400 Sackville Drive

Sackville, Nova Scotia

Transportation Impact Study

December 2023

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Release

R1 — May 3, 2023
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01 Introduction and Existing Conditions

1.1 Context and Study Area

This study was prepared to identify the anticipated impacts of two new multi-unit residential buildings on the south side of Sackville Drive between Pinehill Drive and Oakdale Drive, and just east of the Little Sackville River. These buildings will replace the existing single storey commercial located on the west side of the site that includes a variety of small businesses including Kingston Auto Sales. The site slopes from west to east and from north to south toward the Little Sackville River and has parking spaces for about 150 vehicles. A significant number of these parking spaces accommodate new and used vehicles associated with the auto sales component of the property.

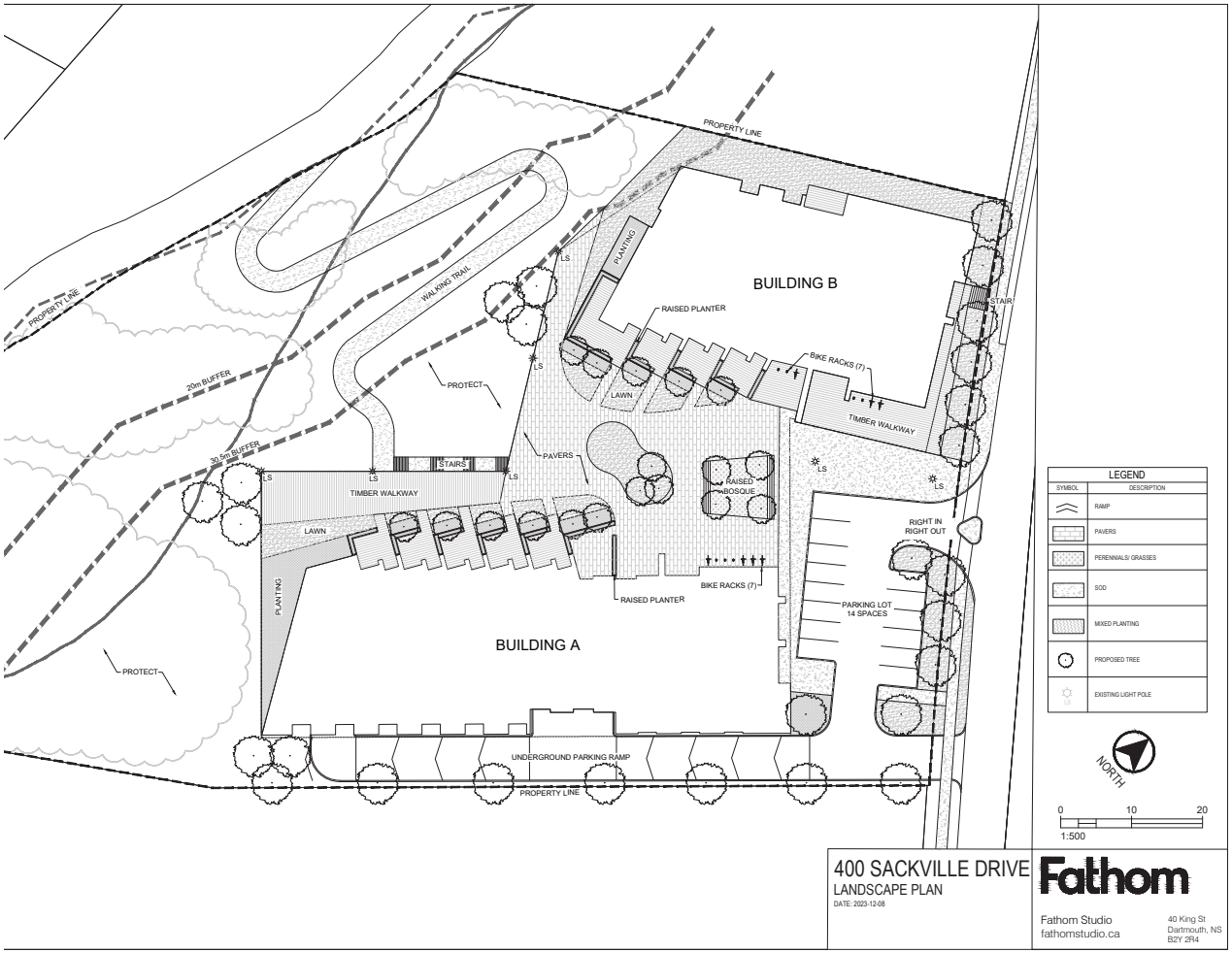
Building 1 on the southeast side of the site (bottom building in the image below) is anticipated to includes about 110 units within an 8 storey structure and Building 2 on the northwest side includes about 90 units within an 11 storey structure. The development is expected to include two level of underground parking containing about 260 parking spaces with a small surface parking areas located adjacent to Sackville Drive which includes an additional 18 parking spaces primarily intended for the limited ground floor commercial spaces included in each building.

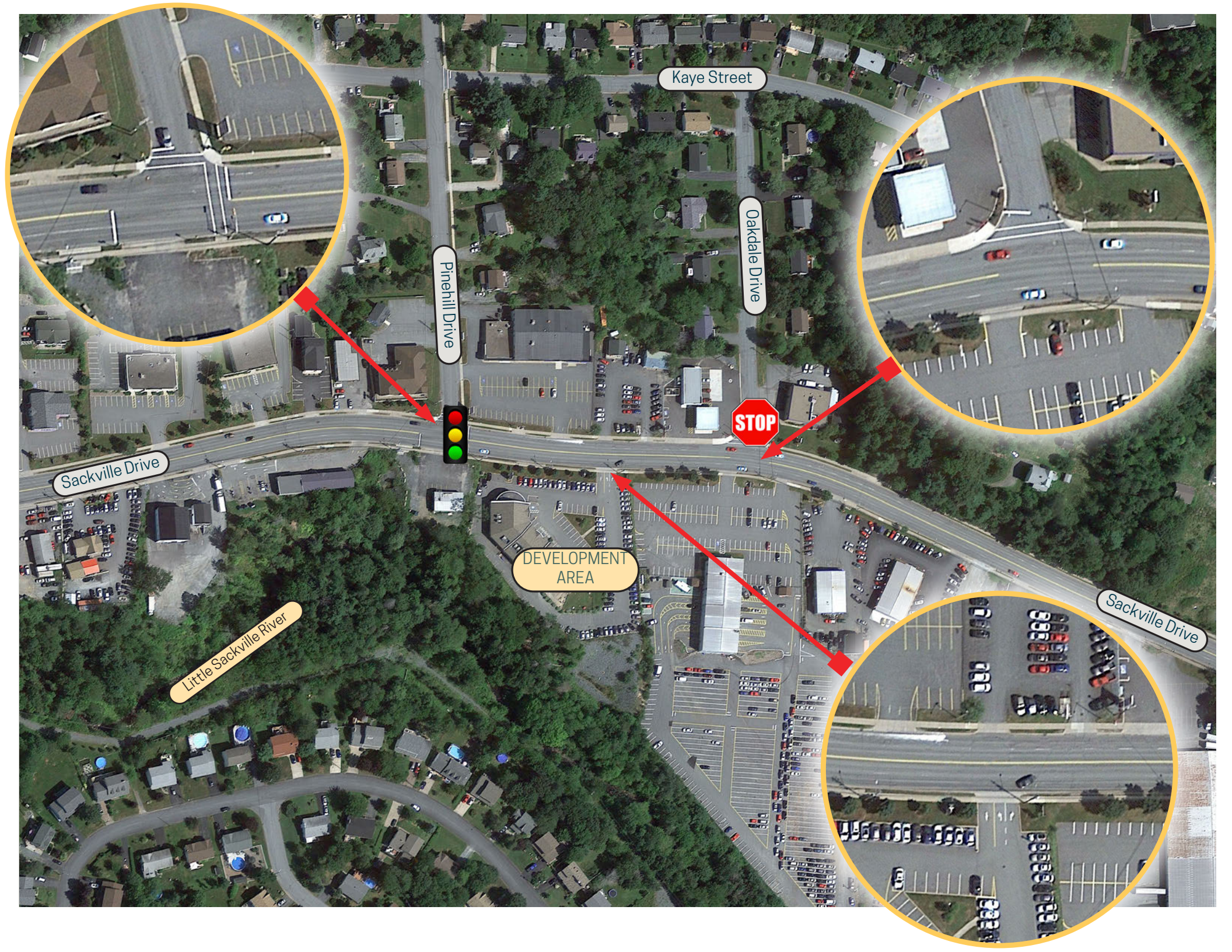
Driveway access is currently provided by a single access point near the east end of the site and consists of one entry lane and dedicated right and left turn exit lanes. This proposal maintains the driveway in approximately the same locations but reduces the cross section to a single entry and exit lane. The driveway directly connects to an entry / exit ramp to the underground parking access points. A second minor driveway is also planned at the west end of the surface parking area and is located near the midpoint of the property.

1.2 Roadways and Intersections

Sackville Drive in the vicinity of the development is a 4-lane undivided major urban arterial roadway with a posted speed limit of 50 km/hr. It is part of Provincial Trunk Highway 1 with the portions of the roadway between the Beaverbank Connector and Cobequid Road serving as a commercial / business corridor with a high level of driveway access off of Sackville Drive.

The main development driveway is located about 90 meters east of the signalized Pinehill Drive intersection and 70 west of the two-way stop controlled at Oakdale Drive, with the secondary parking lot driveway located about 35 meters west of the main driveway. There are a number of driveways located on the opposite side of Sackville Drive from the development though the existing land uses suggest that there will be minimal traffic traveling across Sackville Drive between these driveways.



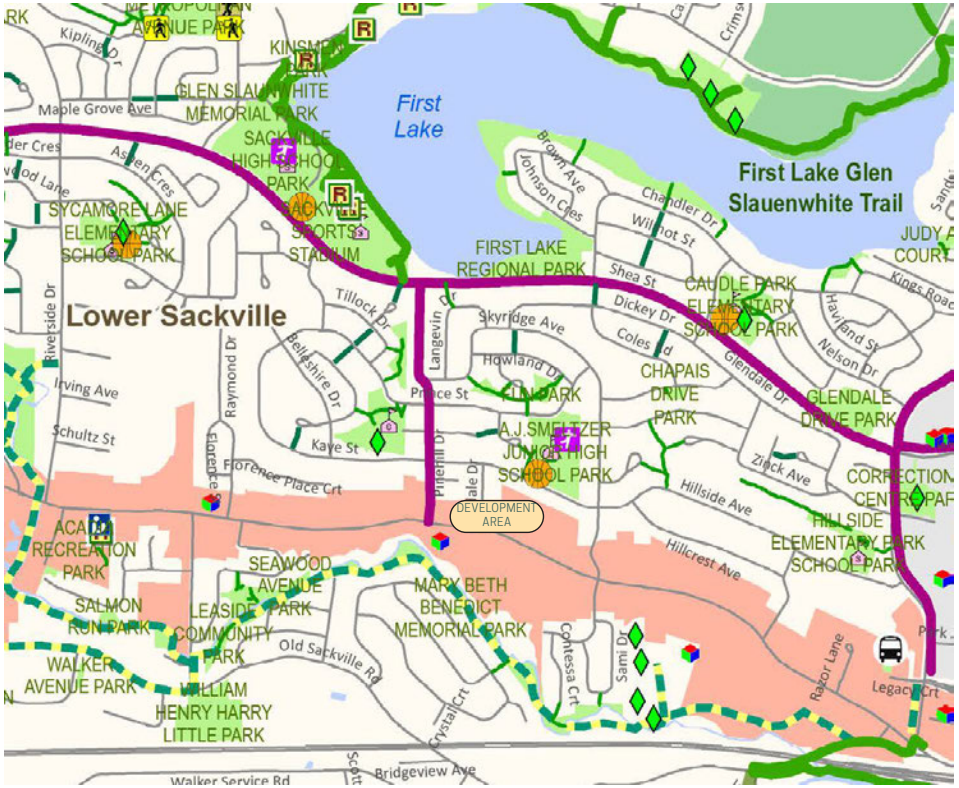

Kaye Street
Pinehill Drive
Oakdale Drive
STOP
Sackville Drive
DEVELOPMENT AREA
Little Sackville River
Sackville Drive

1.3 Other Transportation Infrastructure

Active Transportation

The proposed development has direct access to Sackville Drive, which includes concrete sidewalks along both sides of the roadway. Pinehill Drive to the west also includes sidewalks on it's east side connecting into residential areas to the north and ultimately to Glendale Drive. The Pinehill and Glendale Routes shown in purple in the figure below magenta have been identified as a "Desired" bikeways in the HRM AT plan. Kaye Crescent to the north currently does not have sidewalks but has been identified for the future installation of sidewalks.

The development is in relatively close proximity to a variety of trails including minor trail residential connections north of Kaye Crescent and Hillside Ave. It is also in close proximity to the future proposed greenway located just south of the Little Sackville River, which is intended to connect to the Bedford-Sackville Greenway located about 1.5 kilometers east of the site. The First Lake Trail network is also located

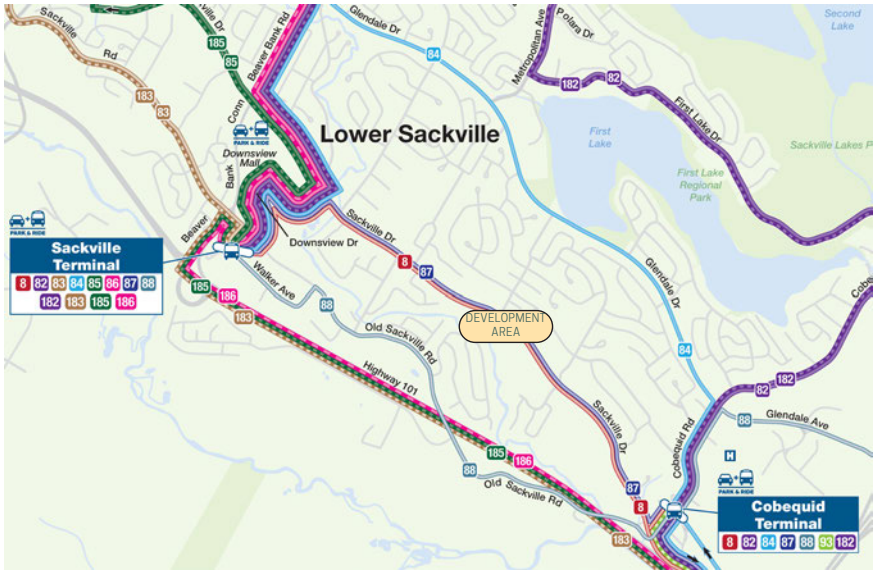


Transit

The figure below was extracted from the most recent Halifax Transit route map and shows the transit network in the areas surrounding the development. This includes 2 routes on Sackville Drive (Routes 8 and 87), and 1 route on Glendale Drive to the north (Route 84). Both routes run on 30 minute intervals with 10 - 15 mintute offsets resulting in scheduled access approximately every 15-20 minutes during peak traffic hours and through most of the day.

The nearest bus stops to the site are Stop 7328 on the south side of Sackville Drive just west of Pinehill Drive and Stop 7327 on the north side of Sackville Drive just east of Pinehill Drive. Two additional stops are located just east of Oakdale Drive about 130 meters east of the site.

The development is in close proximity to the Cobequid Transit Terminal about 1 km to the east, which services 7 different routes. It is also near the Sackville Terminal on Beaverbank Road about 2 km to the west which services 12 routes.



1.4 Existing and Historical Traffic Volumes

Recent and historical traffic counts were obtained from HRM and were supplemented by a 2022 traffic count at the intersection of Sackville Drive and Pinehill Road. The counts were performed using the Miovision automated traffic count technologies and included volumes of light and heavy vehicles, cyclists and pedestrians. Relevant traffic count data is included in Appendix A of this report.

Background Traffic Growth

We are in challenging times concerning predicting traffic growth on our road networks. On one side, we see reduced traffic in many locations as alternative work arrangements are adopted, and the impacts of the COVID-19 pandemic continue to impact travel patterns. On the other side, Nova Scotia has set significant growth targets and is working diligently to address housing shortages throughout the Municipality and many areas throughout the municipality are beginning to see increase in traffic growth rates.

In order to remain conservative in the operational analysis, this study has assumed a 2% annual growth rate to the project horizon year. It is recognized that there are a number of other residential developments currently in the planning, design and construction phases of development. It is assumed that these developments are included within the aggressive 2% average annual growth rate.

Peak Hours

Sackville Drive is a vital commuter thoroughfare during weekdays and a significant commercial corridor resulting in peaking characteristics during both the weekday and weekend periods. That said, the peak concentration of vehicles along Sackville Drive occurs during the weekday AM and PM peak hours, where both commuter and commercial impacts overlap. Therefore, this study has used the weekday AM and PM peak hours as the critical analysis periods.

Time Horizons

It is anticipated that this development will be constructed over the next 5-year period, therefore an analysis time horizon of 10-years (5-years with full build-out +5 years) was established. Given the importance of Sackville Drive as a transportation corridor and the aggressive growth rate assumed in this study, the analysis addresses the following three scenarios:

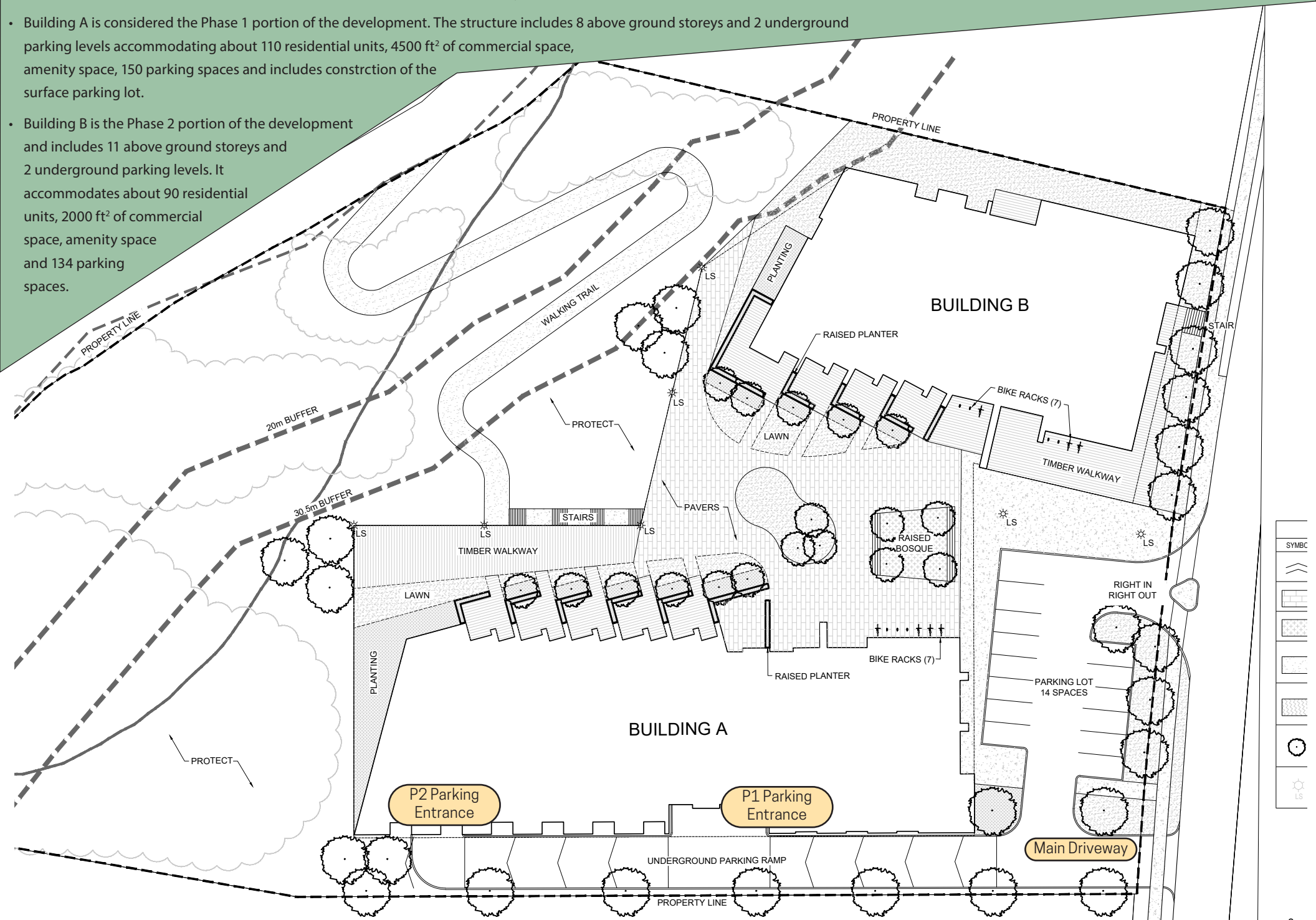
1. 2023 baseline conditions (existing conditions),
2. 2033 conditions with background traffic growth only added to the network, and
3. 2033 conditions with background traffic growth and development traffic added to the network.

02 Proposed Development

400 SACKVILLE DRIVE DEVELOPMENT

The overall development includes two buildings over-top of two levels of connected underground parking. Both levels of the underground parking are accessed from the driveway along the east (bottom in the image below) side of the site, with the Level 1 entrance located about half way along the east side of the building and the Level 2 access located near the rear south end of the building.

- Building A is considered the Phase 1 portion of the development. The structure includes 8 above ground storeys and 2 underground parking levels accommodating about 110 residential units, 4500 ft^2 of commercial space, amenity space, 150 parking spaces and includes constrction of the surface parking lot.
- Building B is the Phase 2 portion of the development and includes 11 above ground storeys and 2 underground parking levels. It accommodates about 90 residential units, 2000 ft^2 of commercial space, amenity space and 134 parking spaces.



2.1 Trip Generation, Distribution and Assignment

Trips Generated by the Development

The new trips generated by the development were based on guidance provided from the Institute of Transportation Engineers (ITE) Trip Generation Guide (11th edition) as shown in the table to the right. Earlier versions of of this report were prepared using the 10th version of the ITE Trip Guide which resulted in higher volumes being added to the road network (as shown as bracketed volumes). For the purposes of analysis, the higher 10th version volumes were added to the road network to keep the analysis conservative.

Land Use *ITE 11th Edition (ITE 10th Edition)*	Trip Code	# Units	Variable	AM Peak			PM Peak		
				Enter	Exit	TOTAL	Enter	Exit	TOTAL
NEW RESIDENTIAL DEVELOPMENT									
Mid Rise - Building A Residential with Ground Floor Commercial	231	110	Units	9 (9)	13 (24)	22 (33)	14 (28)	17 (12)	31 (40)
Mid Rise - Building B Residential with Ground Floor Commercial	231	90	Units	7 (8)	11 (19)	18 (27)	11 (22)	14 (10)	25 (32)
NEW DEVELOPMENT TRIPS		**200**		**16**	**24**	**40**	**25**	**31**	**56**
EXISTING COMMERCIAL DEVELOPMENT									
Multi-Use Commercial Plaza	Various	11	1000ft^2	27	20	47	30	33	63
NET DIFFERENCE IN TRIPS TO SITE				**-11**	**+4**	**-7**	**-5**	**-2**	**-7**

The table to the right also includes trip generation estimates for the existing commercial land uses that are currently on the site. The results show that the total change in two-way trips between existing and future conditions are about 7 vehicles less during the AM peak and PM peak periods. The estimates also suggest that existing volumes are somewhat more balanced between entering and exiting vehicles, where the residential nature of the proposed development tends to increase the difference in directional distribution. For the purposes of this analysis, the existing trips have been ignored and the full new trips generated by the development (10th edition volumes) were added to the network.

Transit and Active Transportation Impacts

Active transportation and transit connections are considered to be reasonable for this development given the proximity to routes on Sackville Drive and it is expected that some resident are likely to use active transportation or transit modes of travel for some trips. For the purposes of this analysis though, the study has assumed no trip generation reduction factors related to AT or transit availability in order to keep the analysis conservative.

Trip Distribution and Assignment

It is assumed that traffic will distribute to Sackville Drive similar to the existing traffic patterns. Counts suggest that volumes on Pinehill favour movements to and from the west, while Skyridge movements favour the east. Being in the middle of these roads, this study assumed a relatively even split with a slight favour towards Dartmouth / Halifax to the east. Based on the simplicity of the site and downstream connections, the trips were assigned to the network directly to and from the development's driveway.

03 Transportation Analysis

3.1 Transportation Modeling

A detailed traffic model was prepared using the Synchro/SimTraffic (v.10) platform for the weekday AM and PM peak hours of analysis. The model was used to gain insight into operations and capacity utilization at the various intersections directly impacted by the proposed development. The analysis results and discussion address the 3 primary intersections along Sackville Drive directly impacted by the development:

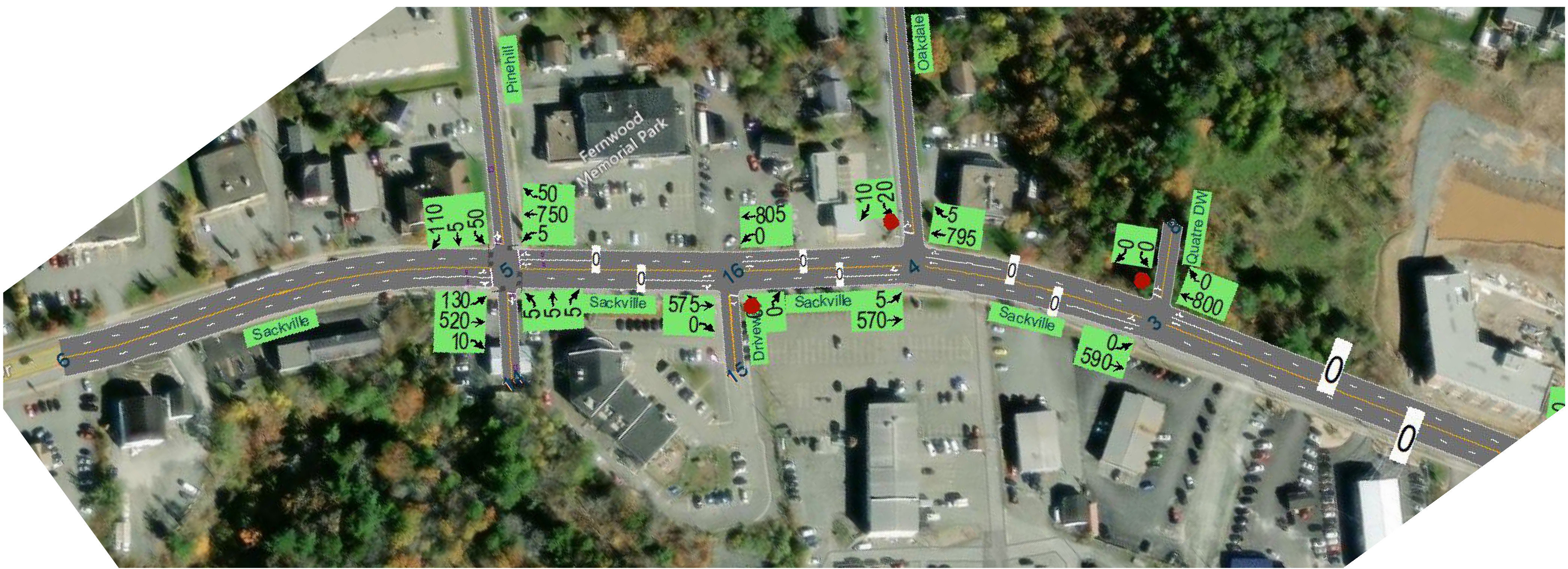
- Sackville Drive and the Development Driveway
- Sackville Drive and Pinehill Drive
- Sackville Drive and Oakdale Drive

As there are relatively low volumes through the intersections and results are generally favourable, only information for the 2022 Baseline and 2032 Full Development volumes are provided as intermediate analysis results add little additional value. It is important to note that most volumes added to the network are related to background traffic growth.

The primary measures of performance that are summarized on the following pages at each intersection include:

- Volumes (peak vehicles per hour)
- Vehicle Control Delay (average seconds per vehicle)
- Volume to Capacity (V/C) ratio (V/C = 1.0 = 100% capacity utilization)
- Level of Service (levels A to F)
- Queuing (95% queue lengths in meters).

All volumes are presented in tabular form, with an aerial view of the intersection for each analysis section. Additional information and discussion regarding the intersection are provided along with the results.



3.2 Sackville Drive / Development Access

Results shown for the 2023 Baseline scenario (highlighted in yellow) represent conditions with the existing driveway present. The tables below do not include existing turn movements to the driveway for the purposes of comparing conditions before and after the new development is constructed. The 2033 results with the entire development in place (highlighted in green), include intersection movements to and from the new development driveway, plus the addition of background traffic growth on Sackville Drive.

AM Peak Hour

Results show the highest volumes through the intersection are the free flowing through movements in the eastbound direction towards Halifax with slightly lower volumes in the westbound direction. Due to the 4-lane cross section that provides for two full lanes of travel in each direction, capacity utilization in both directions is very low, with the volume to capacity (V/C) ratio remaining under 0.30 (30% of theoretical capacity) for all movements.

Further, from the 2023 baseline to the 2033 full build-out scenario, the utilization increase is minimal at about 5%. This limited use of capacity allows for movements to and from the development to occur with minimal delay and virtually no queuing on the driveway exit, or on Sackville Drive itself resulting from vehicles turning left or right into the development.

PM Peak Hour

Overall volumes are higher during the PM peak and the predominant volumes on Sackville Drive are in the westbound (outbound) direction. Overall, results are similar to the AM peak with capacity utilization peaking at about 42% for the westbound movement, while driveway movements are less than the AM peak as more vehicles are entering the development than leaving during the PM peak. All 95% queue lengths are well less than one vehicle on average throughout the peak period.

AM PEAK		Sackville EB		Sackville WB		Driveway NB	
		Thru	Right	Left	Thru	Left	Right
2023 Baseline	Vol *veh/hr*	545	0	0	400	0	0
	V/C Ratio	0.23	0.12	0.00	0.17	0.00	
	Delay *sec/veh*	0.0	0.0	0.0	0.0	0.0	
	LOS	A	A	A	A	A	
	95% Q *m*	0.0	0.0	0.0	0.0	0.0	
2033 Full Development	Vol *veh/hr*	664	10	12	488	23	29
	V/C Ratio	0.28	0.15	0.01	0.21	0.11	
	Delay *sec/veh*	0.0	0.0	0.7	0.0	13.1	
	LOS	A	A	A	A	B	
	95% Q *m*	0.0	0.0	0.3	0.0	2.9	

PM PEAK		Sackville EB		Sackville WB		Driveway SB	
		Thru	Right	Left	Thru	Left	Right
2023 Baseline	Vol *veh/hr*	575	0	0	805	0	0
	V/C Ratio	0.25	0.12	0.00	0.34	0.00	
	Delay *sec/veh*	0.0	0.0	0.0	0.0	0.0	
	LOS	A	A	A	A	A	
	95% Q *m*	0.0	0.0	0.0	0.0	0.0	
2033 Full Development	Vol *veh/hr*	701	28	34	981	12	15
	V/C Ratio	0.30	0.17	0.04	0.42	0.10	
	Delay *sec/veh*	0.0	0.0	1.2	0.0	18.5	
	LOS	A	A	A	A	C	
	95% Q *m*	0.0	0.0	0.9	0.0	2.5	

3.3 Sackville Drive / Pinehill Drive

Sackville and Pinehill is the nearest signalized intersection located about 90 meters west of the development's main driveway. Volumes on the south side driveway carry very low volumes and volumes on Pinehill are also relatively low volumes during both peak periods (2-4 vehicles per minute on average). As such, minimum green times are required to accommodate north south movements allowing the majority of green time to be attributed to movements on Sackville Drive.

AM Peak Hour		Sackville - EB			Sackville - WB			Driveway - NB			Pinehill - SB		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2023 Baseline	Vol *veh/hr*	55	480	10	5	360	35	5	5	5	60	5	85
	V/C Ratio	0.47			0.32			0.02			0.24		
	Delay *s/veh*	11.5			9.5			7.2			5.6		
	LOS	B			A			A			A		
	95% Q *m*	27.3			18.4			2.8			11.5		
2033 Full Development	Vol *veh/hr*	67	594	12	6	460	49	6	6	6	74	6	104
	V/C Ratio	0.60			0.41			0.03			0.29		
	Delay *s/veh*	13.2			10.3			7.2			5.8		
	LOS	B			B			A			A		
	95% Q *m*	35.5			24.0			3.4			13.5		

PM Peak Hour		Sackville - EB			Sackville - WB			Driveway - NB			Pinehill - SB		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2023 Baseline	Vol *veh/hr*	130	520	10	5	750	50	5	5	5	50	5	110
	V/C Ratio	0.57			0.69			0.03			0.32		
	Delay *s/veh*	10.1			25.7			12.6			8.0		
	LOS	B			C			B			A		
	95% Q *m*	31.0			73.3			4.1			16.6		
2033 Full Development	Vol *veh/hr*	158	658	12	6	925	65	6	6	6	65	6	134
	V/C Ratio	0.77			0.85			0.04			0.39		
	Delay *s/veh*	14.9			30.4			12.3			8.7		
	LOS	B			C			B			A		
	95% Q *m*	40.7			94.0			5.0			20.1		

AM Peak Hour

The results show capacity utilization on the 2033 critical Sackville movements at 60% and 41% for eastbound and westbound movements respectively. The movements show limited delays of under 15 seconds on average, and 95% queue lengths of about 3-4 vehicles. All measures of performance are considered to be very good during both peak periods of traffic.

PM Peak Hour

Analysis results for the PM peak hour are similar to the AM peak, though higher overall volumes are present on Sackville Drive resulting in slightly higher capacity utilization, delays, and queue lengths that may extend back about 12 vehicles. Results are acceptable for the peak periods of operation, and again, only a fraction of the increase is related to the new development traffic as compared to the impacts of background traffic growth.

3.4 Sackville Drive / Oakdale Drive

Oakdale Drive is located about 70 meters east of the main development driveway and therefore, it carries very similar volumes through the intersection as does Pinehill. As it is not a signalized intersection, free flow conditions are maintained on Sackville Drive resulting in significantly lower capacity utilization values and little to no delay or queuing on Sackville Drive.

There are two minor driveway connections to the auto dealer on the south side of the street that are slightly offset to either side of the opposing Oakdale Drive. While this has no impact on operations at the proposed development driveway, or bearing on the recommendations in this report, it was noted that this configuration is undesirable from an access management perspective and consideration should be given to refining these driveways in the future.

AM Peak Hour

The AM peak sees very low volumes entering and exiting Oakdale Drive resulting in very good performance measures for all movements at the intersection, including the critical left turn movements from Oakdale Drive to Sackville Drive. There is minimal change in operations at this intersection when comparing the 2023 Baseline and 2033 full development scenarios.

PM Peak Hour

Volumes during the PM peak hour are somewhat higher than during the AM peak hours, though volumes to and from Oakdale are again very low. All measures of performance again remain at very high levels through all analysis scenarios.

AM PEAK		Sackville EB		Sackville WB		Oakdale SB	
		Left	Thru	Thru	Right	Left	Right
2023 Baseline	Vol *veh/hr*	5	540	390	5	20	10
	V/C Ratio	0.00	0.23	0.17	0.09	0.07	
	Delay *sec/veh*	0.2	0.0	0.0	0.0	12.9	
	LOS	A	A	A	A	B	
	95% Q *m*	0.1	0.0	0.0	0.0	1.6	
2033 Full Development	Vol *veh/hr*	6	688	488	6	24	12
	V/C Ratio	0.01	0.29	0.21	0.11	0.09	
	Delay *sec/veh*	0.3	0.0	0.0	0.0	14.6	
	LOS	A	A	A	A	B	
	95% Q *m*	0.2	0.0	0.0	0.0	2.3	

PM PEAK		Sackville EB		Sackville WB		Oakdale SB	
		Left	Thru	Thru	Right	Left	Right
2023 Baseline	Vol *veh/hr*	5	570	795	5	20	10
	V/C Ratio	0.01	0.24	0.34	0.17	0.10	
	Delay *sec/veh*	0.3	0.0	0.0	0.0	17.2	
	LOS	A	A	A	A	C	
	95% Q *m*	0.1	0.0	0.0	0.0	2.5	
2033 Full Development	Vol *veh/hr*	6	709	1003	6	24	12
	V/C Ratio	0.01	0.30	0.43	0.22	0.12	
	Delay *sec/veh*	0.4	0.0	0.0	0.0	17.1	
	LOS	A	A	A	A	C	
	95% Q *m*	0.2	0.0	0.0	0.0	3.0	

04 Conclusions and Recommendations

This Transportation Impact Study was prepared to evaluate the impacts of two new residential buildings located on the south side of Sackville Drive just east of Pinehill Drive in Sackville, Nova Scotia. The development consists of an 8-storey and 11-storey residential buildings with ground floor commercial space in both and 2 levels of interconnected underground parking. The parkade is accessed from a main driveway located on the east side of the site and is at approximately the same location as the existing driveway to the existing commercial site. The new development adds approximately 200 new residential units to the property, though the addition of new volumes will be offset significantly through the removal of the existing commercial land uses.

This study shows that this driveway continues to operate at a high level of service with little delay and low capacity utilization with the addition of the new residential buildings. The proposed driveways are reasonably spaced from adjacent driveways and functions well as two-way stop-controlled intersection at Sackville Drive. The driveways can be configured with a single entry and exit lane and do not require any additional improvements to Sackville Drive infrastructure in order to accommodate the proposed development. The new driveways are located on a relatively straight segment of Sackville Drive with minimal horizontal and vertical curvature, therefore minimum sight distances requirements are exceeded.

The proposed development is consistent with other residential properties located to the north of the site, complements the adjacent commercial land uses along Sackville Drive, and is in close proximity to a number of schools and other amenities in the area.

The modeling exercise also shows that the existing adjacent intersections operate with significant excess capacity and that the new volumes related to the development have very little impact to the overall volumes, capacity utilization, and delays at those intersections.

The development is well situated to take advantage of transit with two regular routes located immediately adjacent to the development on Sackville Drive and another route on Glendale to the north. Two transit terminals are also located in relatively close proximity to the development for additional transit options. The development connects to existing sidewalk infrastructure and accesses a variety of different on- and off-road active transportation routes including the First Lake Trail networks and the Bedford-Sackville Greenway.

Overall, the proposed development does not generate the need for any specific upgrades to infrastructure at or near the driveway, or at other adjacent intersection reasonably impacted by the development.

We trust that this report satisfies HRM's requirements for the preparation of a Transportation Impact Study for this proposed development. Should there be any questions or comments regarding the content of the study, please do not hesitate to contact the undersigned.

[redacted]

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APPENDIX A

Appendix A: TRAFFIC COUNTS

Sackville and Pinehill - TMC

Thu Aug 11, 2022
Full Length (7 AM-9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road)
All Movements
ID: 984340, Location: 44.764367, -63.676849

Provided by: Trans4m Development Group
59 Craigburn Drive,
Dartmouth, NS, B2X 3E6, CA

Leg	Sackville EB						Sackville WB						Driveway NB						Pinehill SB						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-08-11 7:00AM	5	96	0	0	**101**	0	0	34	1	0	**35**	0	0	0	0	0	**0**	0	10	0	11	0	**21**	1	**157**
7:15AM	9	90	0	0	**99**	0	1	55	2	0	**58**	3	0	0	0	0	**0**	3	12	0	16	0	**28**	1	**185**
7:30AM	8	105	0	0	**113**	0	1	77	3	0	**81**	1	0	0	1	0	**1**	1	15	0	21	0	**36**	1	**231**
7:45AM	5	84	0	0	**89**	1	1	68	2	0	**71**	3	0	0	1	0	**1**	2	13	0	14	0	**27**	1	**188**
Hourly Total	27	375	0	0	**402**	1	3	234	8	0	**245**	7	0	0	2	0	**2**	6	50	0	62	0	**112**	4	**761**
8:00AM	7	96	2	0	**105**	0	1	72	6	0	**79**	1	1	0	0	0	**1**	0	13	0	19	0	**32**	1	**217**
8:15AM	10	112	1	0	**123**	0	0	102	6	0	**108**	0	0	0	1	0	**1**	0	17	0	15	0	**32**	3	**264**
8:30AM	20	98	0	0	**118**	0	1	75	11	0	**87**	2	0	0	0	0	**0**	2	9	2	20	0	**31**	2	**236**
8:45AM	17	90	3	0	**110**	0	2	103	9	0	**114**	0	2	0	2	0	**4**	0	5	1	28	1	**35**	0	**263**
Hourly Total	54	396	6	0	**456**	0	4	352	32	0	**388**	3	3	0	3	0	**6**	2	44	3	82	1	**130**	6	**980**
Total	81	771	6	0	**858**	1	7	586	40	0	**633**	10	3	0	5	0	**8**	8	94	3	144	1	**242**	10	**1741**
% Approach	9.4%	89.9%	0.7%	0%	**-**	-	1.1%	92.6%	6.3%	0%	**-**	-	37.5%	0%	62.5%	0%	**-**	-	38.8%	1.2%	59.5%	0.4%	**-**	-	-
% Total	4.7%	44.3%	0.3%	0%	**49.3%**	-	0.4%	33.7%	2.3%	0%	**36.4%**	-	0.2%	0%	0.3%	0%	**0.5%**	-	5.4%	0.2%	8.3%	0.1%	**13.9%**	-	-
Lights	80	743	5	0	**828**	-	7	561	38	0	**606**	-	3	0	4	0	**7**	-	92	3	143	1	**239**	-	1680
% Lights	98.8%	96.4%	83.3%	0%	**96.5%**	-	100%	95.7%	95.0%	0%	**95.7%**	-	100%	0%	80.0%	0%	**87.5%**	-	97.9%	100%	99.3%	100%	**98.8%**	-	96.5%
Articulated Trucks	0	2	0	0	**2**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0.3%	0%	0%	**0.2%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses and Single-Unit Trucks	1	26	1	0	**28**	-	0	23	2	0	**25**	-	0	0	1	0	**1**	-	2	0	1	0	**3**	-	57
% Buses and Single-Unit Trucks	1.2%	3.4%	16.7%	0%	**3.3%**	-	0%	3.9%	5.0%	0%	**3.9%**	-	0%	0%	20.0%	0%	**12.5%**	-	2.1%	0%	0.7%	0%	**1.2%**	-	3.3%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	10	-	-	-	-	-	8	-	-	-	-	-	10	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Sackville and Pinehill - TMC

Thu Aug 11, 2022
AM Peak (8 AM - 9 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road)
All Movements
ID: 984340, Location: 44.764367, -63.676849

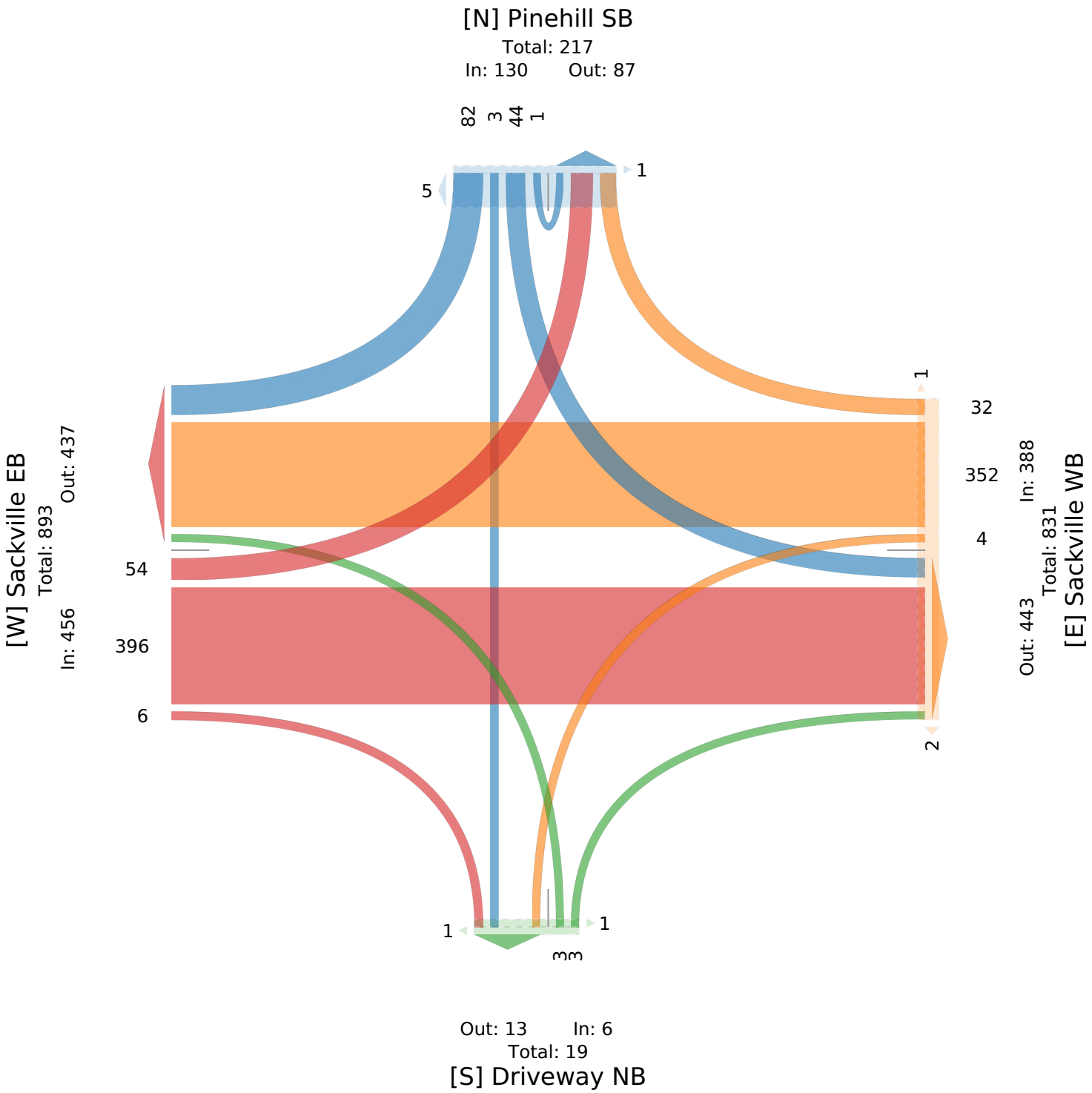
Provided by: Trans4m Development Group
59 Craigburn Drive,
Dartmouth, NS, B2X 3E6, CA

Leg	Sackville EB						Sackville WB						Driveway NB						Pinehill SB						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2022-08-11 8:00AM	7	96	2	0	**105**	0	1	72	6	0	**79**	1	1	0	0	0	**1**	0	13	0	19	0	**32**	1	**217**
8:15AM	10	112	1	0	**123**	0	0	102	6	0	**108**	0	0	0	1	0	**1**	0	17	0	15	0	**32**	3	**264**
8:30AM	20	98	0	0	**118**	0	1	75	11	0	**87**	2	0	0	0	0	**0**	2	9	2	20	0	**31**	2	**236**
8:45AM	17	90	3	0	**110**	0	2	103	9	0	**114**	0	2	0	2	0	**4**	0	5	1	28	1	**35**	0	**263**
Total	54	396	6	0	**456**	0	4	352	32	0	**388**	3	3	0	3	0	**6**	2	44	3	82	1	**130**	6	**980**
% Approach	11.8%	86.8%	1.3%	0%	**-**	-	1.0%	90.7%	8.2%	0%	**-**	-	50.0%	0%	50.0%	0%	**-**	-	33.8%	2.3%	63.1%	0.8%	**-**	-	-
% Total	5.5%	40.4%	0.6%	0%	**46.5%**	-	0.4%	35.9%	3.3%	0%	**39.6%**	-	0.3%	0%	0.3%	0%	**0.6%**	-	4.5%	0.3%	8.4%	0.1%	**13.3%**	-	-
PHF	0.675	0.884	0.500	-	**0.927**	-	0.500	0.854	0.727	-	**0.851**	-	0.375	-	0.375	-	**0.375**	-	0.647	0.375	0.732	0.250	**0.929**	-	0.928
Lights	53	381	5	0	**439**	-	4	337	30	0	**371**	-	3	0	2	0	**5**	-	42	3	82	1	**128**	-	943
% Lights	98.1%	96.2%	83.3%	0%	**96.3%**	-	100%	95.7%	93.8%	0%	**95.6%**	-	100%	0%	66.7%	0%	**83.3%**	-	95.5%	100%	100%	100%	**98.5%**	-	96.2%
Articulated Trucks	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0.3%	0%	0%	**0.2%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses and Single-Unit Trucks	1	14	1	0	**16**	-	0	14	2	0	**16**	-	0	0	1	0	**1**	-	2	0	0	0	**2**	-	35
% Buses and Single-Unit Trucks	1.9%	3.5%	16.7%	0%	**3.5%**	-	0%	4.0%	6.3%	0%	**4.1%**	-	0%	0%	33.3%	0%	**16.7%**	-	4.5%	0%	0%	0%	**1.5%**	-	3.6%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Sackville and Pinehill - TMC
Thu Aug 11, 2022
AM Peak (8 AM - 9 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road)
All Movements
ID: 984340, Location: 44.764367, -63.676849

Provided by: Trans4m Development Group
59 Craigburn Drive,
Dartmouth, NS, B2X 3E6, CA



Sackville and Pinehill PM - TMC

Wed Aug 10, 2022
Full Length (4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road)
All Movements
ID: 984341, Location: 44.764367, -63.676849

Provided by: Trans4m Development Group
59 Craigburn Drive,
Dartmouth, NS, B2X 3E6, CA

Leg	Sackville EB						Sackville WB						Driveway NB						Pinehill SB						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-08-10 4:00PM	34	135	0	0	**169**	0	1	164	20	0	**185**	1	0	0	1	0	**1**	0	13	0	31	0	**44**	1	**399**
4:15PM	27	110	0	0	**137**	0	0	174	7	0	**181**	3	0	1	0	0	**1**	2	14	0	32	0	**46**	1	**365**
4:30PM	28	118	1	0	**147**	0	3	173	13	0	**189**	1	3	0	2	0	**5**	1	5	0	21	0	**26**	0	**367**
4:45PM	33	116	3	0	**152**	0	2	196	5	0	**203**	0	1	2	1	0	**4**	2	7	2	28	0	**37**	2	**396**
Hourly Total	122	479	4	0	**605**	0	6	707	45	0	**758**	5	4	3	4	0	**11**	5	39	2	112	0	**153**	4	**1527**
5:00PM	34	156	1	0	**191**	1	0	207	15	0	**222**	2	0	0	2	0	**2**	2	11	0	25	0	**36**	3	**451**
5:15PM	35	127	3	0	**165**	0	0	171	13	0	**184**	0	0	0	2	0	**2**	1	21	1	31	0	**53**	0	**404**
5:30PM	28	131	0	0	**159**	0	0	148	11	0	**159**	1	0	0	1	0	**1**	3	10	0	33	0	**43**	3	**362**
5:45PM	20	130	0	0	**150**	0	0	118	10	0	**128**	0	0	1	1	0	**2**	0	11	0	30	0	**41**	0	**321**
Hourly Total	117	544	4	0	**665**	1	0	644	49	0	**693**	3	0	1	6	0	**7**	6	53	1	119	0	**173**	6	**1538**
Total	239	1023	8	0	**1270**	1	6	1351	94	0	**1451**	8	4	4	10	0	**18**	11	92	3	231	0	**326**	10	**3065**
% Approach	18.8%	80.6%	0.6%	0%	**-**	-	0.4%	93.1%	6.5%	0%	**-**	-	22.2%	22.2%	55.6%	0%	**-**	-	28.2%	0.9%	70.9%	0%	**-**	-	-
% Total	7.8%	33.4%	0.3%	0%	**41.4%**	-	0.2%	44.1%	3.1%	0%	**47.3%**	-	0.1%	0.1%	0.3%	0%	**0.6%**	-	3.0%	0.1%	7.5%	0%	**10.6%**	-	-
Lights	237	1006	8	0	**1251**	-	6	1327	93	0	**1426**	-	4	4	10	0	**18**	-	91	3	231	0	**325**	-	3020
% Lights	99.2%	98.3%	100%	0%	**98.5%**	-	100%	98.2%	98.9%	0%	**98.3%**	-	100%	100%	100%	0%	**100%**	-	98.9%	100%	100%	0%	**99.7%**	-	98.5%
Articulated Trucks	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	2	14	0	0	**16**	-	0	22	1	0	**23**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	40
% Buses and Single-Unit Trucks	0.8%	1.4%	0%	0%	**1.3%**	-	0%	1.6%	1.1%	0%	**1.6%**	-	0%	0%	0%	0%	**0%**	-	1.1%	0%	0%	0%	**0.3%**	-	1.3%
Bicycles on Road	0	3	0	0	**3**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Bicycles on Road	0%	0.3%	0%	0%	**0.2%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	8	-	-	-	-	-	11	-	-	-	-	-	10	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Sackville and Pinehill PM - TMC

Wed Aug 10, 2022
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road)
All Movements
ID: 984341, Location: 44.764367, -63.676849

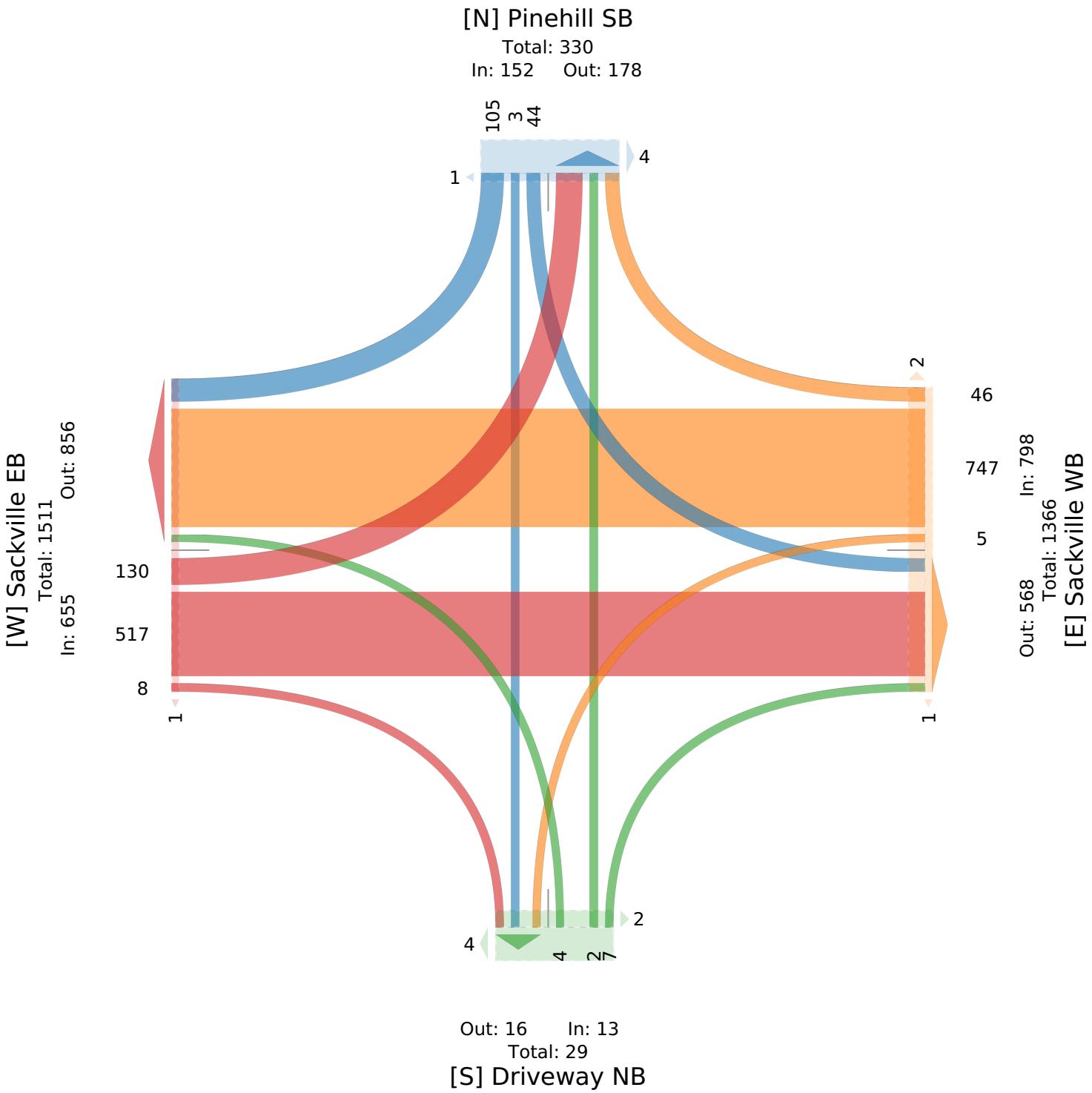
Provided by: Trans4m Development Group
59 Craigburn Drive,
Dartmouth, NS, B2X 3E6, CA

Leg Direction	Sackville EB Eastbound						Sackville WB Westbound						Driveway NB Northbound						Pinehill SB Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2022-08-10 4:30PM	28	118	1	0	**147**	0	3	173	13	0	**189**	1	3	0	2	0	**5**	1	5	0	21	0	**26**	0	**367**
4:45PM	33	116	3	0	**152**	0	2	196	5	0	**203**	0	1	2	1	0	**4**	2	7	2	28	0	**37**	2	**396**
5:00PM	34	156	1	0	**191**	1	0	207	15	0	**222**	2	0	0	2	0	**2**	2	11	0	25	0	**36**	3	**451**
5:15PM	35	127	3	0	**165**	0	0	171	13	0	**184**	0	0	0	2	0	**2**	1	21	1	31	0	**53**	0	**404**
Total	130	517	8	0	**655**	1	5	747	46	0	**798**	3	4	2	7	0	**13**	6	44	3	105	0	**152**	5	**1618**
% Approach	19.8%	78.9%	1.2%	0%	**-**	-	0.6%	93.6%	5.8%	0%	**-**	-	30.8%	15.4%	53.8%	0%	**-**	-	28.9%	2.0%	69.1%	0%	**-**	-	-
% Total	8.0%	32.0%	0.5%	0%	**40.5%**	-	0.3%	46.2%	2.8%	0%	**49.3%**	-	0.2%	0.1%	0.4%	0%	**0.8%**	-	2.7%	0.2%	6.5%	0%	**9.4%**	-	-
PHF	0.929	0.827	0.667	-	**0.856**	-	0.417	0.902	0.767	-	**0.899**	-	0.333	0.250	0.875	-	**0.650**	-	0.524	0.375	0.847	-	**0.717**	-	0.896
Lights	129	509	8	0	**646**	-	5	732	45	0	**782**	-	4	2	7	0	**13**	-	44	3	105	0	**152**	-	1593
% Lights	99.2%	98.5%	100%	0%	**98.6%**	-	100%	98.0%	97.8%	0%	**98.0%**	-	100%	100%	100%	0%	**100%**	-	100%	100%	100%	0%	**100%**	-	98.5%
Articulated Trucks	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses and Single-Unit Trucks	1	7	0	0	**8**	-	0	14	1	0	**15**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	23
% Buses and Single-Unit Trucks	0.8%	1.4%	0%	0%	**1.2%**	-	0%	1.9%	2.2%	0%	**1.9%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.4%
Bicycles on Road	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	6	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Sackville and Pinehill PM - TMC
Wed Aug 10, 2022
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road)
All Movements
ID: 984341, Location: 44.764367, -63.676849

Provided by: Trans4m Development Group
59 Craigburn Drive,
Dartmouth, NS, B2X 3E6, CA



HALIFAX REGIONAL MUNICIPALITY
TRANSPORTATION & PUBLIC WORKS
TRAFFIC MANAGEMENT

CODE NO. 17-TM-304

MANUAL TRAFFIC COUNTS

INTERSECTION: PINEHILL DRIVE AT SACKVILLE DRIVE

WEATHER: RAINY
RECORDER: AA

DAY	DATE	MONTH	YEAR
WEDNESDAY	20	SEPT	2017

STREET:		PINEHILL DRIVE			FACTORY 21 CAR REPAIR			SACKVILLE DRIVE			SACKVILLE DRIVE			
TIME:		FROM THE EAST			FROM THE WEST			FROM THE NORTH			FROM THE SOUTH			TOTAL
15 MIN INTERVALS		L	S	R	L	S	R	L	S	R	L	S	R	
07:00:00 AM	07:15:00 AM	4	0	9	0	0	0	0	53	4	0	36	3	109
07:15:00 AM	07:30:00 AM	5	0	7	0	0	0	0	42	7	0	48	0	109
07:30:00 AM	07:45:00 AM	4	0	9	0	0	0	0	61	2	2	38	1	117
07:45:00 AM	08:00:00 AM	5	0	17	0	0	0	0	49	8	0	44	4	127
TOTAL		18	0	42	0	0	0	0	205	21	2	166	8	462
PEAK			60			0			226			176		
15 MIN PEAK			88			0			252			192		
PEAK HOUR FACTOR			0.68			0			0.9			0.92		
TWO WAY TOTALS			68			23			434			399		FACTOR
														1
														462

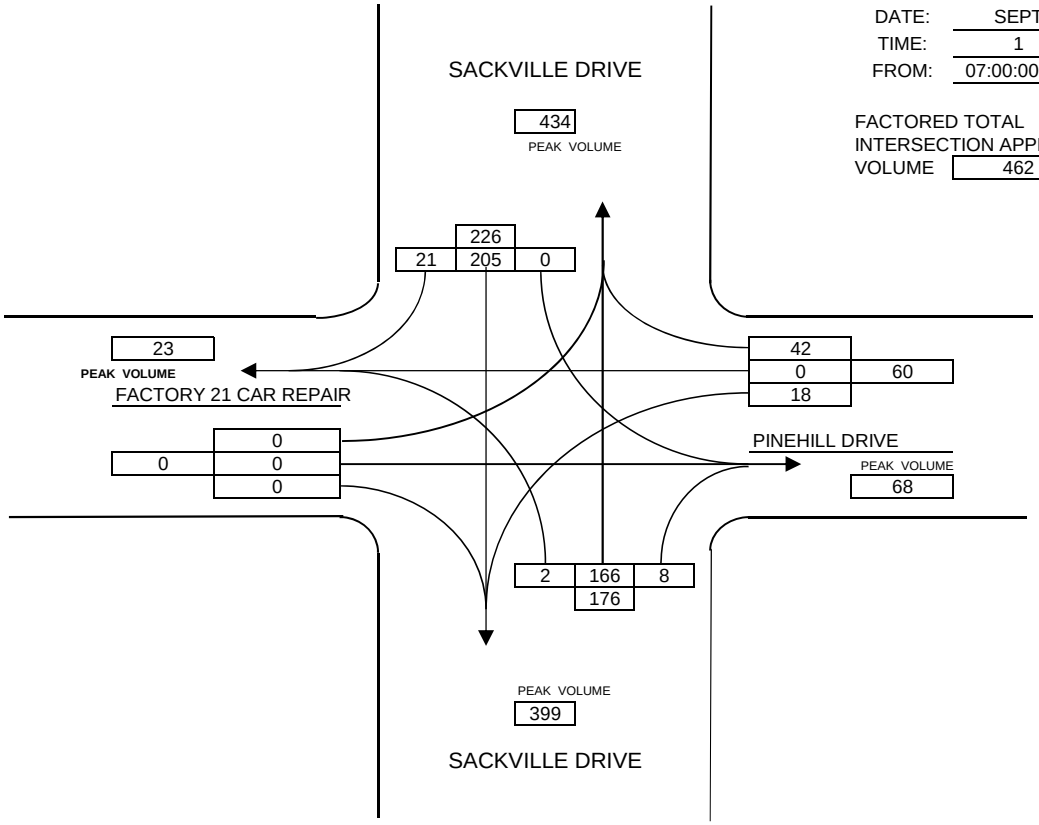
DAY	DATE	MONTH	YEAR
WEDNESDAY	20	SEPT	2017

TIME:		FROM THE EAST			FROM THE WEST			FROM THE NORTH			FROM THE SOUTH			TOTAL
15 MIN INTERVALS		L	S	R	L	S	R	L	S	R	L	S	R	
08:00:00 AM	08:15:00 AM	8	0	23	0	0	0	1	78	6	0	54	3	173
08:15:00 AM	08:30:00 AM	11	0	19	0	0	0	0	73	11	1	57	5	177
08:30:00 AM	08:45:00 AM	7	0	18	1	0	0	0	97	6	0	49	8	186
08:45:00 AM	09:00:00 AM	9	0	22	0	0	0	0	101	7	0	71	3	213
TOTAL		35	0	82	1	0	0	1	349	30	1	231	19	749
PEAK			117			1			380			251		
15 MIN PEAK			124			4			432			296		
PEAK HOUR FACTOR			0.94			0.25			0.88			0.85		
TWO WAY TOTALS			137			32			694			635		FACTOR
														1
														749

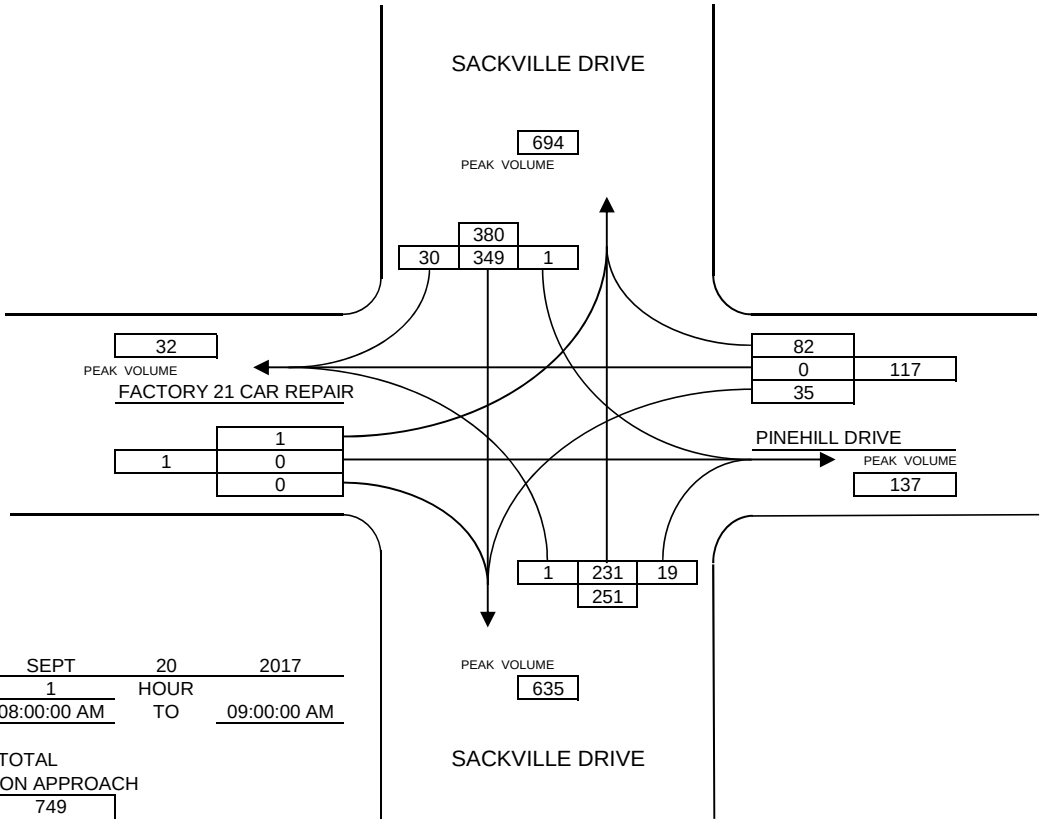
VEHICULAR GRAPHIC SUMMARY SHEET

INTERSECTION : PINEHILL DRIVE AT SACKVILLE DRIVE

DATE: SEPT 20 2017
TIME: 1 HOUR
FROM: 07:00:00 AM TO 08:00:00 AM



FACTORED TOTAL INTERSECTION APPROACH VOLUME 462



DATE: SEPT 20 2017
TIME: 1 HOUR
FROM: 08:00:00 AM TO 09:00:00 AM

FACTORED TOTAL INTERSECTION APPROACH VOLUME 749

HALIFAX REGIONAL MUNICIPALITY
TRANSPORTATION & PUBLIC WORKS
TRAFFIC MANAGEMENT

CODE NO. 17-TM-304

MANUAL TRAFFIC COUNTS

INTERSECTION: PINEHILL DRIVE AT SACKVILLE DRIVE

WEATHER: RAINY
RECORDER: AA

DAY	DATE	MONTH	YEAR
WEDNESDAY	20	SEPT	2017

STREET:		PINEHILL DRIVE			FACTORY 21 CAR REPAIR			SACKVILLE DRIVE			SACKVILLE DRIVE			
TIME:		FROM THE EAST			FROM THE WEST			FROM THE NORTH			FROM THE SOUTH			TOTAL
15 MIN INTERVALS		L	S	R	L	S	R	L	S	R	L	S	R	
04:00:00 PM	04:15:00 PM	8	0	21	0	0	0	16	116	0	0	157	11	329
04:15:00 PM	04:30:00 PM	6	0	25	1	0	0	19	128	0	0	148	8	335
04:30:00 PM	04:45:00 PM	7	0	24	0	0	0	22	134	0	0	114	6	307
04:45:00 PM	05:00:00 PM	11	0	22	0	0	0	30	121	0	0	134	9	327
TOTAL		32	0	92	1	0	0	87	499	0	0	553	34	1298
PEAK		124			1			586			587			
15 MIN PEAK		132			4			624			672			
PEAK HOUR FACTOR		0.94			0.25			0.94			0.87			
TWO WAY TOTALS		245			1			1232			1118			FACTOR
														1
														1298

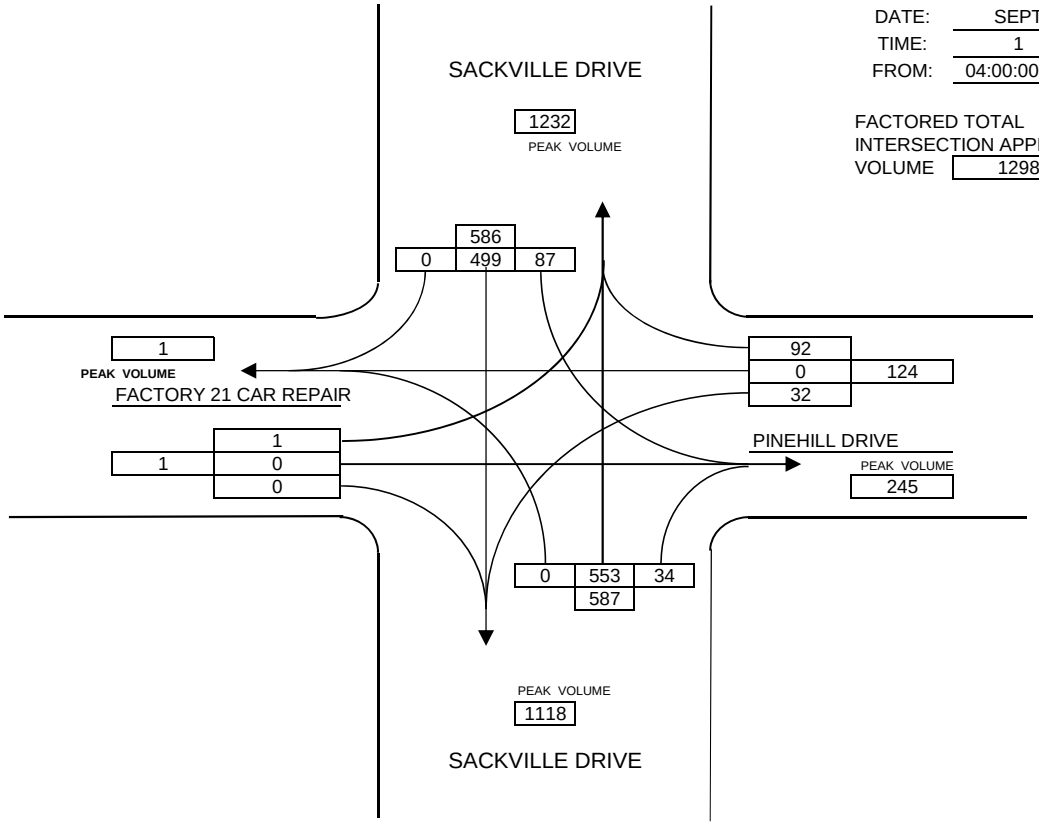
DAY	DATE	MONTH	YEAR
WEDNESDAY	20	SEPT	2017

TIME:		FROM THE EAST			FROM THE WEST			FROM THE NORTH			FROM THE SOUTH			TOTAL
15 MIN INTERVALS		L	S	R	L	S	R	L	S	R	L	S	R	
05:00:00 PM	05:15:00 PM	9	0	22	1	0	1	25	112	0	0	136	7	313
05:15:00 PM	05:30:00 PM	10	0	28	2	0	0	16	106	0	0	115	6	283
05:30:00 PM	05:45:00 PM	7	0	21	0	0	0	30	123	0	0	101	7	289
05:45:00 PM	06:00:00 PM	9	0	19	0	0	0	16	90	0	0	96	5	235
TOTAL		35	0	90	3	0	1	87	431	0	0	448	25	1120
PEAK		125			4			518			473			
15 MIN PEAK		152			8			612			572			
PEAK HOUR FACTOR		0.82			0.5			0.85			0.83			
TWO WAY TOTALS		237			4			1059			940			FACTOR
														1
														1120

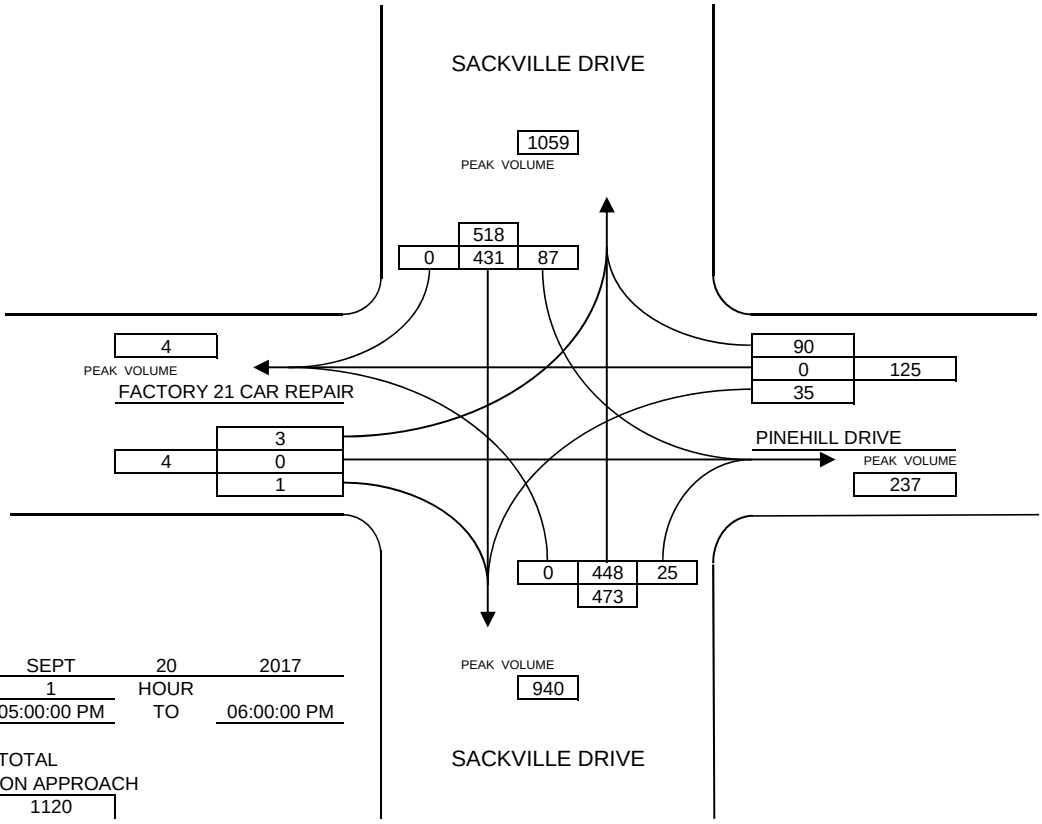
VEHICULAR GRAPHIC SUMMARY SHEET

INTERSECTION : PINEHILL DRIVE AT SACKVILLE DRIVE

DATE: SEPT 20 2017
TIME: 1 HOUR
FROM: 04:00:00 PM TO 05:00:00 PM



FACTORED TOTAL INTERSECTION APPROACH VOLUME 1298



DATE: SEPT 20 2017
TIME: 1 HOUR
FROM: 05:00:00 PM TO 06:00:00 PM

FACTORED TOTAL INTERSECTION APPROACH VOLUME 1120

HALIFAX REGIONAL MUNICIPALITY
TRANSPORTATION & PUBLIC WORKS
TRAFFIC & RIGHT OF WAY

CODE NO. 17-TM-305

MANUAL TRAFFIC COUNTS

INTERSECTION: ARMOYAN DRIVE AT SACKVILLE DRIVE AND SKYRIDGE AVENUE

WEATHER: RAINY
RECORDER: SS

DAY	DATE	MONTH	YEAR
WEDNESDAY	20	SEPT	2017

STREET:		SKYRIDGE AVENUE			ARMOYAN DRIVE			SACKVILLE DRIVE			SACKVILLE DRIVE			
TIME:		FROM THE EAST			FROM THE WEST			FROM THE NORTH			FROM THE SOUTH			TOTAL
15 MIN INTERVALS		L	S	R	L	S	R	L	S	R	L	S	R	
07:00:00 AM	07:15:00 AM	3	0	2	2	1	9	2	118	0	2	27	3	169
07:15:00 AM	07:30:00 AM	6	2	2	4	2	17	3	163	4	3	61	4	271
07:30:00 AM	07:45:00 AM	12	2	2	6	4	18	2	134	2	5	74	8	269
07:45:00 AM	08:00:00 AM	10	1	6	10	1	5	1	136	2	2	63	2	239
TOTAL		31	5	12	22	8	49	8	551	8	12	225	17	948
PEAK			48			79			567			254		
15 MIN PEAK			68			112			680			348		
PEAK HOUR FACTOR			0.71			0.71			0.83			0.73		
TWO WAY TOTALS			81			104			826			885		FACTOR
														1
														948

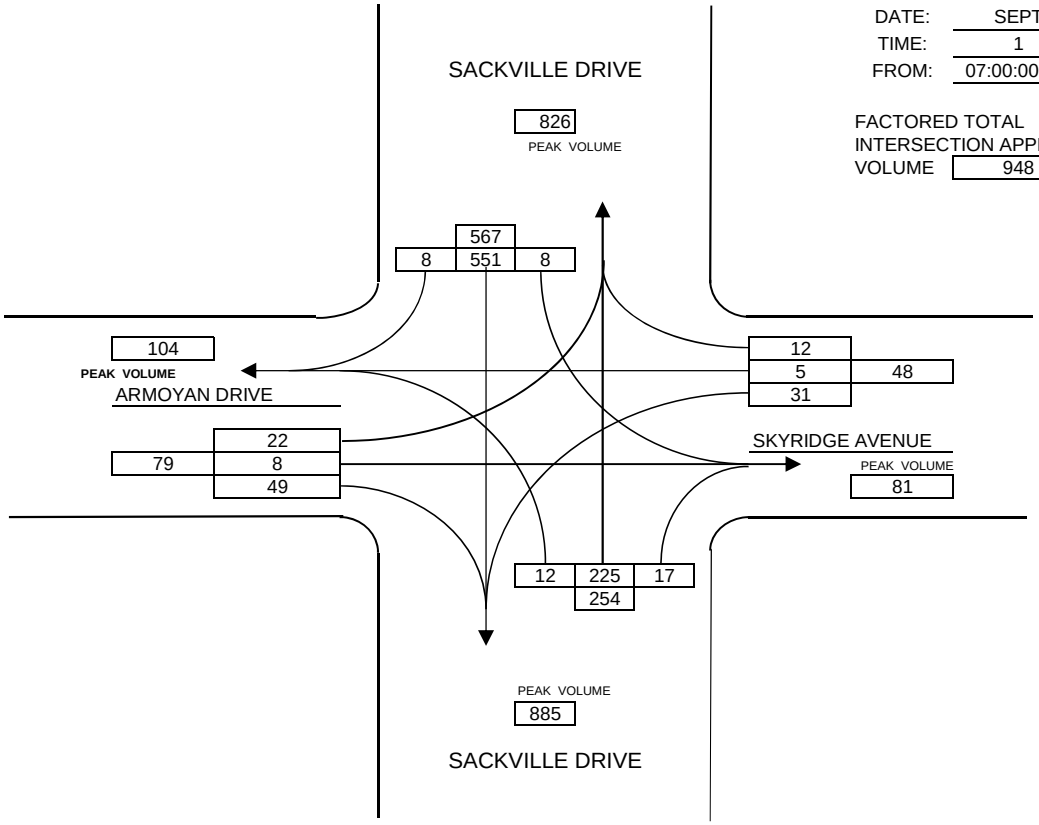
DAY	DATE	MONTH	YEAR
WEDNESDAY	20	SEPT	2017

TIME:		FROM THE EAST			FROM THE WEST			FROM THE NORTH			FROM THE SOUTH			TOTAL
15 MIN INTERVALS		L	S	R	L	S	R	L	S	R	L	S	R	
08:00:00 AM	08:15:00 AM	13	3	6	7	3	8	2	123	5	3	77	6	256
08:15:00 AM	08:30:00 AM	17	3	1	4	6	10	1	119	4	2	73	1	241
08:30:00 AM	08:45:00 AM	14	2	3	6	2	9	2	122	6	3	67	3	239
08:45:00 AM	09:00:00 AM	9	1	5	5	1	12	1	126	5	5	65	2	237
TOTAL		53	9	15	22	12	39	6	490	20	13	282	12	973
PEAK			77			73			516			307		
15 MIN PEAK			88			80			528			344		
PEAK HOUR FACTOR			0.88			0.91			0.98			0.89		
TWO WAY TOTALS			107			115			835			889		FACTOR
														1
														973

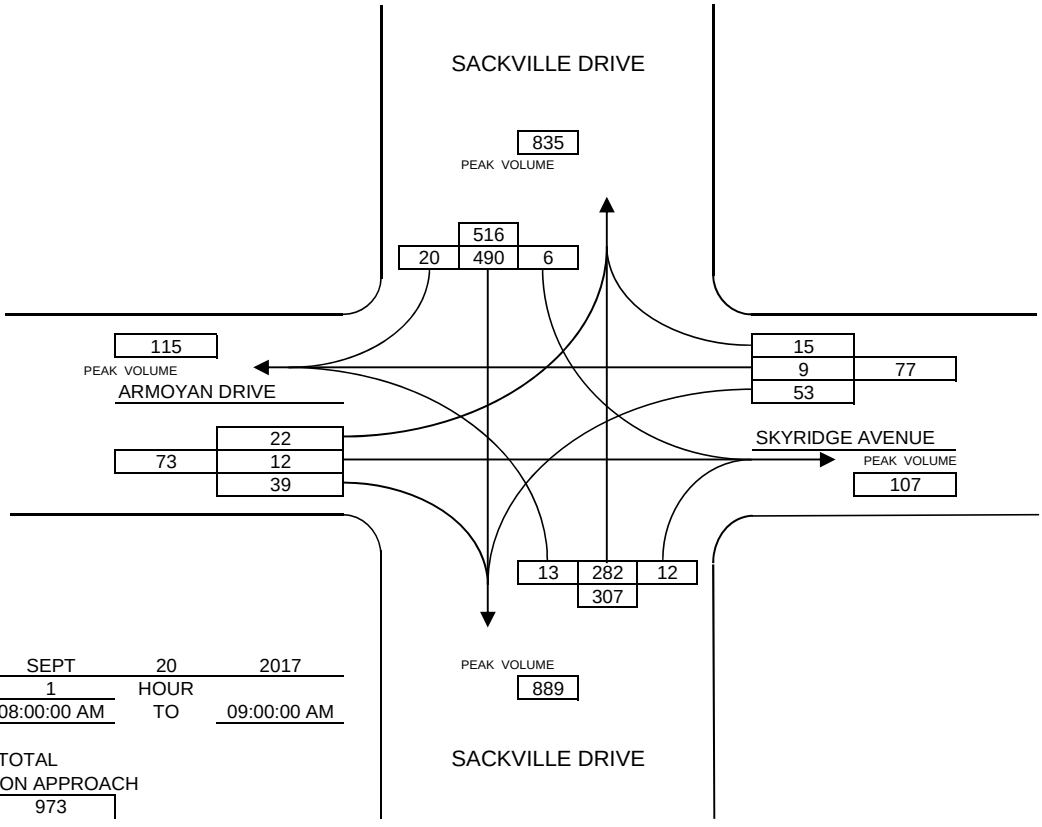
VEHICULAR GRAPHIC SUMMARY SHEET

INTERSECTION : ARMOYAN DRIVE AT SACKVILLE DRIVE AND SKYRIDGE AVENUE

DATE: SEPT 20 2017
TIME: 1 HOUR
FROM: 07:00:00 AM TO 08:00:00 AM



FACTORED TOTAL
INTERSECTION APPROACH
VOLUME 948



DATE: SEPT 20 2017
TIME: 1 HOUR
FROM: 08:00:00 AM TO 09:00:00 AM

FACTORED TOTAL
INTERSECTION APPROACH
VOLUME 973

HALIFAX REGIONAL MUNICIPALITY
TRANSPORTATION & PUBLIC WORKS
TRAFFIC & RIGHT OF WAY

CODE NO. 17-TM-305

MANUAL TRAFFIC COUNTS

INTERSECTION: ARMOYAN DRIVE AT SACKVILLE DRIVE AND SKYRIDGE AVENUE

WEATHER: CLOUDY
RECORDER: SS

DAY	DATE	MONTH	YEAR
WEDNESDAY	20	SEPT	2017

STREET:		SKYRIDGE AVENUE			ARMOYAN DRIVE			SACKVILLE DRIVE			SACKVILLE DRIVE			
TIME:		FROM THE EAST			FROM THE WEST			FROM THE NORTH			FROM THE SOUTH			TOTAL
15 MIN INTERVALS		L	S	R	L	S	R	L	S	R	L	S	R	
04:00:00 PM	04:15:00 PM	7	3	2	5	0	10	3	134	4	11	183	4	366
04:15:00 PM	04:30:00 PM	8	4	3	8	3	2	2	120	5	10	188	7	360
04:30:00 PM	04:45:00 PM	3	1	9	1	2	11	2	145	12	9	166	14	375
04:45:00 PM	05:00:00 PM	8	4	8	6	1	1	1	132	1	8	98	13	281
TOTAL		26	12	22	20	6	24	8	531	22	38	635	38	1382
PEAK			60			50			561			711		
15 MIN PEAK			80			60			636			820		
PEAK HOUR FACTOR			0.75			0.83			0.88			0.87		
TWO WAY TOTALS			112			122			1238			1292		FACTOR
														1
														1382

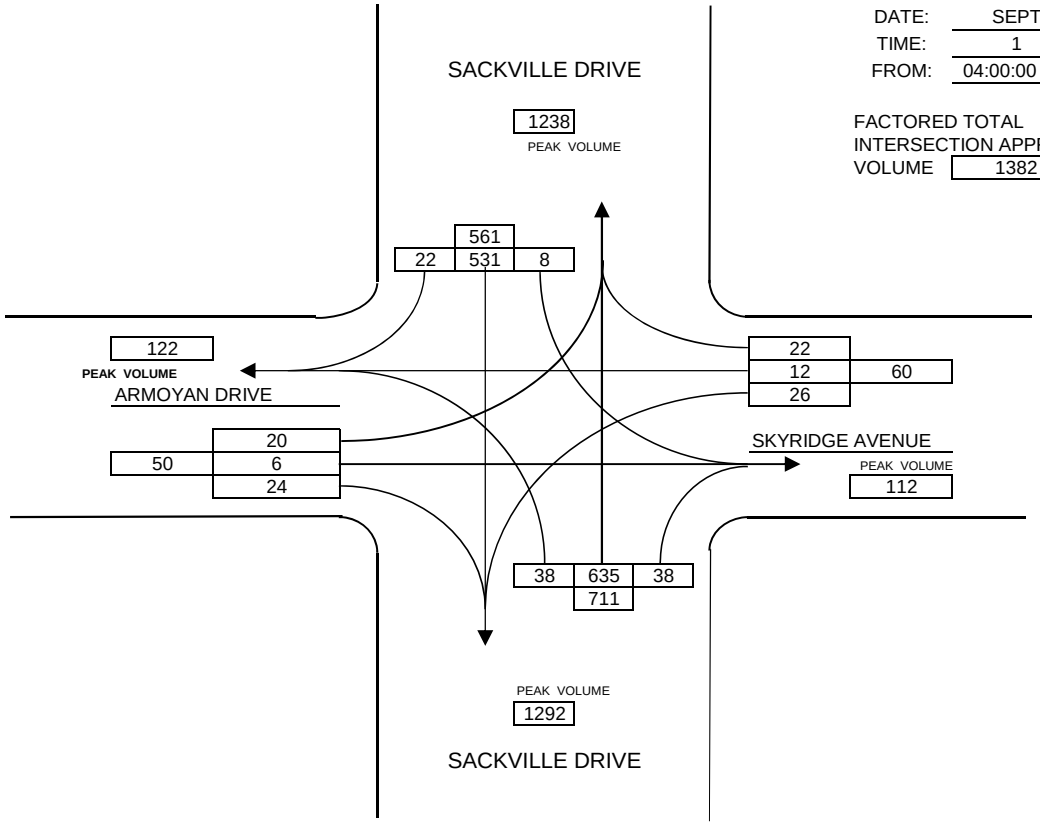
DAY	DATE	MONTH	YEAR
WEDNESDAY	20	SEPT	2017

TIME:		FROM THE EAST			FROM THE WEST			FROM THE NORTH			FROM THE SOUTH			TOTAL
15 MIN INTERVALS		L	S	R	L	S	R	L	S	R	L	S	R	
05:00:00 PM	05:15:00 PM	9	3	12	8	2	8	5	135	8	10	166	9	375
05:15:00 PM	05:30:00 PM	7	2	5	9	0	7	6	139	8	7	183	11	384
05:30:00 PM	05:45:00 PM	7	3	3	7	2	5	3	128	11	7	165	6	347
05:45:00 PM	06:00:00 PM	4	0	7	4	1	5	4	122	6	13	159	7	332
TOTAL		27	8	27	28	5	25	18	524	33	37	673	33	1438
PEAK			62			58			575			743		
15 MIN PEAK			96			72			612			804		
PEAK HOUR FACTOR			0.65			0.81			0.94			0.92		
TWO WAY TOTALS			118			136			1303			1319		FACTOR
														1
														1438

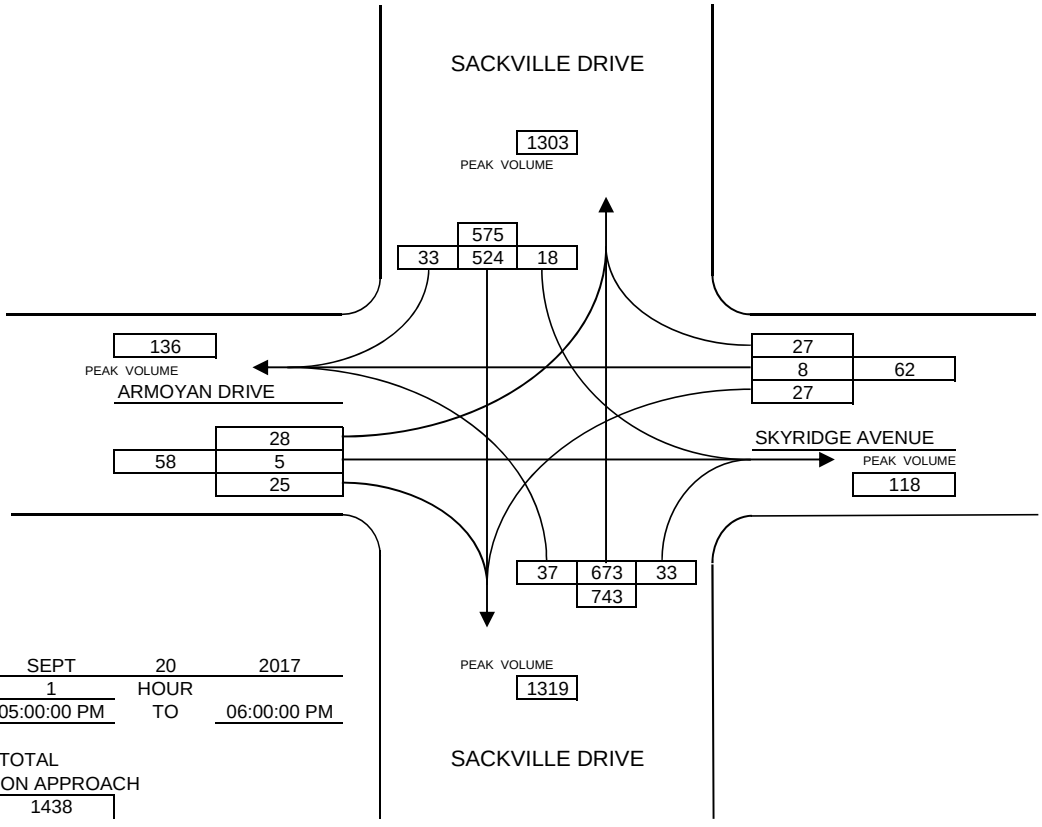
VEHICULAR GRAPHIC SUMMARY SHEET

INTERSECTION : ARMOYAN DRIVE AT SACKVILLE DRIVE AND SKYRIDGE AVENUE

DATE: SEPT 20 2017
TIME: 1 HOUR
FROM: 04:00:00 PM TO 05:00:00 PM



FACTORED TOTAL INTERSECTION APPROACH VOLUME 1382



DATE: SEPT 20 2017
TIME: 1 HOUR
FROM: 05:00:00 PM TO 06:00:00 PM

FACTORED TOTAL INTERSECTION APPROACH VOLUME 1438

APPENDIX B

Appendix B: TRIP GENERATION

Trip Generation Summary

Alternative: Alternative 1
Phase:
Project: 400 Sackville Drive

Open Date: 5/3/2023
Analysis Date: 5/3/2023

ITE	Land Use		Weekday Average Daily Trips *	Enter	Exit	Total	Weekday AM Peak Hour of Adjacent Street Traffic *	Enter	Exit	Total	Weekday PM Peak Hour of Adjacent Street Traffic *	Enter	Exit	Total
231	MID-RISE-COMM 2			155	155	310		8	19	27		22	10	32
	90	Dwelling Units												
231	MID-RISE-COMM 1			189	189	378		9	24	33		28	12	40
	110	Dwelling Units												
Unadjusted Volume				344	344	688		17	43	60		50	22	72
Internal Capture Trips				0	0	0		0	0	0		0	0	0
Pass-By Trips				0	0	0		0	0	0		0	0	0
Volume Added to Adjacent Streets				344	344	688		17	43	60		50	22	72

Total Weekday Average Daily Trips Internal Capture = 0 Percent
Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent
Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

Trip Generation Summary

Alternative: Alternative 1
Phase: Existing Development
Project: 400 Sackville Drive

Open Date: 5/3/2023
Analysis Date: 5/3/2023

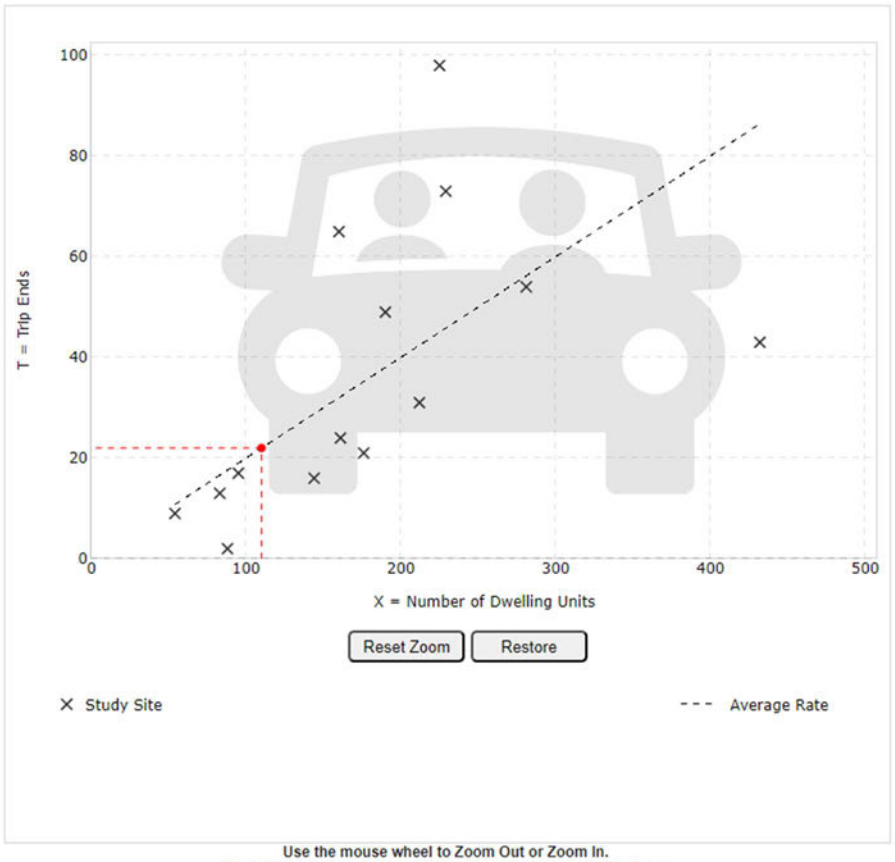
ITE	Land Use		Weekday Average Daily Trips *	Enter	Exit	Total	Weekday AM Peak Hour of Adjacent Street Traffic *	Enter	Exit	Total	Weekday PM Peak Hour of Adjacent Street Traffic *	Enter	Exit	Total
565	DAYCARE			72	71	143		17	16	33		16	17	33
	3	1000 Sq. Ft. GFA												
820	CENTERSHOPPING 1			57	56	113		2	1	3		5	6	11
	3	1000 Sq. Ft. GLA												
841	SALESAUTO-USED 1			68	67	135		8	3	11		9	10	19
	5	1000 Sq. Ft. GFA												
Unadjusted Volume				197	194	391		27	20	47		30	33	63
Internal Capture Trips				0	0	0		0	0	0		0	0	0
Pass-By Trips				0	0	0		0	0	0		2	2	4
Volume Added to Adjacent Streets				197	194	391		27	20	47		28	31	59

Total Weekday Average Daily Trips Internal Capture = 0 Percent
Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent
Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Mid-Rise Residential with Ground-Floor Commercial - GFA (1-25k) (231) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
Dense Multi-Use Urban

Trip Type:
Vehicle

Number of Studies:
14

Avg. Num. of Dwelling Units:
181

Average Rate:
0.20

Range of Rates:
0.02 - 0.44

Standard Deviation:
0.12

Fitted Curve Equation:
Not Given

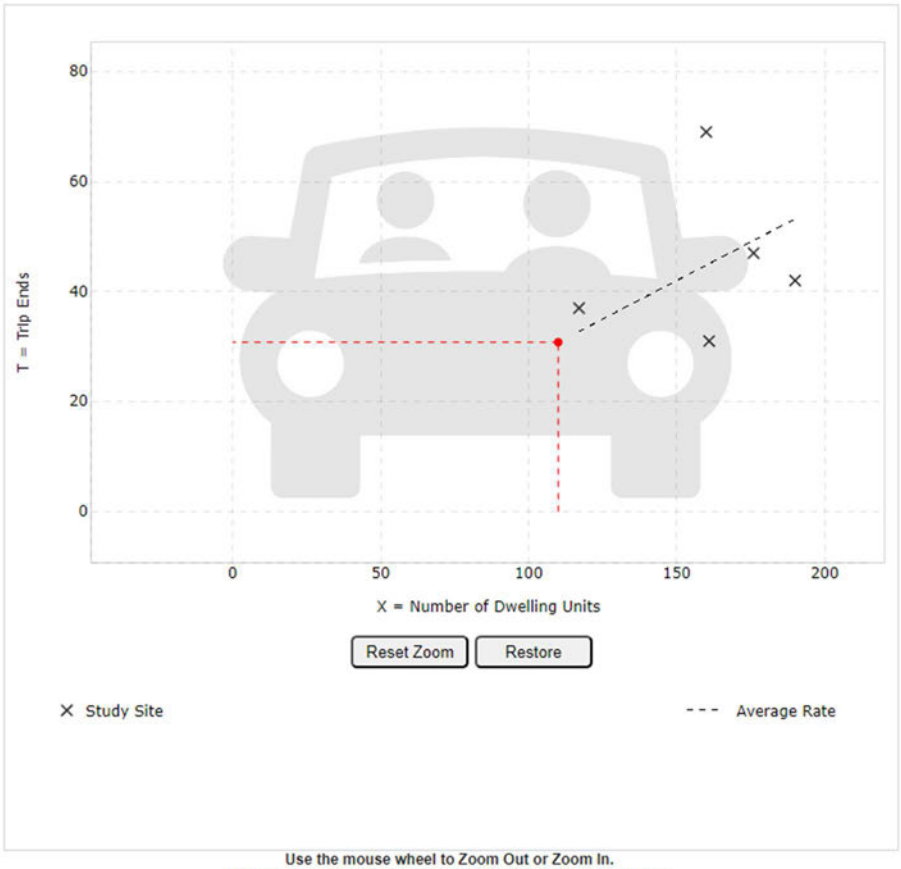
R^2:
****

Directional Distribution:
39% entering, 61% exiting

Calculated Trip Ends:
Average Rate: 22 (Total), 9 (Entry), 13 (Exit)

Data Plot and Equation

Caution – Small Sample Size



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Mid-Rise Residential with Ground-Floor Commercial - GFA (1-25k) (231) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
Dense Multi-Use Urban

Trip Type:
Vehicle

Number of Studies:
5

Avg. Num. of Dwelling Units:
161

Average Rate:
0.28

Range of Rates:
0.19 - 0.43

Standard Deviation:
0.09

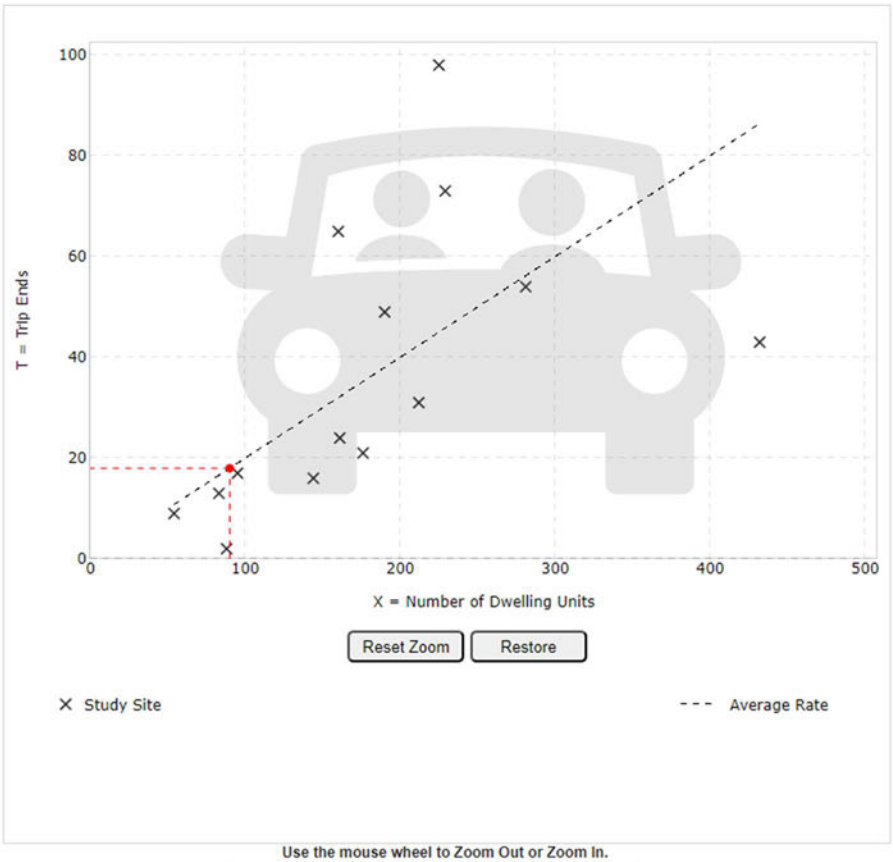
Fitted Curve Equation:
Not Given

R^2:
****

Directional Distribution:
44% entering, 56% exiting

Calculated Trip Ends:
Average Rate: 31 (Total), 14 (Entry), 17 (Exit)

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Mid-Rise Residential with Ground-Floor Commercial - GFA (1-25k) (231) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
Dense Multi-Use Urban

Trip Type:
Vehicle

Number of Studies:
14

Avg. Num. of Dwelling Units:
181

Average Rate:
0.20

Range of Rates:
0.02 - 0.44

Standard Deviation:
0.12

Fitted Curve Equation:
Not Given

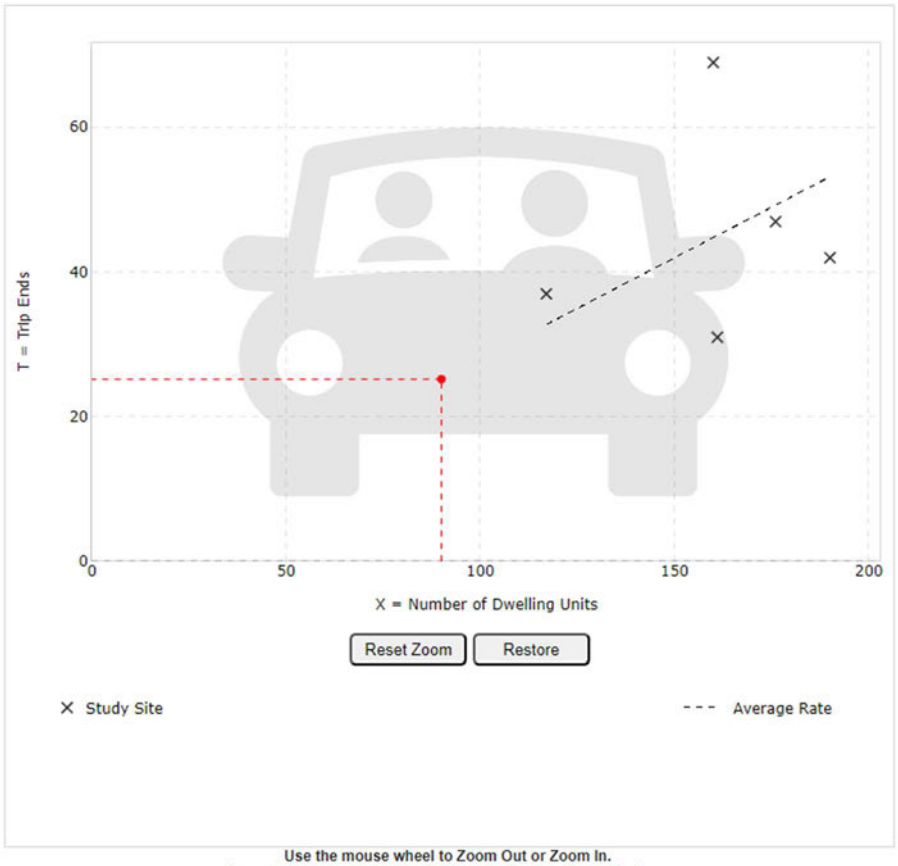
R^2:
****

Directional Distribution:
39% entering, 61% exiting

Calculated Trip Ends:
Average Rate: 18 (Total), 7 (Entry), 11 (Exit)

Data Plot and Equation

Caution – Small Sample Size



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Mid-Rise Residential with Ground-Floor Commercial - GFA (1-25k) (231) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
Dense Multi-Use Urban

Trip Type:
Vehicle

Number of Studies:
5

Avg. Num. of Dwelling Units:
161

Average Rate:
0.28

Range of Rates:
0.19 - 0.43

Standard Deviation:
0.09

Fitted Curve Equation:
Not Given

R^2:
****

Directional Distribution:
44% entering, 56% exiting

Calculated Trip Ends:
Average Rate: 25 (Total), 11 (Entry), 14 (Exit)

APPENDIX C

Appendix C: TRIP ASSIGNMENT

Development: 400 Sackville

Driveway: 1 Driveway

Origin #	Route	To		From	
		Distribution %	Trips	Distribution %	Trips
1	Driveway to Sackville West	40.00	7	40.00	17
2	Driveway to Sackville East	50.00	9	50.00	22
3	Driveway to Pinehill North	5.00	1	5.00	2
4	Driveway to Skyridge North	5.00	1	5.00	2

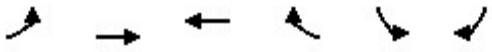
Development: 400 Sackville Drive

Driveway: 1 Driveway 400

Origin #	Route	To		From	
		Distribution %	Trips	Distribution %	Trips
1	Driveway 400 to Sackville West	40.00	20	40.00	9
2	Driveway 400 to Sackville East	50.00	25	50.00	11
3	Driveway 400 to Pinehill North	5.00	3	5.00	1
4	Driveway 400 to Skyridge North	5.00	3	5.00	1

APPENDIX D

Appendix D: SYNCHRO REPORTS



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	540	390	5	20	10
Future Volume (Veh/h)	5	540	390	5	20	10
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	587	424	5	22	11
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		160	393			
pX, platoon unblocked					0.94	
vC, conflicting volume	429				730	214
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	429				587	214
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				95	99
cM capacity (veh/h)	1127				413	790

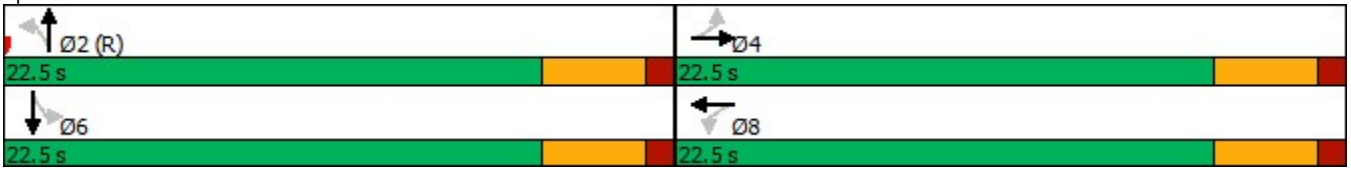
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	201	391	283	146	33
Volume Left	5	0	0	0	22
Volume Right	0	0	0	5	11
cSH	1127	1700	1700	1700	491
Volume to Capacity	0.00	0.23	0.17	0.09	0.07
Queue Length 95th (m)	0.1	0.0	0.0	0.0	1.6
Control Delay (s)	0.2	0.0	0.0	0.0	12.9
Lane LOS	A				B
Approach Delay (s)	0.1		0.0		12.9
Approach LOS					B

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	28.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	55	480	5	360	5	5	60	5
Future Volume (vph)	55	480	5	360	5	5	60	5
Lane Group Flow (vph)	0	593	0	434	0	15	0	162
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Minimum Split (s)	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	22.5	22.5	22.5
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	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
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		4.5		4.5		4.5		4.5
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		18.0		18.0		18.0		18.0
Actuated g/C Ratio		0.40		0.40		0.40		0.40
v/c Ratio		0.47		0.32		0.02		0.24
Control Delay		11.5		9.5		7.2		5.6
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		11.5		9.5		7.2		5.6
LOS		B		A		A		A
Approach Delay		11.5		9.5		7.2		5.6
Approach LOS		B		A		A		A
Queue Length 50th (m)		16.8		10.8		0.5		3.3
Queue Length 95th (m)		27.3		18.4		2.8		11.5
Internal Link Dist (m)		155.6		64.1		19.2		120.4
Turn Bay Length (m)								
Base Capacity (vph)		1250		1357		673		676
Starvation Cap Reductn		0		0		0		0
Spillback Cap Reductn		0		0		0		0
Storage Cap Reductn		0		0		0		0
Reduced v/c Ratio		0.47		0.32		0.02		0.24

Intersection Summary	
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay: 9.9	Intersection LOS: A
Intersection Capacity Utilization 50.1%	ICU Level of Service A
Analysis Period (min) 15	

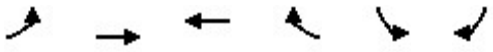
Splits and Phases: 5: Sackville & Pinehill



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	545	0	0	400	0	0
Future Volume (Veh/h)	545	0	0	400	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	592	0	0	435	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	88					
pX, platoon unblocked			0.91		0.91	0.91
vC, conflicting volume			592		810	296
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			344		584	18
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1098		401	958

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	395	197	145	290	0
Volume Left	0	0	0	0	0
Volume Right	0	0	0	0	0
cSH	1700	1700	1098	1700	1700
Volume to Capacity	0.23	0.12	0.00	0.17	0.00
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0
Lane LOS					A
Approach Delay (s)	0.0		0.0		0.0
Approach LOS					A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	540	390	5	20	10
Future Volume (Veh/h)	6	658	475	6	24	12
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	715	516	7	26	13
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		160	393			
pX, platoon unblocked					0.90	
vC, conflicting volume	523				891	262
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	523				647	262
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				93	98
cM capacity (veh/h)	1040				359	737

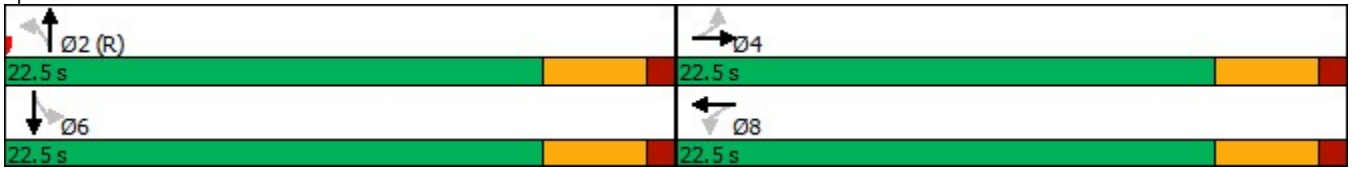
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	245	477	344	179	39
Volume Left	7	0	0	0	26
Volume Right	0	0	0	7	13
cSH	1040	1700	1700	1700	433
Volume to Capacity	0.01	0.28	0.20	0.11	0.09
Queue Length 95th (m)	0.2	0.0	0.0	0.0	2.2
Control Delay (s)	0.3	0.0	0.0	0.0	14.1
Lane LOS	A				B
Approach Delay (s)	0.1		0.0		14.1
Approach LOS					B

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	28.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	55	480	5	360	5	5	60	5
Future Volume (vph)	67	585	6	439	6	6	73	6
Lane Group Flow (vph)	0	722	0	531	0	21	0	199
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Minimum Split (s)	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	22.5	22.5	22.5
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	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
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		4.5		4.5		4.5		4.5
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		18.0		18.0		18.0		18.0
Actuated g/C Ratio		0.40		0.40		0.40		0.40
v/c Ratio		0.59		0.39		0.03		0.29
Control Delay		13.0		10.2		7.2		5.8
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		13.0		10.2		7.2		5.8
LOS		B		B		A		A
Approach Delay		13.0		10.2		7.2		5.8
Approach LOS		B		B		A		A
Queue Length 50th (m)		21.9		13.8		0.6		4.1
Queue Length 95th (m)		34.8		22.8		3.4		13.4
Internal Link Dist (m)		155.6		64.1		19.2		120.4
Turn Bay Length (m)								
Base Capacity (vph)		1220		1351		667		683
Starvation Cap Reductn		0		0		0		0
Spillback Cap Reductn		0		0		0		0
Storage Cap Reductn		0		0		0		0
Reduced v/c Ratio		0.59		0.39		0.03		0.29

Intersection Summary	
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 10.9	Intersection LOS: B
Intersection Capacity Utilization 50.1%	ICU Level of Service A
Analysis Period (min) 15	

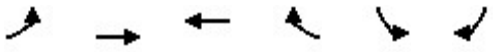
Splits and Phases: 5: Sackville & Pinehill



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	545	0	0	400	0	0
Future Volume (Veh/h)	664	0	0	488	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	722	0	0	530	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	88					
pX, platoon unblocked			0.87		0.87	0.87
vC, conflicting volume			722		987	361
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			380		685	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1021		332	943

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	481	241	177	353	0
Volume Left	0	0	0	0	0
Volume Right	0	0	0	0	0
cSH	1700	1700	1021	1700	1700
Volume to Capacity	0.28	0.14	0.00	0.21	0.11
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0
Lane LOS					A
Approach Delay (s)	0.0		0.0		0.0
Approach LOS					A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	540	390	5	20	10
Future Volume (Veh/h)	6	688	488	6	24	12
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	748	530	7	26	13
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		160	393			
pX, platoon unblocked					0.90	
vC, conflicting volume	537				922	268
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	537				681	268
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				92	98
cM capacity (veh/h)	1027				342	730

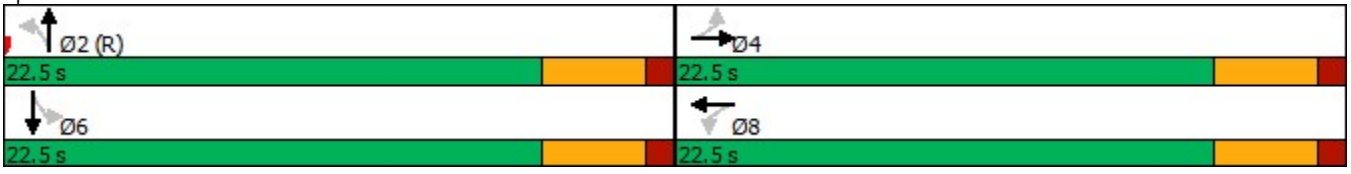
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	256	499	353	184	39
Volume Left	7	0	0	0	26
Volume Right	0	0	0	7	13
cSH	1027	1700	1700	1700	415
Volume to Capacity	0.01	0.29	0.21	0.11	0.09
Queue Length 95th (m)	0.2	0.0	0.0	0.0	2.3
Control Delay (s)	0.3	0.0	0.0	0.0	14.6
Lane LOS	A				B
Approach Delay (s)	0.1		0.0		14.6
Approach LOS					B

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	28.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	55	480	5	360	5	5	60	5
Future Volume (vph)	67	594	6	460	6	6	74	6
Lane Group Flow (vph)	0	732	0	556	0	21	0	200
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Minimum Split (s)	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	22.5	22.5	22.5
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	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
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		4.5		4.5		4.5		4.5
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		18.0		18.0		18.0		18.0
Actuated g/C Ratio		0.40		0.40		0.40		0.40
v/c Ratio		0.60		0.41		0.03		0.29
Control Delay		13.2		10.3		7.2		5.8
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		13.2		10.3		7.2		5.8
LOS		B		B		A		A
Approach Delay		13.2		10.3		7.2		5.8
Approach LOS		B		B		A		A
Queue Length 50th (m)		22.3		14.6		0.6		4.1
Queue Length 95th (m)		35.5		24.0		3.4		13.5
Internal Link Dist (m)		155.6		64.1		19.2		120.4
Turn Bay Length (m)								
Base Capacity (vph)		1216		1351		667		683
Starvation Cap Reductn		0		0		0		0
Spillback Cap Reductn		0		0		0		0
Storage Cap Reductn		0		0		0		0
Reduced v/c Ratio		0.60		0.41		0.03		0.29

Intersection Summary	
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 11.1	Intersection LOS: B
Intersection Capacity Utilization 50.1%	ICU Level of Service A
Analysis Period (min) 15	

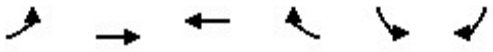
Splits and Phases: 5: Sackville & Pinehill



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	545	0	0	400	0	0
Future Volume (Veh/h)	664	10	12	488	23	29
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	722	11	13	530	25	32
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	88					
pX, platoon unblocked			0.87		0.87	0.87
vC, conflicting volume			733		1018	366
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			383		713	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		92	97
cM capacity (veh/h)			1015		313	939

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	481	252	190	353	57
Volume Left	0	0	13	0	25
Volume Right	0	11	0	0	32
cSH	1700	1700	1015	1700	501
Volume to Capacity	0.28	0.15	0.01	0.21	0.11
Queue Length 95th (m)	0.0	0.0	0.3	0.0	2.9
Control Delay (s)	0.0	0.0	0.7	0.0	13.1
Lane LOS			A		B
Approach Delay (s)	0.0		0.2		13.1
Approach LOS					B

Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	18.4%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	570	795	5	20	10
Future Volume (Veh/h)	5	570	795	5	20	10
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	620	864	5	22	11
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		160	393			
pX, platoon unblocked	0.95				0.97	0.95
vC, conflicting volume	869				1186	434
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	767				913	312
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				92	98
cM capacity (veh/h)	804				262	653

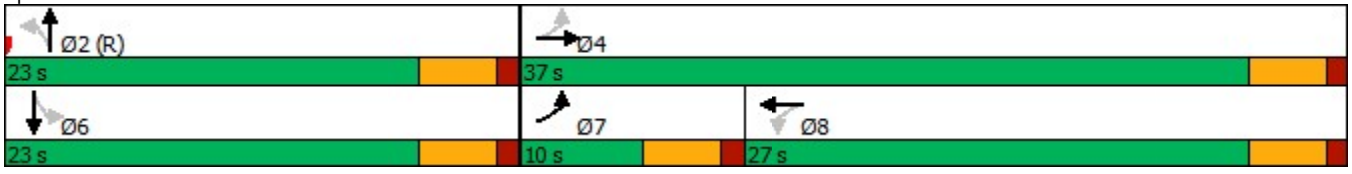
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	212	413	576	293	33
Volume Left	5	0	0	0	22
Volume Right	0	0	0	5	11
cSH	804	1700	1700	1700	328
Volume to Capacity	0.01	0.24	0.34	0.17	0.10
Queue Length 95th (m)	0.1	0.0	0.0	0.0	2.5
Control Delay (s)	0.3	0.0	0.0	0.0	17.2
Lane LOS	A				C
Approach Delay (s)	0.1		0.0		17.2
Approach LOS					C

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	130	520	5	750	5	5	50	5
Future Volume (vph)	130	520	5	750	5	5	50	5
Lane Group Flow (vph)	0	717	0	874	0	15	0	179
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	7	4		8		2		6
Permitted Phases	4		8		2		6	
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	37.0	27.0	27.0	23.0	23.0	23.0	23.0
Total Split (%)	16.7%	61.7%	45.0%	45.0%	38.3%	38.3%	38.3%	38.3%
Yellow Time (s)	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
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		4.5		4.5		4.5		4.5
Lead/Lag	Lead		Lag	Lag				
Lead-Lag Optimize?	Yes		Yes	Yes				
Act Effct Green (s)		32.5		22.5		18.5		18.5
Actuated g/C Ratio		0.54		0.38		0.31		0.31
v/c Ratio		0.57		0.69		0.03		0.32
Control Delay		10.1		25.7		12.6		8.0
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		10.1		25.7		12.6		8.0
LOS		B		C		B		A
Approach Delay		10.1		25.7		12.6		8.0
Approach LOS		B		C		B		A
Queue Length 50th (m)		21.3		54.4		0.8		4.6
Queue Length 95th (m)		31.0		73.3		4.1		16.6
Internal Link Dist (m)		155.6		64.9		19.2		120.4
Turn Bay Length (m)								
Base Capacity (vph)		1266		1273		517		566
Starvation Cap Reductn		0		0		0		0
Spillback Cap Reductn		0		0		0		0
Storage Cap Reductn		0		0		0		0
Reduced v/c Ratio		0.57		0.69		0.03		0.32

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 17.5	Intersection LOS: B
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

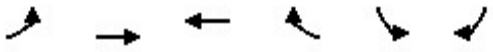
Splits and Phases: 5: Sackville & Pinehill



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	575	0	0	805	0	0
Future Volume (Veh/h)	575	0	0	805	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	625	0	0	875	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	89					
pX, platoon unblocked			0.92		0.92	0.92
vC, conflicting volume			625		1062	312
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			406		884	65
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1052		261	902

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	417	208	292	583	0
Volume Left	0	0	0	0	0
Volume Right	0	0	0	0	0
cSH	1700	1700	1052	1700	1700
Volume to Capacity	0.25	0.12	0.00	0.34	0.00
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0
Lane LOS					A
Approach Delay (s)	0.0		0.0		0.0
Approach LOS					A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	25.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	570	795	5	20	10
Future Volume (Veh/h)	6	695	969	6	24	12
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	755	1053	7	26	13
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		160	393			
pX, platoon unblocked	0.87				0.92	0.87
vC, conflicting volume	1060				1448	530
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	780				847	174
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				91	98
cM capacity (veh/h)	728				275	734

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	259	503	702	358	39
Volume Left	7	0	0	0	26
Volume Right	0	0	0	7	13
cSH	728	1700	1700	1700	347
Volume to Capacity	0.01	0.30	0.41	0.21	0.11
Queue Length 95th (m)	0.2	0.0	0.0	0.0	2.9
Control Delay (s)	0.4	0.0	0.0	0.0	16.7
Lane LOS	A				C
Approach Delay (s)	0.1		0.0		16.7
Approach LOS					C

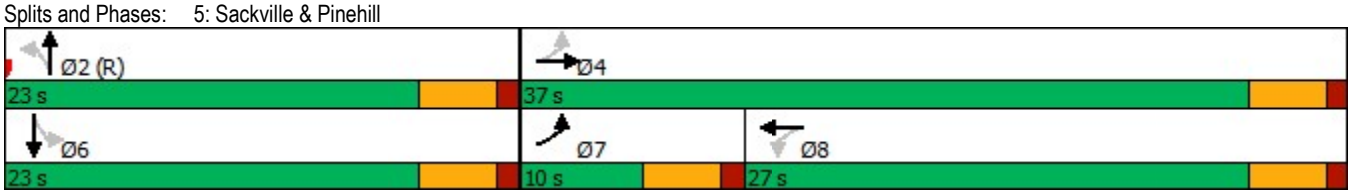
Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	130	520	5	750	5	5	50	5
Future Volume (vph)	158	634	6	914	6	6	61	6
Lane Group Flow (vph)	0	874	0	1066	0	21	0	219
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	7	4		8		2		6
Permitted Phases	4		8		2		6	
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	37.0	27.0	27.0	23.0	23.0	23.0	23.0
Total Split (%)	16.7%	61.7%	45.0%	45.0%	38.3%	38.3%	38.3%	38.3%
Yellow Time (s)	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
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		4.5		4.5		4.5		4.5
Lead/Lag	Lead		Lag	Lag				
Lead-Lag Optimize?	Yes		Yes	Yes				
Act Effct Green (s)		32.5		22.5		18.5		18.5
Actuated g/C Ratio		0.54		0.38		0.31		0.31
v/c Ratio		0.75		0.84		0.04		0.38
Control Delay		13.9		30.1		12.3		8.4
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		13.9		30.1		12.3		8.4
LOS		B		C		B		A
Approach Delay		13.9		30.1		12.3		8.4
Approach LOS		B		C		B		A
Queue Length 50th (m)		27.5		69.3		1.1		5.7
Queue Length 95th (m)		39.3		#91.9		5.0		19.4
Internal Link Dist (m)		155.6		64.9		19.2		120.4
Turn Bay Length (m)								
Base Capacity (vph)		1172		1270		511		580
Starvation Cap Reductn		0		0		0		0
Spillback Cap Reductn		0		0		0		0
Storage Cap Reductn		0		0		0		0
Reduced v/c Ratio		0.75		0.84		0.04		0.38

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 21.2 — Intersection LOS: C
Intersection Capacity Utilization 64.6% — 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.

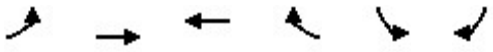
Splits and Phases: 5: Sackville & Pinehill



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	575	0	0	805	0	0
Future Volume (Veh/h)	701	0	0	981	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	762	0	0	1066	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	89					
pX, platoon unblocked			0.88		0.88	0.88
vC, conflicting volume			762		1295	381
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			455		1061	22
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			969		192	923

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	508	254	355	711	0
Volume Left	0	0	0	0	0
Volume Right	0	0	0	0	0
cSH	1700	1700	969	1700	1700
Volume to Capacity	0.30	0.15	0.00	0.42	0.10
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0
Lane LOS					A
Approach Delay (s)	0.0		0.0		0.0
Approach LOS					A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	25.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	570	795	5	20	10
Future Volume (Veh/h)	6	709	1003	6	24	12
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	771	1090	7	26	13
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		160	393			
pX, platoon unblocked	0.86				0.91	0.86
vC, conflicting volume	1097				1493	548
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	781				863	142
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				90	98
cM capacity (veh/h)	714				264	755

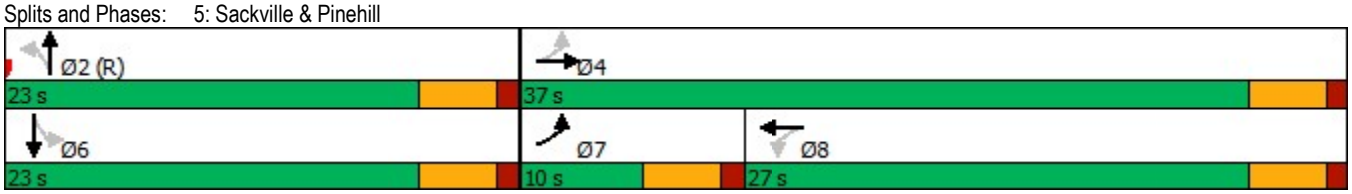
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	264	514	727	370	39
Volume Left	7	0	0	0	26
Volume Right	0	0	0	7	13
cSH	714	1700	1700	1700	337
Volume to Capacity	0.01	0.30	0.43	0.22	0.12
Queue Length 95th (m)	0.2	0.0	0.0	0.0	3.0
Control Delay (s)	0.4	0.0	0.0	0.0	17.1
Lane LOS	A				C
Approach Delay (s)	0.1		0.0		17.1
Approach LOS					C

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	130	520	5	750	5	5	50	5
Future Volume (vph)	158	658	6	925	6	6	65	6
Lane Group Flow (vph)	0	900	0	1079	0	21	0	224
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	7	4		8		2		6
Permitted Phases	4		8		2		6	
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	37.0	27.0	27.0	23.0	23.0	23.0	23.0
Total Split (%)	16.7%	61.7%	45.0%	45.0%	38.3%	38.3%	38.3%	38.3%
Yellow Time (s)	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
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		4.5		4.5		4.5		4.5
Lead/Lag	Lead		Lag	Lag				
Lead-Lag Optimize?	Yes		Yes	Yes				
Act Effct Green (s)		32.5		22.5		18.5		18.5
Actuated g/C Ratio		0.54		0.38		0.31		0.31
v/c Ratio		0.77		0.85		0.04		0.39
Control Delay		14.9		30.4		12.3		8.7
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		14.9		30.4		12.3		8.7
LOS		B		C		B		A
Approach Delay		14.9		30.4		12.3		8.7
Approach LOS		B		C		B		A
Queue Length 50th (m)		28.7		70.0		1.1		6.2
Queue Length 95th (m)		40.7		#94.0		5.0		20.1
Internal Link Dist (m)		155.6		64.9		19.2		120.4
Turn Bay Length (m)								
Base Capacity (vph)		1171		1270		510		578
Starvation Cap Reductn		0		0		0		0
Spillback Cap Reductn		0		0		0		0
Storage Cap Reductn		0		0		0		0
Reduced v/c Ratio		0.77		0.85		0.04		0.39

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 21.7	Intersection LOS: C
Intersection Capacity Utilization 64.6%	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.	

Splits and Phases: 5: Sackville & Pinehill



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	575	0	0	805	0	0
Future Volume (Veh/h)	701	28	34	981	12	15
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	762	30	37	1066	13	16
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)	89					
pX, platoon unblocked			0.87		0.87	0.87
vC, conflicting volume			792		1384	396
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			468		1147	14
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		92	98
cM capacity (veh/h)			950		161	926

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	508	284	392	711	29
Volume Left	0	0	37	0	13
Volume Right	0	30	0	0	16
cSH	1700	1700	950	1700	296
Volume to Capacity	0.30	0.17	0.04	0.42	0.10
Queue Length 95th (m)	0.0	0.0	0.9	0.0	2.5
Control Delay (s)	0.0	0.0	1.2	0.0	18.5
Lane LOS			A		C
Approach Delay (s)	0.0		0.4		18.5
Approach LOS					C

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	25.6%	ICU Level of Service	A
Analysis Period (min)	15		