR	0.43	0.0	A	-	0	0.47	0.0	A	-	0
Fort Hill Street at South Street and West Street	South St WB-LR	0.78	49.8	D	132	163	0.74	46.7	D	124	157
	Fort Hill St NB-T	0.97	65.1	E	~372	#577	0.86	47.4	D	~311	#477
	Fort Hill St NB-R	0.52	9.9	A	31	114	0.42	8.1	A	18	69
	West St SB- L	0.27	45.1	D	19	46	0.26	44.5	D	18	49
	West St SB- T	0.64	27.8	C	209	294	0.92	45.7	D	344	#588
	Total	***0.97***	***40.2***	***D***			***0.92***	***40.2***	***D***		

Table 11B – LOS – 2032 Future Build Conditions- Saturday

Location	Direction / Movement	Saturday Peak Hour				
		V/C	Delay	LOS	50th Q	95th Q
Drop-off Driveway at Bare Cove Park Drive	Bare Cove Park Dr WB-TR	0.01	0.0	A	-	0
	Driveway SB-R	0.01	8.4	A	-	1
Parking Driveway at Bare Cove Park Drive	Bare Cove Park Dr WB-LR	0.02	8.9	A	-	1
	Driveway SB-T	0.00	0.0	A	-	0
Fort Hill Street at Bare Cove Park Drive	Bare Cove Park Dr EB-LT	4.30	>900.1	F		>900
	Bare Cove Park Dr EB-R	4.30	>900.1	F		>900
	T Parking Dr WB-LTR	-	-	-	-	-
	Fort Hill St NB-L	0.10	10.5	B		8
	Fort Hill St NB-TR	0.41	0.0	A		0
	Fort Hill S SB-L	0.00	9.0	A		0
	Fort Hill St SB-TR	0.49	0.0	A		0
Fort Hill Street at South Street and West Street	South St WB-LR	0.93	66.5	E	194	#244
	Fort Hill St NB-T	0.89	49.8	D	274	#520
	Fort Hill St NB-R	0.53	9.4	A	29	101
	West St SB- L	0.23	44.8	D	14	40
	West St SB- T	0.83	37.4	D	294	#476
	Total	***0.93***	***40.8***	***D***		

As shown in Tables 10A and 10B, under the 2032 Build, all intersections will continue to operate at acceptable LOS during a.m., p.m., and Saturday peak hours, with all individual approaches at the intersections, with the exception of Bare Cove Park Drive and the T parking lot driveway during the morning and evening peak hours, operating at LOS D or better.

A comparison of the delay, LOS, and queue length indicated in Tables 9A and 9B (2032 Future No Build Conditions) and Tables 10A and 10B (2032 Future Build Conditions) reveals that the proposed development has very little or no impact to the studied intersections.

8.0 Mitigation

The Bare Cove Park Drive approach at Fort Hill Street currently operates at LOS F and is projected to remain at LOS F under Future (2032) No Build and Build conditions. As a potential mitigation measure, SLR evaluated the intersection as signalized.

Given the proximity of the Fort Hill Street/Bare Cove Park Drive and Fort Hill Street/South Street/West Street intersections, the signals were modeled as a coordinated system to assess operational improvements, particularly for the Bare Cove Park Drive and T Parking Drive approaches. LOS summaries are provided in Tables 12A and 12B, with detailed analysis worksheets in Appendix F.

Table 12A – LOS Summary – 2032 Future Build Conditions with Mitigation

Location	Direction / Movement	Weekday Morning Peak Hour					Weekday Evening Peak Hour				
		V/C	Delay	LOS	50th Q	95th Q	V/C	Delay	LOS	50th Q	95th Q
Drop-off Driveway at Bare Cove Park Drive	Bare Cove Park Dr WB-TR	0.02	0.0	A	-	0	0.03	0.0	A	-	0
	Driveway SB-R	0.01	8.5	A	-	1	0.04	8.6	A	-	3
Parking Driveway at Bare Cove Park Drive	Bare Cove Park Dr WB-LR	0.02	8.8	A	-	2	0.06	8.7	A	-	5
	Driveway SB-T	0.00	0.0	A	-	0	0.01	0.0	A	-	0
Fort Hill Street at Bare Cove Park Drive	Bare Cove Park Dr EB-LT	0.20	23.3	C	18	36	0.21	23.8	C	21	44
	Bare Cove Park Dr EB-R	0.12	2.1	A	0	2	0.17	4.2	A	0	15
	T Parking Dr WB-LTR	0.03	0.2	A	0	0	0.30	9.3	A	7	0
	Fort Hill St NB-L	0.04	8.5	A	6	27	0.05	8.4	A	7	28
	Fort Hill St NB-TR	0.91	30.7	C	228	#642	0.69	15.7	B	128	#428
	Fort Hill S SB-L	0.12	6.4	A	2	m6	0.01	4.0	A	0	m1
	Fort Hill St SB-TR	0.64	10.3	B	144	176	0.67	8.3	A	132	171
	Total	***0.91***	***20.4***	***C***			***0.69***	***11.6***	***B***		
Fort Hill Street at South Street and West Street	South St WB-LR	0.71	35.4	D	98	123	0.68	34.2	C	94	118
	Fort Hill St NB-T	0.50	8.3	A	54	m108	0.45	8.9	A	60	136
	Fort Hill St NB-R	0.33	2.0	A	0	m14	0.26	2.4	A	0	m15
	West St SB- L	0.23	34.1	C	14	38	0.23	34.1	C	14	40
	West St SB- T	0.37	7.0	A	78	130	0.53	8.6	A	126	239
	Total	***0.91***	***11.5***	***B***			***0.68***	***11.9***	***B***		

Table 12B – LOS – 2032 Build with Mitigation

Location	Direction / Movement	Saturday Peak Hour				
		V/C	Delay	LOS	50th Q	95th Q
Drop-off Driveway at Bare Cove Park Drive	Bare Cove Park Dr WB-TR	0.01	0.0	A	-	0
	Driveway SB-R	0.01	8.4	A	-	1
Parking Driveway at Bare Cove Park Drive	Bare Cove Park Dr WB-LR	0.02	8.9	A	-	1
	Driveway SB-T	0.00	0.0	A	-	0
Fort Hill Street at Bare Cove Park Drive	Bare Cove Park Dr EB-LT	0.59	31.3	C	72	123
	Bare Cove Park Dr EB-R	0.31	5.9	A	0	34
	T Parking Dr WB-LTR	-	-	-	-	-
	Fort Hill St NB-L	0.07	8.9	A	11	36
	Fort Hill St NB-TR	0.72	16.9	B	147	#415
	Fort Hill S SB-L	0.02	4.2	A	1	m1
	Fort Hill St SB-TR	0.73	12.1	B	173	448
	Total	***0.83***	***15.1***	***B***		
Fort Hill Street at South Street and West Street	South St WB-LR	0.83	42.7	D	137	172
	Fort Hill S NB-T	0.50	10.7	B	93	167
	Fort Hill St NB-R	0.35	2.6	A	5	27
	West St SB- L	0.21	35.0	C	11	33
	West St SB- T	0.49	9.0	A	122	194
	Total	***0.83***	***14.9***	***B***		

As shown in Tables 11A and 11B, under the 2032 Build with Mitigation measures, both intersections will operate at acceptable LOS during a.m. and p.m. peak hours, with all individual approaches at the intersections operating at LOS C or better. It should be noted, however, that a detailed signal warrant analysis will have to be conducted prior to local/state approval for the design and installation of a traffic signal.

To further address both existing transportation conditions and future needs, the project team proposes a comprehensive package of mitigation strategies under the following two categories:

- Transportation Demand Management (TDM)
- Short-term impacts and construction management

8.1 Transportation Demand Management

The project is committed to implementing TDM measures to reduce dependence on automobiles. TDM will be facilitated by the nature and location of the project.

A supply of transit information (schedules, maps, and fare information) will be kept on site and made available to the patrons of the project site. The project is prepared to take advantage of the good transit access in marketing the project site to future patrons by working with them to implement the following TDM measures to encourage the use of nonvehicular modes of travel.

TDM measures for the project may include but are not limited to the following:

- ***Onsite Orientation and Information Packages***: Orientation packets will be provided to new patrons by the HCAL. The packets will contain information on available transportation choices, including transit routes and schedules.
- ***Electric Vehicle (EV) Charging Stations:*** Seventeen standard spaces will have EV chargers installed, with an additional 25 spaces having conduit ready. Two accessible spaces will have EV chargers installed, with an additional two spaces having conduit ready.
- ***Bicycle Incentives and Amenities:*** To encourage bicycling as an alternative mode of transportation, secure bicycle storage will be provided for the employees of the Center. Bicycle racks for the general public and visitors will be placed near the building entrance.
- ***Information Dissemination and Website:*** The website will include transportation-related information for employees and visitors.

8.2 Short-Term Impacts and Construction Management

Development on tight sites, combined with concerns for avoiding traffic congestion and hazards to pedestrian and vehicular traffic, has led to increasing requirements for sophisticated construction period traffic management plans, which usually need to be approved by the municipality as a precondition to the issuance of a building permit for the development. The Construction Management Plans (CMP) will discuss and address the following in detail:

- Construction activity schedule
- Construction staging area
- Delivery schedule
- Pedestrian and public safety
- Perimeter protection
- Employee parking
- Material handling
- Truck routes
- Police details
- Utilities
- Construction noise
- Construction air quality
- Street cleaning and snow removal
- Rodent control
- Site dewatering

The CMP will also address the need for pedestrian detours, lane closures, and/or parking restrictions, if necessary, to accommodate a safe and secure work zone.

To minimize transportation impacts during the construction period, the following measures may be incorporated into the CMP:

- Construction workers are to be encouraged to use public transportation and/or carpool.
- A subsidy for MBTA passes may be considered for full-time employees.
- Secure spaces may be provided on site for workers' supplies and tools, so they do not have to be brought to the project site each day.

9.0 Summary

SLR International Corporation (SLR) prepared a comprehensive Traffic Impact Report (TIR) to evaluate safety, traffic circulation, and site access/egress associated with the proposed Hingham Center for Active Living (HCAL) Development project at 25 Bare Cove Park Drive in Hingham, Massachusetts. The project is intended to support the Town's growing senior population and its goal of promoting an age-friendly community by replacing the existing, undersized senior center at 224 Central Street. The proposed HCAL facility is expected to be approximately 28,000 square feet in size, representing an increase of roughly five times the size of the existing center, and will be located on an approximately 5.4-acre site accessed from Bare Cove Park Drive.

The traffic analysis evaluated existing (2025) conditions, future 2032 No-Build conditions, and future 2032 Build conditions with the proposed HCAL in place. The study area included Fort Hill Street, Bare Cove Park Drive, South Street, and West Street, as well as the intersections of Fort Hill Street at Bare Cove Park Drive and Fort Hill Street at South Street/West Street. Traffic volumes, turning movements, pedestrian and bicycle activity, and vehicle speeds were collected and analyzed in accordance with the most recent editions of the Manual on Uniform Traffic Control Devices (MUTCD) and the Highway Capacity Manual (HCM).

A review of five years of crash data (2017–2021) indicated a low number of reported crashes within the study area, with crash rates at both study intersections well below statewide and District 5 averages. No pedestrian or bicycle crashes were reported, and no patterns were identified that would indicate existing safety deficiencies. Available stopping sight distance and intersection sight distance at the proposed site driveways meet or exceed applicable minimum requirements.

SLR examined the future conditions as well as site circulation with respect to the projected traffic volumes at the new HCAL. The project is anticipated to result in an increase in traffic volumes within the project area during the weekday morning, weekday evening, and Saturday midday peak hours, totaling approximately 53 additional trips (35 trips in and 18 trips out) during the weekday morning, 107 additional trips (50 trips in and 57 trips out) during the weekday evening, and approximately 30 additional trips (16 trips in and 14 trips out) during the Saturday midday peak hours. These trips were distributed and assigned to the surrounding roadway network based on existing travel patterns.

Operational analyses show that, under existing conditions and future No-Build conditions, the study area intersections generally operate at acceptable levels of service (LOS), with the exception of the Bare Cove Park Drive approach at Fort Hill Street, which currently experiences failing conditions due to queue spillback from the adjacent signalized intersection. This congestion is a pre-existing condition and is expected to continue under future conditions regardless of the proposed development. Under the 2032 Build scenario, the addition of HCAL-generated traffic results in minimal changes to overall intersection delay, LOS, or queue lengths, and does not materially worsen traffic operations within the study area.

Potential mitigation measures were evaluated, including signalization and coordination of the Fort Hill Street/Bare Cove Park Drive intersection with the nearby Fort Hill Street/South Street/West Street signal. With mitigation in place, intersection operations improve substantially, with all movements operating at acceptable LOS during weekday and Saturday peak periods, subject to future signal warrant analysis and agency approvals. In addition, the project incorporates Transportation Demand Management strategies, enhanced pedestrian and bicycle amenities, electric vehicle charging infrastructure, and construction-period traffic management measures to further minimize transportation impacts.

Based on the results of the traffic, safety, and operational analyses, the proposed Hingham Center for Active Living Development project is expected to result in minimal traffic impacts and can be accommodated within the existing and planned roadway network.

10.0 Closure

We hope this report is useful to you and the Town of Hingham. If you have any questions or need anything further, please do not hesitate to contact the undersigned.

Sincerely,

SLR International Corporation

Nick H. Havan, PE, PTOE, ENV SP
Principal Transportation Engineer

Attachments

Figures

- Figure 1: Locus Map
- Figure 2: 2025 Existing Peak-Hour Volumes
- Figure 3: 2032 No-Build Peak-Hour Volumes
- Figure 4: Trip Distribution
- Figure 5: Trip Assignment
- Figure 6: 2032 Build Peak-Hour Volumes

Appendix

A. Traffic Counts
B. The Weekday Seasonal Adjustment Factors
C. Crash Reports
D. Public Transportation
E. *Synchro* Analysis Worksheets

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Figures/Drawings

The Hingham Center for Active Living Traffic Impact Study

Town of Hingham, Massachusetts

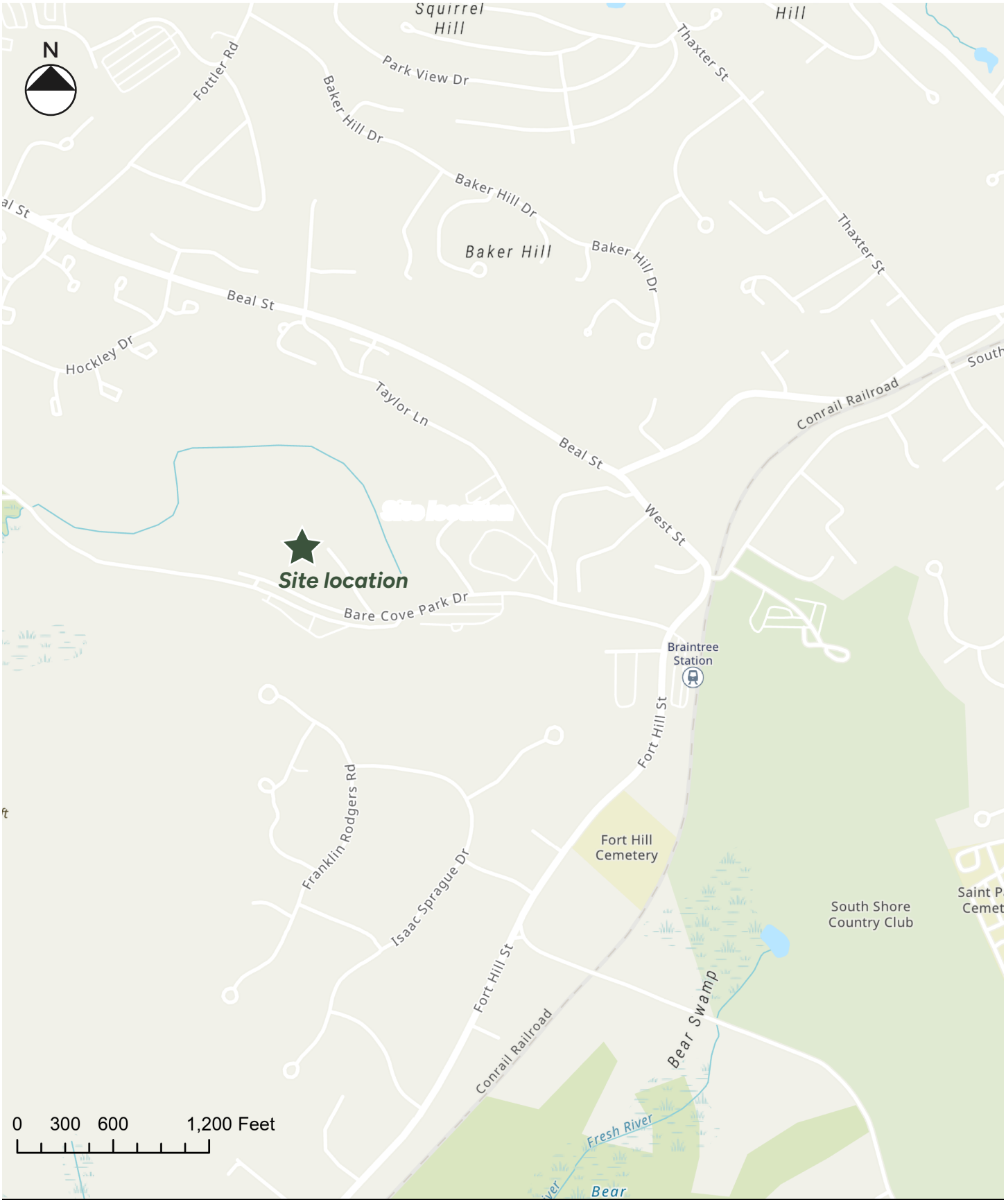
EDM Studio

45 South Main Street
Unionville, CT 06085

SLR Project No.: 141.051021.00001

Client Reference No: 21840.00008

December 4, 2025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Taylor Ln
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Fort Hill St
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South Shore Country Club
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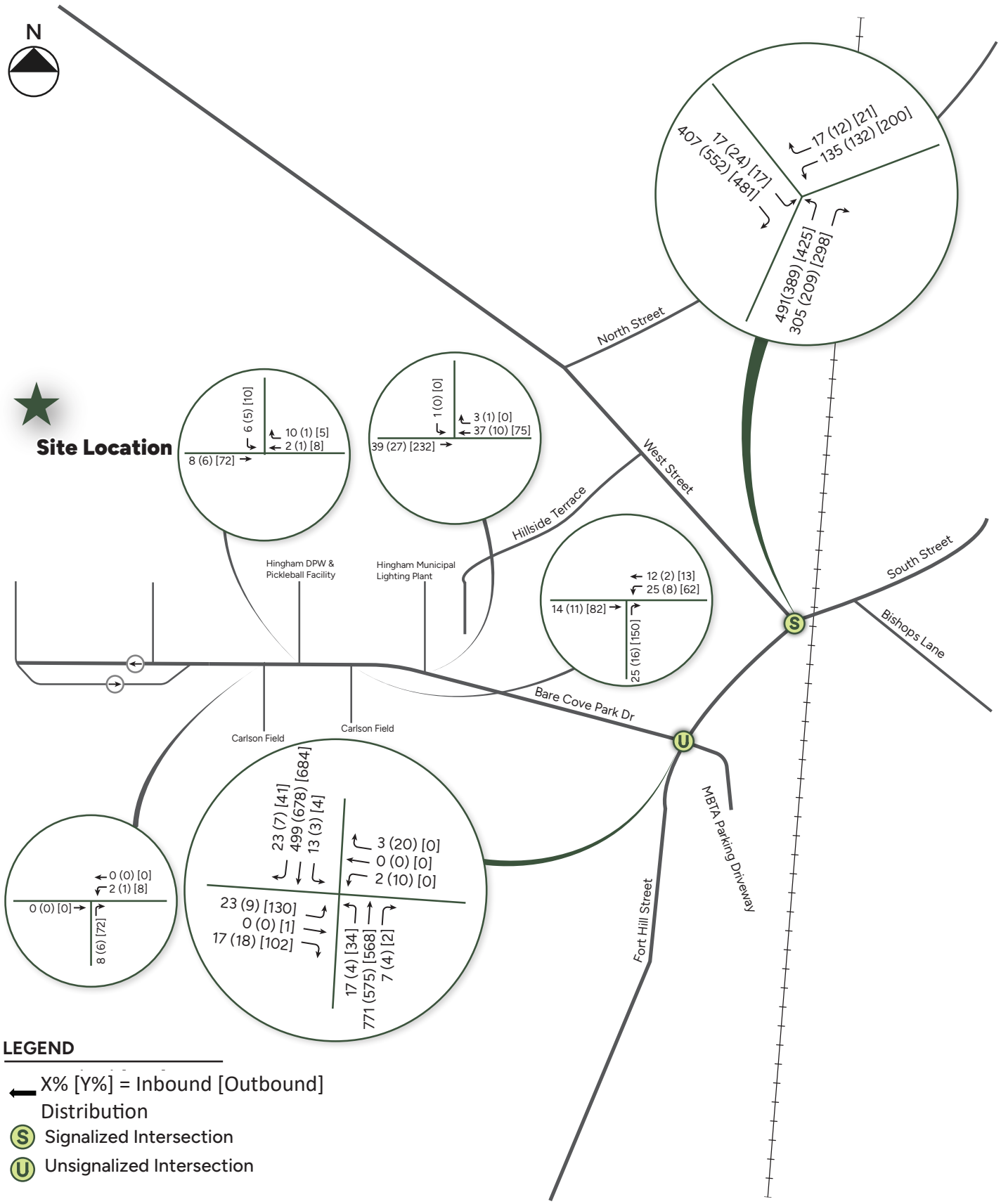
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West Street
Hillside Terrace
South Street
Bishops Lane
Bare Cove Park Dr
Fort Hill Street
MBTA Parking Driveway
Hingham DPW & Pickleball Facility
Hingham Municipal Lighting Plant
Carlson Field
Carlson Field
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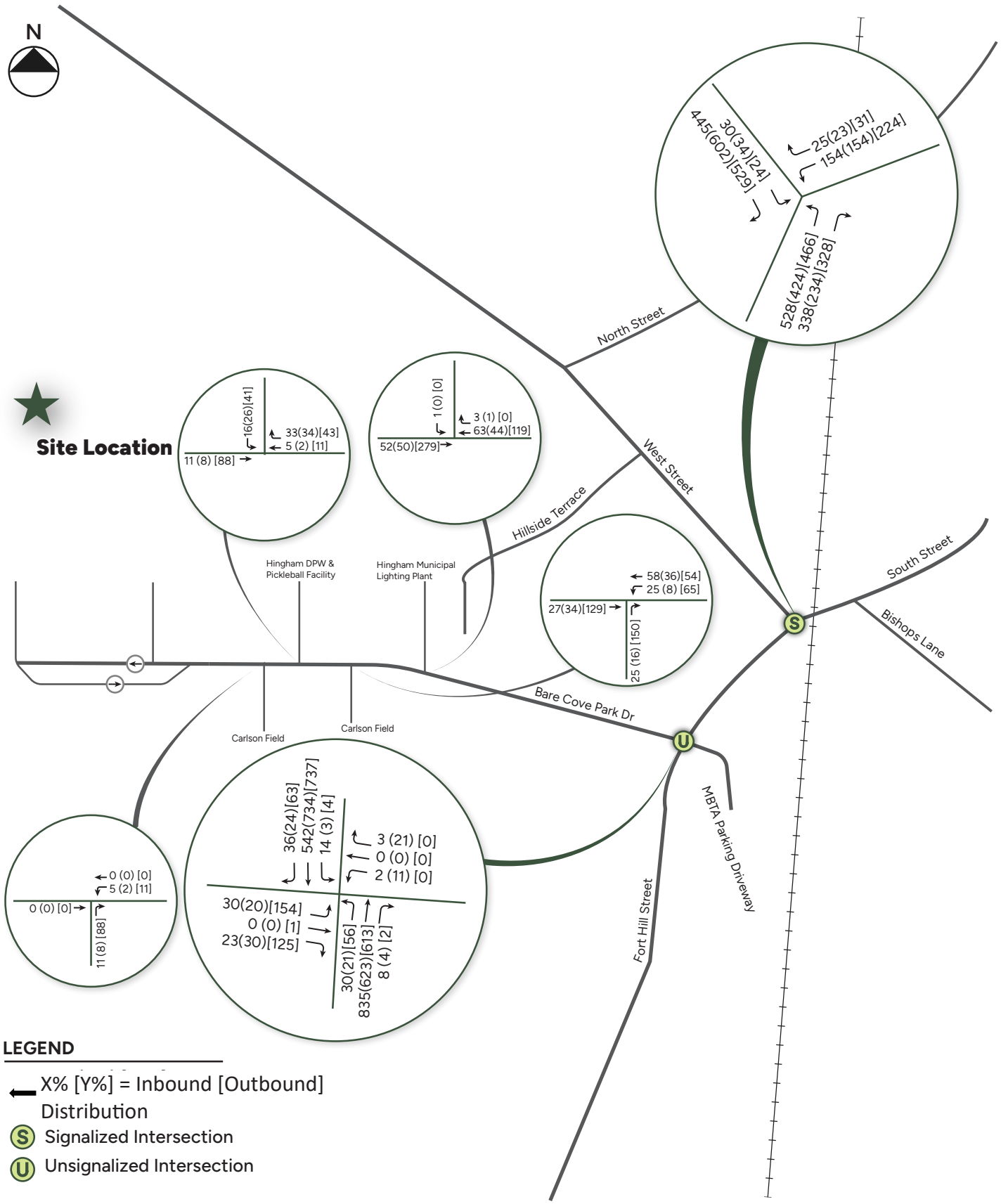
Signalized Intersection
Unsignalized Intersection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South Street
Bishops Lane
Bare Cove Park Dr
Fort Hill Street
MBTA Parking Driveway
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Hingham Municipal Lighting Plant
Carlson Field
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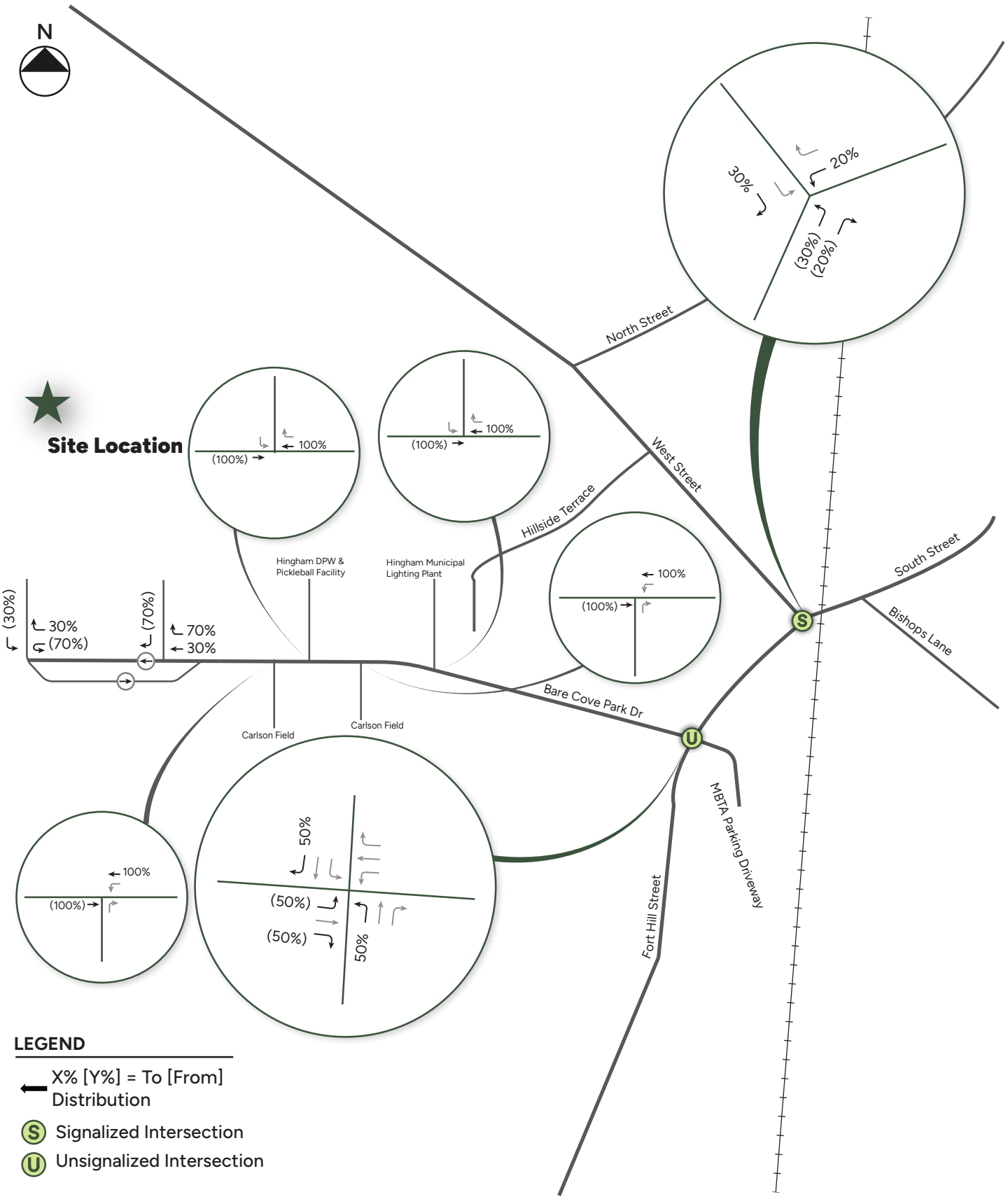
X% [Y%] = Inbound [Outbound] Distribution
S Signalized Intersection
U Unsignalized Intersection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South Street
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Bare Cove Park Dr
Fort Hill Street
MBTA Parking Driveway
Hingham DPW & Pickleball Facility
Hingham Municipal Lighting Plant
Carlson Field
Carlson Field
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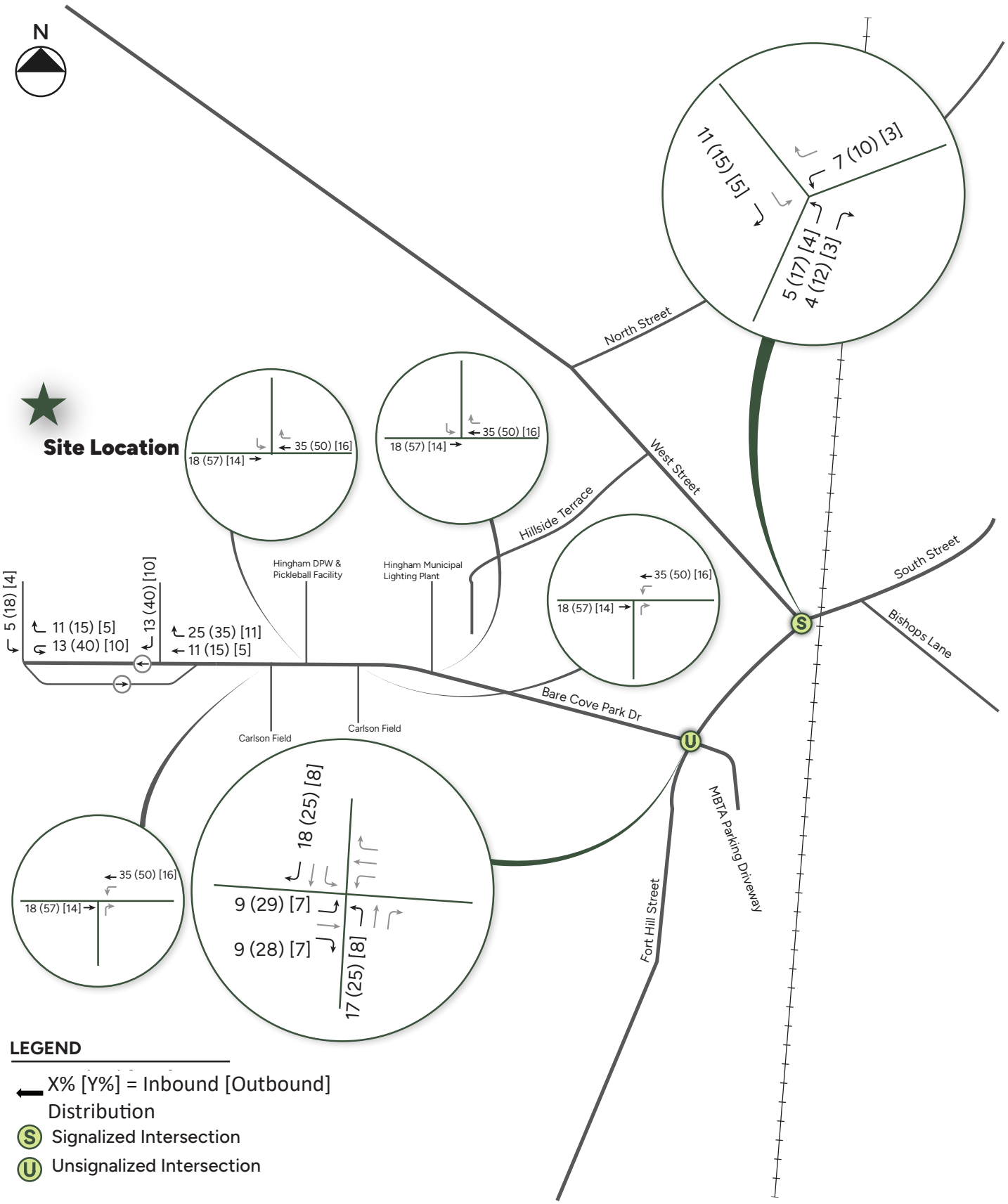
LEGEND
X% [Y%] = To [From] Distribution
Signalized Intersection
Unsignalized Intersection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Bare Cove Park Dr
Fort Hill Street
MBTA Parking Driveway
Hingham DPW & Pickleball Facility
Hingham Municipal Lighting Plant
Carlson Field
Carlson Field
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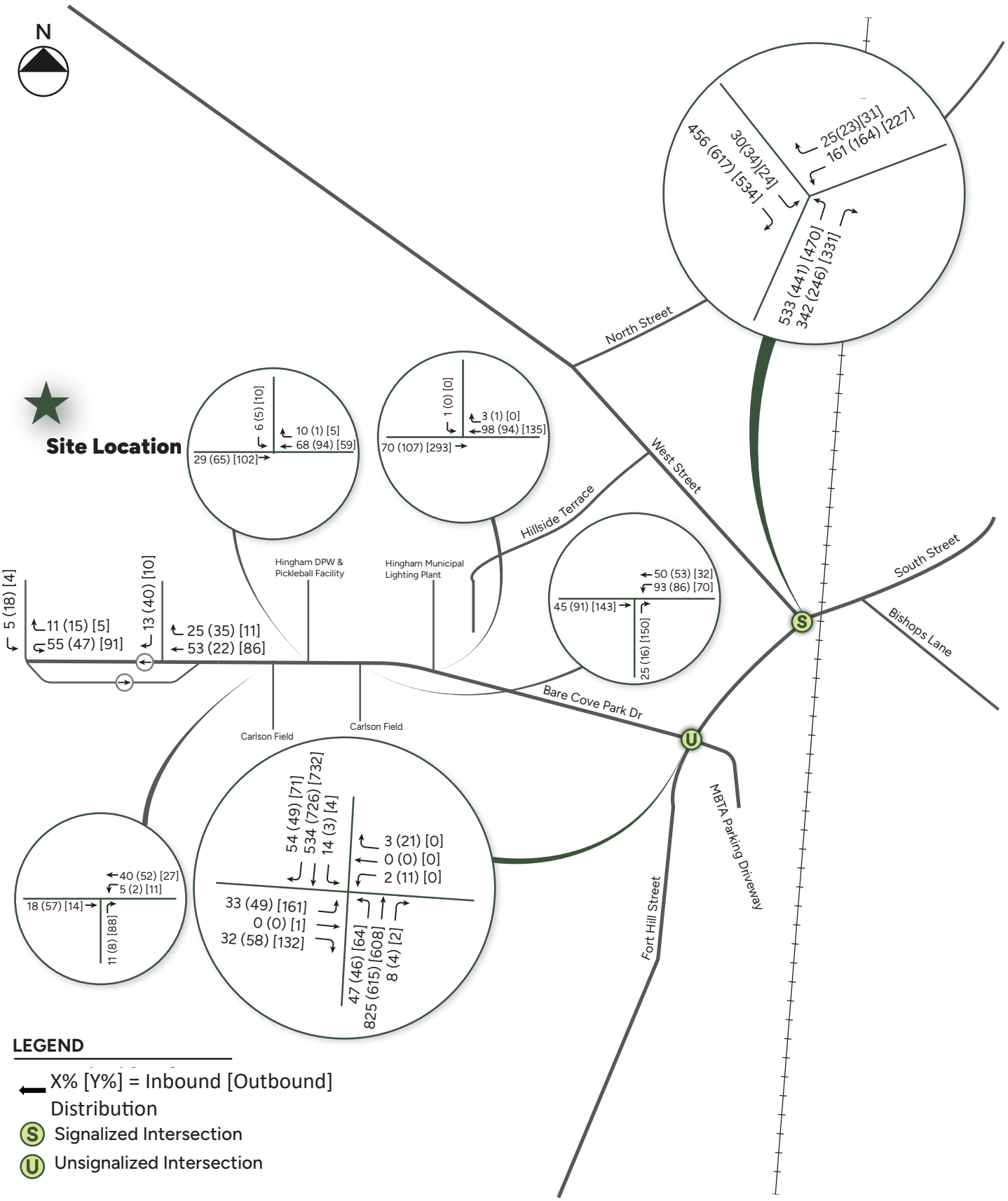
9 (29) [7]
9 (28) [7]
17 (25) [8]
LEGEND
X% [Y%] = Inbound [Outbound] Distribution
Signalized Intersection
Unsignalized Intersection


N
Site Location
North Street
West Street
Hillside Terrace
South Street
Bishops Lane
Bare Cove Park Dr
Fort Hill Street
MBTA Parking Driveway
Hingham DPW & Pickleball Facility
Hingham Municipal Lighting Plant
Carlson Field
Carlson Field
30(34)[24]
456 (617) [534]
25(23)[31]
161 (164) [227]
533 (441) [470]
342 (246) [331]
6 (5) [10]
10 (1) [5]
29 (65) [102]
68 (94) [59]
1 (0) [0]
3 (1) [0]
70 (107) [293]
98 (94) [135]
5 (18) [4]
11 (15) [5]
55 (47) [91]
13 (40) [10]
25 (35) [11]
53 (22) [86]
50 (53) [32]
93 (86) [70]
45 (91) [143]
25 (16) [150]
54 (49) [71]
534 (726) [732]
14 (3) [4]
3 (21) [0]
0 (0) [0]
2 (11) [0]
33 (49) [161]
0 (0) [1]
32 (58) [132]
47 (46) [64]
825 (615) [608]
8 (4) [2]
40 (52) [27]
5 (2) [11]
18 (57) [14]
11 (8) [88]
LEGEND
X% [Y%] = Inbound [Outbound] Distribution
Signalized Intersection
Unsignalized Intersection

Appendix A Traffic Counts

The Hingham Center for Active Living Traffic Impact Study

Town of Hingham, Massachusetts

EDM Studio

45 South Main Street
Unionville, CT 06085

SLR Project No.: 141.051021.00001

Client Reference No: 21840.00008

December 4, 2025 *Revised January 30, 2026*

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

6/9/2025	Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	29	17	31	18	*	*	*	*	30	18	*	*	*	*
1:00	*	*	9	10	25	28	*	*	*	*	17	19	*	*	*	*
2:00	*	*	13	9	11	8	*	*	*	*	12	8	*	*	*	*
3:00	*	*	18	8	16	7	*	*	*	*	17	8	*	*	*	*
4:00	*	*	60	20	60	20	*	*	*	*	60	20	*	*	*	*
5:00	*	*	131	78	177	105	*	*	*	*	154	92	*	*	*	*
6:00	*	*	429	250	401	234	*	*	*	*	415	242	*	*	*	*
7:00	*	*	814	388	599	286	*	*	*	*	706	337	*	*	*	*
8:00	*	*	877	429	658	322	*	*	*	*	768	376	*	*	*	*
9:00	*	*	726	374	552	284	*	*	*	*	639	329	*	*	*	*
10:00	*	*	670	337	555	279	*	*	*	*	612	308	*	*	*	*
11:00	*	*	670	643	565	542	*	*	*	*	618	592	*	*	*	*
12:00 PM	*	*	745	545	573	419	*	*	*	*	659	482	*	*	*	*
1:00	*	*	707	568	582	468	*	*	*	*	644	518	*	*	*	*
2:00	*	*	743	436	609	357	*	*	*	*	676	396	*	*	*	*
3:00	*	*	707	541	645	494	*	*	*	*	676	518	*	*	*	*
4:00	*	*	685	469	676	463	*	*	*	*	680	466	*	*	*	*
5:00	*	*	645	445	678	468	*	*	*	*	662	456	*	*	*	*
6:00	*	*	505	320	529	335	*	*	*	*	517	328	*	*	*	*
7:00	*	*	396	290	469	344	*	*	*	*	432	317	*	*	*	*
8:00	*	*	329	357	406	441	*	*	*	*	368	399	*	*	*	*
9:00	*	*	194	186	272	261	*	*	*	*	233	224	*	*	*	*
10:00	*	*	122	89	167	122	*	*	*	*	144	106	*	*	*	*
11:00	*	*	75	60	91	73	*	*	*	*	83	66	*	*	*	*
Total	0	0	10299	6869	9347	6378	0	0	0	0	9822	6625	0	0	0	0
Day	0		17168		15725		0		0		16447		0		0	
AM Peak			8:00	11:00	8:00	11:00					8:00	11:00				
Volume			877	643	658	542					768	592				
PM Peak			12:00 PM	1:00	5:00	3:00					4:00	1:00				
Volume			745	568	678	494					680	518				
Comb Total	0		17168		15725		0		0		16447		0		0	
ADT	ADT: 16,446		AADT: 16,446													

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: NB

6/10/2025 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	24	4	0	1	0	0	0	0	0	0	0	0	29
1:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
2:00	0	11	0	1	0	1	0	0	0	0	0	0	0	13
3:00	0	13	3	0	0	2	0	0	0	0	0	0	0	18
4:00	0	47	7	2	2	2	0	0	0	0	0	0	0	60
5:00	0	92	30	0	4	5	0	0	0	0	0	0	0	131
6:00	0	317	51	8	32	16	2	2	1	0	0	0	0	429
7:00	0	621	71	29	44	32	2	11	3	1	0	0	0	814
8:00	0	665	83	38	40	23	2	19	3	2	2	0	0	877
9:00	0	518	110	18	32	39	0	8	0	0	0	0	1	726
10:00	0	506	89	12	36	23	0	3	1	0	0	0	0	670
11:00	0	503	82	16	38	24	2	2	2	1	0	0	0	670
12:00 PM	0	687	21	14	7	12	0	3	0	0	0	0	1	745
1:00	0	698	4	2	3	0	0	0	0	0	0	0	0	707
2:00	0	729	2	7	3	1	0	0	1	0	0	0	0	743
3:00	0	568	67	27	19	16	0	5	5	0	0	0	0	707
4:00	0	540	77	22	21	13	0	10	1	1	0	0	0	685
5:00	0	520	80	16	17	9	0	2	0	1	0	0	0	645
6:00	0	404	58	8	16	15	0	3	0	1	0	0	0	505
7:00	0	313	56	2	11	9	0	2	2	0	0	0	1	396
8:00	0	278	32	3	8	7	0	0	0	0	0	0	0	328
9:00	0	158	23	0	3	10	0	0	0	0	0	0	0	194
10:00	0	104	13	0	4	1	0	0	0	0	0	0	0	122
11:00	0	59	10	0	3	3	0	0	0	0	0	0	0	75
Total	0	8383	974	225	344	263	8	70	19	7	2	0	3	10298
Percent	0.0%	81.4%	9.5%	2.2%	3.3%	2.6%	0.1%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	
AM Peak		8:00	9:00	8:00	7:00	9:00	6:00	8:00	7:00	8:00	8:00		9:00	8:00
	*	665	110	38	44	39	2	19	3	2	2	*	1	877
PM Peak		2:00	5:00	3:00	4:00	3:00		4:00	3:00	4:00			12:00 PM	12:00 PM
	*	729	80	27	21	16	*	10	5	1	*	*	1	745

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
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Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: NB

6/11/2025 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	26	4	0	1	0	0	0	0	0	0	0	0	31
1:00	0	22	3	0	0	0	0	0	0	0	0	0	0	25
2:00	0	9	0	1	0	1	0	0	0	0	0	0	0	11
3:00	0	12	3	0	0	2	0	0	0	0	0	0	0	17
4:00	0	47	7	2	2	2	0	0	0	0	0	0	0	60
5:00	0	124	41	0	5	7	0	0	0	0	0	0	0	177
6:00	0	296	48	7	30	15	2	2	1	0	0	0	0	401
7:00	0	457	52	21	32	24	1	8	2	1	0	0	0	598
8:00	0	499	62	29	30	17	2	14	2	2	2	0	0	659
9:00	0	394	84	14	24	30	0	6	0	0	0	0	1	553
10:00	0	419	74	10	30	19	0	2	1	0	0	0	0	555
11:00	0	424	69	13	32	20	2	2	2	1	0	0	0	565
12:00 PM	0	528	16	11	5	9	0	2	0	0	0	0	1	572
1:00	0	575	3	2	2	0	0	0	0	0	0	0	0	582
2:00	0	598	2	6	2	1	0	0	1	0	0	0	0	610
3:00	0	518	61	24	17	15	0	5	5	0	0	0	0	645
4:00	0	533	76	22	21	13	0	10	1	1	0	0	0	677
5:00	0	548	84	16	17	10	0	2	0	1	0	0	0	678
6:00	0	423	61	8	17	15	0	3	0	1	0	0	0	528
7:00	0	371	67	2	14	10	0	2	2	0	0	0	1	469
8:00	0	345	40	3	10	8	0	0	0	0	0	0	0	406
9:00	0	221	33	0	4	15	0	0	0	0	0	0	0	273
10:00	0	141	18	0	6	2	0	0	0	0	0	0	0	167
11:00	0	71	12	0	4	4	0	0	0	0	0	0	0	91
Total	0	7601	920	191	305	239	7	58	17	7	2	0	3	9350
Percent	0.0%	81.3%	9.8%	2.0%	3.3%	2.6%	0.1%	0.6%	0.2%	0.1%	0.0%	0.0%	0.0%	
AM Peak		8:00	9:00	8:00	7:00	9:00	6:00	8:00	7:00	8:00	8:00		9:00	8:00
	*	499	84	29	32	30	2	14	2	2	2	*	1	659
PM Peak		2:00	5:00	3:00	4:00	3:00		4:00	3:00	4:00			12:00 PM	5:00
	*	598	84	24	21	15	*	10	5	1	*	*	1	678
Grand Total	0	15984	1894	416	649	502	15	128	36	14	4	0	6	19648
Percent	0.0%	81.4%	9.6%	2.1%	3.3%	2.6%	0.1%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: SB

6/10/2025 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	15	1	1	0	0	0	0	0	0	0	0	0	17
1:00	0	5	4	0	1	0	0	0	0	0	0	0	0	10
2:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
3:00	0	4	2	0	2	0	0	0	0	0	0	0	0	8
4:00	0	16	3	0	1	0	0	0	0	0	0	0	0	20
5:00	0	60	16	0	2	0	0	0	0	0	0	0	0	78
6:00	0	181	47	5	13	0	0	2	1	0	1	0	0	250
7:00	0	303	56	7	17	1	1	2	0	0	1	0	0	388
8:00	0	312	72	19	18	0	0	5	2	1	0	0	0	429
9:00	0	266	75	13	15	0	0	5	0	0	0	0	0	374
10:00	1	229	69	5	25	1	0	7	0	0	0	0	0	337
11:00	2	441	134	8	41	3	0	12	2	0	0	0	0	643
12:00 PM	0	387	109	19	22	0	0	8	0	0	0	0	0	545
1:00	2	385	117	9	43	2	0	11	0	0	0	0	0	569
2:00	1	299	91	6	28	2	0	8	1	0	0	0	0	436
3:00	0	417	92	13	13	0	0	3	0	0	3	0	0	541
4:00	0	352	81	9	22	1	0	3	0	0	1	0	0	469
5:00	1	345	71	7	18	1	0	2	0	0	0	0	0	445
6:00	0	241	57	4	18	0	0	0	0	0	0	0	0	320
7:00	0	233	42	1	13	0	0	1	0	0	0	0	0	290
8:00	1	294	55	1	6	0	0	0	0	0	0	0	0	357
9:00	0	156	25	0	5	0	0	0	0	0	0	0	0	186
10:00	0	75	14	0	0	0	0	0	0	0	0	0	0	89
11:00	0	53	6	0	1	0	0	0	0	0	0	0	0	60
Total	8	5077	1240	127	324	11	1	69	6	1	6	0	0	6870
Percent	0.1%	73.9%	18.0%	1.8%	4.7%	0.2%	0.0%	1.0%	0.1%	0.0%	0.1%	0.0%	0.0%	
AM Peak	11:00	11:00	11:00	8:00	11:00	11:00	7:00	11:00	8:00	8:00	6:00			11:00
	2	441	134	19	41	3	1	12	2	1	1	*	*	643
PM Peak	1:00	3:00	1:00	12:00 PM	1:00	1:00		1:00	2:00		3:00			1:00
	2	417	117	19	43	2	*	11	1	*	3	*	*	569

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: SB

6/11/2025 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	16	1	1	0	0	0	0	0	0	0	0	0	18
1:00	0	14	11	0	3	0	0	0	0	0	0	0	0	28
2:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
3:00	0	3	2	0	2	0	0	0	0	0	0	0	0	7
4:00	0	16	3	0	1	0	0	0	0	0	0	0	0	20
5:00	0	80	22	0	3	0	0	0	0	0	0	0	0	105
6:00	0	169	44	5	12	0	0	2	1	0	1	0	0	234
7:00	0	222	42	5	12	1	1	2	0	0	1	0	0	286
8:00	0	234	54	14	13	0	0	4	2	1	0	0	0	322
9:00	0	202	57	10	11	0	0	4	0	0	0	0	0	284
10:00	1	189	57	5	21	1	0	5	0	0	0	0	0	279
11:00	1	372	113	7	35	3	0	10	1	0	0	0	0	542
12:00 PM	0	298	84	14	17	0	0	6	0	0	0	0	0	419
1:00	0	318	96	8	35	2	0	9	0	0	0	0	0	468
2:00	1	244	75	5	23	2	0	6	1	0	0	0	0	357
3:00	0	380	84	12	12	0	0	3	0	0	3	0	0	494
4:00	0	347	80	9	22	1	0	3	0	0	1	0	0	463
5:00	0	363	75	8	19	1	0	2	0	0	0	0	0	468
6:00	0	352	60	4	19	0	0	0	0	0	0	0	0	435
7:00	0	276	50	1	16	0	0	1	0	0	0	0	0	344
8:00	0	364	68	2	7	0	0	0	0	0	0	0	0	441
9:00	0	219	35	0	7	0	0	0	0	0	0	0	0	261
10:00	0	103	19	0	0	0	0	0	0	0	0	0	0	122
11:00	0	64	7	0	2	0	0	0	0	0	0	0	0	73
Total	3	4852	1140	110	292	11	1	57	5	1	6	0	0	6478
Percent	0.0%	74.9%	17.6%	1.7%	4.5%	0.2%	0.0%	0.9%	0.1%	0.0%	0.1%	0.0%	0.0%	
AM Peak	10:00	11:00	11:00	8:00	11:00	11:00	7:00	11:00	8:00	8:00	6:00			11:00
	1	372	113	14	35	3	1	10	2	1	1	*	*	542
PM Peak	2:00	3:00	1:00	12:00 PM	1:00	1:00		1:00	2:00		3:00			3:00
	1	380	96	14	35	2	*	9	1	*	3	*	*	494
Grand Total	11	9929	2380	237	616	22	2	126	11	2	12	0	0	13348
Percent	0.1%	74.4%	17.8%	1.8%	4.6%	0.2%	0.0%	0.9%	0.1%	0.0%	0.1%	0.0%	0.0%	

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: Combined

6/10/2025 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	39	5	1	1	0	0	0	0	0	0	0	0	46
1:00	0	13	5	0	1	0	0	0	0	0	0	0	0	19
2:00	0	19	1	1	0	1	0	0	0	0	0	0	0	22
3:00	0	17	5	0	2	2	0	0	0	0	0	0	0	26
4:00	0	63	10	2	3	2	0	0	0	0	0	0	0	80
5:00	0	152	46	0	6	5	0	0	0	0	0	0	0	209
6:00	0	498	98	13	45	16	2	4	2	0	1	0	0	679
7:00	0	924	127	36	61	33	3	13	3	1	1	0	0	1202
8:00	0	977	155	57	58	23	2	24	5	3	2	0	0	1306
9:00	0	784	185	31	47	39	0	13	0	0	0	0	1	1100
10:00	1	735	158	17	61	24	0	10	1	0	0	0	0	1007
11:00	2	944	216	24	79	27	2	14	4	1	0	0	0	1313
12:00 PM	0	1074	130	33	29	12	0	11	0	0	0	0	1	1290
1:00	2	1083	121	11	46	2	0	11	0	0	0	0	0	1276
2:00	1	1028	93	13	31	3	0	8	2	0	0	0	0	1179
3:00	0	985	159	40	32	16	0	8	5	0	3	0	0	1248
4:00	0	892	158	31	43	14	0	13	1	1	1	0	0	1154
5:00	1	865	151	23	35	10	0	4	0	1	0	0	0	1090
6:00	0	645	115	12	34	15	0	3	0	1	0	0	0	825
7:00	0	546	98	3	24	9	0	3	2	0	0	0	1	686
8:00	1	572	87	4	14	7	0	0	0	0	0	0	0	685
9:00	0	314	48	0	8	10	0	0	0	0	0	0	0	380
10:00	0	179	27	0	4	1	0	0	0	0	0	0	0	211
11:00	0	112	16	0	4	3	0	0	0	0	0	0	0	135
Total	8	13460	2214	352	668	274	9	139	25	8	8	0	3	17168
Percent	0.0%	78.4%	12.9%	2.1%	3.9%	1.6%	0.1%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	8:00	11:00	8:00	11:00	9:00	7:00	8:00	8:00	8:00	8:00		9:00	11:00
	2	977	216	57	79	39	3	24	5	3	2	*	1	1313
PM Peak	1:00	1:00	3:00	3:00	1:00	3:00		4:00	3:00	4:00	3:00		12:00 PM	12:00 PM
	2	1083	159	40	46	16	*	13	5	1	3	*	1	1290

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: Combined

6/11/2025 Time	Motor Cycles	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12:00 AM	0	42	5	1	1	0	0	0	0	0	0	0	0	49
1:00	0	36	14	0	3	0	0	0	0	0	0	0	0	53
2:00	0	16	1	1	0	1	0	0	0	0	0	0	0	19
3:00	0	15	5	0	2	2	0	0	0	0	0	0	0	24
4:00	0	63	10	2	3	2	0	0	0	0	0	0	0	80
5:00	0	204	63	0	8	7	0	0	0	0	0	0	0	282
6:00	0	465	92	12	42	15	2	4	2	0	1	0	0	635
7:00	0	679	94	26	44	25	2	10	2	1	1	0	0	884
8:00	0	733	116	43	43	17	2	18	4	3	2	0	0	981
9:00	0	596	141	24	35	30	0	10	0	0	0	0	1	837
10:00	1	608	131	15	51	20	0	7	1	0	0	0	0	834
11:00	1	796	182	20	67	23	2	12	3	1	0	0	0	1107
12:00 PM	0	826	100	25	22	9	0	8	0	0	0	0	1	991
1:00	0	893	99	10	37	2	0	9	0	0	0	0	0	1050
2:00	1	842	77	11	25	3	0	6	2	0	0	0	0	967
3:00	0	898	145	36	29	15	0	8	5	0	3	0	0	1139
4:00	0	880	156	31	43	14	0	13	1	1	1	0	0	1140
5:00	0	911	159	24	36	11	0	4	0	1	0	0	0	1146
6:00	0	775	121	12	36	15	0	3	0	1	0	0	0	963
7:00	0	647	117	3	30	10	0	3	2	0	0	0	1	813
8:00	0	709	108	5	17	8	0	0	0	0	0	0	0	847
9:00	0	440	68	0	11	15	0	0	0	0	0	0	0	534
10:00	0	244	37	0	6	2	0	0	0	0	0	0	0	289
11:00	0	135	19	0	6	4	0	0	0	0	0	0	0	164
Total	3	12453	2060	301	597	250	8	115	22	8	8	0	3	15828
Percent	0.0%	78.7%	13.0%	1.9%	3.8%	1.6%	0.1%	0.7%	0.1%	0.1%	0.1%	0.0%	0.0%	
AM Peak	10:00	11:00	11:00	8:00	11:00	9:00	6:00	8:00	8:00	8:00	8:00		9:00	11:00
	1	796	182	43	67	30	2	18	4	3	2	*	1	1107
PM Peak	2:00	5:00	5:00	3:00	4:00	3:00		4:00	3:00	4:00	3:00		12:00 PM	5:00
	1	911	159	36	43	15	*	13	5	1	3	*	1	1146
Grand Total	11	25913	4274	653	1265	524	17	254	47	16	16	0	6	32996
Percent	0.0%	78.5%	13.0%	2.0%	3.8%	1.6%	0.1%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: NB

6/10/2025 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	29	0	0	0	0	0	0	0	0	0	0	0	0	29
1:00	9	0	0	0	0	0	0	0	0	0	0	0	0	9
2:00	13	0	0	0	0	0	0	0	0	0	0	0	0	13
3:00	18	0	0	0	0	0	0	0	0	0	0	0	0	18
4:00	59	1	0	0	0	0	0	0	0	0	0	0	0	60
5:00	131	0	0	0	0	0	0	0	0	0	0	0	0	131
6:00	429	0	0	0	0	0	0	0	0	0	0	0	0	429
7:00	814	0	0	0	0	0	0	0	0	0	0	0	0	814
8:00	874	3	0	0	0	0	0	0	0	0	0	0	0	877
9:00	726	0	0	0	0	0	0	0	0	0	0	0	0	726
10:00	670	0	0	0	0	0	0	0	0	0	0	0	0	670
11:00	670	0	0	0	0	0	0	0	0	0	0	0	0	670
12:00 PM	745	0	0	0	0	0	0	0	0	0	0	0	0	745
1:00	707	0	0	0	0	0	0	0	0	0	0	0	0	707
2:00	743	0	0	0	0	0	0	0	0	0	0	0	0	743
3:00	707	0	0	0	0	0	0	0	0	0	0	0	0	707
4:00	685	0	0	0	0	0	0	0	0	0	0	0	0	685
5:00	643	2	0	0	0	0	0	0	0	0	0	0	0	645
6:00	505	0	0	0	0	0	0	0	0	0	0	0	0	505
7:00	396	0	0	0	0	0	0	0	0	0	0	0	0	396
8:00	329	0	0	0	0	0	0	0	0	0	0	0	0	329
9:00	194	0	0	0	0	0	0	0	0	0	0	0	0	194
10:00	122	0	0	0	0	0	0	0	0	0	0	0	0	122
11:00	75	0	0	0	0	0	0	0	0	0	0	0	0	75
Total	10293	6	0	0	0	0	0	0	0	0	0	0	0	10299

New Line		Percentile	15th	50th	85th	95th
		Speed	12	22	24	29
	Mean Speed (Average)		18.3			
	10 MPH Pace Speed		26-35			
	Number in Pace		3054			
	Percent in Pace		30.0%			
	Number > 45 MPH		0			
	Percent > 45 MPH		0.0%			

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: NB

6/11/2025 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	31	0	0	0	0	0	0	0	0	0	0	0	0	31
1:00	25	0	0	0	0	0	0	0	0	0	0	0	0	25
2:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11
3:00	16	0	0	0	0	0	0	0	0	0	0	0	0	16
4:00	60	0	0	0	0	0	0	0	0	0	0	0	0	60
5:00	177	0	0	0	0	0	0	0	0	0	0	0	0	177
6:00	401	0	0	0	0	0	0	0	0	0	0	0	0	401
7:00	599	0	0	0	0	0	0	0	0	0	0	0	0	599
8:00	657	1	0	0	0	0	0	0	0	0	0	0	0	658
9:00	551	1	0	0	0	0	0	0	0	0	0	0	0	552
10:00	555	0	0	0	0	0	0	0	0	0	0	0	0	555
11:00	565	0	0	0	0	0	0	0	0	0	0	0	0	565
12:00 PM	573	0	0	0	0	0	0	0	0	0	0	0	0	573
1:00	582	0	0	0	0	0	0	0	0	0	0	0	0	582
2:00	609	0	0	0	0	0	0	0	0	0	0	0	0	609
3:00	645	0	0	0	0	0	0	0	0	0	0	0	0	645
4:00	676	0	0	0	0	0	0	0	0	0	0	0	0	676
5:00	675	3	0	0	0	0	0	0	0	0	0	0	0	678
6:00	529	0	0	0	0	0	0	0	0	0	0	0	0	529
7:00	469	0	0	0	0	0	0	0	0	0	0	0	0	469
8:00	406	0	0	0	0	0	0	0	0	0	0	0	0	406
9:00	271	1	0	0	0	0	0	0	0	0	0	0	0	272
10:00	167	0	0	0	0	0	0	0	0	0	0	0	0	167
11:00	91	0	0	0	0	0	0	0	0	0	0	0	0	91
Total	9341	6	0	0	0	0	0	0	0	0	0	0	0	9347

New Line	Percentile	15th	50th	85th	95th
	Speed	13	21	25	30
	Mean Speed (Average)	18.3			
	10 MPH Pace Speed	26-35			
	Number in Pace	2685			
	Percent in Pace	30.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			
Grand Total	Percentile	15th	50th	85th	95th
	Speed	12	22	24	30
	Mean Speed (Average)	18.3			
	10 MPH Pace Speed	26-35			
	Number in Pace	5789			
	Percent in Pace	30.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: SB

6/10/2025 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	17	0	0	0	0	0	0	0	0	0	0	0	0	17
1:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
2:00	9	0	0	0	0	0	0	0	0	0	0	0	0	9
3:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
4:00	20	0	0	0	0	0	0	0	0	0	0	0	0	20
5:00	78	0	0	0	0	0	0	0	0	0	0	0	0	78
6:00	249	1	0	0	0	0	0	0	0	0	0	0	0	250
7:00	388	0	0	0	0	0	0	0	0	0	0	0	0	388
8:00	429	0	0	0	0	0	0	0	0	0	0	0	0	429
9:00	374	0	0	0	0	0	0	0	0	0	0	0	0	374
10:00	337	0	0	0	0	0	0	0	0	0	0	0	0	337
11:00	641	2	0	0	0	0	0	0	0	0	0	0	0	643
12:00 PM	545	0	0	0	0	0	0	0	0	0	0	0	0	545
1:00	568	0	0	0	0	0	0	0	0	0	0	0	0	568
2:00	436	0	0	0	0	0	0	0	0	0	0	0	0	436
3:00	541	0	0	0	0	0	0	0	0	0	0	0	0	541
4:00	469	0	0	0	0	0	0	0	0	0	0	0	0	469
5:00	445	0	0	0	0	0	0	0	0	0	0	0	0	445
6:00	319	1	0	0	0	0	0	0	0	0	0	0	0	320
7:00	290	0	0	0	0	0	0	0	0	0	0	0	0	290
8:00	357	0	0	0	0	0	0	0	0	0	0	0	0	357
9:00	186	0	0	0	0	0	0	0	0	0	0	0	0	186
10:00	89	0	0	0	0	0	0	0	0	0	0	0	0	89
11:00	60	0	0	0	0	0	0	0	0	0	0	0	0	60
Total	6865	4	0	0	0	0	0	0	0	0	0	0	0	6869

New Line		Percentile	15th	50th	85th	95th
		Speed	2	24	28	30
	Mean Speed (Average)		18.4			
	10 MPH Pace Speed		26-35			
	Number in Pace		2080			
	Percent in Pace		30.0%			
	Number > 45 MPH		0			
	Percent > 45 MPH		0.0%			

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: SB

6/11/2025 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	18	0	0	0	0	0	0	0	0	0	0	0	0	18
1:00	28	0	0	0	0	0	0	0	0	0	0	0	0	28
2:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
3:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
4:00	20	0	0	0	0	0	0	0	0	0	0	0	0	20
5:00	105	0	0	0	0	0	0	0	0	0	0	0	0	105
6:00	234	0	0	0	0	0	0	0	0	0	0	0	0	234
7:00	286	0	0	0	0	0	0	0	0	0	0	0	0	286
8:00	320	2	0	0	0	0	0	0	0	0	0	0	0	322
9:00	284	0	0	0	0	0	0	0	0	0	0	0	0	284
10:00	279	0	0	0	0	0	0	0	0	0	0	0	0	279
11:00	542	0	0	0	0	0	0	0	0	0	0	0	0	542
12:00 PM	419	0	0	0	0	0	0	0	0	0	0	0	0	419
1:00	468	0	0	0	0	0	0	0	0	0	0	0	0	468
2:00	357	0	0	0	0	0	0	0	0	0	0	0	0	357
3:00	494	0	0	0	0	0	0	0	0	0	0	0	0	494
4:00	461	2	0	0	0	0	0	0	0	0	0	0	0	463
5:00	468	0	0	0	0	0	0	0	0	0	0	0	0	468
6:00	335	0	0	0	0	0	0	0	0	0	0	0	0	335
7:00	343	1	0	0	0	0	0	0	0	0	0	0	0	344
8:00	441	0	0	0	0	0	0	0	0	0	0	0	0	441
9:00	261	0	0	0	0	0	0	0	0	0	0	0	0	261
10:00	122	0	0	0	0	0	0	0	0	0	0	0	0	122
11:00	73	0	0	0	0	0	0	0	0	0	0	0	0	73
Total	6373	5	0	0	0	0	0	0	0	0	0	0	0	6378

New Line	Percentile	15th	50th	85th	95th
	Speed	8	22	28	30
	Mean Speed (Average)	18.4			
	10 MPH Pace Speed	26-35			
	Number in Pace	1847			
	Percent in Pace	30.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			
Grand Total	Percentile	15th	50th	85th	95th
	Speed	9	23	28	30
	Mean Speed (Average)	18.4			
	10 MPH Pace Speed	26-35			
	Number in Pace	3967			
	Percent in Pace	30.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: Combined

6/10/2025 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	46	0	0	0	0	0	0	0	0	0	0	0	0	46
1:00	19	0	0	0	0	0	0	0	0	0	0	0	0	19
2:00	22	0	0	0	0	0	0	0	0	0	0	0	0	22
3:00	26	0	0	0	0	0	0	0	0	0	0	0	0	26
4:00	79	1	0	0	0	0	0	0	0	0	0	0	0	80
5:00	209	0	0	0	0	0	0	0	0	0	0	0	0	209
6:00	678	1	0	0	0	0	0	0	0	0	0	0	0	679
7:00	1202	0	0	0	0	0	0	0	0	0	0	0	0	1202
8:00	1303	3	0	0	0	0	0	0	0	0	0	0	0	1306
9:00	1100	0	0	0	0	0	0	0	0	0	0	0	0	1100
10:00	1007	0	0	0	0	0	0	0	0	0	0	0	0	1007
11:00	1311	2	0	0	0	0	0	0	0	0	0	0	0	1313
12:00 PM	1290	0	0	0	0	0	0	0	0	0	0	0	0	1290
1:00	1275	0	0	0	0	0	0	0	0	0	0	0	0	1275
2:00	1179	0	0	0	0	0	0	0	0	0	0	0	0	1179
3:00	1248	0	0	0	0	0	0	0	0	0	0	0	0	1248
4:00	1154	0	0	0	0	0	0	0	0	0	0	0	0	1154
5:00	1088	2	0	0	0	0	0	0	0	0	0	0	0	1090
6:00	824	1	0	0	0	0	0	0	0	0	0	0	0	825
7:00	686	0	0	0	0	0	0	0	0	0	0	0	0	686
8:00	686	0	0	0	0	0	0	0	0	0	0	0	0	686
9:00	380	0	0	0	0	0	0	0	0	0	0	0	0	380
10:00	211	0	0	0	0	0	0	0	0	0	0	0	0	211
11:00	135	0	0	0	0	0	0	0	0	0	0	0	0	135
Total	17158	10	0	0	0	0	0	0	0	0	0	0	0	17168

New Line		Percentile	15th	50th	85th	95th
		Speed	7	23	26	29
	Mean Speed (Average)		18.3			
	10 MPH Pace Speed		26-35			
	Number in Pace		5134			
	Percent in Pace		30.0%			
	Number > 45 MPH		0			
	Percent > 45 MPH		0.0%			

NE TRAFFIC COUNTS

City: Hingham
Location 1: Fort Hill St
Location 2: S/O South St
Tech: KM
Latitude: 42.237093
Longitude: -70.902794

Direction: Combined

6/11/2025 Time	0 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 - 75 MPH	> 75 - 80 MPH	> 80 - 85 MPH	> 85 - 90 MPH	> 90 MPH	Total
12:00 AM	49	0	0	0	0	0	0	0	0	0	0	0	0	49
1:00	53	0	0	0	0	0	0	0	0	0	0	0	0	53
2:00	19	0	0	0	0	0	0	0	0	0	0	0	0	19
3:00	23	0	0	0	0	0	0	0	0	0	0	0	0	23
4:00	80	0	0	0	0	0	0	0	0	0	0	0	0	80
5:00	282	0	0	0	0	0	0	0	0	0	0	0	0	282
6:00	635	0	0	0	0	0	0	0	0	0	0	0	0	635
7:00	885	0	0	0	0	0	0	0	0	0	0	0	0	885
8:00	977	3	0	0	0	0	0	0	0	0	0	0	0	980
9:00	835	1	0	0	0	0	0	0	0	0	0	0	0	836
10:00	834	0	0	0	0	0	0	0	0	0	0	0	0	834
11:00	1107	0	0	0	0	0	0	0	0	0	0	0	0	1107
12:00 PM	992	0	0	0	0	0	0	0	0	0	0	0	0	992
1:00	1050	0	0	0	0	0	0	0	0	0	0	0	0	1050
2:00	966	0	0	0	0	0	0	0	0	0	0	0	0	966
3:00	1139	0	0	0	0	0	0	0	0	0	0	0	0	1139
4:00	1137	2	0	0	0	0	0	0	0	0	0	0	0	1139
5:00	1143	3	0	0	0	0	0	0	0	0	0	0	0	1146
6:00	864	0	0	0	0	0	0	0	0	0	0	0	0	864
7:00	812	1	0	0	0	0	0	0	0	0	0	0	0	813
8:00	847	0	0	0	0	0	0	0	0	0	0	0	0	847
9:00	532	1	0	0	0	0	0	0	0	0	0	0	0	533
10:00	289	0	0	0	0	0	0	0	0	0	0	0	0	289
11:00	164	0	0	0	0	0	0	0	0	0	0	0	0	164
Total	15714	11	0	0	0	0	0	0	0	0	0	0	0	15725

New Line					
	Percentile	15th	50th	85th	95th
	Speed	10	21	27	30
	Mean Speed (Average)	18.3			
	10 MPH Pace Speed	26-35			
	Number in Pace	4532			
	Percent in Pace	30.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			

Grand Total					
	Percentile	15th	50th	85th	95th
	Speed	10	22	26	30
	Mean Speed (Average)	18.3			
	10 MPH Pace Speed	26-35			
	Number in Pace	9756			
	Percent in Pace	30.0%			
	Number > 45 MPH	0			
	Percent > 45 MPH	0.0%			

NE TRAFFIC COUNTS

New England Traffic Counts
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emayboroda@netrafficcounts.com
www.netrafficcounts.com

CLIENT	Bowman
CITY/TOWN	Hingham, MA
WEATHER	Sunny
INTERSECTION #	1

STREET 1	Fort Hill Street
STREET 2	Bare Cove Park Drive
DATE	06/10/2025

Passenger Cars & Heavy Vehicles Combined

	Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
Start Time	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**
7:00 AM	0	8	116	16	0	17	67	7	0	1	0	1	0	0	1	0
7:15 AM	0	7	138	3	0	4	90	8	0	2	0	1	0	2	0	5
7:30 AM	0	5	191	1	0	1	101	7	0	7	0	4	0	0	0	0
7:45 AM	0	4	199	6	0	9	90	5	0	4	0	5	0	0	0	2
8:00 AM	0	6	189	6	0	13	99	2	0	8	0	5	0	1	0	2
8:15 AM	0	5	200	1	0	0	116	7	0	6	0	7	0	0	0	1
8:30 AM	0	2	184	0	0	0	133	4	0	4	0	0	0	1	0	0
8:45 AM	0	4	198	0	0	0	151	10	0	5	0	5	0	0	0	0
3:00 PM	0	6	128	0	0	0	158	6	0	12	0	11	0	0	0	0
3:15 PM	0	6	135	3	0	5	127	12	0	1	0	6	0	0	0	3
3:30 PM	0	4	144	1	0	1	142	2	0	6	0	7	0	1	0	2
3:45 PM	0	1	140	1	0	2	126	6	0	9	0	14	0	1	0	0
4:00 PM	0	3	138	2	0	0	143	3	0	6	0	11	0	5	0	10
4:15 PM	0	4	129	1	0	0	137	5	0	6	0	3	0	0	0	1
4:30 PM	0	2	130	0	0	1	176	1	0	6	0	2	0	0	0	0
4:45 PM	0	0	133	3	0	1	162	4	0	0	0	3	0	0	0	1
5:00 PM	0	1	165	0	0	1	172	1	0	2	0	6	0	9	0	18
5:15 PM	0	1	147	1	0	0	168	1	0	1	0	7	0	1	0	1
5:30 PM	0	4	140	3	0	2	131	3	0	5	0	1	0	0	0	0
5:45 PM	0	3	115	4	0	2	103	4	0	1	0	2	0	15	0	30

AM PEAK HOURS	Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
8:00 AM	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**
	0	17	771	7	0	13	499	23	0	23	0	17	0	2	0	3
PHF	0.96				0.83				0.77				0.42			
HV%	0.0%	0.0%	4.8%	0.0%	0.0%	0.0%	3.0%	39.1%	0.0%	17.4%	0.0%	17.6%	0.0%	0.0%	0.0%	0.0%

PM PEAK HOURS	Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
4:30 PM	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**
	0	4	575	4	0	3	678	7	0	9	0	18	0	10	0	20
PHF	0.88				0.97				0.84				0.28			
HV%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

NE TRAFFIC COUNTS

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www.netrafficcounts.com

CLIENT	Bowman	**STREET 1**	Fort Hill Street
CITY/TOWN	Hingham, MA	**STREET 2**	Bare Cove Park Drive
WEATHER	Sunny	**DATE**	06/10/2025
INTERSECTION #	1		

Heavy Vehicles

	Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
Start Time	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**
7:00 AM	0	1	8	0	0	0	2	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	5	0	0	0	2	0	0	1	0	0	0	0	0	0
7:30 AM	0	0	13	0	0	0	5	1	0	5	0	0	0	0	0	0
7:45 AM	0	1	9	0	0	0	3	0	0	1	0	3	0	0	0	0
8:00 AM	0	0	13	0	0	0	1	0	0	1	0	1	0	0	0	0
8:15 AM	0	0	5	0	0	0	5	4	0	1	0	1	0	0	0	0
8:30 AM	0	0	11	0	0	0	3	1	0	1	0	0	0	0	0	0
8:45 AM	0	0	8	0	0	0	6	4	0	1	0	1	0	0	0	0
3:00 PM	0	0	3	0	0	0	4	1	0	1	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0
3:30 PM	0	0	0	0	0	0	7	1	0	0	0	0	0	0	0	0
3:45 PM	0	0	1	0	0	0	3	1	0	0	0	0	0	0	0	0
4:00 PM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

AM PEAK HOURS
8:00 AM

Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
U-Turn	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**
0	0	37	0	0	0	15	9	0	4	0	3	0	0	0	0

PM PEAK HOURS
4:30 PM

Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
U-Turn	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**
0	0	2	0	0	0	7	0	0	0	0	0	0	0	0	0

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CLIENT	Bowman	**STREET 1**	Fort Hill Street
CITY/TOWN	Hingham, MA	**STREET 2**	Bare Cove Park Drive
WEATHER	Sunny	**DATE**	06/10/2025
INTERSECTION #	1		

Pedestrians and Bicycles

	Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
Start Time	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AM PEAK HOURS
8:00 AM

Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
Peds	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**
0	0	0	1	0	0	0	0	5	1	0	0	0	0	0	0

PM PEAK HOURS
4:30 PM

Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
Peds	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**
0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0


Fort Hill Street
NORTHBOUND
LEFT
THRU
RIGHT
Bare Cove Park Dr
EASTBOUND
RIGHT
THRU
LEFT
LEFT
THRU
RIGHT
Driveway
Westbound
RIGHT
THRU
LEFT
Fort Hill Street
SOUTHBOUND
SLR_031
06/10/20254

NE TRAFFIC COUNTS

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emayboroda@netrafficcounts.com
www.netrafficcounts.com

CLIENT	Bowman
CITY/TOWN	Hingham, MA
WEATHER	Sunny
INTERSECTION #	1

STREET 1	Fort Hill Street
STREET 2	Bare Cove Park Drive
DATE	06/14/2025

Passenger Cars & Heavy Vehicles Combined

	Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
Start Time	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**
11:00 AM	0	8	141	0	0	0	145	18	0	26	0	22	0	0	0	0
11:15 AM	0	6	132	0	0	4	139	19	0	36	0	13	0	0	0	0
11:30 AM	0	11	133	0	0	1	164	16	0	51	0	35	0	0	0	1
11:45 AM	0	8	148	1	0	2	170	9	0	44	0	38	0	0	0	0
12:00 PM	0	8	157	1	0	1	150	7	0	16	1	17	0	0	0	5
12:15 PM	0	7	130	0	0	0	200	9	0	19	0	12	0	0	0	0
12:30 PM	0	10	154	0	0	0	151	5	0	19	0	18	0	0	0	0
12:45 PM	1	9	129	2	0	1	141	8	0	14	0	3	0	1	0	1

AM PEAK HOURS	Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
11:30 AM	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**
	0	34	568	2	0	4	684	41	0	130	1	102	0	0	0	6
PHF	0.91				0.87				0.68				0.30			
HV%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

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CLIENT	Bowman
CITY/TOWN	Hingham, MA
WEATHER	Sunny
INTERSECTION #	1

STREET 1	Fort Hill Street
STREET 2	Bare Cove Park Drive
DATE	06/14/2025

Heavy Vehicles

	Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
Start Time	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AM PEAK HOURS	Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
11:30 AM	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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CLIENT	Bowman
CITY/TOWN	Hingham, MA
WEATHER	Sunny
INTERSECTION #	1

STREET 1	Fort Hill Street
STREET 2	Bare Cove Park Drive
DATE	06/14/2025

Pedestrians and Bicycles

	Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
Start Time	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AM PEAK HOURS	Fort Hill Street - Northbound				Fort Hill Street - Southbound				Bare Cove Park Drive - Eastbound				Driveway - Westbound			
11:30 AM	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0


Fort Hill Street
NORTHBOUND
RIGHT
THRU
LEFT
LEFT
THRU
RIGHT
Bare Cove Park Dr
EASTBOUND
RIGHT
THRU
LEFT
RIGHT
THRU
LEFT
Fort Hill Street
SOUTHBOUND
Driveway
Westbound
SLR_031
06/10/20254

NE TRAFFIC COUNTS

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CLIENT	SLR	**STREET 1**	Fort Hill Street at West Street
CITY/TOWN	Hingham, MA	**STREET 2**	South Street
WEATHER	Cloudy	**DATE**	06/10/2025
INTERSECTION #	2		

Passenger Cars & Heavy Vehicles Combined

	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
Start Time	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**
7:00 AM	0	79	36	0	3	72	0	17	1
7:15 AM	0	105	50	0	3	88	0	14	0
7:30 AM	0	132	57	0	0	83	0	31	1
7:45 AM	0	133	78	0	3	76	0	25	1
8:00 AM	0	131	73	0	3	84	0	29	6
8:15 AM	0	132	74	0	5	94	0	29	5
8:30 AM	0	123	68	0	4	109	0	29	1
8:45 AM	0	105	90	0	5	120	0	48	5
3:00 PM	0	90	55	0	4	137	0	31	1
3:15 PM	0	81	60	0	4	108	0	37	1
3:30 PM	0	83	65	0	9	101	0	41	5
3:45 PM	0	102	48	0	5	95	0	40	7
4:00 PM	0	89	62	0	8	113	0	31	4
4:15 PM	0	94	42	0	10	107	0	34	2
4:30 PM	0	76	51	0	5	136	0	43	6
4:45 PM	0	97	43	0	5	126	0	39	3
5:00 PM	0	103	73	0	4	143	0	28	2
5:15 PM	0	113	42	0	10	147	0	22	1
5:30 PM	0	82	58	0	2	115	0	20	6
5:45 PM	0	90	64	0	8	90	0	21	4

AM PEAK HOURS	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
8:00 AM	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**
	0	491	305	0	17	407	0	135	17
PHF		0.97			0.85			0.72	
HV%	0.0%	5.3%	5.2%	0.0%	0.0%	3.4%	0.0%	5.9%	5.9%

PM PEAK HOURS	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
4:30 PM	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**
	0	389	209	0	24	552	0	132	12
PHF		0.85			0.92			0.73	
HV%	0.0%	0.3%	0.0%	0.0%	0.0%	0.9%	0.0%	1.5%	0.0%

NE TRAFFIC COUNTS

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emayboroda@netrafficcounts.com
www.netrafficcounts.com

CLIENT	SLR	**STREET 1**	Fort Hill Street at West Street
CITY/TOWN	Hingham, MA	**STREET 2**	South Street
WEATHER	Cloudy	**DATE**	06/10/2025
INTERSECTION #	2		

Heavy Vehicles

	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
Start Time	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**
7:00 AM	0	5	3	0	0	1	0	0	0
7:15 AM	0	6	2	0	1	2	0	0	0
7:30 AM	0	10	7	0	0	5	0	1	0
7:45 AM	0	6	5	0	0	3	0	0	0
8:00 AM	0	10	4	0	0	1	0	0	0
8:15 AM	0	4	3	0	0	7	0	1	1
8:30 AM	0	7	5	0	0	1	0	3	0
8:45 AM	0	5	4	0	0	5	0	4	0
3:00 PM	0	1	3	0	0	5	0	0	0
3:15 PM	0	0	0	0	0	5	0	4	0
3:30 PM	0	0	0	0	0	1	0	7	0
3:45 PM	0	1	0	0	0	2	0	1	1
4:00 PM	0	1	1	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	2	0	1	0
4:30 PM	0	0	0	0	0	2	0	0	0
4:45 PM	0	1	0	0	0	2	0	1	0
5:00 PM	0	0	0	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0
5:30 PM	0	2	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0

AM PEAK HOURS	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
8:00 AM	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**
	0	26	16	0	0	14	0	8	1

PM PEAK HOURS	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
4:30 PM	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**
	0	1	0	0	0	5	0	2	0

NE TRAFFIC COUNTS

New England Traffic Counts
(413) 579-8366
emayboroda@netrafficcounts.com
www.netrafficcounts.com

CLIENT	SLR	**STREET 1**	Fort Hill Street at West Street
CITY/TOWN	Hingham, MA	**STREET 2**	South Street
WEATHER	Cloudy	**DATE**	06/10/2025
INTERSECTION #	2		

Pedestrians and Bicycles

	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
Start Time	**Peds**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Peds**	**Left**	**Right**
7:00 AM	1	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	1	0	0
7:30 AM	0	0	0	1	0	1	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0
8:00 AM	0	1	0	2	0	0	0	0	0
8:15 AM	0	1	1	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	3	0	0	0	0	0
3:00 PM	0	0	0	0	0	1	0	0	0
3:15 PM	0	0	1	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	1	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	4	0	0	0	0	0
5:15 PM	0	0	0	1	0	0	1	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	0

AM PEAK HOURS
8:00 AM

Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
Peds	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Peds**	**Left**	**Right**
0	2	1	6	0	0	0	0	0

PM PEAK HOURS
4:30 PM

Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
Peds	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Peds**	**Left**	**Right**
0	0	0	5	0	0	1	0	0


Fort Hill St
NORTHBOUND
RIGHT
THRU
South St
WESTBOUND
LEFT
RIGHT
THRU
LEFT
West St
SOUTHBOUND
SLR_031
06/10/2025

NE TRAFFIC COUNTS

New England Traffic Counts
(413) 579-8366
emayboroda@netrafficcounts.com
www.netrafficcounts.com

CLIENT	SLR	**STREET 1**	Fort Hill Street at West Street
CITY/TOWN	Hingham, MA	**STREET 2**	South Street
WEATHER	Cloudy	**DATE**	06/14/2025
INTERSECTION #	2		

Passenger Cars & Heavy Vehicles Combined

	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
Start Time	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**
11:00 AM	0	106	74	0	3	119	0	40	2
11:15 AM	0	83	76	0	5	103	0	61	6
11:30 AM	0	119	69	0	5	126	0	56	5
11:45 AM	0	117	79	0	4	133	0	43	8
12:00 PM	0	110	66	0	10	110	0	51	8
12:15 PM	0	94	57	0	4	156	0	52	5
12:30 PM	0	99	72	0	5	105	0	48	3
12:45 PM	0	89	55	0	10	105	0	47	6

PEAK HOURS	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
11:00 AM	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**
	0	425	298	0	17	481	0	200	21
PHF		0.92			0.91			0.82	
HV%	0.0%	0.7%	0.3%	0.0%	5.9%	0.8%	0.0%	0.0%	0.0%

NE TRAFFIC COUNTS

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emayboroda@netrafficcounts.com
www.netrafficcounts.com

CLIENT	SLR	**STREET 1**	Fort Hill Street at West Stre
CITY/TOWN	Hingham, MA	**STREET 2**	South Street
WEATHER	Cloudy	**DATE**	06/14/2025
INTERSECTION #	2		

Heavy Vehicles

	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
Start Time	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**
11:00 AM	0	0	0	0	0	1	0	0	0
11:15 AM	0	1	1	0	0	0	0	0	0
11:30 AM	0	1	0	0	1	2	0	0	0
11:45 AM	0	1	0	0	0	1	0	0	0
12:00 PM	0	0	1	0	0	0	0	1	0
12:15 PM	0	2	2	0	0	0	0	0	0
12:30 PM	0	0	1	0	0	0	0	0	0
12:45 PM	0	1	0	0	0	1	0	2	1

PEAK HOURS	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
11:00 AM	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**
	0	3	1	0	1	4	0	0	0

NE TRAFFIC COUNTS

New England Traffic Counts
(413) 579-8366
emayboroda@netrafficcounts.com
www.netrafficcounts.com

CLIENT	SLR	**STREET 1**	Fort Hill Street at West Street
CITY/TOWN	Hingham, MA	**STREET 2**	South Street
WEATHER	Cloudy	**DATE**	06/14/2025
INTERSECTION #	2		

Pedestrians and Bicycles

	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
Start Time	**Peds**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Peds**	**Left**	**Right**
11:00 AM	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	2	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0

PEAK HOURS	Fort Hill Street - Northbound			West Street - Southbound			South Street - Westbound		
11:00 AM	**Peds**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Peds**	**Left**	**Right**
	0	0	0	2	0	0	0	0	0


Fort Hill St
NORTHBOUND
RIGHT
THRU
South St
WESTBOUND
LEFT
RIGHT
THRU
LEFT
West St
SOUTHBOUND
SLR_031
06/10/2025

Appendix B The Weekly Seasonal Adjustment Factors

The Hingham Center for Active Living Traffic Impact Study

Town of Hingham, Massachusetts

EDM Studio

45 South Main Street
Unionville, CT 06085

SLR Project No.: 141.051021.00001

Client Reference No: 21840.00008

December 4, 2025 *Revised January 30, 2026*

Massachusetts Highway Department
Statewide Traffic Data Collection
2024 Weekday Seasonal Factors

Factor Group	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Axle Factor
R1	1.17	1.12	1.11	1.06	1.00	0.96	0.94	0.92	1.00	0.98	1.06	1.07	0.78
R3	1.10	1.04	1.04	1.02	0.91	0.88	0.88	0.87	0.92	0.92	0.99	1.01	0.98
R4-R7	1.16	1.12	1.08	1.03	0.92	0.89	0.88	0.89	0.92	0.94	1.04	1.10	0.98
U1-Boston	1.07	1.03	0.98	0.97	0.94	0.91	0.94	0.91	0.94	0.94	0.98	1.02	0.94
U1-Essex	1.13	1.09	1.06	1.04	0.95	0.89	0.88	0.87	0.95	0.95	1.03	1.05	0.96
U1-Southeast	1.14	1.10	1.04	0.99	0.93	0.86	0.87	0.85	0.91	0.93	0.99	1.02	0.96
U1-West	1.10	1.02	0.98	0.96	0.95	0.92	0.94	0.91	0.91	0.91	0.96	1.00	0.83
U1-Worcester	1.08	1.03	0.99	0.98	0.94	0.91	0.93	0.91	0.92	0.91	0.95	1.00	0.93
U3	1.06	1.02	0.98	0.96	0.93	0.91	0.95	0.94	0.93	0.93	0.96	1.00	0.98
U4-U7	1.04	1.02	0.96	0.95	0.91	0.90	0.94	0.94	0.93	0.94	0.98	1.02	0.99
UR2	1.08	1.02	0.98	0.97	0.93	0.90	0.93	0.90	0.92	0.92	0.97	1.01	0.98
Rec - East	1.21	1.20	1.09	1.01	0.91	0.81	0.77	0.79	0.91	0.95	1.05	1.13	0.99
Rec - West	1.46	1.38	1.32	1.06	0.94	0.79	0.59	0.69	0.97	0.99	1.18	1.28	0.99

Round off:
0-999 = 10
>1000 = 100

U = Urban
R = Rural

1 - Interstate
2 - Freeway and Expressway
3 - Other Principal Arterial
4 - Minor Arterial
5 - Major Collector
6 - Minor Collector
7 - Local Road and Street

UR2 Group - Combination of Urban Freeways and Expressways and Rural Freeways and Expressways.

Recreational - East Group - Cape Cod (all towns) including the town of Plymouth south of Route 3A (stations 7014,7079,7080,7090,7091,7092,7093,7094,7095,7096,7097,7108 and 7178), Martha's Vineyard and Nantucket.

Recreational - West Group - Continuous Stations 2 and 189 including stations 1066,1067,1083,1084,1085,1086,1087,1088,1089,1090,1091,1092,1093,1094,1095,1096,1097,1098,1099,1100,1101,1102,1103,1104,1105,1106,1107,1108,1113, 1114,1116,2196,2197 and 2198.

5/2/2025

Appendix C Crash Reports

The Hingham Center for Active Living Traffic Impact Study

Town of Hingham, Massachusetts

EDM Studio

45 South Main Street
Unionville, CT 06085

SLR Project No.: 141.051021.00001

Client Reference No: 21840.00008

December 4, 2025 *Revised January 30, 2026*

Appendix D Public Transportation

The Hingham Center for Active Living Traffic Impact Study

Town of Hingham, Massachusetts

EDM Studio

45 South Main Street
Unionville, CT 06085

SLR Project No.: 141.051021.00001

Client Reference No: 21840.00008

December 4, 2025 *Revised January 30, 2026*

INTERSECTION CRASH RATE WORKSHEET, 2014-2016

CITY/TOWN : HINGHAM COUNT DATE : Nov-18

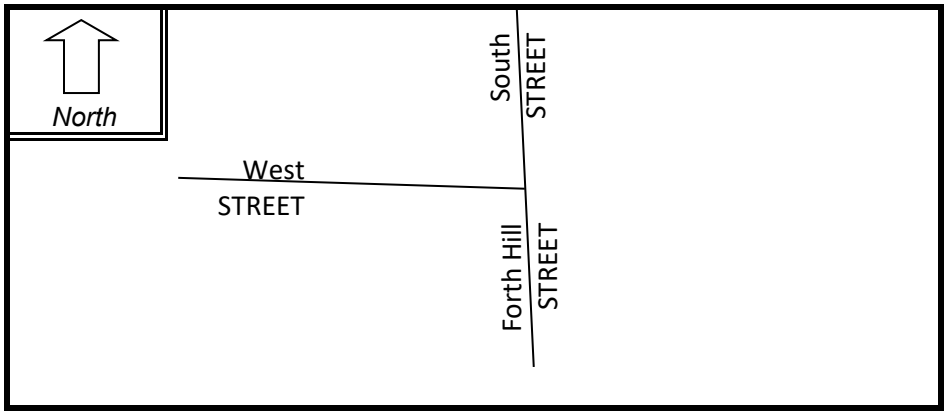
DISTRICT : 4 UNSIGNALIZED : SIGNALIZED : X

~ INTERSECTION DATA ~

MAJOR STREET : FORTH HILL STREET (NB) AND WEST STREET (EB)

MINOR STREET(S) : SOUTH STREET (SB)

INTERSECTION DIAGRAM
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	EB	WB	NB	SB		
PEAK HOURLY VOLUMES (AM/PM) :	424	0	796	152		1,372

" K " FACTOR : **0.11** INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **12,473**

TOTAL # OF CRASHES : 6 # OF YEARS : 5 AVERAGE # OF CRASHES PER YEAR (**A**) : **1.20**

CRASH RATE CALCULATION : **0.26** RATE = $\frac{(A * 1{,}000{,}000)}{(V * 365)}$

Comments : To remain conservative Morning Peak Hour was used

Project Title & Date: Hingham Senior Center

INTERSECTION CRASH RATE WORKSHEET, 2017-2021

CITY/TOWN : HINGHAM COUNT DATE : Jun-25

DISTRICT : 5 UNSIGNALIZED : X SIGNALIZED :

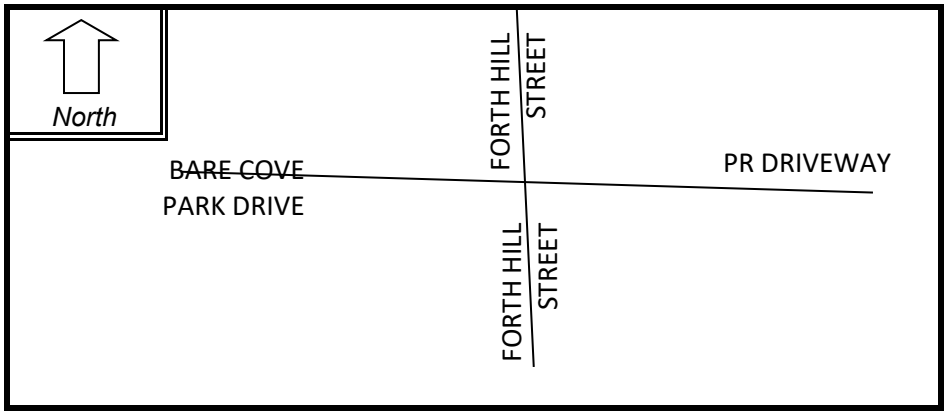
~ INTERSECTION DATA ~

MAJOR STREET : FORTH HILL STREET(NB AND SB)

MINOR STREET(S) : BARE COVE PARK DRIVE (EB)

PRIVATE DRIVEWAY (WB)

INTERSECTION DIAGRAM
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	EB	WB	NB	SB		
PEAK HOURLY VOLUMES (AM/PM) :	40	5	795	535		**1,375**

" K " FACTOR : **0.11** INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **12,500**

TOTAL # OF CRASHES : 2 # OF YEARS : 5 AVERAGE # OF CRASHES PER YEAR (**A**) : **0.40**

CRASH RATE CALCULATION : **0.09** RATE = $\frac{(A * 1{,}000{,}000)}{(V * 365)}$

Comments : To remain conservative Morning Peak Hour was used

Project Title & Date: Hingham Senior Center

Appendix E Background Developments Trip Generation

The Hingham Center for Active Living Traffic Impact Study

Town of Hingham, Massachusetts

EDM Studio

45 South Main Street
Unionville, CT 06085

SLR Project No.: 141.051021.00001

Client Reference No: 21840.00008

December 4, 2025 *Revised January 30, 2026*

Trip Generation Associated with the Proposed Pickleball Facility

SLR based the trip generation rates for the proposed Pickleball Facility on Land Use Code (LUC) 489 (Pickleball Courts) from the Institute of Transportation Engineers (ITE) *Trip Generation*, 12th Edition, to estimate vehicle trip rates for the proposed facility. Table Appendix A presents the site trips associated with the proposed Pickleball Facility during the weekday morning, weekday afternoon, and Saturday midday peak periods.

Table Appendix A – Proposed Trip Generation

Time Period		Facility with 9 Courts (LUC 489)
Weekday a.m.	Entering	23
	Exiting	10
	Total	33
Weekday p.m.	Entering	33
	Exiting	21
	Total	54
Saturday Midday	Entering	38
	Exiting	31
	Total	69

Based on ITE *Trip Generation*, the proposed 9-Court Pickleball Facility would result in approximately 33 trips (23 trips in and 10 trips out) during the weekday morning peak hour, 54 trips (33 trips in and 21 trips out) during the weekday afternoon peak hour, and 69 trips (38 trips in and 31 trips out) during the Saturday peak hour.

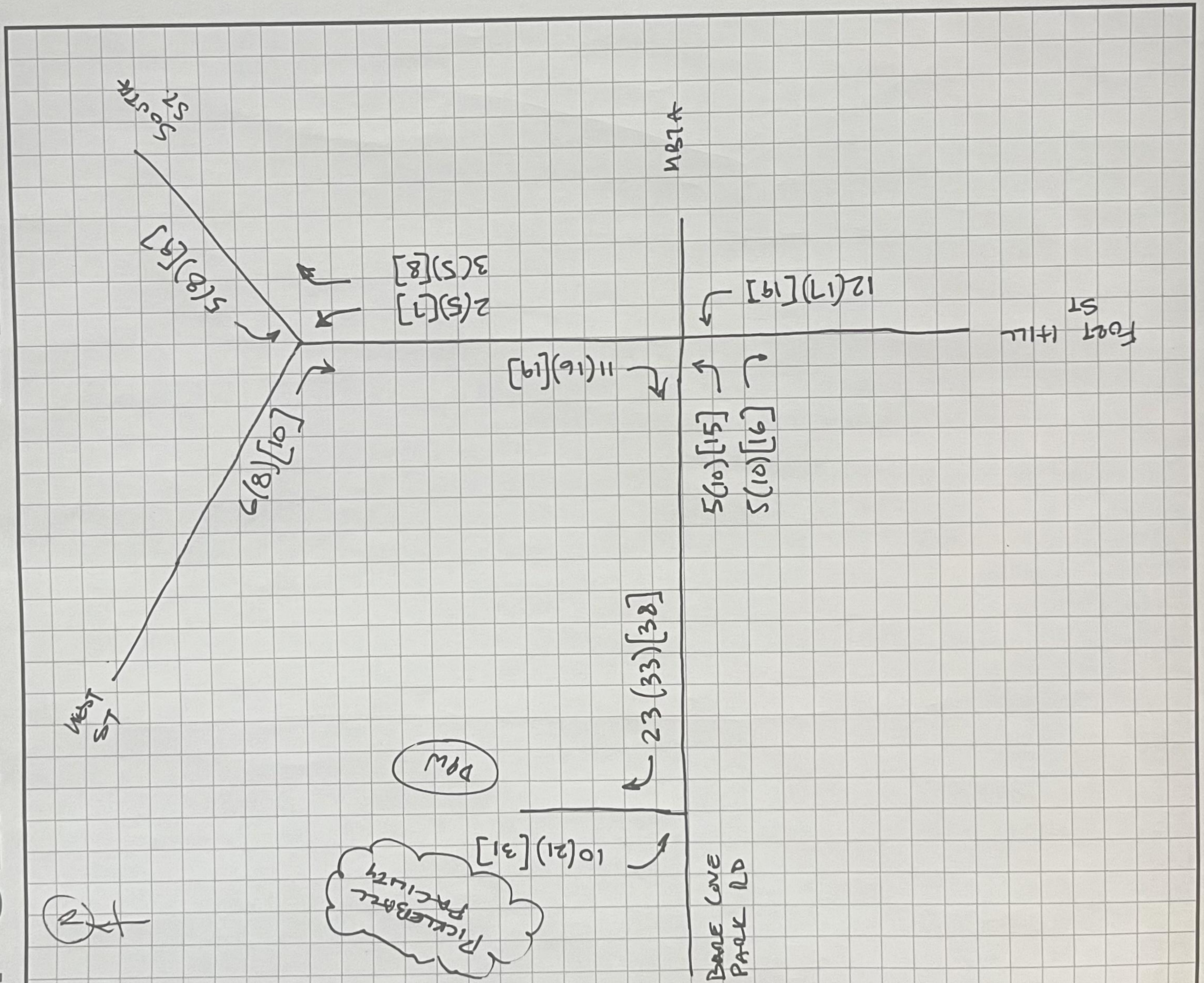
JOB _____

SHEET NO. _____ OF _____ SCALE _____

CALCULATED BY _____ DATE _____

CHECKED BY _____ DATE _____

SLR



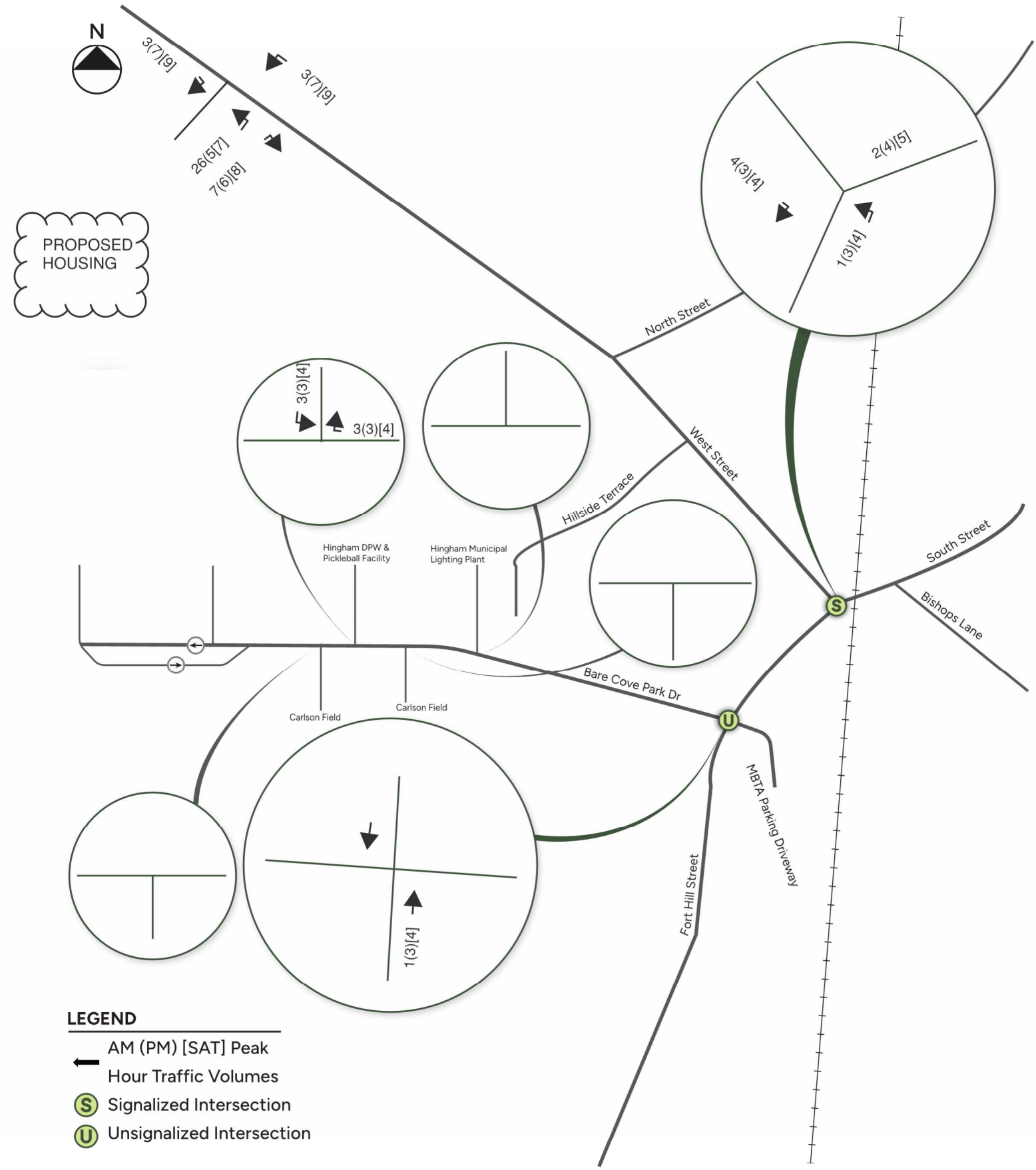
Trip Generation Associated with the Proposed 100 Beal St. Development

SLR based the trip generation rates for the proposed 100-unit senior housing at 100 Beal Street in Hingham on Land Use Code (LUC) 252 (Senior Adult Housing-Multifamily) from the Institute of Transportation Engineers (ITE) *Trip Generation*, 12th Edition, to estimate vehicle trip rates for the proposed senior housing. Table Appendix-B presents the site trips associated with the proposed senior housing during the weekday morning, weekday afternoon, and Saturday midday peak periods.

Table Appendix B – Proposed Trip Generation

Time Period		Development with 100 Units (LUC 252)
Weekday a.m.	Entering	6
	Exiting	13
	Total	19
Weekday p.m.	Entering	14
	Exiting	11
	Total	25
Saturday Midday	Entering	18
	Exiting	15
	Total	33

Based on ITE *Trip Generation*, the proposed 100-Unit senior housing development at 100 Beal Stret in Hingham would result in approximately 16 trips (six trips in and 13 trips out) during the weekday morning peak hour, 25 trips (14 trips in and 11 trips out) during the weekday afternoon peak hour, and 33 trips (18 trips in and 15 trips out) during the Saturday peak hour.

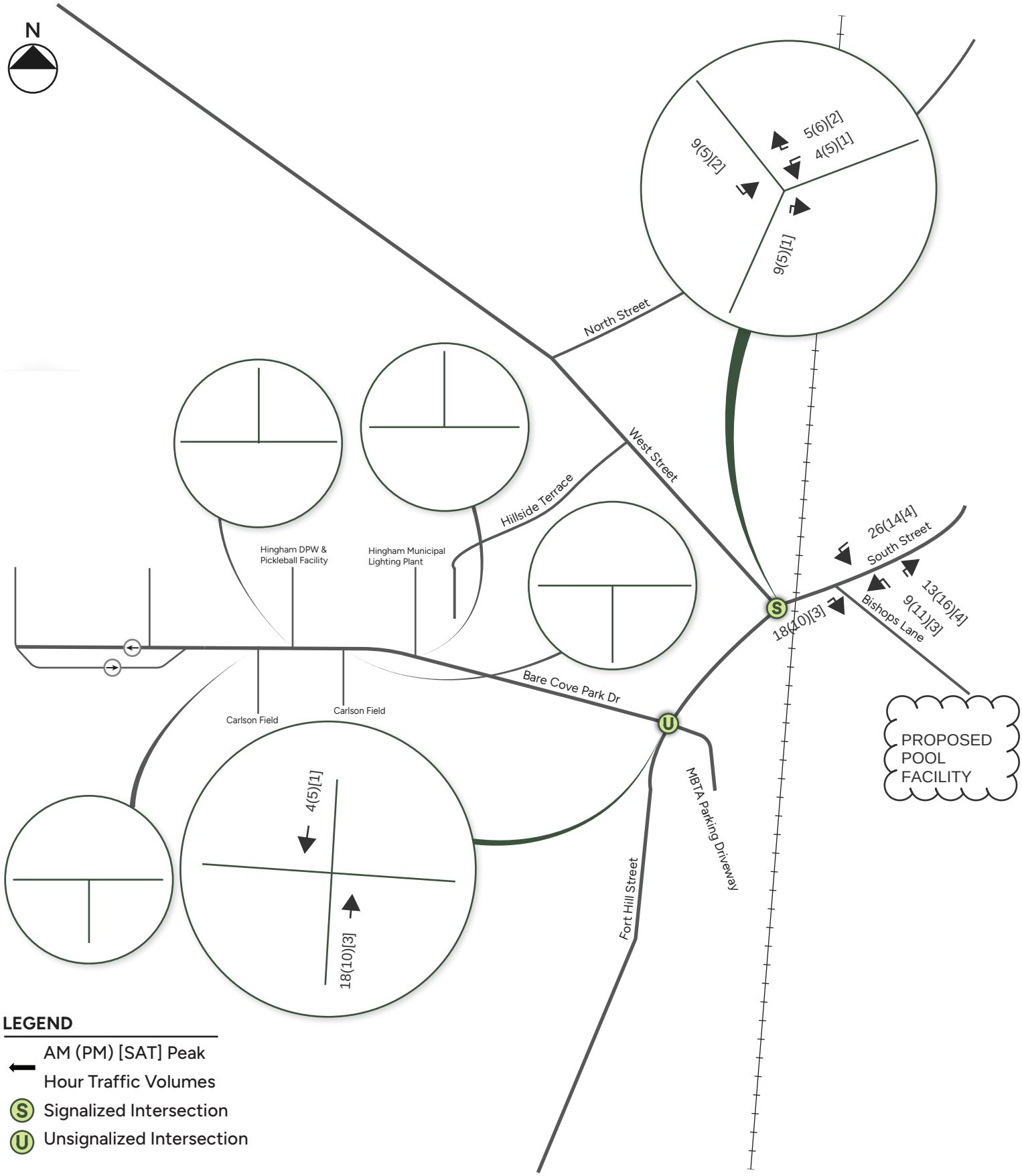

N
3(7)[9]
3(7)[9]
26(5)[7]
7(6)[8]
PROPOSED HOUSING
4(3)[4]
2(4)[5]
1(3)[4]
North Street
West Street
3(3)[4]
3(3)[4]
Hillside Terrace
Hingham DPW & Pickleball Facility
Hingham Municipal Lighting Plant
South Street
Bishops Lane
Bare Cove Park Dr
Carlson Field
Carlson Field
MBTA Parking Driveway
Fort Hill Street
1(3)[4]
LEGEND
AM (PM) [SAT] Peak Hour Traffic Volumes
Signalized Intersection
Unsignalized Intersection

Trip Generation Associated with the Proposed Pool Facility at SSCC

SLR based the trip generation rates for the proposed pool facility at SSCC on Land Use Code (LUC) 495 (Recreational Community Center) from the Institute of Transportation Engineers (ITE) *Trip Generation*, 12th Edition, to estimate vehicle trip rates for the proposed pool facility. Table Appendix C presents the site trips associated with the proposed pool facility during the weekday morning, weekday afternoon, and Saturday midday peak periods.

Time Period		Center with 12,000 SF GFA (LUC 495)
Weekday a.m.	Entering	44
	Exiting	22
	Total	66
Weekday p.m.	Entering	24
	Exiting	27
	Total	51
Saturday Midday	Entering	7
	Exiting	7
	Total	14

Based on ITE *Trip Generation*, the proposed pool facility and a club house with 12,000-foot gross floor area (GFA) would result in approximately 66 trips (44 trips in and 22 trips out) during the weekday morning peak hour, 51 trips (24 trips in and 27 trips out) during the weekday afternoon peak hour, and 14trips (seven trips in and seven trips out) during the Saturday peak hour.


N
North Street
West Street
Hillside Terrace
Bare Cove Park Dr
South Street
Bishops Lane
Fort Hill Street
MBTA Parking Driveway
Hingham DPW & Pickleball Facility
Hingham Municipal Lighting Plant
Carlson Field
Carlson Field
PROPOSED POOL FACILITY
9(5)[2]
5(6)[2]
4(5)[1]
9(5)[1]
26(14)[4]
13(16)[4]
9(11)[3]
18(10)[3]
4(5)[1]
18(10)[3]
S
U
LEGEND
AM (PM) [SAT] Peak Hour Traffic Volumes
Signalized Intersection
Unsignalized Intersection

Appendix F *Synchro* Analysis Worksheets

The Hingham Center for Active Living Traffic Impact Study

Town of Hingham, Massachusetts

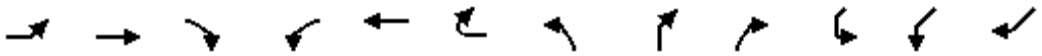
EDM Studio

45 South Main Street
Unionville, CT 06085

SLR Project No.: 141.051021.00001

Client Reference No: 21840.00008

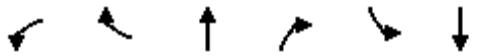
December 4, 2025 *Revised January 30, 2026*



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	NBR2	SWL2	SWL	SWR
Lane Configurations												
Traffic Volume (vph)	23	0	17	2	0	3	17	771	7	13	499	23
Future Volume (vph)	23	0	17	2	0	3	17	771	7	13	499	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		130	0		0	90	0			100	0
Storage Lanes	0		1	0		0	1	1			1	0
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.921			0.850			0.993	
Flt Protected		0.950			0.980		0.950			0.950	0.954	
Satd. Flow (prot)	0	1543	1369	0	1715	0	1805	1539	0	1805	1721	0
Flt Permitted		0.950			0.980		0.950			0.950	0.954	
Satd. Flow (perm)	0	1543	1369	0	1715	0	1805	1539	0	1805	1721	0
Link Speed (mph)		30			30		30				30	
Link Distance (ft)		713			153		621				434	
Travel Time (s)		16.2			3.5		14.1				9.9	
Peak Hour Factor	0.77	0.77	0.77	0.42	0.42	0.42	0.96	0.96	0.96	0.83	0.83	0.83
Heavy Vehicles (%)	17%	0%	18%	0%	0%	0%	0%	5%	0%	0%	3%	39%
Adj. Flow (vph)	30	0	22	5	0	7	18	803	7	16	601	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	30	22	0	12	0	18	810	0	16	629	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0		12				24	
Link Offset(ft)		0			0		0				0	
Crosswalk Width(ft)		16			16		16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15	9	9	15	15	9
Sign Control		Stop			Stop		Free				Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.2%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Lane Configurations							
Traffic Volume (vph)	135	17	491	305	17	407	
Future Volume (vph)	135	17	491	305	17	407	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.985			0.850			
Flt Protected	0.958				0.950		
Satd. Flow (prot)	1691	0	1810	1538	1805	1845	
Flt Permitted	0.958				0.950		
Satd. Flow (perm)	1691	0	1810	1538	1805	1845	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	7			273			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.72	0.72	0.97	0.97	0.85	0.85	
Growth Factor	100%	100%	100%	100%	100%	85%	
Heavy Vehicles (%)	6%	6%	5%	5%	0%	3%	
Adj. Flow (vph)	188	24	506	314	20	407	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	212	0	506	314	20	407	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	

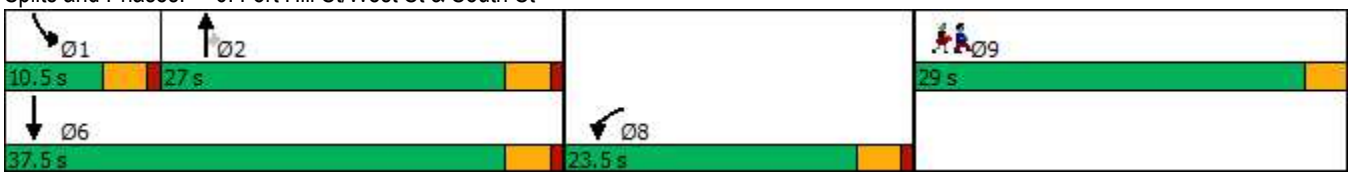


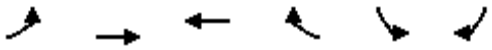
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Protected Phases	8		2		1	6	9
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	1.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	29.0
Total Split (s)	23.5		27.0	27.0	10.5	37.5	29.0
Total Split (%)	26.1%		30.0%	30.0%	11.7%	41.7%	32%
Maximum Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	0.2
Recall Mode	None		Max	Max	None	Max	Ped
Walk Time (s)			7.0	7.0			7.0
Flash Dont Walk (s)			11.0	11.0			19.0
Pedestrian Calls (#/hr)			0	0			2
Act Effct Green (s)	15.1		29.5	29.5	6.1	33.6	
Actuated g/C Ratio	0.18		0.34	0.34	0.07	0.39	
v/c Ratio	0.70		0.81	0.44	0.16	0.56	
Control Delay	44.9		41.2	7.6	41.6	24.8	
Queue Delay	0.0		0.0	0.0	0.0	0.0	
Total Delay	44.9		41.2	7.6	41.6	24.8	
LOS	D		D	A	D	C	
Approach Delay	44.9		28.3			25.6	
Approach LOS	D		C			C	
90th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
90th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
70th %ile Green (s)	18.4		23.0	23.0	6.5	33.5	26.0
70th %ile Term Code	Gap		MaxR	MaxR	Max	MaxR	Ped
50th %ile Green (s)	15.6		33.5	33.5	0.0	33.5	26.0
50th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
30th %ile Green (s)	13.0		33.5	33.5	0.0	33.5	26.0
30th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
10th %ile Green (s)	9.4		33.5	33.5	0.0	33.5	26.0
10th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
Stops (vph)	134		356	55	18	263	
Fuel Used(gal)	3		8	2	0	5	
CO Emissions (g/hr)	201		541	126	22	322	
NOx Emissions (g/hr)	39		105	25	4	63	
VOC Emissions (g/hr)	47		125	29	5	75	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	105		228	14	10	169	
Queue Length 95th (ft)	134		#520	89	32	257	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Base Capacity (vph)	390		624	709	137	722	
Starvation Cap Reductn	0		0	0	0	0	
Spillback Cap Reductn	0		0	0	0	0	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.54		0.81	0.44	0.15	0.56	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 85.7			
Natural Cycle: 85			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 29.9		Intersection LOS: C	
Intersection Capacity Utilization 41.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 88.9			
50th %ile Actuated Cycle: 86.1			
30th %ile Actuated Cycle: 83.5			
10th %ile Actuated Cycle: 79.9			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 6: Fort Hill St/West St & South St



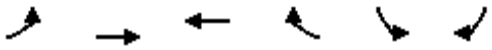


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	39	37	3	1	0
Future Volume (vph)	0	39	37	3	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.991			
Flt Protected					0.950	
Satd. Flow (prot)	0	1863	1846	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	1863	1846	0	1770	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		316	713		159	
Travel Time (s)		7.2	16.2		3.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	42	40	3	1	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	42	43	0	1	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	14	0	25	12	0	25
Future Volume (vph)	14	0	25	12	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected				0.967		
Satd. Flow (prot)	1863	0	0	1801	1611	0
Flt Permitted				0.967		
Satd. Flow (perm)	1863	0	0	1801	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	197			316	129	
Travel Time (s)	4.5			7.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	0	27	13	0	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	0	0	40	27	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.7%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	8	2	10	6	0
Future Volume (vph)	0	8	2	10	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.886			
Flt Protected					0.950	
Satd. Flow (prot)	0	1863	1650	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	1863	1650	0	1770	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		147	197		186	
Travel Time (s)		3.3	4.5		4.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	9	2	11	7	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	9	13	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	2	0	0	8
Future Volume (vph)	0	0	2	0	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected				0.950		
Satd. Flow (prot)	1863	0	0	1770	1611	0
Flt Permitted				0.950		
Satd. Flow (perm)	1863	0	0	1770	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	340			147	169	
Travel Time (s)	7.7			3.3	3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	2	0	0	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2	9	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	23	0	17	2	0	3	17	771	7	13	499	23
Future Vol, veh/h	23	0	17	2	0	3	17	771	7	13	499	23
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	-	-	130	-	-	-	90	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	42	42	42	96	96	96	83	83	83
Heavy Vehicles, %	17	0	18	0	0	0	0	5	0	0	3	39
Mvmt Flow	30	0	22	5	0	7	18	803	7	16	601	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1493	1493	615	1501	1504	807	629	0	0	810	0	0
Stage 1	647	647	-	843	843	-	-	-	-	-	-	-
Stage 2	846	846	-	658	661	-	-	-	-	-	-	-
Critical Hdwy	7.27	6.5	6.38	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.27	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.27	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.653	4	3.462	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	94	124	463	101	123	385	963	-	-	825	-	-
Stage 1	436	470	-	361	382	-	-	-	-	-	-	-
Stage 2	336	381	-	457	463	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	90	119	463	93	118	385	963	-	-	825	-	-
Mov Cap-2 Maneuver	90	119	-	93	118	-	-	-	-	-	-	-
Stage 1	428	461	-	354	375	-	-	-	-	-	-	-
Stage 2	324	374	-	427	454	-	-	-	-	-	-	-

Approach	EB	WB	NE	SW
HCM Control Delay, s	42.2	27.6	0.2	0.2
HCM LOS	E	D		

Minor Lane/Major Mvmt	NEL	NET	NER	EBLn1	EBLn2	WBLn1	SWL	SWT	SWR
Capacity (veh/h)	963	-	-	90	463	171	825	-	-
HCM Lane V/C Ratio	0.018	-	-	0.332	0.048	0.07	0.019	-	-
HCM Control Delay (s)	8.8	-	-	63.7	13.2	27.6	9.4	-	-
HCM Lane LOS	A	-	-	F	B	D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.3	0.1	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	39	37	3	1	0
Future Vol, veh/h	0	39	37	3	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	42	40	3	1	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	43	0	-	0	84	42
Stage 1	-	-	-	-	42	-
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	1566	-	-	-	918	1029
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	980	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1566	-	-	-	918	1029
Mov Cap-2 Maneuver	-	-	-	-	918	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	980	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1566	-	-	-	918
HCM Lane V/C Ratio	-	-	-	-	0.001
HCM Control Delay (s)	0	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	5.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	0	25	12	0	25
Future Vol, veh/h	14	0	25	12	0	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	-	-	-	-	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	0	27	13	0	27

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	15	0	82	15
Stage 1	-	-	-	-	15	-
Stage 2	-	-	-	-	67	-
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	-	920	1065
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	956	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1603	-	904	1065
Mov Cap-2 Maneuver	-	-	-	-	904	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	940	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.9	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1065	-	-	1603	-
HCM Lane V/C Ratio	0.026	-	-	0.017	-
HCM Control Delay (s)	8.5	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	2	10	6	0
Future Vol, veh/h	0	8	2	10	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	2	11	7	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	13	0	-	0	17	8
Stage 1	-	-	-	-	8	-
Stage 2	-	-	-	-	9	-
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	1606	-	-	-	1001	1074
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1606	-	-	-	1001	1074
Mov Cap-2 Maneuver	-	-	-	-	1001	-
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	1014	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1606	-	-	-	1001
HCM Lane V/C Ratio	-	-	-	-	0.007
HCM Control Delay (s)	0	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	7.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	2	0	0	8
Future Vol, veh/h	0	0	2	0	0	8
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	0	0	2	0	0	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	5	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	4	-
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	-	-	1622	-	1017	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1019	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1622	-	1016	1084
Mov Cap-2 Maneuver	-	-	-	-	1016	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1018	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.2	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1084	-	-	1622	-
HCM Lane V/C Ratio	0.008	-	-	0.001	-
HCM Control Delay (s)	8.3	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

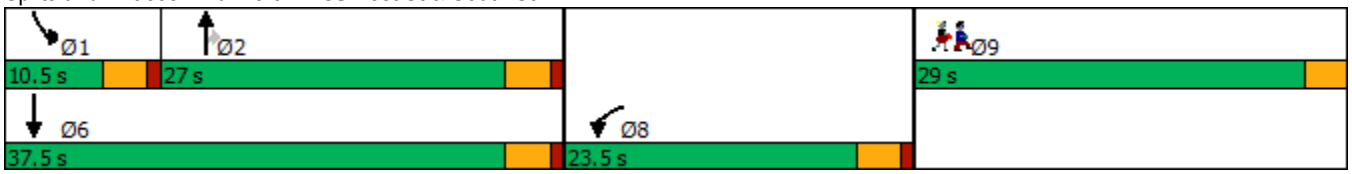
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Lane Configurations							
Traffic Volume (vph)	132	12	389	209	24	552	
Future Volume (vph)	132	12	389	209	24	552	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.989			0.850			
Flt Protected	0.956				0.950		
Satd. Flow (prot)	1764	0	1900	1615	1805	1881	
Flt Permitted	0.956				0.950		
Satd. Flow (perm)	1764	0	1900	1615	1805	1881	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	5			237			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.92	0.92	
Heavy Vehicles (%)	2%	0%	0%	0%	0%	1%	
Adj. Flow (vph)	181	16	458	246	26	600	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	197	0	458	246	26	600	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	
Protected Phases	8		2		1	6	9

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	1.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	29.0
Total Split (s)	23.5		27.0	27.0	10.5	37.5	29.0
Total Split (%)	26.1%		30.0%	30.0%	11.7%	41.7%	32%
Maximum Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None		Max	Max	None	Max	Ped
Walk Time (s)							7.0
Flash Dont Walk (s)							19.0
Pedestrian Calls (#/hr)							2
Act Effct Green (s)	14.2		29.5	29.5	6.2	33.6	
Actuated g/C Ratio	0.17		0.35	0.35	0.07	0.40	
v/c Ratio	0.66		0.69	0.34	0.20	0.81	
Control Delay	43.0		33.8	5.8	42.2	33.9	
Queue Delay	0.0		0.0	0.0	0.0	0.0	
Total Delay	43.0		33.8	5.8	42.2	33.9	
LOS	D		C	A	D	C	
Approach Delay	43.0		24.0			34.3	
Approach LOS	D		C			C	
90th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
90th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
70th %ile Green (s)	16.9		23.0	23.0	6.5	33.5	26.0
70th %ile Term Code	Gap		MaxR	MaxR	Max	MaxR	Ped
50th %ile Green (s)	14.4		33.5	33.5	0.0	33.5	26.0
50th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
30th %ile Green (s)	12.0		33.5	33.5	0.0	33.5	26.0
30th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
10th %ile Green (s)	8.8		33.5	33.5	0.0	33.5	26.0
10th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
Stops (vph)	126		295	28	24	454	
Fuel Used(gal)	3		6	1	0	9	
CO Emissions (g/hr)	185		393	77	30	598	
NOx Emissions (g/hr)	36		76	15	6	116	
VOC Emissions (g/hr)	43		91	18	7	139	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	97		190	3	13	278	
Queue Length 95th (ft)	128		#402	51	40	#502	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		
Base Capacity (vph)	410		661	717	138	744	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Starvation Cap Reductn	0		0	0	0	0	
Spillback Cap Reductn	0		0	0	0	0	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.48		0.69	0.34	0.19	0.81	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 84.8			
Natural Cycle: 85			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 30.7		Intersection LOS: C	
Intersection Capacity Utilization 43.8%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 87.4			
50th %ile Actuated Cycle: 84.9			
30th %ile Actuated Cycle: 82.5			
10th %ile Actuated Cycle: 79.3			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 6: Fort Hill St/West St & South St



Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	0	18	10	0	20	4	575	4	3	678	7
Future Vol, veh/h	9	0	18	10	0	20	4	575	4	3	678	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	-	-	130	-	-	-	90	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	28	28	28	88	88	88	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	1	0
Mvmt Flow	11	0	21	36	0	71	5	653	5	3	699	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1410	1377	703	1385	1378	656	706	0	0	658	0	0
Stage 1	709	709	-	666	666	-	-	-	-	-	-	-
Stage 2	701	668	-	719	712	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	117	146	441	122	146	469	902	-	-	939	-	-
Stage 1	428	440	-	452	460	-	-	-	-	-	-	-
Stage 2	433	459	-	423	439	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	99	145	441	115	145	469	902	-	-	939	-	-
Mov Cap-2 Maneuver	99	145	-	115	145	-	-	-	-	-	-	-
Stage 1	425	439	-	449	457	-	-	-	-	-	-	-
Stage 2	365	456	-	401	438	-	-	-	-	-	-	-

Approach	EB	WB	NE	SW
HCM Control Delay, s	24.3	33.4	0.1	0
HCM LOS	C	D		

Minor Lane/Major Mvmt	NEL	NET	NER	EBLn1	EBLn2	WBLn1	SWL	SWT	SWR
Capacity (veh/h)	902	-	-	99	441	231	939	-	-
HCM Lane V/C Ratio	0.005	-	-	0.108	0.049	0.464	0.003	-	-
HCM Control Delay (s)	9	-	-	45.7	13.6	33.4	8.8	-	-
HCM Lane LOS	A	-	-	E	B	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.2	2.3	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	27	10	0	1	0
Future Vol, veh/h	0	27	10	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	29	11	0	1	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	11	0	-	0	40	11
Stage 1	-	-	-	-	11	-
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	1608	-	-	-	972	1070
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1608	-	-	-	972	1070
Mov Cap-2 Maneuver	-	-	-	-	972	-
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	994	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1608	-	-	-	972
HCM Lane V/C Ratio	-	-	-	-	0.001
HCM Control Delay (s)	0	-	-	-	8.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	5.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	11	0	8	2	0	16
Future Vol, veh/h	11	0	8	2	0	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	-	-	-	-	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	0	9	2	0	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	12	0	32	12
Stage 1	-	-	-	-	12	-
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	-	-	1607	-	982	1069
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	1003	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1607	-	976	1069
Mov Cap-2 Maneuver	-	-	-	-	976	-
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	997	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.8	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1069	-	-	1607	-
HCM Lane V/C Ratio	0.016	-	-	0.005	-
HCM Control Delay (s)	8.4	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	1	1	5	0
Future Vol, veh/h	0	6	1	1	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	7	1	1	5	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2	0	-	0	9	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	7	-
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	-	-	-	1011	1082
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1016	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1620	-	-	-	1011	1082
Mov Cap-2 Maneuver	-	-	-	-	1011	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	1016	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1620	-	-	-	1011
HCM Lane V/C Ratio	-	-	-	-	0.005
HCM Control Delay (s)	0	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	7.1

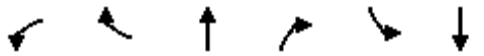
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	1	0	0	6
Future Vol, veh/h	0	0	1	0	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	1	0	0	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	3	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	2	-
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	-	-	1622	-	1019	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1021	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1622	-	1018	1084
Mov Cap-2 Maneuver	-	-	-	-	1018	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1020	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.2	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1084	-	-	1622	-
HCM Lane V/C Ratio	0.006	-	-	0.001	-
HCM Control Delay (s)	8.3	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Lane Configurations							
Traffic Volume (vph)	200	21	425	298	17	481	
Future Volume (vph)	200	21	425	298	17	481	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.987			0.850			
Flt Protected	0.957				0.950		
Satd. Flow (prot)	1763	0	1900	1615	1805	1881	
Flt Permitted	0.957				0.950		
Satd. Flow (perm)	1763	0	1900	1615	1805	1881	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	5			309			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.92	0.92	
Heavy Vehicles (%)	2%	0%	0%	0%	0%	1%	
Adj. Flow (vph)	274	29	500	351	18	523	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	303	0	500	351	18	523	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	
Protected Phases	8		2		1	6	9

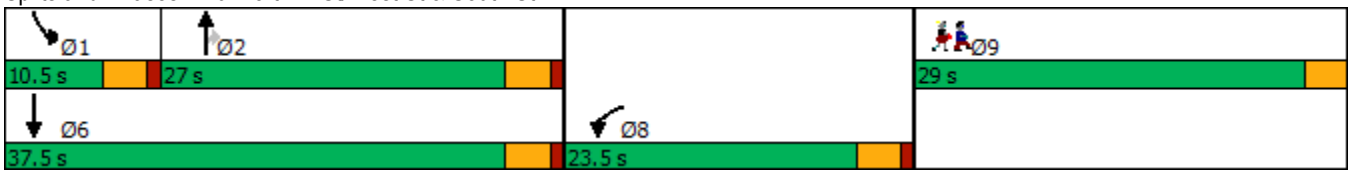


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	1.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	29.0
Total Split (s)	23.5		27.0	27.0	10.5	37.5	29.0
Total Split (%)	26.1%		30.0%	30.0%	11.7%	41.7%	32%
Maximum Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None		Max	Max	None	Max	Ped
Walk Time (s)							7.0
Flash Dont Walk (s)							19.0
Pedestrian Calls (#/hr)							2
Act Effct Green (s)	17.9		29.4	29.4	6.1	33.5	
Actuated g/C Ratio	0.20		0.33	0.33	0.07	0.38	
v/c Ratio	0.84		0.79	0.47	0.15	0.73	
Control Delay	55.0		40.6	7.4	42.1	31.4	
Queue Delay	0.0		0.0	0.0	0.0	0.0	
Total Delay	55.0		40.6	7.4	42.1	31.4	
LOS	D		D	A	D	C	
Approach Delay	55.0		26.9			31.8	
Approach LOS	D		C			C	
90th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
90th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
70th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
70th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
50th %ile Green (s)	19.5		33.5	33.5	0.0	33.5	26.0
50th %ile Term Code	Max		Hold	Hold	Skip	MaxR	Ped
30th %ile Green (s)	17.9		33.5	33.5	0.0	33.5	26.0
30th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
10th %ile Green (s)	13.4		33.5	33.5	0.0	33.5	26.0
10th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
Stops (vph)	195		320	51	19	405	
Fuel Used(gal)	5		7	2	0	7	
CO Emissions (g/hr)	322		470	122	22	507	
NOx Emissions (g/hr)	63		91	24	4	99	
VOC Emissions (g/hr)	75		109	28	5	118	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	161		238	15	10	254	
Queue Length 95th (ft)	195		#454	74	31	378	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		
Base Capacity (vph)	392		631	742	132	713	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Starvation Cap Reductn	0		0	0	0	0	
Spillback Cap Reductn	0		0	0	0	0	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.77		0.79	0.47	0.14	0.73	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 88.5			
Natural Cycle: 85			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 33.5		Intersection LOS: C	
Intersection Capacity Utilization 44.3%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 90			
50th %ile Actuated Cycle: 90			
30th %ile Actuated Cycle: 88.4			
10th %ile Actuated Cycle: 83.9			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 6: Fort Hill St/West St & South St



Intersection	
Int Delay, s/veh	31.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	130	1	102	0	0	0	34	568	2	4	684	41
Future Vol, veh/h	130	1	102	0	0	0	34	568	2	4	684	41
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	-	-	130	-	-	-	90	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	28	28	28	88	88	88	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	1	0
Mvmt Flow	155	1	121	0	0	0	39	645	2	4	705	42

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1458	1459	726	1519	1479	646	747	0	0	647	0	0
Stage 1	734	734	-	724	724	-	-	-	-	-	-	-
Stage 2	724	725	-	795	755	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 109	131	428	98	127	475	870	-	-	948	-	-
Stage 1	415	429	-	420	433	-	-	-	-	-	-	-
Stage 2	420	433	-	384	420	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 105	125	428	67	121	475	870	-	-	948	-	-
Mov Cap-2 Maneuver	~ 105	125	-	67	121	-	-	-	-	-	-	-
Stage 1	396	427	-	401	414	-	-	-	-	-	-	-
Stage 2	401	414	-	273	418	-	-	-	-	-	-	-

Approach	EB	WB	NE	SW
HCM Control Delay, s	195.7	0	0.5	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NEL	NET	NER	EBLn1	EBLn2	WBLn1	SWL	SWT	SWR
Capacity (veh/h)	870	-	-	105	428	-	948	-	-
HCM Lane V/C Ratio	0.044	-	-	1.485	0.284	-	0.004	-	-
HCM Control Delay (s)	9.3	-	-	$ 335.1	16.7	0	8.8	-	-
HCM Lane LOS	A	-	-	F	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	11.5	1.2	-	0	-	-

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

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	232	75	0	1	0
Future Vol, veh/h	0	232	75	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	252	82	0	1	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	82	0	-	0	334	82
Stage 1	-	-	-	-	82	-
Stage 2	-	-	-	-	252	-
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	1515	-	-	-	661	978
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	790	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1515	-	-	-	661	978
Mov Cap-2 Maneuver	-	-	-	-	661	-
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	790	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1515	-	-	-	661
HCM Lane V/C Ratio	-	-	-	-	0.002
HCM Control Delay (s)	0	-	-	-	10.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	6.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	82	0	62	13	0	150
Future Vol, veh/h	82	0	62	13	0	150
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	89	0	67	14	0	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	89	0	237	89
Stage 1	-	-	-	-	89	-
Stage 2	-	-	-	-	148	-
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	-	-	1506	-	751	969
Stage 1	-	-	-	-	934	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1506	-	717	969
Mov Cap-2 Maneuver	-	-	-	-	717	-
Stage 1	-	-	-	-	934	-
Stage 2	-	-	-	-	840	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.2	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	969	-	-	1506	-
HCM Lane V/C Ratio	0.168	-	-	0.045	-
HCM Control Delay (s)	9.5	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	72	8	5	10	0
Future Vol, veh/h	0	72	8	5	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	78	9	5	11	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	14	0	-	0	90	12
Stage 1	-	-	-	-	12	-
Stage 2	-	-	-	-	78	-
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	1604	-	-	-	910	1069
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	945	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1604	-	-	-	910	1069
Mov Cap-2 Maneuver	-	-	-	-	910	-
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	945	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1604	-	-	-	910
HCM Lane V/C Ratio	-	-	-	-	0.012
HCM Control Delay (s)	0	-	-	-	9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	8.4

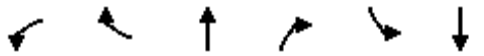
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	8	0	0	72
Future Vol, veh/h	0	0	8	0	0	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	9	0	0	78

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	19	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	18	-
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	-	-	1622	-	998	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1005	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1622	-	992	1084
Mov Cap-2 Maneuver	-	-	-	-	992	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	999	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.2	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1084	-	-	1622	-
HCM Lane V/C Ratio	0.072	-	-	0.005	-
HCM Control Delay (s)	8.6	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Lane Configurations							
Traffic Volume (vph)	154	25	528	338	30	450	
Future Volume (vph)	154	25	528	338	30	450	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.981			0.850			
Flt Protected	0.959				0.950		
Satd. Flow (prot)	1686	0	1810	1538	1805	1845	
Flt Permitted	0.959				0.950		
Satd. Flow (perm)	1686	0	1810	1538	1805	1845	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	8			282			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.72	0.72	0.97	0.97	0.85	0.85	
Growth Factor	100%	100%	100%	100%	100%	85%	
Heavy Vehicles (%)	6%	6%	5%	5%	0%	3%	
Adj. Flow (vph)	214	35	544	348	35	450	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	249	0	544	348	35	450	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Protected Phases	8		2		1	6	9
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	1.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	29.0
Total Split (s)	23.5		27.0	27.0	10.5	37.5	29.0
Total Split (%)	26.1%		30.0%	30.0%	11.7%	41.7%	32%
Maximum Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None		Max	Max	None	Max	Ped
Walk Time (s)							7.0
Flash Dont Walk (s)							19.0
Pedestrian Calls (#/hr)							1
Act Effct Green (s)	16.4		27.4	27.4	6.2	33.6	
Actuated g/C Ratio	0.19		0.31	0.31	0.07	0.39	
v/c Ratio	0.77		0.95	0.51	0.27	0.63	
Control Delay	48.8		62.0	9.6	44.9	27.2	
Queue Delay	0.0		0.0	0.0	0.0	0.0	
Total Delay	48.8		62.0	9.6	44.9	27.2	
LOS	D		E	A	D	C	
Approach Delay	48.8		41.6			28.5	
Approach LOS	D		D			C	
90th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
90th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
70th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
70th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
50th %ile Green (s)	17.8		23.0	23.0	6.5	33.5	26.0
50th %ile Term Code	Gap		MaxR	MaxR	Max	MaxR	Ped
30th %ile Green (s)	14.8		33.5	33.5	0.0	33.5	26.0
30th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
10th %ile Green (s)	10.8		33.5	33.5	0.0	33.5	26.0
10th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
Stops (vph)	159		382	74	30	304	
Fuel Used(gal)	4		11	2	1	5	
CO Emissions (g/hr)	246		739	155	39	373	
NOx Emissions (g/hr)	48		144	30	8	73	
VOC Emissions (g/hr)	57		171	36	9	87	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	126		~361	28	19	202	
Queue Length 95th (ft)	157		#570	111	46	289	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		

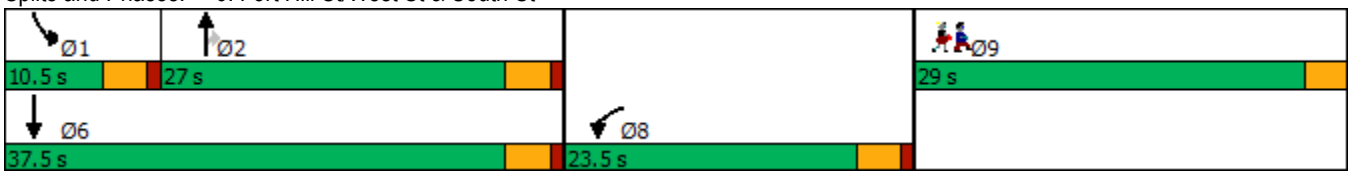
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Base Capacity (vph)	384		570	677	135	711	
Starvation Cap Reductn	0		0	0	0	0	
Spillback Cap Reductn	0		0	0	0	0	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.65		0.95	0.51	0.26	0.63	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 87			
Natural Cycle: 85			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 38.8		Intersection LOS: D	
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 90			
50th %ile Actuated Cycle: 88.3			
30th %ile Actuated Cycle: 85.3			
10th %ile Actuated Cycle: 81.3			

~ 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: 6: Fort Hill St/West St & South St



Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	60	40	3	1	0
Future Vol, veh/h	0	60	40	3	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	65	43	3	1	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	46	0	-	0	110	45
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	65	-
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	1562	-	-	-	887	1025
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	958	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1562	-	-	-	887	1025
Mov Cap-2 Maneuver	-	-	-	-	887	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	958	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1562	-	-	-	887
HCM Lane V/C Ratio	-	-	-	-	0.001
HCM Control Delay (s)	0	-	-	-	9.1
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	35	0	25	50	0	25
Future Vol, veh/h	35	0	25	50	0	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	-	-	-	-	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	38	0	27	54	0	27

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	38	0	146	38
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	108	-
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	-	846	1034
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	916	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1572	-	831	1034
Mov Cap-2 Maneuver	-	-	-	-	802	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	900	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1034	-	-	1572	-
HCM Lane V/C Ratio	0.026	-	-	0.017	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	29	40	10	6	0
Future Vol, veh/h	0	29	40	10	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	32	43	11	7	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	54	0	-	0	81	49
Stage 1	-	-	-	-	49	-
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	1551	-	-	-	921	1020
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	991	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1551	-	-	-	921	1020
Mov Cap-2 Maneuver	-	-	-	-	868	-
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	991	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1551	-	-	-	868
HCM Lane V/C Ratio	-	-	-	-	0.008
HCM Control Delay (s)	0	-	-	-	9.2
HCM Lane LOS	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	18	0	5	35	0	11
Future Vol, veh/h	18	0	5	35	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	20	0	5	38	0	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	20	0	68	20
Stage 1	-	-	-	-	20	-
Stage 2	-	-	-	-	48	-
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	-	-	1596	-	937	1058
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	974	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1596	-	934	1058
Mov Cap-2 Maneuver	-	-	-	-	934	-
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	971	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1058	-	-	1596	-
HCM Lane V/C Ratio	0.011	-	-	0.003	-
HCM Control Delay (s)	8.4	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

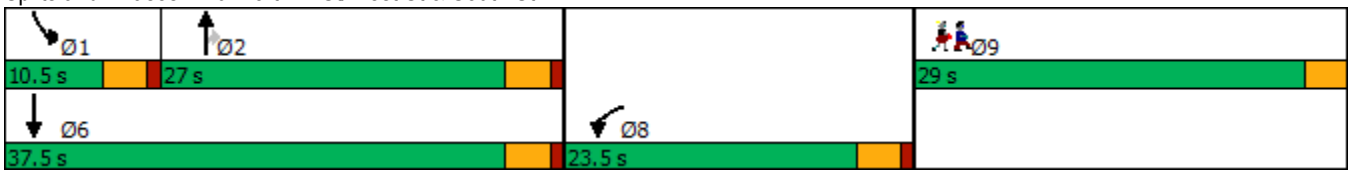
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Lane Configurations							
Traffic Volume (vph)	154	23	424	234	34	606	
Future Volume (vph)	154	23	424	234	34	606	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.982			0.850			
Flt Protected	0.958				0.950		
Satd. Flow (prot)	1757	0	1900	1615	1805	1881	
Flt Permitted	0.958				0.950		
Satd. Flow (perm)	1757	0	1900	1615	1805	1881	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	8			243			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.92	0.92	
Heavy Vehicles (%)	2%	0%	0%	0%	0%	1%	
Adj. Flow (vph)	211	32	499	275	37	659	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	243	0	499	275	37	659	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	
Protected Phases	8		2		1	6	9

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	1.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	29.0
Total Split (s)	23.5		27.0	27.0	10.5	37.5	29.0
Total Split (%)	26.1%		30.0%	30.0%	11.7%	41.7%	32%
Maximum Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None		Max	Max	None	Max	Ped
Walk Time (s)							7.0
Flash Dont Walk (s)							19.0
Pedestrian Calls (#/hr)							2
Act Effct Green (s)	15.9		27.4	27.4	6.2	33.5	
Actuated g/C Ratio	0.18		0.32	0.32	0.07	0.39	
v/c Ratio	0.74		0.83	0.41	0.28	0.90	
Control Delay	46.3		44.2	7.5	45.1	44.0	
Queue Delay	0.0		0.0	0.0	0.0	0.0	
Total Delay	46.3		44.2	7.5	45.1	44.0	
LOS	D		D	A	D	D	
Approach Delay	46.3		31.2			44.1	
Approach LOS	D		C			D	
90th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
90th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
70th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
70th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
50th %ile Green (s)	16.8		23.0	23.0	6.5	33.5	26.0
50th %ile Term Code	Gap		MaxR	MaxR	Max	MaxR	Ped
30th %ile Green (s)	14.0		33.5	33.5	0.0	33.5	26.0
30th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
10th %ile Green (s)	10.3		33.5	33.5	0.0	33.5	26.0
10th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
Stops (vph)	157		328	42	34	502	
Fuel Used(gal)	3		7	1	1	11	
CO Emissions (g/hr)	236		494	97	45	745	
NOx Emissions (g/hr)	46		96	19	9	145	
VOC Emissions (g/hr)	55		114	22	10	173	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	122		274	13	20	337	
Queue Length 95th (ft)	155		#452	64	51	#577	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		
Base Capacity (vph)	402		602	677	135	729	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Starvation Cap Reductn	0		0	0	0	0	
Spillback Cap Reductn	0		0	0	0	0	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.60		0.83	0.41	0.27	0.90	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 86.5			
Natural Cycle: 85			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 38.6		Intersection LOS: D	
Intersection Capacity Utilization 48.5%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 90			
50th %ile Actuated Cycle: 87.3			
30th %ile Actuated Cycle: 84.5			
10th %ile Actuated Cycle: 80.8			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 6: Fort Hill St/West St & South St



Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	86	61	1	0	0
Future Vol, veh/h	0	86	61	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	93	66	1	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	67	0	-	0	160	67
Stage 1	-	-	-	-	67	-
Stage 2	-	-	-	-	93	-
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	1535	-	-	-	831	997
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	931	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1535	-	-	-	831	997
Mov Cap-2 Maneuver	-	-	-	-	831	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	931	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1535	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	70	0	8	53	0	16
Future Vol, veh/h	70	0	8	53	0	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	-	-	-	-	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	76	0	9	58	0	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	76	0	152	76
Stage 1	-	-	-	-	76	-
Stage 2	-	-	-	-	76	-
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	-	-	1523	-	840	985
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	947	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1523	-	835	985
Mov Cap-2 Maneuver	-	-	-	-	812	-
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	941	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	985	-	-	1523	-
HCM Lane V/C Ratio	0.018	-	-	0.006	-
HCM Control Delay (s)	8.7	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	65	52	1	5	0
Future Vol, veh/h	0	65	52	1	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	71	57	1	5	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	58	0	-	0	129	58
Stage 1	-	-	-	-	58	-
Stage 2	-	-	-	-	71	-
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	1546	-	-	-	865	1008
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	952	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1546	-	-	-	865	1008
Mov Cap-2 Maneuver	-	-	-	-	832	-
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	952	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1546	-	-	-	832
HCM Lane V/C Ratio	-	-	-	-	0.007
HCM Control Delay (s)	0	-	-	-	9.4
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.7

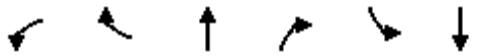
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	57	0	2	50	0	8
Future Vol, veh/h	57	0	2	50	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	0	2	54	0	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	62	0	120	62
Stage 1	-	-	-	-	62	-
Stage 2	-	-	-	-	58	-
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	-	-	1541	-	876	1003
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	965	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1541	-	875	1003
Mov Cap-2 Maneuver	-	-	-	-	875	-
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	964	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1003	-	-	1541	-
HCM Lane V/C Ratio	0.009	-	-	0.001	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Lane Configurations							
Traffic Volume (vph)	224	31	466	328	24	529	
Future Volume (vph)	224	31	466	328	24	529	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.984			0.850			
Flt Protected	0.958				0.950		
Satd. Flow (prot)	1760	0	1900	1615	1805	1881	
Flt Permitted	0.958				0.950		
Satd. Flow (perm)	1760	0	1900	1615	1805	1881	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	7			310			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.92	0.92	
Heavy Vehicles (%)	2%	0%	0%	0%	0%	1%	
Adj. Flow (vph)	307	42	548	386	26	575	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	349	0	548	386	26	575	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	
Protected Phases	8		2		1	6	9

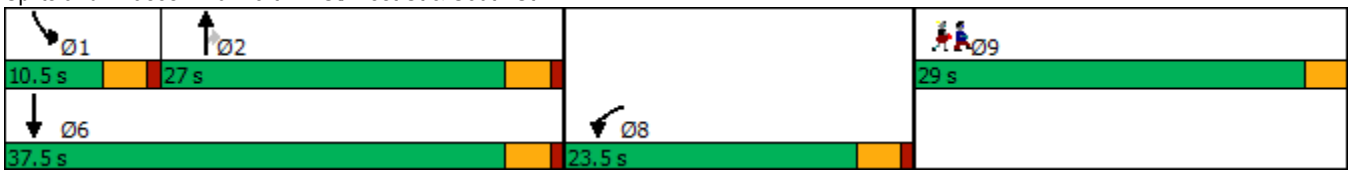


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	1.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	29.0
Total Split (s)	23.5		27.0	27.0	10.5	37.5	29.0
Total Split (%)	26.1%		30.0%	30.0%	11.7%	41.7%	32%
Maximum Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None		Max	Max	None	Max	Ped
Walk Time (s)							7.0
Flash Dont Walk (s)							19.0
Pedestrian Calls (#/hr)							2
Act Effct Green (s)	19.1		29.3	29.3	6.2	33.5	
Actuated g/C Ratio	0.21		0.33	0.33	0.07	0.37	
v/c Ratio	0.92		0.88	0.52	0.21	0.82	
Control Delay	65.4		48.7	9.2	43.6	36.7	
Queue Delay	0.0		0.0	0.0	0.0	0.0	
Total Delay	65.4		48.7	9.2	43.6	36.7	
LOS	E		D	A	D	D	
Approach Delay	65.4		32.4			37.0	
Approach LOS	E		C			D	
90th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
90th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
70th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
70th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
50th %ile Green (s)	19.5		33.5	33.5	0.0	33.5	26.0
50th %ile Term Code	Max		Hold	Hold	Skip	MaxR	Ped
30th %ile Green (s)	19.5		33.5	33.5	0.0	33.5	26.0
30th %ile Term Code	Max		Hold	Hold	Skip	MaxR	Ped
10th %ile Green (s)	17.3		33.5	33.5	0.0	33.5	26.0
10th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
Stops (vph)	218		347	71	25	451	
Fuel Used(gal)	6		8	2	0	9	
CO Emissions (g/hr)	407		567	148	31	600	
NOx Emissions (g/hr)	79		110	29	6	117	
VOC Emissions (g/hr)	94		131	34	7	139	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	191		270	28	14	291	
Queue Length 95th (ft)	#239		#514	99	40	#468	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		
Base Capacity (vph)	388		622	737	131	703	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Starvation Cap Reductn	0		0	0	0	0	
Spillback Cap Reductn	0		0	0	0	0	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.90		0.88	0.52	0.20	0.82	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 89.6			
Natural Cycle: 85			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 40.0		Intersection LOS: D	
Intersection Capacity Utilization 48.8%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 90			
50th %ile Actuated Cycle: 90			
30th %ile Actuated Cycle: 90			
10th %ile Actuated Cycle: 87.8			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 6: Fort Hill St/West St & South St



Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	262	97	0	0	0
Future Vol, veh/h	0	262	97	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	285	105	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	105	0	-	0	390	105
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	285	-
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	1486	-	-	-	614	949
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	614	949
Mov Cap-2 Maneuver	-	-	-	-	614	-
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	763	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1486	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	112	0	65	32	0	150
Future Vol, veh/h	112	0	65	32	0	150
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	122	0	71	35	0	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	122	0	299	122
Stage 1	-	-	-	-	122	-
Stage 2	-	-	-	-	177	-
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	-	-	1465	-	692	929
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	854	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1465	-	658	929
Mov Cap-2 Maneuver	-	-	-	-	687	-
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	812	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.1	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	929	-	-	1465	-
HCM Lane V/C Ratio	0.176	-	-	0.048	-
HCM Control Delay (s)	9.7	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	102	27	5	10	0
Future Vol, veh/h	0	102	27	5	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	111	29	5	11	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	34	0	-	0	143	32
Stage 1	-	-	-	-	32	-
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	1578	-	-	-	850	1042
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1578	-	-	-	850	1042
Mov Cap-2 Maneuver	-	-	-	-	816	-
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	914	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1578	-	-	-	816
HCM Lane V/C Ratio	-	-	-	-	0.013
HCM Control Delay (s)	0	-	-	-	9.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	6.6

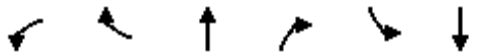
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	0	11	16	0	88
Future Vol, veh/h	14	0	11	16	0	88
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	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	0	12	17	0	96

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	15	0	56	15
Stage 1	-	-	-	-	15	-
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	-	-	1603	-	952	1065
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	981	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1603	-	944	1065
Mov Cap-2 Maneuver	-	-	-	-	944	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	973	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1065	-	-	1603	-
HCM Lane V/C Ratio	0.09	-	-	0.007	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Lane Configurations							
Traffic Volume (vph)	161	25	533	342	30	456	
Future Volume (vph)	161	25	533	342	30	456	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.982			0.850			
Flt Protected	0.959				0.950		
Satd. Flow (prot)	1688	0	1810	1538	1805	1845	
Flt Permitted	0.959				0.950		
Satd. Flow (perm)	1688	0	1810	1538	1805	1845	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	8			283			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.72	0.72	0.97	0.97	0.85	0.85	
Growth Factor	100%	100%	100%	100%	100%	85%	
Heavy Vehicles (%)	6%	6%	5%	5%	0%	3%	
Adj. Flow (vph)	224	35	549	353	35	456	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	259	0	549	353	35	456	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Protected Phases	8		2		1	6	9
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	1.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	29.0
Total Split (s)	23.5		27.0	27.0	10.5	37.5	29.0
Total Split (%)	26.1%		30.0%	30.0%	11.7%	41.7%	32%
Maximum Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None		Max	Max	None	Max	Ped
Walk Time (s)							7.0
Flash Dont Walk (s)							19.0
Pedestrian Calls (#/hr)							1
Act Effct Green (s)	16.8		27.4	27.4	6.2	33.6	
Actuated g/C Ratio	0.19		0.31	0.31	0.07	0.38	
v/c Ratio	0.78		0.97	0.52	0.27	0.64	
Control Delay	49.8		65.1	9.9	45.1	27.8	
Queue Delay	0.0		0.0	0.0	0.0	0.0	
Total Delay	49.8		65.1	9.9	45.1	27.8	
LOS	D		E	A	D	C	
Approach Delay	49.8		43.5			29.0	
Approach LOS	D		D			C	
90th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
90th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
70th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
70th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
50th %ile Green (s)	18.5		23.0	23.0	6.5	33.5	26.0
50th %ile Term Code	Gap		MaxR	MaxR	Max	MaxR	Ped
30th %ile Green (s)	15.5		33.5	33.5	0.0	33.5	26.0
30th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
10th %ile Green (s)	11.4		33.5	33.5	0.0	33.5	26.0
10th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
Stops (vph)	164		385	78	30	312	
Fuel Used(gal)	4		11	2	1	5	
CO Emissions (g/hr)	258		768	159	39	383	
NOx Emissions (g/hr)	50		149	31	8	75	
VOC Emissions (g/hr)	60		178	37	9	89	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	132		~372	31	19	209	
Queue Length 95th (ft)	163		#577	114	46	294	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		

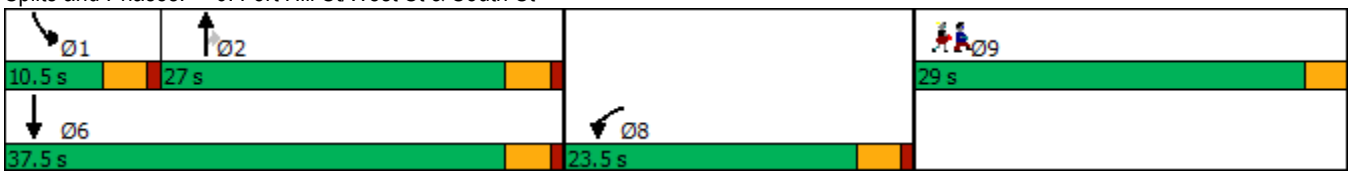
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Base Capacity (vph)	383		567	676	134	708	
Starvation Cap Reductn	0		0	0	0	0	
Spillback Cap Reductn	0		0	0	0	0	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.68		0.97	0.52	0.26	0.64	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 87.4			
Natural Cycle: 85			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 40.2		Intersection LOS: D	
Intersection Capacity Utilization 45.2%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 90			
50th %ile Actuated Cycle: 89			
30th %ile Actuated Cycle: 86			
10th %ile Actuated Cycle: 81.9			

~ 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: 6: Fort Hill St/West St & South St



Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	60	40	3	1	0
Future Vol, veh/h	0	60	40	3	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	65	43	3	1	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	46	0	-	0	110	45
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	65	-
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	1562	-	-	-	887	1025
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	958	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1562	-	-	-	887	1025
Mov Cap-2 Maneuver	-	-	-	-	887	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	958	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1562	-	-	-	887
HCM Lane V/C Ratio	-	-	-	-	0.001
HCM Control Delay (s)	0	-	-	-	9.1
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	35	0	25	50	0	25
Future Vol, veh/h	35	0	25	50	0	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	-	-	-	-	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	38	0	27	54	0	27

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	38	0	146	38
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	108	-
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	-	846	1034
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	916	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1572	-	831	1034
Mov Cap-2 Maneuver	-	-	-	-	802	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	900	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1034	-	-	1572	-
HCM Lane V/C Ratio	0.026	-	-	0.017	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	29	40	43	16	0
Future Vol, veh/h	0	29	40	43	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	32	43	47	17	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	90	0	-	0	99	67
Stage 1	-	-	-	-	67	-
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	1505	-	-	-	900	997
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	991	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1505	-	-	-	900	997
Mov Cap-2 Maneuver	-	-	-	-	853	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	991	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1505	-	-	-	853
HCM Lane V/C Ratio	-	-	-	-	0.02
HCM Control Delay (s)	0	-	-	-	9.3
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	18	0	5	35	0	11
Future Vol, veh/h	18	0	5	35	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	20	0	5	38	0	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	20	0	68	20
Stage 1	-	-	-	-	20	-
Stage 2	-	-	-	-	48	-
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	-	-	1596	-	937	1058
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	974	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1596	-	934	1058
Mov Cap-2 Maneuver	-	-	-	-	934	-
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	971	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1058	-	-	1596	-
HCM Lane V/C Ratio	0.011	-	-	0.003	-
HCM Control Delay (s)	8.4	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

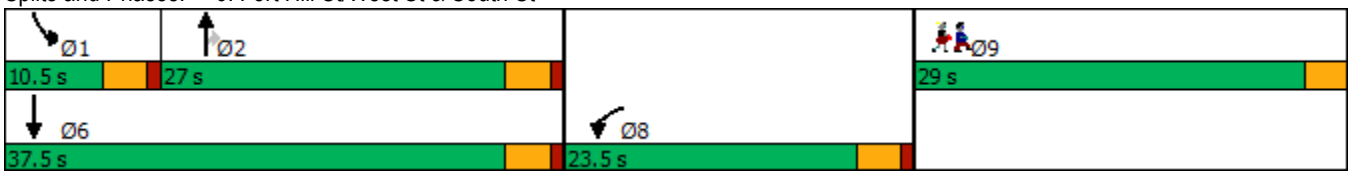
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Lane Configurations							
Traffic Volume (vph)	160	19	440	241	31	614	
Future Volume (vph)	160	19	440	241	31	614	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.986			0.850			
Flt Protected	0.957				0.950		
Satd. Flow (prot)	1761	0	1900	1615	1805	1881	
Flt Permitted	0.957				0.950		
Satd. Flow (perm)	1761	0	1900	1615	1805	1881	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	6			242			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.92	0.92	
Heavy Vehicles (%)	2%	0%	0%	0%	0%	1%	
Adj. Flow (vph)	219	26	518	284	34	667	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	245	0	518	284	34	667	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	
Protected Phases	8		2		1	6	9

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	1.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	29.0
Total Split (s)	23.5		27.0	27.0	10.5	37.5	29.0
Total Split (%)	26.1%		30.0%	30.0%	11.7%	41.7%	32%
Maximum Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None		Max	Max	None	Max	Ped
Walk Time (s)							7.0
Flash Dont Walk (s)							19.0
Pedestrian Calls (#/hr)							2
Act Effct Green (s)	16.0		27.4	27.4	6.2	33.5	
Actuated g/C Ratio	0.18		0.32	0.32	0.07	0.39	
v/c Ratio	0.74		0.86	0.42	0.26	0.92	
Control Delay	46.7		47.4	8.1	44.5	45.7	
Queue Delay	0.0		0.0	0.0	0.0	0.0	
Total Delay	46.7		47.4	8.1	44.5	45.7	
LOS	D		D	A	D	D	
Approach Delay	46.7		33.5			45.7	
Approach LOS	D		C			D	
90th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
90th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
70th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
70th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
50th %ile Green (s)	17.0		23.0	23.0	6.5	33.5	26.0
50th %ile Term Code	Gap		MaxR	MaxR	Max	MaxR	Ped
30th %ile Green (s)	14.2		33.5	33.5	0.0	33.5	26.0
30th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
10th %ile Green (s)	10.4		33.5	33.5	0.0	33.5	26.0
10th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
Stops (vph)	161		334	46	31	508	
Fuel Used(gal)	3		8	1	1	11	
CO Emissions (g/hr)	241		530	103	40	769	
NOx Emissions (g/hr)	47		103	20	8	150	
VOC Emissions (g/hr)	56		123	24	9	178	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	124		~311	18	18	344	
Queue Length 95th (ft)	157		#477	69	49	#588	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		
Base Capacity (vph)	402		601	676	135	728	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Starvation Cap Reductn	0		0	0	0	0	
Spillback Cap Reductn	0		0	0	0	0	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.61		0.86	0.42	0.25	0.92	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 86.6			
Natural Cycle: 85			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 40.2		Intersection LOS: D	
Intersection Capacity Utilization 49.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 90			
50th %ile Actuated Cycle: 87.5			
30th %ile Actuated Cycle: 84.7			
10th %ile Actuated Cycle: 80.9			
~ 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: 6: Fort Hill St/West St & South St



Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	86	61	1	0	0
Future Vol, veh/h	0	86	61	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	93	66	1	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	67	0	-	0	160	67
Stage 1	-	-	-	-	67	-
Stage 2	-	-	-	-	93	-
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	1535	-	-	-	831	997
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	931	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1535	-	-	-	831	997
Mov Cap-2 Maneuver	-	-	-	-	831	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	931	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1535	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	70	0	8	53	0	16
Future Vol, veh/h	70	0	8	53	0	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	-	-	-	-	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	76	0	9	58	0	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	76	0	152	76
Stage 1	-	-	-	-	76	-
Stage 2	-	-	-	-	76	-
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	-	-	1523	-	840	985
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	947	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1523	-	835	985
Mov Cap-2 Maneuver	-	-	-	-	812	-
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	941	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	985	-	-	1523	-
HCM Lane V/C Ratio	0.018	-	-	0.006	-
HCM Control Delay (s)	8.7	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	65	52	34	26	0
Future Vol, veh/h	0	65	52	34	26	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	71	57	37	28	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	94	0	-	0	147	76
Stage 1	-	-	-	-	76	-
Stage 2	-	-	-	-	71	-
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	1500	-	-	-	845	985
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	952	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1500	-	-	-	845	985
Mov Cap-2 Maneuver	-	-	-	-	819	-
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	952	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1500	-	-	-	819
HCM Lane V/C Ratio	-	-	-	-	0.035
HCM Control Delay (s)	0	-	-	-	9.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.7

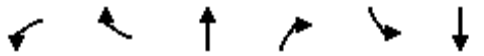
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	57	0	2	50	0	8
Future Vol, veh/h	57	0	2	50	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	0	2	54	0	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	62	0	120	62
Stage 1	-	-	-	-	62	-
Stage 2	-	-	-	-	58	-
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	-	-	1541	-	876	1003
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	965	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1541	-	875	1003
Mov Cap-2 Maneuver	-	-	-	-	875	-
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	964	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1003	-	-	1541	-
HCM Lane V/C Ratio	0.009	-	-	0.001	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Lane Configurations							
Traffic Volume (vph)	227	31	470	330	24	534	
Future Volume (vph)	227	31	470	330	24	534	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.984			0.850			
Flt Protected	0.958				0.950		
Satd. Flow (prot)	1760	0	1900	1615	1624	1881	
Flt Permitted	0.958				0.950		
Satd. Flow (perm)	1760	0	1900	1615	1624	1881	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	7			309			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.92	0.92	
Heavy Vehicles (%)	2%	0%	0%	0%	0%	1%	
Parking (#/hr)					0		
Adj. Flow (vph)	311	42	553	388	26	580	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	353	0	553	388	26	580	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.14	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	

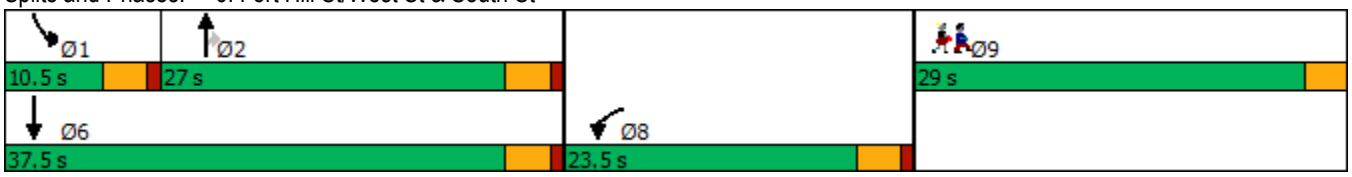


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Protected Phases	8		2		1	6	9
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	1.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	29.0
Total Split (s)	23.5		27.0	27.0	10.5	37.5	29.0
Total Split (%)	26.1%		30.0%	30.0%	11.7%	41.7%	32%
Maximum Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None		Max	Max	None	Max	Ped
Walk Time (s)							7.0
Flash Dont Walk (s)							19.0
Pedestrian Calls (#/hr)							2
Act Effct Green (s)	19.2		29.3	29.3	6.2	33.5	
Actuated g/C Ratio	0.21		0.33	0.33	0.07	0.37	
v/c Ratio	0.93		0.89	0.53	0.23	0.83	
Control Delay	66.5		49.8	9.4	44.8	37.4	
Queue Delay	0.0		0.0	0.0	0.0	0.0	
Total Delay	66.5		49.8	9.4	44.8	37.4	
LOS	E		D	A	D	D	
Approach Delay	66.5		33.2			37.7	
Approach LOS	E		C			D	
90th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
90th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
70th %ile Green (s)	19.5		23.0	23.0	6.5	33.5	26.0
70th %ile Term Code	Max		MaxR	MaxR	Max	MaxR	Ped
50th %ile Green (s)	19.5		33.5	33.5	0.0	33.5	26.0
50th %ile Term Code	Max		Hold	Hold	Skip	MaxR	Ped
30th %ile Green (s)	19.5		33.5	33.5	0.0	33.5	26.0
30th %ile Term Code	Max		Hold	Hold	Skip	MaxR	Ped
10th %ile Green (s)	17.9		33.5	33.5	0.0	33.5	26.0
10th %ile Term Code	Gap		Hold	Hold	Skip	MaxR	Ped
Stops (vph)	219		349	76	25	456	
Fuel Used(gal)	6		8	2	0	9	
CO Emissions (g/hr)	415		579	152	32	611	
NOx Emissions (g/hr)	81		113	30	6	119	
VOC Emissions (g/hr)	96		134	35	7	142	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	194		274	29	14	294	
Queue Length 95th (ft)	#244		#520	101	40	#476	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø9
Base Capacity (vph)	387		621	735	117	702	
Starvation Cap Reductn	0		0	0	0	0	
Spillback Cap Reductn	0		0	0	0	0	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.91		0.89	0.53	0.22	0.83	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 89.7			
Natural Cycle: 85			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 40.8		Intersection LOS: D	
Intersection Capacity Utilization 49.2%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 90			
50th %ile Actuated Cycle: 90			
30th %ile Actuated Cycle: 90			
10th %ile Actuated Cycle: 88.4			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 6: Fort Hill St/West St & South St



Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	262	97	0	0	0
Future Vol, veh/h	0	262	97	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	285	105	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	105	0	-	0	390	105
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	285	-
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	1486	-	-	-	614	949
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	614	949
Mov Cap-2 Maneuver	-	-	-	-	614	-
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	763	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1486	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	112	0	65	32	0	150
Future Vol, veh/h	112	0	65	32	0	150
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	122	0	71	35	0	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	122	0	299	122
Stage 1	-	-	-	-	122	-
Stage 2	-	-	-	-	177	-
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	-	-	1465	-	692	929
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	854	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1465	-	658	929
Mov Cap-2 Maneuver	-	-	-	-	687	-
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	812	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.1	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	929	-	-	1465	-
HCM Lane V/C Ratio	0.176	-	-	0.048	-
HCM Control Delay (s)	9.7	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	102	27	43	41	0
Future Vol, veh/h	0	102	27	43	41	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	111	29	47	45	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	76	0	-	0	164	53
Stage 1	-	-	-	-	53	-
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	1523	-	-	-	827	1014
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1523	-	-	-	827	1014
Mov Cap-2 Maneuver	-	-	-	-	804	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	914	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1523	-	-	-	804
HCM Lane V/C Ratio	-	-	-	-	0.055
HCM Control Delay (s)	0	-	-	-	9.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	6.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	0	11	16	0	88
Future Vol, veh/h	14	0	11	16	0	88
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	0	12	17	0	96

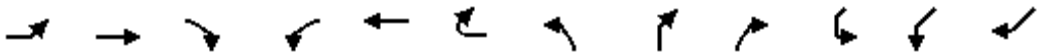
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	15	0	56	15
Stage 1	-	-	-	-	15	-
Stage 2	-	-	-	-	41	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1603	-	952	1065
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	981	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1603	-	944	1065
Mov Cap-2 Maneuver	-	-	-	-	944	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	973	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1065	-	-	1603	-
HCM Lane V/C Ratio	0.09	-	-	0.007	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	NBR2	SWL2	SWL	SWR
Lane Configurations												
Traffic Volume (vph)	39	0	32	2	0	3	47	835	8	14	547	54
Future Volume (vph)	39	0	32	2	0	3	47	835	8	14	547	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		130	0		0	90	0			100	0
Storage Lanes	0		1	0		0	1	1			1	0
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.921			0.850			0.987	
Flt Protected		0.950			0.980		0.950			0.950	0.956	
Satd. Flow (prot)	0	1543	1369	0	1715	0	1805	1539	0	1805	1688	0
Flt Permitted		0.750			0.923		0.950			0.118	0.956	
Satd. Flow (perm)	0	1218	1369	0	1615	0	1805	1539	0	224	1688	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		86			86			23	
Link Speed (mph)		30			30		30				30	
Link Distance (ft)		713			153		583				434	
Travel Time (s)		16.2			3.5		13.3				9.9	
Peak Hour Factor	0.77	0.77	0.77	0.42	0.42	0.42	0.96	0.96	0.96	0.83	0.83	0.83
Heavy Vehicles (%)	17%	0%	18%	0%	0%	0%	0%	5%	0%	0%	3%	39%
Adj. Flow (vph)	51	0	42	5	0	7	49	870	8	17	659	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	51	42	0	12	0	49	878	0	17	724	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0		12				24	
Link Offset(ft)		0			0		0				0	
Crosswalk Width(ft)		16			16		16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15	9	9	15	15	9
Number of Detectors	1	2	1	1	2		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Right		Left	Left	
Leading Detector (ft)	20	100	20	20	100		20	20		20	20	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	20		20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA	Perm	Perm	NA		Prot	Perm		Perm	Prot	
Protected Phases		4			8		2!				6!	

Lane Group	Ø1
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	NBR2	SWL2	SWL	SWR
Permitted Phases	4		4	8				2		6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5	22.5	22.5		38.0	38.0		47.5	47.5	
Total Split (%)	32.1%	32.1%	32.1%	32.1%	32.1%		54.3%	54.3%		67.9%	67.9%	
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0		33.5	33.5		43.0	43.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lag	Lag				
Lead-Lag Optimize?							Yes	Yes				
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)		14.7	14.7		14.7		42.4	42.4		46.3	46.3	
Actuated g/C Ratio		0.21	0.21		0.21		0.61	0.61		0.66	0.66	
v/c Ratio		0.20	0.12		0.03		0.04	0.91		0.12	0.64	
Control Delay		23.3	2.1		0.2		8.5	30.7		6.4	10.1	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.2	
Total Delay		23.3	2.1		0.2		8.5	30.7		6.4	10.3	
LOS		C	A		A		A	C		A	B	
Approach Delay		13.7			0.2		29.5				10.2	
Approach LOS		B			A		C				B	
90th %ile Green (s)	18.0	18.0	18.0	18.0	18.0		33.5	33.5		43.0	43.0	
90th %ile Term Code	Hold	Hold	Hold	Max	Max		Coord	Coord		Coord	Coord	
70th %ile Green (s)	17.8	17.8	17.8	17.8	17.8		33.5	33.5		43.2	43.2	
70th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Coord	Coord		Coord	Coord	
50th %ile Green (s)	15.4	15.4	15.4	15.4	15.4		45.6	45.6		45.6	45.6	
50th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Coord	Coord		Coord	Coord	
30th %ile Green (s)	13.0	13.0	13.0	13.0	13.0		48.0	48.0		48.0	48.0	
30th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Coord	Coord		Coord	Coord	
10th %ile Green (s)	9.5	9.5	9.5	9.5	9.5		51.5	51.5		51.5	51.5	
10th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Coord	Coord		Coord	Coord	
Stops (vph)		32	2		0		23	479		7	393	
Fuel Used(gal)		1	0		0		0	12		0	5	
CO Emissions (g/hr)		40	14		0		29	821		7	380	
NOx Emissions (g/hr)		8	3		0		6	160		1	74	
VOC Emissions (g/hr)		9	3		0		7	190		2	88	
Dilemma Vehicles (#)		0	0		0		0	0		0	0	
Queue Length 50th (ft)		18	0		0		6	228		2	144	
Queue Length 95th (ft)		36	2		0		27	#642		m6	176	
Internal Link Dist (ft)		633			73		503				354	
Turn Bay Length (ft)			130				90			100	100	
Base Capacity (vph)		313	415		479		1093	966		147	1123	

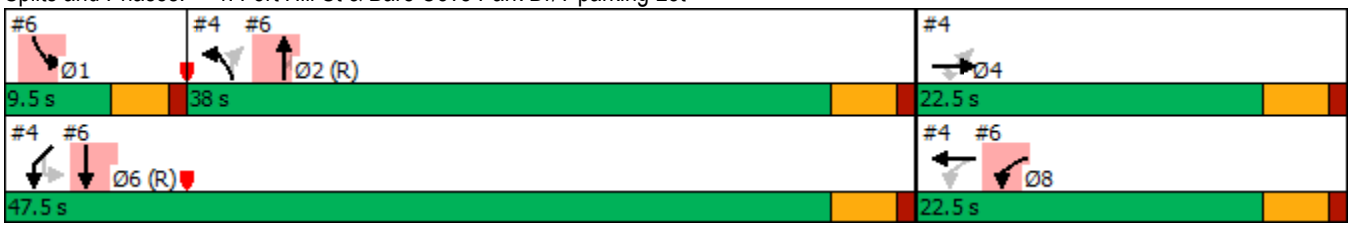
Lane Group	Ø1
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	9.5
Total Split (s)	9.5
Total Split (%)	14%
Maximum Green (s)	5.5
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	5.5
90th %ile Term Code	Max
70th %ile Green (s)	5.7
70th %ile Term Code	Max
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	NBR2	SWL2	SWL	SWR
Starvation Cap Reductn		0	0		0		0	0		0	52	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.16	0.10		0.03		0.04	0.91		0.12	0.68	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:SWL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 20.4		Intersection LOS: C	
Intersection Capacity Utilization 64.3%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

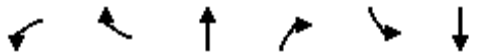
Splits and Phases: 4: Fort Hill St & Bare Cove Park Dr/T parking Lot



Lane Group	Ø1
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	161	25	533	342	30	456	
Future Volume (vph)	161	25	533	342	30	456	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.982			0.850			
Flt Protected	0.959				0.950		
Satd. Flow (prot)	1688	0	1810	1538	1805	1845	
Flt Permitted	0.959				0.950		
Satd. Flow (perm)	1688	0	1810	1538	1805	1845	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	11			353			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.72	0.72	0.97	0.97	0.85	0.85	
Growth Factor	100%	100%	100%	100%	100%	85%	
Heavy Vehicles (%)	6%	6%	5%	5%	0%	3%	
Adj. Flow (vph)	224	35	549	353	35	456	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	259	0	549	353	35	456	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Protected Phases	8		2		1	6	4
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.5		38.0	38.0	9.5	47.5	22.5
Total Split (%)	32.1%		54.3%	54.3%	13.6%	67.9%	32%
Maximum Green (s)	18.0		33.5	33.5	5.5	43.0	18.0
Yellow Time (s)	3.5		3.5	3.5	3.0	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.0	4.5	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None		C-Max	C-Max	None	C-Max	None
Walk Time (s)	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0		0	0		0	0
Act Effct Green (s)	14.7		42.4	42.4	5.9	46.3	
Actuated g/C Ratio	0.21		0.61	0.61	0.08	0.66	
v/c Ratio	0.71		0.50	0.33	0.23	0.37	
Control Delay	35.4		8.3	2.0	34.1	7.0	
Queue Delay	0.0		0.4	0.0	0.0	0.0	
Total Delay	35.4		8.7	2.0	34.1	7.1	
LOS	D		A	A	C	A	
Approach Delay	35.4		6.0			9.0	
Approach LOS	D		A			A	
90th %ile Green (s)	18.0		33.5	33.5	5.5	43.0	18.0
90th %ile Term Code	Max		Coord	Coord	Max	Coord	Hold
70th %ile Green (s)	17.8		33.5	33.5	5.7	43.2	17.8
70th %ile Term Code	Gap		Coord	Coord	Max	Coord	Hold
50th %ile Green (s)	15.4		45.6	45.6	0.0	45.6	15.4
50th %ile Term Code	Gap		Coord	Coord	Skip	Coord	Hold
30th %ile Green (s)	13.0		48.0	48.0	0.0	48.0	13.0
30th %ile Term Code	Gap		Coord	Coord	Skip	Coord	Hold
10th %ile Green (s)	9.5		51.5	51.5	0.0	51.5	9.5
10th %ile Term Code	Gap		Coord	Coord	Skip	Coord	Hold
Stops (vph)	160		154	42	29	168	
Fuel Used(gal)	3		4	2	0	3	
CO Emissions (g/hr)	218		248	107	34	213	
NOx Emissions (g/hr)	42		48	21	7	42	
VOC Emissions (g/hr)	50		58	25	8	49	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	98		54	0	14	78	
Queue Length 95th (ft)	123		m108	m14	38	130	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Base Capacity (vph)	442		1097	1071	150	1219	
Starvation Cap Reductn	0		176	0	0	0	
Spillback Cap Reductn	0		0	0	0	67	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.59		0.60	0.33	0.23	0.40	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:SWL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 11.5		Intersection LOS: B	
Intersection Capacity Utilization 46.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Fort Hill St/West St & South St

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	60	40	3	1	0
Future Vol, veh/h	0	60	40	3	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	65	43	3	1	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	46	0	-	0	110	45
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	65	-
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	1562	-	-	-	887	1025
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	958	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1562	-	-	-	887	1025
Mov Cap-2 Maneuver	-	-	-	-	887	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	958	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1562	-	-	-	887
HCM Lane V/C Ratio	-	-	-	-	0.001
HCM Control Delay (s)	0	-	-	-	9.1
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	35	0	25	50	0	25
Future Vol, veh/h	35	0	25	50	0	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	-	-	-	-	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	38	0	27	54	0	27

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	38	0	146	38
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	108	-
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	-	846	1034
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	916	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1572	-	831	1034
Mov Cap-2 Maneuver	-	-	-	-	802	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	900	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1034	-	-	1572	-
HCM Lane V/C Ratio	0.026	-	-	0.017	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	29	40	43	16	0
Future Vol, veh/h	0	29	40	43	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	32	43	47	17	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	90	0	-	0	99	67
Stage 1	-	-	-	-	67	-
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	1505	-	-	-	900	997
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	991	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1505	-	-	-	900	997
Mov Cap-2 Maneuver	-	-	-	-	853	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	991	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1505	-	-	-	853
HCM Lane V/C Ratio	-	-	-	-	0.02
HCM Control Delay (s)	0	-	-	-	9.3
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	18	0	5	35	0	11
Future Vol, veh/h	18	0	5	35	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	20	0	5	38	0	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	20	0	68	20
Stage 1	-	-	-	-	20	-
Stage 2	-	-	-	-	48	-
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	-	-	1596	-	937	1058
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	974	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1596	-	934	1058
Mov Cap-2 Maneuver	-	-	-	-	934	-
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	971	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1058	-	-	1596	-
HCM Lane V/C Ratio	0.011	-	-	0.003	-
HCM Control Delay (s)	8.4	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	NBR2	SWL2	SWL	SWR
Lane Configurations												
Traffic Volume (vph)	49	0	58	11	0	21	46	620	4	3	731	49
Future Volume (vph)	49	0	58	11	0	21	46	620	4	3	731	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		130	0		0	90	0			100	0
Storage Lanes	0		1	0		0	1	1			1	0
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.911			0.850			0.990	
Flt Protected		0.950			0.983		0.950			0.950	0.955	
Satd. Flow (prot)	0	1805	1615	0	1701	0	1805	1615	0	1805	1780	0
Flt Permitted		0.706			0.886		0.950			0.213	0.955	
Satd. Flow (perm)	0	1341	1615	0	1534	0	1805	1615	0	405	1780	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94		94			94			23	
Link Speed (mph)		30			30		30				30	
Link Distance (ft)		713			153		583				434	
Travel Time (s)		16.2			3.5		13.3				9.9	
Peak Hour Factor	0.84	0.84	0.84	0.28	0.28	0.28	0.88	0.88	0.88	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Adj. Flow (vph)	58	0	69	39	0	75	52	705	5	3	754	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	69	0	114	0	52	710	0	3	805	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0		12				24	
Link Offset(ft)		0			0		0				0	
Crosswalk Width(ft)		16			16		16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15	9	9	15	15	9
Number of Detectors	1	2	1	1	2		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Right		Left	Left	
Leading Detector (ft)	20	100	20	20	100		20	20		20	20	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	20		20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA	Perm	Perm	NA		Prot	Perm		Perm	Prot	
Protected Phases		4			8		2!				6!	

Lane Group	Ø1
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	NBR2	SWL2	SWL	SWR
Permitted Phases	4		4	8				2		6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5	22.5	22.5		38.0	38.0		47.5	47.5	
Total Split (%)	32.1%	32.1%	32.1%	32.1%	32.1%		54.3%	54.3%		67.9%	67.9%	
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0		33.5	33.5		43.0	43.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lag	Lag				
Lead-Lag Optimize?							Yes	Yes				
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)		14.1	14.1		14.1		42.8	42.8		46.9	46.9	
Actuated g/C Ratio		0.20	0.20		0.20		0.61	0.61		0.67	0.67	
v/c Ratio		0.21	0.17		0.30		0.05	0.69		0.01	0.67	
Control Delay		23.8	4.2		9.3		8.4	15.7		4.0	8.3	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.1	
Total Delay		23.8	4.2		9.3		8.4	15.7		4.0	8.3	
LOS		C	A		A		A	B		A	A	
Approach Delay		13.1			9.3		15.2				8.3	
Approach LOS		B			A		B				A	
90th %ile Green (s)	18.0	18.0	18.0	18.0	18.0		33.5	33.5		43.0	43.0	
90th %ile Term Code	Hold	Hold	Hold	Max	Max		Coord	Coord		Coord	Coord	
70th %ile Green (s)	16.8	16.8	16.8	16.8	16.8		33.5	33.5		44.2	44.2	
70th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Coord	Coord		Coord	Coord	
50th %ile Green (s)	14.6	14.6	14.6	14.6	14.6		46.4	46.4		46.4	46.4	
50th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Coord	Coord		Coord	Coord	
30th %ile Green (s)	12.3	12.3	12.3	12.3	12.3		48.7	48.7		48.7	48.7	
30th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Coord	Coord		Coord	Coord	
10th %ile Green (s)	9.0	9.0	9.0	9.0	9.0		52.0	52.0		52.0	52.0	
10th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Coord	Coord		Coord	Coord	
Stops (vph)		40	7		8		21	358		2	459	
Fuel Used(gal)		1	0		0		0	7		0	6	
CO Emissions (g/hr)		51	29		10		28	476		2	454	
NOx Emissions (g/hr)		10	6		2		5	93		0	88	
VOC Emissions (g/hr)		12	7		2		7	110		0	105	
Dilemma Vehicles (#)		0	0		0		0	0		0	0	
Queue Length 50th (ft)		21	0		7		7	128		0	132	
Queue Length 95th (ft)		44	15		0		28	#428		m1	171	
Internal Link Dist (ft)		633			73		503				354	
Turn Bay Length (ft)			130				90			100	100	
Base Capacity (vph)		344	485		464		1103	1024		270	1199	

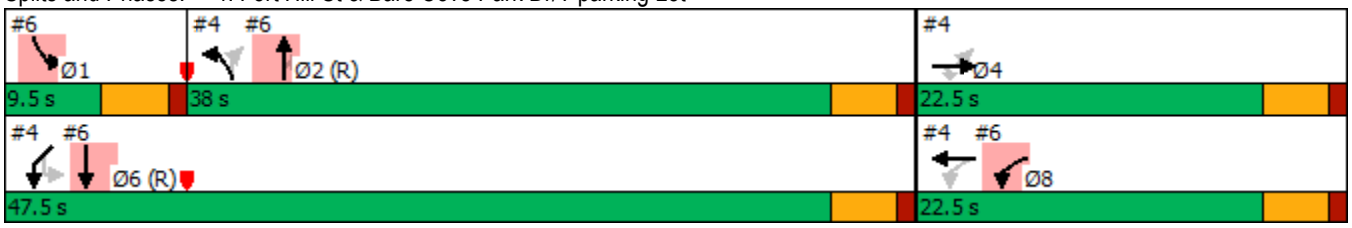
Lane Group	Ø1
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	9.5
Total Split (s)	9.5
Total Split (%)	14%
Maximum Green (s)	5.0
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	5.0
90th %ile Term Code	Max
70th %ile Green (s)	6.2
70th %ile Term Code	Max
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	NBR2	SWL2	SWL	SWR
Starvation Cap Reductn		0	0		0		0	0		0	19	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.17	0.14		0.25		0.05	0.69		0.01	0.68	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:SWL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 67.5%		ICU Level of Service C	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

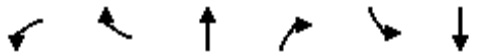
Splits and Phases: 4: Fort Hill St & Bare Cove Park Dr/T parking Lot



Lane Group	Ø1
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	160	19	440	241	31	614	
Future Volume (vph)	160	19	440	241	31	614	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.986			0.850			
Flt Protected	0.957				0.950		
Satd. Flow (prot)	1761	0	1900	1615	1805	1881	
Flt Permitted	0.957				0.950		
Satd. Flow (perm)	1761	0	1900	1615	1805	1881	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	8			284			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.92	0.92	
Heavy Vehicles (%)	2%	0%	0%	0%	0%	1%	
Adj. Flow (vph)	219	26	518	284	34	667	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	245	0	518	284	34	667	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	
Protected Phases	8		2		1	6	4



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.5		38.0	38.0	9.5	47.5	22.5
Total Split (%)	32.1%		54.3%	54.3%	13.6%	67.9%	32%
Maximum Green (s)	18.0		33.5	33.5	5.0	43.0	18.0
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None		C-Max	C-Max	None	C-Max	None
Walk Time (s)	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0		0	0		0	0
Act Effct Green (s)	14.1		42.8	42.8	5.9	46.9	
Actuated g/C Ratio	0.20		0.61	0.61	0.08	0.67	
v/c Ratio	0.68		0.45	0.26	0.23	0.53	
Control Delay	34.2		8.9	2.4	34.1	8.6	
Queue Delay	0.0		0.3	0.0	0.0	0.0	
Total Delay	34.2		9.2	2.4	34.1	8.6	
LOS	C		A	A	C	A	
Approach Delay	34.2		6.8			9.8	
Approach LOS	C		A			A	
90th %ile Green (s)	18.0		33.5	33.5	5.0	43.0	18.0
90th %ile Term Code	Max		Coord	Coord	Max	Coord	Hold
70th %ile Green (s)	16.8		33.5	33.5	6.2	44.2	16.8
70th %ile Term Code	Gap		Coord	Coord	Max	Coord	Hold
50th %ile Green (s)	14.6		46.4	46.4	0.0	46.4	14.6
50th %ile Term Code	Gap		Coord	Coord	Skip	Coord	Hold
30th %ile Green (s)	12.3		48.7	48.7	0.0	48.7	12.3
30th %ile Term Code	Gap		Coord	Coord	Skip	Coord	Hold
10th %ile Green (s)	9.0		52.0	52.0	0.0	52.0	9.0
10th %ile Term Code	Gap		Coord	Coord	Skip	Coord	Hold
Stops (vph)	153		144	33	31	307	
Fuel Used(gal)	3		3	1	1	5	
CO Emissions (g/hr)	206		216	78	36	367	
NOx Emissions (g/hr)	40		42	15	7	71	
VOC Emissions (g/hr)	48		50	18	8	85	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	94		60	0	14	126	
Queue Length 95th (ft)	118		136	m15	40	239	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		
Base Capacity (vph)	458		1162	1097	150	1259	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Starvation Cap Reductn	0		197	0	0	0	
Spillback Cap Reductn	0		0	0	0	32	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.53		0.54	0.26	0.23	0.54	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:SWL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 11.9		Intersection LOS: B	
Intersection Capacity Utilization 49.8%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Fort Hill St/West St & South St

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	86	61	1	0	0
Future Vol, veh/h	0	86	61	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	93	66	1	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	67	0	-	0	160	67
Stage 1	-	-	-	-	67	-
Stage 2	-	-	-	-	93	-
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	1535	-	-	-	831	997
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	931	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1535	-	-	-	831	997
Mov Cap-2 Maneuver	-	-	-	-	831	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	931	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1535	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	70	0	8	53	0	16
Future Vol, veh/h	70	0	8	53	0	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	-	-	-	-	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	76	0	9	58	0	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	76	0	152	76
Stage 1	-	-	-	-	76	-
Stage 2	-	-	-	-	76	-
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	-	-	1523	-	840	985
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	947	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1523	-	835	985
Mov Cap-2 Maneuver	-	-	-	-	812	-
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	941	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	985	-	-	1523	-
HCM Lane V/C Ratio	0.018	-	-	0.006	-
HCM Control Delay (s)	8.7	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	65	52	34	26	0
Future Vol, veh/h	0	65	52	34	26	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	71	57	37	28	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	94	0	-	0	147	76
Stage 1	-	-	-	-	76	-
Stage 2	-	-	-	-	71	-
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	1500	-	-	-	845	985
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	952	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1500	-	-	-	845	985
Mov Cap-2 Maneuver	-	-	-	-	819	-
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	952	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1500	-	-	-	819
HCM Lane V/C Ratio	-	-	-	-	0.035
HCM Control Delay (s)	0	-	-	-	9.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	57	0	2	50	0	8
Future Vol, veh/h	57	0	2	50	0	8
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	62	0	2	54	0	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	62	0	120	62
Stage 1	-	-	-	-	62	-
Stage 2	-	-	-	-	58	-
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	-	-	1541	-	876	1003
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	965	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1541	-	875	1003
Mov Cap-2 Maneuver	-	-	-	-	875	-
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	964	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1003	-	-	1541	-
HCM Lane V/C Ratio	0.009	-	-	0.001	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	NBR2	SWL2	SWL	SWR
Lane Configurations												
Traffic Volume (vph)	161	1	132	0	0	0	64	611	2	4	737	71
Future Volume (vph)	161	1	132	0	0	0	64	611	2	4	737	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		130	0		0	90	0			100	0
Storage Lanes	0		1	0		0	1	1			1	0
Taper Length (ft)	25			25			25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850					0.850			0.987	
Flt Protected		0.953					0.950			0.950	0.956	
Satd. Flow (prot)	0	1811	1615	0	1900	0	1805	1615	0	1805	1777	0
Flt Permitted		0.728					0.950			0.199	0.956	
Satd. Flow (perm)	0	1383	1615	0	1900	0	1805	1615	0	378	1777	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			157					94			23	
Link Speed (mph)		30			30		30				30	
Link Distance (ft)		713			153		583				434	
Travel Time (s)		16.2			3.5		13.3				9.9	
Peak Hour Factor	0.84	0.84	0.84	0.28	0.28	0.28	0.88	0.88	0.88	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Adj. Flow (vph)	192	1	157	0	0	0	73	694	2	4	760	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	193	157	0	0	0	73	696	0	4	833	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0		12				24	
Link Offset(ft)		0			0		0				0	
Crosswalk Width(ft)		16			16		16				16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15	9	9	15	15	9
Number of Detectors	1	2	1	1	2		1	1		1	1	
Detector Template	Left	Thru	Right	Left	Thru		Left	Right		Left	Left	
Leading Detector (ft)	20	100	20	20	100		20	20		20	20	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	20		20	20	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Perm	NA	Perm				Prot	Perm		Perm	Prot	
Protected Phases		4			8		2!				6!	

Lane Group	Ø1
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	NBR2	SWL2	SWL	SWR
Permitted Phases	4		4	8				2		6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5	22.5	22.5	22.5		37.9	37.9		47.5	47.5	
Total Split (%)	32.1%	32.1%	32.1%	32.1%	32.1%		54.1%	54.1%		67.9%	67.9%	
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0		33.4	33.4		43.0	43.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lag	Lag				
Lead-Lag Optimize?							Yes	Yes				
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)		16.7	16.7				40.5	40.5		44.3	44.3	
Actuated g/C Ratio		0.24	0.24				0.58	0.58		0.63	0.63	
v/c Ratio		0.59	0.31				0.07	0.72		0.02	0.73	
Control Delay		31.3	5.9				8.9	16.9		4.2	12.1	
Queue Delay		0.0	0.0				0.0	0.0		0.0	0.0	
Total Delay		31.3	5.9				8.9	16.9		4.2	12.2	
LOS		C	A				A	B		A	B	
Approach Delay		19.9					16.1				12.1	
Approach LOS		B					B				B	
90th %ile Green (s)	18.0	18.0	18.0	18.0	18.0		33.4	33.4		43.0	43.0	
90th %ile Term Code	Max	Max	Max	Max	Max		Coord	Coord		Coord	Coord	
70th %ile Green (s)	18.0	18.0	18.0	18.0	18.0		33.4	33.4		43.0	43.0	
70th %ile Term Code	Hold	Hold	Hold	Max	Max		Coord	Coord		Coord	Coord	
50th %ile Green (s)	18.0	18.0	18.0	18.0	18.0		43.0	43.0		43.0	43.0	
50th %ile Term Code	Hold	Hold	Hold	Max	Max		Coord	Coord		Coord	Coord	
30th %ile Green (s)	16.6	16.6	16.6	16.6	16.6		44.4	44.4		44.4	44.4	
30th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Coord	Coord		Coord	Coord	
10th %ile Green (s)	12.7	12.7	12.7	12.7	12.7		48.3	48.3		48.3	48.3	
10th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Coord	Coord		Coord	Coord	
Stops (vph)		140	21				31	370		2	665	
Fuel Used(gal)		3	1				1	7		0	8	
CO Emissions (g/hr)		189	70				40	484		2	587	
NOx Emissions (g/hr)		37	14				8	94		0	114	
VOC Emissions (g/hr)		44	16				9	112		0	136	
Dilemma Vehicles (#)		0	0				0	0		0	0	
Queue Length 50th (ft)		72	0				11	147		1	173	
Queue Length 95th (ft)		123	34				36	#415		m1	448	
Internal Link Dist (ft)		633			73		503				354	
Turn Bay Length (ft)			130				90			100	100	
Base Capacity (vph)		355	531				1044	973		239	1134	

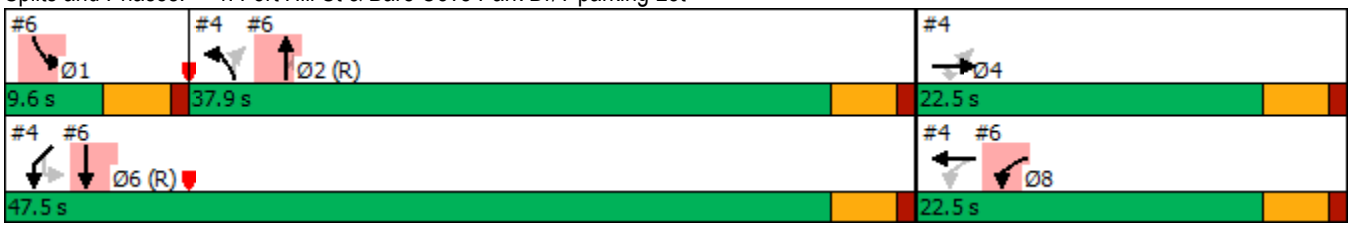
Lane Group	Ø1
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	9.5
Total Split (s)	9.6
Total Split (%)	14%
Maximum Green (s)	5.1
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
90th %ile Green (s)	5.1
90th %ile Term Code	Max
70th %ile Green (s)	5.1
70th %ile Term Code	Max
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	NBR2	SWL2	SWL	SWR
Starvation Cap Reductn		0	0				0	0		0	8	
Spillback Cap Reductn		0	0				0	0		0	0	
Storage Cap Reductn		0	0				0	0		0	0	
Reduced v/c Ratio		0.54	0.30				0.07	0.72		0.02	0.74	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:SWL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 15.1		Intersection LOS: B	
Intersection Capacity Utilization 69.5%		ICU Level of Service C	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

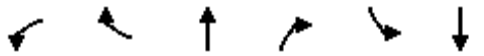
Splits and Phases: 4: Fort Hill St & Bare Cove Park Dr/T parking Lot



Lane Group	Ø1
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Lane Configurations							
Traffic Volume (vph)	227	31	470	330	24	534	
Future Volume (vph)	227	31	470	330	24	534	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0	0		180	120		
Storage Lanes	1	0		1	1		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	0.984			0.850			
Flt Protected	0.958				0.950		
Satd. Flow (prot)	1760	0	1900	1615	1624	1881	
Flt Permitted	0.958				0.950		
Satd. Flow (perm)	1760	0	1900	1615	1624	1881	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)	9			388			
Link Speed (mph)	30		30			30	
Link Distance (ft)	615		434			518	
Travel Time (s)	14.0		9.9			11.8	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.92	0.92	
Heavy Vehicles (%)	2%	0%	0%	0%	0%	1%	
Parking (#/hr)					0		
Adj. Flow (vph)	311	42	553	388	26	580	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	353	0	553	388	26	580	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Right	Left	Left	
Median Width(ft)	12		12			12	
Link Offset(ft)	0		0			0	
Crosswalk Width(ft)	16		16			16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.14	1.00	
Turning Speed (mph)	15	9		9	15		
Number of Detectors	1		2	1	1	2	
Detector Template	Left		Thru	Right	Left	Thru	
Leading Detector (ft)	20		100	20	20	100	
Trailing Detector (ft)	0		0	0	0	0	
Detector 1 Position(ft)	0		0	0	0	0	
Detector 1 Size(ft)	20		6	20	20	6	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	
Detector 2 Position(ft)			94			94	
Detector 2 Size(ft)			6			6	
Detector 2 Type			Cl+Ex			Cl+Ex	
Detector 2 Channel							
Detector 2 Extend (s)			0.0			0.0	
Turn Type	Prot		NA	Perm	Prot	NA	



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Protected Phases	8		2		1	6	4
Permitted Phases				2			
Detector Phase	8		2	2	1	6	
Switch Phase							
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5		22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.5		37.9	37.9	9.6	47.5	22.5
Total Split (%)	32.1%		54.1%	54.1%	13.7%	67.9%	32%
Maximum Green (s)	18.0		33.4	33.4	5.1	43.0	18.0
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.5	4.5	4.5	4.5	
Lead/Lag			Lag	Lag	Lead		
Lead-Lag Optimize?			Yes	Yes	Yes		
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0
Recall Mode	None		C-Max	C-Max	None	C-Max	None
Walk Time (s)	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0		0	0		0	0
Act Effct Green (s)	16.7		40.5	40.5	5.3	44.3	
Actuated g/C Ratio	0.24		0.58	0.58	0.08	0.63	
v/c Ratio	0.83		0.50	0.35	0.21	0.49	
Control Delay	42.7		10.7	2.6	35.0	8.9	
Queue Delay	0.0		0.4	0.0	0.0	0.1	
Total Delay	42.7		11.0	2.6	35.0	9.0	
LOS	D		B	A	C	A	
Approach Delay	42.7		7.6			10.1	
Approach LOS	D		A			B	
90th %ile Green (s)	18.0		33.4	33.4	5.1	43.0	18.0
90th %ile Term Code	Max		Coord	Coord	Max	Coord	Max
70th %ile Green (s)	18.0		33.4	33.4	5.1	43.0	18.0
70th %ile Term Code	Max		Coord	Coord	Max	Coord	Hold
50th %ile Green (s)	18.0		43.0	43.0	0.0	43.0	18.0
50th %ile Term Code	Max		Coord	Coord	Skip	Coord	Hold
30th %ile Green (s)	16.6		44.4	44.4	0.0	44.4	16.6
30th %ile Term Code	Gap		Coord	Coord	Skip	Coord	Hold
10th %ile Green (s)	12.7		48.3	48.3	0.0	48.3	12.7
10th %ile Term Code	Gap		Coord	Coord	Skip	Coord	Hold
Stops (vph)	221		211	46	26	271	
Fuel Used(gal)	5		4	2	0	5	
CO Emissions (g/hr)	329		264	108	29	323	
NOx Emissions (g/hr)	64		51	21	6	63	
VOC Emissions (g/hr)	76		61	25	7	75	
Dilemma Vehicles (#)	0		0	0	0	0	
Queue Length 50th (ft)	137		93	5	11	122	
Queue Length 95th (ft)	172		167	27	33	194	
Internal Link Dist (ft)	535		354			438	
Turn Bay Length (ft)				180	120		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø4
Base Capacity (vph)	459		1099	1097	123	1191	
Starvation Cap Reductn	0		173	0	0	0	
Spillback Cap Reductn	0		0	0	0	72	
Storage Cap Reductn	0		0	0	0	0	
Reduced v/c Ratio	0.77		0.60	0.35	0.21	0.52	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:SWL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 14.9		Intersection LOS: B	
Intersection Capacity Utilization 50.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Fort Hill St/West St & South St

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	262	97	0	0	0
Future Vol, veh/h	0	262	97	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	285	105	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	105	0	-	0	390	105
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	285	-
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	1486	-	-	-	614	949
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	614	949
Mov Cap-2 Maneuver	-	-	-	-	614	-
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	763	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1486	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	112	0	65	32	0	150
Future Vol, veh/h	112	0	65	32	0	150
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	122	0	71	35	0	163

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	122	0	299	122
Stage 1	-	-	-	-	122	-
Stage 2	-	-	-	-	177	-
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	-	-	1465	-	692	929
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	854	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1465	-	658	929
Mov Cap-2 Maneuver	-	-	-	-	687	-
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	812	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.1	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	929	-	-	1465	-
HCM Lane V/C Ratio	0.176	-	-	0.048	-
HCM Control Delay (s)	9.7	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	102	27	43	41	0
Future Vol, veh/h	0	102	27	43	41	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	111	29	47	45	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	76	0	-	0	164	53
Stage 1	-	-	-	-	53	-
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	1523	-	-	-	827	1014
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1523	-	-	-	827	1014
Mov Cap-2 Maneuver	-	-	-	-	804	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	914	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1523	-	-	-	804
HCM Lane V/C Ratio	-	-	-	-	0.055
HCM Control Delay (s)	0	-	-	-	9.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

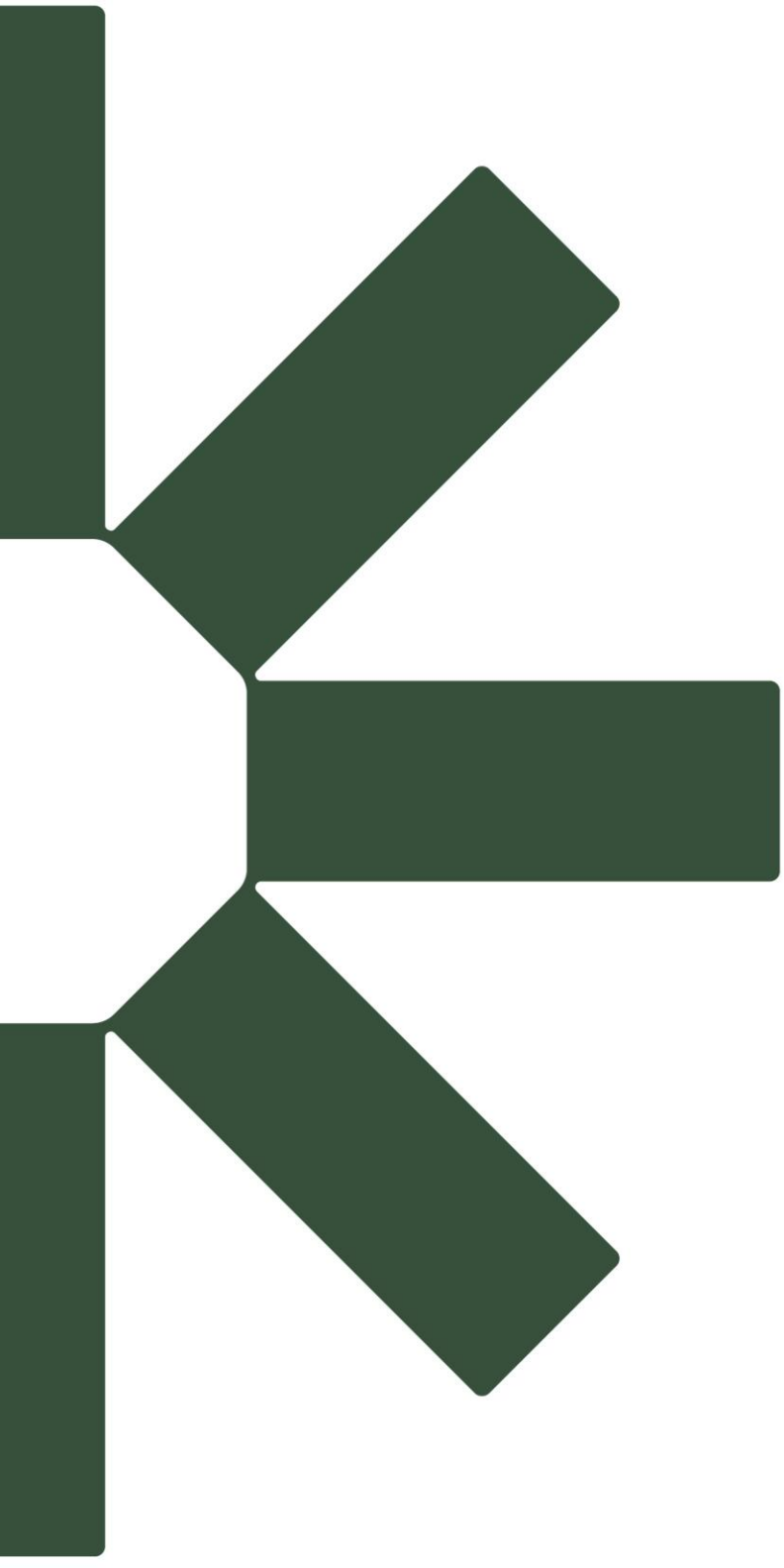
Intersection	
Int Delay, s/veh	6.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	0	11	16	0	88
Future Vol, veh/h	14	0	11	16	0	88
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	0	12	17	0	96

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	15	0	56	15
Stage 1	-	-	-	-	15	-
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	-	-	1603	-	952	1065
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	981	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1603	-	944	1065
Mov Cap-2 Maneuver	-	-	-	-	944	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	973	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1065	-	-	1603	-
HCM Lane V/C Ratio	0.09	-	-	0.007	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-



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