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MEMORANDUM

TO:	Hon. James Bonanno, Chairman and Planning Board Members	DATE:	May 1, 2024
FROM:	Brian Dempsey, P.E., PTOE, RSP1 Daris Monroy Castillo	RE:	Traffic Analysis 203 Beech Street 104 & 108 Highland Avenue Town of Eastchester

DTS Provident Design Engineering (DTS Provident), a licensed Professional Engineering Firm in the State of New York, has prepared this Traffic Analysis Memorandum for the 203 Beech Street and 104/108 Highland Avenue – Subdivision Project proposed to be located along Highland Avenue and Beech Street in the Town of Eastchester. DTS Provident previously submitted various Traffic Studies and Memos in conjunction with the previous proposal for this Site. The Site is now proposed to consist of an 11-buildable lot single family detached subdivision (8 lots were previously proposed) and the cul-de-sac will now be accessed from Highland Avenue instead of Beech Street. There are no variances required.

Discussions were held with Town Staff and the Town's Traffic Consultant, Colliers Engineering & Design along with others regarding the latest Site Plan. The Town's Traffic Consultant recommended that some additional traffic analysis be prepared for submission to the Town. To provide this additional analysis, field observations and traffic counts were performed, and capacity analysis were conducted to determine future Levels of Service along with other tasks. The following is a summary of this Traffic Analysis as requested by the Town's Traffic Consultant:

Access

Of the eleven single family detached lots, eight will be along the cul-de-sac which connects to Highland Avenue. One will connect directly to Highland Avenue. The other two lots will have individual driveways connecting to Beech Street. For analysis purposes, and to be conservative, all nine lots on Highland Avenue were analyzed together (as if all were utilizing the cul-de-sac), and both lots on Beech Street were analyzed together (as if they shared a driveway). As described below, all of the access points will operate at good levels of service.

Trip Generation

Consistent with the previous Studies, the Site-generated traffic attributable to the proposed Project was determined based upon the trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition for Land Use 210 – Single-Family Detached Homes. The following

Table summarizes the estimated Site-generated Traffic Volumes, based upon the ITE rates:

TABLE NO. 1
TRIP GENERATION
(vph – vehicles per hour)

	Weekday Peak AM Roadway Hour		Weekday Peak PM Roadway Hour	
	Enter (vph)	**Exit (vph)**	**Enter (vph)**	**Exit (vph)**
Highland Avenue Access 9 Single-Family Homes (ITE Land Use 210)	4	10	7	4
Beech Street Access 2 Single-Family Homes (ITE Land Use 210)	1	2	2	1

The previous traffic analysis indicated that these volumes are conservative and consistent when compared with similar locations within the Town.

Traffic Volumes

DTS Provident conducted traffic counts along Highland Avenue on Tuesday April 16, 2024 from 3:00 – 6:00 PM and on Wednesday April 17, 2024 from 7:00 – 9:00 AM. The Peak Hours determined (7:45 – 8:45 AM and 3:15 to 4:15 PM) were similar to those in the original Traffic Study. The traffic volumes were combined with the previous traffic counts that were included in the Traffic Study dated December 14, 2022, and other supplemental traffic counts during the review process to form the Existing Traffic Volumes. Consistent with the original Traffic Study, this traffic was then grown to the Design Year. The Site-Generated traffic was then added to form the Build Traffic Volumes. The Traffic Volume figures are attached.

Capacity Analysis/Levels of Service

Utilizing these traffic volumes, Synchro Capacity Analyses (copies attached) were performed, and Levels of Service were determined. As illustrated in the attached Level of Service Tables, the Project will not result in any change in Levels of Service at any of the five intersections studied. They each will continue to operate at Level of Service A after Project completion. Some individual turning movements will continue to operate at Level of Service B such as turning left from Beech Street onto Highland Avenue during the Peak PM Hour. The Site Driveway/Cul-de-Sac left turn onto Highland Avenue will also operate at a Level of Service B.

Bus Stops

At the request of the Town's Traffic Consultant, observations were performed regarding the location of School Bus Stops along Highland Avenue as there are no sidewalks along Highland Avenue between White Plains Road and California Road. The buses did stop at the driveways/cul-de-sacs intersecting with Highland Avenue. The same would occur at the new cul-de-sac proposed for the project. Previous discussions with the Bus Company indicated that they will review their routes each year depending upon the residences and schools of the particular students who register for the bus.

Highland Avenue Signage

In addition to parking/no parking signs, there is some current signage along Highland Avenue eastbound including a curve warning sign, a children at play sign, and a slippery when wet sign. There is also a curve warning sign in the westbound direction in a different section of Highland Avenue. In addition, there is a speed radar sign on the eastbound side of Highland Avenue just west of D'Ambrosia Way, which has been located there for several years and is effective in maintaining lower speeds.

The Town's Traffic Consultant had asked whether any signage would be required to indicate the presence of the Site Driveway and/or the cul-de sac along Highland Avenue. Based upon a field review, there will be sufficient visibility of the cul-de-sac and driveway. This type of signage is not needed for the proposed cul-de-sac, nor does any similar signage currently exist along this section of Highland Avenue (there is a Hidden Driveway sign on a different section which has curves). The above referenced speed radar sign helps limit travel speeds.

Parking along Cul-de-Sac

There will be more than sufficient parking for the residences. Each house will have room for several vehicles in their respective driveway as well as additional space for off-street parking in its own garage. In addition, there will be room for 8 vehicles to park on-street along the entrance side of the cul-de-sac, as the cul-de-sac is 30 feet wide in that area. These spaces will be typical unstriped on-street parking spaces and there will be sufficient snow storage area.

There is also some on-street parking permitted along some portions of the eastbound side of Highland Avenue.

Sight Distance

As illustrated on the Site Plans, appropriate sight distance will be provided at the Site Driveways and the Cul-de-sac. Highland Avenue is straight in this section. Some vegetation will need to be cleared within

the right-of-way. A reviewed of the vehicle speeds measured by the speed radar sign on Highland Avenue showed that the overwhelming majority of vehicles were traveling at less than 30 mph.

Crash Data

As requested by the Town's Traffic Consultant, DTS Provident obtained the available crash data for the area from the New York State Department of Transportation for the last five years, from December 31, 2018 through December 31, 2023. This data shows that the Project area is not prone to crashes. During this time period, there were only five crashes, and no more than one crash at any of the locations.

The following were the locations of the crashes (or the closest intersection to the crash), one crash per location:

- Highland Avenue at Cauldwell Street
- Highland Avenue near Cauldwell Street
- Highland Avenue at Leary Street
- Highland Avenue at Beech Street
- Stebbins Avenue at Beech Street

Of the five crashes, two of the crashes were right angle crashes, one rear end, and the remaining two were unknown. One of the right-angle crashes possibly had an injury (at or near the intersection of Highland Avenue and Leary Street), while the four others were property damage only. None of the crashes involved pedestrians, bicyclists, or commercial vehicles. The main contributing factors were failure to yield right-of-way and disregarded traffic control device. Three of the crashes involved parked cars, including the two that were related to Beech Street where vehicles backing out of their driveways/parking spaces, backed into parked cars. The other two were vehicles turning left, one of which was because a vehicle traveling westbound on Highland Avenue did not stop at the Stop sign at Cauldwell Street. Additional Crash Data information is attached.

Centerline Distance to Adjacent Streets

As illustrated on the Site Plans, the centerline distance from the cul-de-sac to the closest street is greater than 150 feet, thus, no variance is required. The closest street to the southeast is Leary Street while the closest street to the northwest is D'Ambrosia Way.

We trust the foregoing adequately addresses any outstanding comments or concerns. Should you wish to discuss any aspect of this Memorandum please feel free to contact us.

ATTACHMENTS

C:\Users\Dmonroy\DC\ACCDocs\DTSP\0975_Eastchester 203 Beech Street\Project Files\Traffic\Traffic Figure - Highland Avenue and Leary Street\0975 - TrafficFigures_Rev 04.23.24.dwg

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Site Location
Beech Street
Town of Eastchester, Westchester County, NY

Project No. 0975
Scale: N.T.S
May 2024

Figure No. 01

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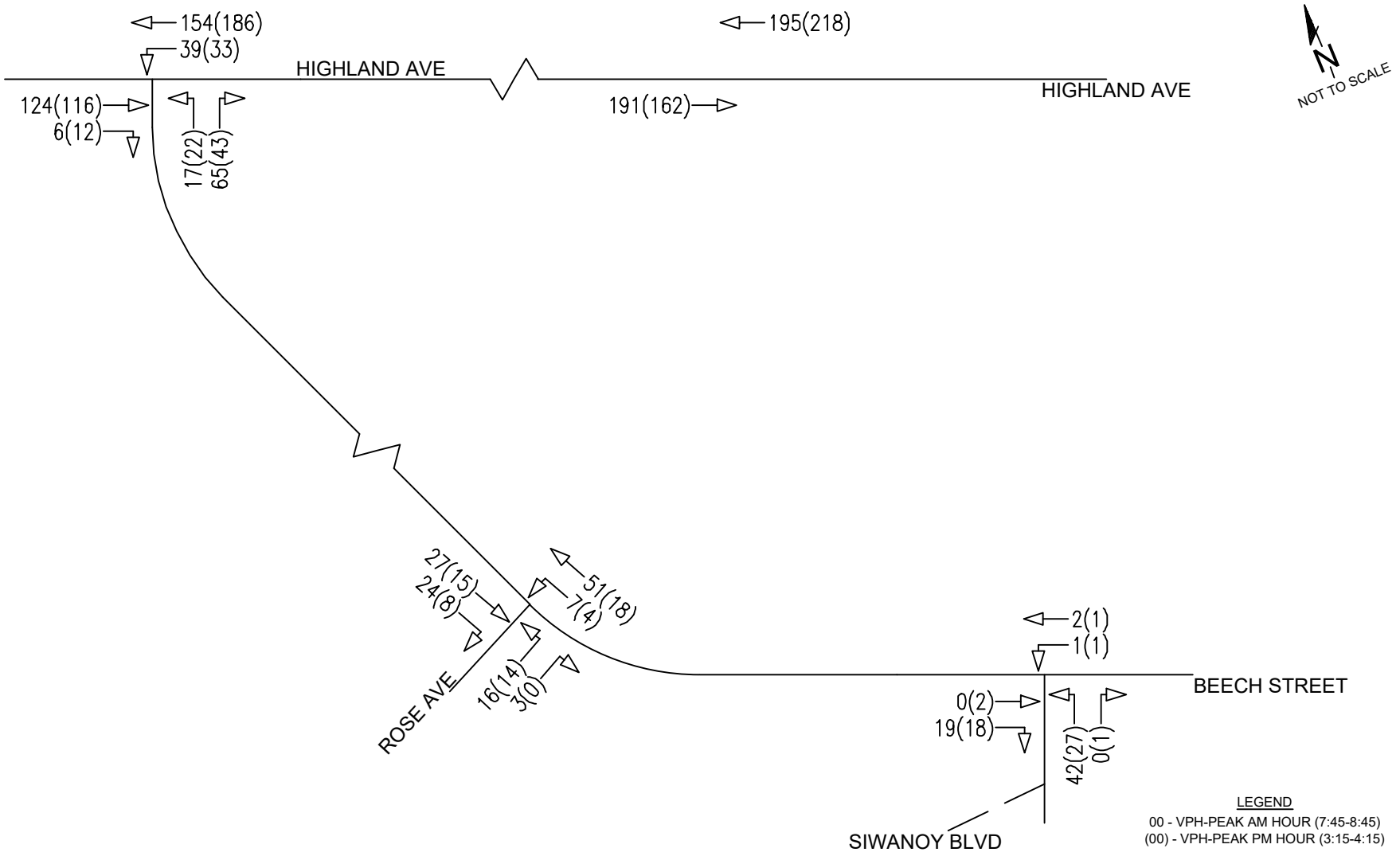

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Existing Traffic Volumes

Beech Street
Town of Eastchester, Westchester County, NY

Project No. 0975
Scale: N.T.S
May 2024

Figure No. 02

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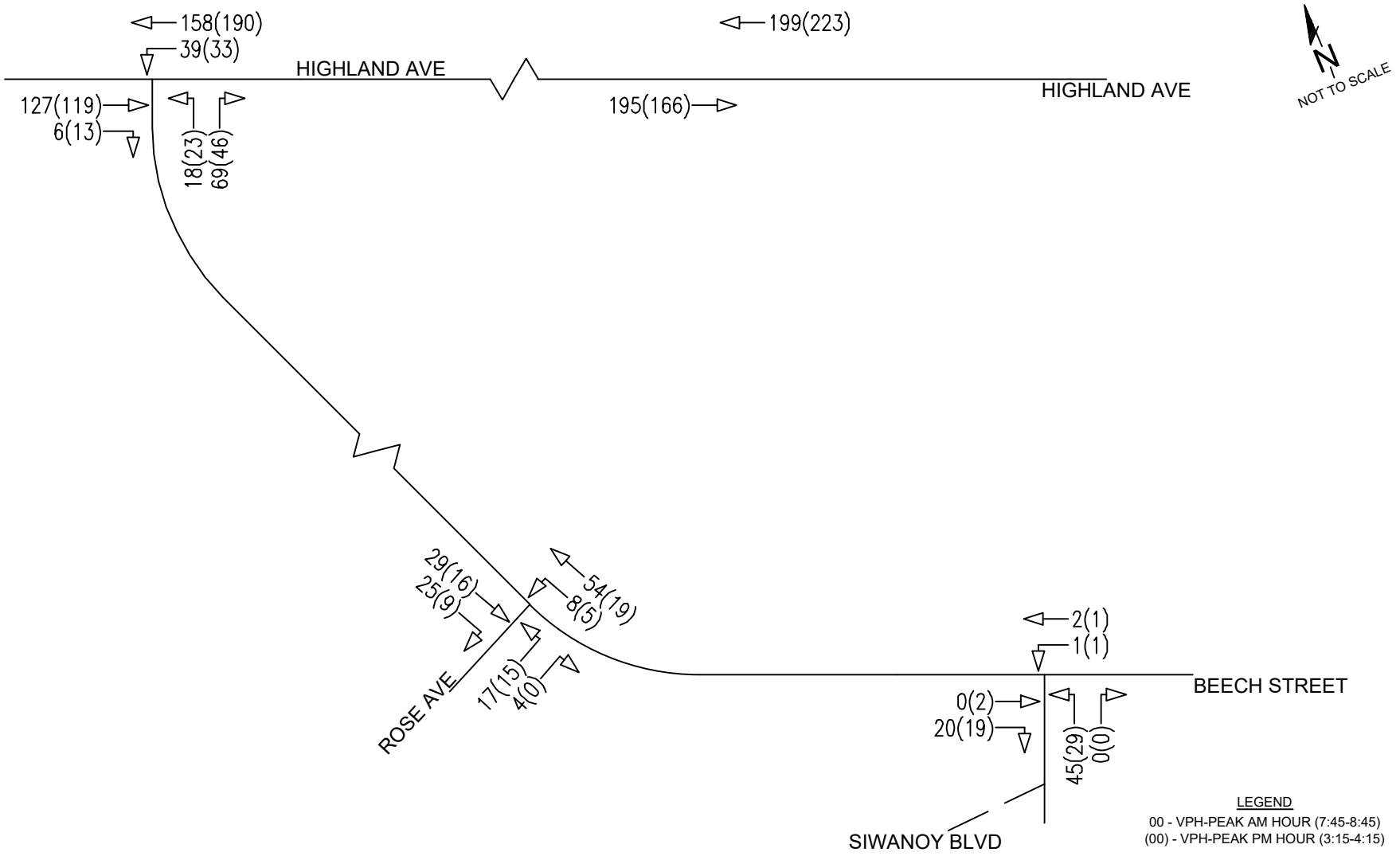

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No-Build Traffic Volumes
Beech Street
Town of Eastchester, Westchester County, NY

Project No. 0975
Scale: N.T.S
May 2024

Figure No. 03

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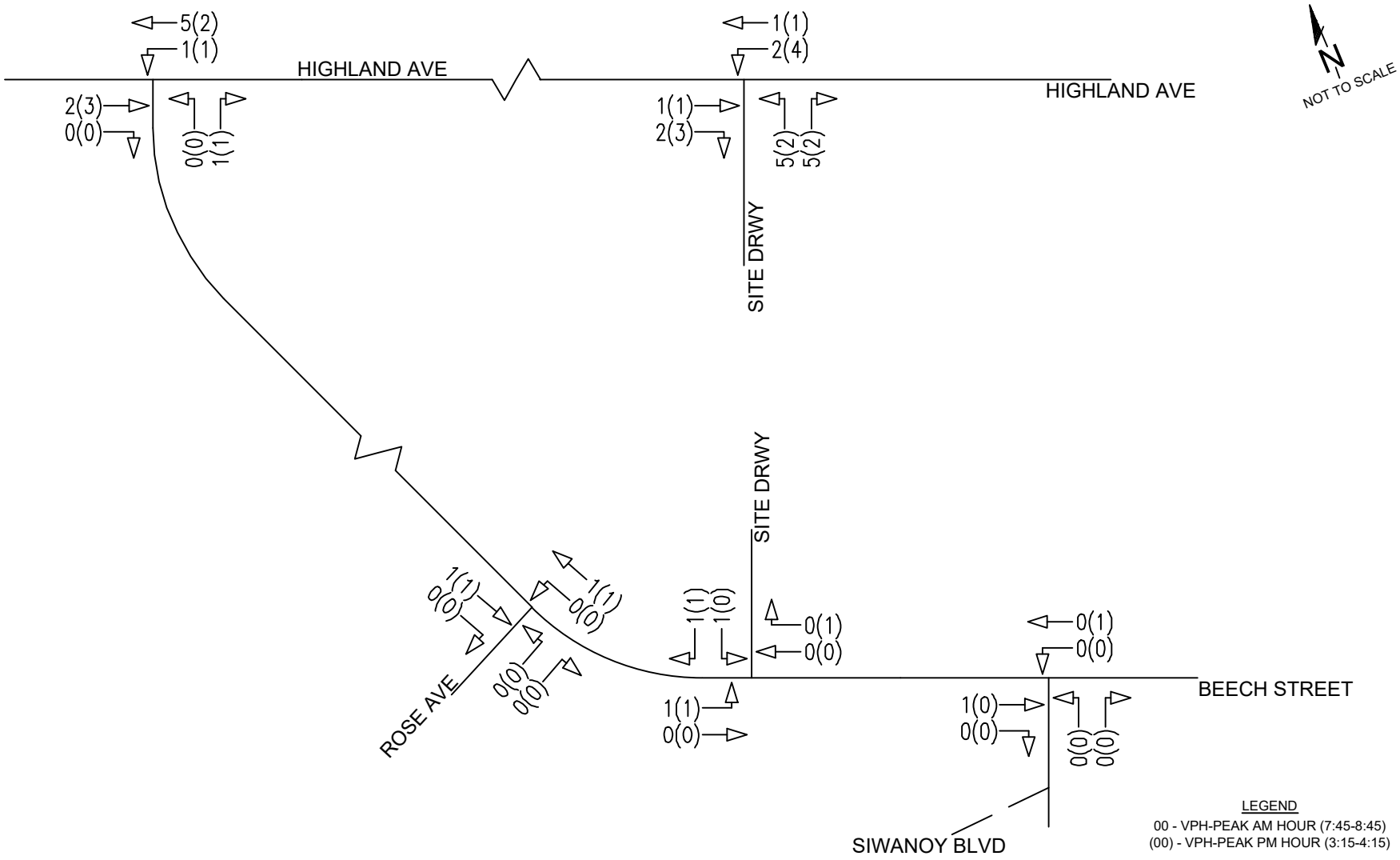

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Site Generated Traffic Volumes

Beech Street
Town of Eastchester, Westchester County, NY

Project No. 0975
Scale: N.T.S
May 2024

Figure No. 04

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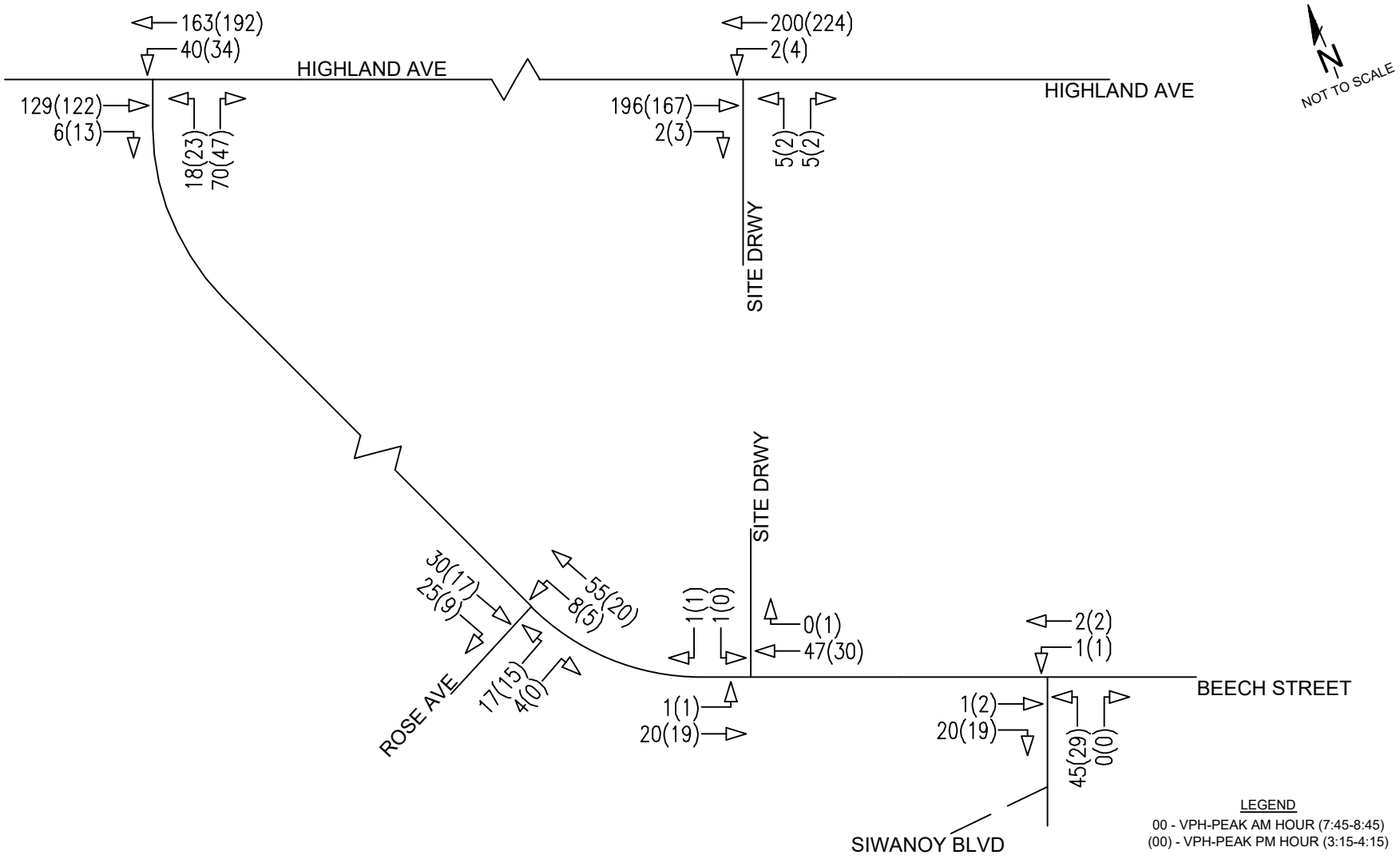

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Build Traffic Volumes
Beech Street
Town of Eastchester, Westchester County, NY

Project No. 0975
Scale: N.T.S
May 2024

Figure No. 05

PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE HIGHLAND AVENUE & BEECH STREET							
APPROACH		**PEAK AM HOUR**			**PEAK PM HOUR**		
		2022 EXISTING	**2025 NO-BUILD**	**2025 BUILD**	**2022 EXISTING**	**2025 NO-BUILD**	**2025 BUILD**
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
Beech Street							
NB	LR	a 9.9	a 10.0	a 10	b 10.2	b 10.2	b 10.3
Highland Avenue							
EB	TR	- 0	- 0	- 0	- 0.0	- 0	- 0.0
WB	LT	a 7.6	a 7.6	a 7.6	a 7.6	a 7.6	a 7.6
INTERSECTION		**a 2.7**	**a 2.8**	**a 2.8**	**a 2.2**	**a 2.3**	**a 2.3**

PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE HIGHLAND AVENUE & SITE DRIVEWAY							
APPROACH		**PEAK AM HOUR**			**PEAK PM HOUR**		
		2022 EXISTING	**2025 NO-BUILD**	**2025 BUILD**	**2022 EXISTING**	**2025 NO-BUILD**	**2025 BUILD**
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
Site Driveway							
NB	LR	- 0	- 0.0	b 10.4	- 0.0	- 0.0	b 10.3
Highland Avenue							
EB	TR	- 0	- 0	- 0	- 0.0	- 0	- 0.0
WB	LT	- 0.0	- 0.0	a 7.7	- 0.0	- 0.0	a 7.6
INTERSECTION		**- 0.0**	**- 0.0**	**a 0.3**	**- 0.0**	**- 0.0**	**a 0.2**

PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE BEECH STREET & ROSE AVENUE							
APPROACH		PEAK AM HOUR			PEAK PM HOUR		
		2022 EXISTING	2025 NO-BUILD	2025 BUILD	2022 EXISTING	2025 NO-BUILD	2025 BUILD
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
Rose Avenue							
NB	LR	a 9.1	a 9.1	a 9.1	a 8.8	a 8.9	a 8.9
Beech Street							
EB	TR	- 0	- 0	- 0	- 0.0	- 0	- 0.0
WB	LT	a 7.3	a 7.3	a 7.3	a 7.3	a 7.3	a 7.3
INTERSECTION		**a 1.8**	**a 1.8**	**a 1.8**	**a 2.6**	**a 2.6**	**a 2.6**

PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE BEECH STREET & SITE DRIVEWAY							
APPROACH		PEAK AM HOUR			PEAK PM HOUR		
		2022 EXISTING	2025 NO-BUILD	2025 BUILD	2022 EXISTING	2025 NO-BUILD	2025 BUILD
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
Site Driveway							
SB	LR	- 0	- 0	a 8.7	- 0	- 0.0	a 8.5
Beech Street							
EB	LT	- 0	- 0	a 7.3	- 0.0	- 0	a 7.3
WB	TR	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0
INTERSECTION		**- 0.0**	**- 0.0**	**a 0.4**	**- 0.0**	**- 0.0**	**a 0.3**

PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE BEECH STREET & SIWANOY BOULEVARD							
APPROACH		**PEAK AM HOUR**			**PEAK PM HOUR**		
		2022 EXISTING	**2025 NO-BUILD**	**2025 BUILD**	**2022 EXISTING**	**2025 NO-BUILD**	**2025 BUILD**
		LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)
Siwanoy Boulevard							
NB	LR	a 7.4	a 7.4	a 7.4	a 7.3	a 7.4	a 7.3
Beech Street							
EB	TR	a 6.5	a 6.5	a 6.6	a 6.5	a 6.6	a 6.5
WB	LT	a 7.1	a 7.1	a 7.1	a 7.1	a 7.2	a 7.1
INTERSECTION		**a 7.1**	**a 7.1**	**a 7.1**	**a 7.0**	**a 7.1**	**a 7.0**

CRASH NUMBER	CASE NUMBER	CASE YEAR	ACCD DATE	ACCD TIME	ON STREET	CLOSEST CROSS STREET	INTERSECTION INDICATOR	ACCIDENT TYPE	COLLISION TYPE	SEVERITY	NUMBER OF INJURIES	NUMBER OF SERIOUS INJURIES	NUMBER OF FATALITIES	NUMBER OF VEHICLES
1	38076008	2019	2019-07-26T00:00:00	7:55 AM	HIGHLAND AVE	BEECH ST	INTERSECTION-RELATED	COLLISION WITH MOTOR VEHICLE	UNKNOWN	PROPERTY DAMAGE	0	0	0	2
2	38920427	2021	2021-06-30T00:00:00	2:19 PM	HIGHLAND AVE	Cauldwell St	INTERSECTION-RELATED	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	PROPERTY DAMAGE	0	0	0	2
3	38593611	2020	2020-10-12T00:00:00	3:15 PM	HIGHLAND AVE	Leary St	INTERSECTION-RELATED	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	INJURY	1	0	0	2
4	39774575	2023	2023-03-30T00:00:00	7:30 AM	HIGHLAND AVENUE	CAULDWELL STREET	Not an intersection crash	COLLISION WITH MOTOR VEHICLE	REAR END	PROPERTY DAMAGE	0	0	0	2
5	38261413	2019	2019-11-28T00:00:00	9:00 PM	STEBBINS AVE	BEECH ST	AT-INTERSECTION	COLLISION WITH MOTOR VEHICLE	UNKNOWN	PROPERTY DAMAGE	0	0	0	2

CRASH NUMBER	CASE NUMBER	APPARENT CONTRIBUTING FACTOR	TRAFFIC CONTROL	LIGHT CONDITION	WEATHER	ROAD SURFACE CONDITION
1	38076008	V1:(NOT ENTERED,NOT ENTERED) / V2:(NOT ENTERED,NOT ENTERED)	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN
2	38920427	V1:(FAILURE TO YIELD RIGHT OF WAY,TRAFFIC CONTROL DEVICES DISREGARDED) / V2:(NOT APPLICABLE,NOT APPLICABLE)	STOP SIGN	DAYLIGHT	CLEAR	DRY
3	38593611	V1:(UNSAFE SPEED,NOT APPLICABLE) / V2:(FAILURE TO YIELD RIGHT OF WAY,TRAFFIC CONTROL DEVICES DISREGARDED)	STOP SIGN	DAYLIGHT	RAIN	WET
4	39774575	V1:(GLARE,PASSING OR LANE USAGE IMPROPERLY) / V2:(NOT APPLICABLE,NOT APPLICABLE)	NONE	DAYLIGHT	CLEAR	DRY
5	38261413	V1:(NOT ENTERED,NOT ENTERED) / V2:(NOT ENTERED,NOT ENTERED)	UNKNOWN	DARK-ROAD LIGHTED	CLEAR	DRY

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	124	6	39	154	17	65
Future Vol, veh/h	124	6	39	154	17	65
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	135	7	42	167	18	71

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	141	0	390	138
Stage 1	-	-	-	-	138	-
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	-	-	1442	-	614	910
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	790	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1442	-	594	910
Mov Cap-2 Maneuver	-	-	-	-	594	-
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	764	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.53	9.93
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	820	-	-	364	-
HCM Lane V/C Ratio	0.109	-	-	0.029	-
HCM Control Delay (s/veh)	9.9	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	27	24	7	51	16	3
Future Vol, veh/h	27	24	7	51	16	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	26	8	55	17	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	55	0	113	42
Stage 1	-	-	-	-	42	-
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	-	-	1549	-	884	1028
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	952	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1549	-	879	1028
Mov Cap-2 Maneuver	-	-	-	-	879	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	947	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.89	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	900	-	-	217	-
HCM Lane V/C Ratio	0.023	-	-	0.005	-
HCM Control Delay (s/veh)	9.1	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	116	12	33	186	22	43
Future Vol, veh/h	116	12	33	186	22	43
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	126	13	36	202	24	47

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	139	0	407	133
Stage 1	-	-	-	-	133	-
Stage 2	-	-	-	-	274	-
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	-	-	1444	-	601	917
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	772	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1444	-	584	917
Mov Cap-2 Maneuver	-	-	-	-	584	-
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	751	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.14	10.16
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	768	-	-	271	-
HCM Lane V/C Ratio	0.092	-	-	0.025	-
HCM Control Delay (s/veh)	10.2	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	8	4	18	14	0
Future Vol, veh/h	15	8	4	18	14	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	16	9	4	20	15	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	25	0	49	21
Stage 1	-	-	-	-	21	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1589	-	960	1057
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1589	-	958	1057
Mov Cap-2 Maneuver	-	-	-	-	958	-
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	992	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.32	8.82
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	958	-	-	327	-
HCM Lane V/C Ratio	0.016	-	-	0.003	-
HCM Control Delay (s/veh)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	19	1	2	42	0
Future Vol, veh/h	0	19	1	2	42	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	21	1	2	46	0
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	6.5	7.1	7.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	33%
Vol Thru, %	0%	0%	67%
Vol Right, %	0%	100%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	42	19	3
LT Vol	42	0	1
Through Vol	0	0	2
RT Vol	0	19	0
Lane Flow Rate	46	21	3
Geometry Grp	1	1	1
Degree of Util (X)	0.053	0.02	0.004
Departure Headway (Hd)	4.175	3.417	4.097
Convergence, Y/N	Yes	Yes	Yes
Cap	862	1046	873
Service Time	2.181	1.441	2.122
HCM Lane V/C Ratio	0.053	0.02	0.003
HCM Control Delay, s/veh	7.4	6.5	7.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.1	0

Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	18	1	1	27	1
Future Vol, veh/h	2	18	1	1	27	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	20	1	1	29	1
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	6.5	7.1	7.3
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	96%	0%	50%
Vol Thru, %	0%	10%	50%
Vol Right, %	4%	90%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	28	20	2
LT Vol	27	0	1
Through Vol	0	2	1
RT Vol	1	18	0
Lane Flow Rate	30	22	2
Geometry Grp	1	1	1
Degree of Util (X)	0.035	0.021	0.002
Departure Headway (Hd)	4.146	3.449	4.103
Convergence, Y/N	Yes	Yes	Yes
Cap	868	1040	874
Service Time	2.15	1.464	2.121
HCM Lane V/C Ratio	0.035	0.021	0.002
HCM Control Delay, s/veh	7.3	6.5	7.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	127	6	39	158	18	69
Future Vol, veh/h	127	6	39	158	18	69
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	138	7	42	172	20	75

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	145	0	398	141
Stage 1	-	-	-	-	141	-
Stage 2	-	-	-	-	257	-
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	-	-	1438	-	608	907
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	786	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1438	-	588	907
Mov Cap-2 Maneuver	-	-	-	-	588	-
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	761	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.5	10
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	815	-	-	356	-
HCM Lane V/C Ratio	0.116	-	-	0.029	-
HCM Control Delay (s/veh)	10	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	29	25	8	54	17	4
Future Vol, veh/h	29	25	8	54	17	4
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	32	27	9	59	18	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	59	0	121	45
Stage 1	-	-	-	-	45	-
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	-	-	1545	-	874	1025
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	947	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1545	-	869	1025
Mov Cap-2 Maneuver	-	-	-	-	869	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	941	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.95	9.13
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	895	-	-	232	-
HCM Lane V/C Ratio	0.026	-	-	0.006	-
HCM Control Delay (s/veh)	9.1	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	119	13	33	190	23	46
Future Vol, veh/h	119	13	33	190	23	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	129	14	36	207	25	50

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	143	0	415	136
Stage 1	-	-	-	-	136	-
Stage 2	-	-	-	-	278	-
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	-	-	1439	-	594	912
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	769	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1439	-	577	912
Mov Cap-2 Maneuver	-	-	-	-	577	-
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	747	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.12	10.22
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	764	-	-	266	-
HCM Lane V/C Ratio	0.098	-	-	0.025	-
HCM Control Delay (s/veh)	10.2	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	16	9	5	19	15	0
Future Vol, veh/h	16	9	5	19	15	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	17	10	5	21	16	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	27	0	54	22
Stage 1	-	-	-	-	22	-
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	-	-	1587	-	954	1055
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	991	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1587	-	951	1055
Mov Cap-2 Maneuver	-	-	-	-	951	-
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	988	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.52	8.85
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	951	-	-	375	-
HCM Lane V/C Ratio	0.017	-	-	0.003	-
HCM Control Delay (s/veh)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	20	1	2	45	0
Future Vol, veh/h	0	20	1	2	45	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	1	2	49	0
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	6.5	7.1	7.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	33%
Vol Thru, %	0%	0%	67%
Vol Right, %	0%	100%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	45	20	3
LT Vol	45	0	1
Through Vol	0	0	2
RT Vol	0	20	0
Lane Flow Rate	49	22	3
Geometry Grp	1	1	1
Degree of Util (X)	0.057	0.021	0.004
Departure Headway (Hd)	4.177	3.421	4.102
Convergence, Y/N	Yes	Yes	Yes
Cap	861	1044	871
Service Time	2.183	1.449	2.131
HCM Lane V/C Ratio	0.057	0.021	0.003
HCM Control Delay, s/veh	7.4	6.5	7.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.1	0

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	19	1	1	45	0
Future Vol, veh/h	2	19	1	1	45	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	21	1	1	49	0
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	6.6	7.2	7.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	50%
Vol Thru, %	0%	10%	50%
Vol Right, %	0%	90%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	45	21	2
LT Vol	45	0	1
Through Vol	0	2	1
RT Vol	0	19	0
Lane Flow Rate	49	23	2
Geometry Grp	1	1	1
Degree of Util (X)	0.057	0.022	0.002
Departure Headway (Hd)	4.177	3.477	4.136
Convergence, Y/N	Yes	Yes	Yes
Cap	862	1027	864
Service Time	2.181	1.505	2.165
HCM Lane V/C Ratio	0.057	0.022	0.002
HCM Control Delay, s/veh	7.4	6.6	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.1	0

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	129	6	40	163	18	70
Future Vol, veh/h	129	6	40	163	18	70
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	140	7	43	177	20	76

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	147	0	408	143
Stage 1	-	-	-	-	143	-
Stage 2	-	-	-	-	264	-
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	-	-	1435	-	600	904
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	780	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1435	-	580	904
Mov Cap-2 Maneuver	-	-	-	-	580	-
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	754	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.49	10.03
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	811	-	-	355	-
HCM Lane V/C Ratio	0.118	-	-	0.03	-
HCM Control Delay (s/veh)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	25	8	55	17	4
Future Vol, veh/h	30	25	8	55	17	4
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	33	27	9	60	18	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	60	0	123	46
Stage 1	-	-	-	-	46	-
Stage 2	-	-	-	-	77	-
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	-	-	1544	-	872	1023
Stage 1	-	-	-	-	976	-
Stage 2	-	-	-	-	946	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1544	-	867	1023
Mov Cap-2 Maneuver	-	-	-	-	867	-
Stage 1	-	-	-	-	976	-
Stage 2	-	-	-	-	940	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.93	9.14
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	893	-	-	229	-
HCM Lane V/C Ratio	0.026	-	-	0.006	-
HCM Control Delay (s/veh)	9.1	-	-	7.3	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	1	20	47	0	1	1
Future Vol, veh/h	1	20	47	0	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	22	51	0	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	51	0	-	0	75	51
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	24	-
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	1555	-	-	-	928	1017
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	999	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1555	-	-	-	928	1017
Mov Cap-2 Maneuver	-	-	-	-	928	-
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	999	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.35	0	8.72
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	86	-	-	-	970
HCM Lane V/C Ratio	0.001	-	-	-	0.002
HCM Control Delay (s/veh)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	196	2	2	200	5	5
Future Vol, veh/h	196	2	2	200	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
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	213	2	2	217	5	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	215	0	436	214
Stage 1	-	-	-	-	214	-
Stage 2	-	-	-	-	222	-
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	-	-	1355	-	578	826
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	815	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1355	-	577	826
Mov Cap-2 Maneuver	-	-	-	-	577	-
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	814	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.08	10.39
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	679	-	-	18	-
HCM Lane V/C Ratio	0.016	-	-	0.002	-
HCM Control Delay (s/veh)	10.4	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	122	13	34	192	23	47
Future Vol, veh/h	122	13	34	192	23	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	133	14	37	209	25	51

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	147	0	422	140
Stage 1	-	-	-	-	140	-
Stage 2	-	-	-	-	283	-
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	-	-	1435	-	588	908
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	765	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1435	-	571	908
Mov Cap-2 Maneuver	-	-	-	-	571	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	743	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.14	10.26
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	761	-	-	271	-
HCM Lane V/C Ratio	0.1	-	-	0.026	-
HCM Control Delay (s/veh)	10.3	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	9	5	20	15	0
Future Vol, veh/h	17	9	5	20	15	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	18	10	5	22	16	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	28	0	56	23
Stage 1	-	-	-	-	23	-
Stage 2	-	-	-	-	33	-
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	-	-	1585	-	952	1053
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	990	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1585	-	948	1053
Mov Cap-2 Maneuver	-	-	-	-	948	-
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	986	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.46	8.86
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	948	-	-	360	-
HCM Lane V/C Ratio	0.017	-	-	0.003	-
HCM Control Delay (s/veh)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	19	30	1	0	1
Future Vol, veh/h	1	19	30	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	21	33	1	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	34	0	-	0	56	33
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	23	-
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	-	-	-	952	1040
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	1000	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1578	-	-	-	951	1040
Mov Cap-2 Maneuver	-	-	-	-	951	-
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	1000	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.36	0	8.46
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	90	-	-	-	1040
HCM Lane V/C Ratio	0.001	-	-	-	0.001
HCM Control Delay (s/veh)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	167	3	4	224	2	2
Future Vol, veh/h	167	3	4	224	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	182	3	4	243	2	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	185	0	435	183
Stage 1	-	-	-	-	183	-
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	-	-	1390	-	578	859
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	790	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1390	-	576	859
Mov Cap-2 Maneuver	-	-	-	-	576	-
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	787	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.13	10.25
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	690	-	-	32	-
HCM Lane V/C Ratio	0.006	-	-	0.003	-
HCM Control Delay (s/veh)	10.3	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	20	1	2	45	0
Future Vol, veh/h	1	20	1	2	45	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	22	1	2	49	0
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	6.6	7.1	7.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	33%
Vol Thru, %	0%	5%	67%
Vol Right, %	0%	95%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	45	21	3
LT Vol	45	0	1
Through Vol	0	1	2
RT Vol	0	20	0
Lane Flow Rate	49	23	3
Geometry Grp	1	1	1
Degree of Util (X)	0.057	0.022	0.004
Departure Headway (Hd)	4.179	3.449	4.103
Convergence, Y/N	Yes	Yes	Yes
Cap	861	1035	871
Service Time	2.185	1.478	2.132
HCM Lane V/C Ratio	0.057	0.022	0.003
HCM Control Delay, s/veh	7.4	6.6	7.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.1	0

Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	19	1	2	29	0
Future Vol, veh/h	2	19	1	2	29	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	21	1	2	32	0
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	6.5	7.1	7.3
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	100%	0%	33%
Vol Thru, %	0%	10%	67%
Vol Right, %	0%	90%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	29	21	3
LT Vol	29	0	1
Through Vol	0	2	2
RT Vol	0	19	0
Lane Flow Rate	32	23	3
Geometry Grp	1	1	1
Degree of Util (X)	0.037	0.022	0.004
Departure Headway (Hd)	4.179	3.449	4.073
Convergence, Y/N	Yes	Yes	Yes
Cap	861	1039	880
Service Time	2.185	1.467	2.092
HCM Lane V/C Ratio	0.037	0.022	0.003
HCM Control Delay, s/veh	7.3	6.5	7.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0