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Transportation Planning
Traffic Impact Assessment
Parking Assessment
Site Access Design & Review
Site Servicing and Grading
Stormwater Management
Municipal Road Design

Transportation Impact Study

PROPOSED RESIDENTIAL DEVELOPMENT

80 Thomas Street
Mississauga, Ontario

October, 2016
Project No: NT-16-109

nexTrans Consulting

A Division of NextEng Consulting Group Inc.

October 26, 2016

Mr. Nick Sesito, B.URPL

Dunpar
105 Six Point Road
Etobicoke, Ontario
M8Z 2X3 Canada

Re: Transportation Impact Study
Proposed Residential Development
80 Thomas Street, Mississauga, ON
Our Project No. NT-16-109

NexTrans Engineering is pleased to present the enclosed Transportation Impact Study for the above noted site in support of the Zoning By-law Amendment and Draft Plan of Subdivision Applications.

The subject lands are located at the municipal address 80 Thomas Street and generally located at the north-west corner of Joymar Drive and Thomas Street in the City of Mississauga. The development proposal is to provide condominium townhouse development consisting of 219 units and providing a total of 359 vehicle parking spaces, of which 57 are visitor parking spaces. The proposed development vehicular accesses are provided via two main entrances and two laneways onto Joymar Drive.

The transportation impact study concludes that the development proposal can adequately be accommodated by the existing transportation network and the recommended Transportation Demand Management measures and incentives. We trust the enclosed sufficiently addresses your needs. Should you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

NEXTRANS ENGINEERING

Richard Pernicky, CET, MITE
Principal

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EXECUTIVE SUMMARY

NexTrans Engineering was retained by Dunpar (the 'Client') to undertake a Transportation Study in support of Zoning By-law Amendment and Draft Plan of Subdivision Applications for a proposed residential development. The subject lands are located at the municipal address 80 Thomas Street and generally located at the north-west corner of Joymar Drive and Thomas Street in the City of Mississauga.

Development Proposal

The development proposal is to provide condominium townhouse development consisting of 219 units and providing a total of 359 vehicle parking spaces, of which 57 are visitor parking spaces.

Development Access

The proposed development vehicular accesses are provided via two main entrances and two laneways onto Joymar Drive. The analyses indicate that the proposed development accesses are expected to operate at acceptable levels of service with negligible delay.

Land Use Comparison

A comparison between the proposed and the existing land use (as-of-right) indicates that the existing land use is expected to generate an additional 15 two-way auto trips during the morning and 3 two-way auto trips during the afternoon peak hours. It is recognized that the trip distribution and assignment are opposite for the two types of land uses, as such the degree of impact on the roadway intersections would be slightly different. It is also important to note that the trip generation for the existing land use (assumed general industrial) is very similar to the proposed development. Although the trip distribution may be slightly different between the general industrial and residential uses, it is anticipated that the traffic impact would be very similar.

Intersection Capacity Analysis

The development proposal is expected to generate 86 two-way auto trips (13 inbound and 73 outbound) during the weekday morning peak hour and 103 two-way trips (69 inbound and 34 outbound) during the afternoon peak hour.

The proposed development is also expected to generate about 10 non-auto trips (2 inbound and 8 outbound) and 11 two-way non-auto trips (8 inbound and 3 outbound) during the morning and afternoon peak hours, respectively.

The intersection capacity analyses indicate that under the existing, future background and future total traffic conditions, the majority of the signalized intersections are expected to operate at acceptable levels of service based on the overall intersection operation perspective. There are some critical movements identified based on this assessment. However, it should be noted that the proposed development only adds a maximum of one to two seconds delay to the overall intersection operation or critical movements.

It is NexTrans opinion that these intersections are already at their ultimate lane configurations and both the Region and the City have done excellent work in optimizing the signal timing plans for these intersections to balance between all modes of transportation. As such, NexTrans does not recommend any additional changes to the lane configurations or signal timing plans as any further changes such as intersection width and reallocation of green time to accommodate automobile mode will impact other modes of transportation. This is consistent with objectives and goals in the City of Mississauga and Region of Peel sustainability and healthy living community.

NexTrans recommends that the City of Mississauga and the proposed development to monitor this intersection in the future when the proposed development is constructed. Additional turn lanes or potential signalization of this intersection could be considered at that time.

Vehicle Parking Review

Based on the City of Mississauga's By-law, a total of 391 parking spaces are required for the proposed development. The proposed parking supply of 359 spaces represents a technical shortfall of 32 spaces. It is NexTrans opinion that a 10 percent reduction (39 spaces) in parking rate based on the existing non-auto modal split is reasonable. As such, a total parking supply of 359 parking spaces provided on site meets the City of Mississauga's Zoning By-law requirement. In addition, this report recommends a number of Transportation Demand Management measures and incentives to support this non-auto modal split and parking rate reduction.

Transportation Demand Management Measures and Incentives

It is recommended that the applicant to implement the TDM measures and incentives identified in this report to support active transportation, public transit and meet the assumed non-auto modal split used in this report.

Loading Requirement

AutoTURN software was used (MSU TAC-1999) to generate vehicular turning templates to confirm and demonstrate the accessibility of the proposed site plan.

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1.0 INTRODUCTION

NexTrans Engineering was retained by Dunpar (the 'Client') to undertake a Transportation Study in support of Zoning By-law Amendment and Draft Plan of Subdivision Applications for a proposed residential development.

The subject lands are located at the municipal address 80 Thomas Street and generally located at the north-west corner of Joymar Drive and Thomas Street in the City of Mississauga.

The location of the proposed development is illustrated in Figure 1-1.

The development proposal is to provide condominium townhouse development consisting of 219 units and providing a total of 359 vehicle parking spaces, of which 57 are visitor parking spaces. The proposed site plan is illustrated in Figure 1-2.

The proposed development vehicular accesses are provided via two main entrances and two laneways onto Joymar Drive.

2.0 EXISTING TRAFFIC CONDITIONS

2.1. Existing Road Network

The existing road network, lane configuration and existing traffic control for the study area are shown in Figure 2-1. The details area described below:

- Thomas Street: is a minor east-west arterial road under the jurisdiction of the City of Mississauga. It has four general purpose lanes and it maintains a posted speed limit of 50 km/h in the vicinity of the subject site.
- Queen Street South: is a major north-south arterial road under the jurisdiction of the City of Mississauga. It has two general purpose lanes and it maintains posted speed limit of 40 km/h in the vicinity of the subject site.
- Britannia Road W: is a major east-west arterial road under the jurisdiction of the Region of Peele. It has four general purpose lanes and it maintains posted speed limit of 50 km/h in the vicinity of the subject site.
- Erin Mills Pkwy: is a major north-south arterial road under the jurisdiction of the Region of Peele. It has six general purpose lanes and it maintains posted speed limit of 70 km/h in the vicinity of the subject site.
- Joymar Drive: is a minor collector road under the jurisdiction of the City of Mississauga. It has two general purpose lanes and it maintains posted speed limit of 40 km/h in the vicinity of the subject site.
- Tannery Street: is an east-west local road under the jurisdiction of the City of Mississauga. It has two general purpose lanes and it maintains an unposted speed limit of 40 km/h in the vicinity of the subject site.

2.2. Existing Transit Network

The proposed development is well served by the existing transit network in the area.

The proposed development is located adjacent to the westbound and southbound bus stops and approximately 250 metres (or 3.5-minute walk) from the eastbound bus stop for Mississauga Transit (MiWay) Bus Routes 9, 41, 49, 67 and 306.

The proposed development is also located less than 900 m (about 13-minute walk) from the existing Streetsville GO Train/GO Bus station.

Route 9 Rathburn-Millers Grove operates about 20-minute frequency during the weekday peak periods between Meadowvale Town Centre Bus Terminal and City Centre Transit Terminal drop off.

Route 41 Thomas operates between 9 to 26-minute frequency during the weekday peak periods (6:00 AM to 8:15 AM and 5:00 PM to 7:00 PM) provides service between Streetsville GO Station and Erin Centre Blvd at Longford Drive.

Route 49 McDowell operates between 11 to 60-minute frequency during the weekday peak periods (6:30 AM to 8:30 AM and 4:00 PM to 7:00 PM) provides service between McDowell Drive at Churchill Meadows Blvd and Erin Mills Town Centre Bus Terminal.

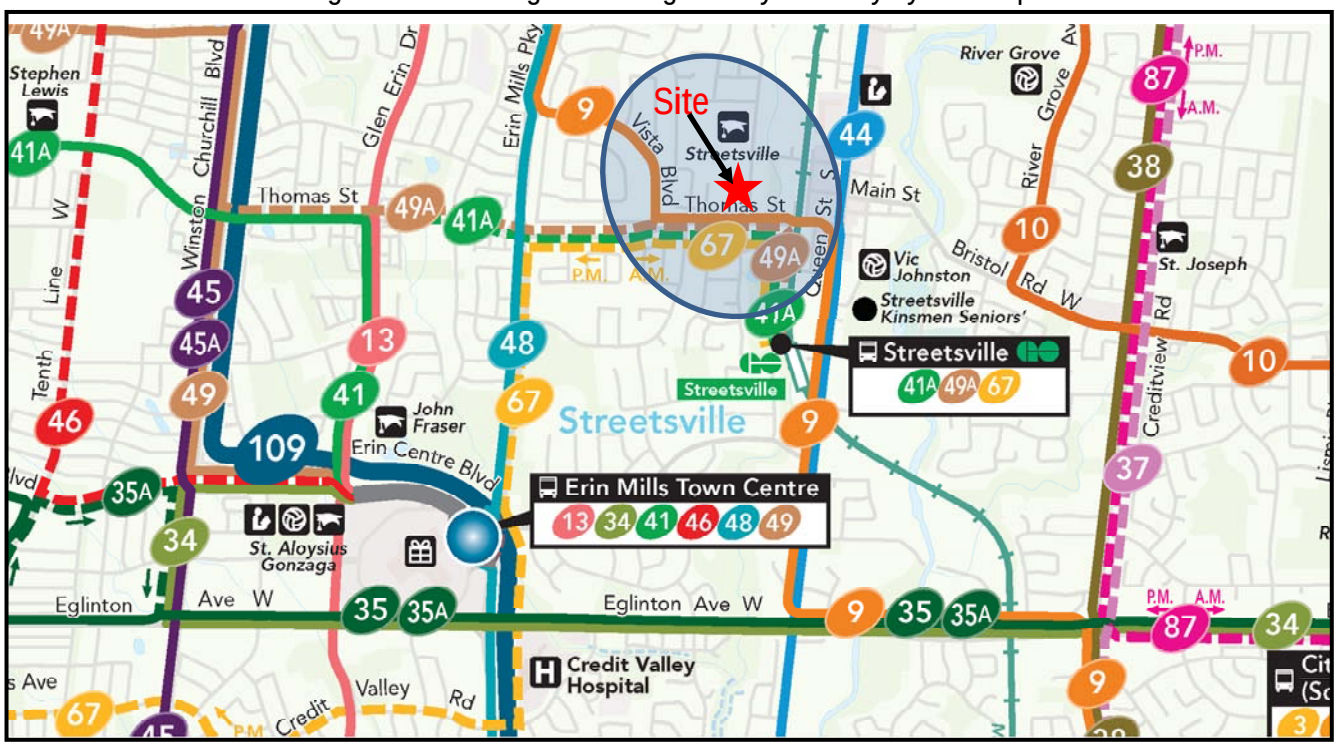
Route 67 Streetsville Secondary-Terry Fox operates one stop per direction during the morning and afternoon weekday peak periods between Joymar Drive at Tannery Street and Winterton Way at Mavis Road.

The Streetsville GO Station is serviced by the Milton Line GO Train between Union Station and Milton. There are ten train services at this station during the morning peak period (6:18, 6:42, 7:03, 7:20, 7:33, 7:45, 7:56, 8:06, 8:18 and 8:45). There are also ten train services at this station during the afternoon peak period (4:19, 4:49, 5:19, 5:34, 5:49, 6:04, 6:19, 6:34, 7:04 and 7:49). Bicycle racks are available at this location.

There are also four GO Buses service this station during the morning peak periods (5:15, 5:35 and 9:25). There are five GO Bus services during the afternoon peak periods (8:30, 8:45, 9:00 and 9:15).

Figure 2-2 illustrates the existing Mississauga MiWay system map.

Figure 2-2 – Existing Mississauga MiWay Weekday System Map

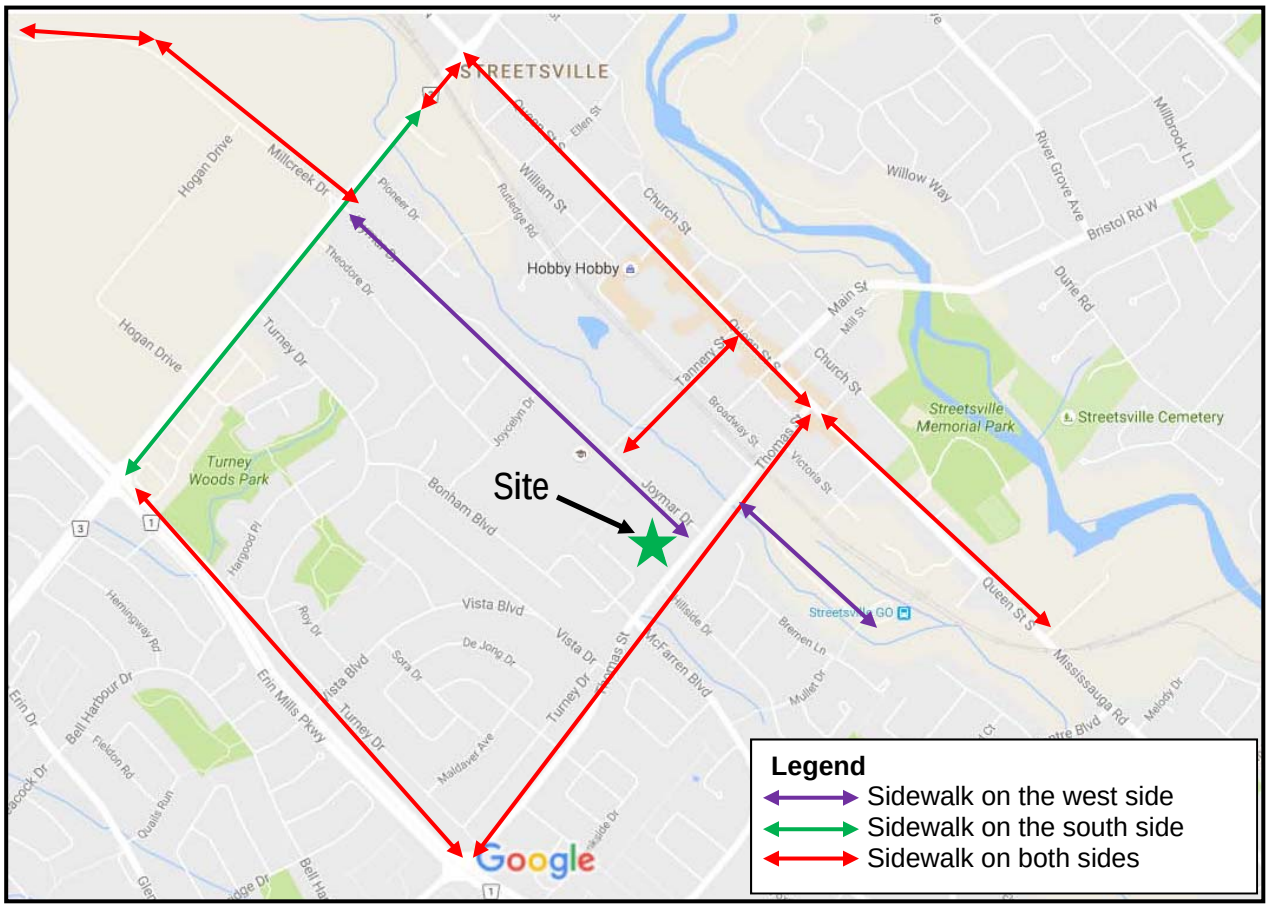


Source: Mississauga Transit Website

2.3. Existing Active Transportation Network

A cursory review of the existing active transportation network was conducted in the study area. The general existing active transportation network is illustrated in Figure 2-3 below.

Figure 2-3 – Existing Active Transportation Network in the Study Area



The area is generally well-served by the existing sidewalk network, including the direct sidewalk access to the Streetsville GO Train/Bus Station. However, there is no dedicated bicycle network in the area. Cyclists are generally have to share the road with automobile traffic. This is an area of improvement that the Region of Peel and the City of Mississauga should fast track the cycling route improvements identified in the City's Cycling Master Plan.

2.4. Existing Transportation Planning and Policies

Mississauga Living Green Master Plan

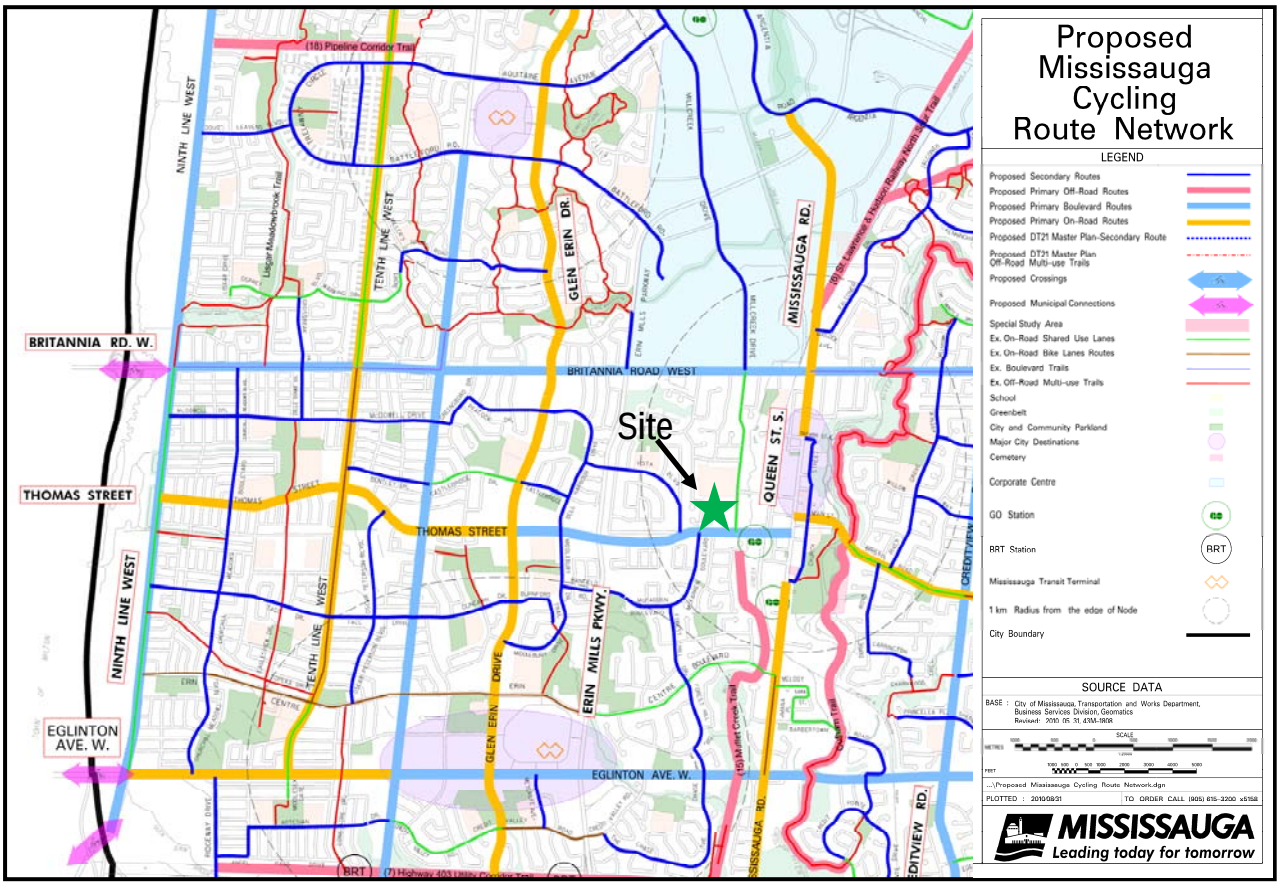
The Living Green Master Plan (LGMP) was adopted by the City of Mississauga Council on January 18, 2012 and was developed through extensive consultation with stakeholders and City staff. This document is the City of Mississauga's first environmental master plan it gives a clear signal that the green environment is a priority in the City. The LGMP is a roadmap towards achieving the City's environmental goals which include building a great public transit system and active transportation routes that promote a healthy place where people choose to live, work and play.

Mississauga Cycling Master Plan

Mississauga's Cycling Master Plan focuses on cycling as a way of life in the city, building an integrated network of cycling routes throughout the City. The objective of the Plan is to make Mississauga a city where people choose to cycle for their daily transportation needs. The plan aims to connect destinations and place 95 per cent of the City's population within one kilometre of a primary cycling route.

The proposed Mississauga Cycling Route Network in the vicinity of the study area is illustrated in Figure 2-4 below.

Figure 2-4 – Mississauga Proposed Cycling Route Network in the Study Area



Source: City of Mississauga website

In the future when these cycling routes are implemented, the residents at the subject development will enjoy a complete and interconnected cycling network that can be efficiently used for their transportation needs.

2.5. Existing Traffic Volumes

Existing traffic volumes at the study area intersections were undertaken by Spectrum on Tuesday September 21, 2016 during the morning (7:00 a.m. to 10:00 a.m.) and afternoon (4:00 p.m. to 7:00 p.m.) peak periods for the Thomas Street/Joymar Drive, Joymar Drive/Tannery Street and Thomas Street/GO Parking Lot Access. The remaining intersections existing traffic counts were obtained from the City of Mississauga and the Region of Peel.

Turning movement count summaries are provided in Appendix A.

The signal timing plans for the signalized intersections were obtained from the City of Mississauga and the Region of Peel and incorporated into the analysis. It should be noted that signal timing plans for the Thomas Street/GO Parking Access intersection has not been received in time for the preparation of this report. For the purpose of this assessment, similar signal timing plan for the Thomas Street/McFarren Blvd/Gafney Drive intersection was utilized and optimized to ensure that all modes of transportation can be accommodated efficiently. This also includes the no right turn on red restriction for the northbound right turn at this intersection. If necessary, additional analysis can be conducted for further review.

2.6. Existing Traffic Assessment

The existing volumes are illustrated in Figure 2-5, and were analyzed using Synchro 9 software. The methodology of the software follows the procedures described and outlined in the Highway Capacity Manual, HCM 2000, published by the

Transportation Research Board. The detailed results are provided in Appendix B and summarized in Tables 2.1 and 2.2.

Table 2.1 – Existing Levels of Service for Signalized Intersections

Signalized Intersections	Key Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS (v/c)	Delay (s)	LOS (v/c)	Delay (s)
Queen Street S at Thomas St	Overall	C (0.94)	27	B (0.77)	19
	EB L	D (0.94)	68	E (0.73)	56
	EB R	A (0.39)	7	A (0.39)	9
	NB L	B (0.17)	10	B (0.56)	18
	NB T	B (0.36)	11	A (0.34)	8
	SB TR	B (0.49)	12	B (0.77)	17
Erin Mills Pkwy at Thomas St	Overall	D (1.10)	41	D (1.19)	41
	EB L	D (0.76)	43	D (0.57)	40
	EB T	E (0.81)	56	C (0.22)	31
	EB R	C (0.51)	30	A (0.20)	5
	WB L	F (1.10)	119	E (0.84)	73
	WB T	D (0.42)	46	E (0.88)	60
	WB R	A (0.20)	9	B (0.21)	16
	NB L	C (0.48)	29	F (1.19)	154
	NB T	C (0.63)	34	C (0.55)	22
	NB R	A (0.18)	5	A (0.20)	3
	SB L	D (0.69)	36	D (0.54)	53
	SB T	D (0.77)	36	D (0.83)	40
	SB R	A (0.11)	6	A (0.32)	7
Britannia Rd W at Joymar Dr	Overall	E (1.09)	67	D (1.15)	45
	EB L	C (0.09)	21	D (0.28)	39
	EB TR	F (1.09)	85	C (0.49)	27
	WB L	B (0.20)	16	B (0.22)	15
	WB T	B (0.29)	17	D (0.98)	47
	WB R	A (0.13)	3	A (0.23)	6
	NB L	C (0.12)	29	C (0.04)	28
	NB TR	D (0.55)	44	C (0.15)	24
	SB L	F (1.07)	137	F (1.15)	159
	SB R	B (0.20)	11	A (0.26)	10
Thomas St at GO Parking Access	Overall	B (0.95)	18	C (0.91)	30
	EB LTR	A (0.66)	7	C (0.49)	24
	WB LTR	A (0.98)	8	C (0.60)	30
	NB L	F (0.95)	83	D (0.91)	40
	NB R	D (0.42)	40	B (0.27)	14
	SB LTR	C (0.03)	24	A (0.02)	0
Thomas St at McFarren Blvd/Gafney Dr	Overall	C (0.89)	22	B (0.52)	10
	EB L	B (0.09)	11	A (0.06)	8
	EB T	B (0.69)	17	A (0.17)	7
	EB R	A (0.04)	0	A (0.03)	1
	WB L	C (0.51)	23	A (014)	3
	WB TR	B (0.31)	11	A (0.44)	9
	NB L	D (0.22)	37	D (0.18)	44
	NB TR	D (0.66)	37	C (0.43)	16
	SB LTR	E (0.89)	79	D (0.52)	41
Queen St S at Tannery St	Overall	B (0.67)	15	B (0.86)	17
	EB L	D (0.67)	51	F (0.86)	87
	EB R	B (0.31)	13	B (0.31)	16
	WB LTR	B (0.18)	20	C (0.22)	34
	NB LTR	B (0.57)	10	B (0.70)	11
	SB LTR	A (0.37)	7	A (0.66)	9

Table 2.2 – Existing Levels of Service for Unsignalized Intersections

Unsignalized Intersections	Key Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS (v/c)	Delay (s)	LOS (v/c)	Delay (s)
Thomas St at Joymar Dr	EB LTR	A (0.22)	5	A (0.15)	5
	WB LTR	A (0.13)	0	A (0.46)	0
	SB L	E (0.21)	40	F (0.25)	58
	SB R	B (0.17)	11	C (0.27)	13
Joymar Dr at Tannery St	EB LTR	B (0.26)	12	A (0.02)	8
	WB LTR	B (0.34)	12	A (0.28)	9
	NB LTR	C (0.64)	18	A (0.19)	9
	SB LTR	B (0.52)	15	A (0.22)	9

The intersection capacity analyses indicate that under the existing conditions, the majority of the signalized intersections are operating at acceptable levels of service from the overall intersection operation perspective. However, there are some critical movements identified based on this assessment. It is NexTrans opinion that these intersections are already at their ultimate lane configurations and both the Region and the City have done excellent work in optimizing the signal timing plans for these intersections to balance between all modes of transportation. As such, NexTrans does not recommend any additional changes to the lane configurations or signal timing plans as any further changes such as intersection width and reallocation of green time to accommodate automobile mode will impact other modes of transportation. This is consistent with objectives and goals in the City of Mississauga and Region of Peel sustainability and healthy living community.

The analysis also indicated that under the existing conditions, the unsignalized intersections are also operating at acceptable levels of service. It is noticed that the southbound left turn from Joymar Drive to Thomas Street eastbound is operating with higher delay because of the heavy traffic volumes on Thomas Street during the morning and afternoon peak hours. However, it is NexTrans opinion that the identified operational issues for the southbound left turn is typical for unsignalized intersection in an urban setting similar to this situation. Drivers will have to wait for gaps created by the upstream and downstream, which is reasonable for any unsignalized intersections in the Greater Toronto Area. As such, NexTrans does not recommend any additional improvements for this intersection since signalization or additional modifications will impact the flow on Thomas Street.

3.0 FUTURE BACKGROUND CONDITIONS

A five year horizon (2021) is selected to assess the impact of the proposed development on the existing and anticipated future road network in the area.

3.1. Background Growth and Development Application

It is NexTrans understanding that there are no current active development applications in the immediate vicinity of the subject site. However, the following growth rates were provided by the Region of Peel and the City of Mississauga to estimate the future through traffic growth in the study area:

- Joymar Drive and Britannia Road West: 0.5% per annum
- Thomas Street and Erin Mills Parkway: 1.5% per annum
- Queen Street: 0.5% per annum for NB and 0.5% per annum for SB during the morning peak and 1.0% per annum for NB and 0.5% per annum for SB during the afternoon peak
- Thomas Street: 0.5% per annum for EB and 1.0% per annum for WB during the morning peak and 1.5% per annum for EB and 1.0% per annum for WB during the afternoon peak

The estimated 2021 future background traffic volumes are illustrated in Figure 3-1.

3.2. Future Background Traffic Assessment

The estimated 2021 future background traffic volumes are illustrated in Figure 3-1, and were analyzed using Synchro 9

software. The detailed calculations are provided in Appendix C and summarized in Tables 3-1 and 3.2.

Table 3.1 – 2021 Future Background Levels of Service for Signalized Intersections

Signalized Intersections	Key Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS (v/c)	Delay (s)	LOS (v/c)	Delay (s)
Queen Street S at Thomas St	Overall	C (0.96)	28	C (0.78)	20
	EB L	D (0.96)	70	E (0.75)	57
	EB R	A (0.39)	7	A (0.40)	9
	NB L	B (0.18)	10	C (0.59)	21
	NB T	B (0.37)	12	A (0.36)	8
	SB TR	B (0.50)	12	B (0.78)	18
Erin Mills Pkwy at Thomas St	Overall	D (1.12)	43	D (1.22)	43
	EB L	D (0.77)	44	D (0.58)	40
	EB T	E (0.81)	56	C (0.23)	31
	EB R	C (0.50)	30	A (0.20)	5
	WB L	F (1.12)	124	E (0.84)	73
	WB T	D (0.44)	46	E (0.91)	64
	WB R	A (0.19)	9	B (0.21)	16
	NB L	C (0.48)	29	F (1.22)	165
	NB T	C (0.69)	36	C (0.59)	23
	NB R	A (0.18)	5	A (0.20)	3
	SB L	D (0.74)	48	E (0.67)	72
	SB T	D (0.84)	39	D (0.89)	43
	SB R	A (0.11)	6	A (0.32)	7
Britannia Rd W at Joymar Dr	Overall	E (1.11)	73	D (1.15)	49
	EB L	C (0.09)	21	D (0.28)	39
	EB TR	F (1.11)	95	C (0.50)	27
	WB L	B (0.20)	16	B (0.23)	15
	WB T	B (0.29)	17	D (1.01)	53
	WB R	A (0.13)	3	A (0.23)	6
	NB L	C (0.12)	29	C (0.04)	28
	NB TR	D (0.55)	44	C (0.15)	24
	SB L	F (1.07)	137	F (1.15)	159
	SB R	B (0.20)	11	A (0.26)	10
Thomas St at GO Parking Access	Overall	B (0.95)	18	C (0.91)	30
	EB LTR	A (0.67)	7	C (0.52)	25
	WB LTR	A (1.01)	8	C (0.64)	31
	NB L	F (0.95)	83	D (0.91)	40
	NB R	D (0.42)	40	B (0.27)	14
	SB LTR	C (0.03)	24	A (0.02)	0
Thomas St at McFarren Blvd/Gafney Dr	Overall	C (0.89)	22	B (0.52)	11
	EB L	B (0.09)	11	A (0.07)	8
	EB T	B (0.71)	18	A (0.19)	7
	EB R	A (0.04)	0	A (0.03)	1
	WB L	C (0.54)	26	A (015)	3
	WB TR	B (0.32)	12	A (0.46)	9
	NB L	D (0.22)	37	D (0.18)	44
	NB TR	D (0.67)	38	C (0.43)	16
	SB LTR	E (0.89)	79	D (0.52)	41
Queen St S at Tannery St	Overall	B (0.67)	15	B (0.86)	18
	EB L	D (0.67)	51	F (0.86)	87
	EB R	B (0.31)	13	B (0.31)	16
	WB LTR	B (0.18)	20	C (0.22)	34
	NB LTR	B (0.58)	11	B (0.73)	12
	SB LTR	A (0.37)	7	A (0.68)	10

Table 3.2 – 2021 Future Background Levels of Service for Unsignalized Intersections

Unsignalized Intersections	Key Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS (v/c)	Delay (s)	LOS (v/c)	Delay (s)
Thomas St at Joymar Dr	EB LTR WB LTR SB L SB R	A (0.22) A (0.14) E (0.22) B (0.17)	5 0 42 11	A (0.15) A (0.23) F (0.28) C (0.28)	6 0 68 13
Joymar Dr at Tannery St	EB LTR WB LTR NB LTR SB LTR	B (0.26) B (0.34) C (0.64) B (0.52)	12 12 18 15	A (0.02) A (0.28) A (0.19) A (0.22)	8 9 9 9

The intersection capacity analyses indicate that the signalized and unsignalized intersections are expected to operate at similar levels of service under the future background conditions as compared to the existing conditions. Some critical movements deteriorate slightly due to the future traffic growth. For these reasons, it is critical for the Region of Peel and the City of Mississauga to implement traffic demand management strategies that include aggressive Transportation Demand Management (TDM) measures and incentives to discourage single-occupant vehicle trips. This strategy also include the new development to identify and implement TDM programs and measures.

4.0 SITE TRAFFIC

4.1. Proposed Development

The development proposal is to provide condominium townhouse development consisting of 219 units and providing a total of 359 vehicle parking spaces, of which 57 are visitor parking spaces.

The 2011 Transportation Tomorrow Survey (TTS) and the *Trip Generation Manual, 9th Edition* published by the Institute of Transportation Engineers (ITE) information was reviewed to estimate the modal split, trip distribution and trip generation for the proposed development.

4.2. Non-auto Modal Split

Table 4.1 summarizes the non-auto modal split information based on the review of the 2011 Transportation Tomorrow Survey data for Ward 11 in the City of Mississauga.

Table 4.1 – Non-Auto Modal Split based on 2011 TTS Data

Ward		Trips Made by Residents of the City of Mississauga	Trips to the City of Mississauga	Combined Average
Ward 11	6-9 AM	15%	8%	11.5%
	24 Hours	11%	8%	9.5%
Average		13%	8%	10.5%

Based on the information outlined in Table 4.1, the *average* non-auto modal split is approximately 10% for both the inbound and outbound. For the purpose of this assessment, the average 10% modal split has been assumed. This assumption is reasonable given that the proposed development is less than 250 m (about 3.5-minute walk) from the existing transit stops at the Thomas Street/Joymar Drive, and less than 900 m (less than 13-minute walk) from the existing Streetsville GO Train/Bus station.

4.3. Trip Generation

The trip generation forecasts were undertaken using the information contained in the *Trip Generation Manual, 9th Edition* published by the Institute of Transportation Engineers (ITE). Based on our review, the selected corresponding land use code (LUC) is: "Residential Condominium/Townhouse" (LUC 230) for the proposed development.

The summary of the vehicular trip generation is summarized in Table 4.2.

Table 4.2 – Site Traffic Trip Generation

ITE Land Use	Magnitude	Parameter	Morning Peak			Afternoon Peak		
			In	Out	Total	In	Out	Total
Residential Condominium/ Townhouse (LUC 230)	219 units	Total Trips	15	81	96	77	37	114
		Rate (trips/unit)	0.07	0.37	0.44	0.35	0.17	0.52
		Transit Reduction (10%)	2	8	10	8	3	11
TOTAL		Total New Trips	*13*	*73*	*86*	*69*	*34*	*103*

The development proposal is expected to generate 86 two-way auto trips (13 inbound and 73 outbound) during the weekday morning peak hour and 103 two-way trips (69 inbound and 34 outbound) during the afternoon peak hour.

The proposed development is also expected to generate about 10 non-auto trips (2 inbound and 8 outbound) and 11 two-way non-auto trips (8 inbound and 3 outbound) during the morning and afternoon peak hours, respectively.

For comparison purpose, the existing land use trip generation was also reviewed. It is our understanding that the existing building is vacant but could be potentially used for general light industrial purposes. For the purpose of this assessment, ITE Land Use Code (LUC 110) "General Light Industrial" is used. Table 4.3 below summarizes the existing (as-of-right) land use.

Table 4.3 – Land Use Trip Generation Comparison

ITE Land Use	Magnitude	Parameter	Morning Peak			Afternoon Peak		
			In	Out	Total	In	Out	Total
General Light Industrial (LUC 110)	109,318 ft² (10,156 m²)	Total Trips	89	12	101	13	93	106
		Rate (trips/1000 ft²)	0.81	0.11	0.92	0.12	0.85	0.97
Townhouse (LUC 230)	219 units	Total New Trips	13	73	86	69	34	103
Difference			*76*	*-61*	*15*	*-56*	*59*	*3*

Based on Table 4.3 above, the existing land use is expected to generate an additional 15 two-way more auto trips during the morning and 3 two-way auto trips during the afternoon peak hours. It is recognized that the trip distribution and assignment are opposite for the two types of land uses, as such the degree of impact on the roadway intersections would be slightly different.

4.4. Trip Distribution and Assignment

The 2011 Transportation Tomorrow Survey (TTS) data was reviewed for the City of Mississauga in order to estimate the general trip distribution for the proposed residential development. Table 4.4 summarizes the general trip distribution to and from the proposed development.

Table 4.4 – General Trip Distribution Based on 2011 TTS

Direction	From the City of Mississauga	To the City of Mississauga
Mississauga	68%	57%
Toronto	16%	12%
Brampton	6%	12%
Caledon	0%	1%
Oakville	3%	4%
Burlington	1%	2%
Milton	1%	2%
Halton Hills	0%	1%
Markham	1%	1%
Vaughan	2%	2%
Richmond Hill	0%	1%
Hamilton	0%	1%
Others	2%	4%
Total	100%	100%

Table 4.5 summarizes the trip assignment for the proposed development based on the 2011 TTS information outlined in Table 4.4 and the assessment of the existing road network. Since Britannia Road W and Eglinton Avenue W are continuous east-west major arterial roads that provide direct connections to Highway 407 and Highway 401 (via north-south arterial roads), it is anticipated that Britannia Road W will be utilized significantly for the eastbound and westbound direction by the proposed development. Similarly, it is anticipated that Erin Mills Parkway and Joymar Drive/Millcreek Drive will be utilized mostly for the northbound direction and Queen Street/Mississauga Road will be utilized for the southbound direction.

Table 4.5 – Trip Assignment Based on 2011 TTS and Existing Road Network/Traffic Pattern

Direction	Street Name	From Proposed Development	To Proposed Development
East	Britannia Road via Joymar Drive	20%	20%
West	Thomas Street via Joymar Drive	16%	16%
	Britannia Road via Joymar Drive	11%	11%
North	Joymar Drive/Millcreek Drive	21%	21%
	Queen Street via Tannery Street	8%	8%
South	Queen Street/Mississauga Road via Thomas Street	24%	24%
Total		100%	100%

Figure 4-2 illustrates the site generated traffic volumes.

5.0 FUTURE TOTAL TRAFFIC CONDITIONS

5.1. Future Total Traffic Assessment

The estimated 2021 future total traffic volumes (future background traffic volumes plus site generated traffic volumes) are illustrated in Figure 5-1, and were analyzed using Synchro 9 software. The detailed calculations are provided in Appendix D and summarized in Tables 5.1 and 5.2.

Table 5.1 – 2021 Future Total Levels of Service for Signalized Intersections

Signalized Intersections	Key Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS (v/c)	Delay (s)	LOS (v/c)	Delay (s)
Queen Street S at Thomas St	Overall	C (0.96)	27	C (0.78)	20
	EB L	E (0.96)	70	E (0.75)	57
	EB R	A (0.40)	6	A (0.40)	9
	NB L	B (0.18)	10	C (0.62)	23
	NB T	B (0.37)	12	A (0.36)	8
	SB TR	B (0.50)	12	B (0.78)	18
Erin Mills Pkwy at Thomas St	Overall	D (1.12)	43	D (1.23)	43
	EB L	D (0.77)	44	D (0.58)	40
	EB T	E (0.82)	56	C (0.23)	31
	EB R	C (0.50)	30	A (0.20)	5
	WB L	F (1.12)	125	E (0.85)	74
	WB T	D (0.44)	46	E (0.92)	64
	WB R	A (0.19)	9	B (0.21)	16
	NB L	C (0.48)	29	F (1.23)	166
	NB T	C (0.69)	36	C (0.59)	23
	NB R	A (0.18)	5	A (0.21)	3
	SB L	D (0.74)	48	E (0.67)	72
	SB T	D (0.84)	39	D (0.89)	43
	SB R	A (0.11)	6	A (0.32)	7
Britannia Rd W at Joymar Dr	Overall	E (1.12)	73	D (1.15)	49
	EB L	C (0.09)	21	D (0.28)	39
	EB TR	F (1.12)	96	C (0.51)	27
	WB L	B (0.23)	16	B (0.30)	16
	WB T	B (0.29)	17	D (1.01)	53
	WB R	A (0.13)	3	A (0.23)	6
	NB L	C (0.13)	29	C (0.05)	28
	NB TR	D (0.72)	54	C (0.21)	23
	SB L	F (1.07)	137	F (1.15)	159
	SB R	B (0.20)	11	A (0.26)	10
Thomas St at GO Parking Access	Overall	B (0.95)	18	C (0.91)	30
	EB LTR	A (0.67)	7	C (0.52)	25
	WB LTR	A (1.01)	8	C (0.65)	31
	NB L	F (0.95)	83	D (0.91)	40
	NB R	D (0.42)	40	B (0.27)	14
	SB LTR	C (0.03)	24	A (0.02)	0
Thomas St at McFarren Blvd/Gafney Dr	Overall	C (0.89)	22	B (0.52)	11
	EB L	B (0.09)	11	A (0.07)	8
	EB T	B (0.71)	18	A (0.19)	7
	EB R	A (0.04)	0	A (0.03)	1
	WB L	C (0.54)	26	A (015)	3
	WB TR	B (0.33)	12	A (0.47)	9
	NB L	D (0.22)	37	D (0.18)	44
	NB TR	D (0.67)	38	C (0.43)	16
	SB LTR	E (0.89)	79	D (0.52)	41
Queen St S at Tannery St	Overall	B (0.68)	15	B (0.88)	18
	EB L	D (0.68)	52	F (0.88)	89
	EB R	B (0.30)	13	B (0.31)	16
	WB LTR	B (0.17)	20	C (0.22)	34
	NB LTR	B (0.58)	11	B (0.73)	13
	SB LTR	A (0.38)	7	A (0.68)	10

Table 5.2 – 2021 Future Total Levels of Service for Unsignalized Intersections

Unsignalized Intersections	Key Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS (v/c)	Delay (s)	LOS (v/c)	Delay (s)
Thomas St at Joymar Dr	EB LTR	A (0.22)	5	A (0.17)	6
	WB LTR	A (0.14)	0	A (0.23)	0
	SB L	E (0.28)	45	F (0.36)	79
	SB R	B (0.19)	11	C (0.29)	13
Joymar Dr at Tannery St	EB LTR	B (0.28)	12	A (0.02)	8
	WB LTR	B (0.36)	12	A (0.30)	10
	NB LTR	C (0.77)	18	A (0.23)	9
	SB LTR	B (0.55)	15	A (0.29)	10
Joymar Dr at Driveway #1	EB LR	B (0.02)	11	B (0.00)	10
	NB TL	B (0.00)	0	B (0.00)	0
	SB TR	B (0.00)	0	B (0.13)	0
Joymar Dr at Entrance #1	EB LR	B (0.05)	11	B (0.02)	11
	NB TL	A (0.00)	0	A (0.01)	0
	SB TR	A (0.00)	0	A (0.15)	0
Joymar Dr at Entrance #2	EB LR	B (0.02)	12	B (0.02)	11
	NB TL	A (0.00)	0	A (0.00)	0
	SB TR	A (0.00)	0	A (0.16)	0
Joymar Dr at Driveway #2	EB LR	B (0.02)	12	B (0.01)	11
	NB TL	A (0.00)	0	A (0.00)	0
	SB TR	A (0.00)	0	A (0.00)	0

The intersection capacity analyses indicate that the signalized and unsignalized intersections are expected to operate at similar levels of service under the future total conditions as compared to the future background and existing conditions. Some critical movements deteriorate slightly due to the future traffic growth and the proposed development. However, It should be noted that the proposed development only adds a maximum of one to two seconds delay to the overall intersection operations or the critical movements.

It is noticed that the southbound left turn from Joymar Drive to Thomas Street eastbound is operating with higher delay because of the heavy traffic volumes on Thomas Street during the morning and afternoon peak hours. However, this is very similar to the future background and existing conditions. It is NexTrans opinion that the identified operational issues for the southbound left turn is typical for unsignalized intersection in an urban setting similar to this situation. Drivers will have to wait for gaps created by the upstream and downstream, which is reasonable for any unsignalized intersections in the Great Toronto Area. As such, NexTrans does not recommend and additional improvements for this intersection as part of this proposed development

However, NexTrans recommends that the City of Mississauga and the proposed development to monitor this intersection in the future when the proposed development is constructed. Additional turn lanes or potential signalization of this intersection could be considered at that time.

It is also NexTrans opinion that it is critical for the Region of Peel and the City of Mississauga to implement traffic demand management strategies that include aggressive Transportation Demand Management (TDM) measures and incentives to discourage single-occupant vehicle trips. This strategy also include the requirement for new development to identify and implement TDM programs and measures. Recognize the importance of TDM to reduce the numbers of trips to and from the proposed development, as well as encourage the new residents to take up walking, cycling and transit as alternative modes of transportation, the report identified and recommends a numbers of important TDM measures and incentives that could be implemented as part of this proposed development. The detail information related to TDM is summarized in Section 8.0 of this report.

It is also important to note that the trip generation for the existing land use (assumed general industrial) is very similar to the proposed development. Although the trip distribution may be slightly different between the general industrial and residential uses, it is anticipated that the traffic impact would be very similar.

5.2. Proposed Development Access

Based on the intersection capacity analysis results outlined in Table 5-2, the proposed development accesses are expected to operate at acceptable levels of service with negligible delay.

5.3. Active Transportation Assessment

Sidewalks

As indicated in Section 2.3 and Figure 2-3, the proposed development is well-served by the existing sidewalk network in the area. The proposed development also located less than 500 m (less than 7-minute walk) to restaurants and shopping on Queen Street, and less than 900 m (about 13-minute walk) from the existing Streetsville GO Train/GO Bus station. The proposed development is also accessible by sidewalks connecting to the westbound bus stop on Thomas Street and approximately 250 metres (or 3.5-minute walk) from the eastbound bus stop for Mississauga Transit (MiWay) Bus Routes 9, 41, 49, 67 and 306.

It is our understanding that the proposed development will complete the sidewalk connections along Joymar Drive and to the north side of Thomas Street. It is also our understanding that the proposed development will provide direct sidewalk connections from the proposed development to Joymar Drive and Thomas Street.

Bicycle Lanes

Currently, there are no dedicated bicycle lanes on any street in the vicinity of the proposed development. It is recommended that the City of Mississauga and the Region of Peel consider fast track the implementation of the comprehensive cycling network identified in the Mississauga Cycling Master Plan (as indicated in Section 2.3 and Figure 2-4) to encourage residents taking up walking and cycling.

In the future when these cycling routes are implemented, the residents at the subject development will enjoy a complete and interconnected cycling network that can be efficiently used for their transportation needs.

In the interim, bicycle routes and “Share” the road signs can be considered for this area.

5.4. Public Transit Assessment

The proposed development is expected to generate about 10 non-auto trips (2 inbound and 8 outbound) and 11 two-way non-auto trips (8 inbound and 3 outbound) during the morning and afternoon peak hours, respectively. It is anticipated that the majority of these trips are transit related during the peak periods.

As indicated in Section 2.2 of the report, the proposed development is located adjacent to the westbound bus stop and approximately 250 metres (or 3.5-minute walk) from the eastbound bus stop for Mississauga Transit (MiWay) Bus Routes 9, 41, 49, 67 and 306.

The proposed development also located less than 900 m (about 13-minute walk) from the existing Streetsville GO Train/GO Bus station.

It is concluded that the area is well-served by the existing transit network and no improvements are required to accommodate the non-auto trips generated by the proposed development. However, the proposed development is encouraged to provide TDM incentives such as pre-loaded PRESTO Cards to the residents so that they can take up transit as an alternative mode of transportation rather than driving alone to and from the proposed development.

6.0 SITE PLAN REVIEW

AutoTURN software was used (MSU TAC-1999) to generate vehicular turning templates to confirm and demonstrate the accessibility of the proposed site plan. These templates are illustrated in Figure 6-1.

7.0 PARKING ASSESSMENT

7.1. Vehicle Parking

The City of Mississauga current Zoning By-law vehicle parking requirement and supply for the proposed development is summarized in Table 7.1.

Table 7.1 – City of Mississauga's Zoning By-law Vehicle Parking Requirements

Land Use	Type	No. of Unit/GFA	Parking Rates	Parking Requirement	Parking Supply
Condominium Townhouse	Visitor	219 units	0.25 space/unit	55	57
	Resident	83 units	2.0 spaces/unit	166	166
		136 units	1.25 spaces/unit	170	136
	Total			391	359

Based on the City of Mississauga's By-law, a total of 391 parking spaces are required for the proposed development. The proposed parking supply of 359 spaces represents a technical shortfall of 32 spaces.

As indicated in Section 4.2, the existing non-auto modal split for this area is approximately 10%. If this 10 percent non-auto modal split is applied to the parking rates, it represents a reduction of approximately 39 parking spaces and the proposed development is expected to provide a total of 352 parking spaces It is NexTrans opinion that a total parking supply of 359 parking spaces on site meets the City of Mississauga's Zoning By-law requirement.

In addition, this report recommends a number of Transportation Demand Management measures and incentives to support this non-auto modal split and parking rate reduction.

8.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) is a co-ordinated series of actions aimed at maximizing the people moving capability of the transportation system. Intended to reduce single-occupant auto use, potential TDM measures include: TDM supportive land use, bicycle and pedestrian programs and facilities, public transit improvements, preferential treatments for buses and ridesharing, where appropriate.

The following TDM incentives are recommended for the proposed residential development:

- Provide direct shared pedestrian/bicycle connections from the proposed development to Joymar Drive and Thomas Street.
- Provide information package for new residents. The information package includes GO Train schedules, Mississauga MiWay bus route schedules, community and cycling maps, where appropriate. The Information Package can be distributed at the sale office.
- Provide pre-load PRESTO Cards with the starting value of $100 (inclusive of the registration fee) to the residents on demand basis. This will help the future residents to consider taking GO Train and Mississauga MiWay Transit as an alternative mode of transportation. The pre-loaded PRESTO Cards can be distributed in conjunction with the Information Package at the time of purchase or at occupancy.

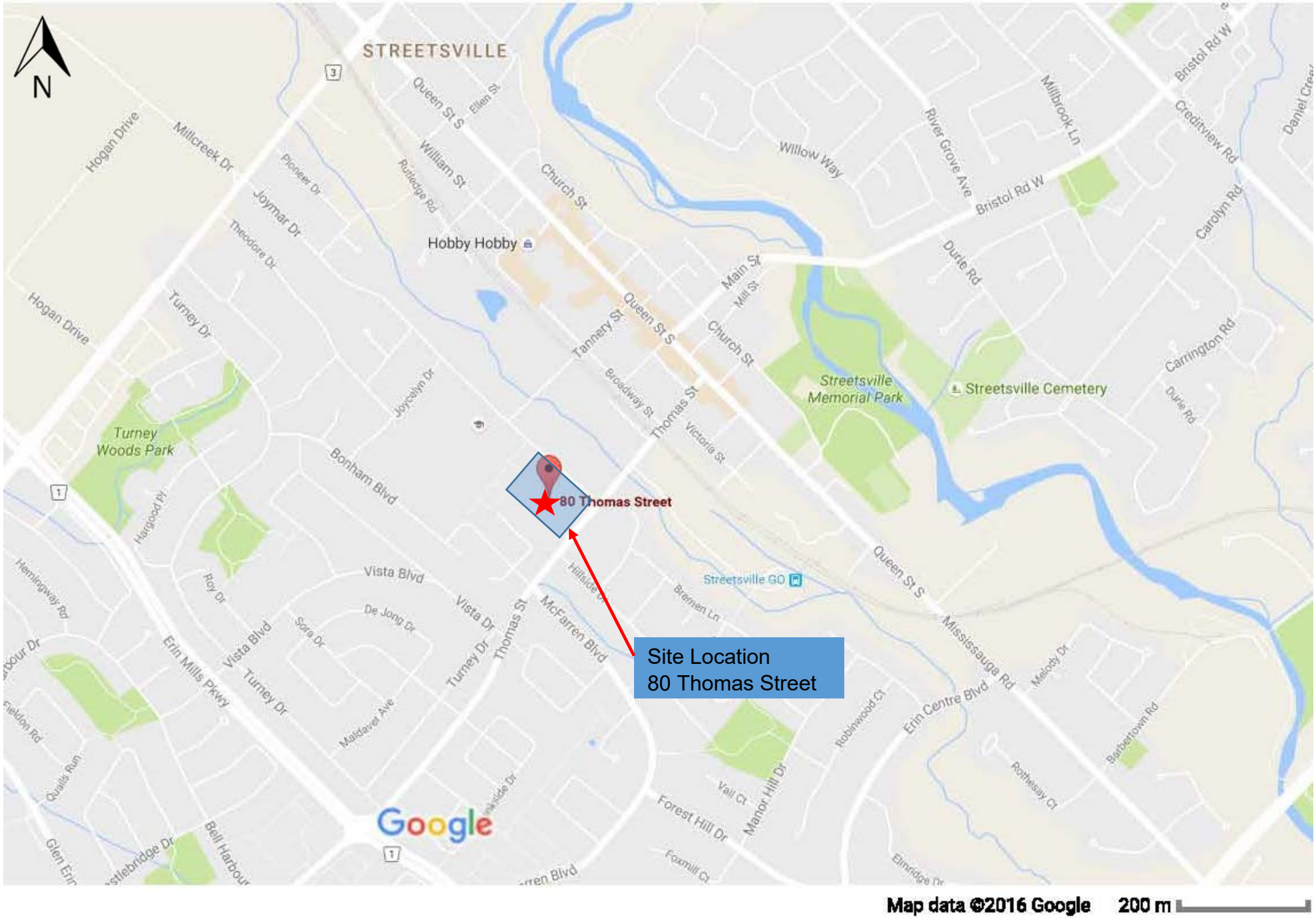
9.0 CONCLUSIONS / FINDINGS

The findings and conclusions of our analysis are as follows:

- The development proposal consists of 219 townhouse residential units.
- The proposed development provides a total of 359 vehicle parking spaces, of which 57 are visitor parking spaces.
- The development proposal is expected to generate 86 two-way auto trips (13 inbound and 73 outbound) during the weekday morning peak hour and 103 two-way trips (69 inbound and 34 outbound) during the afternoon peak hour.
- The proposed development is also expected to generate about 10 two-way non-auto trips (2 inbound and 8 outbound) and 11 two-way non-auto trips (8 inbound and 3 outbound) during the morning and afternoon peak hours, respectively.
- A comparison between the proposed land use and the existing as-of-right land use indicates that the existing land use is expected to generate an additional 15 two-way auto trips during the morning and 3 two-way auto trips during the afternoon peak hours. It is recognized that the trip distribution and assignment are opposite for the two types of land uses, as such the degree of impact on the roadway intersections would be slightly different. It is also important to note that the trip generation for the existing land use (assumed general industrial) is very similar to the proposed development. Although the trip distribution may be slightly different between the general industrial and residential uses, it is anticipated that the traffic impact would be very similar.
- The proposed development vehicular accesses are provided via two main entrances and two laneways onto Joymar Drive. The analyses indicate that the proposed development accesses are expected to operate at acceptable levels of service with negligible delay.
- Based on the City of Mississauga's By-law, a total of 391 parking spaces are required for the proposed development. The proposed parking supply of 359 spaces represents a technical shortfall of 32 spaces. It is NexTrans opinion that a 10 percent reduction (39 spaces) in parking rate based on the existing non-auto modal split is reasonable. As such, a total parking supply of 359 parking spaces provided on site meets the City of Mississauga's Zoning By-law requirement. In addition, this report recommends a number of Transportation Demand Management measures and incentives to support this non-auto modal split and parking rate reduction.
- The intersection capacity analyses indicate that under the existing, future background and future total traffic conditions, the majority of the signalized intersections are expected to operate at acceptable levels of service based on the overall intersection operation perspective. There are some critical movements identified based on this assessment. However, it should be noted that the proposed development only adds a maximum of one to two seconds delay to the overall intersection operation or critical movements.
- It is NexTrans opinion that these intersections are already at their ultimate lane configurations and both the Region and the City have done excellent work in optimizing the signal timing plans for these intersections to balance between all modes of transportation. As such, NexTrans does not recommend any additional changes to the lane configurations or signal timing plans as any further changes such as intersection width and reallocation of green time to accommodate automobile mode will impact other modes of transportation. This is consistent with objectives and goals in the City of Mississauga and Region of Peel sustainability and healthy living community.

- NexTrans recommends that the City of Mississauga and the proposed development to monitor this intersection in the future when the proposed development is constructed. Additional turn lanes or potential signalization of this intersection could be considered at that time.

- It is recommended that the proposed development provide and implement the proposed Transportation Demand Management measures and incentives suggested in this report.



Legend ★ **Site Location**

Figure 1-1 Site Location

SCALE 1: 400

10 0 10 20 30 40 60 80metres

David B. Searles Surveying Ltd.
ONTARIO LAND SURVEYORS

METRIC

DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

BEARING NOTE

BEARINGS SHOWN HEREON ARE GRID AND ARE REFERRED TO THE NORTHERLY LIMIT OF THOMAS STREET AS SHOWN ON PLAN 43R-28302, HAVING A BEARING OF N39°41'00"E.

nexTrans ENGINEERING

Figure 1-2 Proposed Site Plan

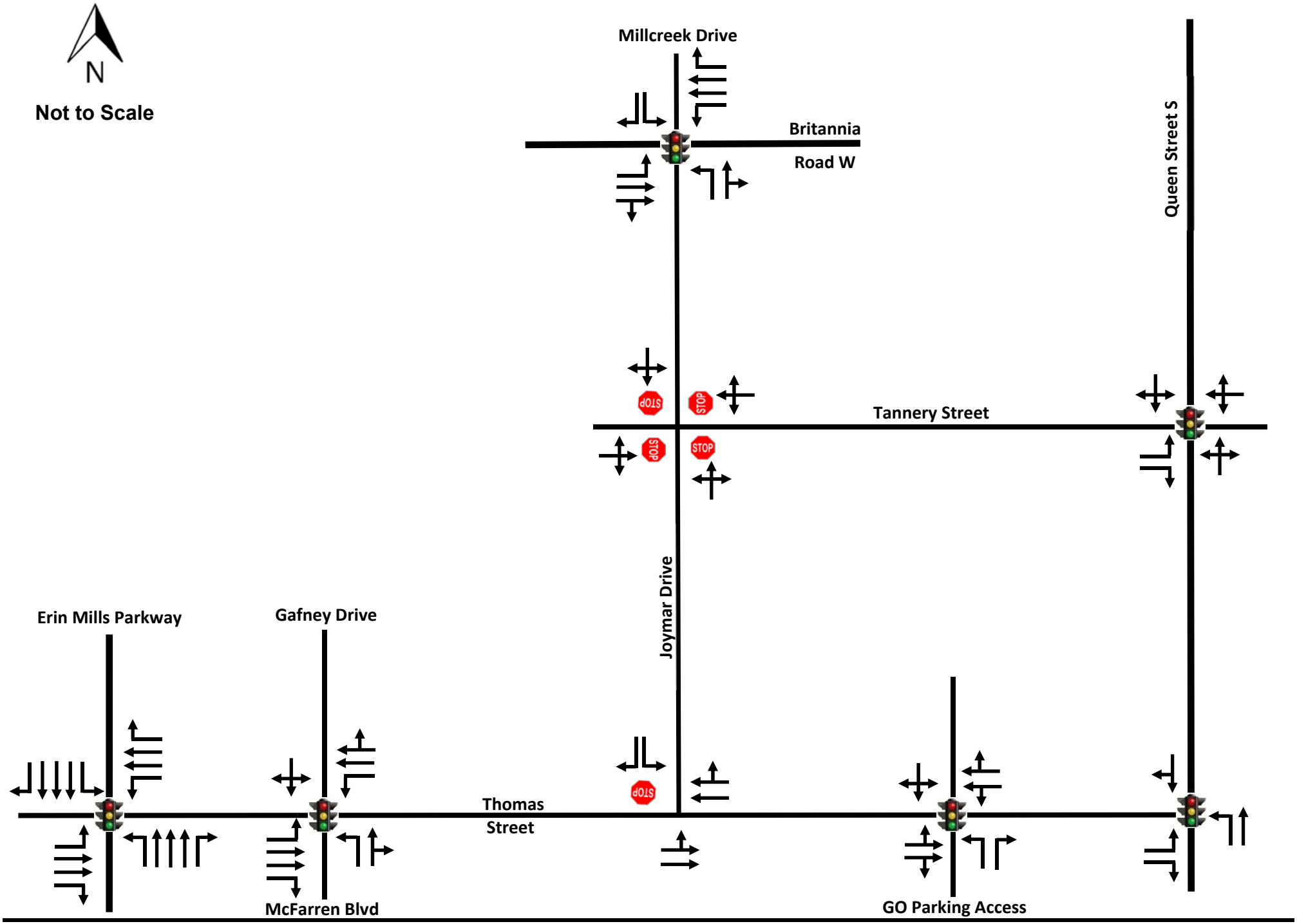
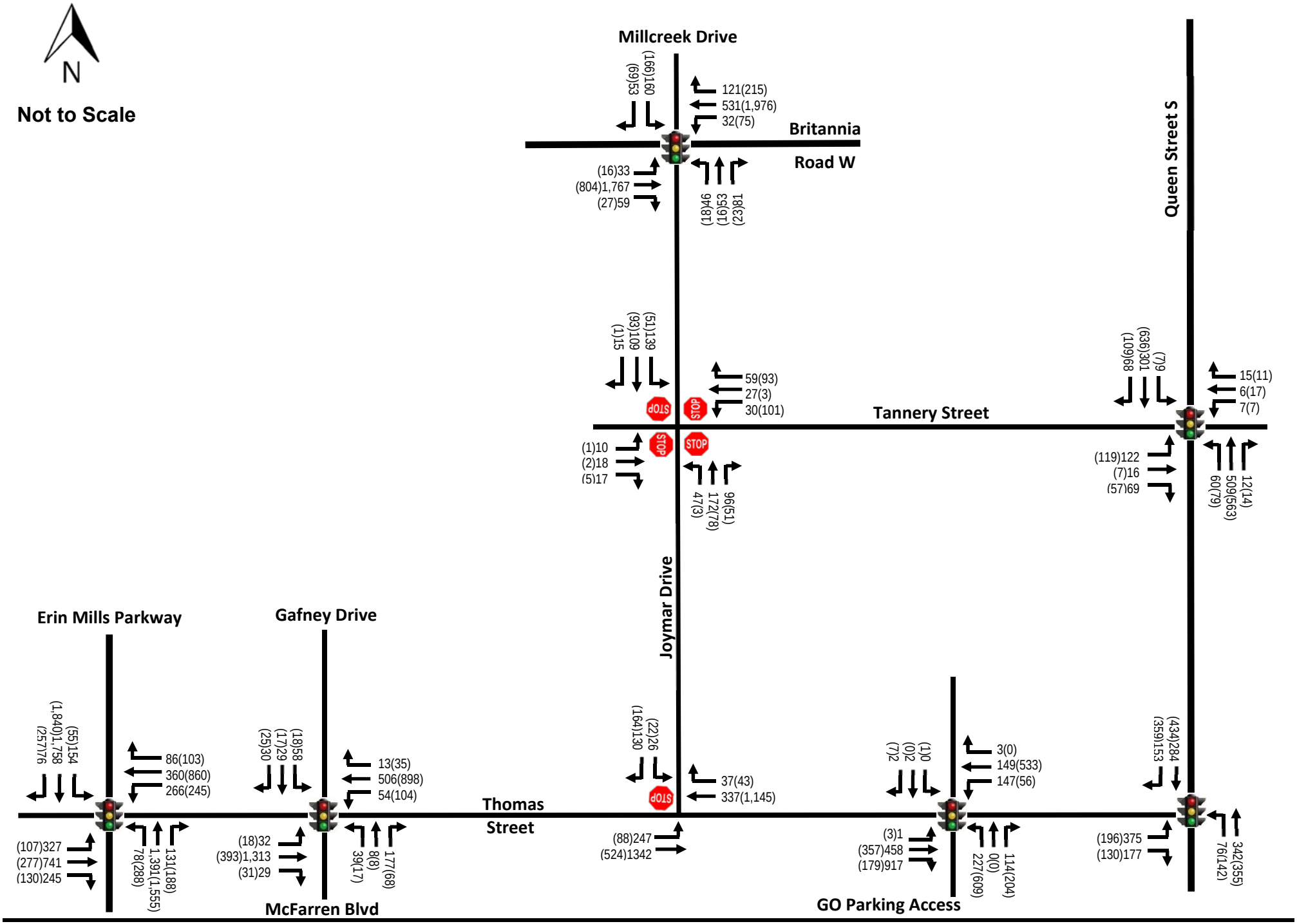


Figure 2-1 Existing Lane Configurations



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Legend

XX AM Peak Hour (XX) PM Peak Hour

STOP Existing Stop Sign

Existing Signalized Intersection

Figure 2-5 Existing Traffic Volumes

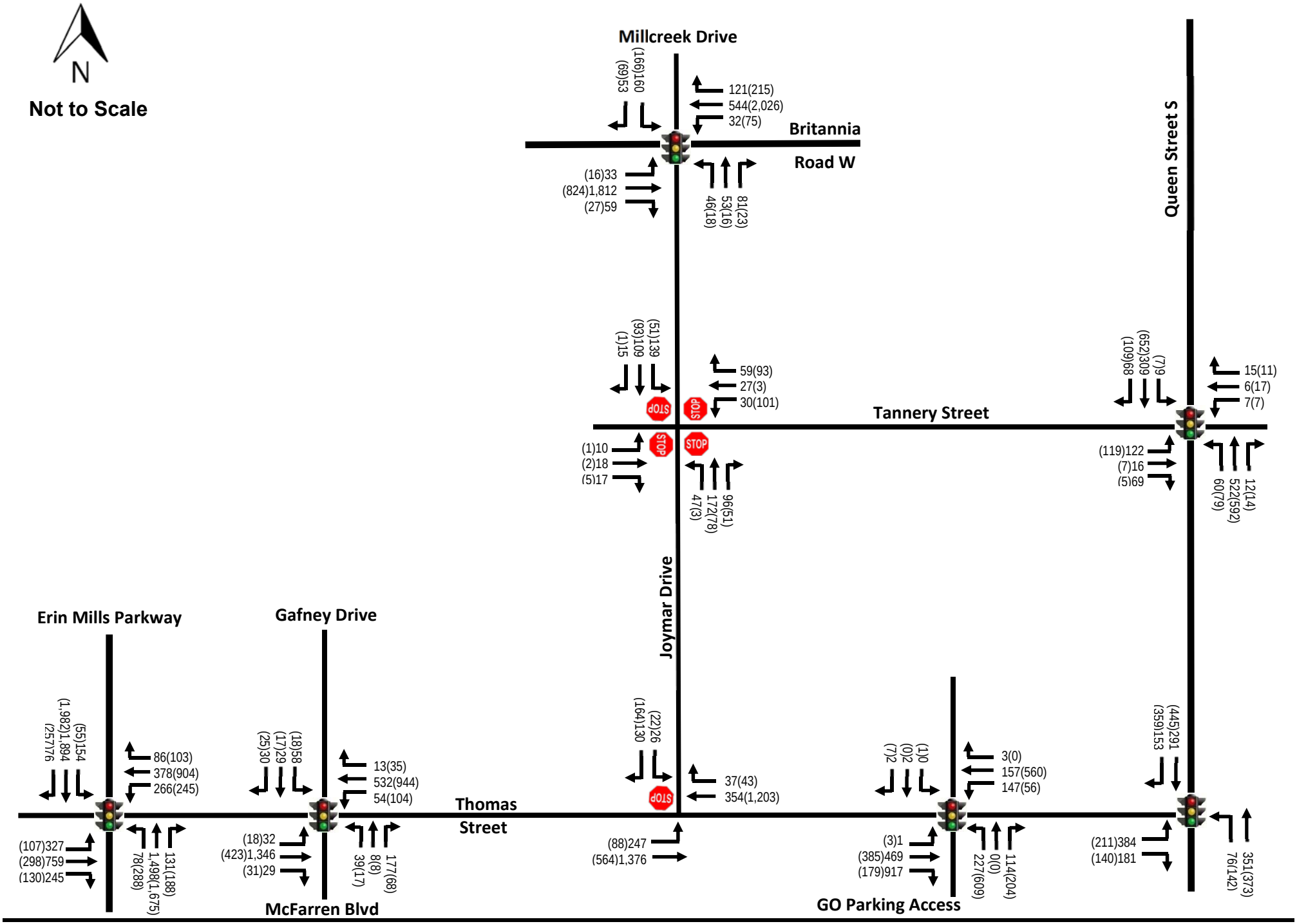
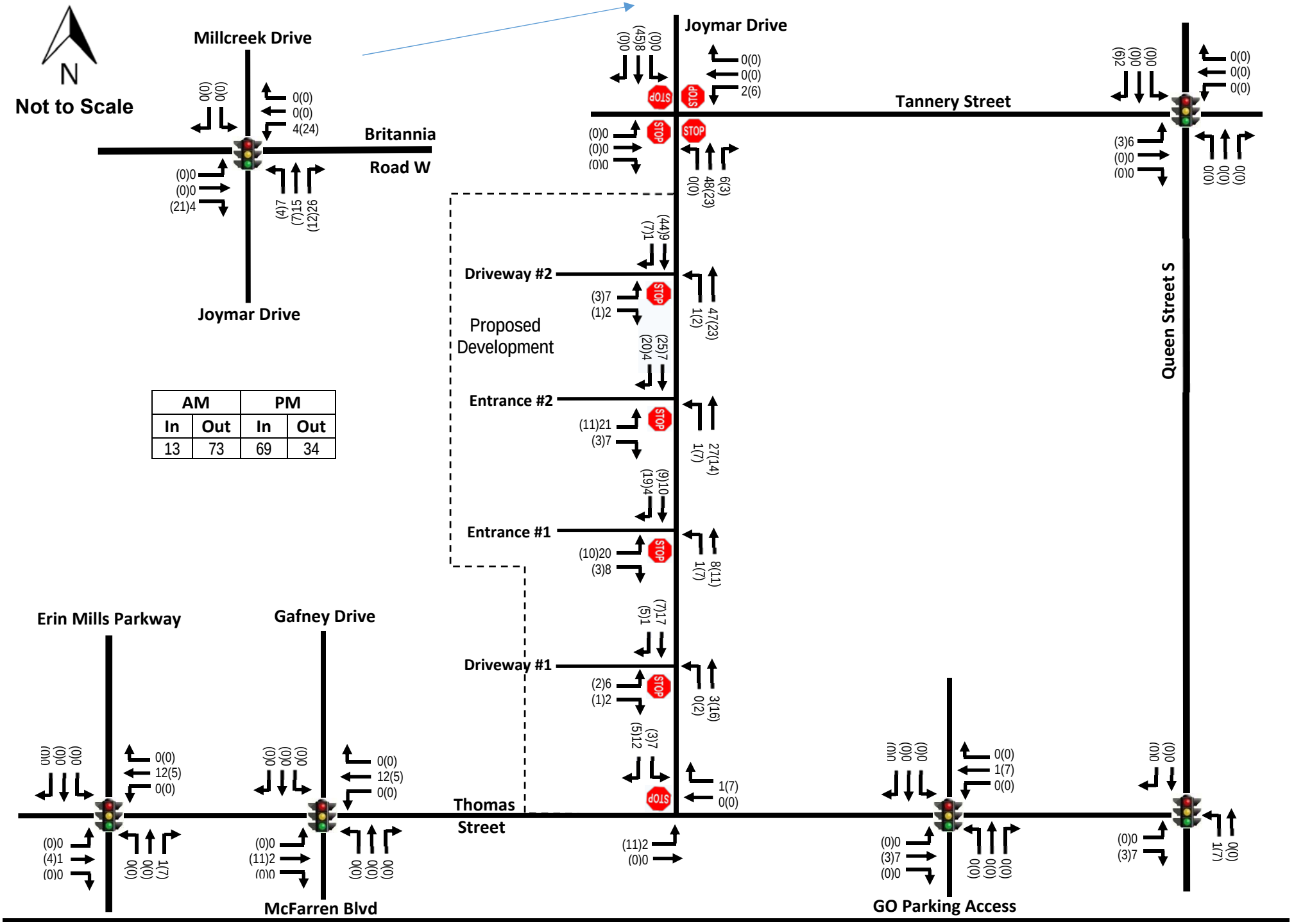


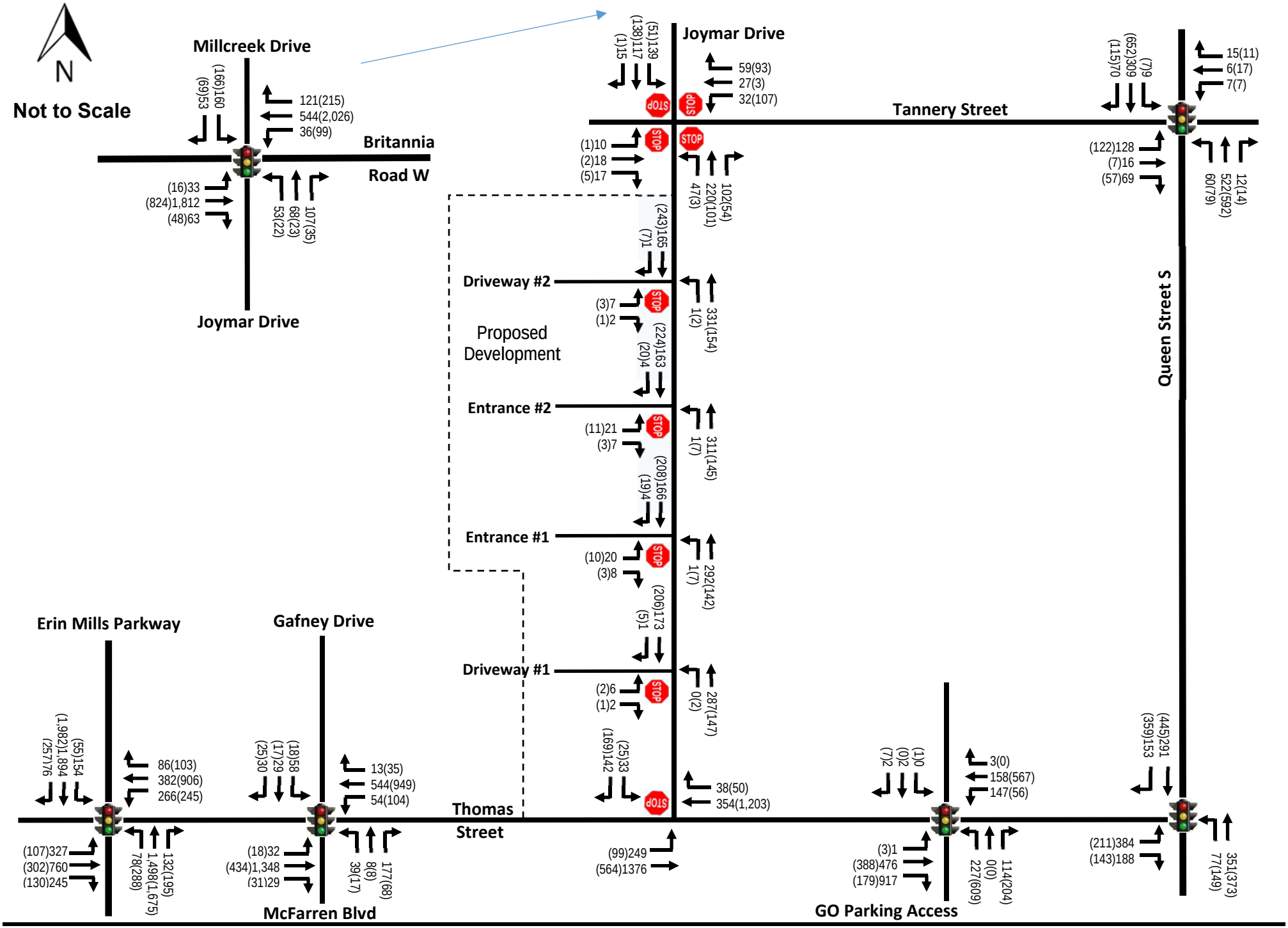
Figure 3-1 2021 Future Background Traffic Volumes



AM		PM	
In	Out	In	Out
13	73	69	34

Legend
XX AM Peak Hour (XX) PM Peak Hour
STOP Stop Sign
Signalized Intersection

Figure 4-1 Site Traffic Volumes



Legend
XX AM Peak Hour (XX) PM Peak Hour

STOP Stop Sign

Signalized Intersection

Figure 5-1 2021 Future Total Traffic Volumes

SCALE 1: 400

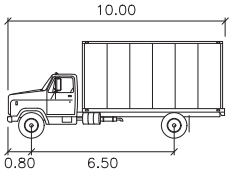
10 0 10 20 30 40 60 80metres

David B. Searles Surveying Ltd.
ONTARIO LAND SURVEYORS

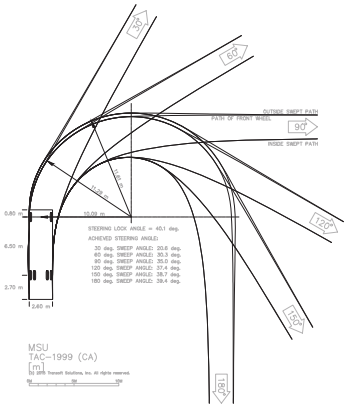
METRIC
DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

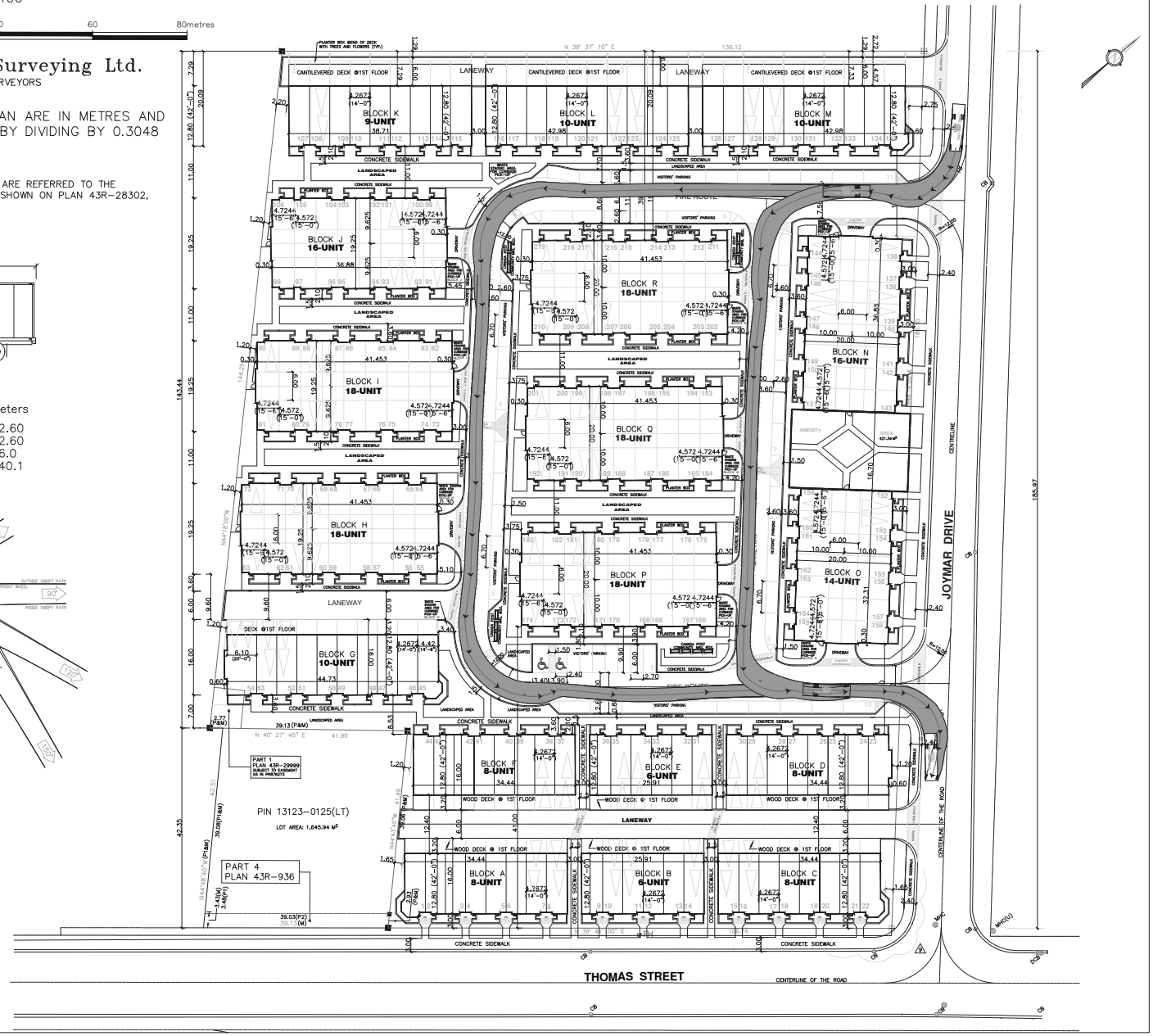
BEARING NOTE

BEARINGS SHOWN HEREON ARE GRID AND ARE REFERRED TO THE NORTHERLY LIMIT OF THOMAS STREET AS SHOWN ON PLAN 43R-28302, HAVING A BEARING OF N39°41'00"E.



MSU	meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 40.1





KEY PLAN

BENCHMARK

REVISONS

NO	REVISION	DATE	BY

STAMP

CIVIL CONSULTANT:

nexTrans ENGINEERING

Suite 204, 15260 Yonge Street, Aurora ON L4G 1N4
Tel: 416-274-7036, Fax: 877-957-2929
Web: www.nextrans.ca

PROJECT NAME:

TOWNHOUSE DEVELOPMENT
80 Thomas Street
CITY OF MISSISSAUGA
REGION OF YORK

DRAWING TITLE:

AutoTURN Analysis
(MST TAC-1999)

DESIGN BY:	A.S.	DATE: October 21, 2016	
CHECKED BY:	R.P.	PROJECT NO.	NT-16-109
DRAWN BY:	A.S.		
SCALE:	NTS	DRAWING NO.	Figure 6-1

Appendix A
Existing Traffic Data and Signal Timing Plans

NexTrans
4261-A14 Highway 7 East
Suite 489
Markham ON, CANADA, L3R 9W6

Turning Movement Count (1 . THOMAS ST & GO PARKING LOT ACCESS)

Start Time	N Approach ACCESS					E Approach THOMAS ST					S Approach GO PARKING LOT ACCESS					W Approach THOMAS ST					Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	Peds W:	Approach Total		
07:00:00	0	0	0	5	0	0	20	36	2	56	12	0	46	1	58	146	57	0	1	203	317	
07:15:00	0	0	0	0	0	0	15	40	1	55	34	0	62	3	96	243	72	0	2	315	466	
07:30:00	0	0	0	4	0	0	43	42	6	85	24	0	55	4	79	230	111	0	3	341	505	
07:45:00	2	1	0	6	3	3	39	39	5	81	37	0	61	6	98	222	132	0	6	354	536	1824
08:00:00	0	1	0	9	1	0	52	26	6	78	19	0	49	4	68	222	143	1	1	366	513	2020
08:15:00	0	0	0	0	0	0	50	15	1	65	18	0	42	6	60	62	167	1	2	230	355	1909
08:30:00	1	0	0	7	1	0	63	21	2	84	19	0	34	10	53	83	168	1	1	252	390	1794
08:45:00	0	0	0	2	0	1	53	2	0	56	3	0	7	2	10	9	155	0	1	164	230	1488
09:00:00	1	0	1	3	2	0	51	3	0	54	4	0	5	6	9	9	103	1	0	113	178	1153
09:15:00	0	0	0	2	0	1	41	7	0	49	7	0	15	2	22	13	94	1	0	108	179	977
09:30:00	1	0	0	5	1	0	42	0	1	42	2	0	1	5	3	4	76	0	0	80	126	713
09:45:00	2	0	1	7	3	1	43	4	0	48	2	0	5	2	7	5	80	1	0	86	144	627
BREAK																						
16:00:00	0	0	0	6	0	0	116	6	0	122	1	0	3	7	4	4	84	1	1	89	215	
16:15:00	4	0	2	4	6	3	103	5	0	111	20	0	66	2	86	19	69	2	2	90	293	
16:30:00	1	0	0	2	1	1	109	3	0	113	2	0	6	3	8	11	62	0	1	73	195	
16:45:00	2	0	0	6	2	2	114	7	3	123	32	0	109	6	141	12	83	2	1	97	363	1066
17:00:00	1	0	0	7	1	1	146	11	1	158	2	0	8	3	10	24	73	0	2	97	266	1117
17:15:00	0	0	1	5	1	0	122	10	3	132	57	0	157	5	214	40	79	0	3	119	466	1290
17:30:00	3	0	1	2	4	0	138	8	0	146	50	0	148	6	198	33	103	0	1	136	484	1579
17:45:00	0	0	0	4	0	0	138	14	2	152	48	0	139	5	187	59	72	0	3	131	470	1686
18:00:00	3	0	0	6	3	0	126	16	3	142	50	0	154	8	204	44	83	1	2	128	477	1897
18:15:00	1	0	0	5	1	0	131	18	2	149	56	0	168	5	224	43	99	2	1	144	518	1949
18:30:00	0	0	0	7	0	0	120	10	1	130	24	0	93	5	117	19	93	0	1	112	359	1824
18:45:00	2	0	1	6	3	1	94	12	0	107	4	0	17	5	21	34	111	1	1	146	277	1631
Grand Total	24	2	7	110	33	14	1969	355	39	2338	527	0	1450	111	1977	1590	2369	15	36	3974	**8322**	-
Approach%	72.7%	6.1%	21.2%		-	0.6%	84.2%	15.2%		-	26.7%	0%	73.3%		-	40%	59.6%	0.4%		-	**-**	-
Totals %	0.3%	0%	0.1%		0.4%	0.2%	23.7%	4.3%		28.1%	6.3%	0%	17.4%		23.8%	19.1%	28.5%	0.2%		47.8%	**-**	-
Heavy	0	0	0		-	0	49	2		-	7	0	51		-	57	60	0		-	**-**	-
Heavy %	0%	0%	0%		-	0%	2.5%	0.6%		-	1.3%	0%	3.5%		-	3.6%	2.5%	0%		-	**-**	-
Bicycles	0	0	0		-	0	4	0		-	0	0	0		-	1	4	0		-	**-**	-
Bicycle %	0%	0%	0%		-	0%	0.2%	0%		-	0%	0%	0%		-	0.1%	0.2%	0%		-	**-**	-

NexTrans
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Suite 489
Markham ON, CANADA, L3R 9W6

Peak Hour: 07:15 AM - 08:15 AM Weather:

Start Time	N Approach ACCESS					E Approach THOMAS ST					S Approach GO PARKING LOT ACCESS					W Approach THOMAS ST					Int. Total (15 min)
	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	
07:15:00	0	0	0	0	0	0	15	40	1	55	34	0	62	3	96	243	72	0	2	315	466
07:30:00	0	0	0	4	0	0	43	42	6	85	24	0	55	4	79	230	111	0	3	341	505
07:45:00	2	1	0	6	3	3	39	39	5	81	37	0	61	6	98	222	132	0	6	354	536
08:00:00	0	1	0	9	1	0	52	26	6	78	19	0	49	4	68	222	143	1	1	366	513
Grand Total	2	2	0	19	4	3	149	147	18	299	114	0	227	17	341	917	458	1	12	1376	**2020**
Approach%	50%	50%	0%		-	1%	49.8%	49.2%		-	33.4%	0%	66.6%		-	66.6%	33.3%	0.1%		-	-
Totals %	0.1%	0.1%	0%		0.2%	0.1%	7.4%	7.3%		14.8%	5.6%	0%	11.2%		16.9%	45.4%	22.7%	0%		68.1%	-
PHF	0.25	0.5	0		0.33	0.25	0.72	0.88		0.88	0.77	0	0.92		0.87	0.94	0.8	0.25		0.94	-
Heavy	0	0	0		0	0	10	0		10	3	0	11		14	18	17	0		35	-
Heavy %	0%	0%	0%		0%	0%	6.7%	0%		3.3%	2.6%	0%	4.8%		4.1%	2%	3.7%	0%		2.5%	-
Lights	2	2	0		4	3	139	147		289	111	0	216		327	899	441	1		1341	-
Lights %	100%	100%	0%		100%	100%	93.3%	100%		96.7%	97.4%	0%	95.2%		95.9%	98%	96.3%	100%		97.5%	-
Single-Unit Trucks	0	0	0		0	0	1	0		1	0	0	0		0	0	4	0		4	-
Single-Unit Trucks %	0%	0%	0%		0%	0%	0.7%	0%		0.3%	0%	0%	0%		0%	0%	0.9%	0%		0.3%	-
Buses	0	0	0		0	0	9	0		9	3	0	11		14	18	13	0		31	-
Buses %	0%	0%	0%		0%	0%	6%	0%		3%	2.6%	0%	4.8%		4.1%	2%	2.8%	0%		2.3%	-
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	-
Articulated Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	16	-	-	-	-	17	-	-	-	-	16	-	-	-	-	11	-	-
Pedestrians%	-	-	-	24.2%		-	-	-	25.8%		-	-	-	24.2%		-	-	-	16.7%		-
Bicycles on Crosswalk	-	-	-	3	-	-	-	-	1	-	-	-	-	1	-	-	-	-	1	-	-
Bicycles on Crosswalk%	-	-	-	4.5%		-	-	-	1.5%		-	-	-	1.5%		-	-	-	1.5%		-
Bicycles on Road	0	0	0	0	-	0	2	0	0	-	0	0	0	0	-	1	1	0	0	-	-
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-	-	-	0%		-

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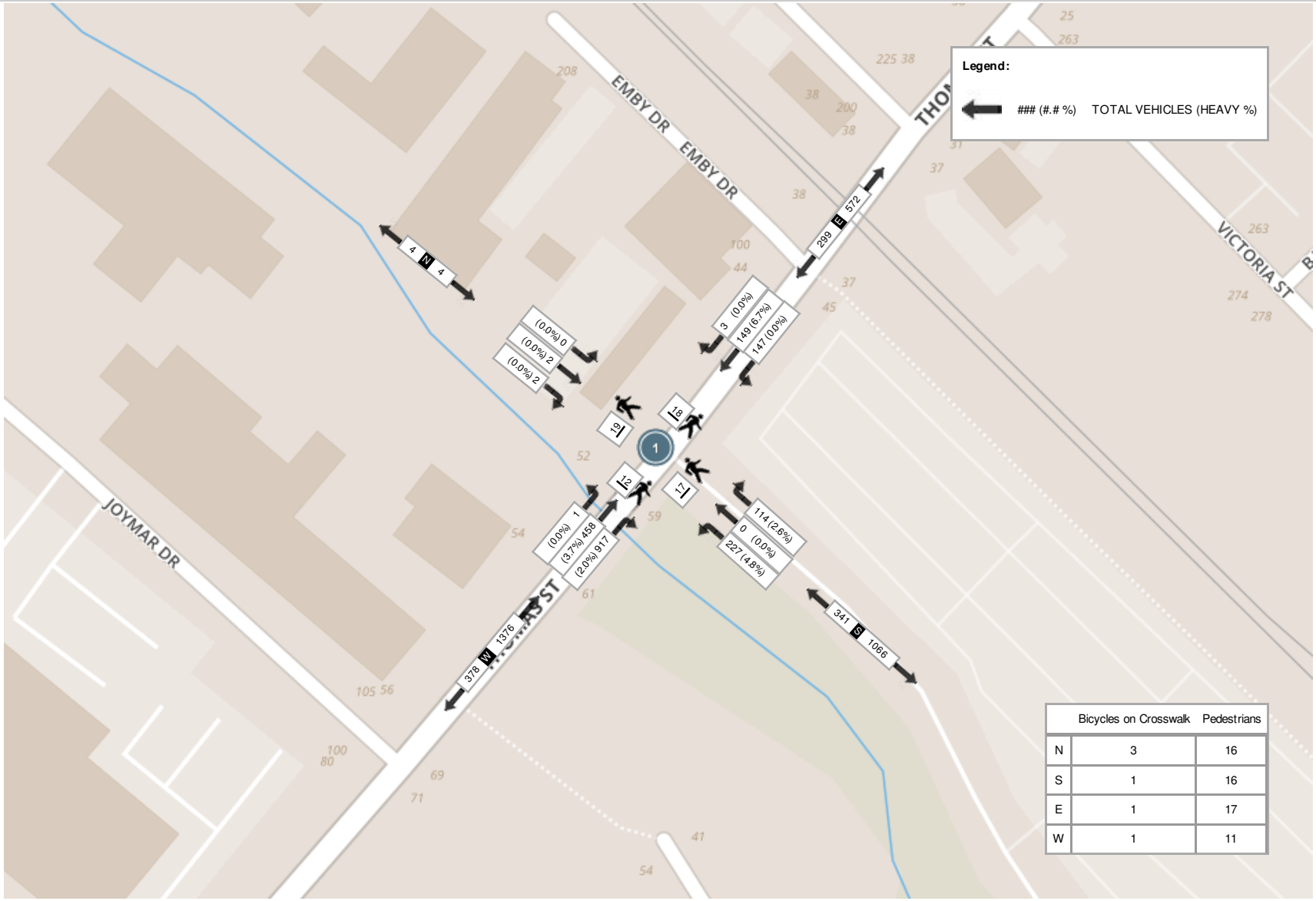
Peak Hour: 05:30 PM - 06:30 PM Weather:

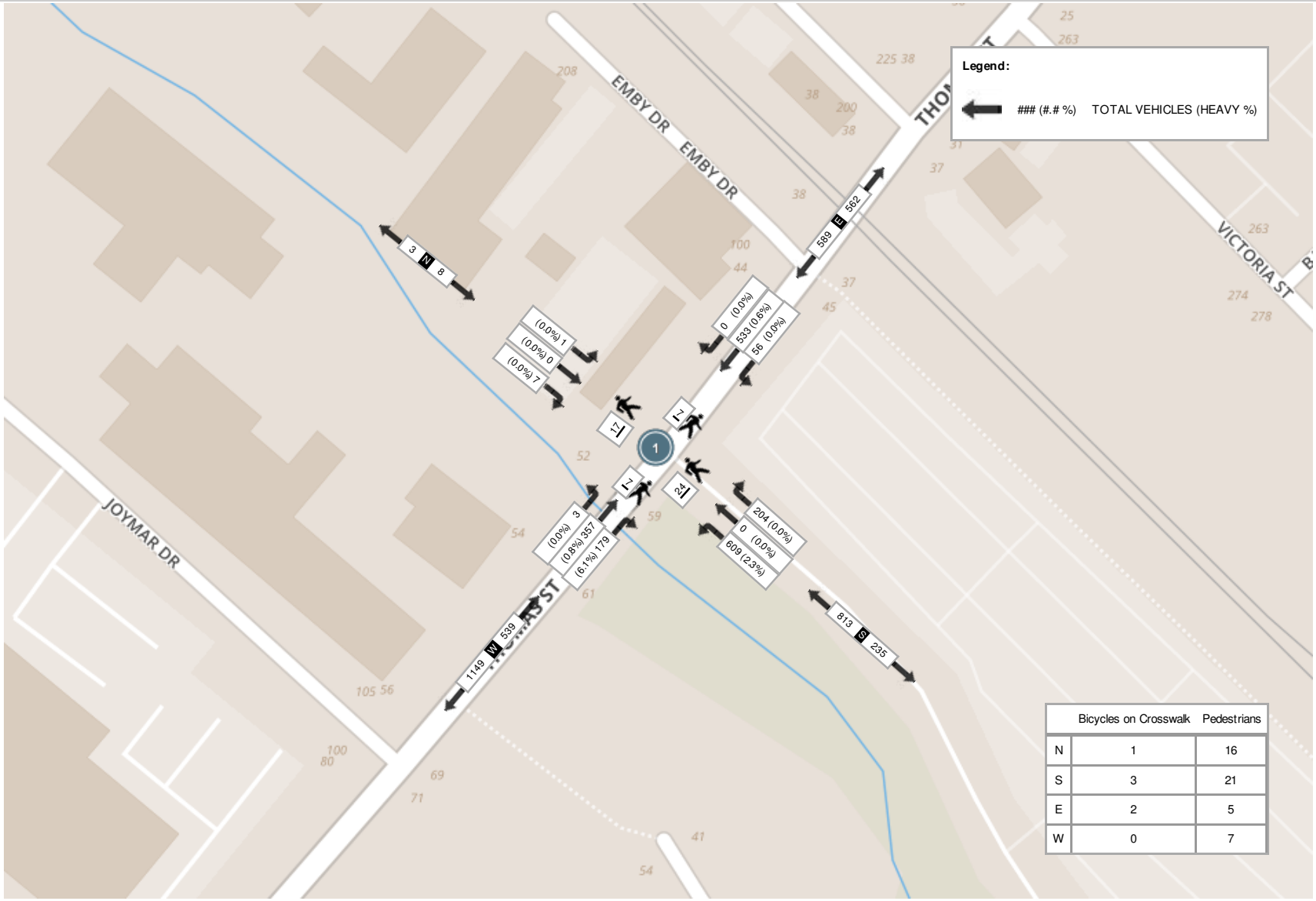
Start Time	N Approach ACCESS					E Approach THOMAS ST					S Approach GO PARKING LOT ACCESS					W Approach THOMAS ST					Int. Total (15 min)
	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	
17:30:00	3	0	1	2	4	0	138	8	0	146	50	0	148	6	198	33	103	0	1	136	484
17:45:00	0	0	0	4	0	0	138	14	2	152	48	0	139	5	187	59	72	0	3	131	470
18:00:00	3	0	0	6	3	0	126	16	3	142	50	0	154	8	204	44	83	1	2	128	477
18:15:00	1	0	0	5	1	0	131	18	2	149	56	0	168	5	224	43	99	2	1	144	518
Grand Total	7	0	1	17	8	0	533	56	7	589	204	0	609	24	813	179	357	3	7	539	**1949**
Approach%	87.5%	0%	12.5%		-	0%	90.5%	9.5%		-	25.1%	0%	74.9%		-	33.2%	66.2%	0.6%		-	-
Totals %	0.4%	0%	0.1%		0.4%	0%	27.3%	2.9%		30.2%	10.5%	0%	31.2%		41.7%	9.2%	18.3%	0.2%		27.7%	-
PHF	0.58	0	0.25		0.5	0	0.97	0.78		0.97	0.91	0	0.91		0.91	0.76	0.87	0.38		0.94	-
Heavy	0	0	0		0	0	3	0		3	0	0	14		14	11	3	0		14	-
Heavy %	0%	0%	0%		0%	0%	0.6%	0%		0.5%	0%	0%	2.3%		1.7%	6.1%	0.8%	0%		2.6%	-
Lights	7	0	1		8	0	530	56		586	204	0	595		799	168	354	3		525	-
Lights %	100%	0%	100%		100%	0%	99.4%	100%		99.5%	100%	0%	97.7%		98.3%	93.9%	99.2%	100%		97.4%	-
Single-Unit Trucks	0	0	0		0	0	1	0		1	0	0	0		0	0	0	0		0	-
Single-Unit Trucks %	0%	0%	0%		0%	0%	0.2%	0%		0.2%	0%	0%	0%		0%	0%	0%	0%		0%	-
Buses	0	0	0		0	0	2	0		2	0	0	14		14	11	3	0		14	-
Buses %	0%	0%	0%		0%	0%	0.4%	0%		0.3%	0%	0%	2.3%		1.7%	6.1%	0.8%	0%		2.6%	-
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	-
Articulated Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	16	-	-	-	-	5	-	-	-	-	21	-	-	-	-	7	-	-
Pedestrians%	-	-	-	29.1%		-	-	-	9.1%		-	-	-	38.2%		-	-	-	12.7%		-
Bicycles on Crosswalk	-	-	-	1	-	-	-	-	2	-	-	-	-	3	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	-	1.8%		-	-	-	3.6%		-	-	-	5.5%		-	-	-	0%		-
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	1	0	0	-	-
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-	-	-	0%		-

Peak Hour: 07:15 AM - 08:15 AM **Weather:**



	Bicycles on Crosswalk	Pedestrians
N	3	16
S	1	16
E	1	17
W	1	11

Peak Hour: 05:30 PM - 06:30 PM **Weather:**



	Bicycles on Crosswalk	Pedestrians
N	1	16
S	3	21
E	2	5
W	0	7

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Turning Movement Count (2 . JOYMAR DR & THOMAS ST)

Start Time	N Approach JOYMAR DR				E Approach THOMAS ST				W Approach THOMAS ST				Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Left N:E	Peds N:	Approach Total	Right E:N	Thru E:W	Peds E:	Approach Total	Thru W:E	Left W:N	Peds W:	Approach Total		
07:00:00	10	4	2	14	0	63	0	63	186	19	0	206	283	
07:15:00	8	9	1	17	2	74	0	76	301	23	0	324	417	
07:30:00	24	6	1	30	6	94	1	100	332	55	0	387	517	
07:45:00	41	7	7	48	17	80	0	97	331	90	0	421	566	1783
08:00:00	57	4	7	61	12	89	0	101	378	79	0	457	619	2119
08:15:00	22	4	1	26	6	88	0	94	218	49	0	267	387	2089
08:30:00	16	6	5	22	5	88	0	93	269	51	0	320	435	2007
08:45:00	24	4	1	28	3	55	0	58	151	43	2	194	280	1721
09:00:00	22	3	1	25	3	59	0	62	114	25	0	139	226	1328
09:15:00	14	1	0	15	3	54	1	57	106	24	0	130	202	1143
09:30:00	15	5	3	20	2	44	0	46	81	19	0	100	166	874
09:45:00	7	1	4	8	4	42	1	46	80	17	0	97	151	745
BREAK														
16:00:00	30	8	5	38	7	111	0	118	77	17	0	94	250	
16:15:00	32	3	2	35	3	180	0	183	91	13	0	104	322	
16:30:00	31	6	1	37	7	97	0	104	59	19	0	78	219	
16:45:00	40	4	5	44	6	223	0	229	93	20	0	113	386	1177
17:00:00	50	3	3	54	8	153	0	161	93	22	0	115	330	1257
17:15:00	53	4	3	57	17	240	0	257	111	18	0	129	443	1378
17:30:00	38	7	2	45	8	291	0	299	139	19	0	158	502	1661
17:45:00	48	2	4	50	9	271	0	280	116	22	0	138	468	1743
18:00:00	48	8	4	56	11	261	1	272	140	23	0	163	491	1904
18:15:00	30	5	3	35	15	322	0	337	129	24	0	153	525	1986
18:30:00	41	1	6	42	4	206	0	210	103	19	0	122	374	1858

18:45:00	27	4	5	31	4	113	1	117	144	17	0	161	309	1699
Grand Total	728	109	76	838	162	3298	5	3460	3842	727	2	4570	**8868**	-
Approach%	86.9%	13%		-	4.7%	95.3%		-	84.1%	15.9%		-	**-**	-
Totals %	8.2%	1.2%		9.4%	1.8%	37.2%		39%	43.3%	8.2%		51.5%	**-**	-
Heavy	17	5		-	2	97		-	113	12		-	**-**	-
Heavy %	2.3%	4.6%		-	1.2%	2.9%		-	2.9%	1.7%		-	**-**	-
Bicycles	0	0		-	1	3		-	2	0		-	**-**	-
Bicycle %	0%	0%		-	0.6%	0.1%		-	0.1%	0%		-	**-**	-

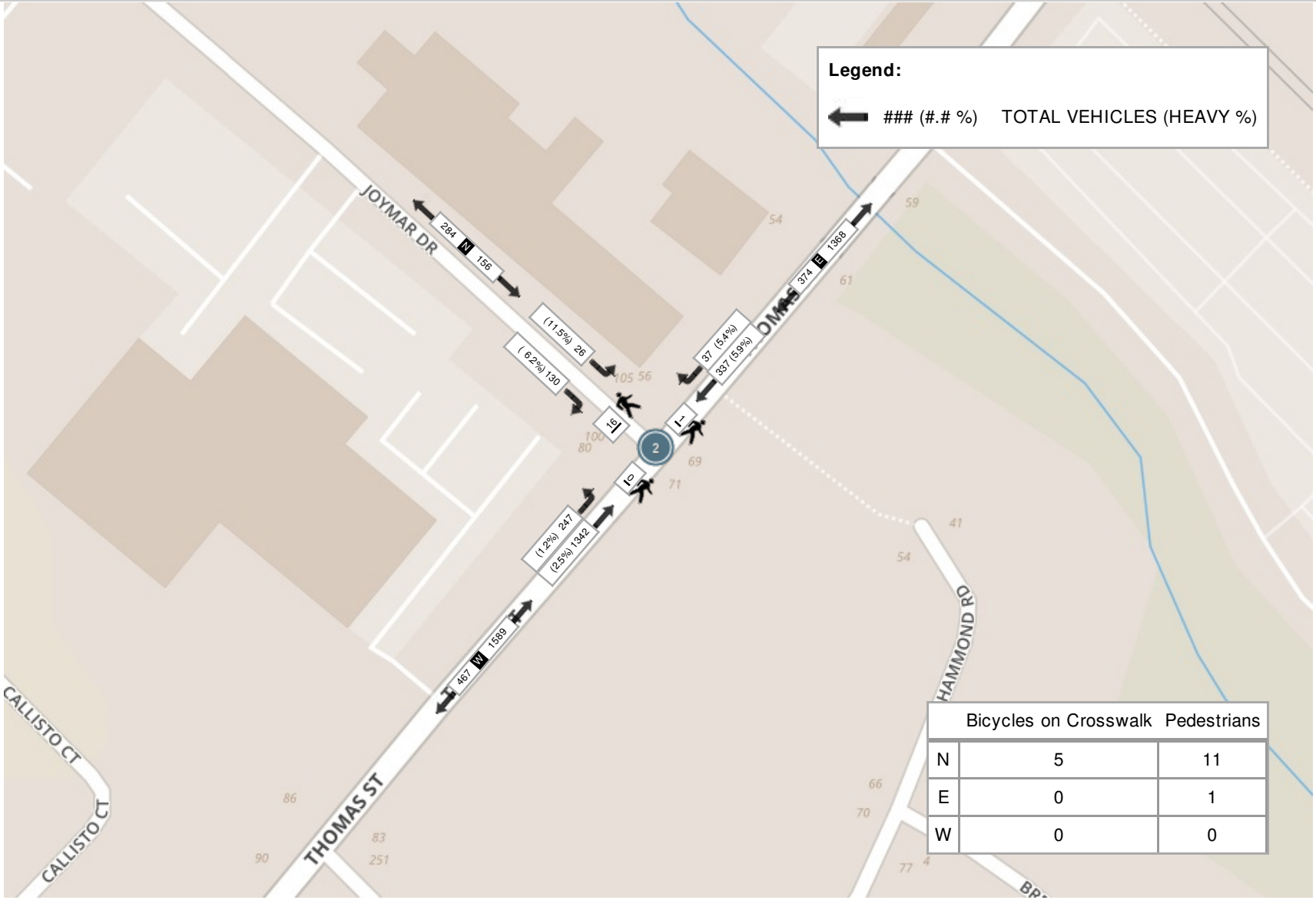
Peak Hour: 07:15 AM - 08:15 AM Weather:

Start Time	N Approach JOYMAR DR				E Approach THOMAS ST				W Approach THOMAS ST				Int. Total (15 min)
	Right	Left	Peds	Approach Total	Right	Thru	Peds	Approach Total	Thru	Left	Peds	Approach Total	
07:15:00	8	9	1	17	2	74	0	76	301	23	0	324	417
07:30:00	24	6	1	30	6	94	1	100	332	55	0	387	517
07:45:00	41	7	7	48	17	80	0	97	331	90	0	421	566
08:00:00	57	4	7	61	12	89	0	101	378	79	0	457	619
Grand Total	130	26	16	156	37	337	1	374	1342	247	0	1589	**2119**
Approach%	83.3%	16.7%		-	9.9%	90.1%		-	84.5%	15.5%		-	-
Totals %	6.1%	1.2%		7.4%	1.7%	15.9%		17.6%	63.3%	11.7%		75%	-
PHF	0.57	0.72		0.64	0.54	0.9		0.93	0.89	0.69		0.87	-
Heavy	8	3		11	2	20		22	33	3		36	-
Heavy %	6.2%	11.5%		7.1%	5.4%	5.9%		5.9%	2.5%	1.2%		2.3%	-
Lights	122	23		145	35	317		352	1309	244		1553	-
Lights %	93.8%	88.5%		92.9%	94.6%	94.1%		94.1%	97.5%	98.8%		97.7%	-
Single-Unit Trucks	3	1		4	1	0		1	4	1		5	-
Single-Unit Trucks %	2.3%	3.8%		2.6%	2.7%	0%		0.3%	0.3%	0.4%		0.3%	-
Buses	5	2		7	1	20		21	29	2		31	-
Buses %	3.8%	7.7%		4.5%	2.7%	5.9%		5.6%	2.2%	0.8%		2%	-
Articulated Trucks	0	0		0	0	0		0	0	0		0	-
Articulated Trucks %	0%	0%		0%	0%	0%		0%	0%	0%		0%	-
Pedestrians	-	-	11	-	-	-	1	-	-	-	0	-	-
Pedestrians%	-	-	64.7%		-	-	5.9%		-	-	0%		-
Bicycles on Crosswalk	-	-	5	-	-	-	0	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	29.4%		-	-	0%		-	-	0%		-
Bicycles on Road	0	0	0	-	0	1	0	-	1	0	0	-	-
Bicycles on Road%	-	-	0%		-	-	0%		-	-	0%		-

Peak Hour: 05:30 PM - 06:30 PM Weather:

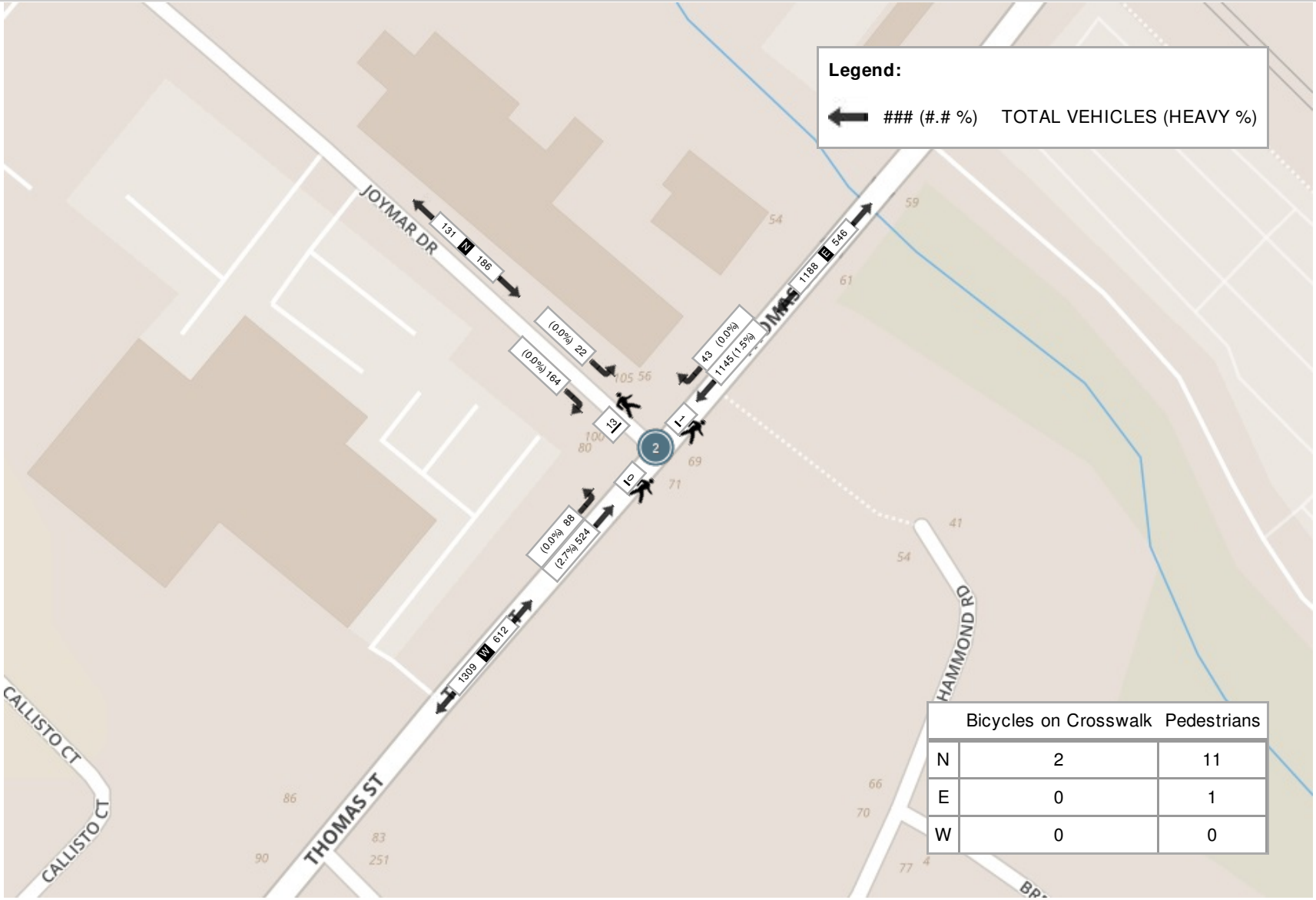
Start Time	N Approach JOYMAR DR				E Approach THOMAS ST				W Approach THOMAS ST				Int. Total (15 min)
	Right	Left	Peds	Approach Total	Right	Thru	Peds	Approach Total	Thru	Left	Peds	Approach Total	
17:30:00	38	7	2	45	8	291	0	299	139	19	0	158	502
17:45:00	48	2	4	50	9	271	0	280	116	22	0	138	468
18:00:00	48	8	4	56	11	261	1	272	140	23	0	163	491
18:15:00	30	5	3	35	15	322	0	337	129	24	0	153	525
Grand Total	164	22	13	186	43	1145	1	1188	524	88	0	612	**1986**
Approach%	88.2%	11.8%		-	3.6%	96.4%		-	85.6%	14.4%		-	-
Totals %	8.3%	1.1%		9.4%	2.2%	57.7%		59.8%	26.4%	4.4%		30.8%	-
PHF	0.85	0.69		0.83	0.72	0.89		0.88	0.94	0.92		0.94	-
Heavy	0	0		0	0	17		17	14	0		14	-
Heavy %	0%	0%		0%	0%	1.5%		1.4%	2.7%	0%		2.3%	-
Lights	164	22		186	43	1128		1171	510	88		598	-
Lights %	100%	100%		100%	100%	98.5%		98.6%	97.3%	100%		97.7%	-
Single-Unit Trucks	0	0		0	0	1		1	0	0		0	-
Single-Unit Trucks %	0%	0%		0%	0%	0.1%		0.1%	0%	0%		0%	-
Buses	0	0		0	0	16		16	14	0		14	-
Buses %	0%	0%		0%	0%	1.4%		1.3%	2.7%	0%		2.3%	-
Articulated Trucks	0	0		0	0	0		0	0	0		0	-
Articulated Trucks %	0%	0%		0%	0%	0%		0%	0%	0%		0%	-
Pedestrians	-	-	11	-	-	-	1	-	-	-	0	-	-
Pedestrians%	-	-	78.6%		-	-	7.1%		-	-	0%		-
Bicycles on Crosswalk	-	-	2	-	-	-	0	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	14.3%		-	-	0%		-	-	0%		-
Bicycles on Road	0	0	0	-	0	1	0	-	0	0	0	-	-
Bicycles on Road%	-	-	0%		-	-	0%		-	-	0%		-

Peak Hour: 07:15 AM - 08:15 AM Weather:



	Bicycles on Crosswalk	Pedestrians
N	5	11
E	0	1
W	0	0

Peak Hour: 05:30 PM - 06:30 PM Weather:



	Bicycles on Crosswalk	Pedestrians
N	2	11
E	0	1
W	0	0

Turning Movement Count (3 . JOYMAR DR & TANNERY ST)

Start Time	N Approach JOYMAR DR					E Approach TANNERY ST					S Approach JOYMAR DR					W Approach STREETSVILLE SCHOOL DRIVEWAY					Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	Peds W:	Approach Total		
07:00:00	3	10	7	0	20	2	1	3	0	6	11	17	0	1	28	0	0	0	2	0	54	
07:15:00	4	15	12	6	31	9	0	3	0	12	10	13	0	1	23	0	0	2	2	2	68	
07:30:00	4	23	33	9	60	14	5	2	0	21	17	38	9	4	64	0	0	2	7	2	147	
07:45:00	6	32	34	19	72	16	5	12	0	33	26	50	16	7	92	0	3	2	20	5	202	471
08:00:00	4	33	42	25	79	21	17	11	0	49	31	52	22	6	105	17	15	6	20	38	271	688
08:15:00	1	21	30	5	52	8	0	5	0	13	22	32	0	0	54	0	0	0	10	0	119	739
08:30:00	0	12	26	7	38	7	0	11	2	18	29	28	1	2	58	1	0	0	7	1	115	707
08:45:00	0	14	16	3	30	8	0	18	0	26	28	16	0	1	44	0	0	0	6	0	100	605
09:00:00	0	16	15	3	31	5	0	11	0	16	14	18	0	2	32	0	0	0	0	0	79	413
09:15:00	5	7	13	6	26	9	0	6	0	15	10	19	0	3	29	0	2	1	1	3	73	367
09:30:00	3	12	10	2	25	10	2	10	0	22	8	16	0	2	24	0	2	2	1	4	75	327
09:45:00	0	3	7	7	10	8	1	8	0	17	10	9	1	2	20	0	0	0	4	0	47	274
BREAK																						
16:00:00	0	23	13	3	36	17	1	15	1	33	6	14	1	0	21	1	0	6	1	7	97	
16:15:00	0	21	12	4	33	14	0	20	0	34	7	12	0	0	19	0	1	4	1	5	91	
16:30:00	0	15	13	0	28	16	0	24	0	41	11	13	0	1	25	1	1	0	0	2	96	
16:45:00	1	17	15	1	33	21	0	22	0	43	15	17	0	4	32	0	0	0	4	0	108	392
17:00:00	0	28	11	0	39	22	0	29	1	51	10	16	1	3	28	0	1	1	0	2	120	415
17:15:00	1	27	14	1	42	25	0	31	2	56	16	20	0	2	36	0	0	1	0	1	135	459
17:30:00	0	17	11	0	28	22	2	23	0	47	15	17	0	6	32	3	1	0	5	4	111	474
17:45:00	0	26	11	1	37	28	0	20	0	48	6	18	2	1	26	2	1	0	2	3	114	480
18:00:00	0	23	15	4	38	18	1	27	0	46	14	23	1	1	38	0	0	0	6	0	122	482
18:15:00	0	13	13	5	26	18	0	21	2	39	21	27	0	1	48	0	0	0	4	0	113	460
18:30:00	0	13	12	8	25	21	1	31	1	53	10	13	0	0	23	0	0	2	3	2	103	452
18:45:00	0	14	11	3	25	14	0	16	0	30	11	14	0	2	25	0	0	0	2	0	80	418
Grand Total	32	435	396	122	864	353	36	379	9	769	358	512	54	52	926	25	27	29	108	81	**2640**	-
Approach%	3.7%	50.3%	45.8%		-	45.9%	4.7%	49.3%		-	38.7%	55.3%	5.8%		-	30.9%	33.3%	35.8%		-	-	-
Totals %	1.2%	16.5%	15%		32.7%	13.4%	1.4%	14.4%		29.1%	13.6%	19.4%	2%		35.1%	0.9%	1%	1.1%		3.1%	-	-
Heavy	0	9	8		-	4	1	6		-	9	5	0		-	1	0	0		-	-	-
Heavy %	0%	2.1%	2%		-	1.1%	2.8%	1.6%		-	2.5%	1%	0%		-	4%	0%	0%		-	-	-
Bicycles	0	3	3		-	2	0	1		-	0	4	0		-	0	1	0		-	-	-
Bicycle %	0%	0.7%	0.8%		-	0.6%	0%	0.3%		-	0%	0.8%	0%		-	0%	3.7%	0%		-	-	-

NexTrans
4261-A14 Highway 7 East
Suite 489
Markham ON, CANADA, L3R 9W6

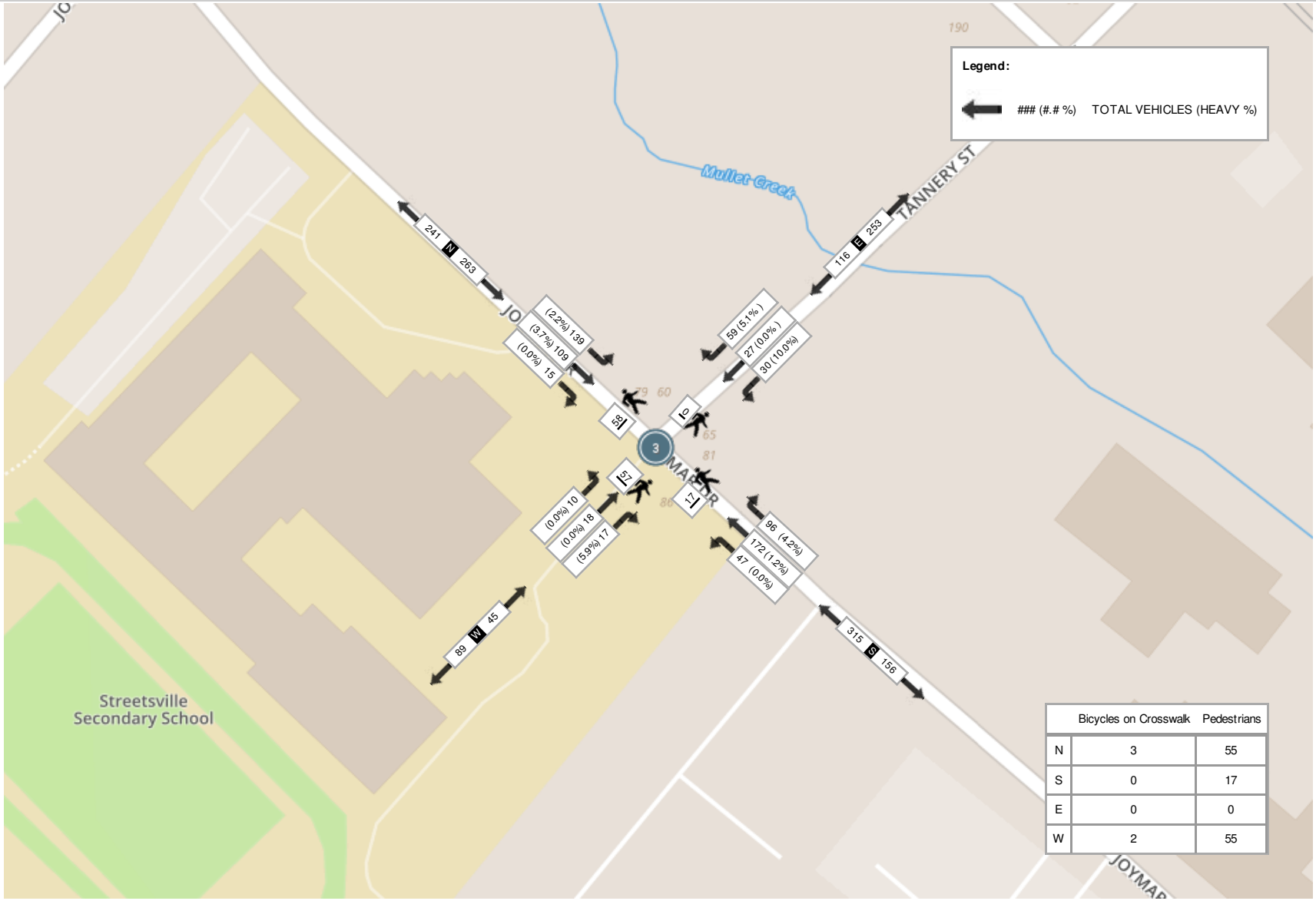
Peak Hour: 07:30 AM - 08:30 AM Weather:

Start Time	N Approach JOYMAR DR					E Approach TANNERY ST					S Approach JOYMAR DR					W Approach STREETSVILLE SCHOOL DRIVEWAY					Int. Total (15 min)
	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	
07:30:00	4	23	33	9	60	14	5	2	0	21	17	38	9	4	64	0	0	2	7	2	147
07:45:00	6	32	34	19	72	16	5	12	0	33	26	50	16	7	92	0	3	2	20	5	202
08:00:00	4	33	42	25	79	21	17	11	0	49	31	52	22	6	105	17	15	6	20	38	271
08:15:00	1	21	30	5	52	8	0	5	0	13	22	32	0	0	54	0	0	0	10	0	119
Grand Total	15	109	139	58	263	59	27	30	0	116	96	172	47	17	315	17	18	10	57	45	**739**
Approach%	5.7%	41.4%	52.9%		-	50.9%	23.3%	25.9%		-	30.5%	54.6%	14.9%		-	37.8%	40%	22.2%		-	**-**
Totals %	2%	14.7%	18.8%		35.6%	8%	3.7%	4.1%		15.7%	13%	23.3%	6.4%		42.6%	2.3%	2.4%	1.4%		6.1%	**-**
PHF	0.63	0.83	0.83		0.83	0.7	0.4	0.63		0.59	0.77	0.83	0.53		0.75	0.25	0.3	0.42		0.3	**-**
Heavy	0	4	3		7	3	0	3		6	4	2	0		6	1	0	0		1	**-**
Heavy %	0%	3.7%	2.2%		2.7%	5.1%	0%	10%		5.2%	4.2%	1.2%	0%		1.9%	5.9%	0%	0%		2.2%	**-**
Lights	15	105	136		256	56	27	27		110	92	170	47		309	16	18	10		44	**-**
Lights %	100%	96.3%	97.8%		97.3%	94.9%	100%	90%		94.8%	95.8%	98.8%	100%		98.1%	94.1%	100%	100%		97.8%	**-**
Single-Unit Trucks	0	1	0		1	1	0	0		1	3	0	0		3	0	0	0		0	**-**
Single-Unit Trucks %	0%	0.9%	0%		0.4%	1.7%	0%	0%		0.9%	3.1%	0%	0%		1%	0%	0%	0%		0%	**-**
Buses	0	3	3		6	2	0	3		5	1	2	0		3	1	0	0		1	**-**
Buses %	0%	2.8%	2.2%		2.3%	3.4%	0%	10%		4.3%	1%	1.2%	0%		1%	5.9%	0%	0%		2.2%	**-**
Pedestrians	-	-	-	55	-	-	-	-	0	-	-	-	-	17	-	-	-	-	55	-	**-**
Pedestrians%	-	-	-	41.7%		-	-	-	0%		-	-	-	12.9%		-	-	-	41.7%		**-**
Bicycles on Crosswalk	-	-	-	3	-	-	-	-	0	-	-	-	-	0	-	-	-	-	2	-	**-**
Bicycles on Crosswalk%	-	-	-	2.3%		-	-	-	0%		-	-	-	0%		-	-	-	1.5%		**-**
Bicycles on Road	0	1	1	0	-	0	0	0	0	-	0	1	0	0	-	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

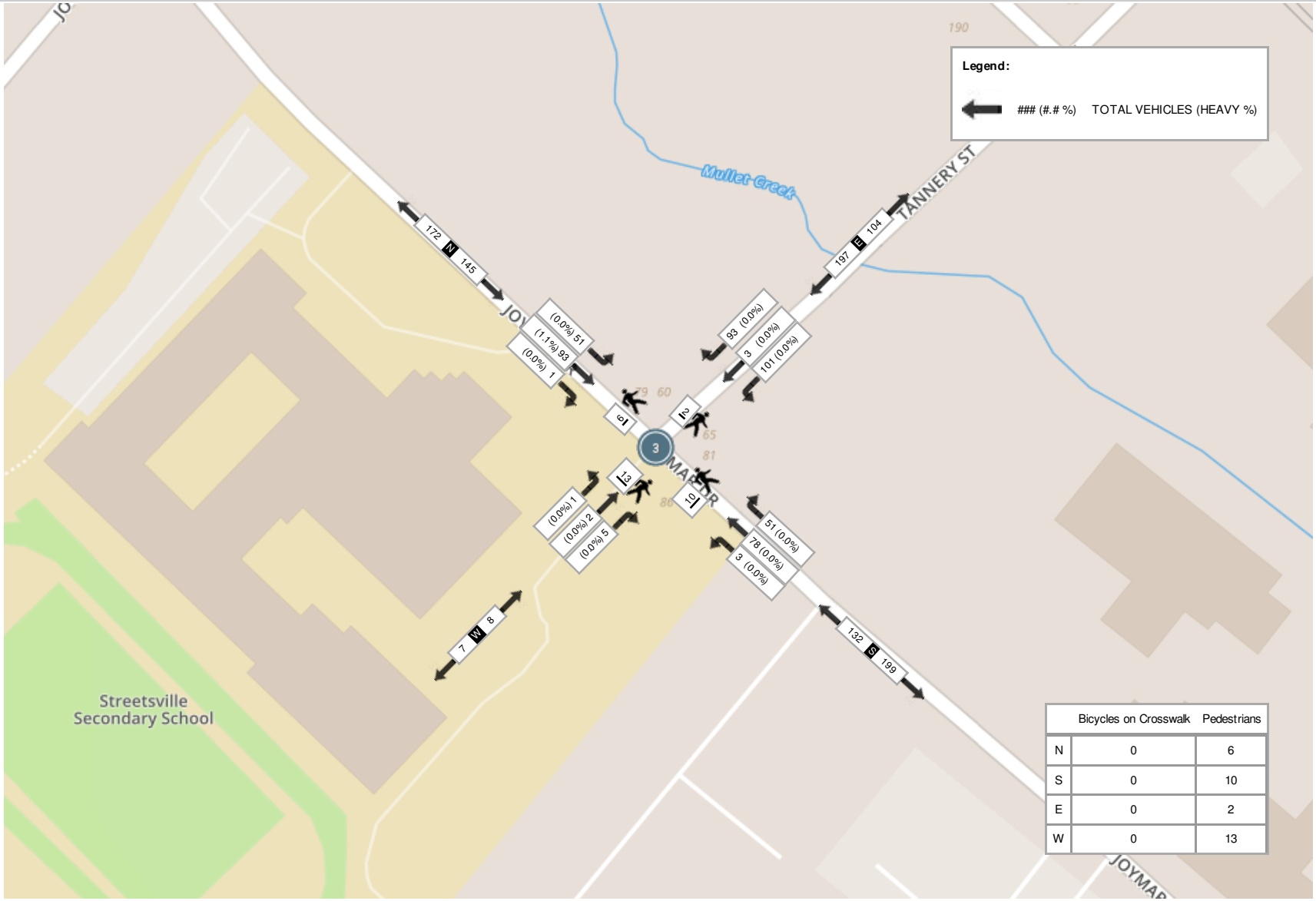
Peak Hour: 05:15 PM - 06:15 PM Weather:

Start Time	N Approach JOYMAR DR					E Approach TANNERY ST					S Approach JOYMAR DR					W Approach STREETSVILLE SCHOOL DRIVEWAY					Int. Total (15 min)
	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	Right	Thru	Left	Peds	Approach Total	
17:15:00	1	27	14	1	42	25	0	31	2	56	16	20	0	2	36	0	0	1	0	1	135
17:30:00	0	17	11	0	28	22	2	23	0	47	15	17	0	6	32	3	1	0	5	4	111
17:45:00	0	26	11	1	37	28	0	20	0	48	6	18	2	1	26	2	1	0	2	3	114
18:00:00	0	23	15	4	38	18	1	27	0	46	14	23	1	1	38	0	0	0	6	0	122
Grand Total	1	93	51	6	145	93	3	101	2	197	51	78	3	10	132	5	2	1	13	8	**482**
Approach%	0.7%	64.1%	35.2%		-	47.2%	1.5%	51.3%		-	38.6%	59.1%	2.3%		-	62.5%	25%	12.5%		-	-
Totals %	0.2%	19.3%	10.6%		30.1%	19.3%	0.6%	21%		40.9%	10.6%	16.2%	0.6%		27.4%	1%	0.4%	0.2%		1.7%	-
PHF	0.25	0.86	0.85		0.86	0.83	0.38	0.81		0.88	0.8	0.85	0.38		0.87	0.42	0.5	0.25		0.5	-
Heavy	0	1	0		1	0	0	0		0	0	0	0		0	0	0	0		0	-
Heavy %	0%	1.1%	0%		0.7%	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	-
Lights	1	92	51		144	93	3	101		197	51	78	3		132	5	2	1		8	-
Lights %	100%	98.9%	100%		99.3%	100%	100%	100%		100%	100%	100%	100%		100%	100%	100%	100%		100%	-
Single-Unit Trucks	0	1	0		1	0	0	0		0	0	0	0		0	0	0	0		0	-
Single-Unit Trucks %	0%	1.1%	0%		0.7%	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	-
Buses	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	-
Buses %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	6	-	-	-	-	2	-	-	-	-	10	-	-	-	-	13	-	-
Pedestrians%	-	-	-	19.4%		-	-	-	6.5%		-	-	-	32.3%		-	-	-	41.9%		-
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-	-	-	0%		-
Bicycles on Road	0	1	1	0	-	0	0	0	0	-	0	3	0	0	-	0	0	0	0	-	-
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-	-	-	0%		-

Peak Hour: 07:30 AM - 08:30 AM Weather:



Peak Hour: 05:15 PM - 06:15 PM **Weather:**



MG8 ENG

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:15:00
To: 8:15:00

Municipality: Region of Peel
Site #: 0000305941
Intersection: Britannia Road & Joymar Drive
TFR File #: 8
Count date: 7-Mar-2013

Weather conditions:
Cold

Person(s) who counted:
NIKOLA

**** Signalized Intersection ****

Major Road: Britannia Road runs W/E

North Leg Total:	421
North Entering:	214
North Peds:	3
Peds Cross:	⋈

Cyclists	0	0	0	0
Trucks	2	0	2	4
Cars	51	1	158	210
Totals	53	1	160	

Cyclists	0
Trucks	8
Cars	199
Totals	207

East Leg Total:	2692
East Entering:	684
East Peds:	6
Peds Cross:	⧖

Millcreek Drive

Cyclists	Trucks	Cars	Totals
0	49	581	630

	Cars	Trucks	Cyclists	Totals
	116	5	0	121
	485	46	0	531
	31	1	0	32
	632	52	0	

Britannia Road

N
W E
S

Cyclists	Trucks	Cars	Totals
0	2	31	33
0	45	1722	1767
0	1	58	59
0	48	1811	

Britannia Road

Cars	Trucks	Cyclists	Totals
1960	48	0	2008

Joymar Drive

Peds Cross:	⧖
West Peds:	2
West Entering:	1859
West Leg Total:	2489

Cars	90			
Trucks	2			
Cyclists	0			
Totals	92			

Cars	45	52	80	177
Trucks	1	1	1	3
Cyclists	0	0	0	0
Totals	46	53	81	

Peds Cross:	⋈
South Peds:	0
South Entering:	180
South Leg Total:	272

Comments

MG8 ENG

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

One Hour Peak
From: 13:00:00
To: 14:00:00

Municipality: Region of Peel
Site #: 0000305941
Intersection: Britannia Road & Joymar Drive
TFR File #: 8
Count date: 7-Mar-2013

Weather conditions:
Cold

Person(s) who counted:
NIKOLA

**** Signalized Intersection ****

Major Road: Britannia Road runs W/E

North Leg Total:	225
North Entering:	95
North Peds:	1
Peds Cross:	⋈

Cyclists	0	0	0	0
Trucks	1	0	4	5
Cars	24	1	65	90
Totals	25	1	69	

Cyclists	0
Trucks	7
Cars	123
Totals	130

East Leg Total:	1620
East Entering:	857
East Peds:	3
Peds Cross:	⧖

Millcreek Drive

Cyclists	Trucks	Cars	Totals
0	35	724	759

Cars	Trucks	Cyclists	Totals
92	6	0	98
688	34	0	722
36	1	0	37
816	41	0	

Britannia Road

N
W E
S

Cyclists	Trucks	Cars	Totals
0	1	15	16
0	19	639	658
0	0	9	9
0	20	663	

Britannia Road

Cars	Trucks	Cyclists	Totals
740	23	0	763

Joymar Drive

Peds Cross:	⧖
West Peds:	1
West Entering:	683
West Leg Total:	1442

Cars	46
Trucks	1
Cyclists	0
Totals	47

Cars	12	16	36	64
Trucks	0	0	0	0
Cyclists	0	0	0	0
Totals	12	16	36	

Peds Cross:	⋈
South Peds:	1
South Entering:	64
South Leg Total:	111

Comments

MG8 ENG

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

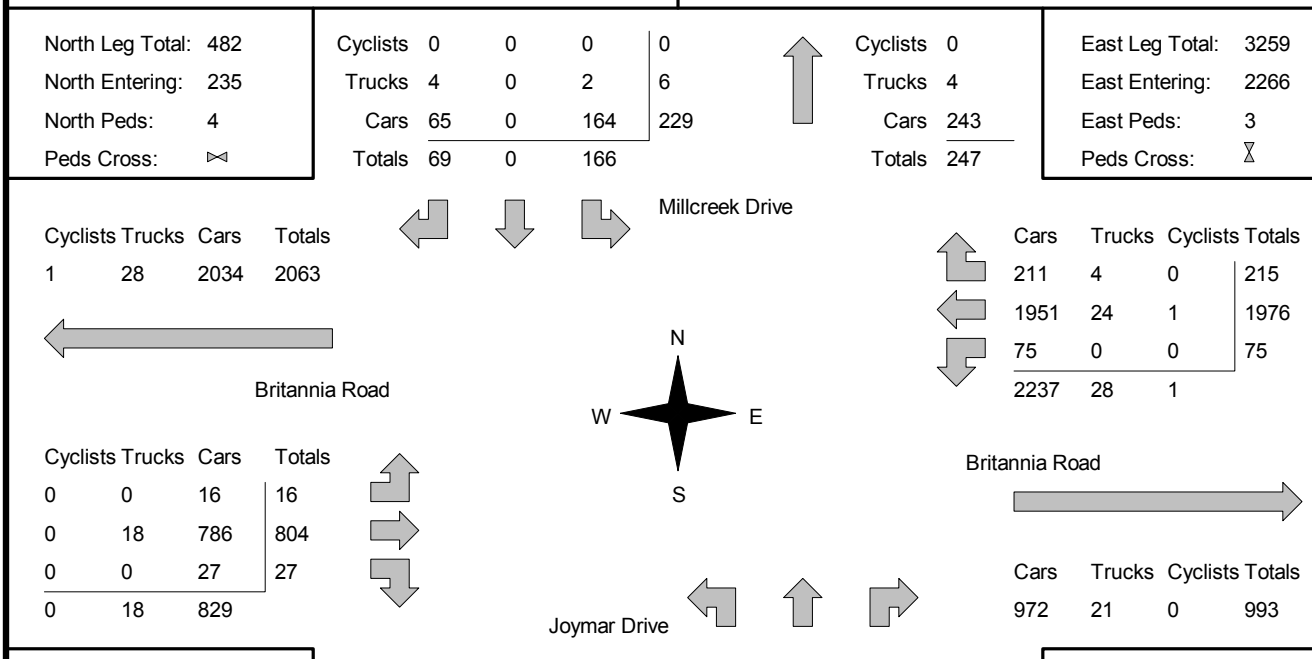
Municipality: Region of Peel
Site #: 0000305941
Intersection: Britannia Road & Joymar Drive
TFR File #: 8
Count date: 7-Mar-2013

Weather conditions:
Cold

Person(s) who counted:
NIKOLA

**** Signalized Intersection ****

Major Road: Britannia Road runs W/E



Comments

MG8 ENG

Total Count Diagram

Municipality: Region of Peel
Site #: 0000305941
Intersection: Britannia Road & Joymar Drive
TFR File #: 8
Count date: 7-Mar-2013

Weather conditions:
Cold

Person(s) who counted:
NIKOLA

**** Signalized Intersection ****

Major Road: Britannia Road runs W/E

North Leg Total:	2743
North Entering:	1318
North Peds:	26
Peds Cross:	⋈

Cyclists	1	0	1	2
Trucks	11	1	22	34
Cars	330	6	946	1282
Totals	342	7	969	

Cyclists	1
Trucks	56
Cars	1368
Totals	1425

East Leg Total:	17942
East Entering:	9171
East Peds:	23
Peds Cross:	⧖

Millcreek Drive

Cyclists	Trucks	Cars	Totals
2	263	8036	8301

Cars	Trucks	Cyclists	Totals
1024	46	0	1070
7561	250	1	7812
278	11	0	289
8863	307	1	

Britannia Road

N
W E
S

Cyclists	Trucks	Cars	Totals
1	9	177	187
0	225	7263	7488
0	6	169	175
1	240	7609	

Britannia Road

Cars	Trucks	Cyclists	Totals
8512	258	1	8771

Joymar Drive

Peds Cross:	⧖
West Peds:	7
West Entering:	7850
West Leg Total:	16151

Cars	453
Trucks	18
Cyclists	0
Totals	471

Cars	145	167	303	615
Trucks	2	1	11	14
Cyclists	0	0	0	0
Totals	147	168	314	

Peds Cross:	⋈
South Peds:	10
South Entering:	629
South Leg Total:	1100

Comments

MG8 ENG
Traffic Count Summary

Intersection: Britannia Road & Joymar Drive | **Count Date:** 7-Mar-2013 | **Municipality:** Region of Peel

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds	North/South Total Approaches
7:00:00	0	0	0	0	0	0
8:00:00	156	1	51	208	2	334
9:00:00	111	0	28	139	1	279
11:00:00	2	0	1	3	0	4
12:00:00	89	2	32	123	1	161
13:00:00	104	0	31	135	1	194
14:00:00	69	1	25	95	1	159
15:00:00	5	0	0	5	0	7
16:00:00	116	1	57	174	9	253
17:00:00	161	2	42	205	6	262
18:00:00	156	0	75	231	5	294
Totals:	969	7	342	1318	26	1947

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	0	0	0	0
8:00:00	23	38	65	126	2
9:00:00	33	37	70	140	0
11:00:00	1	0	0	1	0
12:00:00	7	12	19	38	0
13:00:00	8	12	39	59	1
14:00:00	12	16	36	64	1
15:00:00	1	1	0	2	1
16:00:00	23	19	37	79	5
17:00:00	19	17	21	57	0
18:00:00	20	16	27	63	0
Totals:	147	168	314	629	10

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds	East/West Total Approaches
7:00:00	0	7	1	8	0	25
8:00:00	29	457	114	600	7	2405
9:00:00	20	575	154	749	4	2463
11:00:00	0	0	2	2	0	4
12:00:00	26	541	83	650	1	1358
13:00:00	24	670	102	796	1	1399
14:00:00	37	722	98	857	3	1540
15:00:00	0	0	0	0	0	2
16:00:00	29	1381	137	1547	3	2334
17:00:00	48	1664	164	1876	1	2620
18:00:00	76	1795	215	2086	3	2870
Totals:	289	7812	1070	9171	23	17020

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Cyclists: Left	Thru	Right	Grand Total	Total Peds
7:00:00	0	17	0	17	0
8:00:00	43	1707	55	1805	2
9:00:00	52	1631	31	1714	2
11:00:00	0	1	1	2	0
12:00:00	13	681	14	708	0
13:00:00	13	580	10	603	1
14:00:00	16	658	9	683	1
15:00:00	0	2	0	2	0
16:00:00	26	743	18	787	0
17:00:00	10	723	11	744	0
18:00:00	14	744	26	784	1
Totals:	187	7487	175	7849	7

Calculated Values for Traffic Crossing Major Street

Hours Ending:	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00
Crossing Values:	226	187	109	126	101	161	198	196

MG8 ENG

Count Date: 7-Mar-2013 Site #: 0000305941

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Cyclists - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	27	27	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	66	39	0	0	14	6	0	0	0	0	1	1	0	0	0	0	0	0	0	0
7:45:00	104	38	1	1	22	8	2	2	0	0	1	0	0	0	0	0	0	0	1	1
8:00:00	154	50	1	0	49	27	2	0	0	0	2	1	0	0	0	0	0	0	2	1
8:15:00	185	31	1	0	59	10	2	0	0	0	2	0	0	0	0	0	0	0	3	1
8:30:00	211	26	1	0	68	9	4	2	0	0	2	0	0	0	0	0	0	0	3	0
8:45:00	243	32	1	0	74	6	6	2	0	0	2	0	0	0	0	0	0	0	3	0
9:00:00	261	18	1	0	77	3	6	0	0	0	2	0	0	0	0	0	0	0	3	0
9:00:05	261	0	1	0	77	0	6	0	0	0	2	0	0	0	0	0	0	0	3	0
11:00:00	263	2	1	0	78	1	6	0	0	0	2	0	0	0	0	0	0	0	3	0
11:15:00	289	26	1	0	83	5	7	1	0	0	2	0	0	0	0	0	0	0	3	0
11:30:00	316	27	1	0	92	9	7	0	1	1	3	1	0	0	0	0	0	0	4	1
11:45:00	336	20	2	1	101	9	9	2	1	0	3	0	0	0	0	0	0	0	4	0
12:00:00	348	12	2	0	109	8	10	1	1	0	3	0	0	0	0	0	0	0	4	0
12:15:00	377	29	2	0	117	8	10	0	1	0	3	0	1	1	0	0	0	0	4	0
12:30:00	403	26	2	0	125	8	13	3	1	0	4	1	1	0	0	0	0	0	5	1
12:45:00	422	19	2	0	131	6	13	0	1	0	4	0	1	0	0	0	0	0	5	0
13:00:00	448	26	2	0	139	8	13	0	1	0	4	0	1	0	0	0	0	0	5	0
13:15:00	466	18	2	0	149	10	14	1	1	0	4	0	1	0	0	0	0	0	6	1
13:30:00	483	17	2	0	155	6	15	1	1	0	4	0	1	0	0	0	0	0	6	0
13:45:00	499	16	2	0	157	2	16	1	1	0	5	1	1	0	0	0	0	0	6	0
14:00:00	513	14	3	1	163	6	17	1	1	0	5	0	1	0	0	0	0	0	6	0
14:00:05	513	0	3	0	163	0	17	0	1	0	5	0	1	0	0	0	0	0	6	0
15:00:00	518	5	3	0	163	0	17	0	1	0	5	0	1	0	0	0	0	0	6	0
15:15:00	548	30	4	1	176	13	17	0	1	0	5	0	1	0	0	0	0	0	11	5
15:30:00	576	28	4	0	187	11	18	1	1	0	5	0	1	0	0	0	0	0	13	2
15:45:00	611	35	4	0	206	19	18	0	1	0	5	0	1	0	0	0	0	0	14	1
16:00:00	633	22	4	0	217	11	18	0	1	0	7	2	1	0	0	0	1	1	15	1
16:15:00	677	44	5	1	233	16	19	1	1	0	7	0	1	0	0	0	1	0	15	0
16:30:00	714	37	6	1	237	4	19	0	1	0	7	0	1	0	0	0	1	0	18	3
16:45:00	757	43	6	0	247	10	19	0	1	0	7	0	1	0	0	0	1	0	20	2
17:00:00	793	36	6	0	258	11	19	0	1	0	8	1	1	0	0	0	1	0	21	1
17:15:00	850	57	6	0	277	19	19	0	1	0	10	2	1	0	0	0	1	0	22	1
17:30:00	882	32	6	0	295	18	20	1	1	0	10	0	1	0	0	0	1	0	23	1
17:45:00	921	39	6	0	312	17	21	1	1	0	11	1	1	0	0	0	1	0	24	1
18:00:00	946	25	6	0	330	18	22	1	1	0	11	0	1	0	0	0	1	0	26	2
18:00:10	946	0	6	0	330	0	22	0	1	0	11	0	1	0	0	0	1	0	26	0

MG8 ENG

Count Date: 7-Mar-2013 Site #: 0000305941

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Cyclists - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	6	6	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
7:15:00	4	4	68	62	28	27	0	0	12	11	1	1	0	0	0	0	0	0	3	3
7:30:00	11	7	194	126	60	32	1	1	23	11	2	1	0	0	0	0	0	0	3	0
7:45:00	16	5	300	106	82	22	1	0	37	14	2	0	0	0	0	0	0	0	5	2
8:00:00	28	12	413	113	110	28	1	0	51	14	5	3	0	0	0	0	0	0	7	2
8:15:00	35	7	553	140	144	34	1	0	58	7	6	1	0	0	0	0	0	0	9	2
8:30:00	38	3	698	145	185	41	2	1	73	15	9	3	0	0	0	0	0	0	9	0
8:45:00	42	4	815	117	221	36	2	0	81	8	10	1	0	0	0	0	0	0	11	2
9:00:00	47	5	949	134	255	34	2	0	90	9	14	4	0	0	0	0	0	0	11	0
9:00:05	47	0	949	0	255	0	2	0	90	0	14	0	0	0	0	0	0	0	11	0
11:00:00	47	0	949	0	257	2	2	0	90	0	14	0	0	0	0	0	0	0	11	0
11:15:00	50	3	1079	130	278	21	2	0	97	7	15	1	0	0	0	0	0	0	11	0
11:30:00	55	5	1192	113	297	19	2	0	104	7	16	1	0	0	0	0	0	0	12	1
11:45:00	63	8	1327	135	316	19	3	1	108	4	17	1	0	0	0	0	0	0	12	0
12:00:00	72	9	1468	141	335	19	3	0	112	4	19	2	0	0	0	0	0	0	12	0
12:15:00	79	7	1599	131	363	28	3	0	119	7	20	1	0	0	0	0	0	0	12	0
12:30:00	86	7	1765	166	382	19	3	0	125	6	22	2	0	0	0	0	0	0	12	0
12:45:00	90	4	1942	177	400	18	3	0	130	5	23	1	0	0	0	0	0	0	13	1
13:00:00	95	5	2116	174	433	33	4	1	134	4	23	0	0	0	0	0	0	0	13	0
13:15:00	106	11	2301	185	454	21	4	0	142	8	27	4	0	0	0	0	0	0	16	3
13:30:00	111	5	2466	165	474	20	5	1	148	6	28	1	0	0	0	0	0	0	16	0
13:45:00	121	10	2645	179	493	19	5	0	158	10	28	0	0	0	0	0	0	0	16	0
14:00:00	131	10	2804	159	525	32	5	0	168	10	29	1	0	0	0	0	0	0	16	0
14:00:05	131	0	2804	0	525	0	5	0	168	0	29	0	0	0	0	0	0	0	16	0
15:00:00	131	0	2804	0	525	0	5	0	168	0	29	0	0	0	0	0	0	0	16	0
15:15:00	135	4	3092	288	560	35	5	0	174	6	32	3	0	0	0	0	0	0	17	1
15:30:00	142	7	3412	320	585	25	7	2	177	3	35	3	0	0	0	0	0	0	17	0
15:45:00	149	7	3755	343	617	32	9	2	190	13	37	2	0	0	0	0	0	0	19	2
16:00:00	156	7	4153	398	654	37	9	0	200	10	37	0	0	0	0	0	0	0	19	0
16:15:00	167	11	4452	299	682	28	9	0	210	10	37	0	0	0	0	0	0	0	19	0
16:30:00	176	9	4854	402	737	55	10	1	216	6	40	3	0	0	0	0	0	0	19	0
16:45:00	184	8	5242	388	772	35	11	1	222	6	41	1	0	0	0	0	0	0	20	1
17:00:00	202	18	5788	546	813	41	11	0	229	7	42	1	0	0	0	0	0	0	20	0
17:15:00	221	19	6235	447	864	51	11	0	235	6	44	2	0	0	0	0	0	0	21	1
17:30:00	241	20	6691	456	922	58	11	0	240	5	45	1	0	0	1	1	0	0	22	1
17:45:00	259	18	7193	502	983	61	11	0	246	6	45	0	0	0	1	0	0	0	23	1
18:00:00	278	19	7561	368	1024	41	11	0	250	4	46	1	0	0	1	0	0	0	23	0
18:00:10	278	0	7561	0	1024	0	11	0	250	0	46	0	0	0	1	0	0	0	23	0

MG8 ENG

Count Date: 7-Mar-2013 Site #: 0000305941

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Cyclists - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	2	2	5	5	14	14	0	0	0	0	0	0	0	0	0	0	0	0	2	2
7:30:00	2	0	7	2	28	14	0	0	0	0	1	1	0	0	0	0	0	0	2	0
7:45:00	8	6	11	4	43	15	0	0	1	1	1	0	0	0	0	0	0	0	2	0
8:00:00	22	14	37	26	64	21	1	1	1	0	1	0	0	0	0	0	0	0	2	0
8:15:00	47	25	57	20	94	30	1	0	1	0	1	0	0	0	0	0	0	0	2	0
8:30:00	51	4	64	7	109	15	1	0	1	0	2	1	0	0	0	0	0	0	2	0
8:45:00	53	2	67	3	124	15	1	0	1	0	2	0	0	0	0	0	0	0	2	0
9:00:00	55	2	74	7	133	9	1	0	1	0	2	0	0	0	0	0	0	0	2	0
9:00:05	55	0	74	0	133	0	1	0	1	0	2	0	0	0	0	0	0	0	2	0
11:00:00	56	1	74	0	133	0	1	0	1	0	2	0	0	0	0	0	0	0	2	0
11:15:00	60	4	79	5	136	3	1	0	1	0	3	1	0	0	0	0	0	0	2	0
11:30:00	60	0	82	3	140	4	1	0	1	0	3	0	0	0	0	0	0	0	2	0
11:45:00	62	2	84	2	144	4	1	0	1	0	3	0	0	0	0	0	0	0	2	0
12:00:00	63	1	86	2	150	6	1	0	1	0	4	1	0	0	0	0	0	0	2	0
12:15:00	67	4	91	5	166	16	1	0	1	0	4	0	0	0	0	0	0	0	2	0
12:30:00	68	1	91	0	173	7	1	0	1	0	4	0	0	0	0	0	0	0	3	1
12:45:00	70	2	94	3	180	7	1	0	1	0	4	0	0	0	0	0	0	0	3	0
13:00:00	71	1	98	4	187	7	1	0	1	0	6	2	0	0	0	0	0	0	3	0
13:15:00	71	0	101	3	192	5	1	0	1	0	6	0	0	0	0	0	0	0	3	0
13:30:00	76	5	106	5	201	9	1	0	1	0	6	0	0	0	0	0	0	0	3	0
13:45:00	80	4	109	3	215	14	1	0	1	0	6	0	0	0	0	0	0	0	4	1
14:00:00	83	3	114	5	223	8	1	0	1	0	6	0	0	0	0	0	0	0	4	0
14:00:05	83	0	114	0	223	0	1	0	1	0	6	0	0	0	0	0	0	0	4	0
15:00:00	84	1	115	1	223	0	1	0	1	0	6	0	0	0	0	0	0	0	5	1
15:15:00	88	4	120	5	232	9	1	0	1	0	6	0	0	0	0	0	0	0	10	5
15:30:00	94	6	127	7	237	5	1	0	1	0	6	0	0	0	0	0	0	0	10	0
15:45:00	101	7	131	4	246	9	1	0	1	0	6	0	0	0	0	0	0	0	10	0
16:00:00	107	6	134	3	258	12	1	0	1	0	8	2	0	0	0	0	0	0	10	0
16:15:00	115	8	138	4	262	4	1	0	1	0	8	0	0	0	0	0	0	0	10	0
16:30:00	117	2	146	8	267	5	1	0	1	0	9	1	0	0	0	0	0	0	10	0
16:45:00	122	5	149	3	272	5	2	1	1	0	10	1	0	0	0	0	0	0	10	0
17:00:00	125	3	151	2	277	5	2	0	1	0	10	0	0	0	0	0	0	0	10	0
17:15:00	130	5	155	4	282	5	2	0	1	0	11	1	0	0	0	0	0	0	10	0
17:30:00	137	7	160	5	291	9	2	0	1	0	11	0	0	0	0	0	0	0	10	0
17:45:00	140	3	165	5	294	3	2	0	1	0	11	0	0	0	0	0	0	0	10	0
18:00:00	145	5	167	2	303	9	2	0	1	0	11	0	0	0	0	0	0	0	10	0
18:00:10	145	0	167	0	303	0	2	0	1	0	11	0	0	0	0	0	0	0	10	0

MG8 ENG

Count Date: 7-Mar-2013 Site #: 0000305941

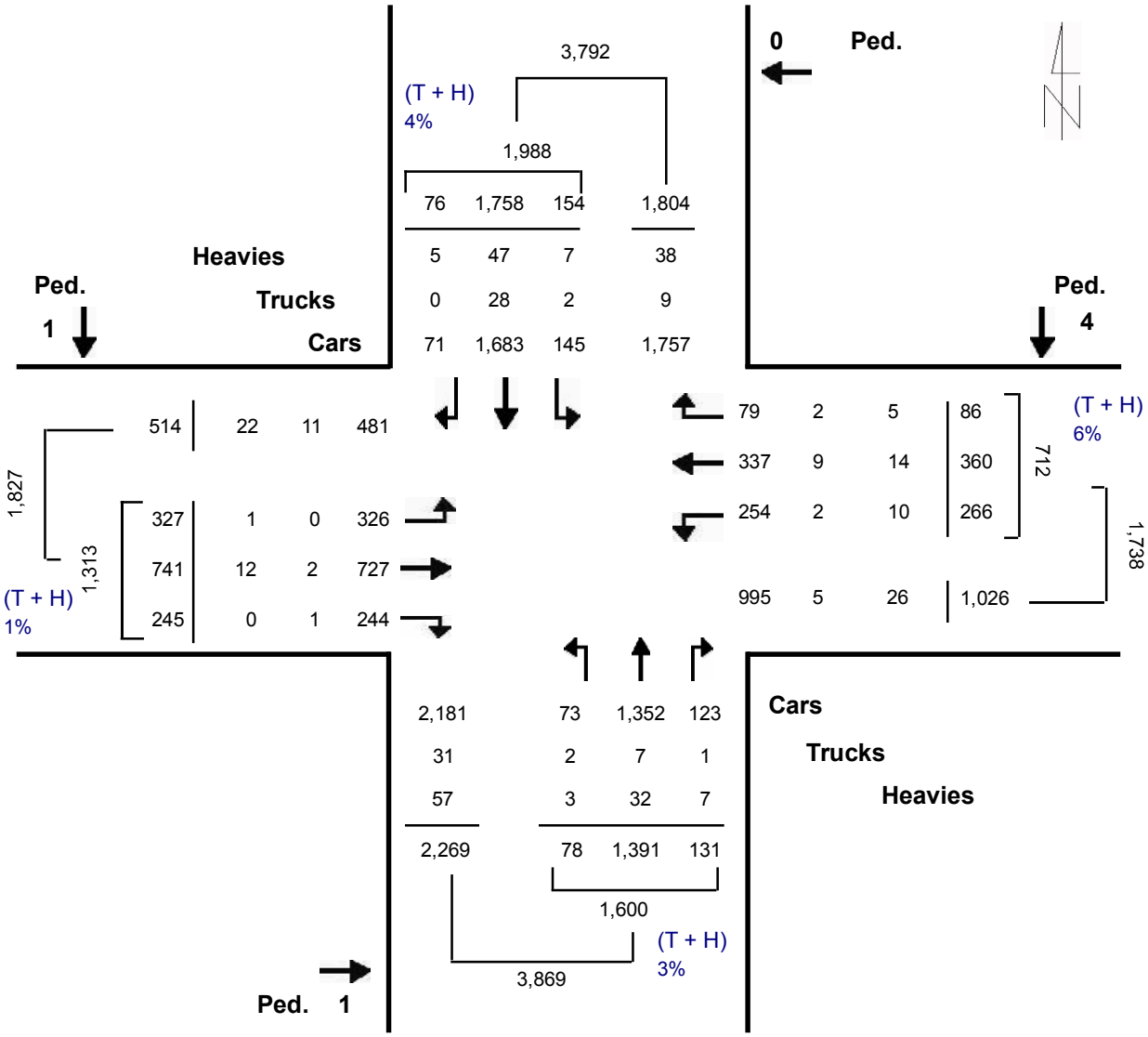
Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Cyclists - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	20	20	384	367	2	2	0	0	6	6	0	0	0	0	0	0	0	0	0	0
7:30:00	34	14	813	429	9	7	0	0	14	8	0	0	0	0	0	0	0	0	1	1
7:45:00	39	5	1253	440	26	17	0	0	29	15	0	0	0	0	0	0	0	0	2	1
8:00:00	41	2	1685	432	54	28	2	2	39	10	1	1	0	0	0	0	0	0	2	0
8:15:00	51	10	2106	421	60	6	2	0	51	12	1	0	0	0	0	0	0	0	2	0
8:30:00	61	10	2500	394	68	8	3	1	62	11	1	0	0	0	0	0	0	0	3	1
8:45:00	76	15	2915	415	78	10	3	0	72	10	1	0	1	1	0	0	0	0	3	0
9:00:00	91	15	3268	353	85	7	3	0	87	15	1	0	1	0	0	0	0	0	4	1
9:00:05	91	0	3269	1	86	1	3	0	87	0	1	0	1	0	0	0	0	0	4	0
11:00:00	91	0	3269	0	86	0	3	0	87	0	1	0	1	0	0	0	0	0	4	0
11:15:00	96	5	3415	146	87	1	4	1	93	6	1	0	1	0	0	0	0	0	4	0
11:30:00	98	2	3582	167	91	4	5	1	95	2	1	0	1	0	0	0	0	0	4	0
11:45:00	99	1	3752	170	95	4	5	0	105	10	2	1	1	0	0	0	0	0	4	0
12:00:00	102	3	3926	174	97	2	5	0	111	6	4	2	1	0	0	0	0	0	4	0
12:15:00	105	3	4076	150	99	2	5	0	113	2	4	0	1	0	0	0	0	0	4	0
12:30:00	108	3	4227	151	102	3	6	1	118	5	4	0	1	0	0	0	0	0	5	1
12:45:00	111	3	4360	133	105	3	6	0	122	4	5	1	1	0	0	0	0	0	5	0
13:00:00	114	3	4490	130	106	1	6	0	127	5	5	0	1	0	0	0	0	0	5	0
13:15:00	118	4	4640	150	107	1	7	1	130	3	5	0	1	0	0	0	0	0	5	0
13:30:00	119	1	4802	162	110	3	7	0	134	4	5	0	1	0	0	0	0	0	5	0
13:45:00	126	7	4945	143	113	3	7	0	141	7	5	0	1	0	0	0	0	0	6	1
14:00:00	129	3	5129	184	115	2	7	0	146	5	5	0	1	0	0	0	0	0	6	0
14:00:05	129	0	5129	0	115	0	7	0	147	1	5	0	1	0	0	0	0	0	6	0
15:00:00	129	0	5130	1	115	0	7	0	147	0	5	0	1	0	0	0	0	0	6	0
15:15:00	133	4	5280	150	116	1	7	0	159	12	5	0	1	0	0	0	0	0	6	0
15:30:00	145	12	5452	172	120	4	7	0	170	11	6	1	1	0	0	0	0	0	6	0
15:45:00	146	1	5646	194	130	10	7	0	178	8	6	0	1	0	0	0	0	0	6	0
16:00:00	153	7	5827	181	132	2	9	2	193	15	6	0	1	0	0	0	0	0	6	0
16:15:00	158	5	5987	160	135	3	9	0	197	4	6	0	1	0	0	0	0	0	6	0
16:30:00	158	0	6139	152	138	3	9	0	200	3	6	0	1	0	0	0	0	0	6	0
16:45:00	159	1	6309	170	140	2	9	0	205	5	6	0	1	0	0	0	0	0	6	0
17:00:00	163	4	6531	222	143	3	9	0	212	7	6	0	1	0	0	0	0	0	6	0
17:15:00	167	4	6697	166	150	7	9	0	216	4	6	0	1	0	0	0	0	0	7	1
17:30:00	171	4	6914	217	160	10	9	0	221	5	6	0	1	0	0	0	0	0	7	0
17:45:00	175	4	7095	181	167	7	9	0	223	2	6	0	1	0	0	0	0	0	7	0
18:00:00	177	2	7262	167	169	2	9	0	225	2	6	0	1	0	0	0	0	0	7	0
18:00:10	177	0	7263	1	169	0	9	0	225	0	6	0	1	0	0	0	0	0	7	0

AM Peak Hour Diagram

ERIN MILLS PY @ THOMAS STREET

Mississauga

Intersection ID:INT_12678 **PK HR End: 8:30** **Day: Tuesday** **Date:12-Nov-2013**

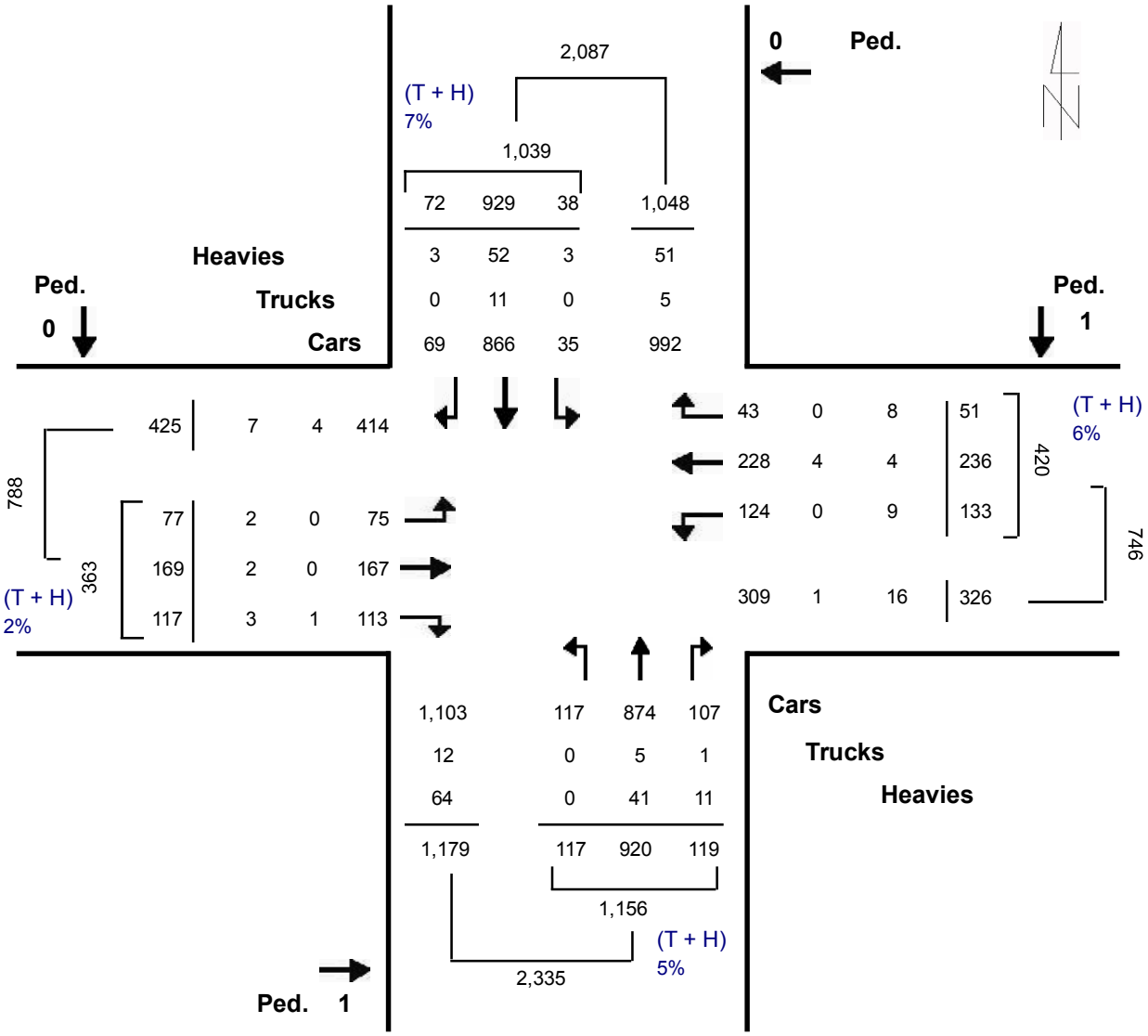


MD Peak Hour Diagram

ERIN MILLS PY @ THOMAS STREET

Mississauga

Intersection ID:INT_12678 **PK HR End: 13:00** **Day: Tuesday** **Date:12-Nov-2013**

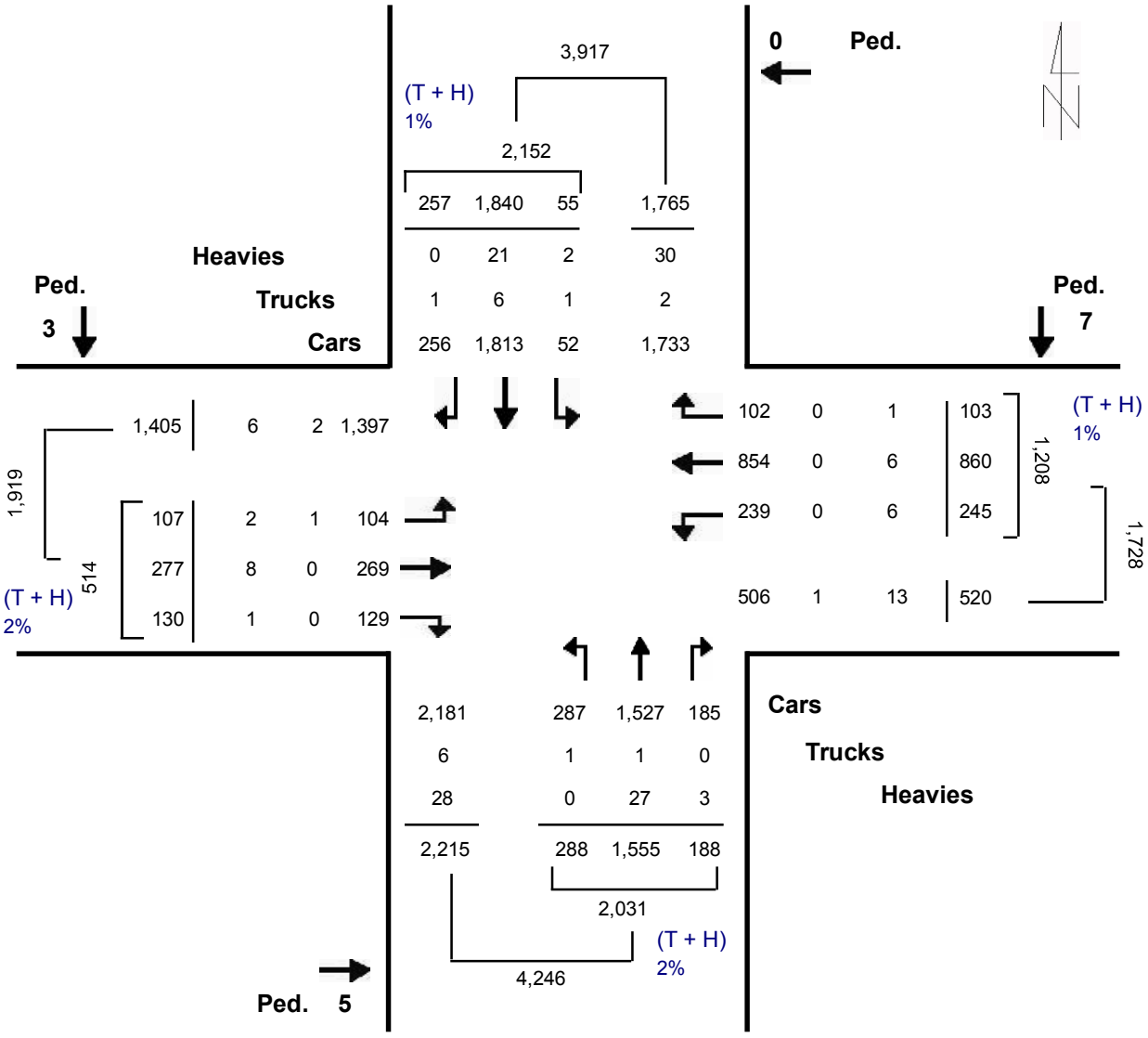


PM Peak Hour Diagram

ERIN MILLS PY @ THOMAS STREET

Mississauga

Intersection ID:INT_12678 **PK HR End: 18:00** **Day: Tuesday** **Date:12-Nov-2013**

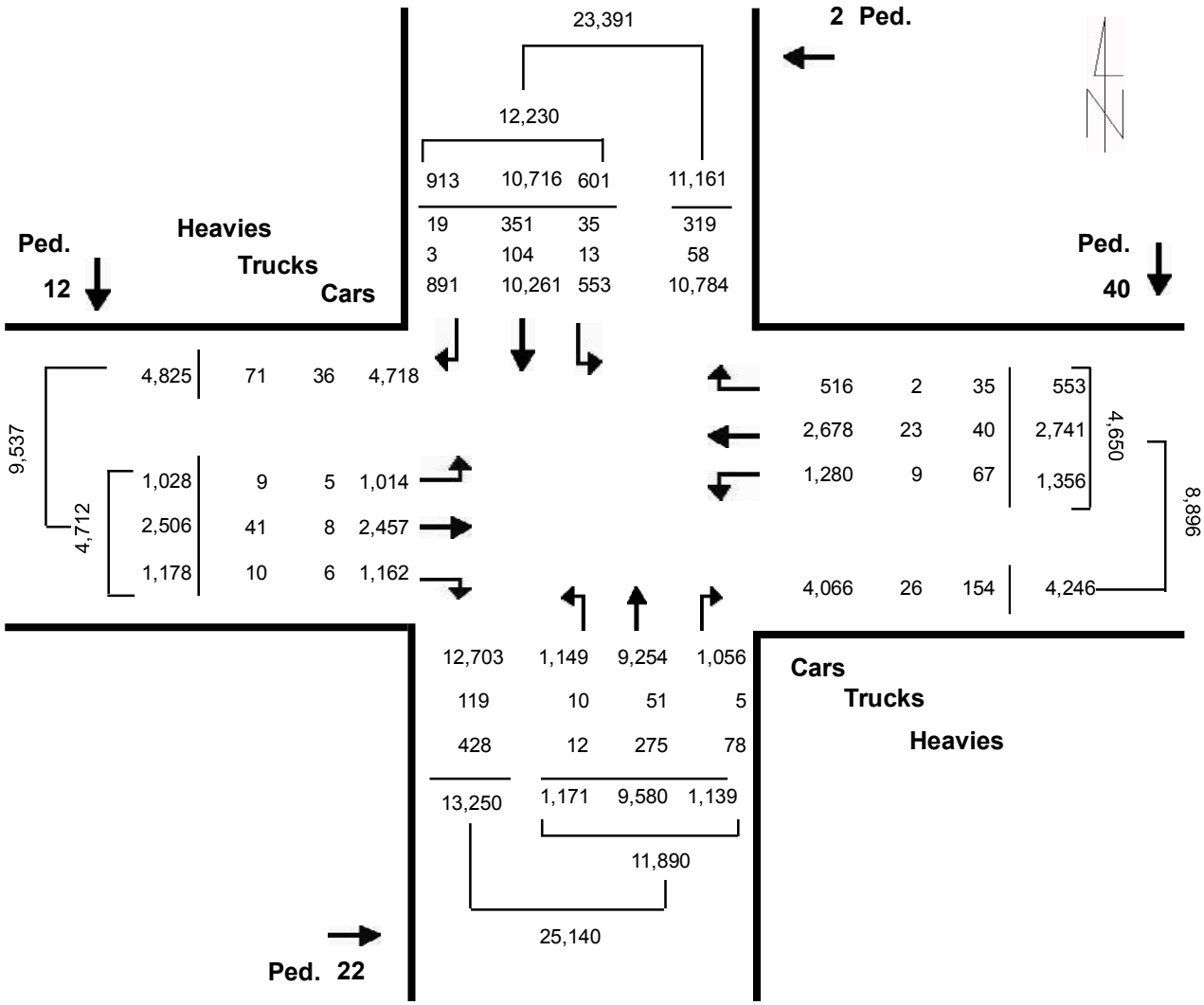


COUNT TOTAL

ERIN MILLS PY @ THOMAS STREET

Mississauga

Intersection ID:INT_12678 **Date: 12-Nov-2013**



Horizon Data Services - Traffic Signal Warrants

Municipality: Mississauga
Intersection: ERIN MILLS PY @ THOMAS STREET
Major Road: THOMAS STREET
Direction:
Minor Road: ERIN MILLS PY

Date of Count: Nov 12, 2013
Flow Condition: Restricted
No. of Lanes: 2 or more
Cross or T: Cross
No. of Collisions: 0

Warrant 1 - Minimum Vehicular Volume

A - All Approaches

	Min. Req.	Min. Req.	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00	Total
Volume	900	720	4451	4620	2259	2619	2496	3709	4318	5227	29699
Warrant %	100	80	100	100	100	100	100	100	100	100	800

Controlling Sectional % **100%**

B - Minor Street Both Approaches

	Min. Req.	Min. Req.	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00	Total
Volume	170	136	1530	1282	482	615	529	787	917	1489	7631
Warrant %	100	80	100	100	100	100	100	100	100	100	800

Controlling Sectional % **100%**

WARRANT 1 HAS BEEN SATISFIED **100%**

Warrant 2 - Delay To Cross Traffic

A - Major Street Both Approaches

	Min. Req.	Min. Req.	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00	Total
Volume	900	720	2921	3338	1777	2004	1967	2922	3401	3738	22068
Warrant %	100	80	100	100	100	100	100	100	100	100	800

Controlling Sectional % **100%**

B - Traffic Crossing Major Street

	Min. Req.	Min. Req.	8:00	9:00	12:00	13:00	14:00	16:00	17:00	18:00	Total
Volume	75	60	1292	1063	330	447	359	693	817	1361	6362
Warrant %	100	80	100	100	100	100	100	100	100	100	800

Controlling Sectional % **100%**

WARRANT 2 HAS BEEN SATISFIED **100%**

Warrant 3 - Accident Experience

A Reportable accident within a 12 month period averaged over 36 consecutive months susceptible to correction by a traffic signal was **0**

Based on the minimum warrant value of 5 this section has been satisfied **0%**

B Adequate trial of less restrictive remedies requirement was satisfied **100%**

C Either Warrant #1 or #2 being satisfied by at least 80% was satisfied **100%**

WARRANT 3 HAS BEEN SATISFIED **0%**

Warrant 4 - Combination Warrant

Warrant 1 satisfied 80% or more **100%**

Warrant 2 satisfied 80% or more **100%**

Warrant 3 satisfied 80% or more **0%**

WARRANT 4 HAS BEEN SATISFIED **100%**

CONCLUSION: TRAFFIC SIGNALS ARE WARRANTED

Erin Mills Parkway and Thomas Street

Municipality:	Region of Peel	Major Road Runs:	North/South
Major Road:	Erin Mills Parkway	Count Station:	00107009
Minor Road:	Thomas Street	Date:	12-Nov-13

Period Ending	North Approach									
	CAR			TRUCK			HEAVY			PED
	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	CROSS
7:15	33	291	7	1	2	0	0	6	1	0
7:30	38	326	7	0	3	0	1	15	0	0
7:45	24	368	16	0	13	0	0	13	0	0
8:00	69	460	16	2	3	0	2	13	2	0
8:15	30	400	17	0	8	0	2	11	0	0
8:30	22	455	22	0	4	0	3	10	3	0
8:45	23	393	11	0	5	0	0	17	0	0
9:00	21	381	13	1	8	1	1	13	0	0
11:15	8	190	15	0	4	0	0	24	1	0
11:30	9	163	16	0	2	0	1	19	1	0
11:45	10	258	17	1	3	0	1	5	1	0
12:00	10	189	23	1	8	0	1	7	0	0
12:15	12	231	23	0	4	0	0	14	1	0
12:30	5	228	18	0	4	0	2	9	2	0
12:45	9	216	13	0	2	0	0	13	0	0
13:00	9	191	15	0	1	0	1	16	0	0
13:15	17	239	20	1	1	0	2	13	0	0
13:30	8	197	18	0	1	0	3	14	0	0
13:45	9	211	17	0	1	0	0	15	1	0
14:00	6	185	21	1	0	0	1	11	0	1
15:15	12	279	26	0	3	0	2	12	1	0
15:30	16	321	32	0	2	0	5	8	3	1
15:45	15	313	40	0	4	0	1	11	0	0
16:00	27	396	35	0	1	0	3	9	0	0
16:15	12	315	36	0	2	0	0	4	2	0
16:30	25	400	43	1	5	1	0	10	0	0
16:45	15	425	54	3	3	0	0	8	0	0
17:00	7	427	44	0	1	0	1	10	0	0
17:15	16	455	70	0	0	0	2	9	0	0
17:30	10	458	54	1	2	0	0	2	0	0
17:45	14	467	69	0	4	0	0	4	0	0
18:00	12	433	63	0	0	1	0	6	0	0

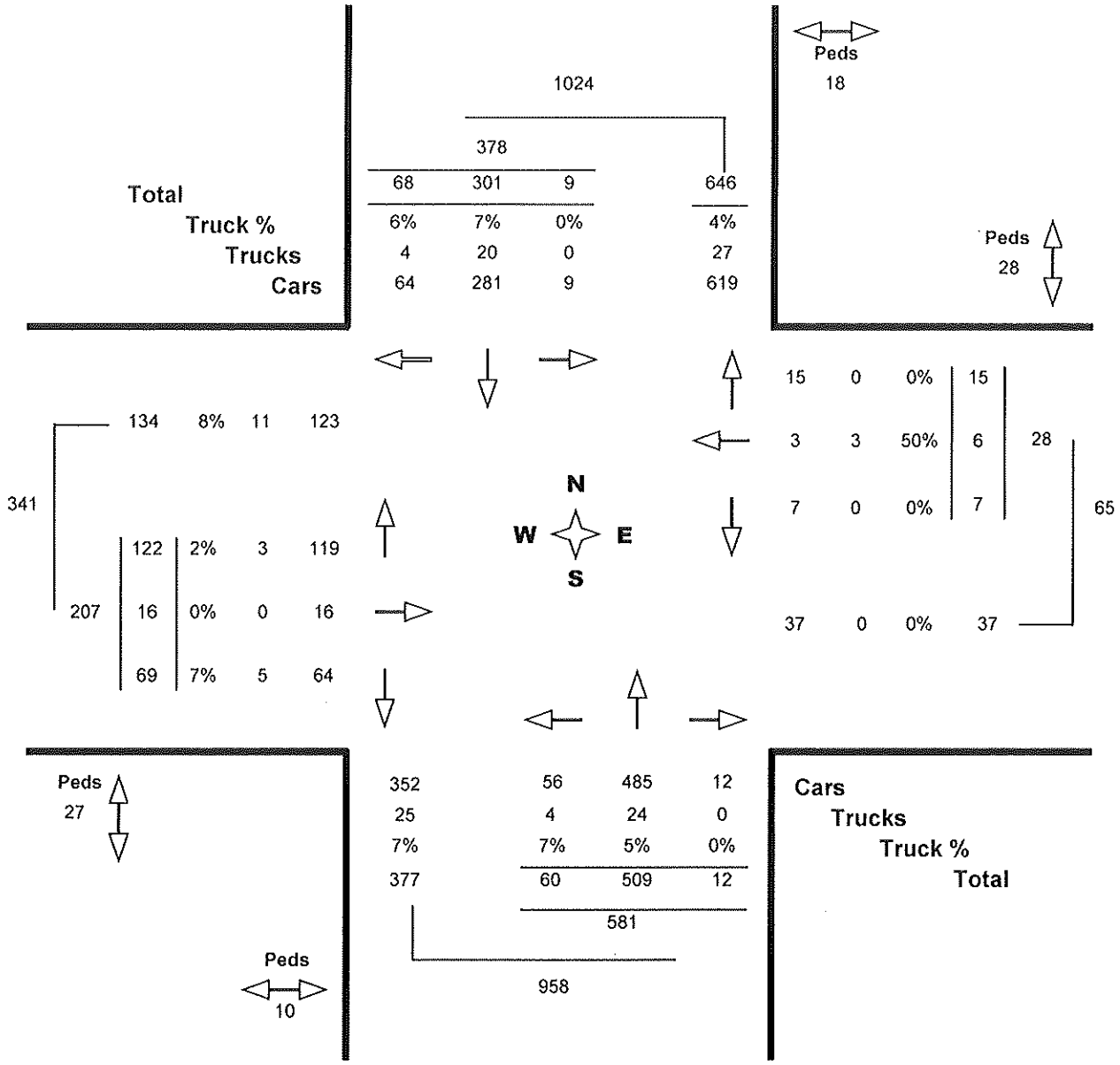
East Approach									
CAR			TRUCK			HEAVY			PED
LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	CROSS
34	36	14	1	1	0	2	1	0	1
35	74	18	0	0	0	1	2	0	0
54	95	11	1	0	0	2	7	1	0
79	105	30	0	1	1	3	2	3	1
76	82	28	0	3	0	2	4	0	2
45	55	10	1	5	1	3	1	1	1
32	37	19	0	3	0	1	1	2	0
40	27	9	1	1	0	2	0	0	0
20	41	17	0	0	0	1	0	1	0
34	52	8	0	0	0	3	1	1	2
20	25	5	0	0	0	3	0	0	2
26	52	8	0	0	0	2	0	0	3
28	49	9	0	0	0	1	0	2	0
35	57	10	0	2	0	1	3	2	0
28	79	18	0	1	0	3	1	3	1
33	43	6	0	1	0	4	0	1	0
26	32	8	0	1	0	3	0	1	0
35	53	12	0	1	0	3	1	0	0
28	31	12	1	1	0	2	0	2	0
18	55	8	0	1	0	2	0	0	1
52	96	15	0	1	0	4	0	1	2
18	62	22	0	0	0	2	2	1	4
53	121	11	0	0	0	4	2	4	5
27	53	9	0	0	0	2	0	2	3
43	75	27	1	0	0	3	1	1	2
34	67	16	0	0	0	1	1	3	0
37	98	25	3	0	0	1	1	2	2
51	172	29	0	0	0	0	3	0	1
38	126	18	0	0	0	3	0	0	2
83	303	36	0	0	0	0	4	0	2
62	228	26	0	0	0	3	2	1	3
56	197	22	0	0	0	0	0	0	0

South Approach									
CAR			TRUCK			HEAVY			PED
LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	CROSS
12	215	26	0	0	0	0	9	1	0
17	284	44	0	1	0	2	7	1	0
10	270	27	0	3	1	0	9	2	1
16	368	37	1	4	0	1	9	3	0
20	302	32	1	0	0	2	8	2	0
27	412	27	0	0	0	0	6	0	0
28	337	26	1	2	0	1	4	5	0
17	344	27	1	0	0	2	15	3	0
15	134	35	0	4	0	1	7	3	0
21	234	17	1	2	0	0	9	3	0
19	181	34	1	3	0	0	7	3	0
19	194	34	0	0	0	0	11	1	0
23	229	23	0	1	1	0	10	6	1
29	203	31	0	2	0	0	8	0	0
37	220	31	0	1	0	0	9	3	0
28	222	22	0	1	0	0	14	2	0
36	227	28	1	2	0	0	7	3	0
21	201	27	1	1	0	0	4	1	0
25	240	23	1	2	1	0	7	4	0
25	216	32	0	4	0	0	10	3	0
34	278	34	0	3	1	0	10	3	8
53	347	47	0	1	0	0	11	3	0
44	289	24	0	2	0	0	8	3	1
50	330	36	0	4	0	1	17	6	3
59	319	33	0	4	0	1	12	0	0
51	371	37	0	1	0	1	5	8	2
68	396	38	0	1	0	0	9	1	0
58	364	39	0	1	1	0	6	2	1
72	403	31	1	0	0	0	11	0	2
70	363	41	0	0	0	0	6	1	1
72	373	68	0	0	0	0	3	1	0
73	388	45	0	1	0	0	7	1	2

West Approach										Vehicle Summary	
CAR			TRUCK			HEAVY			PED		
LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	CROSS	15	60
28	136	38	0	1	0	0	3	0	0	900	
53	198	48	0	1	0	0	5	0	0	1181	
80	230	35	0	0	0	0	2	0	0	1275	
71	180	39	0	2	1	0	4	0	1	1529	4885
82	166	109	0	0	0	0	2	0	0	1391	5376
93	151	61	0	0	0	1	4	0	0	1424	5619
73	101	64	0	0	0	2	1	0	0	1189	5533
53	129	67	1	0	1	0	1	0	2	1182	5186
6	41	19	0	1	1	1	1	1	0	592	
15	29	26	0	0	0	0	0	1	0	670	
13	39	25	0	0	0	0	1	1	0	678	
14	39	27	1	0	0	0	1	0	2	673	2613
22	39	30	0	0	1	2	0	0	0	762	2783
10	41	22	0	0	0	0	0	2	0	726	2839
23	41	31	0	0	0	0	0	1	0	784	2945
20	46	30	0	0	0	0	2	0	0	708	2980
16	43	30	0	0	0	0	0	0	0	757	2975
20	45	26	0	0	0	0	0	0	0	693	2942
16	39	20	0	0	0	0	0	0	0	709	2867
12	44	30	0	0	1	0	0	1	0	689	2848
23	45	22	0	1	1	0	0	0	1	970	
15	45	28	0	0	0	0	1	0	1	1051	
26	50	28	0	1	0	0	4	0	0	1064	
25	50	31	1	0	0	0	1	1	1	1124	4209
22	41	24	0	0	0	0	0	1	1	1041	4280
23	70	38	0	0	0	0	0	0	0	1214	4443
30	61	46	1	0	0	1	0	0	0	1329	4708
26	49	39	0	1	0	0	0	0	0	1333	4917
24	58	32	1	0	0	2	2	1	1	1380	5256
27	72	33	0	0	0	0	3	0	0	1572	5614
22	56	29	0	0	0	0	0	0	0	1507	5792
31	83	35	0	0	0	0	3	0	2	1461	5920

Turning Movements Report - AM Period

Location..... QUEEN ST S @ TANNERY ST
Municipality..... Mississauga
GeoID..... 345198
Count Date..... Tuesday, 14 October, 2014 **Peak Hour.....** 07:45 AM —08:45 AM



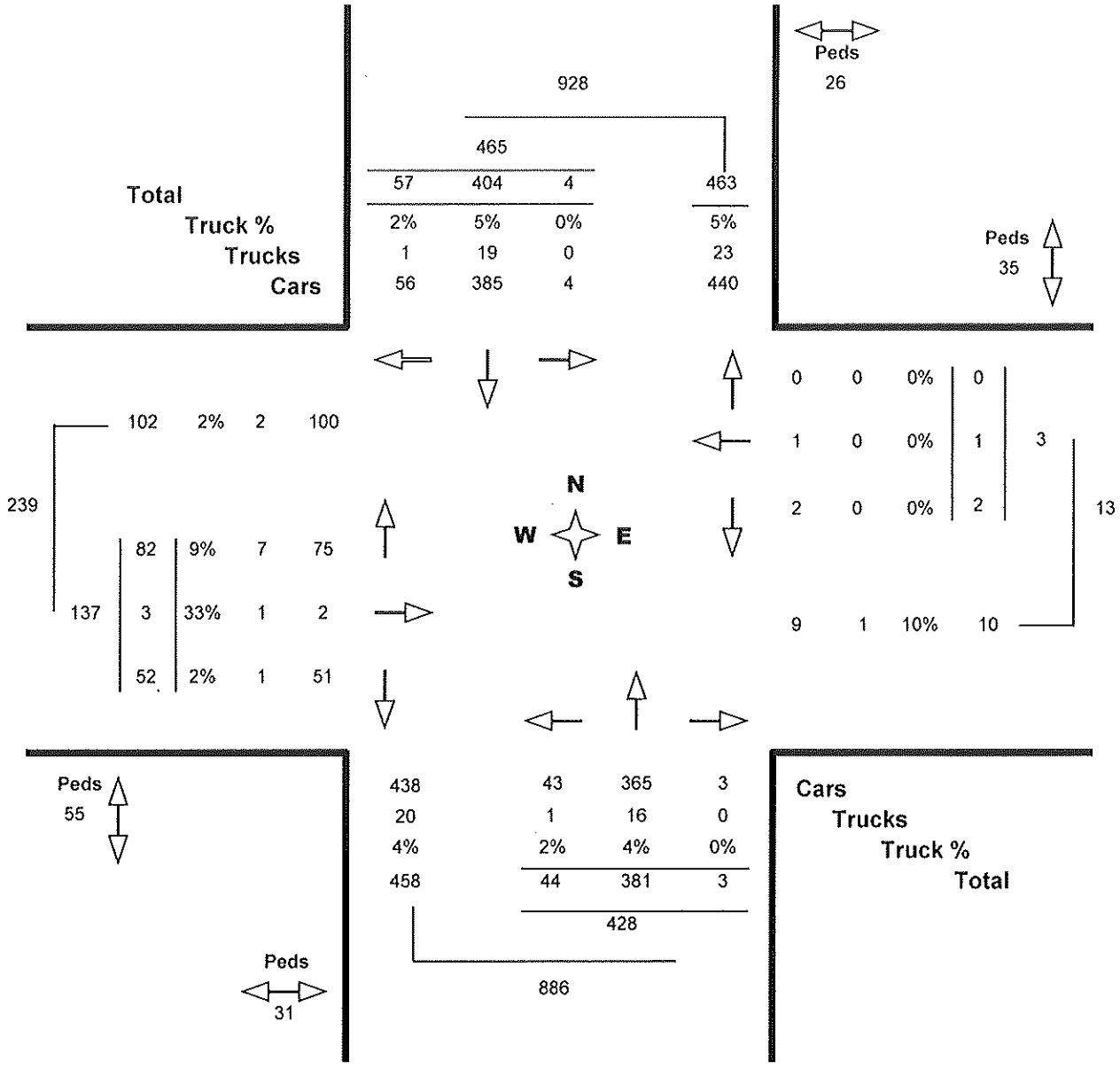
Turning Movements Report - MD Period

Location..... QUEEN ST S @ TANNERY ST

Municipality..... Mississauga

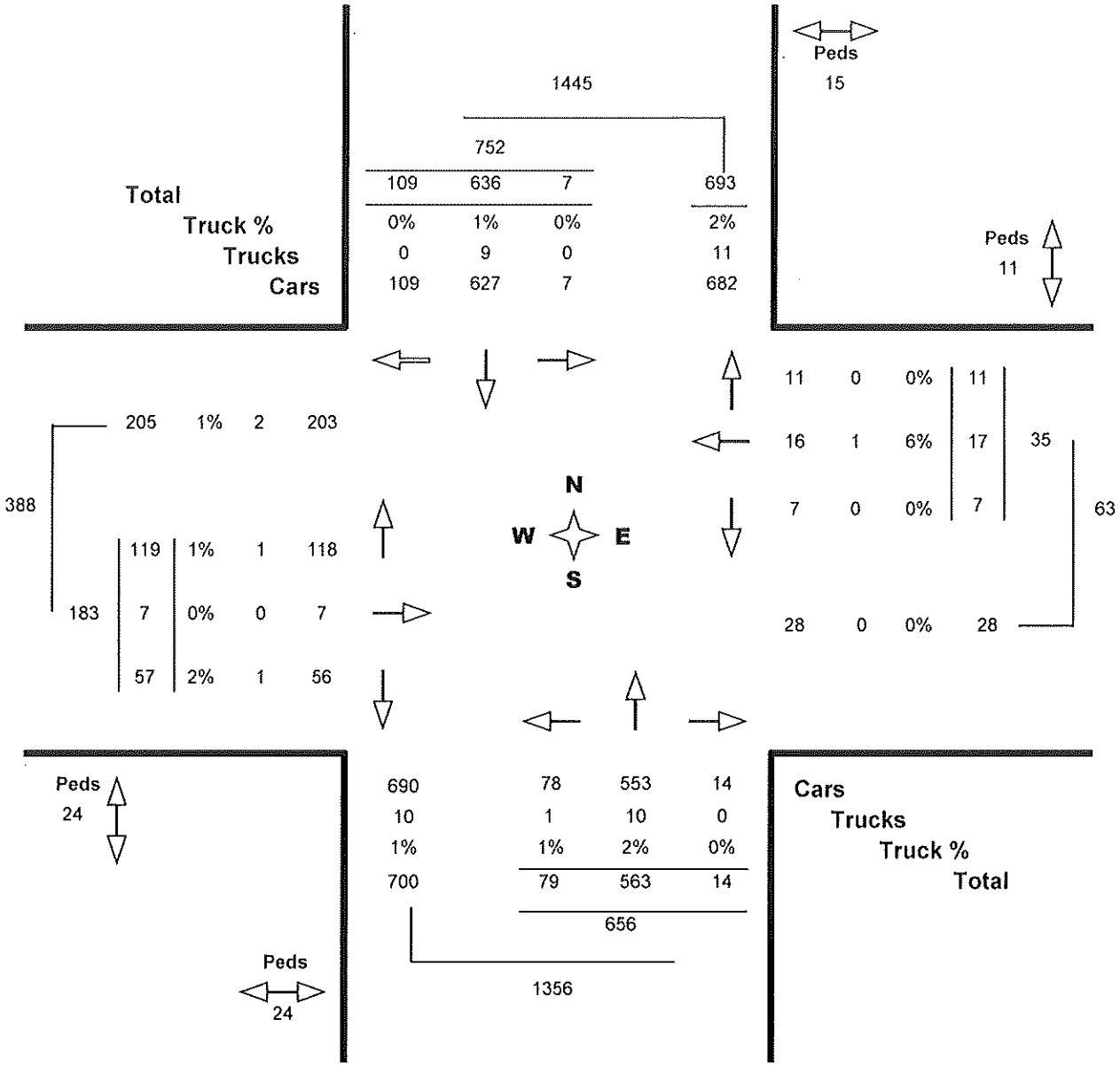
GeoID..... 345198

Count Date..... Tuesday, 14 October, 2014 **Peak Hour.....** 12:30 PM — 01:30 PM



Turning Movements Report - PM Period

Location..... QUEEN ST S @ TANNERY ST
Municipality..... Mississauga
GeoID..... 345198
Count Date..... Tuesday, 14 October, 2014 **Peak Hour.....** 05:00 PM — 06:00 PM



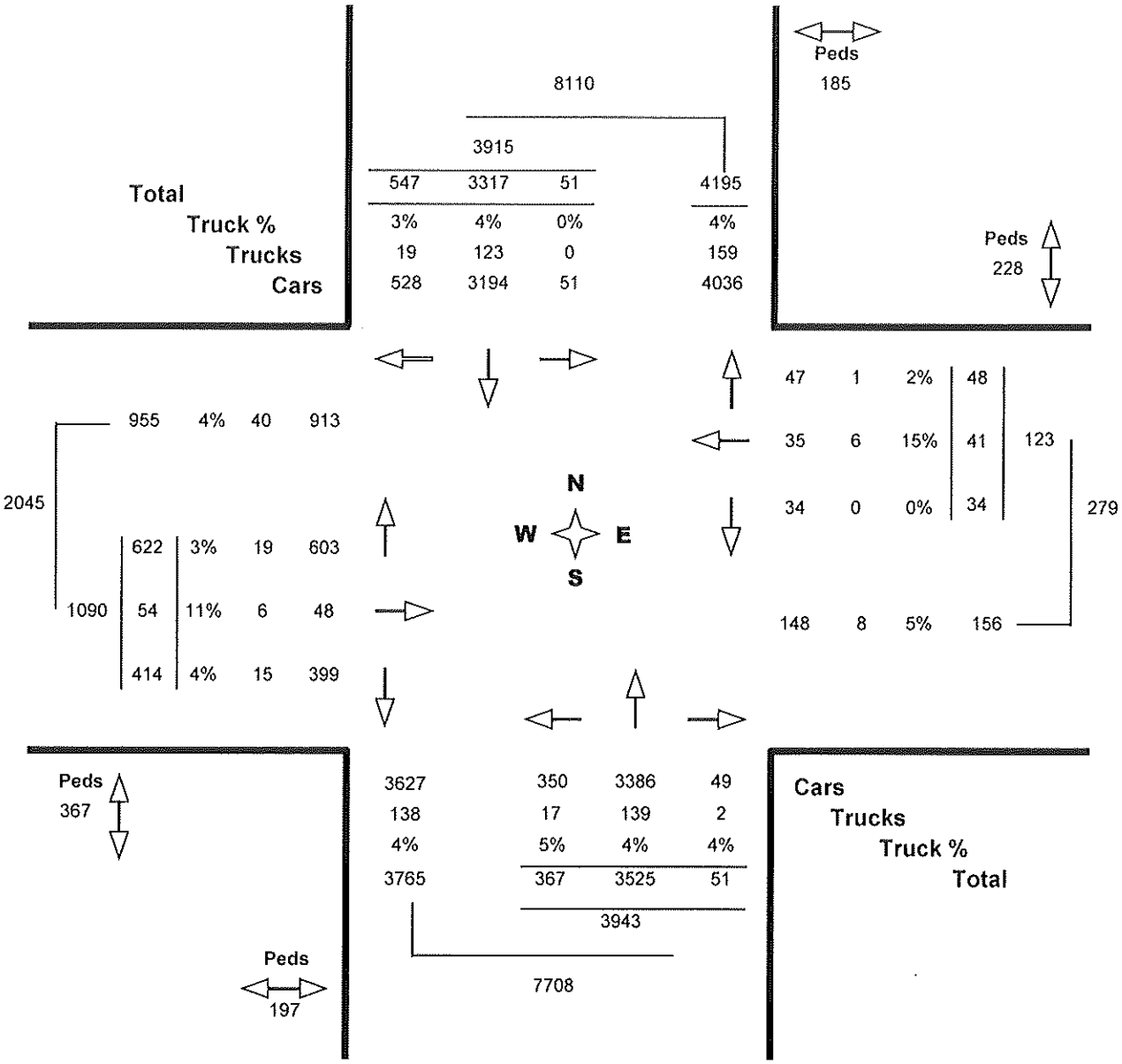
Turning Movements Count - Full Study Report

Location..... QUEEN ST S @ TANNERY ST

Municipality..... Mississauga

GeoID..... 345198

Count Date..... Tuesday, 14 October, 2014



Turning Movement Count - Details Report

Location..... QUEEN ST S @ TANNERY ST

Municipality..... Mississauga

Count Date..... Tuesday, October 14, 2014

		North Approach					South Approach					East Approach					West Approach				
Time Period		LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
07:00	07:15	0	39	10	0	49	2	56	2	0	60	0	0	1	0	1	4	3	5	0	12
07:15	07:30	1	67	17	0	85	3	60	1	0	64	2	1	1	0	4	7	2	10	0	19
07:30	07:45	0	71	13	0	84	9	80	3	0	92	2	0	0	0	2	21	3	15	0	39
07:45	08:00	0	70	31	0	101	26	120	4	0	150	2	0	3	0	5	35	3	27	0	65
08:00	08:15	1	67	17	0	85	20	134	1	0	155	1	3	2	0	6	34	2	18	0	54
08:15	08:30	4	74	15	0	93	7	137	3	0	147	1	1	3	0	5	30	5	13	0	48
08:30	08:45	4	90	5	0	99	7	118	4	0	129	3	2	7	0	12	23	6	11	0	40
08:45	09:00	1	95	9	0	105	8	139	1	0	148	3	2	6	0	11	25	6	9	0	40
11:00	11:15	0	63	9	0	72	10	108	2	0	120	0	0	0	0	0	15	1	13	0	29
11:15	11:30	0	109	15	0	124	5	93	1	0	99	0	1	0	0	1	16	1	8	0	25
11:30	11:45	3	100	15	0	118	8	92	0	0	100	0	1	0	0	1	5	0	7	0	12
11:45	12:00	6	94	14	0	114	8	105	1	0	114	1	2	4	0	7	18	2	12	0	32
12:00	12:15	4	93	17	0	114	10	104	0	0	114	4	1	2	0	7	13	1	11	0	25
12:15	12:30	2	83	19	0	104	8	92	0	0	100	0	0	2	0	2	18	0	11	0	29
12:30	12:45	0	96	13	0	109	10	90	0	0	100	0	0	0	0	0	19	2	12	0	33
12:45	13:00	1	115	17	0	133	16	86	2	0	104	0	0	0	0	0	30	1	18	0	49
13:00	13:15	1	95	14	0	110	5	106	0	0	111	0	0	0	0	0	13	0	8	0	21
13:15	13:30	2	98	13	0	113	13	99	1	0	113	2	1	0	0	3	20	0	14	0	34
13:30	13:45	3	84	17	0	104	9	101	0	0	110	1	1	1	0	3	11	0	9	0	20
13:45	14:00	0	89	11	0	100	8	99	0	0	107	0	0	0	0	0	11	0	7	0	18
15:00	15:15	3	102	19	0	124	11	89	0	0	100	0	0	1	0	1	12	1	13	0	26
15:15	15:30	1	135	19	0	155	17	125	3	0	145	2	0	0	0	2	13	0	10	0	23
15:30	15:45	1	144	10	0	155	13	125	1	0	139	0	1	1	0	2	17	0	16	0	33
15:45	16:00	0	101	23	0	124	12	110	1	0	123	0	0	0	0	0	14	0	10	0	24
16:00	16:15	0	129	16	0	145	7	112	1	0	120	0	0	2	0	2	12	1	21	0	34
16:15	16:30	3	121	19	0	143	11	116	0	0	127	0	0	0	0	0	18	1	17	0	36
16:30	16:45	1	119	17	0	137	11	108	1	0	120	1	5	0	0	6	22	3	18	0	43
16:45	17:00	2	138	24	0	164	14	158	4	0	176	2	2	1	0	5	27	3	14	0	44
17:00	17:15	1	150	26	0	177	13	135	5	0	153	0	2	3	0	5	23	0	6	0	29
17:15	17:30	3	190	23	0	216	20	162	6	0	188	1	4	3	0	8	39	2	18	0	59
17:30	17:45	1	142	32	0	175	24	129	1	0	154	2	6	1	0	9	30	3	17	0	50
17:45	18:00	2	154	28	0	184	22	137	2	0	161	4	5	4	0	13	27	2	16	0	45
Total	.....	51	3317	547	0	3915	367	3525	51	0	3943	34	41	48	0	123	622	54	414	0	1090

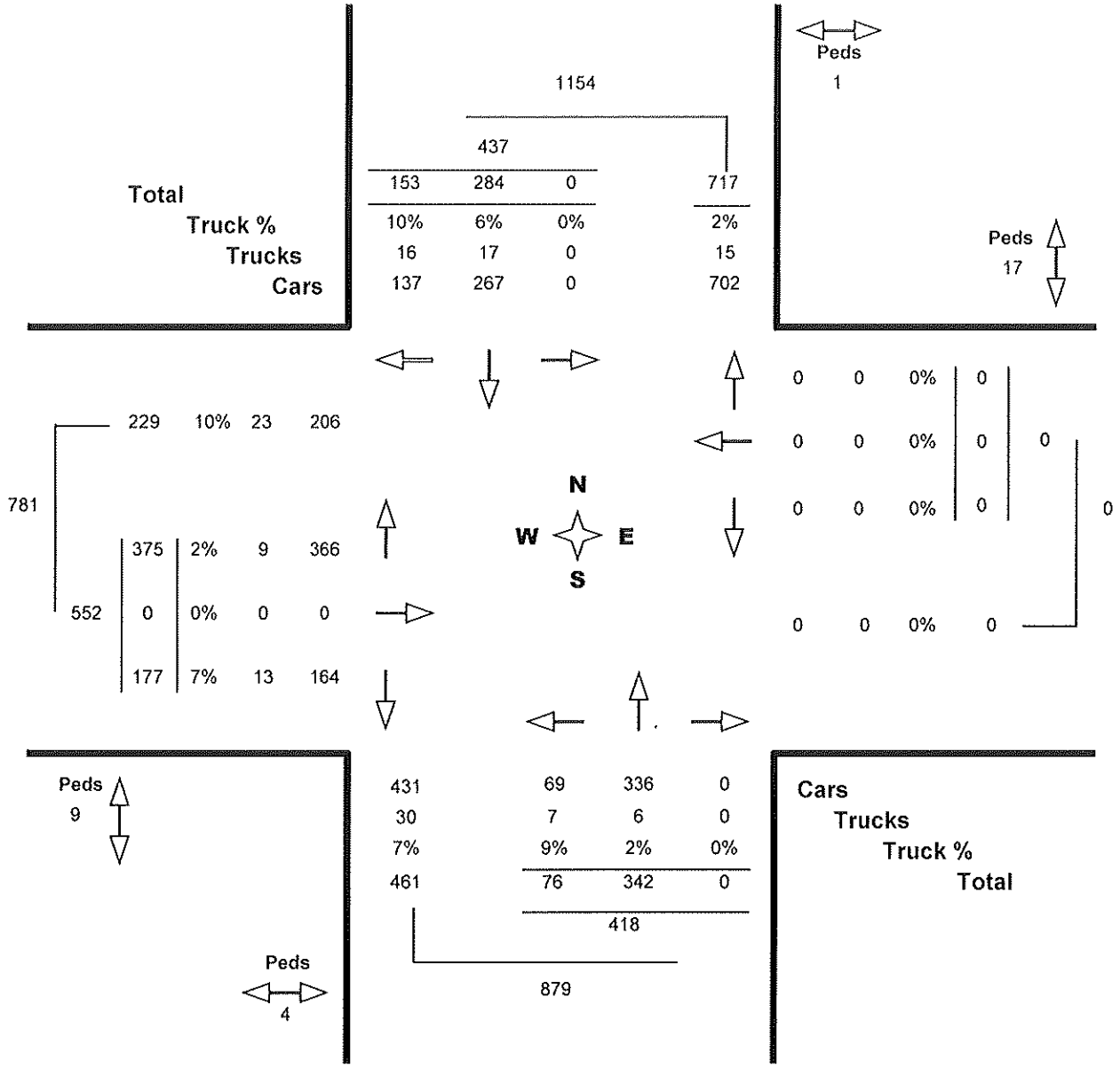
Turning Movements Report - AM Period

Location..... QUEEN ST S @ THOMAS ST

Municipality..... Mississauga

GeoID..... 345297

Count Date..... Wednesday, 18 February, 2015 **Peak Hour.....** 07:45 AM — 08:45 AM



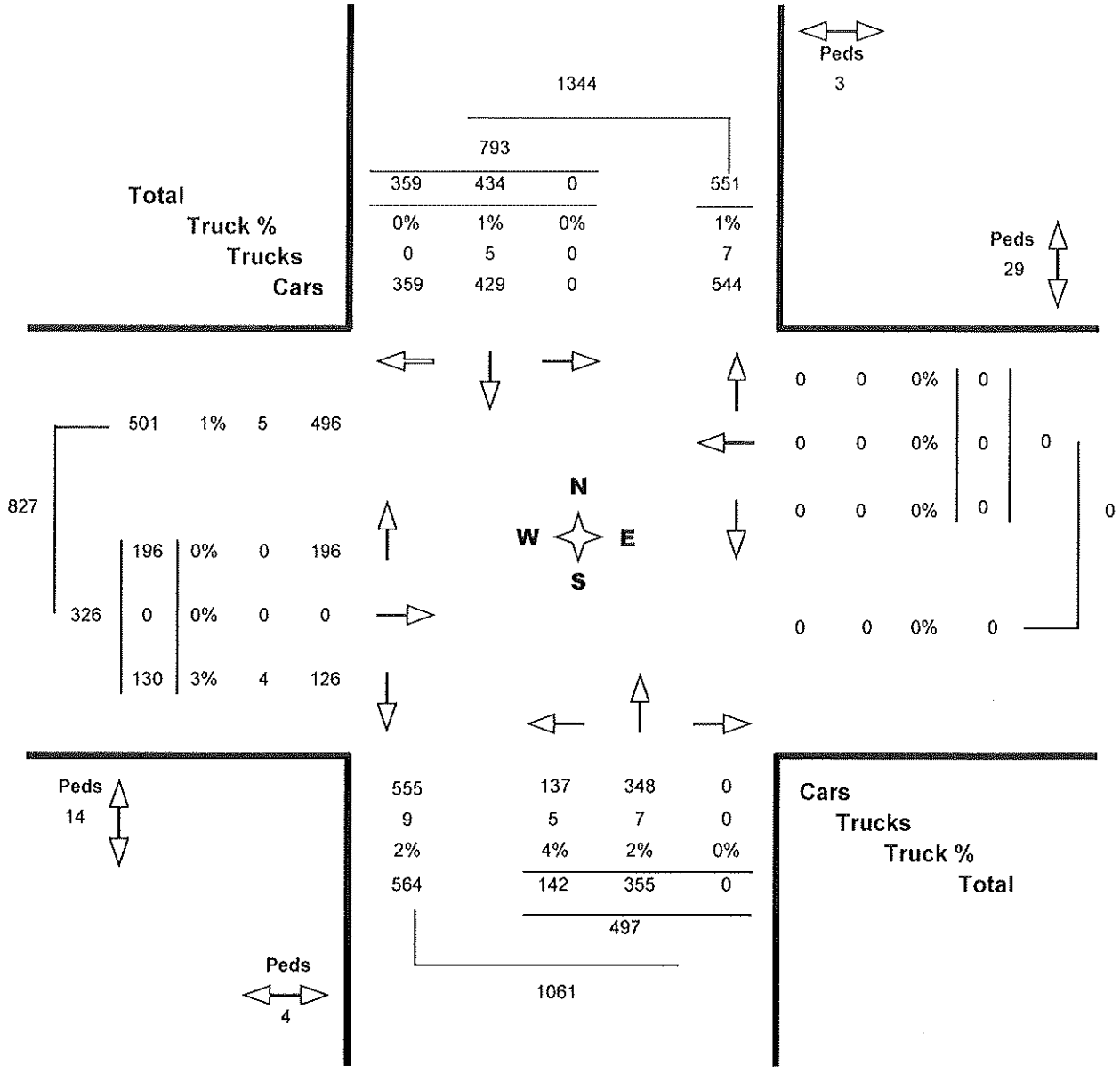
Turning Movements Report - PM Period

Location..... QUEEN ST S @ THOMAS ST

Municipality..... Mississauga

GeoID..... 345297

Count Date..... Wednesday, 18 February, 2015 **Peak Hour.....** 05:00 PM — 06:00 PM



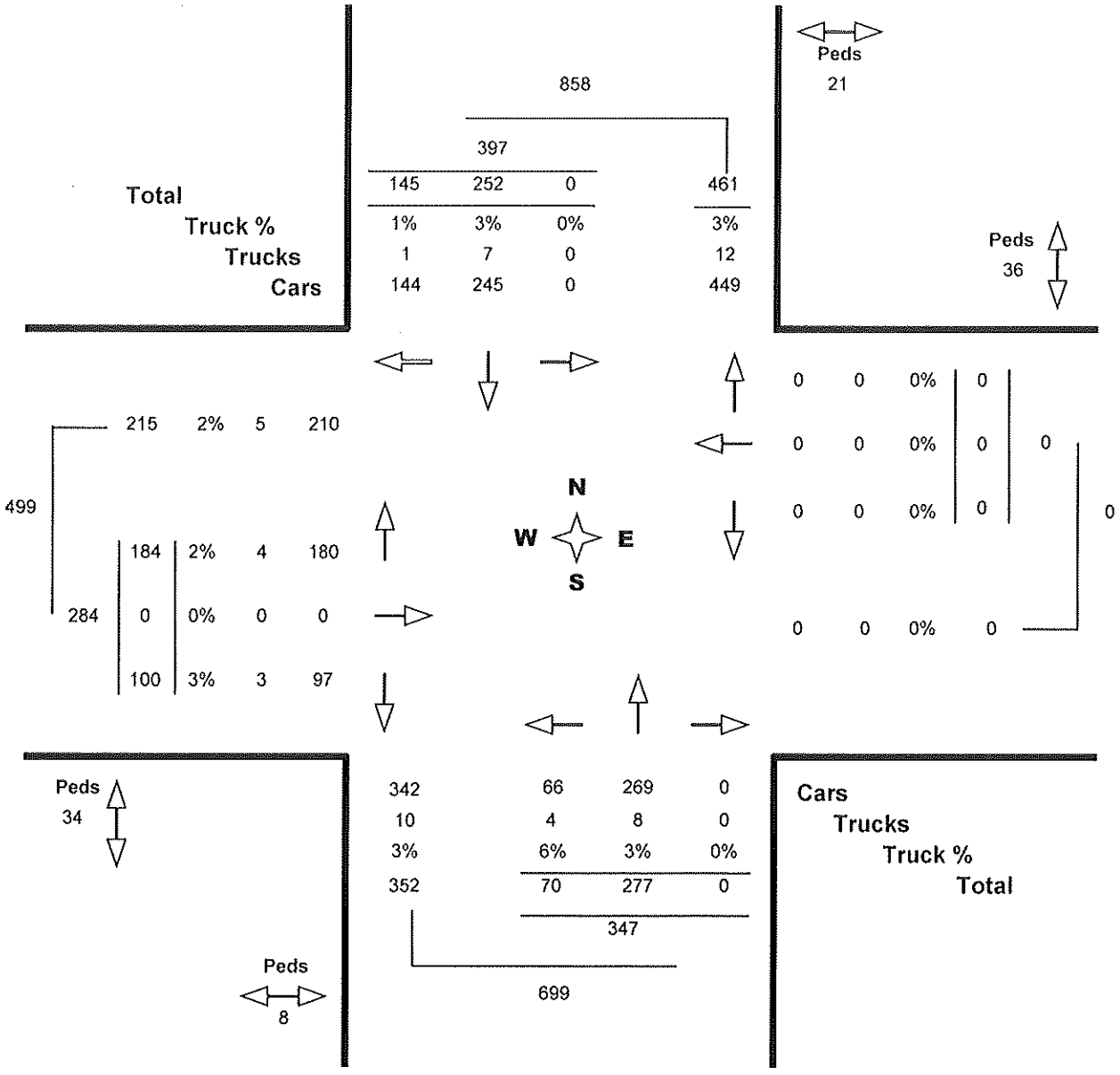
Turning Movements Report - MD Period

Location..... QUEEN ST S @ THOMAS ST

Municipality..... Mississauga

GeoID..... 345297

Count Date..... Wednesday, 18 February, 2015 **Peak Hour.....** 11:45 AM — 12:45 PM



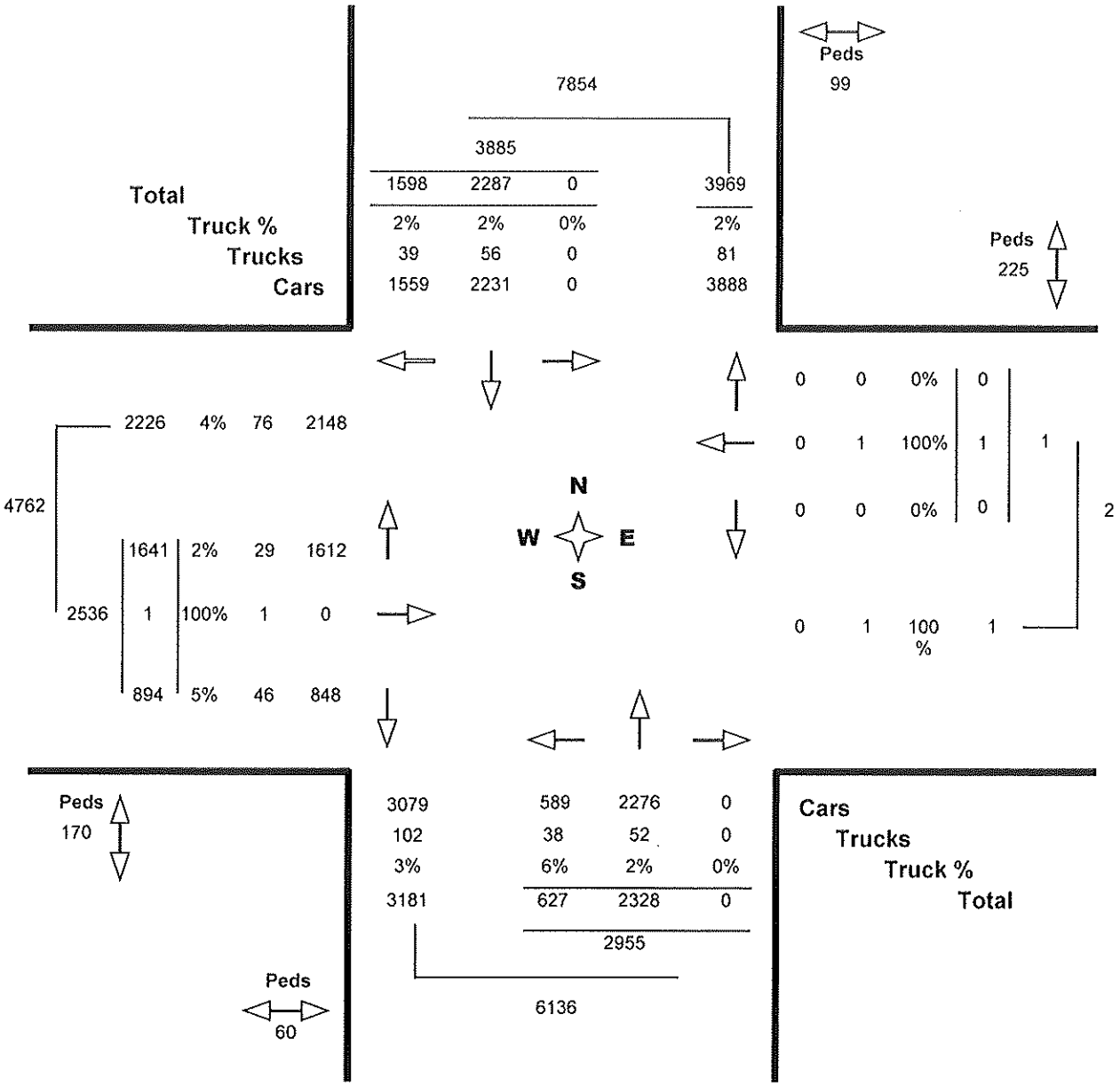
Turning Movements Count - Full Study Report

Location..... QUEEN ST S @ THOMAS ST

Municipality..... Mississauga

GeoID..... 345297

Count Date..... Wednesday, 18 February, 2015



Turning Movement Count - Details Report

Location..... QUEEN ST S @ THOMAS ST

Municipality..... Mississauga

Count Date..... Wednesday, February 18, 2015

		North Approach					South Approach					East Approach					West Approach				
Time Period		LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
07:00	07:15	0	28	29	0	57	9	33	0	0	42	0	0	0	0	0	26	0	25	0	51
07:15	07:30	0	45	51	0	96	13	62	0	0	75	0	0	0	0	0	67	0	35	0	102
07:30	07:45	0	42	67	0	109	13	76	0	0	89	0	0	0	0	0	61	0	42	0	103
07:45	08:00	0	71	46	0	117	23	80	0	0	103	0	0	0	0	0	82	0	32	0	114
08:00	08:15	0	62	36	0	98	11	89	0	0	100	0	0	0	0	0	87	0	39	0	126
08:15	08:30	0	76	41	0	117	15	101	0	0	116	0	0	0	0	0	90	0	57	0	147
08:30	08:45	0	75	30	0	105	27	72	0	0	99	0	0	0	0	0	116	0	49	0	165
08:45	09:00	0	44	27	0	71	14	73	0	0	87	0	0	0	0	0	74	0	34	0	108
11:00	11:15	0	54	36	0	90	11	60	0	0	71	0	0	0	0	0	32	0	10	0	42
11:15	11:30	0	53	24	0	77	8	48	0	0	56	0	0	0	0	0	33	0	21	0	54
11:30	11:45	0	63	38	0	101	16	39	0	0	55	0	0	0	0	0	27	0	13	0	40
11:45	12:00	0	59	32	0	91	17	82	0	0	99	0	0	0	0	0	54	0	31	0	85
12:00	12:15	0	66	49	0	115	22	64	0	0	86	0	0	0	0	0	48	0	24	0	72
12:15	12:30	0	66	32	0	98	16	64	0	0	80	0	0	0	0	0	41	0	22	0	63
12:30	12:45	0	61	32	0	93	15	67	0	0	82	0	0	0	0	0	41	0	23	0	64
12:45	13:00	0	55	42	0	97	18	80	0	0	98	0	0	0	0	0	36	0	22	0	58
13:00	13:15	0	69	45	0	114	8	67	0	0	75	0	0	0	0	0	42	0	12	0	54
13:15	13:30	0	77	43	0	120	14	72	0	0	86	0	0	0	0	0	57	0	20	0	77
13:30	13:45	0	69	38	0	107	14	57	0	0	71	0	0	0	0	0	38	0	16	0	54
13:45	14:00	0	59	40	0	99	12	59	0	0	71	0	1	0	0	1	41	0	16	0	57
15:00	15:15	0	77	48	0	125	21	72	0	0	93	0	0	0	0	0	56	0	30	0	86
15:15	15:30	0	75	42	0	117	27	60	0	0	87	0	0	0	0	0	41	0	30	0	71
15:30	15:45	0	93	56	0	149	23	89	0	0	112	0	0	0	0	0	36	0	30	0	66
15:45	16:00	0	82	63	0	145	20	97	0	0	117	0	0	0	0	0	43	0	20	0	63
16:00	16:15	0	71	54	0	125	23	80	0	0	103	0	0	0	0	0	43	0	30	0	73
16:15	16:30	0	78	64	0	142	25	74	0	0	99	0	0	0	0	0	50	1	19	0	70
16:30	16:45	0	86	55	0	141	25	75	0	0	100	0	0	0	0	0	46	0	27	0	73
16:45	17:00	0	97	79	0	176	25	81	0	0	106	0	0	0	0	0	37	0	35	0	72
17:00	17:15	0	121	78	0	199	38	73	0	0	111	0	0	0	0	0	42	0	31	0	73
17:15	17:30	0	103	88	0	191	30	101	0	0	131	0	0	0	0	0	44	0	27	0	71
17:30	17:45	0	118	108	0	226	39	105	0	0	144	0	0	0	0	0	51	0	34	0	85
17:45	18:00	0	92	85	0	177	35	76	0	0	111	0	0	0	0	0	59	0	38	0	97
Total	.....	0	2287	1598	0	3885	627	2328	0	0	2955	0	1	0	0	1	1641	1	894	0	2536

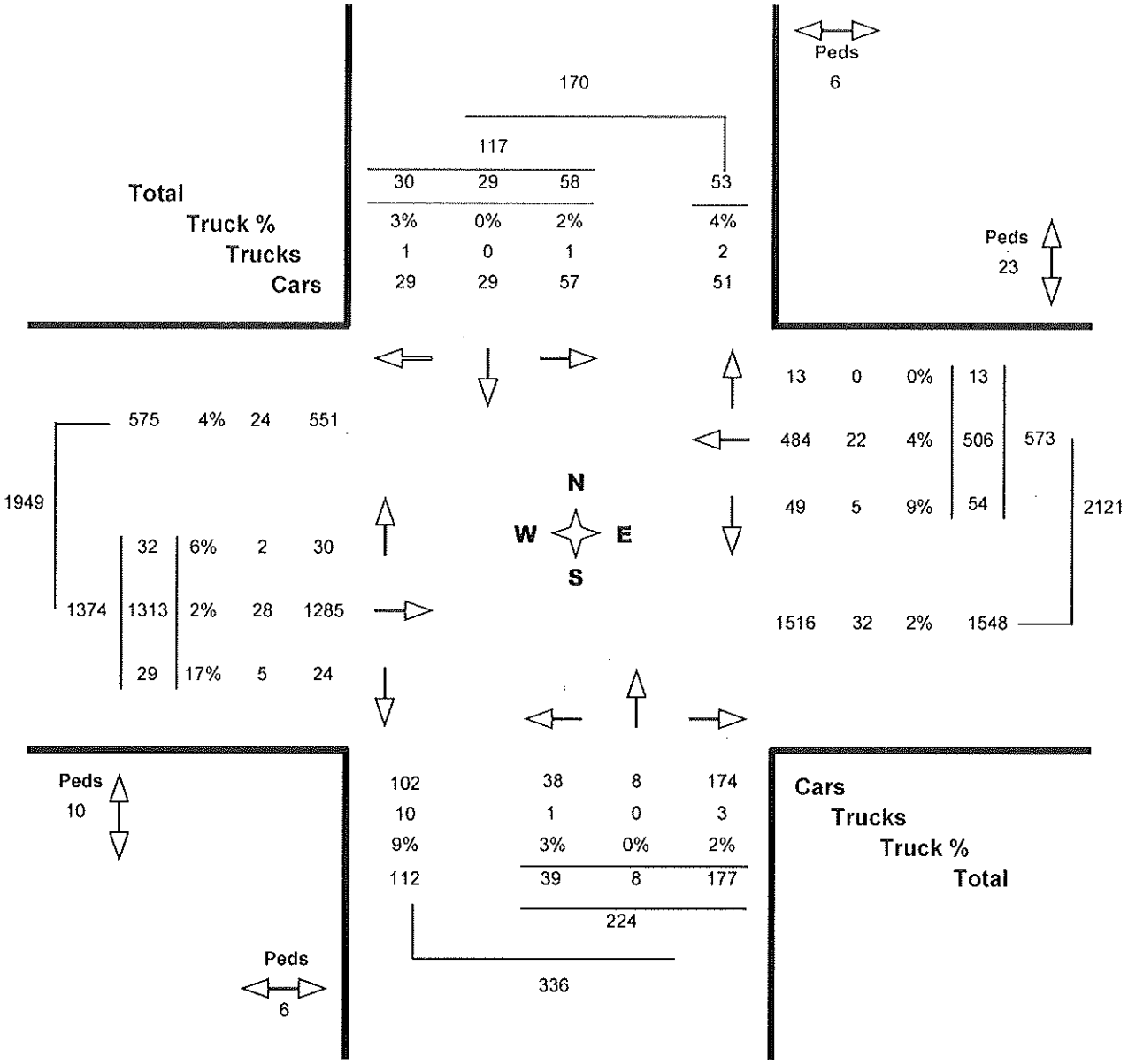
Turning Movements Report - AM Period

Location..... GAFNEY DR / MCFARREN BLVD @ THOMAS ST

Municipality..... Mississauga

GeoID..... 345120

Count Date..... Wednesday, 04 February, 2015 **Peak Hour.....** 07:15 AM —08:15 AM



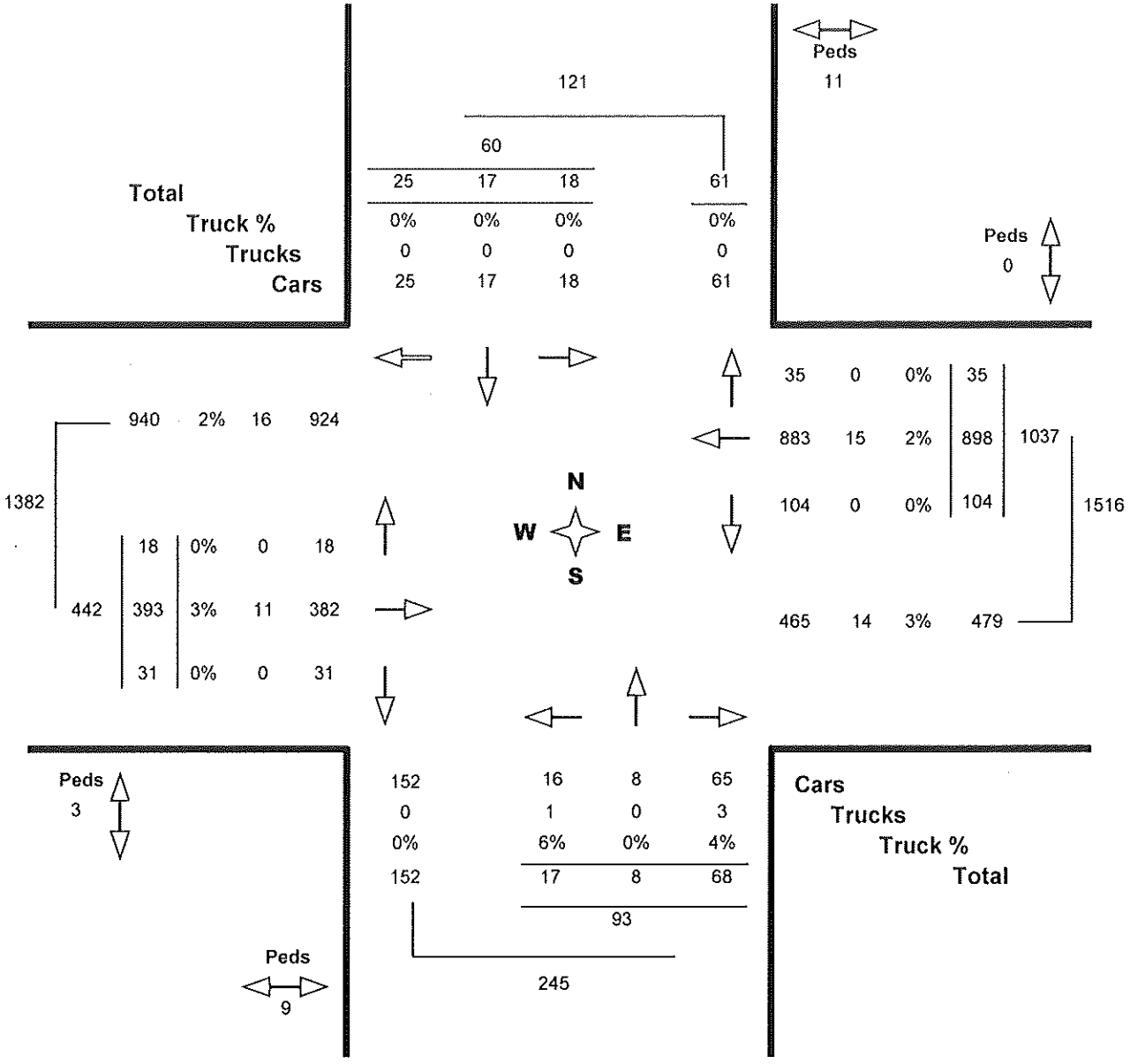
Turning Movements Report - PM Period

Location..... GAFNEY DR / MCFARREN BLVD @ THOMAS ST

Municipality..... Mississauga

GeoID..... 345120

Count Date..... Wednesday, 04 February, 2015 **Peak Hour.....** 05:00 PM — 06:00 PM



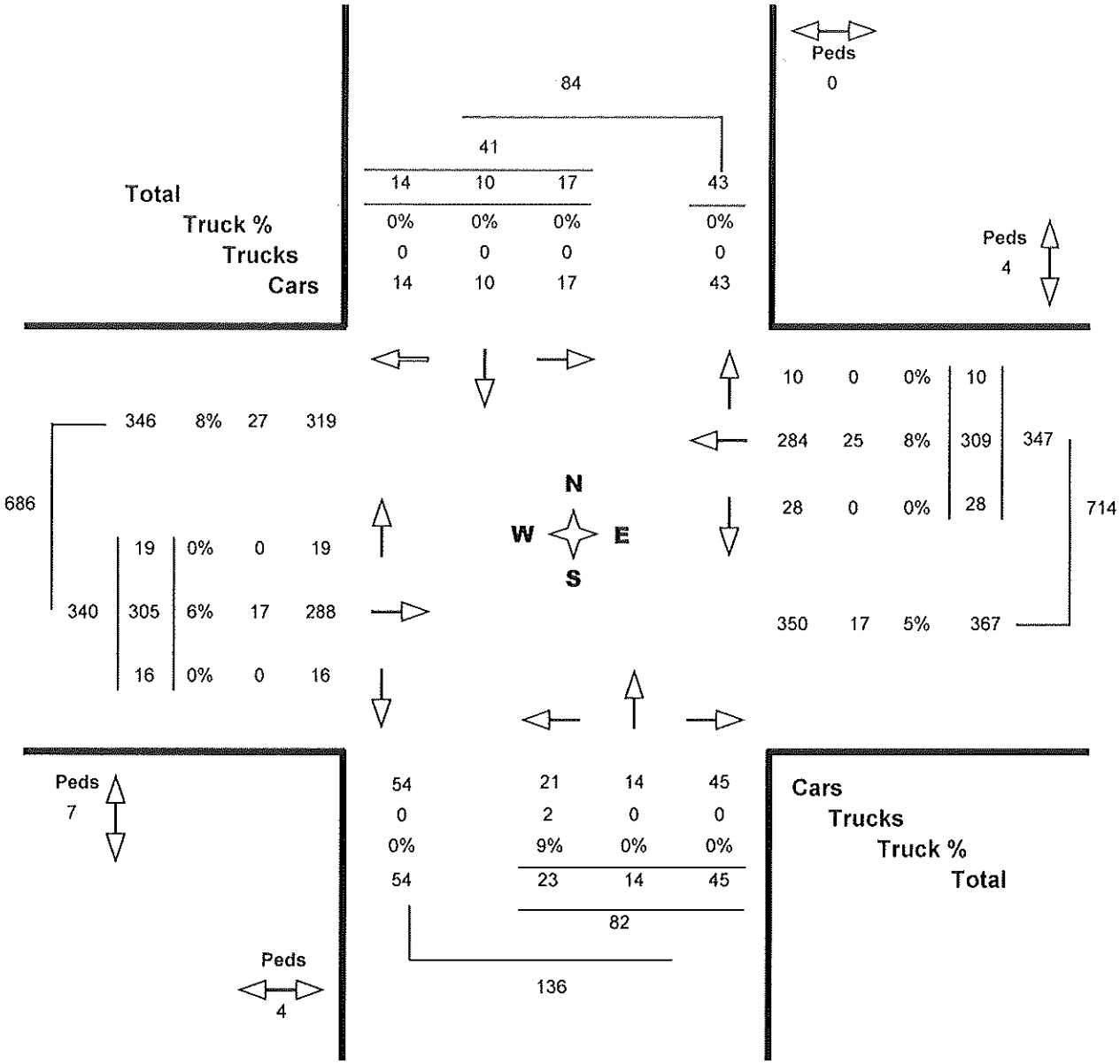
Turning Movements Report - MD Period

Location..... GAFNEY DR / MCFARREN BLVD @ THOMAS ST

Municipality..... Mississauga

GeoID..... 345120

Count Date..... Wednesday, 04 February, 2015 **Peak Hour.....** 01:00 PM — 02:00 PM



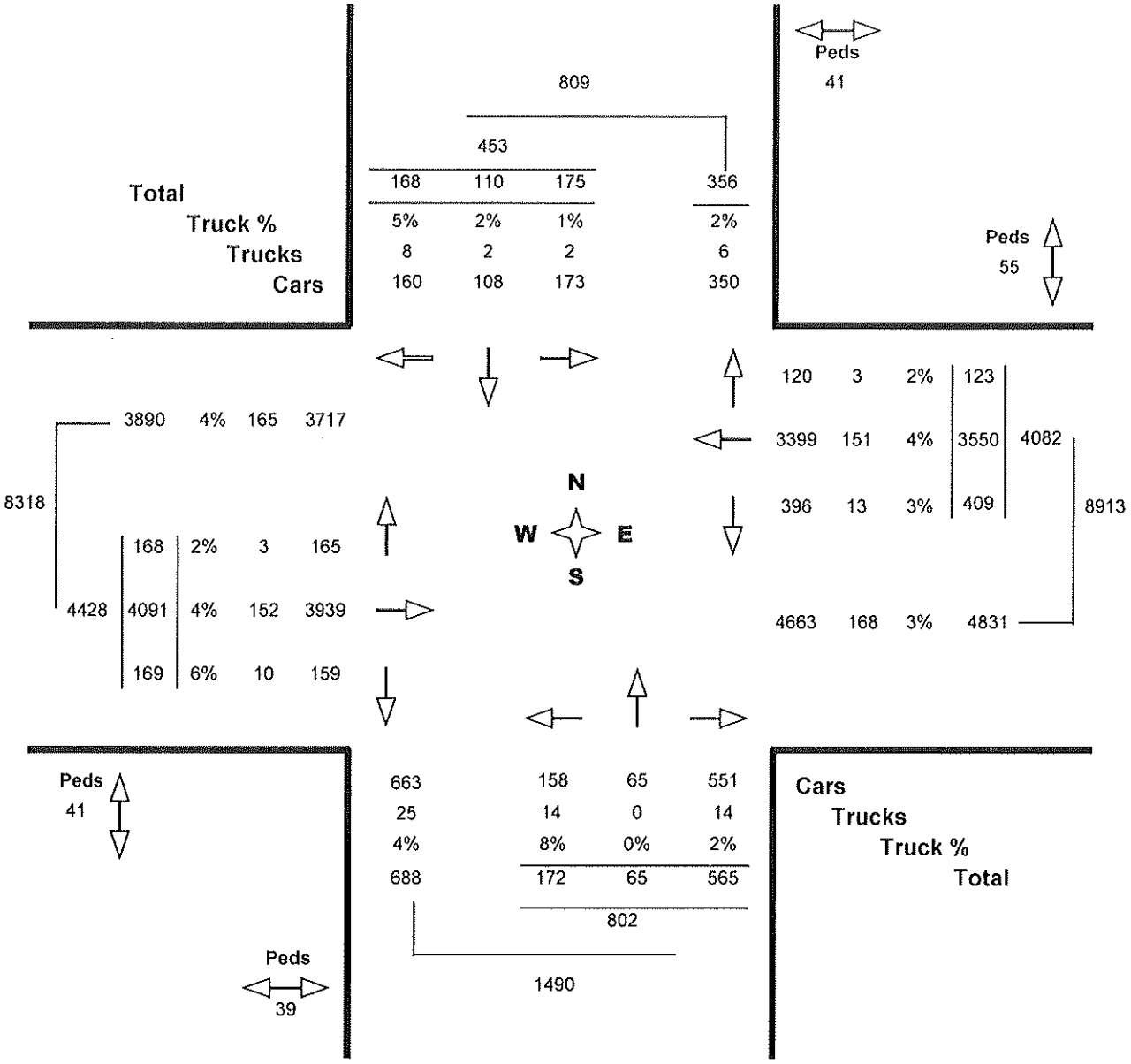
Turning Movements Count - Full Study Report

Location..... GAFNEY DR / MCFARREN BLVD @ THOMAS ST

Municipality..... Mississauga

GeoID..... 345120

Count Date..... Wednesday, 04 February, 2015



Turning Movement Count - Details Report

Location..... GAFNEY DR / MCFARREN BLVD @ THOMAS ST

Municipality..... Mississauga

Count Date..... Wednesday, February 04, 2015

		North Approach					South Approach					East Approach					West Approach				
Time Period		LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
07:00	07:15	18	3	8	0	29	10	0	35	0	45	6	61	4	0	71	3	209	2	0	214
07:15	07:30	13	3	1	0	17	10	0	43	0	53	11	83	1	0	95	1	308	3	0	312
07:30	07:45	18	4	7	0	29	5	1	41	0	47	13	110	6	0	129	3	334	2	0	339
07:45	08:00	14	16	13	0	43	16	6	48	0	70	20	157	4	0	181	13	373	11	0	397
08:00	08:15	13	6	9	0	28	8	1	45	0	54	10	156	2	0	168	15	298	13	0	326
08:15	08:30	4	5	9	0	18	3	2	40	0	45	15	96	3	0	114	3	240	8	0	251
08:30	08:45	4	5	4	0	13	4	0	17	0	21	10	68	2	0	80	2	225	2	0	229
08:45	09:00	8	2	5	0	15	7	1	17	0	25	10	89	1	0	100	1	185	1	0	187
11:00	11:15	2	2	3	0	7	2	2	2	0	6	7	43	2	0	52	6	52	4	0	62
11:15	11:30	7	2	2	0	11	1	0	8	0	9	6	78	2	0	86	0	58	2	0	60
11:30	11:45	4	3	4	0	11	2	1	10	0	13	5	63	2	0	70	7	58	1	0	66
11:45	12:00	4	2	4	0	10	3	0	11	0	14	11	63	2	0	76	1	70	3	0	74
12:00	12:15	2	0	3	0	5	1	0	9	0	10	8	66	4	0	78	6	48	3	0	57
12:15	12:30	0	2	3	0	5	3	1	7	0	11	6	61	1	0	68	4	56	1	0	61
12:30	12:45	3	1	4	0	8	3	1	7	0	11	8	74	6	0	88	2	86	2	0	90
12:45	13:00	2	4	3	0	9	8	2	8	0	18	8	51	2	0	61	4	82	4	0	90
13:00	13:15	3	2	4	0	9	1	3	11	0	15	5	76	4	0	85	3	71	2	0	76
13:15	13:30	4	3	3	0	10	6	3	11	0	20	7	79	2	0	88	5	77	4	0	86
13:30	13:45	5	1	3	0	9	8	4	11	0	23	7	78	2	0	87	4	74	5	0	83
13:45	14:00	5	4	4	0	13	8	4	12	0	24	9	76	2	0	87	7	83	5	0	95
15:00	15:15	6	8	9	0	23	2	5	14	0	21	13	97	5	0	115	12	79	7	0	98
15:15	15:30	1	1	9	0	11	9	4	16	0	29	9	96	4	0	109	4	83	6	0	93
15:30	15:45	1	2	2	0	5	1	1	10	0	12	12	106	4	0	122	9	99	12	0	120
15:45	16:00	2	0	11	0	13	12	3	11	0	26	19	129	5	0	153	10	102	8	0	120
16:00	16:15	2	2	5	0	9	8	3	10	0	21	13	112	3	0	128	6	72	10	0	88
16:15	16:30	1	6	0	0	7	1	0	14	0	15	22	152	6	0	180	6	114	9	0	129
16:30	16:45	4	3	5	0	12	7	2	16	0	25	17	130	3	0	150	7	66	3	0	76
16:45	17:00	7	1	6	0	14	6	7	13	0	26	18	202	4	0	224	6	96	5	0	107
17:00	17:15	2	0	6	0	8	7	2	19	0	28	20	172	7	0	199	2	95	8	0	105
17:15	17:30	0	1	10	0	11	3	1	12	0	16	22	215	9	0	246	2	104	4	0	110
17:30	17:45	11	9	3	0	23	6	3	21	0	30	29	257	8	0	294	7	91	12	0	110
17:45	18:00	5	7	6	0	18	1	2	16	0	19	33	254	11	0	298	7	103	7	0	117
Total	.....	175	110	168	0	453	172	65	565	0	802	409	3550	123	0	4082	168	4091	169	0	4428

MISSISSAUGA

File: CA.13.SIG
Signal Timing Request
RT.07.3806
RT.07.3808
RT.07.3925

October 24, 2016

NexTrans Consulting
15260 Yonge Street, Suite 204
Aurora, ON L4G 1N4

Dear Mr. Srikantha:

Re: Traffic Signal Timing

Please find the attached traffic signal timing for the intersections of:

Queen Street at Tannery Street
Queen Street at Thomas Street
Thomas Street at McFarren Boulvard/Gafney Drive as requested October 13, 2016.

The side street phase (4) is actuated; meaning a vehicle or pedestrian must be present on the side street before the side street is given a green indication. Vehicle presence on the side street would result in a possible green time of between the minimum and maximum time noted, depending on demand. Similarly, phase (1) is also actuated. Pedestrian "Walk" and flashing "Don't Walk" time on the side street, as noted, would be used in the event that the pedestrian push button is activated. During the side street pedestrian indications, the side street vehicle green is concurrently displayed. Should there be no demand on the actuated phase, the signals would result in a green indication on the major street (2).

Note: All times recorded in seconds, based on full demand.

The system data "Selection Plan" is used for system control operation. In the event that the "mode" is computer control (CC), the cycle length as noted, would be used along with the system split time given for each phase. When the "mode" is local control (LO), all other functions are redundant with no system split time given, and the intersection operates using the timings at the intersection, as noted in the report.

Should you require further information, please contact Jim Kartsomanis, at 905-615-3200 ext. 3964.

Sincerely,

Jim Kartsomanis
Coordinator, Traffic System
Traffic Signals and Street Lighting
Transportation and Works Department
City of Mississauga
905-615-3200 ext. 3964
jim.kartsomanis@mississauga.ca

c: Javed Khan, Manager, Traffic Signals and Street Lighting

JK:kl

```
?? SHOW TIMING REPORT,ACT1-3,I524
  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   524 00:00   /     /     /     /     /     /    LO  101   2     2    2
   524 07:00  1/1    /     /     /    1/1    /    CC  100   1     1    1
1080

  LOCATION:  MISS (QUEEN)@ THOMAS            INTERSECTION NO.:   524
  DATE:      21-OCT-2016                     TIME:              07:00
  SCHEDULE:   1                              SPEC. FUNC.: 1 - Y  2 - Y  3
- N

  MAIN ST.:  MISS (QUEEN)                    CONTROLLER TYPE:   S4
  NO. OF PH: 2                               CONTROL MODE:      CC

  2.   NS                          - Walk           =  45 seconds
       MISS (QUEEN)                - FL. Don't Walk =   9 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   4 seconds

  4.   EB                          - Walk           =   8 seconds
       THOMAS ST                   - FL. Don't Walk =  12 seconds
                                   - Sd. Don't Walk =  12 seconds
                                   - Maximum        =  32 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   2 seconds

                                 Total Cycle Length = 100 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   524 09:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080

  LOCATION:  MISS (QUEEN)@ THOMAS            INTERSECTION NO.:   524
  DATE:      21-OCT-2016                     TIME:              09:00
  SCHEDULE:   1                              SPEC. FUNC.: 1 - Y  2 - Y  3
- N

  MAIN ST.:  MISS (QUEEN)                    CONTROLLER TYPE:   S4
  NO. OF PH: 2                               CONTROL MODE:      CC

  2.   NS                          - Walk           =  22 seconds
       MISS (QUEEN)                - FL. Don't Walk =   9 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   4 seconds
```

```
  4.   EB                              - Walk           =   8 seconds
       THOMAS ST                       - FL. Don't Walk =  12 seconds
                                       - Sd. Don't Walk =   5 seconds
                                       - Maximum        =  25 seconds
                                       - Amber          =   4 seconds
                                       - All Red        =   2 seconds

                                     Total Cycle Length =  70 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   524 16:00  1/1    /     /     /    1/1    /    CC  110   3     3    3
1080

  LOCATION:  MISS (QUEEN)@ THOMAS           INTERSECTION NO.:   524
  DATE:      21-OCT-2016                    TIME:              16:00
  SCHEDULE:   1                             SPEC. FUNC.: 1 - Y  2 - Y  3
- N

  MAIN ST.:  MISS (QUEEN)                   CONTROLLER TYPE:   S4
  NO. OF PH: 2                              CONTROL MODE:      CC

  2.   NS                              - Walk           =  61 seconds
       MISS (QUEEN)                    - FL. Don't Walk =   9 seconds
                                       - Amber          =   4 seconds
                                       - All Red        =   4 seconds

  4.   EB                              - Walk           =   8 seconds
       THOMAS ST                       - FL. Don't Walk =  12 seconds
                                       - Sd. Don't Walk =   6 seconds
                                       - Maximum        =  26 seconds
                                       - Amber          =   4 seconds
                                       - All Red        =   2 seconds

                                     Total Cycle Length = 110 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   524 18:30  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080

  LOCATION:  MISS (QUEEN)@ THOMAS           INTERSECTION NO.:   524
  DATE:      21-OCT-2016                    TIME:              18:30
  SCHEDULE:   1                             SPEC. FUNC.: 1 - Y  2 - Y  3
- N
```

```
  MAIN ST.:  MISS (QUEEN)                    CONTROLLER TYPE:   S4
  NO. OF PH: 2                               CONTROL MODE:      CC

  2.   NS                          - Walk           =  22 seconds
       MISS (QUEEN)                - FL. Don't Walk =   9 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   4 seconds

  4.   EB                          - Walk           =   8 seconds
       THOMAS ST                   - FL. Don't Walk =  12 seconds
                                   - Sd. Don't Walk =   5 seconds
                                   - Maximum        =  25 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   2 seconds

                                 Total Cycle Length =  70 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   524 21:30   /     /     /     /     /     /    LO  101   2     2    2
1080
  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   524 00:00   /     /     /     /     /     /    LO  101   2     2    2
   524 09:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080

  LOCATION:  MISS (QUEEN)@ THOMAS            INTERSECTION NO.:   524
  DATE:      21-OCT-2016                     TIME:               09:00
  SCHEDULE:   2                              SPEC. FUNC.: 1 - Y  2 - Y  3
- N

  MAIN ST.:  MISS (QUEEN)                    CONTROLLER TYPE:   S4
  NO. OF PH: 2                               CONTROL MODE:      CC

  2.   NS                          - Walk           =  22 seconds
       MISS (QUEEN)                - FL. Don't Walk =   9 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   4 seconds

  4.   EB                          - Walk           =   8 seconds
       THOMAS ST                   - FL. Don't Walk =  12 seconds
                                   - Sd. Don't Walk =   5 seconds
                                   - Maximum        =  25 seconds
                                   - Amber          =   4 seconds
```

```
                                    - All Red        =   2 seconds

                                  Total Cycle Length =  70 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   524 21:30   /     /     /     /     /     /    LO  101   2     2    2
1080
  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   524 00:00   /     /     /     /     /     /    LO  101   2     2    2
   524 10:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080

  LOCATION:  MISS (QUEEN)@ THOMAS            INTERSECTION NO.:   524
  DATE:      21-OCT-2016                     TIME:              10:00
  SCHEDULE:   3                              SPEC. FUNC.: 1 - Y  2 - Y  3
- N

  MAIN ST.:  MISS (QUEEN)                    CONTROLLER TYPE:   S4
  NO. OF PH: 2                               CONTROL MODE:      CC

  2.   NS                          - Walk           =  22 seconds
       MISS (QUEEN)                - FL. Don't Walk =   9 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   4 seconds

  4.   EB                          - Walk           =   8 seconds
       THOMAS ST                   - FL. Don't Walk =  12 seconds
                                   - Sd. Don't Walk =   5 seconds
                                   - Maximum        =  25 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   2 seconds

                                  Total Cycle Length =  70 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   524 18:30   /     /     /     /     /     /    LO  101   2     2    2
1080
?? SHOW CDT524
CYCLE DEFINITION TABLE: 524
```

```
 PHASE  DIR  VEH  PED   PED   AMBER  ALL  COMM  SPECIAL  STREET
             MIN  MIN  CLEAR        RED  DELAY FEATURE  NAME
   1    NBL                             1             MISS (QUEEN)
   2    NS         8     9      4     4     1    C       MISS (QUEEN)
   3                                     1
   4    EB         8    12      4     2     1            THOMAS ST
   5                                     1
   6                                     1
   7                                     1
   8                                     1
     VALID SPECIAL FUNCTIONS(Y/N)
      1   2   3  1&2 1&3 2&3 ALL
      Y   Y   Y   Y   Y   Y   Y
?? SHOW DINTREP,ACT1-3,I524
  DAILY INTERSECTION REPORT FOR ACT SCH  1 ( MON TUE WED THU FRI )
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   524 00:00   /     /     /     /     /     /    LO  101   2     2    2
   524 07:00  1/1    /     /     /    1/1    /    CC  100   1     1    1
1080
   524 09:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080
   524 16:00  1/1    /     /     /    1/1    /    CC  110   3     3    3
1080
   524 18:30  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080
   524 21:30   /     /     /     /     /     /    LO  101   2     2    2
1080
  DAILY INTERSECTION REPORT FOR ACT SCH  2 ( SAT )
   524 00:00   /     /     /     /     /     /    LO  101   2     2    2
   524 09:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080
   524 21:30   /     /     /     /     /     /    LO  101   2     2    2
1080
  DAILY INTERSECTION REPORT FOR ACT SCH  3 ( SUN HOL )
   524 00:00   /     /     /     /     /     /    LO  101   2     2    2
   524 10:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080
   524 18:30   /     /     /     /     /     /    LO  101   2     2    2
1080
?? SHOW SPL1-3,I524
   SPLIT TABLE
    INTERSECTION  524           MISS (QUEEN)@ THOMAS
    TABLE     (SPLIT) PHASE NUMBER           (MAX SPLIT) PHASE NUMBER
    NO.    1   2   3   4   5   6   7   8    1   2   3   4   5   6   7   8
          NBL NS      EB
     1        62      38                      0       0
     2        57      43                      0       0
     3        71      29                      0       0
?? SHOW SPF1-3,I524
   SPECIAL FUNCTIONS
```

```
    INTERSECTION  524   MISS (QUEEN)@ THOMAS
    SPECIAL   IN(Y)/OUT(N)
    FUNCTION  #  1   2   3
                NA  NA  CAL   PHASE OMIT
      1          Y   Y   N
      2          Y   Y   N
      3          Y   Y   N
?? SHOW OFF1-3,I524
   OFFSET TABLE
    INTERSECTION  524           MISS (QUEEN)@ THOMAS
    OFFSET #   OFFSET %
        1         70
        2         63
        3         53
??
```

```
?? SHOW TIMING REPORT,ACT1-3,I520$I
 ILLEGAL SYNTAX
?? SHOW TIMING REPORT,ACT1-3,I520
  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   520 00:00   /     /     /     /     /     /    LO  101   2     2    2
   520 07:00  1/1    /     /     /    1/1    /    CC  100   1     1    1
1080

  LOCATION:  MISS (QUEEN)@TANNERY            INTERSECTION NO.:   520
  DATE:      21-OCT-2016                     TIME:              07:00
  SCHEDULE:   1                              SPEC. FUNC.: 1 - Y  2 - N  3
- N

  MAIN ST.:  MISS (QUEEN)                    CONTROLLER TYPE:   S4
  NO. OF PH: 2                               CONTROL MODE:      CC

  2.   NS                          - Walk           =  48 seconds
       MISS (QUEEN)                - FL. Don't Walk =  12 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   2 seconds

  4.   EB                          - Walk           =   8 seconds
       TANNERY ST                  - FL. Don't Walk =   8 seconds
                                   - Sd. Don't Walk =  12 seconds
                                   - Maximum        =  28 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   2 seconds

                                Total Cycle Length = 100 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   520 09:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080

  LOCATION:  MISS (QUEEN)@TANNERY            INTERSECTION NO.:   520
  DATE:      21-OCT-2016                     TIME:              09:00
  SCHEDULE:   1                              SPEC. FUNC.: 1 - Y  2 - N  3
- N

  MAIN ST.:  MISS (QUEEN)                    CONTROLLER TYPE:   S4
  NO. OF PH: 2                               CONTROL MODE:      CC

  2.   NS                          - Walk           =  24 seconds
       MISS (QUEEN)                - FL. Don't Walk =  12 seconds
```

```
                                    - Amber          =   4 seconds
                                    - All Red        =   2 seconds

  4.   EB                           - Walk           =   8 seconds
       TANNERY ST                   - FL. Don't Walk =   8 seconds
                                    - Sd. Don't Walk =   6 seconds
                                    - Maximum        =  22 seconds
                                    - Amber          =   4 seconds
                                    - All Red        =   2 seconds

                                  Total Cycle Length =  70 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   520 16:00  1/1    /     /     /    1/1    /    CC  110   3     3    3
1080

  LOCATION:  MISS (QUEEN)@TANNERY           INTERSECTION NO.:   520
  DATE:      21-OCT-2016                    TIME:              16:00
  SCHEDULE:   1                             SPEC. FUNC.: 1 - Y  2 - N  3
- N

  MAIN ST.:  MISS (QUEEN)                   CONTROLLER TYPE:   S4
  NO. OF PH: 2                              CONTROL MODE:      CC

  2.   NS                           - Walk           =  65 seconds
       MISS (QUEEN)                 - FL. Don't Walk =  12 seconds
                                    - Amber          =   4 seconds
                                    - All Red        =   2 seconds

  4.   EB                           - Walk           =   8 seconds
       TANNERY ST                   - FL. Don't Walk =   8 seconds
                                    - Sd. Don't Walk =   5 seconds
                                    - Maximum        =  21 seconds
                                    - Amber          =   4 seconds
                                    - All Red        =   2 seconds

                                  Total Cycle Length = 110 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   520 18:30  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080

  LOCATION:  MISS (QUEEN)@TANNERY           INTERSECTION NO.:   520
  DATE:      21-OCT-2016                    TIME:              18:30
```

```
  SCHEDULE:   1                                SPEC. FUNC.: 1 - Y  2 - N  3
- N

  MAIN ST.:  MISS (QUEEN)                      CONTROLLER TYPE:   S4
  NO. OF PH: 2                                 CONTROL MODE:      CC

  2.   NS                            - Walk           =  24 seconds
       MISS (QUEEN)                  - FL. Don't Walk =  12 seconds
                                     - Amber          =   4 seconds
                                     - All Red        =   2 seconds

  4.   EB                            - Walk           =   8 seconds
       TANNERY ST                    - FL. Don't Walk =   8 seconds
                                     - Sd. Don't Walk =   6 seconds
                                     - Maximum        =  22 seconds
                                     - Amber          =   4 seconds
                                     - All Red        =   2 seconds

                                   Total Cycle Length =  70 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   520 21:30   /     /     /     /     /     /    LO  101   2     2    2
1080
  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   520 00:00   /     /     /     /     /     /    LO  101   2     2    2
   520 09:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080

  LOCATION:  MISS (QUEEN)@TANNERY            INTERSECTION NO.:   520
  DATE:      21-OCT-2016                     TIME:              09:00
  SCHEDULE:   2                              SPEC. FUNC.: 1 - Y  2 - N  3
- N

  MAIN ST.:  MISS (QUEEN)                    CONTROLLER TYPE:   S4
  NO. OF PH: 2                               CONTROL MODE:      CC

  2.   NS                            - Walk           =  24 seconds
       MISS (QUEEN)                  - FL. Don't Walk =  12 seconds
                                     - Amber          =   4 seconds
                                     - All Red        =   2 seconds

  4.   EB                            - Walk           =   8 seconds
       TANNERY ST                    - FL. Don't Walk =   8 seconds
                                     - Sd. Don't Walk =   6 seconds
```

```
                                    - Maximum        =  22 seconds
                                    - Amber          =   4 seconds
                                    - All Red        =   2 seconds

                                  Total Cycle Length =  70 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   520 21:30   /     /     /     /     /     /    LO  101   2     2    2
1080
  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   520 00:00   /     /     /     /     /     /    LO  101   2     2    2
   520 10:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080

  LOCATION:  MISS (QUEEN)@TANNERY            INTERSECTION NO.:   520
  DATE:      21-OCT-2016                     TIME:              10:00
  SCHEDULE:   3                              SPEC. FUNC.: 1 - Y  2 - N  3
- N

  MAIN ST.:  MISS (QUEEN)                    CONTROLLER TYPE:   S4
  NO. OF PH: 2                               CONTROL MODE:      CC

  2.   NS                          - Walk           =  24 seconds
       MISS (QUEEN)                - FL. Don't Walk =  12 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   2 seconds

  4.   EB                          - Walk           =   8 seconds
       TANNERY ST                  - FL. Don't Walk =   8 seconds
                                   - Sd. Don't Walk =   6 seconds
                                   - Maximum        =  22 seconds
                                   - Amber          =   4 seconds
                                   - All Red        =   2 seconds

                                  Total Cycle Length =  70 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   520 18:30   /     /     /     /     /     /    LO  101   2     2    2
1080
```

```
?? SHOW CDT520
CYCLE DEFINITION TABLE: 520
 PHASE  DIR  VEH  PED   PED   AMBER  ALL  COMM  SPECIAL  STREET
             MIN  MIN  CLEAR        RED  DELAY FEATURE  NAME
   1                                    1
   2    NS       8    12      4     2    1    C       MISS (QUEEN)
   3                                    1
   4    EB       8     8      4     2    1            TANNERY ST
   5                                    1
   6                                    1
   7                                    1
   8                                    1
     VALID SPECIAL FUNCTIONS(Y/N)
      1   2   3  1&2 1&3 2&3 ALL
      Y   Y   Y   Y   Y   Y   Y
?? SHOW DINTREP,ACT1-3,I520
  DAILY INTERSECTION REPORT FOR ACT SCH  1 ( MON TUE WED THU FRI )
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   520 00:00   /     /     /     /     /     /    LO  101   2     2    2
   520 07:00  1/1    /     /     /    1/1    /    CC  100   1     1    1
1080
   520 09:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080
   520 16:00  1/1    /     /     /    1/1    /    CC  110   3     3    3
1080
   520 18:30  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080
   520 21:30   /     /     /     /     /     /    LO  101   2     2    2
1080
  DAILY INTERSECTION REPORT FOR ACT SCH  2 ( SAT )
   520 00:00   /     /     /     /     /     /    LO  101   2     2    2
   520 09:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080
   520 21:30   /     /     /     /     /     /    LO  101   2     2    2
1080
  DAILY INTERSECTION REPORT FOR ACT SCH  3 ( SUN HOL )
   520 00:00   /     /     /     /     /     /    LO  101   2     2    2
   520 10:00  1/1    /     /     /    1/1    /    CC   70   2     2    2
1080
   520 18:30   /     /     /     /     /     /    LO  101   2     2    2
1080
?? SHOW SPL1-3,I520
   SPLIT TABLE
    INTERSECTION  520          MISS (QUEEN)@TANNERY
    TABLE     (SPLIT) PHASE NUMBER          (MAX SPLIT) PHASE NUMBER
    NO.    1   2   3   4   5   6   7   8    1   2   3   4   5   6   7   8
             NS      EB
     1       66      34                       0       0
     2       61      39                       0       0
     3       76      24                       0       0
```

```
?? SHOW SPF1-3,I520
   SPECIAL FUNCTIONS
    INTERSECTION  520   MISS (QUEEN)@TANNERY
    SPECIAL   IN(Y)/OUT(N)
    FUNCTION  #  1   2   3
                NA  NA  CAL   PHASE OMIT
      1          Y   N   N
      2          Y   N   N
      3          Y   N   N
?? SHOW OFF1-3,I520
   OFFSET TABLE
    INTERSECTION  520           MISS (QUEEN)@TANNERY
    OFFSET #   OFFSET %
        1         84
        2         69
        3         34
??
```

```
?? SHOW TIMING REPORT,ACT1-3,I840
  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   840 00:00   /     /     /     /     /     /    LO  101   2     2    2
   840 06:45  1/1    /     /     /    1/1    /    CC  100   1     1    1

  LOCATION:  THOMAS @MCFARRAN/GAF            INTERSECTION NO.:   840
  DATE:      21-OCT-2016                     TIME:              06:45
  SCHEDULE:   1                              SPEC. FUNC.: 1 - N  2 - N  3
- N

  MAIN ST.:  THOMAS STREET                   CONTROLLER TYPE:   S4
  NO. OF PH: 3                               CONTROL MODE:      CC

  1.   WBT                          - Minimum green  =   5 seconds
       THOMAS STREET                - Maximum green  =   7 seconds
                                    - Clearance      =   3 seconds

  2.   EW                           - Walk           =  36 seconds
       THOMAS STREET                - FL. Don't Walk =  14 seconds
                                    - Amber          =   5 seconds
                                    - All Red        =   2 seconds

  4.   NS                           - Walk           =   9 seconds
       MCFARRAN/GAFNEY              - FL. Don't Walk =  12 seconds
                                    - Sd. Don't Walk =   4 seconds
                                    - Maximum        =  25 seconds
                                    - Amber          =   4 seconds
                                    - All Red        =   3 seconds

                                 Total Cycle Length = 100 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   840 08:30   /     /     /     /     /     /    LO  101   2     2    2
   840 16:45  1/1    /     /     /    1/1    /    CC  110   3     3    3

  LOCATION:  THOMAS @MCFARRAN/GAF            INTERSECTION NO.:   840
  DATE:      21-OCT-2016                     TIME:              16:45
  SCHEDULE:   1                              SPEC. FUNC.: 1 - N  2 - N  3
- N

  MAIN ST.:  THOMAS STREET                   CONTROLLER TYPE:   S4
  NO. OF PH: 3                               CONTROL MODE:      CC

  1.   WBT                          - Minimum green  =   5 seconds
```

```
       THOMAS STREET                 - Maximum green  =   8 seconds
                                     - Clearance      =   3 seconds

  2.   EW                            - Walk           =  43 seconds
       THOMAS STREET                 - FL. Don't Walk =  14 seconds
                                     - Amber          =   5 seconds
                                     - All Red        =   2 seconds

  4.   NS                            - Walk           =   9 seconds
       MCFARRAN/GAFNEY               - FL. Don't Walk =  12 seconds
                                     - Sd. Don't Walk =   6 seconds
                                     - Maximum        =  27 seconds
                                     - Amber          =   4 seconds
                                     - All Red        =   3 seconds

                                   Total Cycle Length = 110 seconds

  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   840 18:30   /     /     /     /     /     /    LO  101   2     2    2
  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   840 00:00   /     /     /     /     /     /    LO  101   2     2    2
  SCHEDULED DATA
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   840 00:00   /     /     /     /     /     /    LO  101   2     2    2
?? SHOW CDT840
CYCLE DEFINITION TABLE: 840
 PHASE  DIR  VEH  PED   PED   AMBER  ALL  COMM  SPECIAL  STREET
             MIN  MIN  CLEAR        RED  DELAY FEATURE  NAME
   1    WBT   5               3          1            THOMAS STREET
   2    EW         8    14     5     2    1    C       THOMAS STREET
   3                                     1
   4    NS         9    12     4     3    1            MCFARRAN/GAFNEY
   5                                     1
   6                                     1
   7                                     1
   8                                     1
     VALID SPECIAL FUNCTIONS(Y/N)
      1   2   3  1&2 1&3 2&3 ALL
      Y   Y   Y   Y   Y   Y   Y
?? SHOW DINTREP,ACT1-3,I840
```

```
  DAILY INTERSECTION REPORT FOR ACT SCH  1 ( MON TUE WED THU FRI )
  INT  TIME          SELECTION PLANS  IN USE         ALTERNATES
             MODE   CYC   OFF  SPLT  SPEC  DUP   MODE CYC  OFF  SPLT SPEC
DUP
                    LEN   NO.  NO.   FUNC  ISEC       LEN  NO.   NO. FUNC
ISEC
   840 00:00   /     /     /     /     /     /    LO  101   2     2    2
   840 06:45  1/1    /     /     /    1/1    /    CC  100   1     1    1
   840 08:30   /     /     /     /     /     /    LO  101   2     2    2
   840 16:45  1/1    /     /     /    1/1    /    CC  110   3     3    3
   840 18:30   /     /     /     /     /     /    LO  101   2     2    2
  DAILY INTERSECTION REPORT FOR ACT SCH  2 ( SAT )
   840 00:00   /     /     /     /     /     /    LO  101   2     2    2
  DAILY INTERSECTION REPORT FOR ACT SCH  3 ( SUN HOL )
   840 00:00   /     /     /     /     /     /    LO  101   2     2    2
?? SHOW SPL1 3,I840
   SPLIT TABLE
    INTERSECTION  840           THOMAS @MCFARRAN/GAF
    TABLE     (SPLIT) PHASE NUMBER            (MAX SPLIT) PHASE NUMBER
    NO.    1   2   3   4   5   6   7   8    1   2   3   4   5   6   7   8
          WBT EW      NS
     1    10  57      33                   12   0       0
     3    10  59      31                   12   0       0
?? SHOW SPF1-3,I840
   SPECIAL FUNCTIONS
    INTERSECTION  840   THOMAS @MCFARRAN/GAF
    SPECIAL   IN(Y)/OUT(N)
    FUNCTION  #  1   2   3
                 WBL PED CAL   PHASE OMIT BUT SPF2 Y=ON
      1           N   N   N
      2           Y   N   N
      3           N   N   N
?? SHOW OFF1 3,I840
   OFFSET TABLE
    INTERSECTION  840           THOMAS @MCFARRAN/GAF
    OFFSET #   OFFSET %
        1         79
        3         36
??
```

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**February 26, 2014**		**Prepared Date:**	**October 13, 2016**	
Database Rev	**31**		**Completed By:**	**AP**	
Timing Card / Field rev	**19**		**Checked By:**	**SL**	

Location:	**Erin Mills Parkway @ Thomas Street**						**TIME PERIOD (sec.) (Green+Amber+All Red)**		
Phase #	**Direction**	**Vehicle Minimum (sec.)**	**Pedestrian Minimum (sec.) WALK**	**FDWALK**	**Amber (sec.)**	**All Red (sec.)**	**AM MAX**	**OFF MAX**	**PM MAX**
1	**NB P.P. LT**	5.0			3.0		15.4		15.4
2	**S/B Green**	8.0	9.0	15.0	4.2	2.0	61.6	64.80	65.8
3	**EB P.P. LT**	5.0			3.0		18.2	9.60	14.0
4	**W/B Green**	8.0	13.0	21.0	4.0	2.8	44.8/67	45.60	44.8
5	**SB P.P. LT**	5.0			3.0		16.8/20		
6	**N/B Green**	8.0	9.0	15.0	4.2	2.0	60.2	64.80	81.2
7	**WB P.P. LT**	5.0			3.0		16.8		
8	**E/B Green**	8.0	13.0	21.0	4.0	2.8	46.2/49	55.20	58.8

System Control	Yes
Local Control	No
Semi-Actuated Mode	Yes

TIME (M-F)	**PEAK**	**CYCLE LENGTH (sec.)**	**OFFSET (sec.)**
06:00-09:30	**AM**	**140**	**1.4**
09:30-15:00	**OFF**	**120**	**2.8**
15:00-19:30	**PM**	**140**	**107.8**

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

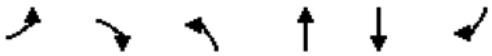
Database Date	**May 29, 2014**		**Prepared Date:**	**October 13, 2016**	
Database Rev	**5**		**Completed By:**	**AP**	
Timing Card / Field rev	**4**		**Checked By:**	**SL**	

Location:	**Britannia Rd. @ Joymar/ Millcreek**					**TIME PERIOD (sec.) (Green+Amber+All Red)**		
Phase #	**Direction**	**Vehicle Minimum (sec.)**	**Pedestrian Minimum (sec.)**		**Amber (sec.)**	**All Red (sec.)**	**AM MAX**	**OFF MAX**	**PM MAX**
			WALK	**FDWALK**					
1	**WB P.P. LT**	5.0			3.0		11.2	12.00	11.2
2	**E/B Green**	12.0	7.0	9.0	4.0	2.7	72.8	52.80	72.8
3	**SB P.P. LT**	8.0			3.0		19.6	19.20	19.6
4	**N/B Green**	8.0	10.0	15.0	4.0	3.2	36.4	36.00	36.4
5	**Not in Use**								
6	**W/B Green**	12.0	7.0	9.0	4.2	2.7	84.0	64.80	84.0
7	**NB P.P. LT**	5.0			3.0		19.6	19.20	19.6
8	**S/B Green**	8.0	10.0	15.0	4.0	3.2	36.4	36.00	36.4

System Control	Yes
Local Control	No
Semi-Actuated Mode	Yes

TIME (M-F)	**PEAK**	**CYCLE LENGTH (sec.)**	**OFFSET (sec.)**
06:00-09:30	**AM**	**140**	**53.2**
09:30-15:00	**OFF**	**120**	**69.6**
15:00-19:30	**PM**	**140**	**33.6**

Appendix B
Existing Traffic Level of Service Calculations

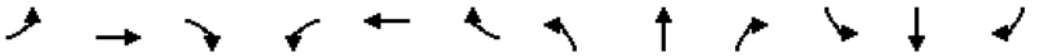


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	375	177	76	342	284	153
Future Volume (vph)	375	177	76	342	284	153
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	0.97	1.00		0.99	
Frt		0.850			0.953	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1842	1571	1724	1745	1570	0
Flt Permitted	0.950		0.445			
Satd. Flow (perm)	1837	1524	805	1745	1570	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		211			49	
Link Speed (k/h)	50			40	40	
Link Distance (m)	294.1			151.2	268.6	
Travel Time (s)	21.2			13.6	24.2	
Confl. Peds. (#/hr)	1	4	9			9
Peak Hour Factor	0.84	0.84	0.90	0.90	0.93	0.93
Heavy Vehicles (%)	2%	7%	9%	2%	6%	10%
Parking (#/hr)				0	0	0
Adj. Flow (vph)	446	211	84	380	305	165
Shared Lane Traffic (%)						
Lane Group Flow (vph)	446	211	84	380	470	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.95	0.95	0.95	1.09	1.09	0.95
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (m)	6.1	6.1	6.1	30.5	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	6.1	6.1	6.1	1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	2	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	26.0	26.0	62.0	62.0	62.0	
Total Split (s)	32.0	32.0	68.0	68.0	68.0	
Total Split (%)	32.0%	32.0%	68.0%	68.0%	68.0%	
Maximum Green (s)	26.0	26.0	60.0	60.0	60.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
All-Red Time (s)	2.0	2.0	4.0	4.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	8.0	8.0	8.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	Max	Max	Max	
Walk Time (s)	8.0	8.0	45.0	45.0	45.0	
Flash Dont Walk (s)	12.0	12.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
Act Effct Green (s)	25.5	25.5	60.0	60.0	60.0	
Actuated g/C Ratio	0.26	0.26	0.60	0.60	0.60	
v/c Ratio	0.94	0.39	0.17	0.36	0.49	
Control Delay	67.5	6.5	10.1	11.4	12.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	67.5	6.5	10.1	11.4	12.0	
LOS	E	A	B	B	B	
Approach Delay	47.9			11.1	12.0	
Approach LOS	D			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 99.5			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 26.5		Intersection LOS: C	
Intersection Capacity Utilization 87.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Queen St & Thomas St

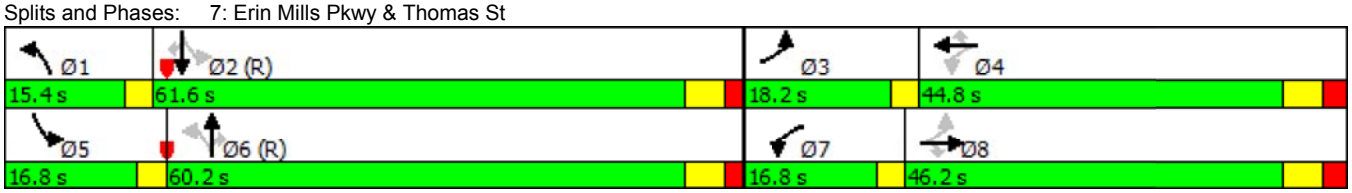


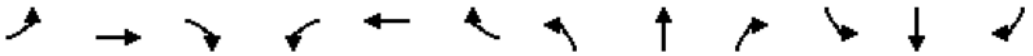
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	327	741	245	266	360	86	78	1391	131	154	1758	76
Future Volume (vph)	327	741	245	266	360	86	78	1391	131	154	1758	76
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	75.0		25.0	125.0		40.0	185.0		155.0	140.0		125.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor			0.99	1.00					0.98			0.99
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1879	3684	1681	1789	3545	1557	1773	5242	1586	1773	5192	1571
Flt Permitted	0.424			0.137			0.067			0.095		
Satd. Flow (perm)	839	3684	1659	258	3545	1557	125	5242	1556	177	5192	1550
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96			88			134			78
Link Speed (k/h)		50			50			70			70	
Link Distance (m)		99.0			760.5			333.6			521.7	
Travel Time (s)		7.1			54.8			17.2			26.8	
Confl. Peds. (#/hr)			1	1			1		4	4		1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	2%	0%	5%	6%	8%	6%	3%	6%	6%	4%	7%
Adj. Flow (vph)	334	756	250	271	367	88	80	1419	134	157	1794	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	334	756	250	271	367	88	80	1419	134	157	1794	78
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	5.0	8.0	8.0	5.0	8.0	8.0
Minimum Split (s)	9.5	40.8	40.8	9.5	40.8	40.8	9.5	30.2	30.2	9.5	30.2	30.2
Total Split (s)	18.2	46.2	46.2	16.8	44.8	44.8	15.4	60.2	60.2	16.8	61.6	61.6
Total Split (%)	13.0%	33.0%	33.0%	12.0%	32.0%	32.0%	11.0%	43.0%	43.0%	12.0%	44.0%	44.0%
Maximum Green (s)	15.2	39.4	39.4	13.8	38.0	38.0	12.4	54.0	54.0	13.8	55.4	55.4
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.8	2.8	0.0	2.8	2.8	0.0	2.0	2.0	0.0	2.0	2.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.8	6.8	3.0	6.8	6.8	3.0	6.2	6.2	3.0	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		13.0	13.0		13.0	13.0		9.0	9.0		9.0	9.0
Flash Dont Walk (s)		21.0	21.0		21.0	21.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	54.7	35.7	35.7	51.9	34.3	34.3	71.9	60.0	60.0	77.3	62.9	62.9
Actuated g/C Ratio	0.39	0.26	0.26	0.37	0.24	0.24	0.51	0.43	0.43	0.55	0.45	0.45
v/c Ratio	0.76	0.81	0.51	1.10	0.42	0.20	0.48	0.63	0.18	0.69	0.77	0.11
Control Delay	43.3	56.0	30.0	119.4	45.6	8.5	28.8	33.8	4.9	36.3	36.2	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.3	56.0	30.0	119.4	45.6	8.5	28.8	33.8	4.9	36.3	36.2	5.6
LOS	D	E	C	F	D	A	C	C	A	D	D	A
Approach Delay		48.0			68.6			31.2			35.0	
Approach LOS		D			E			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 1.4 (1%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 41.2		Intersection LOS: D	
Intersection Capacity Utilization 87.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 7: Erin Mills Pkwy & Thomas St



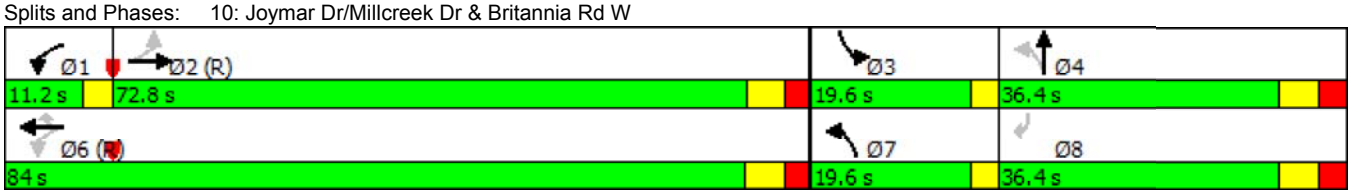


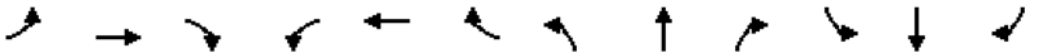
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	1767	59	32	531	121	46	53	81	160	0	53
Future Volume (vph)	33	1767	59	32	531	121	46	53	81	160	0	53
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	90.0		0.0	90.0		90.0	25.0		0.0	0.0		0.0
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99					0.97	1.00	0.99		0.99		0.98
Frt		0.995				0.850		0.909				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1773	3631	0	1824	3448	1616	1842	1750	0	1860	0	1616
Flt Permitted	0.450			0.058			0.950			0.950		
Satd. Flow (perm)	834	3631	0	111	3448	1563	1836	1750	0	1847	0	1592
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				123		50				78
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		418.7			370.9			948.1			108.1	
Travel Time (s)		30.1			26.7			85.3			9.7	
Confl. Peds. (#/hr)	3					3	2		6	6		2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.60	0.60	0.60	0.68	0.68	0.68
Heavy Vehicles (%)	6%	3%	2%	3%	9%	4%	2%	2%	1%	1%	0%	4%
Adj. Flow (vph)	34	1803	60	33	542	123	77	88	135	235	0	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	1863	0	33	542	123	77	223	0	235	0	78
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Turn Type	Perm	NA		pm+pt	NA	Perm	pm+pt	NA		Prot		Perm
Protected Phases		2		1	6		7	4		3		
Permitted Phases	2			6		6	4			3		8
Minimum Split (s)	24.7	24.7		10.7	27.9	27.9	9.5	32.2		12.5		32.2
Total Split (s)	72.8	72.8		11.2	84.0	84.0	19.6	36.4		19.6		36.4
Total Split (%)	52.0%	52.0%		8.0%	60.0%	60.0%	14.0%	26.0%		14.0%		26.0%
Maximum Green (s)	66.1	66.1		8.2	77.1	77.1	16.6	29.2		16.6		29.2
Yellow Time (s)	4.0	4.0		3.0	4.2	4.2	3.0	4.0		3.0		4.0
All-Red Time (s)	2.7	2.7		0.0	2.7	2.7	0.0	3.2		0.0		3.2
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	6.7	6.7		3.0	6.9	6.9	3.0	7.2		3.0		7.2
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		Yes
Walk Time (s)	7.0	7.0			7.0	7.0		10.0				10.0
Flash Dont Walk (s)	9.0	9.0			9.0	9.0		15.0				15.0
Pedestrian Calls (#/hr)	0	0			0	0		0				0
Act Effct Green (s)	66.1	66.1		81.0	77.1	77.1	50.0	29.2		16.6		29.2
Actuated g/C Ratio	0.47	0.47		0.58	0.55	0.55	0.36	0.21		0.12		0.21
v/c Ratio	0.09	1.09		0.20	0.29	0.13	0.12	0.55		1.07		0.20
Control Delay	21.2	84.8		15.5	17.3	2.8	28.9	43.9		136.9		10.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	21.2	84.8		15.5	17.3	2.8	28.9	43.9		136.9		10.5
LOS	C	F		B	B	A	C	D		F		B
Approach Delay		83.7			14.6			40.1			105.4	
Approach LOS		F			B			D			F	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	

Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 145	
Control Type: Pretimed	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 66.7	Intersection LOS: E
Intersection Capacity Utilization 92.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Joymar Dr/Millcreek Dr & Britannia Rd W





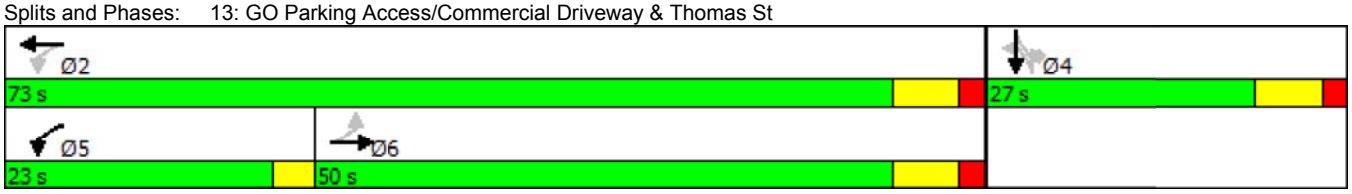
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	458	917	147	149	3	227	0	114	0	2	2
Future Volume (vph)	1	458	917	147	149	3	227	0	114	0	2	2
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96			1.00		0.98		0.96		0.99	
Frt		0.900			0.999				0.850		0.932	
Flt Protected					0.976		0.950					
Satd. Flow (prot)	0	3159	0	0	3538	0	1789	0	1632	0	1816	0
Flt Permitted		0.955			0.519		0.750					
Satd. Flow (perm)	0	3017	0	0	1882	0	1388	0	1569	0	1816	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		635			2						6	
Link Speed (k/h)		50			50			40			20	
Link Distance (m)		123.5			294.1			148.4			49.8	
Travel Time (s)		8.9			21.2			13.4			9.0	
Confl. Peds. (#/hr)	19		17	17		19	12		18	18		12
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.87	0.87	0.87	0.33	0.33	0.33
Heavy Vehicles (%)	0%	4%	2%	0%	7%	0%	5%	0%	3%	0%	0%	0%
Adj. Flow (vph)	1	487	976	167	169	3	261	0	131	0	6	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1464	0	0	339	0	261	0	131	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1		1	1	2	
Detector Template	Left	Thru		Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Perm	NA		pm+pt	NA		D.Pm		Perm		NA	
Protected Phases		6		5	2						4	
Permitted Phases	6			2			4		4	4		
Detector Phase	6	6		5	2		4		4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0		5.0	5.0	5.0	
Minimum Split (s)	30.0	30.0		20.0	30.0		27.0		27.0	27.0	27.0	
Total Split (s)	50.0	50.0		23.0	73.0		27.0		27.0	27.0	27.0	
Total Split (%)	50.0%	50.0%		23.0%	73.0%		27.0%		27.0%	27.0%	27.0%	
Maximum Green (s)	43.0	43.0		20.0	66.0		20.0		20.0	20.0	20.0	
Yellow Time (s)	5.0	5.0		3.0	5.0		5.0		5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		0.0	2.0		2.0		2.0	2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		7.0			7.0		7.0		7.0		7.0	
Lead/Lag	Lag	Lag		Lead								

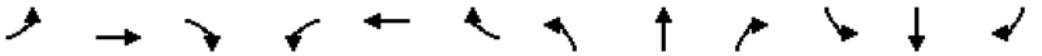
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0	3.0	
Recall Mode	Max	Max		None	Max		None		None	None	None	
Walk Time (s)	8.0	8.0			8.0		8.0		8.0	8.0	8.0	
Flash Dont Walk (s)	12.0	12.0			12.0		12.0		12.0	12.0	12.0	
Pedestrian Calls (#/hr)	0	0			0		0		0	0	0	
Act Effct Green (s)		66.0			66.0		19.9		19.9		19.9	
Actuated g/C Ratio		0.66			0.66		0.20		0.20		0.20	
v/c Ratio		0.66			0.98dl		0.95		0.42		0.03	
Control Delay		6.8			7.7		82.9		39.7		24.2	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay		6.8			7.7		82.9		39.7		24.2	
LOS		A			A		F		D		C	
Approach Delay		6.8			7.7			68.5			24.3	
Approach LOS		A			A			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 99.9			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 18.0		Intersection LOS: B	
Intersection Capacity Utilization 91.5%		ICU Level of Service F	
Analysis Period (min) 15			

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 13: GO Parking Access/Commercial Driveway & Thomas St



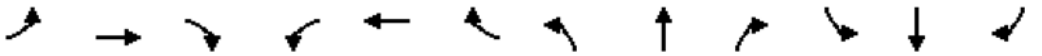


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	1313	29	54	506	13	39	8	177	58	29	30
Future Volume (vph)	32	1313	29	54	506	13	39	8	177	58	29	30
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	100.0		70.0	50.0		0.0	30.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	1.00	1.00		0.99	0.96			0.98	
Frt			0.850		0.996			0.856			0.965	
Flt Protected	0.950			0.950			0.950				0.976	
Satd. Flow (prot)	1773	3684	1437	1724	3600	0	1824	1589	0	0	1818	0
Flt Permitted	0.382			0.095			0.620				0.528	
Satd. Flow (perm)	711	3684	1399	172	3600	0	1179	1589	0	0	973	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127		4			64			15	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		760.5			274.5			324.8			269.2	
Travel Time (s)		54.8			19.8			29.2			24.2	
Confl. Peds. (#/hr)	6		6	6		6	10		23	23		10
Peak Hour Factor	0.87	0.87	0.87	0.79	0.79	0.79	0.80	0.80	0.80	0.68	0.68	0.68
Heavy Vehicles (%)	6%	2%	17%	9%	4%	0%	3%	0%	2%	2%	0%	3%
Adj. Flow (vph)	37	1509	33	68	641	16	49	10	221	85	43	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	1509	33	68	657	0	49	231	0	0	172	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	2			4			4	
Permitted Phases	2		2	2			4			4		
Detector Phase	2	2	2	1	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	2.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	57.0	57.0	57.0	10.0	57.0		28.0	28.0		28.0	28.0	
Total Split (s)	65.0	65.0	65.0	10.0	65.0		28.0	28.0		28.0	28.0	
Total Split (%)	63.1%	63.1%	63.1%	9.7%	63.1%		27.2%	27.2%		27.2%	27.2%	
Maximum Green (s)	58.0	58.0	58.0	2.0	58.0		21.0	21.0		21.0	21.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	3.0	2.0		3.0	3.0		3.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	8.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max		None	None		None	None	
Walk Time (s)	36.0	36.0	36.0		36.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	14.0	14.0	14.0		14.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0	0		0		0	0		0	0	
Act Effct Green (s)	58.4	58.4	58.4	58.9	58.4		18.4	18.4			18.4	
Actuated g/C Ratio	0.59	0.59	0.59	0.60	0.59		0.19	0.19			0.19	
v/c Ratio	0.09	0.69	0.04	0.51	0.31		0.22	0.66			0.89	
Control Delay	11.1	17.2	0.1	22.8	11.3		37.3	36.8			78.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	11.1	17.2	0.1	22.8	11.3		37.3	36.8			78.6	
LOS	B	B	A	C	B		D	D			E	
Approach Delay		16.7			12.4			36.9			78.6	
Approach LOS		B			B			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 103			
Actuated Cycle Length: 98.6			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 21.5		Intersection LOS: C	
Intersection Capacity Utilization 85.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 15: McFarren Blvd/Gafney Dr & Thomas St

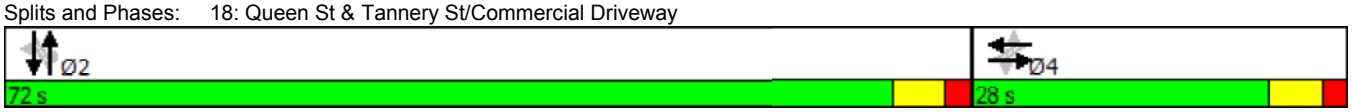


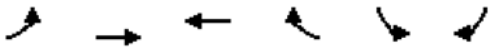
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	16	69	7	6	15	60	509	12	9	301	68
Future Volume (vph)	122	16	69	7	6	15	60	509	12	9	301	68
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	25.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.96	0.96			0.96			1.00			0.99	
Frt		0.878			0.927			0.997			0.976	
Flt Protected	0.950				0.988			0.995			0.999	
Satd. Flow (prot)	1842	1609	0	0	1584	0	0	1679	0	0	1615	0
Flt Permitted	0.726				0.915			0.919			0.985	
Satd. Flow (perm)	1348	1609	0	0	1459	0	0	1548	0	0	1592	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		86			26			2			23	
Link Speed (k/h)		40			20			40			40	
Link Distance (m)		415.2			37.3			268.6			257.2	
Travel Time (s)		37.4			6.7			24.2			23.1	
Confl. Peds. (#/hr)	18		10	10		18	27		28	28		27
Peak Hour Factor	0.80	0.80	0.80	0.58	0.58	0.58	0.94	0.94	0.94	0.92	0.92	0.92
Heavy Vehicles (%)	2%	0%	5%	0%	50%	0%	7%	5%	0%	0%	7%	6%
Parking (#/hr)								0	0		0	0
Adj. Flow (vph)	153	20	86	12	10	26	64	541	13	10	327	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	153	106	0	0	48	0	0	618	0	0	411	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.09	0.95	0.95	1.09	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		66.0	66.0		66.0	66.0	
Total Split (s)	28.0	28.0		28.0	28.0		72.0	72.0		72.0	72.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		72.0%	72.0%		72.0%	72.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		66.0	66.0		66.0	66.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	8.0	8.0		8.0	8.0		48.0	48.0		48.0	48.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	16.1	16.1			16.1			66.2			66.2	
Actuated g/C Ratio	0.17	0.17			0.17			0.70			0.70	
v/c Ratio	0.67	0.31			0.18			0.57			0.37	
Control Delay	50.8	12.9			20.0			10.4			7.1	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	50.8	12.9			20.0			10.4			7.1	
LOS	D	B			B			B			A	
Approach Delay		35.3			20.0			10.4			7.1	
Approach LOS		D			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 94.3			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 14.5		Intersection LOS: B	
Intersection Capacity Utilization 79.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 18: Queen St & Tannery St/Commercial Driveway

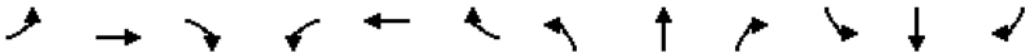




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	247	1342	337	37	26	130
Future Volume (Veh/h)	247	1342	337	37	26	130
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	252	1369	344	38	27	133
Pedestrians			1		16	
Lane Width (m)			3.5		3.5	
Walking Speed (m/s)			1.1		1.1	
Percent Blockage			0		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		275	123			
pX, platoon unblocked					0.70	
vC, conflicting volume	398				1568	207
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	398				959	207
tC, single (s)	4.1				7.0	7.0
tC, 2 stage (s)						
tF (s)	2.2				3.6	3.4
p0 queue free %	78				79	83
cM capacity (veh/h)	1148				128	776

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	708	913	229	153	27	133
Volume Left	252	0	0	0	27	0
Volume Right	0	0	0	38	0	133
cSH	1148	1700	1700	1700	128	776
Volume to Capacity	0.22	0.54	0.13	0.09	0.21	0.17
Queue Length 95th (m)	6.4	0.0	0.0	0.0	5.7	4.7
Control Delay (s)	5.0	0.0	0.0	0.0	40.4	10.6
Lane LOS	A				E	B
Approach Delay (s)	2.2		0.0		15.6	
Approach LOS					C	

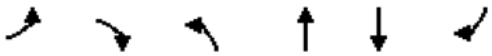
Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		



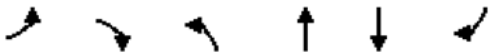
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	10	18	17	30	27	59	47	172	96	139	109	15
Future Volume (vph)	10	18	17	30	27	59	47	172	96	139	109	15
Peak Hour Factor	0.30	0.30	0.30	0.59	0.59	0.59	0.75	0.75	0.75	0.83	0.83	0.83
Hourly flow rate (vph)	33	60	57	51	46	100	63	229	128	167	131	18

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	150	197	420	316
Volume Left (vph)	33	51	63	167
Volume Right (vph)	57	100	128	18
Hadj (s)	-0.15	-0.17	-0.12	0.12
Departure Headway (s)	6.3	6.2	5.5	5.9
Degree Utilization, x	0.26	0.34	0.64	0.52
Capacity (veh/h)	481	501	626	567
Control Delay (s)	11.6	12.3	17.7	14.9
Approach Delay (s)	11.6	12.3	17.7	14.9
Approach LOS	B	B	C	B

Intersection Summary				
Delay			15.1	
Level of Service			C	
Intersection Capacity Utilization			55.2%	ICU Level of Service
Analysis Period (min)			15	



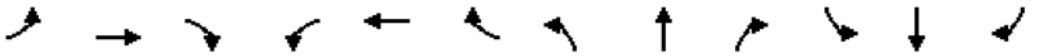
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	196	130	142	355	434	359
Future Volume (vph)	196	130	142	355	434	359
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.97	1.00		0.99	
Frt		0.850			0.939	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1879	1632	1807	1745	1648	0
Flt Permitted	0.950		0.223			
Satd. Flow (perm)	1866	1585	423	1745	1648	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		155			74	
Link Speed (k/h)	50			40	40	
Link Distance (m)	294.1			151.2	268.6	
Travel Time (s)	21.2			13.6	24.2	
Confl. Peds. (#/hr)	3	4	14			14
Peak Hour Factor	0.84	0.84	0.86	0.86	0.88	0.88
Heavy Vehicles (%)	0%	3%	4%	2%	1%	0%
Parking (#/hr)				0	0	0
Adj. Flow (vph)	233	155	165	413	493	408
Shared Lane Traffic (%)						
Lane Group Flow (vph)	233	155	165	413	901	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.95	0.95	0.95	1.09	1.09	0.95
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (m)	6.1	6.1	6.1	30.5	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	6.1	6.1	6.1	1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	2	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	32.0	32.0	78.0	78.0	78.0	
Total Split (s)	32.0	32.0	84.0	84.0	84.0	
Total Split (%)	27.6%	27.6%	72.4%	72.4%	72.4%	
Maximum Green (s)	26.0	26.0	76.0	76.0	76.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
All-Red Time (s)	2.0	2.0	4.0	4.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	8.0	8.0	8.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	Max	Max	Max	
Walk Time (s)	8.0	8.0	61.0	61.0	61.0	
Flash Dont Walk (s)	18.0	18.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
Act Effct Green (s)	18.6	18.6	76.1	76.1	76.1	
Actuated g/C Ratio	0.17	0.17	0.70	0.70	0.70	
v/c Ratio	0.73	0.39	0.56	0.34	0.77	
Control Delay	56.0	8.9	18.4	8.0	16.2	
Queue Delay	0.0	0.0	0.0	0.0	0.3	
Total Delay	56.0	8.9	18.4	8.0	16.5	
LOS	E	A	B	A	B	
Approach Delay	37.2			10.9	16.5	
Approach LOS	D			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 116			
Actuated Cycle Length: 108.7			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 19.1		Intersection LOS: B	
Intersection Capacity Utilization 95.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 2: Queen St & Thomas St

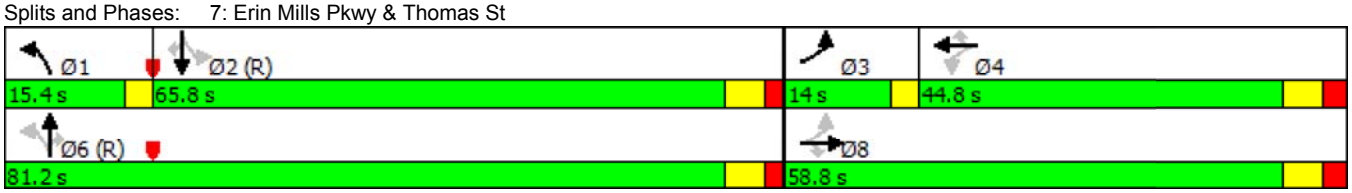


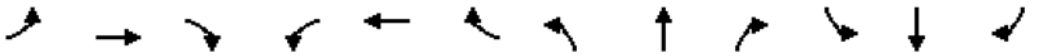
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	277	130	245	860	103	288	1555	188	55	1840	257
Future Volume (vph)	107	277	130	245	860	103	288	1555	188	55	1840	257
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	75.0		25.0	125.0		40.0	185.0		155.0	140.0		125.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor			0.98	1.00					0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1824	3648	1664	1842	3721	1664	1879	5293	1648	1789	5346	1681
Flt Permitted	0.099			0.578			0.064			0.130		
Satd. Flow (perm)	190	3648	1634	1116	3721	1664	127	5293	1609	245	5346	1652
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			133			72			192			212
Link Speed (k/h)		50			50			70			70	
Link Distance (m)		99.0			760.5			333.6			521.7	
Travel Time (s)		7.1			54.8			17.2			26.8	
Confl. Peds. (#/hr)			5	5			3		7	7		3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	3%	1%	2%	1%	1%	0%	2%	2%	5%	1%	0%
Adj. Flow (vph)	109	283	133	250	878	105	294	1587	192	56	1878	262
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	283	133	250	878	105	294	1587	192	56	1878	262
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases	3	8			4		1	6			2	
Permitted Phases	8		8	4		4	6		6	2		2
Detector Phase	3	8	8	4	4	4	1	6	6	2	2	2
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	8.0	8.0	8.0	5.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	9.5	40.8	40.8	40.8	40.8	40.8	9.5	30.2	30.2	30.2	30.2	30.2
Total Split (s)	14.0	58.8	58.8	44.8	44.8	44.8	15.4	81.2	81.2	65.8	65.8	65.8
Total Split (%)	10.0%	42.0%	42.0%	32.0%	32.0%	32.0%	11.0%	58.0%	58.0%	47.0%	47.0%	47.0%
Maximum Green (s)	11.0	52.0	52.0	38.0	38.0	38.0	12.4	75.0	75.0	59.6	59.6	59.6
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.8	2.8	2.8	2.8	2.8	0.0	2.0	2.0	2.0	2.0	2.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.8	6.8	6.8	6.8	6.8	3.0	6.2	6.2	6.2	6.2	6.2
Lead/Lag	Lead			Lag	Lag	Lag	Lead			Lag	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		13.0	13.0	13.0	13.0	13.0		9.0	9.0	9.0	9.0	9.0
Flash Dont Walk (s)		21.0	21.0	21.0	21.0	21.0		15.0	15.0	15.0	15.0	15.0
Pedestrian Calls (#/hr)		0	0	0	0	0		0	0	0	0	0
Act Effct Green (s)	54.2	50.4	50.4	37.5	37.5	37.5	79.8	76.6	76.6	59.6	59.6	59.6
Actuated g/C Ratio	0.39	0.36	0.36	0.27	0.27	0.27	0.57	0.55	0.55	0.43	0.43	0.43
v/c Ratio	0.57	0.22	0.20	0.84	0.88	0.21	1.19	0.55	0.20	0.54	0.83	0.32
Control Delay	39.7	31.2	5.3	72.5	60.4	15.7	153.8	21.7	2.6	52.8	39.5	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.7	31.2	5.3	72.5	60.4	15.7	153.8	21.7	2.6	52.8	39.5	6.9
LOS	D	C	A	E	E	B	F	C	A	D	D	A
Approach Delay		26.4			59.0			38.7			35.9	
Approach LOS		C			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 107.8 (77%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.19			
Intersection Signal Delay: 40.8		Intersection LOS: D	
Intersection Capacity Utilization 94.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 7: Erin Mills Pkwy & Thomas St



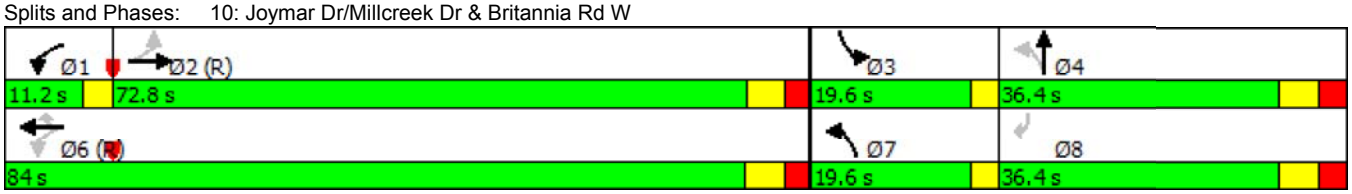


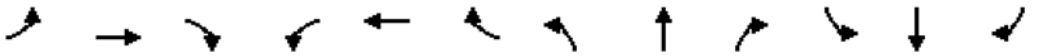
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	804	27	75	1976	215	18	16	23	166	0	69
Future Volume (vph)	16	804	27	75	1976	215	18	16	23	166	0	69
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	90.0		0.0	90.0		90.0	25.0		0.0	0.0		0.0
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.96	1.00	0.99		1.00		0.99
Frt		0.995				0.850		0.912				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1879	3668	0	1879	3721	1648	1879	1735	0	1860	0	1586
Flt Permitted	0.061			0.233			0.950			0.950		
Satd. Flow (perm)	121	3668	0	461	3721	1587	1876	1735	0	1852	0	1564
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				152		34				105
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		418.7			370.9			948.1			108.1	
Travel Time (s)		30.1			26.7			85.3			9.7	
Confl. Peds. (#/hr)	4					4	1		3	3		1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.68	0.68	0.68	0.66	0.66	0.66
Heavy Vehicles (%)	0%	2%	0%	0%	1%	2%	0%	0%	5%	1%	0%	6%
Adj. Flow (vph)	16	820	28	77	2016	219	26	24	34	252	0	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	848	0	77	2016	219	26	58	0	252	0	105
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Turn Type	Perm	NA		pm+pt	NA	Perm	pm+pt	NA		Prot		Perm
Protected Phases		2		1	6		7	4		3		
Permitted Phases	2			6		6	4			3		8
Minimum Split (s)	24.7	24.7		10.7	27.9	27.9	9.5	32.2		12.5		32.2
Total Split (s)	72.8	72.8		11.2	84.0	84.0	19.6	36.4		19.6		36.4
Total Split (%)	52.0%	52.0%		8.0%	60.0%	60.0%	14.0%	26.0%		14.0%		26.0%
Maximum Green (s)	66.1	66.1		8.2	77.1	77.1	16.6	29.2		16.6		29.2
Yellow Time (s)	4.0	4.0		3.0	4.2	4.2	3.0	4.0		3.0		4.0
All-Red Time (s)	2.7	2.7		0.0	2.7	2.7	0.0	3.2		0.0		3.2
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	6.7	6.7		3.0	6.9	6.9	3.0	7.2		3.0		7.2
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		Yes
Walk Time (s)	7.0	7.0			7.0	7.0		10.0				10.0
Flash Dont Walk (s)	9.0	9.0			9.0	9.0		15.0				15.0
Pedestrian Calls (#/hr)	0	0			0	0		0				0
Act Effct Green (s)	66.1	66.1		81.0	77.1	77.1	50.0	29.2		16.6		29.2
Actuated g/C Ratio	0.47	0.47		0.58	0.55	0.55	0.36	0.21		0.12		0.21
v/c Ratio	0.28	0.49		0.22	0.98	0.23	0.04	0.15		1.15		0.26
Control Delay	38.5	26.5		14.6	47.3	5.7	27.8	23.6		158.7		9.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	38.5	26.5		14.6	47.3	5.7	27.8	23.6		158.7		9.7
LOS	D	C		B	D	A	C	C		F		A
Approach Delay		26.7			42.3			24.9			114.9	
Approach LOS		C			D			C			F	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	

Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 135	
Control Type: Pretimed	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay: 45.3	Intersection LOS: D
Intersection Capacity Utilization 92.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Joymar Dr/Millcreek Dr & Britannia Rd W



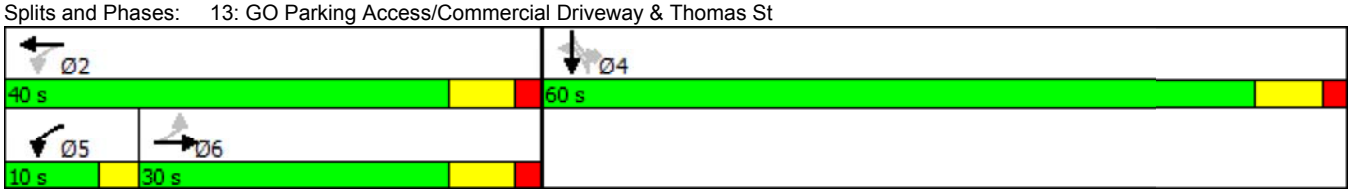


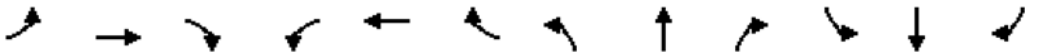
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	357	179	56	533	0	609	0	204	1	0	7
Future Volume (vph)	3	357	179	56	533	0	609	0	204	1	0	7
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97			1.00		0.99		0.98		0.98	
Frt		0.950							0.850		0.882	
Flt Protected					0.995		0.950				0.994	
Satd. Flow (prot)	0	3387	0	0	3705	0	1842	0	1681	0	1700	0
Flt Permitted		0.952			0.790		0.747				0.994	
Satd. Flow (perm)	0	3224	0	0	2937	0	1434	0	1644	0	1698	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		79									76	
Link Speed (k/h)		50			50			40			20	
Link Distance (m)		123.5			294.1			148.4			49.8	
Travel Time (s)		8.9			21.2			13.4			9.0	
Confl. Peds. (#/hr)	17		24	24		17	7		7	7		7
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.91	0.91	0.91	0.50	0.50	0.50
Heavy Vehicles (%)	0%	1%	6%	0%	1%	0%	2%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	380	190	58	549	0	669	0	224	2	0	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	573	0	0	607	0	669	0	224	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1		1	1	2	
Detector Template	Left	Thru		Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Perm	NA		pm+pt	NA		D.Pm		Perm	Perm	NA	
Protected Phases		6		5	2						4	
Permitted Phases	6			2			4		4	4		
Detector Phase	6	6		5	2		4		4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0		5.0	5.0	5.0	
Minimum Split (s)	30.0	30.0		10.0	30.0		27.0		27.0	27.0	27.0	
Total Split (s)	30.0	30.0		10.0	40.0		60.0		60.0	60.0	60.0	
Total Split (%)	30.0%	30.0%		10.0%	40.0%		60.0%		60.0%	60.0%	60.0%	
Maximum Green (s)	23.0	23.0		7.0	33.0		53.0		53.0	53.0	53.0	
Yellow Time (s)	5.0	5.0		3.0	5.0		5.0		5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		0.0	2.0		2.0		2.0	2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		7.0			7.0		7.0		7.0		7.0	
Lead/Lag	Lag	Lag		Lead								

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0	3.0	
Recall Mode	Max	Max		None	Max		None		None	None	None	
Walk Time (s)	8.0	8.0			8.0		8.0		8.0	8.0	8.0	
Flash Dont Walk (s)	12.0	12.0			12.0		12.0		12.0	12.0	12.0	
Pedestrian Calls (#/hr)	0	0			0		0		0	0	0	
Act Effct Green (s)		33.1			33.1		49.3		49.3		49.3	
Actuated g/C Ratio		0.34			0.34		0.51		0.51		0.51	
v/c Ratio		0.49			0.60		0.91		0.27		0.02	
Control Delay		23.9			30.2		40.4		14.1		0.0	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay		23.9			30.2		40.4		14.1		0.0	
LOS		C			C		D		B		A	
Approach Delay		23.9			30.2			33.8				
Approach LOS		C			C			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 96.5			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 29.8		Intersection LOS: C	
Intersection Capacity Utilization 87.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 13: GO Parking Access/Commercial Driveway & Thomas St



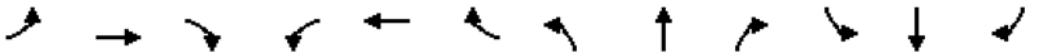


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	393	31	104	898	35	17	8	68	18	17	25
Future Volume (vph)	18	393	31	104	898	35	17	8	68	18	17	25
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	100.0		70.0	50.0		0.0	30.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	0.99	1.00		1.00				0.99	
Frt			0.850		0.994			0.865			0.944	
Flt Protected	0.950			0.950			0.950				0.985	
Satd. Flow (prot)	1879	3648	1681	1879	3660	0	1773	1711	0	0	1827	0
Flt Permitted	0.234			0.507			0.764				0.858	
Satd. Flow (perm)	462	3648	1632	998	3660	0	1421	1711	0	0	1591	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			65		5			97			28	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		760.5			274.5			324.8			269.2	
Travel Time (s)		54.8			19.8			29.2			24.2	
Confl. Peds. (#/hr)	11		9	9		11	3					3
Peak Hour Factor	0.94	0.94	0.94	0.87	0.87	0.87	0.70	0.70	0.70	0.65	0.65	0.65
Heavy Vehicles (%)	0%	3%	0%	0%	2%	0%	6%	0%	0%	0%	0%	0%
Adj. Flow (vph)	19	418	33	120	1032	40	24	11	97	28	26	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	418	33	120	1072	0	24	108	0	0	92	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	2			4			4	
Permitted Phases	2		2	2			4			4		
Detector Phase	2	2	2	1	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	2.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	64.0	64.0	64.0	10.0	64.0		34.0	34.0		34.0	34.0	
Total Split (s)	72.0	72.0	72.0	11.0	72.0		34.0	34.0		34.0	34.0	
Total Split (%)	61.5%	61.5%	61.5%	9.4%	61.5%		29.1%	29.1%		29.1%	29.1%	
Maximum Green (s)	65.0	65.0	65.0	8.0	65.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	5.0	5.0	5.0	3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	0.0	2.0		3.0	3.0		3.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	3.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max		None	None		None	None	
Walk Time (s)	43.0	43.0	43.0		43.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	14.0	14.0	14.0		14.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0	0		0		0	0		0	0	
Act Effct Green (s)	65.1	65.1	65.1	75.9	65.1		9.3	9.3			9.3	
Actuated g/C Ratio	0.66	0.66	0.66	0.77	0.66		0.09	0.09			0.09	
v/c Ratio	0.06	0.17	0.03	0.14	0.44		0.18	0.43			0.52	
Control Delay	7.6	6.9	0.5	2.8	9.0		43.8	16.4			41.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	7.6	6.9	0.5	2.8	9.0		43.8	16.4			41.1	
LOS	A	A	A	A	A		D	B			D	
Approach Delay		6.5			8.3			21.4			41.1	
Approach LOS		A			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 117			
Actuated Cycle Length: 98.2			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 15: McFarren Blvd/Gafney Dr & Thomas St

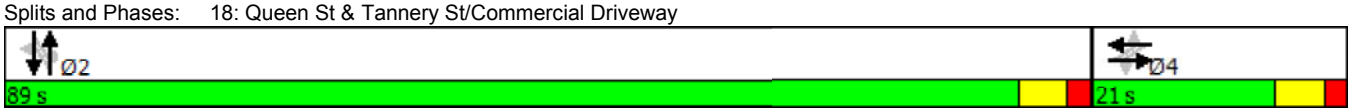


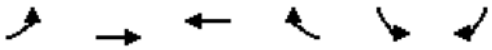
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	7	57	7	17	11	79	563	14	7	636	109
Future Volume (vph)	119	7	57	7	17	11	79	563	14	7	636	109
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	25.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.95	0.91			0.96			1.00			0.99	
Frt		0.866			0.958			0.997			0.980	
Flt Protected	0.950				0.990			0.994				
Satd. Flow (prot)	1860	1524	0	0	1780	0	0	1731	0	0	1721	0
Flt Permitted	0.724				0.933			0.811			0.993	
Satd. Flow (perm)	1345	1524	0	0	1652	0	0	1412	0	0	1708	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			16			3			23	
Link Speed (k/h)		40			20			40			40	
Link Distance (m)		415.2			37.3			268.6			257.2	
Travel Time (s)		37.4			6.7			24.2			23.1	
Confl. Peds. (#/hr)	15		24	24		15	24		11	11		24
Peak Hour Factor	0.78	0.78	0.78	0.67	0.67	0.67	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	1%	0%	2%	0%	6%	0%	1%	2%	0%	0%	1%	0%
Parking (#/hr)								0	0		0	0
Adj. Flow (vph)	153	9	73	10	25	16	91	647	16	8	731	125
Shared Lane Traffic (%)												
Lane Group Flow (vph)	153	82	0	0	51	0	0	754	0	0	864	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.09	0.95	0.95	1.09	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	1.0	1.0		1.0	1.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		83.0	83.0		83.0	83.0	
Total Split (s)	21.0	21.0		21.0	21.0		89.0	89.0		89.0	89.0	
Total Split (%)	19.1%	19.1%		19.1%	19.1%		80.9%	80.9%		80.9%	80.9%	
Maximum Green (s)	15.0	15.0		15.0	15.0		83.0	83.0		83.0	83.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	8.0	8.0		8.0	8.0		65.0	65.0		65.0	65.0	
Flash Dont Walk (s)	7.0	7.0		7.0	7.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	14.4	14.4			14.4			83.0			83.0	
Actuated g/C Ratio	0.13	0.13			0.13			0.76			0.76	
v/c Ratio	0.86	0.31			0.22			0.70			0.66	
Control Delay	87.4	15.6			34.2			11.4			9.4	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	87.4	15.6			34.2			11.4			9.4	
LOS	F	B			C			B			A	
Approach Delay		62.4			34.2			11.4			9.4	
Approach LOS		E			C			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 109.4			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 17.4		Intersection LOS: B	
Intersection Capacity Utilization 102.7%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 18: Queen St & Tannery St/Commercial Driveway

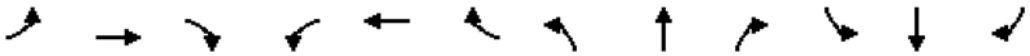




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	88	524	1145	43	22	164
Future Volume (Veh/h)	88	524	1145	43	22	164
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	90	535	1168	44	22	167
Pedestrians			1		13	
Lane Width (m)			3.5		3.5	
Walking Speed (m/s)			1.1		1.1	
Percent Blockage			0		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		275	123			
pX, platoon unblocked	0.88				0.88	0.88
vC, conflicting volume	1225				1652	619
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	989				1473	303
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	85				75	73
cM capacity (veh/h)	617				89	610

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	268	357	779	433	22	167
Volume Left	90	0	0	0	22	0
Volume Right	0	0	0	44	0	167
cSH	617	1700	1700	1700	89	610
Volume to Capacity	0.15	0.21	0.46	0.25	0.25	0.27
Queue Length 95th (m)	3.9	0.0	0.0	0.0	6.7	8.4
Control Delay (s)	5.3	0.0	0.0	0.0	58.1	13.1
Lane LOS	A				F	B
Approach Delay (s)	2.3		0.0		18.3	
Approach LOS					C	

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

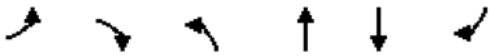


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	1	2	5	101	3	93	3	78	51	51	93	1
Future Volume (vph)	1	2	5	101	3	93	3	78	51	51	93	1
Peak Hour Factor	0.50	0.50	0.50	0.88	0.88	0.88	0.87	0.87	0.87	0.86	0.86	0.86
Hourly flow rate (vph)	2	4	10	115	3	106	3	90	59	59	108	1

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	16	224	152	168
Volume Left (vph)	2	115	3	59
Volume Right (vph)	10	106	59	1
Hadj (s)	-0.35	-0.18	-0.23	0.08
Departure Headway (s)	4.6	4.5	4.5	4.7
Degree Utilization, x	0.02	0.28	0.19	0.22
Capacity (veh/h)	701	749	760	715
Control Delay (s)	7.7	9.2	8.5	9.1
Approach Delay (s)	7.7	9.2	8.5	9.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.9			
Level of Service	A			
Intersection Capacity Utilization	46.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Appendix C
Future Background Level of Service Calculations

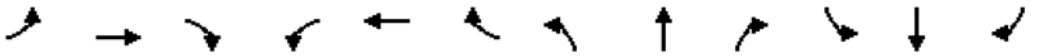


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	384	181	76	351	291	153
Future Volume (vph)	384	181	76	351	291	153
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	0.97	1.00		0.99	
Frt		0.850			0.953	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1842	1571	1724	1745	1571	0
Flt Permitted	0.950		0.438			
Satd. Flow (perm)	1837	1524	793	1745	1571	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		215			47	
Link Speed (k/h)	50			40	40	
Link Distance (m)	294.1			151.2	268.6	
Travel Time (s)	21.2			13.6	24.2	
Confl. Peds. (#/hr)	1	4	9			9
Peak Hour Factor	0.84	0.84	0.90	0.90	0.93	0.93
Heavy Vehicles (%)	2%	7%	9%	2%	6%	10%
Parking (#/hr)				0	0	0
Adj. Flow (vph)	457	215	84	390	313	165
Shared Lane Traffic (%)						
Lane Group Flow (vph)	457	215	84	390	478	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.95	0.95	0.95	1.09	1.09	0.95
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (m)	6.1	6.1	6.1	30.5	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	6.1	6.1	6.1	1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	2	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	26.0	26.0	62.0	62.0	62.0	
Total Split (s)	32.0	32.0	68.0	68.0	68.0	
Total Split (%)	32.0%	32.0%	68.0%	68.0%	68.0%	
Maximum Green (s)	26.0	26.0	60.0	60.0	60.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
All-Red Time (s)	2.0	2.0	4.0	4.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	8.0	8.0	8.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	Max	Max	Max	
Walk Time (s)	8.0	8.0	45.0	45.0	45.0	
Flash Dont Walk (s)	12.0	12.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
Act Effct Green (s)	25.9	25.9	60.0	60.0	60.0	
Actuated g/C Ratio	0.26	0.26	0.60	0.60	0.60	
v/c Ratio	0.96	0.39	0.18	0.37	0.50	
Control Delay	70.2	6.4	10.1	11.5	12.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	70.2	6.4	10.1	11.5	12.3	
LOS	E	A	B	B	B	
Approach Delay	49.8			11.3	12.3	
Approach LOS	D			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 99.9			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 27.5		Intersection LOS: C	
Intersection Capacity Utilization 87.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Queen St & Thomas St

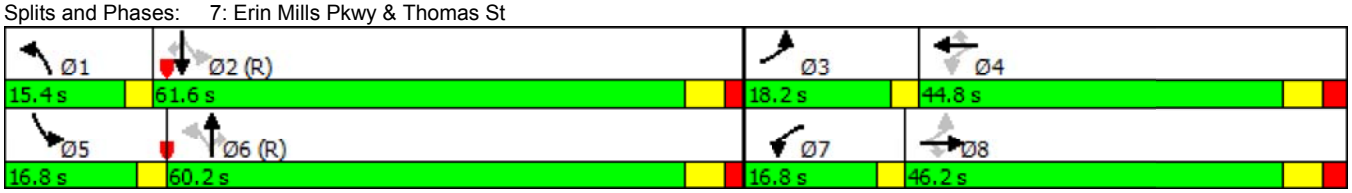


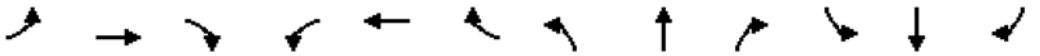
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	327	759	245	266	378	86	78	1498	131	154	1894	76
Future Volume (vph)	327	759	245	266	378	86	78	1498	131	154	1894	76
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	75.0		25.0	125.0		40.0	185.0		155.0	140.0		125.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor			0.99	1.00					0.98			0.99
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1879	3684	1681	1789	3545	1557	1773	5242	1586	1773	5192	1571
Flt Permitted	0.408			0.130			0.068			0.073		
Satd. Flow (perm)	807	3684	1659	245	3545	1557	127	5242	1556	136	5192	1550
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94			88			134			78
Link Speed (k/h)		50			50			70			70	
Link Distance (m)		99.0			760.5			333.6			521.7	
Travel Time (s)		7.1			54.8			17.2			26.8	
Confl. Peds. (#/hr)			1	1			1		4	4		1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	2%	0%	5%	6%	8%	6%	3%	6%	6%	4%	7%
Adj. Flow (vph)	334	774	250	271	386	88	80	1529	134	157	1933	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	334	774	250	271	386	88	80	1529	134	157	1933	78
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	5.0	8.0	8.0	5.0	8.0	8.0
Minimum Split (s)	9.5	40.8	40.8	9.5	40.8	40.8	9.5	30.2	30.2	9.5	30.2	30.2
Total Split (s)	18.2	46.2	46.2	16.8	44.8	44.8	15.4	60.2	60.2	16.8	61.6	61.6
Total Split (%)	13.0%	33.0%	33.0%	12.0%	32.0%	32.0%	11.0%	43.0%	43.0%	12.0%	44.0%	44.0%
Maximum Green (s)	15.2	39.4	39.4	13.8	38.0	38.0	12.4	54.0	54.0	13.8	55.4	55.4
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.8	2.8	0.0	2.8	2.8	0.0	2.0	2.0	0.0	2.0	2.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.8	6.8	3.0	6.8	6.8	3.0	6.2	6.2	3.0	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		13.0	13.0		13.0	13.0		9.0	9.0		9.0	9.0
Flash Dont Walk (s)		21.0	21.0		21.0	21.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	55.2	36.2	36.2	52.4	34.8	34.8	71.1	59.3	59.3	76.8	62.3	62.3
Actuated g/C Ratio	0.39	0.26	0.26	0.37	0.25	0.25	0.51	0.42	0.42	0.55	0.44	0.44
v/c Ratio	0.77	0.81	0.50	1.12	0.44	0.19	0.48	0.69	0.18	0.74	0.84	0.11
Control Delay	43.8	56.1	30.1	124.0	45.5	8.5	28.6	35.8	4.9	47.5	39.2	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.8	56.1	30.1	124.0	45.5	8.5	28.6	35.8	4.9	47.5	39.2	5.6
LOS	D	E	C	F	D	A	C	D	A	D	D	A
Approach Delay		48.3			69.7			33.1			38.5	
Approach LOS		D			E			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 1.4 (1%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 43.0		Intersection LOS: D	
Intersection Capacity Utilization 90.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 7: Erin Mills Pkwy & Thomas St



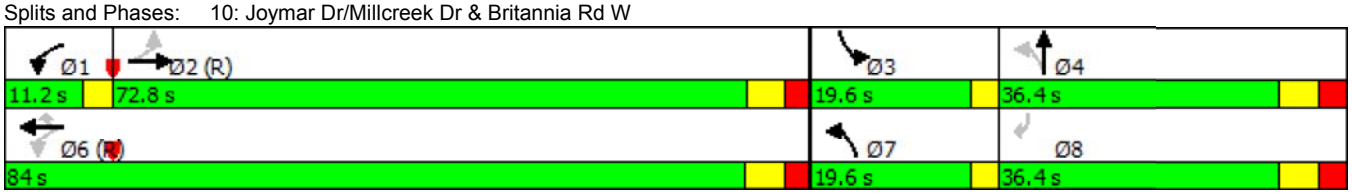


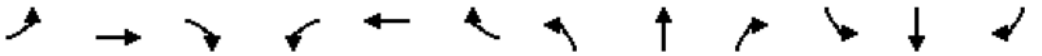
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	1812	59	32	544	121	46	53	81	160	0	53
Future Volume (vph)	33	1812	59	32	544	121	46	53	81	160	0	53
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	90.0		0.0	90.0		90.0	25.0		0.0	0.0		0.0
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99					0.97	1.00	0.99		0.99		0.98
Frt		0.995				0.850		0.909				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1773	3631	0	1824	3448	1616	1842	1750	0	1860	0	1616
Flt Permitted	0.444			0.058			0.950			0.950		
Satd. Flow (perm)	823	3631	0	111	3448	1563	1836	1750	0	1847	0	1592
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				123		50				78
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		418.7			370.9			948.1			108.1	
Travel Time (s)		30.1			26.7			85.3			9.7	
Confl. Peds. (#/hr)	3					3	2		6	6		2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.60	0.60	0.60	0.68	0.68	0.68
Heavy Vehicles (%)	6%	3%	2%	3%	9%	4%	2%	2%	1%	1%	0%	4%
Adj. Flow (vph)	34	1849	60	33	555	123	77	88	135	235	0	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	1909	0	33	555	123	77	223	0	235	0	78
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Turn Type	Perm	NA		pm+pt	NA	Perm	pm+pt	NA		Prot		Perm
Protected Phases		2		1	6		7	4		3		
Permitted Phases	2			6		6	4			3		8
Minimum Split (s)	24.7	24.7		10.7	27.9	27.9	9.5	32.2		12.5		32.2
Total Split (s)	72.8	72.8		11.2	84.0	84.0	19.6	36.4		19.6		36.4
Total Split (%)	52.0%	52.0%		8.0%	60.0%	60.0%	14.0%	26.0%		14.0%		26.0%
Maximum Green (s)	66.1	66.1		8.2	77.1	77.1	16.6	29.2		16.6		29.2
Yellow Time (s)	4.0	4.0		3.0	4.2	4.2	3.0	4.0		3.0		4.0
All-Red Time (s)	2.7	2.7		0.0	2.7	2.7	0.0	3.2		0.0		3.2
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	6.7	6.7		3.0	6.9	6.9	3.0	7.2		3.0		7.2
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		Yes
Walk Time (s)	7.0	7.0			7.0	7.0		10.0				10.0
Flash Dont Walk (s)	9.0	9.0			9.0	9.0		15.0				15.0
Pedestrian Calls (#/hr)	0	0			0	0		0				0
Act Effct Green (s)	66.1	66.1		81.0	77.1	77.1	50.0	29.2		16.6		29.2
Actuated g/C Ratio	0.47	0.47		0.58	0.55	0.55	0.36	0.21		0.12		0.21
v/c Ratio	0.09	1.11		0.20	0.29	0.13	0.12	0.55		1.07		0.20
Control Delay	21.3	94.9		15.5	17.4	2.8	28.9	43.9		136.9		10.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	21.3	94.9		15.5	17.4	2.8	28.9	43.9		136.9		10.5
LOS	C	F		B	B	A	C	D		F		B
Approach Delay		93.6			14.7			40.1			105.4	
Approach LOS		F			B			D			F	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	

Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 145	
Control Type: Pretimed	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 72.6	Intersection LOS: E
Intersection Capacity Utilization 93.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Joymar Dr/Millcreek Dr & Britannia Rd W





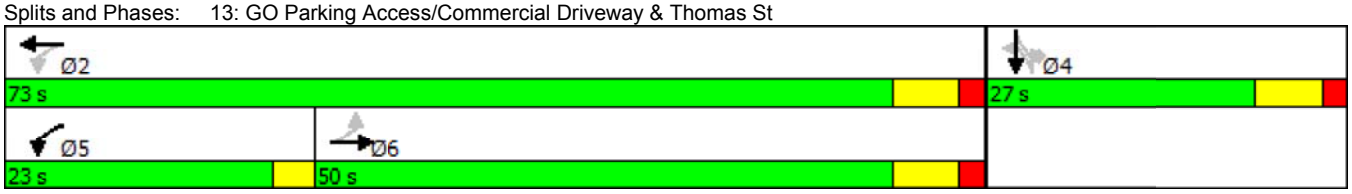
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	469	917	147	157	3	227	0	114	0	2	2
Future Volume (vph)	1	469	917	147	157	3	227	0	114	0	2	2
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96			1.00		0.98		0.96		0.99	
Frt		0.901			0.999				0.850		0.932	
Flt Protected					0.977		0.950					
Satd. Flow (prot)	0	3163	0	0	3539	0	1789	0	1632	0	1816	0
Flt Permitted		0.955			0.518		0.750					
Satd. Flow (perm)	0	3021	0	0	1876	0	1388	0	1569	0	1816	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		616			2						6	
Link Speed (k/h)		50			50			40			20	
Link Distance (m)		123.5			294.1			148.4			49.8	
Travel Time (s)		8.9			21.2			13.4			9.0	
Confl. Peds. (#/hr)	19		17	17		19	12		18	18		12
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.87	0.87	0.87	0.33	0.33	0.33
Heavy Vehicles (%)	0%	4%	2%	0%	7%	0%	5%	0%	3%	0%	0%	0%
Adj. Flow (vph)	1	499	976	167	178	3	261	0	131	0	6	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1476	0	0	348	0	261	0	131	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1		1	1	2	
Detector Template	Left	Thru		Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Perm	NA		pm+pt	NA		D.Pm		Perm		NA	
Protected Phases		6		5	2						4	
Permitted Phases	6			2			4		4	4		
Detector Phase	6	6		5	2		4		4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0		5.0	5.0	5.0	
Minimum Split (s)	30.0	30.0		20.0	30.0		27.0		27.0	27.0	27.0	
Total Split (s)	50.0	50.0		23.0	73.0		27.0		27.0	27.0	27.0	
Total Split (%)	50.0%	50.0%		23.0%	73.0%		27.0%		27.0%	27.0%	27.0%	
Maximum Green (s)	43.0	43.0		20.0	66.0		20.0		20.0	20.0	20.0	
Yellow Time (s)	5.0	5.0		3.0	5.0		5.0		5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		0.0	2.0		2.0		2.0	2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		7.0			7.0		7.0		7.0		7.0	
Lead/Lag	Lag	Lag		Lead								

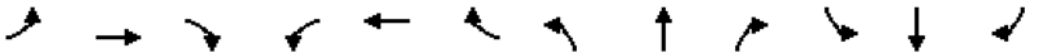
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0	3.0	
Recall Mode	Max	Max		None	Max		None		None	None	None	
Walk Time (s)	8.0	8.0			8.0		8.0		8.0	8.0	8.0	
Flash Dont Walk (s)	12.0	12.0			12.0		12.0		12.0	12.0	12.0	
Pedestrian Calls (#/hr)	0	0			0		0		0	0	0	
Act Effct Green (s)		66.0			66.0		19.9		19.9		19.9	
Actuated g/C Ratio		0.66			0.66		0.20		0.20		0.20	
v/c Ratio		0.67			1.01dl		0.95		0.42		0.03	
Control Delay		7.1			7.7		82.9		39.7		24.2	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay		7.1			7.7		82.9		39.7		24.2	
LOS		A			A		F		D		C	
Approach Delay		7.1			7.7			68.5			24.3	
Approach LOS		A			A			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 99.9			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 18.1		Intersection LOS: B	
Intersection Capacity Utilization 91.8%		ICU Level of Service F	
Analysis Period (min) 15			

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 13: GO Parking Access/Commercial Driveway & Thomas St



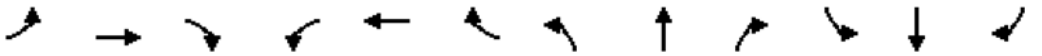


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	1346	29	54	532	13	39	8	177	58	29	30
Future Volume (vph)	32	1346	29	54	532	13	39	8	177	58	29	30
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	100.0		70.0	50.0		0.0	30.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	1.00	1.00		0.99	0.96			0.98	
Frt			0.850		0.997			0.856			0.965	
Flt Protected	0.950			0.950			0.950				0.976	
Satd. Flow (prot)	1773	3684	1437	1724	3603	0	1824	1589	0	0	1818	0
Flt Permitted	0.366			0.087			0.620				0.528	
Satd. Flow (perm)	681	3684	1399	158	3603	0	1179	1589	0	0	973	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127		4			61			15	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		760.5			274.5			324.8			269.2	
Travel Time (s)		54.8			19.8			29.2			24.2	
Confl. Peds. (#/hr)	6		6	6		6	10		23	23		10
Peak Hour Factor	0.87	0.87	0.87	0.79	0.79	0.79	0.80	0.80	0.80	0.68	0.68	0.68
Heavy Vehicles (%)	6%	2%	17%	9%	4%	0%	3%	0%	2%	2%	0%	3%
Adj. Flow (vph)	37	1547	33	68	673	16	49	10	221	85	43	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	1547	33	68	689	0	49	231	0	0	172	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	2			4			4	
Permitted Phases	2		2	2			4			4		
Detector Phase	2	2	2	1	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	2.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	57.0	57.0	57.0	10.0	57.0		28.0	28.0		28.0	28.0	
Total Split (s)	65.0	65.0	65.0	10.0	65.0		28.0	28.0		28.0	28.0	
Total Split (%)	63.1%	63.1%	63.1%	9.7%	63.1%		27.2%	27.2%		27.2%	27.2%	
Maximum Green (s)	58.0	58.0	58.0	2.0	58.0		21.0	21.0		21.0	21.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	3.0	2.0		3.0	3.0		3.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	8.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max		None	None		None	None	
Walk Time (s)	36.0	36.0	36.0		36.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	14.0	14.0	14.0		14.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0	0		0		0	0		0	0	
Act Effct Green (s)	58.4	58.4	58.4	58.9	58.4		18.4	18.4			18.4	
Actuated g/C Ratio	0.59	0.59	0.59	0.60	0.59		0.19	0.19			0.19	
v/c Ratio	0.09	0.71	0.04	0.54	0.32		0.22	0.67			0.89	
Control Delay	11.2	17.6	0.1	26.2	11.5		37.3	37.6			78.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	11.2	17.6	0.1	26.2	11.5		37.3	37.6			78.6	
LOS	B	B	A	C	B		D	D			E	
Approach Delay		17.1			12.8			37.6			78.6	
Approach LOS		B			B			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 103			
Actuated Cycle Length: 98.6			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 21.7		Intersection LOS: C	
Intersection Capacity Utilization 85.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 15: McFarren Blvd/Gafney Dr & Thomas St

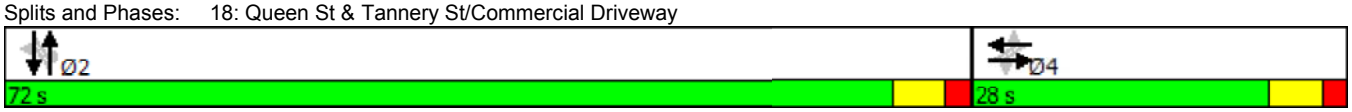


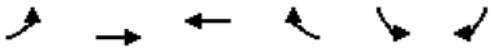
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	16	69	7	6	15	60	522	12	9	309	68
Future Volume (vph)	122	16	69	7	6	15	60	522	12	9	309	68
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	25.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.96	0.96			0.96			1.00			0.99	
Frt		0.878			0.927			0.997			0.976	
Flt Protected	0.950				0.988			0.995			0.999	
Satd. Flow (prot)	1842	1609	0	0	1584	0	0	1679	0	0	1615	0
Flt Permitted	0.726				0.915			0.920			0.985	
Satd. Flow (perm)	1348	1609	0	0	1459	0	0	1550	0	0	1592	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		86			26			2			23	
Link Speed (k/h)		40			20			40			40	
Link Distance (m)		415.2			37.3			268.6			257.2	
Travel Time (s)		37.4			6.7			24.2			23.1	
Confl. Peds. (#/hr)	18		10	10		18	27		28	28		27
Peak Hour Factor	0.80	0.80	0.80	0.58	0.58	0.58	0.94	0.94	0.94	0.92	0.92	0.92
Heavy Vehicles (%)	2%	0%	5%	0%	50%	0%	7%	5%	0%	0%	7%	6%
Parking (#/hr)								0	0		0	0
Adj. Flow (vph)	153	20	86	12	10	26	64	555	13	10	336	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	153	106	0	0	48	0	0	632	0	0	420	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.09	0.95	0.95	1.09	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		66.0	66.0		66.0	66.0	
Total Split (s)	28.0	28.0		28.0	28.0		72.0	72.0		72.0	72.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		72.0%	72.0%		72.0%	72.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		66.0	66.0		66.0	66.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	8.0	8.0		8.0	8.0		48.0	48.0		48.0	48.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	16.1	16.1			16.1			66.2			66.2	
Actuated g/C Ratio	0.17	0.17			0.17			0.70			0.70	
v/c Ratio	0.67	0.31			0.18			0.58			0.37	
Control Delay	50.8	12.9			20.0			10.6			7.2	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	50.8	12.9			20.0			10.6			7.2	
LOS	D	B			B			B			A	
Approach Delay		35.3			20.0			10.6			7.2	
Approach LOS		D			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 94.3			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 14.6		Intersection LOS: B	
Intersection Capacity Utilization 80.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 18: Queen St & Tannery St/Commercial Driveway

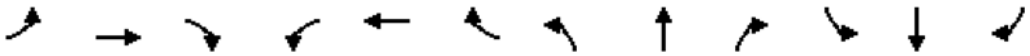




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	247	1376	354	37	26	130
Future Volume (Veh/h)	247	1376	354	37	26	130
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	252	1404	361	38	27	133
Pedestrians			1		16	
Lane Width (m)			3.5		3.5	
Walking Speed (m/s)			1.1		1.1	
Percent Blockage			0		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		275	123			
pX, platoon unblocked					0.69	
vC, conflicting volume	415				1603	216
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	415				963	216
tC, single (s)	4.1				7.0	7.0
tC, 2 stage (s)						
tF (s)	2.2				3.6	3.4
p0 queue free %	78				78	83
cM capacity (veh/h)	1131				124	766

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	720	936	241	158	27	133
Volume Left	252	0	0	0	27	0
Volume Right	0	0	0	38	0	133
cSH	1131	1700	1700	1700	124	766
Volume to Capacity	0.22	0.55	0.14	0.09	0.22	0.17
Queue Length 95th (m)	6.5	0.0	0.0	0.0	6.0	4.8
Control Delay (s)	5.0	0.0	0.0	0.0	41.9	10.7
Lane LOS	A				E	B
Approach Delay (s)	2.2		0.0		16.0	
Approach LOS					C	

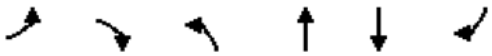
Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		



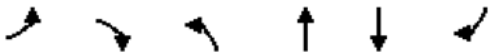
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	10	18	17	30	27	59	47	172	96	139	109	15
Future Volume (vph)	10	18	17	30	27	59	47	172	96	139	109	15
Peak Hour Factor	0.30	0.30	0.30	0.59	0.59	0.59	0.75	0.75	0.75	0.83	0.83	0.83
Hourly flow rate (vph)	33	60	57	51	46	100	63	229	128	167	131	18

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	150	197	420	316
Volume Left (vph)	33	51	63	167
Volume Right (vph)	57	100	128	18
Hadj (s)	-0.15	-0.17	-0.12	0.12
Departure Headway (s)	6.3	6.2	5.5	5.9
Degree Utilization, x	0.26	0.34	0.64	0.52
Capacity (veh/h)	481	501	626	567
Control Delay (s)	11.6	12.3	17.7	14.9
Approach Delay (s)	11.6	12.3	17.7	14.9
Approach LOS	B	B	C	B

Intersection Summary				
Delay			15.1	
Level of Service			C	
Intersection Capacity Utilization			55.2%	ICU Level of Service
Analysis Period (min)			15	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	211	140	142	373	445	359
Future Volume (vph)	211	140	142	373	445	359
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.97	1.00		0.99	
Frt		0.850			0.940	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1879	1632	1807	1745	1650	0
Flt Permitted	0.950		0.213			
Satd. Flow (perm)	1866	1585	404	1745	1650	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		167			73	
Link Speed (k/h)	50			40	40	
Link Distance (m)	294.1			151.2	268.6	
Travel Time (s)	21.2			13.6	24.2	
Confl. Peds. (#/hr)	3	4	14			14
Peak Hour Factor	0.84	0.84	0.86	0.86	0.88	0.88
Heavy Vehicles (%)	0%	3%	4%	2%	1%	0%
Parking (#/hr)				0	0	0
Adj. Flow (vph)	251	167	165	434	506	408
Shared Lane Traffic (%)						
Lane Group Flow (vph)	251	167	165	434	914	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.95	0.95	0.95	1.09	1.09	0.95
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (m)	6.1	6.1	6.1	30.5	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	6.1	6.1	6.1	1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	2	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	32.0	32.0	78.0	78.0	78.0	
Total Split (s)	32.0	32.0	84.0	84.0	84.0	
Total Split (%)	27.6%	27.6%	72.4%	72.4%	72.4%	
Maximum Green (s)	26.0	26.0	76.0	76.0	76.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
All-Red Time (s)	2.0	2.0	4.0	4.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	8.0	8.0	8.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	Max	Max	Max	
Walk Time (s)	8.0	8.0	61.0	61.0	61.0	
Flash Dont Walk (s)	18.0	18.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
Act Effct Green (s)	19.5	19.5	76.1	76.1	76.1	
Actuated g/C Ratio	0.18	0.18	0.69	0.69	0.69	
v/c Ratio	0.75	0.40	0.59	0.36	0.78	
Control Delay	57.4	8.7	20.8	8.4	17.3	
Queue Delay	0.0	0.0	0.0	0.0	0.3	
Total Delay	57.4	8.7	20.8	8.4	17.6	
LOS	E	A	C	A	B	
Approach Delay	37.9			11.8	17.6	
Approach LOS	D			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 116			
Actuated Cycle Length: 109.6			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 20.2		Intersection LOS: C	
Intersection Capacity Utilization 96.6%		ICU Level of Service F	
Analysis Period (min) 15			

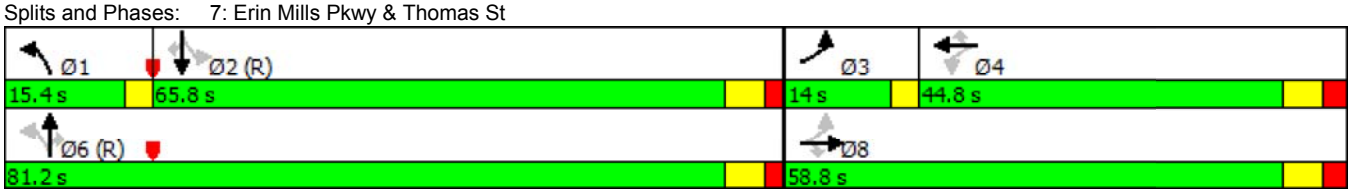
Splits and Phases: 2: Queen St & Thomas St

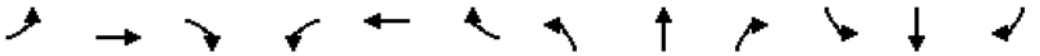
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	298	130	245	904	103	288	1675	188	55	1982	257
Future Volume (vph)	107	298	130	245	904	103	288	1675	188	55	1982	257
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	75.0		25.0	125.0		40.0	185.0		155.0	140.0		125.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor			0.98	1.00					0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1824	3648	1664	1842	3721	1664	1879	5293	1648	1789	5346	1681
Flt Permitted	0.098			0.567			0.064			0.105		
Satd. Flow (perm)	188	3648	1634	1095	3721	1664	127	5293	1609	198	5346	1652
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			133			72			192			210
Link Speed (k/h)		50			50			70			70	
Link Distance (m)		99.0			760.5			333.6			521.7	
Travel Time (s)		7.1			54.8			17.2			26.8	
Confl. Peds. (#/hr)			5	5			3		7	7		3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	3%	1%	2%	1%	1%	0%	2%	2%	5%	1%	0%
Adj. Flow (vph)	109	304	133	250	922	105	294	1709	192	56	2022	262
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	304	133	250	922	105	294	1709	192	56	2022	262
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases	3	8			4		1	6			2	
Permitted Phases	8		8	4		4	6		6	2		2
Detector Phase	3	8	8	4	4	4	1	6	6	2	2	2
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	8.0	8.0	8.0	5.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	9.5	40.8	40.8	40.8	40.8	40.8	9.5	30.2	30.2	30.2	30.2	30.2
Total Split (s)	14.0	58.8	58.8	44.8	44.8	44.8	15.4	81.2	81.2	65.8	65.8	65.8
Total Split (%)	10.0%	42.0%	42.0%	32.0%	32.0%	32.0%	11.0%	58.0%	58.0%	47.0%	47.0%	47.0%
Maximum Green (s)	11.0	52.0	52.0	38.0	38.0	38.0	12.4	75.0	75.0	59.6	59.6	59.6
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.8	2.8	2.8	2.8	2.8	0.0	2.0	2.0	2.0	2.0	2.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.8	6.8	6.8	6.8	6.8	3.0	6.2	6.2	6.2	6.2	6.2
Lead/Lag	Lead			Lag	Lag	Lag	Lead			Lag	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		13.0	13.0	13.0	13.0	13.0		9.0	9.0	9.0	9.0	9.0
Flash Dont Walk (s)		21.0	21.0	21.0	21.0	21.0		15.0	15.0	15.0	15.0	15.0
Pedestrian Calls (#/hr)		0	0	0	0	0		0	0	0	0	0
Act Effct Green (s)	54.7	50.9	50.9	38.0	38.0	38.0	79.3	76.1	76.1	59.6	59.6	59.6
Actuated g/C Ratio	0.39	0.36	0.36	0.27	0.27	0.27	0.57	0.54	0.54	0.43	0.43	0.43
v/c Ratio	0.58	0.23	0.20	0.84	0.91	0.21	1.22	0.59	0.20	0.67	0.89	0.32
Control Delay	39.7	31.2	5.2	73.2	63.5	15.7	165.4	22.8	2.6	72.1	43.1	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.7	31.2	5.2	73.2	63.5	15.7	165.4	22.8	2.6	72.1	43.1	7.0
LOS	D	C	A	E	E	B	F	C	A	E	D	A
Approach Delay		26.6			61.5			40.1			39.8	
Approach LOS		C			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 107.8 (77%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.22			
Intersection Signal Delay: 43.1		Intersection LOS: D	
Intersection Capacity Utilization 98.4%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 7: Erin Mills Pkwy & Thomas St



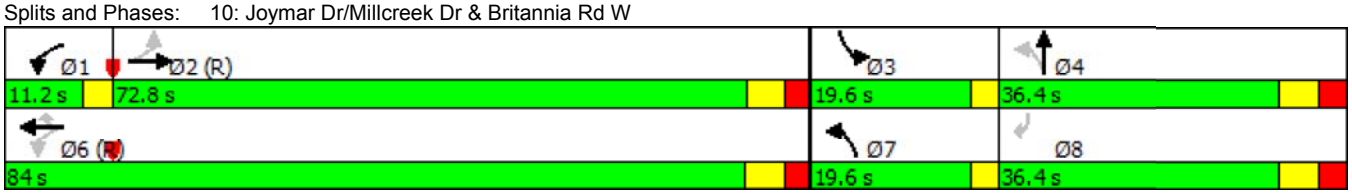


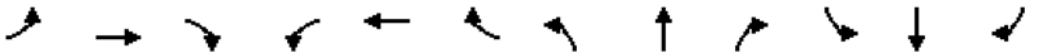
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	824	27	75	2026	215	18	16	23	166	0	69
Future Volume (vph)	16	824	27	75	2026	215	18	16	23	166	0	69
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	90.0		0.0	90.0		90.0	25.0		0.0	0.0		0.0
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.96	1.00	0.99		1.00		0.99
Frt		0.995				0.850		0.912				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1879	3668	0	1879	3721	1648	1879	1735	0	1860	0	1586
Flt Permitted	0.061			0.225			0.950			0.950		
Satd. Flow (perm)	121	3668	0	445	3721	1587	1876	1735	0	1852	0	1564
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				148		34				105
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		418.7			370.9			948.1			108.1	
Travel Time (s)		30.1			26.7			85.3			9.7	
Confl. Peds. (#/hr)	4					4	1		3	3		1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.68	0.68	0.68	0.66	0.66	0.66
Heavy Vehicles (%)	0%	2%	0%	0%	1%	2%	0%	0%	5%	1%	0%	6%
Adj. Flow (vph)	16	841	28	77	2067	219	26	24	34	252	0	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	869	0	77	2067	219	26	58	0	252	0	105
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Turn Type	Perm	NA		pm+pt	NA	Perm	pm+pt	NA		Prot		Perm
Protected Phases		2		1	6		7	4		3		
Permitted Phases	2			6		6	4			3		8
Minimum Split (s)	24.7	24.7		10.7	27.9	27.9	9.5	32.2		12.5		32.2
Total Split (s)	72.8	72.8		11.2	84.0	84.0	19.6	36.4		19.6		36.4
Total Split (%)	52.0%	52.0%		8.0%	60.0%	60.0%	14.0%	26.0%		14.0%		26.0%
Maximum Green (s)	66.1	66.1		8.2	77.1	77.1	16.6	29.2		16.6		29.2
Yellow Time (s)	4.0	4.0		3.0	4.2	4.2	3.0	4.0		3.0		4.0
All-Red Time (s)	2.7	2.7		0.0	2.7	2.7	0.0	3.2		0.0		3.2
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	6.7	6.7		3.0	6.9	6.9	3.0	7.2		3.0		7.2
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		Yes
Walk Time (s)	7.0	7.0			7.0	7.0		10.0				10.0
Flash Dont Walk (s)	9.0	9.0			9.0	9.0		15.0				15.0
Pedestrian Calls (#/hr)	0	0			0	0		0				0
Act Effct Green (s)	66.1	66.1		81.0	77.1	77.1	50.0	29.2		16.6		29.2
Actuated g/C Ratio	0.47	0.47		0.58	0.55	0.55	0.36	0.21		0.12		0.21
v/c Ratio	0.28	0.50		0.23	1.01	0.23	0.04	0.15		1.15		0.26
Control Delay	38.5	26.7		14.6	53.4	5.9	27.8	23.6		158.7		9.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	38.5	26.7		14.6	53.4	5.9	27.8	23.6		158.7		9.7
LOS	D	C		B	D	A	C	C		F		A
Approach Delay		26.9			47.7			24.9			114.9	
Approach LOS		C			D			C			F	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	

Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 135	
Control Type: Pretimed	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay: 48.7	Intersection LOS: D
Intersection Capacity Utilization 93.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Joymar Dr/Millcreek Dr & Britannia Rd W



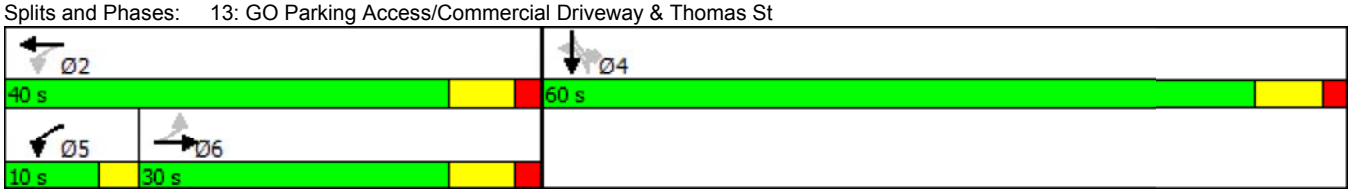


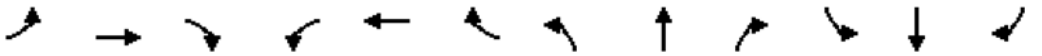
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	385	179	56	560	0	609	0	204	1	0	7
Future Volume (vph)	3	385	179	56	560	0	609	0	204	1	0	7
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			1.00		0.99		0.98		0.98	
Frt		0.953							0.850		0.882	
Flt Protected					0.995		0.950				0.994	
Satd. Flow (prot)	0	3405	0	0	3705	0	1842	0	1681	0	1700	0
Flt Permitted		0.952			0.779		0.747				0.994	
Satd. Flow (perm)	0	3241	0	0	2896	0	1434	0	1644	0	1698	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		70									76	
Link Speed (k/h)		50			50			40			20	
Link Distance (m)		123.5			294.1			148.4			49.8	
Travel Time (s)		8.9			21.2			13.4			9.0	
Confl. Peds. (#/hr)	17		24	24		17	7		7	7		7
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.91	0.91	0.91	0.50	0.50	0.50
Heavy Vehicles (%)	0%	1%	6%	0%	1%	0%	2%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	410	190	58	577	0	669	0	224	2	0	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	603	0	0	635	0	669	0	224	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1		1	1	2	
Detector Template	Left	Thru		Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Perm	NA		pm+pt	NA		D.Pm		Perm	Perm	NA	
Protected Phases		6		5	2						4	
Permitted Phases	6			2			4		4	4		
Detector Phase	6	6		5	2		4		4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0		5.0	5.0	5.0	
Minimum Split (s)	30.0	30.0		10.0	30.0		27.0		27.0	27.0	27.0	
Total Split (s)	30.0	30.0		10.0	40.0		60.0		60.0	60.0	60.0	
Total Split (%)	30.0%	30.0%		10.0%	40.0%		60.0%		60.0%	60.0%	60.0%	
Maximum Green (s)	23.0	23.0		7.0	33.0		53.0		53.0	53.0	53.0	
Yellow Time (s)	5.0	5.0		3.0	5.0		5.0		5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		0.0	2.0		2.0		2.0	2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		7.0			7.0		7.0		7.0		7.0	
Lead/Lag	Lag	Lag		Lead								

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0	3.0	
Recall Mode	Max	Max		None	Max		None		None	None	None	
Walk Time (s)	8.0	8.0			8.0		8.0		8.0	8.0	8.0	
Flash Dont Walk (s)	12.0	12.0			12.0		12.0		12.0	12.0	12.0	
Pedestrian Calls (#/hr)	0	0			0		0		0	0	0	
Act Effct Green (s)		33.1			33.1		49.3		49.3		49.3	
Actuated g/C Ratio		0.34			0.34		0.51		0.51		0.51	
v/c Ratio		0.52			0.64		0.91		0.27		0.02	
Control Delay		24.9			31.1		40.4		14.1		0.0	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay		24.9			31.1		40.4		14.1		0.0	
LOS		C			C		D		B		A	
Approach Delay		24.9			31.1			33.8				
Approach LOS		C			C			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 96.5			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 30.3		Intersection LOS: C	
Intersection Capacity Utilization 87.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 13: GO Parking Access/Commercial Driveway & Thomas St



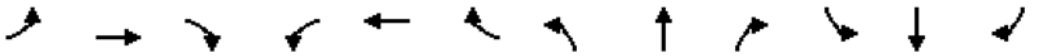


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	423	31	104	944	35	17	8	68	18	17	25
Future Volume (vph)	18	423	31	104	944	35	17	8	68	18	17	25
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	100.0		70.0	50.0		0.0	30.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	1.00	1.00		1.00				0.99	
Frt			0.850		0.995			0.865			0.944	
Flt Protected	0.950			0.950			0.950				0.985	
Satd. Flow (prot)	1879	3648	1681	1879	3664	0	1773	1711	0	0	1827	0
Flt Permitted	0.217			0.492			0.764				0.858	
Satd. Flow (perm)	428	3648	1632	968	3664	0	1421	1711	0	0	1591	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			65		5			97			28	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		760.5			274.5			324.8			269.2	
Travel Time (s)		54.8			19.8			29.2			24.2	
Confl. Peds. (#/hr)	11		9	9		11	3					3
Peak Hour Factor	0.94	0.94	0.94	0.87	0.87	0.87	0.70	0.70	0.70	0.65	0.65	0.65
Heavy Vehicles (%)	0%	3%	0%	0%	2%	0%	6%	0%	0%	0%	0%	0%
Adj. Flow (vph)	19	450	33	120	1085	40	24	11	97	28	26	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	450	33	120	1125	0	24	108	0	0	92	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	2			4			4	
Permitted Phases	2		2	2			4			4		
Detector Phase	2	2	2	1	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	2.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	64.0	64.0	64.0	10.0	64.0		34.0	34.0		34.0	34.0	
Total Split (s)	72.0	72.0	72.0	11.0	72.0		34.0	34.0		34.0	34.0	
Total Split (%)	61.5%	61.5%	61.5%	9.4%	61.5%		29.1%	29.1%		29.1%	29.1%	
Maximum Green (s)	65.0	65.0	65.0	8.0	65.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	5.0	5.0	5.0	3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	0.0	2.0		3.0	3.0		3.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	3.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max		None	None		None	None	
Walk Time (s)	43.0	43.0	43.0		43.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	14.0	14.0	14.0		14.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0	0		0		0	0		0	0	
Act Effct Green (s)	65.1	65.1	65.1	75.9	65.1		9.3	9.3			9.3	
Actuated g/C Ratio	0.66	0.66	0.66	0.77	0.66		0.09	0.09			0.09	
v/c Ratio	0.07	0.19	0.03	0.15	0.46		0.18	0.43			0.52	
Control Delay	7.7	7.0	0.5	2.8	9.2		43.8	16.4			41.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	7.7	7.0	0.5	2.8	9.2		43.8	16.4			41.1	
LOS	A	A	A	A	A		D	B			D	
Approach Delay		6.6			8.6			21.4			41.1	
Approach LOS		A			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 117			
Actuated Cycle Length: 98.2			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 10.5		Intersection LOS: B	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 15: McFarren Blvd/Gafney Dr & Thomas St

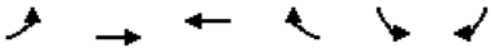


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	7	57	7	17	11	79	592	14	7	652	109
Future Volume (vph)	119	7	57	7	17	11	79	592	14	7	652	109
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	25.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.95	0.91			0.96			1.00			0.99	
Frt		0.866			0.958			0.997			0.981	
Flt Protected	0.950				0.990			0.994				
Satd. Flow (prot)	1860	1524	0	0	1780	0	0	1731	0	0	1722	0
Flt Permitted	0.724				0.933			0.814			0.993	
Satd. Flow (perm)	1345	1524	0	0	1652	0	0	1417	0	0	1710	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			16			3			22	
Link Speed (k/h)		40			20			40			40	
Link Distance (m)		415.2			37.3			268.6			257.2	
Travel Time (s)		37.4			6.7			24.2			23.1	
Confl. Peds. (#/hr)	15		24	24		15	24		11	11		24
Peak Hour Factor	0.78	0.78	0.78	0.67	0.67	0.67	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	1%	0%	2%	0%	6%	0%	1%	2%	0%	0%	1%	0%
Parking (#/hr)								0	0		0	0
Adj. Flow (vph)	153	9	73	10	25	16	91	680	16	8	749	125
Shared Lane Traffic (%)												
Lane Group Flow (vph)	153	82	0	0	51	0	0	787	0	0	882	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.09	0.95	0.95	1.09	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	1.0	1.0		1.0	1.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		83.0	83.0		83.0	83.0	
Total Split (s)	21.0	21.0		21.0	21.0		89.0	89.0		89.0	89.0	
Total Split (%)	19.1%	19.1%		19.1%	19.1%		80.9%	80.9%		80.9%	80.9%	
Maximum Green (s)	15.0	15.0		15.0	15.0		83.0	83.0		83.0	83.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	8.0	8.0		8.0	8.0		65.0	65.0		65.0	65.0	
Flash Dont Walk (s)	7.0	7.0		7.0	7.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	14.4	14.4			14.4			83.0			83.0	
Actuated g/C Ratio	0.13	0.13			0.13			0.76			0.76	
v/c Ratio	0.86	0.31			0.22			0.73			0.68	
Control Delay	87.4	15.6			34.2			12.4			9.7	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	87.4	15.6			34.2			12.4			9.7	
LOS	F	B			C			B			A	
Approach Delay		62.4			34.2			12.4			9.7	
Approach LOS		E			C			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 109.4			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 17.8		Intersection LOS: B	
Intersection Capacity Utilization 104.2%		ICU Level of Service G	
Analysis Period (min) 15			

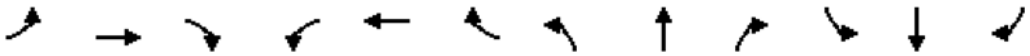
Splits and Phases: 18: Queen St & Tannery St/Commercial Driveway



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	88	564	1203	43	22	164
Future Volume (Veh/h)	88	564	1203	43	22	164
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	90	576	1228	44	22	167
Pedestrians			1		13	
Lane Width (m)			3.5		3.5	
Walking Speed (m/s)			1.1		1.1	
Percent Blockage			0		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		275	123			
pX, platoon unblocked	0.87				0.87	0.87
vC, conflicting volume	1285				1732	649
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1036				1548	307
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	85				72	72
cM capacity (veh/h)	586				78	599

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	282	384	819	453	22	167
Volume Left	90	0	0	0	22	0
Volume Right	0	0	0	44	0	167
cSH	586	1700	1700	1700	78	599
Volume to Capacity	0.15	0.23	0.48	0.27	0.28	0.28
Queue Length 95th (m)	4.1	0.0	0.0	0.0	7.8	8.6
Control Delay (s)	5.4	0.0	0.0	0.0	68.3	13.3
Lane LOS	A				F	B
Approach Delay (s)	2.3		0.0		19.7	
Approach LOS					C	

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

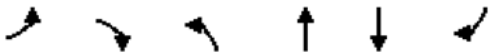


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	1	2	5	101	3	93	3	78	51	51	93	1
Future Volume (vph)	1	2	5	101	3	93	3	78	51	51	93	1
Peak Hour Factor	0.50	0.50	0.50	0.88	0.88	0.88	0.87	0.87	0.87	0.86	0.86	0.86
Hourly flow rate (vph)	2	4	10	115	3	106	3	90	59	59	108	1

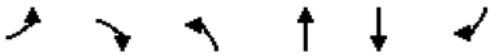
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	16	224	152	168
Volume Left (vph)	2	115	3	59
Volume Right (vph)	10	106	59	1
Hadj (s)	-0.35	-0.18	-0.23	0.08
Departure Headway (s)	4.6	4.5	4.5	4.7
Degree Utilization, x	0.02	0.28	0.19	0.22
Capacity (veh/h)	701	749	760	715
Control Delay (s)	7.7	9.2	8.5	9.1
Approach Delay (s)	7.7	9.2	8.5	9.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.9			
Level of Service	A			
Intersection Capacity Utilization	46.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Appendix D
Future Total Level of Service Calculations



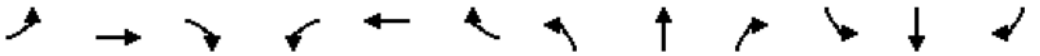
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	384	188	77	351	291	153
Future Volume (vph)	384	188	77	351	291	153
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	0.97	1.00		0.99	
Frt		0.850			0.953	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1842	1571	1724	1745	1571	0
Flt Permitted	0.950		0.438			
Satd. Flow (perm)	1837	1524	793	1745	1571	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		224			47	
Link Speed (k/h)	50			40	40	
Link Distance (m)	294.1			151.2	268.6	
Travel Time (s)	21.2			13.6	24.2	
Confl. Peds. (#/hr)	1	4	9			9
Peak Hour Factor	0.84	0.84	0.90	0.90	0.93	0.93
Heavy Vehicles (%)	2%	7%	9%	2%	6%	10%
Parking (#/hr)				0	0	0
Adj. Flow (vph)	457	224	86	390	313	165
Shared Lane Traffic (%)						
Lane Group Flow (vph)	457	224	86	390	478	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.95	0.95	0.95	1.09	1.09	0.95
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (m)	6.1	6.1	6.1	30.5	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	6.1	6.1	6.1	1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	2	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	26.0	26.0	62.0	62.0	62.0	
Total Split (s)	32.0	32.0	68.0	68.0	68.0	
Total Split (%)	32.0%	32.0%	68.0%	68.0%	68.0%	
Maximum Green (s)	26.0	26.0	60.0	60.0	60.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
All-Red Time (s)	2.0	2.0	4.0	4.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	8.0	8.0	8.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	Max	Max	Max	
Walk Time (s)	8.0	8.0	45.0	45.0	45.0	
Flash Dont Walk (s)	12.0	12.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
Act Effct Green (s)	25.9	25.9	60.0	60.0	60.0	
Actuated g/C Ratio	0.26	0.26	0.60	0.60	0.60	
v/c Ratio	0.96	0.40	0.18	0.37	0.50	
Control Delay	70.2	6.4	10.2	11.5	12.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	70.2	6.4	10.2	11.5	12.3	
LOS	E	A	B	B	B	
Approach Delay	49.2			11.3	12.3	
Approach LOS	D			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 99.9			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 27.4		Intersection LOS: C	
Intersection Capacity Utilization 87.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Queen St & Thomas St

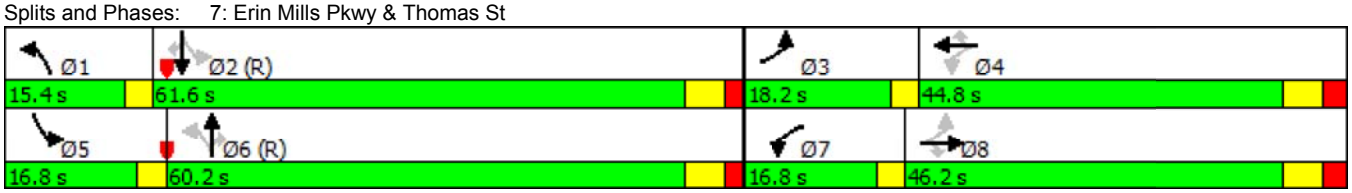


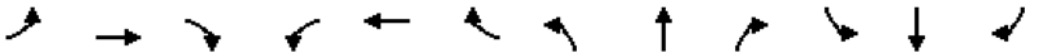
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	327	760	245	266	382	86	78	1498	132	154	1894	76
Future Volume (vph)	327	760	245	266	382	86	78	1498	132	154	1894	76
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	75.0		25.0	125.0		40.0	185.0		155.0	140.0		125.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor			0.99	1.00					0.98			0.99
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1879	3684	1681	1789	3545	1557	1773	5242	1586	1773	5192	1571
Flt Permitted	0.404			0.129			0.068			0.073		
Satd. Flow (perm)	799	3684	1659	243	3545	1557	127	5242	1556	136	5192	1550
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94			88			135			78
Link Speed (k/h)		50			50			70			70	
Link Distance (m)		99.0			760.5			333.6			521.7	
Travel Time (s)		7.1			54.8			17.2			26.8	
Confl. Peds. (#/hr)			1	1			1		4	4		1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	2%	0%	5%	6%	8%	6%	3%	6%	6%	4%	7%
Adj. Flow (vph)	334	776	250	271	390	88	80	1529	135	157	1933	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	334	776	250	271	390	88	80	1529	135	157	1933	78
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4	6		6	2		2
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	5.0	8.0	8.0	5.0	8.0	8.0
Minimum Split (s)	9.5	40.8	40.8	9.5	40.8	40.8	9.5	30.2	30.2	9.5	30.2	30.2
Total Split (s)	18.2	46.2	46.2	16.8	44.8	44.8	15.4	60.2	60.2	16.8	61.6	61.6
Total Split (%)	13.0%	33.0%	33.0%	12.0%	32.0%	32.0%	11.0%	43.0%	43.0%	12.0%	44.0%	44.0%
Maximum Green (s)	15.2	39.4	39.4	13.8	38.0	38.0	12.4	54.0	54.0	13.8	55.4	55.4
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	0.0	2.8	2.8	0.0	2.8	2.8	0.0	2.0	2.0	0.0	2.0	2.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.8	6.8	3.0	6.8	6.8	3.0	6.2	6.2	3.0	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		13.0	13.0		13.0	13.0		9.0	9.0		9.0	9.0
Flash Dont Walk (s)		21.0	21.0		21.0	21.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	55.2	36.2	36.2	52.4	34.8	34.8	71.1	59.2	59.2	76.8	62.3	62.3
Actuated g/C Ratio	0.39	0.26	0.26	0.37	0.25	0.25	0.51	0.42	0.42	0.55	0.44	0.44
v/c Ratio	0.77	0.82	0.50	1.12	0.44	0.19	0.48	0.69	0.18	0.74	0.84	0.11
Control Delay	44.2	56.2	30.1	125.4	45.6	8.5	28.6	35.8	4.9	47.6	39.2	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.2	56.2	30.1	125.4	45.6	8.5	28.6	35.8	4.9	47.6	39.2	5.6
LOS	D	E	C	F	D	A	C	D	A	D	D	A
Approach Delay		48.4			70.1			33.1			38.6	
Approach LOS		D			E			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 1.4 (1%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 43.1		Intersection LOS: D	
Intersection Capacity Utilization 90.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 7: Erin Mills Pkwy & Thomas St



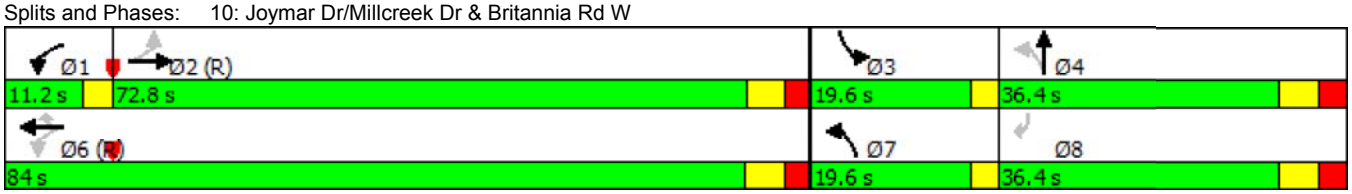


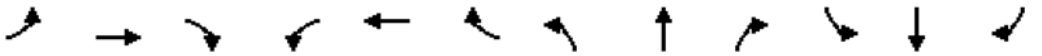
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	1812	63	36	544	121	53	68	107	160	0	53
Future Volume (vph)	33	1812	63	36	544	121	53	68	107	160	0	53
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	90.0		0.0	90.0		90.0	25.0		0.0	0.0		0.0
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99					0.97	1.00	0.99		0.99		0.98
Frt		0.995				0.850		0.908				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1773	3631	0	1824	3448	1616	1842	1748	0	1860	0	1616
Flt Permitted	0.444			0.058			0.950			0.950		
Satd. Flow (perm)	823	3631	0	111	3448	1563	1836	1748	0	1848	0	1592
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				123		51				78
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		418.7			370.9			948.1			108.1	
Travel Time (s)		30.1			26.7			85.3			9.7	
Confl. Peds. (#/hr)	3					3	2		6	6		2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.60	0.60	0.60	0.68	0.68	0.68
Heavy Vehicles (%)	6%	3%	2%	3%	9%	4%	2%	2%	1%	1%	0%	4%
Adj. Flow (vph)	34	1849	64	37	555	123	88	113	178	235	0	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	34	1913	0	37	555	123	88	291	0	235	0	78
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Turn Type	Perm	NA		pm+pt	NA	Perm	pm+pt	NA		Prot		Perm
Protected Phases		2		1	6		7	4		3		
Permitted Phases	2			6		6	4			3		8
Minimum Split (s)	24.7	24.7		10.7	27.9	27.9	9.5	32.2		12.5		32.2
Total Split (s)	72.8	72.8		11.2	84.0	84.0	19.6	36.4		19.6		36.4
Total Split (%)	52.0%	52.0%		8.0%	60.0%	60.0%	14.0%	26.0%		14.0%		26.0%
Maximum Green (s)	66.1	66.1		8.2	77.1	77.1	16.6	29.2		16.6		29.2
Yellow Time (s)	4.0	4.0		3.0	4.2	4.2	3.0	4.0		3.0		4.0
All-Red Time (s)	2.7	2.7		0.0	2.7	2.7	0.0	3.2		0.0		3.2
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	6.7	6.7		3.0	6.9	6.9	3.0	7.2		3.0		7.2
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		Yes
Walk Time (s)	7.0	7.0			7.0	7.0		10.0				10.0
Flash Dont Walk (s)	9.0	9.0			9.0	9.0		15.0				15.0
Pedestrian Calls (#/hr)	0	0			0	0		0				0
Act Effct Green (s)	66.1	66.1		81.0	77.1	77.1	50.0	29.2		16.6		29.2
Actuated g/C Ratio	0.47	0.47		0.58	0.55	0.55	0.36	0.21		0.12		0.21
v/c Ratio	0.09	1.12		0.23	0.29	0.13	0.13	0.72		1.07		0.20
Control Delay	21.3	95.8		16.0	17.4	2.8	29.2	53.5		136.9		10.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	21.3	95.8		16.0	17.4	2.8	29.2	53.5		136.9		10.5
LOS	C	F		B	B	A	C	D		F		B
Approach Delay		94.5			14.8			47.8			105.4	
Approach LOS		F			B			D			F	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	

Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 145	
Control Type: Pretimed	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 73.2	Intersection LOS: E
Intersection Capacity Utilization 93.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Joymar Dr/Millcreek Dr & Britannia Rd W





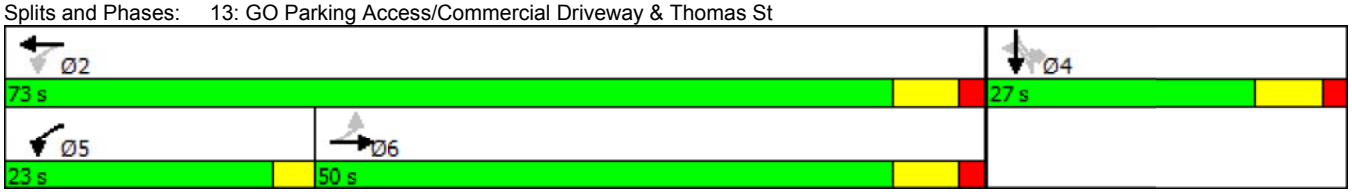
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	476	917	147	158	3	227	0	114	0	2	2
Future Volume (vph)	1	476	917	147	158	3	227	0	114	0	2	2
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96			1.00		0.98		0.96		0.99	
Frt		0.901			0.999				0.850		0.932	
Flt Protected					0.977		0.950					
Satd. Flow (prot)	0	3164	0	0	3538	0	1789	0	1632	0	1816	0
Flt Permitted		0.955			0.518		0.750					
Satd. Flow (perm)	0	3021	0	0	1876	0	1388	0	1569	0	1816	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		610			2						6	
Link Speed (k/h)		50			50			40			20	
Link Distance (m)		123.5			294.1			148.4			49.8	
Travel Time (s)		8.9			21.2			13.4			9.0	
Confl. Peds. (#/hr)	19		17	17		19	12		18	18		12
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.87	0.87	0.87	0.33	0.33	0.33
Heavy Vehicles (%)	0%	4%	2%	0%	7%	0%	5%	0%	3%	0%	0%	0%
Adj. Flow (vph)	1	506	976	167	180	3	261	0	131	0	6	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1483	0	0	350	0	261	0	131	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1		1	1	2	
Detector Template	Left	Thru		Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Perm	NA		pm+pt	NA		D.Pm		Perm		NA	
Protected Phases		6		5	2						4	
Permitted Phases	6			2			4		4	4		
Detector Phase	6	6		5	2		4		4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0		5.0	5.0	5.0	
Minimum Split (s)	30.0	30.0		20.0	30.0		27.0		27.0	27.0	27.0	
Total Split (s)	50.0	50.0		23.0	73.0		27.0		27.0	27.0	27.0	
Total Split (%)	50.0%	50.0%		23.0%	73.0%		27.0%		27.0%	27.0%	27.0%	
Maximum Green (s)	43.0	43.0		20.0	66.0		20.0		20.0	20.0	20.0	
Yellow Time (s)	5.0	5.0		3.0	5.0		5.0		5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		0.0	2.0		2.0		2.0	2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		7.0			7.0		7.0		7.0		7.0	
Lead/Lag	Lag	Lag		Lead								

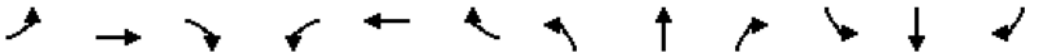
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0	3.0	
Recall Mode	Max	Max		None	Max		None		None	None	None	
Walk Time (s)	8.0	8.0			8.0		8.0		8.0	8.0	8.0	
Flash Dont Walk (s)	12.0	12.0			12.0		12.0		12.0	12.0	12.0	
Pedestrian Calls (#/hr)	0	0			0		0		0	0	0	
Act Effct Green (s)		66.0			66.0		19.9		19.9		19.9	
Actuated g/C Ratio		0.66			0.66		0.20		0.20		0.20	
v/c Ratio		0.67			1.01dl		0.95		0.42		0.03	
Control Delay		7.2			7.8		82.9		39.7		24.2	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay		7.2			7.8		82.9		39.7		24.2	
LOS		A			A		F		D		C	
Approach Delay		7.2			7.8			68.5			24.3	
Approach LOS		A			A			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 99.9			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 18.2		Intersection LOS: B	
Intersection Capacity Utilization 92.0%		ICU Level of Service F	
Analysis Period (min) 15			

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 13: GO Parking Access/Commercial Driveway & Thomas St



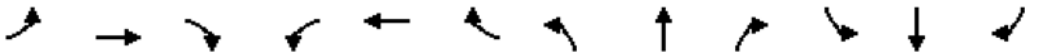


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	1348	29	54	544	13	39	8	177	58	29	30
Future Volume (vph)	32	1348	29	54	544	13	39	8	177	58	29	30
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	100.0		70.0	50.0		0.0	30.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	1.00	1.00		0.99	0.96			0.98	
Frt			0.850		0.997			0.856			0.965	
Flt Protected	0.950			0.950			0.950				0.976	
Satd. Flow (prot)	1773	3684	1437	1724	3603	0	1824	1589	0	0	1818	0
Flt Permitted	0.358			0.087			0.620				0.528	
Satd. Flow (perm)	666	3684	1399	158	3603	0	1179	1589	0	0	973	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127		4			61			15	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		760.5			274.5			324.8			269.2	
Travel Time (s)		54.8			19.8			29.2			24.2	
Confl. Peds. (#/hr)	6		6	6		6	10		23	23		10
Peak Hour Factor	0.87	0.87	0.87	0.79	0.79	0.79	0.80	0.80	0.80	0.68	0.68	0.68
Heavy Vehicles (%)	6%	2%	17%	9%	4%	0%	3%	0%	2%	2%	0%	3%
Adj. Flow (vph)	37	1549	33	68	689	16	49	10	221	85	43	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	1549	33	68	705	0	49	231	0	0	172	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	2			4			4	
Permitted Phases	2		2	2			4			4		
Detector Phase	2	2	2	1	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	2.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	57.0	57.0	57.0	10.0	57.0		28.0	28.0		28.0	28.0	
Total Split (s)	65.0	65.0	65.0	10.0	65.0		28.0	28.0		28.0	28.0	
Total Split (%)	63.1%	63.1%	63.1%	9.7%	63.1%		27.2%	27.2%		27.2%	27.2%	
Maximum Green (s)	58.0	58.0	58.0	2.0	58.0		21.0	21.0		21.0	21.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	3.0	2.0		3.0	3.0		3.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	8.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max		None	None		None	None	
Walk Time (s)	36.0	36.0	36.0		36.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	14.0	14.0	14.0		14.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0	0		0		0	0		0	0	
Act Effct Green (s)	58.4	58.4	58.4	58.9	58.4		18.4	18.4			18.4	
Actuated g/C Ratio	0.59	0.59	0.59	0.60	0.59		0.19	0.19			0.19	
v/c Ratio	0.09	0.71	0.04	0.54	0.33		0.22	0.67			0.89	
Control Delay	11.2	17.6	0.1	26.2	11.6		37.3	37.6			78.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	11.2	17.6	0.1	26.2	11.6		37.3	37.6			78.6	
LOS	B	B	A	C	B		D	D			E	
Approach Delay		17.1			12.8			37.6			78.6	
Approach LOS		B			B			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 103			
Actuated Cycle Length: 98.6			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 21.7		Intersection LOS: C	
Intersection Capacity Utilization 85.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 15: McFarren Blvd/Gafney Dr & Thomas St

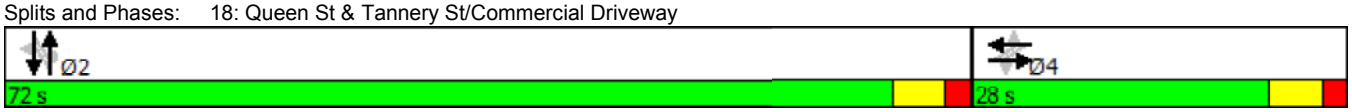


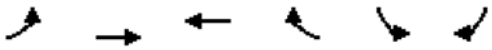
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	16	69	7	6	15	60	522	12	9	309	70
Future Volume (vph)	128	16	69	7	6	15	60	522	12	9	309	70
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	25.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.96	0.96			0.96			1.00			0.99	
Frt		0.878			0.927			0.997			0.976	
Flt Protected	0.950				0.988			0.995			0.999	
Satd. Flow (prot)	1842	1609	0	0	1584	0	0	1679	0	0	1615	0
Flt Permitted	0.726				0.916			0.919			0.985	
Satd. Flow (perm)	1348	1609	0	0	1460	0	0	1549	0	0	1592	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		86			26			2			23	
Link Speed (k/h)		40			20			40			40	
Link Distance (m)		415.2			37.3			268.6			257.2	
Travel Time (s)		37.4			6.7			24.2			23.1	
Confl. Peds. (#/hr)	18		10	10		18	27		28	28		27
Peak Hour Factor	0.80	0.80	0.80	0.58	0.58	0.58	0.94	0.94	0.94	0.92	0.92	0.92
Heavy Vehicles (%)	2%	0%	5%	0%	50%	0%	7%	5%	0%	0%	7%	6%
Parking (#/hr)								0	0		0	0
Adj. Flow (vph)	160	20	86	12	10	26	64	555	13	10	336	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	160	106	0	0	48	0	0	632	0	0	422	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.09	0.95	0.95	1.09	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		66.0	66.0		66.0	66.0	
Total Split (s)	28.0	28.0		28.0	28.0		72.0	72.0		72.0	72.0	
Total Split (%)	28.0%	28.0%		28.0%	28.0%		72.0%	72.0%		72.0%	72.0%	
Maximum Green (s)	22.0	22.0		22.0	22.0		66.0	66.0		66.0	66.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	8.0	8.0		8.0	8.0		48.0	48.0		48.0	48.0	
Flash Dont Walk (s)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	16.5	16.5			16.5			66.2			66.2	
Actuated g/C Ratio	0.17	0.17			0.17			0.70			0.70	
v/c Ratio	0.68	0.30			0.17			0.58			0.38	
Control Delay	51.6	12.8			19.9			10.8			7.3	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	51.6	12.8			19.9			10.8			7.3	
LOS	D	B			B			B			A	
Approach Delay		36.1			19.9			10.8			7.3	
Approach LOS		D			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 94.7			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 15.0		Intersection LOS: B	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 18: Queen St & Tannery St/Commercial Driveway

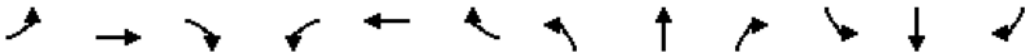




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	249	1376	354	38	33	142
Future Volume (Veh/h)	249	1376	354	38	33	142
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	254	1404	361	39	34	145
Pedestrians			1		16	
Lane Width (m)			3.5		3.5	
Walking Speed (m/s)			1.1		1.1	
Percent Blockage			0		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		275	123			
pX, platoon unblocked					0.68	
vC, conflicting volume	416				1608	216
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	416				967	216
tC, single (s)	4.1				7.0	7.0
tC, 2 stage (s)						
tF (s)	2.2				3.6	3.4
p0 queue free %	78				72	81
cM capacity (veh/h)	1130				123	765

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	722	936	241	159	34	145
Volume Left	254	0	0	0	34	0
Volume Right	0	0	0	39	0	145
cSH	1130	1700	1700	1700	123	765
Volume to Capacity	0.22	0.55	0.14	0.09	0.28	0.19
Queue Length 95th (m)	6.6	0.0	0.0	0.0	8.0	5.3
Control Delay (s)	5.0	0.0	0.0	0.0	45.2	10.8
Lane LOS	A				E	B
Approach Delay (s)	2.2		0.0		17.3	
Approach LOS					C	

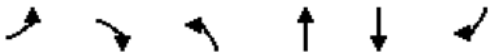
Intersection Summary			
Average Delay	3.0		
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	10	18	17	32	27	59	47	220	102	139	117	15
Future Volume (vph)	10	18	17	32	27	59	47	220	102	139	117	15
Peak Hour Factor	0.30	0.30	0.30	0.59	0.59	0.59	0.75	0.75	0.75	0.83	0.83	0.83
Hourly flow rate (vph)	33	60	57	54	46	100	63	293	136	167	141	18

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	150	200	492	326
Volume Left (vph)	33	54	63	167
Volume Right (vph)	57	100	136	18
Hadj (s)	-0.15	-0.16	-0.11	0.12
Departure Headway (s)	6.7	6.5	5.6	6.1
Degree Utilization, x	0.28	0.36	0.77	0.55
Capacity (veh/h)	467	489	622	547
Control Delay (s)	12.2	13.1	24.7	16.4
Approach Delay (s)	12.2	13.1	24.7	16.4
Approach LOS	B	B	C	C

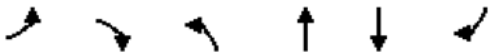
Intersection Summary				
Delay			18.8	
Level of Service			C	
Intersection Capacity Utilization			58.5%	ICU Level of Service
Analysis Period (min)			15	



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	7	1	311	163	4
Future Volume (Veh/h)	21	7	1	311	163	4
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	23	8	1	338	177	4
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	519	179	181			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	519	179	181			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	99	100			
cM capacity (veh/h)	517	864	1394			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	31	339	181
Volume Left	23	1	0
Volume Right	8	0	4
cSH	576	1394	1700
Volume to Capacity	0.05	0.00	0.11
Queue Length 95th (m)	1.3	0.0	0.0
Control Delay (s)	11.6	0.0	0.0
Lane LOS	B	A	
Approach Delay (s)	11.6	0.0	0.0
Approach LOS	B		

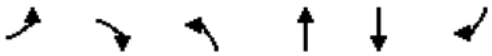
Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	27.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	2	1	331	165	1
Future Volume (Veh/h)	7	2	1	331	165	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	2	1	360	179	1
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	542	180	180			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	542	180	180			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	501	863	1396			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	10	361	180
Volume Left	8	1	0
Volume Right	2	0	1
cSH	547	1396	1700
Volume to Capacity	0.02	0.00	0.11
Queue Length 95th (m)	0.4	0.0	0.0
Control Delay (s)	11.7	0.0	0.0
Lane LOS	B	A	
Approach Delay (s)	11.7	0.0	0.0
Approach LOS	B		

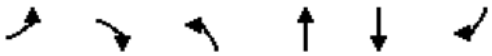
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	28.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	8	1	292	166	4
Future Volume (Veh/h)	20	8	1	292	166	4
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	9	1	317	180	4
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	501	182	184			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	501	182	184			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	99	100			
cM capacity (veh/h)	529	861	1391			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	31	318	184
Volume Left	22	1	0
Volume Right	9	0	4
cSH	596	1391	1700
Volume to Capacity	0.05	0.00	0.11
Queue Length 95th (m)	1.2	0.0	0.0
Control Delay (s)	11.4	0.0	0.0
Lane LOS	B	A	
Approach Delay (s)	11.4	0.0	0.0
Approach LOS	B		

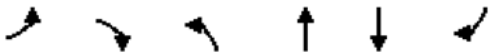
Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	26.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	6	2	0	287	173	1
Future Volume (Veh/h)	6	2	0	287	173	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	2	0	312	188	1
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	500	188	189			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	500	188	189			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	530	853	1385			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	9	312	189
Volume Left	7	0	0
Volume Right	2	0	1
cSH	579	1385	1700
Volume to Capacity	0.02	0.00	0.11
Queue Length 95th (m)	0.4	0.0	0.0
Control Delay (s)	11.3	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.3	0.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	25.1%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	211	143	149	373	445	359
Future Volume (vph)	211	143	149	373	445	359
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	1			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	0.97	1.00		0.99	
Frt		0.850			0.940	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1879	1632	1807	1745	1650	0
Flt Permitted	0.950		0.213			
Satd. Flow (perm)	1866	1585	404	1745	1650	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		170			73	
Link Speed (k/h)	50			40	40	
Link Distance (m)	294.1			151.2	268.6	
Travel Time (s)	21.2			13.6	24.2	
Confl. Peds. (#/hr)	3	4	14			14
Peak Hour Factor	0.84	0.84	0.86	0.86	0.88	0.88
Heavy Vehicles (%)	0%	3%	4%	2%	1%	0%
Parking (#/hr)				0	0	0
Adj. Flow (vph)	251	170	173	434	506	408
Shared Lane Traffic (%)						
Lane Group Flow (vph)	251	170	173	434	914	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.95	0.95	0.95	1.09	1.09	0.95
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (m)	6.1	6.1	6.1	30.5	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	6.1	6.1	6.1	1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	2	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	32.0	32.0	78.0	78.0	78.0	
Total Split (s)	32.0	32.0	84.0	84.0	84.0	
Total Split (%)	27.6%	27.6%	72.4%	72.4%	72.4%	
Maximum Green (s)	26.0	26.0	76.0	76.0	76.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
All-Red Time (s)	2.0	2.0	4.0	4.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	8.0	8.0	8.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	Max	Max	Max	
Walk Time (s)	8.0	8.0	61.0	61.0	61.0	
Flash Dont Walk (s)	18.0	18.0	9.0	9.0	9.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
Act Effct Green (s)	19.5	19.5	76.1	76.1	76.1	
Actuated g/C Ratio	0.18	0.18	0.69	0.69	0.69	
v/c Ratio	0.75	0.40	0.62	0.36	0.78	
Control Delay	57.4	8.7	22.5	8.4	17.3	
Queue Delay	0.0	0.0	0.0	0.0	0.3	
Total Delay	57.4	8.7	22.5	8.4	17.6	
LOS	E	A	C	A	B	
Approach Delay	37.7			12.4	17.6	
Approach LOS	D			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 116			
Actuated Cycle Length: 109.6			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 20.4		Intersection LOS: C	
Intersection Capacity Utilization 96.9%		ICU Level of Service F	
Analysis Period (min) 15			

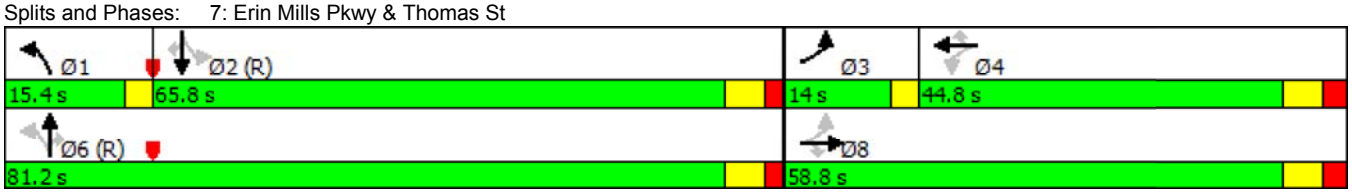
Splits and Phases: 2: Queen St & Thomas St

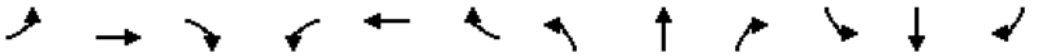
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	302	130	245	906	103	288	1675	195	55	1982	257
Future Volume (vph)	107	302	130	245	906	103	288	1675	195	55	1982	257
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	75.0		25.0	125.0		40.0	185.0		155.0	140.0		125.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Ped Bike Factor			0.98	1.00					0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1824	3648	1664	1842	3721	1664	1879	5293	1648	1789	5346	1681
Flt Permitted	0.098			0.564			0.064			0.105		
Satd. Flow (perm)	188	3648	1634	1089	3721	1664	127	5293	1609	198	5346	1652
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			133			72			199			210
Link Speed (k/h)		50			50			70			70	
Link Distance (m)		99.0			760.5			333.6			521.7	
Travel Time (s)		7.1			54.8			17.2			26.8	
Confl. Peds. (#/hr)			5	5			3		7	7		3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	3%	1%	2%	1%	1%	0%	2%	2%	5%	1%	0%
Adj. Flow (vph)	109	308	133	250	924	105	294	1709	199	56	2022	262
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	308	133	250	924	105	294	1709	199	56	2022	262
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases	3	8			4		1	6			2	
Permitted Phases	8		8	4		4	6		6	2		2
Detector Phase	3	8	8	4	4	4	1	6	6	2	2	2
Switch Phase												
Minimum Initial (s)	5.0	8.0	8.0	8.0	8.0	8.0	5.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	9.5	40.8	40.8	40.8	40.8	40.8	9.5	30.2	30.2	30.2	30.2	30.2
Total Split (s)	14.0	58.8	58.8	44.8	44.8	44.8	15.4	81.2	81.2	65.8	65.8	65.8
Total Split (%)	10.0%	42.0%	42.0%	32.0%	32.0%	32.0%	11.0%	58.0%	58.0%	47.0%	47.0%	47.0%
Maximum Green (s)	11.0	52.0	52.0	38.0	38.0	38.0	12.4	75.0	75.0	59.6	59.6	59.6
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.2	4.2	4.2	4.2	4.2
All-Red Time (s)	0.0	2.8	2.8	2.8	2.8	2.8	0.0	2.0	2.0	2.0	2.0	2.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.8	6.8	6.8	6.8	6.8	3.0	6.2	6.2	6.2	6.2	6.2
Lead/Lag	Lead			Lag	Lag	Lag	Lead			Lag	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)		13.0	13.0	13.0	13.0	13.0		9.0	9.0	9.0	9.0	9.0
Flash Dont Walk (s)		21.0	21.0	21.0	21.0	21.0		15.0	15.0	15.0	15.0	15.0
Pedestrian Calls (#/hr)		0	0	0	0	0		0	0	0	0	0
Act Effct Green (s)	54.7	50.9	50.9	38.0	38.0	38.0	79.3	76.1	76.1	59.6	59.6	59.6
Actuated g/C Ratio	0.39	0.36	0.36	0.27	0.27	0.27	0.57	0.54	0.54	0.43	0.43	0.43
v/c Ratio	0.58	0.23	0.20	0.85	0.92	0.21	1.23	0.59	0.21	0.67	0.89	0.32
Control Delay	39.7	31.3	5.2	73.8	63.7	15.7	165.8	22.8	2.6	72.1	43.1	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.7	31.3	5.2	73.8	63.7	15.7	165.8	22.8	2.6	72.1	43.1	7.0
LOS	D	C	A	E	E	B	F	C	A	E	D	A
Approach Delay		26.6			61.7			40.1			39.8	
Approach LOS		C			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 107.8 (77%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.23			
Intersection Signal Delay: 43.1		Intersection LOS: D	
Intersection Capacity Utilization 98.5%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 7: Erin Mills Pkwy & Thomas St



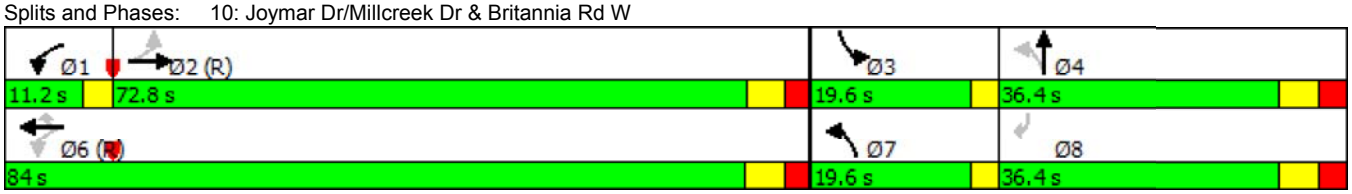


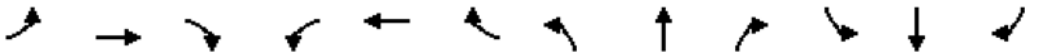
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	824	48	99	2026	215	22	23	35	166	0	69
Future Volume (vph)	16	824	48	99	2026	215	22	23	35	166	0	69
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	90.0		0.0	90.0		90.0	25.0		0.0	0.0		0.0
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						0.96	1.00	0.99		1.00		0.99
Frt		0.992				0.850		0.910				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1879	3659	0	1879	3721	1648	1879	1730	0	1860	0	1586
Flt Permitted	0.061			0.216			0.950			0.950		
Satd. Flow (perm)	121	3659	0	427	3721	1587	1876	1730	0	1852	0	1564
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				148		49				105
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		418.7			370.9			948.1			108.1	
Travel Time (s)		30.1			26.7			85.3			9.7	
Confl. Peds. (#/hr)	4					4	1		3	3		1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.68	0.68	0.68	0.66	0.66	0.66
Heavy Vehicles (%)	0%	2%	0%	0%	1%	2%	0%	0%	5%	1%	0%	6%
Adj. Flow (vph)	16	841	49	101	2067	219	32	34	51	252	0	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	890	0	101	2067	219	32	85	0	252	0	105
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Turn Type	Perm	NA		pm+pt	NA	Perm	pm+pt	NA		Prot		Perm
Protected Phases		2		1	6		7	4		3		
Permitted Phases	2			6		6	4			3		8
Minimum Split (s)	24.7	24.7		10.7	27.9	27.9	9.5	32.2		12.5		32.2
Total Split (s)	72.8	72.8		11.2	84.0	84.0	19.6	36.4		19.6		36.4
Total Split (%)	52.0%	52.0%		8.0%	60.0%	60.0%	14.0%	26.0%		14.0%		26.0%
Maximum Green (s)	66.1	66.1		8.2	77.1	77.1	16.6	29.2		16.6		29.2
Yellow Time (s)	4.0	4.0		3.0	4.2	4.2	3.0	4.0		3.0		4.0
All-Red Time (s)	2.7	2.7		0.0	2.7	2.7	0.0	3.2		0.0		3.2
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	6.7	6.7		3.0	6.9	6.9	3.0	7.2		3.0		7.2
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes		Yes
Walk Time (s)	7.0	7.0			7.0	7.0		10.0				10.0
Flash Dont Walk (s)	9.0	9.0			9.0	9.0		15.0				15.0
Pedestrian Calls (#/hr)	0	0			0	0		0				0
Act Effct Green (s)	66.1	66.1		81.0	77.1	77.1	50.0	29.2		16.6		29.2
Actuated g/C Ratio	0.47	0.47		0.58	0.55	0.55	0.36	0.21		0.12		0.21
v/c Ratio	0.28	0.51		0.30	1.01	0.23	0.05	0.21		1.15		0.26
Control Delay	38.5	26.9		15.6	53.4	5.9	28.0	23.2		158.7		9.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	38.5	26.9		15.6	53.4	5.9	28.0	23.2		158.7		9.7
LOS	D	C		B	D	A	C	C		F		A
Approach Delay		27.1			47.4			24.5			114.9	
Approach LOS		C			D			C			F	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	

Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 135	
Control Type: Pretimed	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay: 48.2	Intersection LOS: D
Intersection Capacity Utilization 101.4%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 10: Joymar Dr/Millcreek Dr & Britannia Rd W



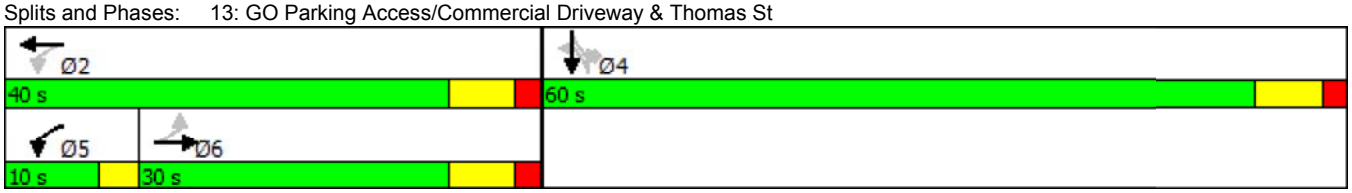


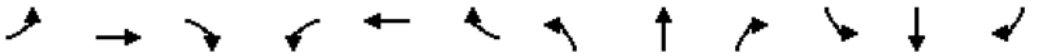
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	388	179	56	567	0	609	0	204	1	0	7
Future Volume (vph)	3	388	179	56	567	0	609	0	204	1	0	7
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			1.00		0.99		0.98		0.98	
Frt		0.953							0.850		0.882	
Flt Protected					0.996		0.950				0.994	
Satd. Flow (prot)	0	3405	0	0	3709	0	1842	0	1681	0	1700	0
Flt Permitted		0.952			0.778		0.747				0.994	
Satd. Flow (perm)	0	3242	0	0	2893	0	1434	0	1644	0	1698	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		69									76	
Link Speed (k/h)		50			50			40			20	
Link Distance (m)		123.5			294.1			148.4			49.8	
Travel Time (s)		8.9			21.2			13.4			9.0	
Confl. Peds. (#/hr)	17		24	24		17	7		7	7		7
Peak Hour Factor	0.94	0.94	0.94	0.97	0.97	0.97	0.91	0.91	0.91	0.50	0.50	0.50
Heavy Vehicles (%)	0%	1%	6%	0%	1%	0%	2%	0%	0%	0%	0%	0%
Adj. Flow (vph)	3	413	190	58	585	0	669	0	224	2	0	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	606	0	0	643	0	669	0	224	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1		1	1	2	
Detector Template	Left	Thru		Left	Thru		Left		Right	Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1		6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1		6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7						28.7	
Detector 2 Size(m)		1.8			1.8						1.8	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Perm	NA		pm+pt	NA		D.Pm		Perm	Perm	NA	
Protected Phases		6		5	2						4	
Permitted Phases	6			2			4		4	4		
Detector Phase	6	6		5	2		4		4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0		5.0	5.0	5.0	
Minimum Split (s)	30.0	30.0		10.0	30.0		27.0		27.0	27.0	27.0	
Total Split (s)	30.0	30.0		10.0	40.0		60.0		60.0	60.0	60.0	
Total Split (%)	30.0%	30.0%		10.0%	40.0%		60.0%		60.0%	60.0%	60.0%	
Maximum Green (s)	23.0	23.0		7.0	33.0		53.0		53.0	53.0	53.0	
Yellow Time (s)	5.0	5.0		3.0	5.0		5.0		5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		0.0	2.0		2.0		2.0	2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		7.0			7.0		7.0		7.0		7.0	
Lead/Lag	Lag	Lag		Lead								

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0	3.0	
Recall Mode	Max	Max		None	Max		None		None	None	None	
Walk Time (s)	8.0	8.0			8.0		8.0		8.0	8.0	8.0	
Flash Dont Walk (s)	12.0	12.0			12.0		12.0		12.0	12.0	12.0	
Pedestrian Calls (#/hr)	0	0			0		0		0	0	0	
Act Effct Green (s)		33.1			33.1		49.3		49.3		49.3	
Actuated g/C Ratio		0.34			0.34		0.51		0.51		0.51	
v/c Ratio		0.52			0.65		0.91		0.27		0.02	
Control Delay		25.0			31.3		40.4		14.1		0.0	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay		25.0			31.3		40.4		14.1		0.0	
LOS		C			C		D		B		A	
Approach Delay		25.0			31.3			33.8				
Approach LOS		C			C			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 96.5			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 30.4		Intersection LOS: C	
Intersection Capacity Utilization 87.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 13: GO Parking Access/Commercial Driveway & Thomas St



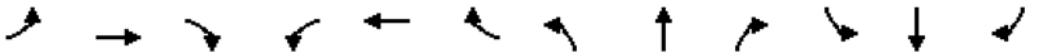


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	434	31	104	949	35	17	8	68	18	17	25
Future Volume (vph)	18	434	31	104	949	35	17	8	68	18	17	25
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	100.0		70.0	50.0		0.0	30.0		0.0	0.0		0.0
Storage Lanes	1		1	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	1.00	1.00		1.00				0.99	
Frt			0.850		0.995			0.865			0.944	
Flt Protected	0.950			0.950			0.950				0.985	
Satd. Flow (prot)	1879	3648	1681	1879	3664	0	1773	1711	0	0	1827	0
Flt Permitted	0.215			0.486			0.764				0.858	
Satd. Flow (perm)	424	3648	1632	957	3664	0	1421	1711	0	0	1591	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			65		5			97			28	
Link Speed (k/h)		50			50			40			40	
Link Distance (m)		760.5			274.5			324.8			269.2	
Travel Time (s)		54.8			19.8			29.2			24.2	
Confl. Peds. (#/hr)	11		9	9		11	3					3
Peak Hour Factor	0.94	0.94	0.94	0.87	0.87	0.87	0.70	0.70	0.70	0.65	0.65	0.65
Heavy Vehicles (%)	0%	3%	0%	0%	2%	0%	6%	0%	0%	0%	0%	0%
Adj. Flow (vph)	19	462	33	120	1091	40	24	11	97	28	26	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	462	33	120	1131	0	24	108	0	0	92	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			3.5			3.5	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	2			4			4	
Permitted Phases	2		2	2			4			4		
Detector Phase	2	2	2	1	2		4	4		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	2.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	64.0	64.0	64.0	10.0	64.0		34.0	34.0		34.0	34.0	
Total Split (s)	72.0	72.0	72.0	11.0	72.0		34.0	34.0		34.0	34.0	
Total Split (%)	61.5%	61.5%	61.5%	9.4%	61.5%		29.1%	29.1%		29.1%	29.1%	
Maximum Green (s)	65.0	65.0	65.0	8.0	65.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	5.0	5.0	5.0	3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	0.0	2.0		3.0	3.0		3.0	3.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	7.0	7.0	7.0	3.0	7.0		7.0	7.0			7.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max		None	None		None	None	
Walk Time (s)	43.0	43.0	43.0		43.0		9.0	9.0		9.0	9.0	
Flash Dont Walk (s)	14.0	14.0	14.0		14.0		18.0	18.0		18.0	18.0	
Pedestrian Calls (#/hr)	0	0	0		0		0	0		0	0	
Act Effct Green (s)	65.1	65.1	65.1	75.9	65.1		9.3	9.3			9.3	
Actuated g/C Ratio	0.66	0.66	0.66	0.77	0.66		0.09	0.09			0.09	
v/c Ratio	0.07	0.19	0.03	0.15	0.47		0.18	0.43			0.52	
Control Delay	7.7	7.0	0.5	2.8	9.2		43.8	16.4			41.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	7.7	7.0	0.5	2.8	9.2		43.8	16.4			41.1	
LOS	A	A	A	A	A		D	B			D	
Approach Delay		6.6			8.6			21.4			41.1	
Approach LOS		A			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 117			
Actuated Cycle Length: 98.2			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 10.5		Intersection LOS: B	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 15: McFarren Blvd/Gafney Dr & Thomas St

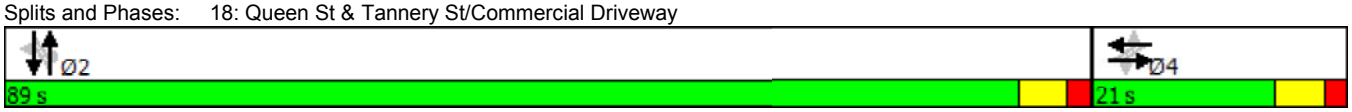


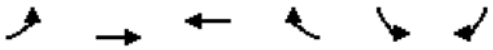
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	7	57	7	17	11	79	592	14	7	652	115
Future Volume (vph)	122	7	57	7	17	11	79	592	14	7	652	115
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Storage Length (m)	25.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.95	0.91			0.96			1.00			0.99	
Frt		0.866			0.958			0.997			0.980	
Flt Protected	0.950				0.990			0.994				
Satd. Flow (prot)	1860	1524	0	0	1780	0	0	1731	0	0	1720	0
Flt Permitted	0.724				0.933			0.812			0.993	
Satd. Flow (perm)	1345	1524	0	0	1652	0	0	1413	0	0	1708	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73			16			3			23	
Link Speed (k/h)		40			20			40			40	
Link Distance (m)		415.2			37.3			268.6			257.2	
Travel Time (s)		37.4			6.7			24.2			23.1	
Confl. Peds. (#/hr)	15		24	24		15	24		11	11		24
Peak Hour Factor	0.78	0.78	0.78	0.67	0.67	0.67	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	1%	0%	2%	0%	6%	0%	1%	2%	0%	0%	1%	0%
Parking (#/hr)								0	0		0	0
Adj. Flow (vph)	156	9	73	10	25	16	91	680	16	8	749	132
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	82	0	0	51	0	0	787	0	0	889	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.5			3.5			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.09	0.95	0.95	1.09	0.95
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	1.0	1.0		1.0	1.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		83.0	83.0		83.0	83.0	
Total Split (s)	21.0	21.0		21.0	21.0		89.0	89.0		89.0	89.0	
Total Split (%)	19.1%	19.1%		19.1%	19.1%		80.9%	80.9%		80.9%	80.9%	
Maximum Green (s)	15.0	15.0		15.0	15.0		83.0	83.0		83.0	83.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	8.0	8.0		8.0	8.0		65.0	65.0		65.0	65.0	
Flash Dont Walk (s)	7.0	7.0		7.0	7.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	14.5	14.5			14.5			83.0			83.0	
Actuated g/C Ratio	0.13	0.13			0.13			0.76			0.76	
v/c Ratio	0.88	0.31			0.22			0.73			0.68	
Control Delay	89.4	15.6			34.1			12.5			9.9	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	89.4	15.6			34.1			12.5			9.9	
LOS	F	B			C			B			A	
Approach Delay		64.0			34.1			12.5			9.9	
Approach LOS		E			C			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 109.5			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 18.1		Intersection LOS: B	
Intersection Capacity Utilization 104.4%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 18: Queen St & Tannery St/Commercial Driveway

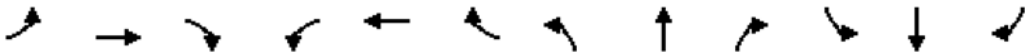




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	99	564	1203	50	25	169
Future Volume (Veh/h)	99	564	1203	50	25	169
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	101	576	1228	51	26	172
Pedestrians			1		13	
Lane Width (m)			3.5		3.5	
Walking Speed (m/s)			1.1		1.1	
Percent Blockage			0		1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		275	123			
pX, platoon unblocked	0.87				0.87	0.87
vC, conflicting volume	1292				1758	652
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1039				1573	304
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	83				64	71
cM capacity (veh/h)	583				73	601

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	293	384	819	460	26	172
Volume Left	101	0	0	0	26	0
Volume Right	0	0	0	51	0	172
cSH	583	1700	1700	1700	73	601
Volume to Capacity	0.17	0.23	0.48	0.27	0.36	0.29
Queue Length 95th (m)	4.7	0.0	0.0	0.0	10.2	9.0
Control Delay (s)	5.9	0.0	0.0	0.0	79.2	13.4
Lane LOS	A				F	B
Approach Delay (s)	2.6		0.0		22.0	
Approach LOS					C	

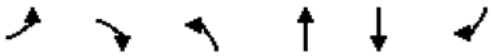
Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	1	2	5	107	3	93	3	101	54	51	138	1
Future Volume (vph)	1	2	5	107	3	93	3	101	54	51	138	1
Peak Hour Factor	0.50	0.50	0.50	0.88	0.88	0.88	0.87	0.87	0.87	0.86	0.86	0.86
Hourly flow rate (vph)	2	4	10	122	3	106	3	116	62	59	160	1

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	16	231	181	220
Volume Left (vph)	2	122	3	59
Volume Right (vph)	10	106	62	1
Hadj (s)	-0.35	-0.17	-0.20	0.06
Departure Headway (s)	4.8	4.7	4.6	4.8
Degree Utilization, x	0.02	0.30	0.23	0.29
Capacity (veh/h)	653	710	736	707
Control Delay (s)	8.0	9.7	9.0	9.8
Approach Delay (s)	8.0	9.7	9.0	9.8
Approach LOS	A	A	A	A

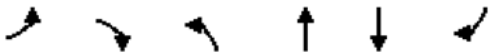
Intersection Summary				
Delay	9.5			
Level of Service	A			
Intersection Capacity Utilization	49.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	3	7	145	224	20
Future Volume (Veh/h)	11	3	7	145	224	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	3	8	158	243	22
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	428	254	265			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	428	254	265			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	99			
cM capacity (veh/h)	580	785	1299			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	15	166	265
Volume Left	12	8	0
Volume Right	3	0	22
cSH	612	1299	1700
Volume to Capacity	0.02	0.01	0.16
Queue Length 95th (m)	0.6	0.1	0.0
Control Delay (s)	11.0	0.4	0.0
Lane LOS	B	A	
Approach Delay (s)	11.0	0.4	0.0
Approach LOS	B		

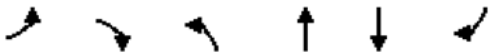
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	23.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	1	2	154	243	7
Future Volume (Veh/h)	3	1	2	154	243	7
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	1	2	167	264	8
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	439	268	272			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	439	268	272			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	574	771	1291			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	4	169	272
Volume Left	3	2	0
Volume Right	1	0	8
cSH	613	1291	1700
Volume to Capacity	0.01	0.00	0.16
Queue Length 95th (m)	0.1	0.0	0.0
Control Delay (s)	10.9	0.1	0.0
Lane LOS	B	A	
Approach Delay (s)	10.9	0.1	0.0
Approach LOS	B		

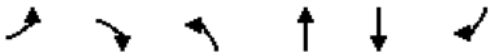
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	23.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	3	7	142	208	19
Future Volume (Veh/h)	10	3	7	142	208	19
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	3	8	154	226	21
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	406	236	247			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	406	236	247			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	99			
cM capacity (veh/h)	597	802	1319			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	14	162	247
Volume Left	11	8	0
Volume Right	3	0	21
cSH	632	1319	1700
Volume to Capacity	0.02	0.01	0.15
Queue Length 95th (m)	0.5	0.1	0.0
Control Delay (s)	10.8	0.4	0.0
Lane LOS	B	A	
Approach Delay (s)	10.8	0.4	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	23.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	1	2	147	206	5
Future Volume (Veh/h)	2	1	2	147	206	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	1	2	160	224	5
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	390	226	229			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	390	226	229			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	613	813	1339			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	3	162	229
Volume Left	2	2	0
Volume Right	1	0	5
cSH	667	1339	1700
Volume to Capacity	0.00	0.00	0.13
Queue Length 95th (m)	0.1	0.0	0.0
Control Delay (s)	10.4	0.1	0.0
Lane LOS	B	A	
Approach Delay (s)	10.4	0.1	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	21.1%	ICU Level of Service	A
Analysis Period (min)	15		