URBANTRANS
Engineering Solutions Inc.

Traffic Impact Study (TIS)

Proposed Residential Development

1775 Thorny Brae Place
City of Mississauga

UT-25-046

June 27, 2025

URBANTRANS
Engineering Solutions Inc.

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June 27, 2025

Mississauga Road Properties Inc.
1660 North Service Rd E, Suite 109B
Oakville ON L6H 7G3

RE: Traffic Impact Study (TIS)
Proposed Residential Development
1775 Thorny Brae Place, Mississauga ON
Reference No.: UT-22-063

UrbanTrans Engineering Solutions Inc. was retained by Mississauga Road Properties Inc. (the "Client") to complete this Traffic Impact Study (TIS) in support of an Official Plan Amendment and Zoning By-law Amendment application(s). The proposed development is located north of Mississauga Road and east of Eglinton Avenue West municipally known as 1775 Thorny Brae Place, in the City of Mississauga.

On February 2024, UrbanTrans Engineering Solutions Inc. prepared a Traffic Impact Study (TIS) in support of an Official Plan Amendment and Zoning By-law Amendment application(s). The study assumed the site would include eight (8) semi-detached homes and 208 stacked townhouses totaling 216 residential units. At a minimum, four (4) car parking spaces will be provided for each semi-detached unit with two (2) in the garage and two (2) in the lead in driveway portion totaling 32 parking spaces. Additionally, a total of 366 parking spaces are proposed underground including 54 visitor parking spaces. A full movement vehicular entrance is proposed via Mississauga Road.

The subject lands are currently occupied by four (4) single detached dwelling units and vacant land. The site plan has been revised to 99 three-storey stacked townhouses. A total of 224 parking spaces are proposed including 198 residential parking spaces and 25 visitor parking spaces. A full movement vehicular entrance is proposed via Mississauga Road.

This report concludes the proposed residential development will have minimal traffic operations and/or safety impacts to the immediate roadways and nearby intersections. The proposed full movement vehicle entrance is expected to operate at acceptable levels of service, v/c ratios and delay with no critical movements identified.

It is understood that the City of Mississauga is the Municipal authority to review and approve the Traffic Impact Study for the proposed development. The study is in accordance with the City of Mississauga Traffic Impact Study Guidelines as well as the Terms of Reference comments received in a timely manner from the City Staff (see **Appendix B**) and Certification Form (see **Appendix C**). We thank you for the opportunity to undertake this study.

We trust the enclosed comply with your requirements. Should you have any questions, please do not hesitate to contact the undersigned.

Kind Regards,
UrbanTrans Engineering Solutions Inc.

Engineer's Seal

Annosan Srikantha, P.Eng.
President

DISCLAIMER

This document entitled '1775 Thorny Brae Place – Traffic Impact Study' or named part thereof (the "project") was prepared by UrbanTrans Engineering Solutions Inc. ("UrbanTrans") for the account of Mississauga Road Properties Inc. (the "Client"). This document is confidential and prepared solely for approval and commenting municipalities and their agencies in their review and approval of this project. The materials in this report reflect best judgement based on the information available at the time the document was issued. Any reliance on this document by any third party is strictly prohibited and UrbanTrans accepts no responsibility for damages, if any, suffered by any third party by reason of decisions made or actions based on this document.

RECORD OF REVISIONS

Revision	Date	Identification	Description
0	February 14, 2025	Final Report	First Submission
1	June 27, 2025	Revised Site Plan	Second Submission

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1.0 INTRODUCTION

1.1 Background

UrbanTrans Engineering Solutions Inc. was retained by Mississauga Road Properties Inc. (the "Client") to complete this Traffic Impact Study (TIS) in support of an Official Plan Amendment and Zoning By-law Amendment application(s).

1.2 Objective

The study will assess the following components:

- Evaluate potential impacts of traffic changes prompted by the proposed development on municipal roadways and identify any infrastructure enhancements or mitigation measures warranted to ensure the road network will operate acceptably and safely upon completion of the proposed development.
- Evaluate and identify potential safety and/or operational issues associated with access conflicts.
- Determine whether the proposed vehicle supply conforms to the City's Zoning By-law requirements.
- Simulate vehicle swept path analysis to determine adequate space requirements are provided for passenger cars, waste collection and fire/emergency truck.

1.3 Development Proposal

The proposed development is located north of Mississauga Road and east of Eglinton Avenue West municipally known as 1775 Thorny Brae Place, in the City of Mississauga.

The subject lands are currently occupied by four (4) single detached dwelling units and vacant land. The site plan has been revised to 99 three-storey townhouses. A total of 224 parking spaces are proposed including 198 residential parking spaces and 25 visitor parking spaces. A full movement vehicular entrance is proposed via Mississauga Road.

The location of the proposed development is illustrated in **Figure 1**. The revised site plan is illustrated in **Figure 2; Appendix A** also provides a larger scale version of the proposed concept plan.

Figure 1 - Site Location

Source: Google Map

Figure 2 – Proposed Concept plan

Source: Chamberlain Architect Services Limited

2.0 EXISTING CONDITIONS

This section documents the transportation network in the study area in 2023, including existing roadways, transit services, active transportation network, traffic control measures, and intersection performances.

2.1 Road Network

To provide clarity throughout this report, Mississauga Road has been given a north-south orientation. On this basis, the characteristics of the roads and intersections within the vicinity of the subject site are described below:

- **Mississauga Road** is a north-south major collector under the jurisdiction of the City of Mississauga. It operates as a 2-lane cross-section, with exclusive left and right turn lanes at the Eglington Ave intersection. Mississauga Road maintains an unposted speed limit 50 km/hr.
- **Eglington Avenue West** is an east-west major arterial under the jurisdiction of the City of Mississauga. It operates as a 6-lane cross-section, with a vegetated road median. It has exclusive left and right turn lanes at the Mississauga Road intersection. Eglington Avenue West maintains a posted speed limit of 60 km/h.

2.2 Transit Network

The proposed subject site is situated within an area that is currently well serviced by the existing TTC transit network and GO Transit. Both TTC bus stops and the Mimico GO Station are easily accessible from the proposed development.

Based on existing 2016 TTS data for the area surrounding the proposed development, during peak hours, approximately 21% and 6% of residents primarily use TTC buses and GO Transit, respectively. TTC bus stops are located within an easily walkable distance of less than 200m from the subject site. The Mimico GO Station is located approximately 500m from the subject site and is easily accessible by existing TTC buses and the cycling facility along Royal York Road. Travel times to both TTC and Mimico GO are illustrated below in **Table 1**.

Table 1: Travel time to Transit

Type	Distance	Mode of Travel	Time
MiWay Bus	220 m	Walk Bike	3 minute 1 minute
GO Bus Stop	250 m	Walk Bike	3 minutes 1 minute

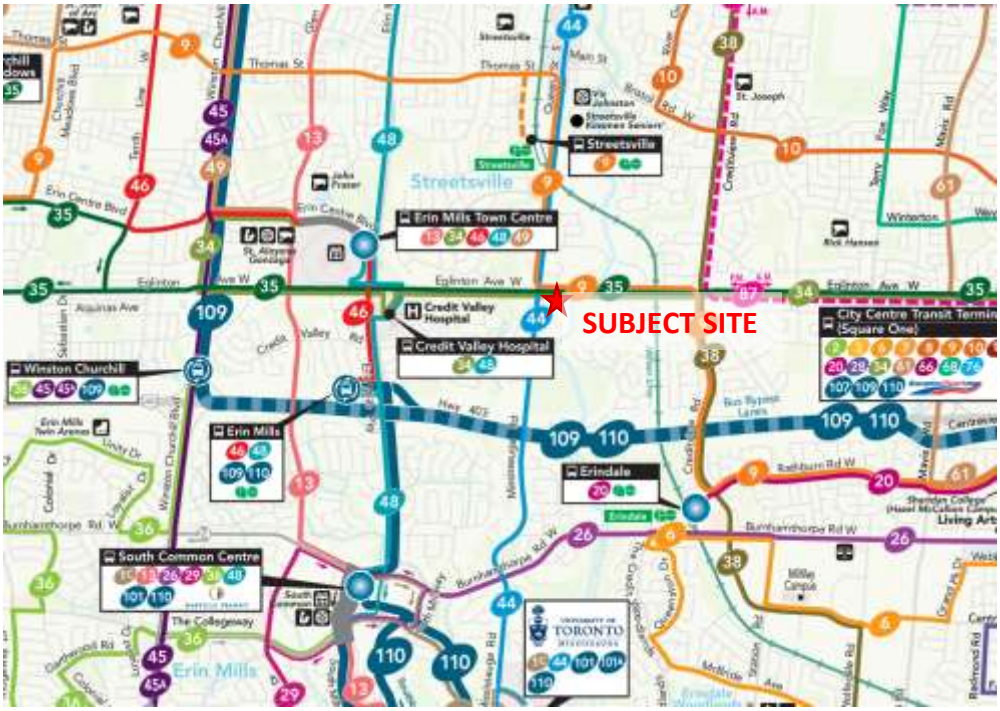
TTC Transit Network

The transit routes are provided in **Appendix D** and the route services in the vicinity of the subject site are summarized in **Table 2**. The existing MiWay Transit System Map in the vicinity of the subject site is illustrated in **Figure 3** to **Figure 5**.

Table 2: Available MiWay Transit

Bus Route	Route Description	Frequency
44 Mississauga Road (MiWay)	Operates in a mostly north-south direction between Meadowvale Town Centre to U of T Mississauga Campus. The 44 Mississauga bus operates every day, from 5:30am to 1:30 am.	15 minutes (peak) 40 minutes (off-peak)
34 Credit Valley (MiWay)	Operates in a mostly northeast-southwest direction between the City Centre Transit Terminal to Erin Mills Town Centre Bus Terminal, Platform B. The 34 Credit Valley bus operates every day, from 5:00am to 12:00 am	15 minutes (peak) 40 minutes (off-peak)
35 Eglington (MiWay)	Operates in mostly northeast-southwest direction between Churchill Meadows Community Centre to Kipling Terminal, Platform 3. The 35 Eglington bus operates every day, from 4:00 am to 1:00 am.	25 minutes
9 Rathburn-Thomas (MiWay)	Operates in Mostly east-west direction between the City Centre Transit Terminal to Churchill Meadows Community Centre. The 9 Rathburn-Thomas bus operates every day, weekdays from 5:00 am to 12:00 am; weekends from 7:00 am to 12:00 am	25 minutes (weekdays) 40 minutes (weekends)

Figure 3: MiWay Transit Map – Weekdays

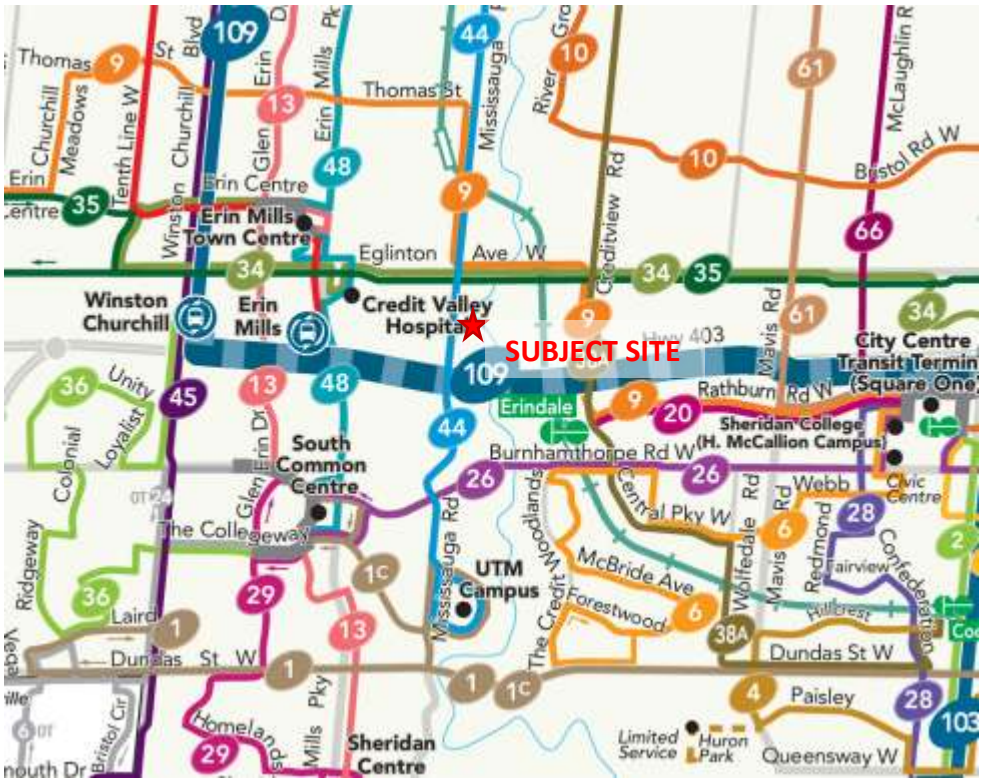


Source: https://www.mississauga.ca/miway-

Figure 4: MiWay Transit Map - Saturdays

Source: https://www.mississauga.ca/miway-

Figure 5: MiWay Transit Map - Sundays



Source: https://www.mississauga.ca/miway-

GO Transit Network

GO Bus 21 Milton is currently unable to provide a direct route to Union Station, due to ongoing construction on the Gardiner Expressway. GO Transit has offered three alternative connecting routes from Milton and the area to Union Station during this period. Additionally, the bus no longer serves Dixie GO Station.

GO Transit offered three alternative routes to accommodate existing travel delays. Transit route 21 A begins at Milton Station, connecting at the Oakville GO Station, ending at Union Station in both directions. Transit route 21 C begins at Erindale, connects at Port Credit, ending at Union Station. Our primary focus will be on Route 21 B/D Milton Lisgar Station (D-Express Route) as it includes a stop near the subject site. For further details on the 21 B/D Milton bus route, refer to **Table 3**.

Table 3: 21 B/D Milton GO Bus Route

Bus Route	Route Description	Frequency
21 B	Two-way route from Lisgar – Clarkson and operates on weekdays and weekends.	30 minutes 60 minutes
21 D Express	Two-way route from Lisgar – Clarkson and operates on weekdays and weekdays.	60 minutes
21 Milton (Go Transit)	Operates in mostly east-west direction between Milton Go Bus Station to Union Station, making a stop at Eglington Ave W & Mississauga Road intersection. The 21 Milton Go operates all day, every day.	30 – 60 minutes

The 21 Milton Line (A, B, and C) line currently provides an all day, two-way, 7 days a week train service between Milton to Union Station, with a stop near subject site. Service between Lisgar to Clarkson operates in a frequency of 30 minutes or better, while Clarkson to Union is 15 minutes or better during peak periods. **Figure 6** illustrates existing GO Transit System Map in the vicinity of the subject site**.**

Figure 6: Milton 21 GO Bus Route

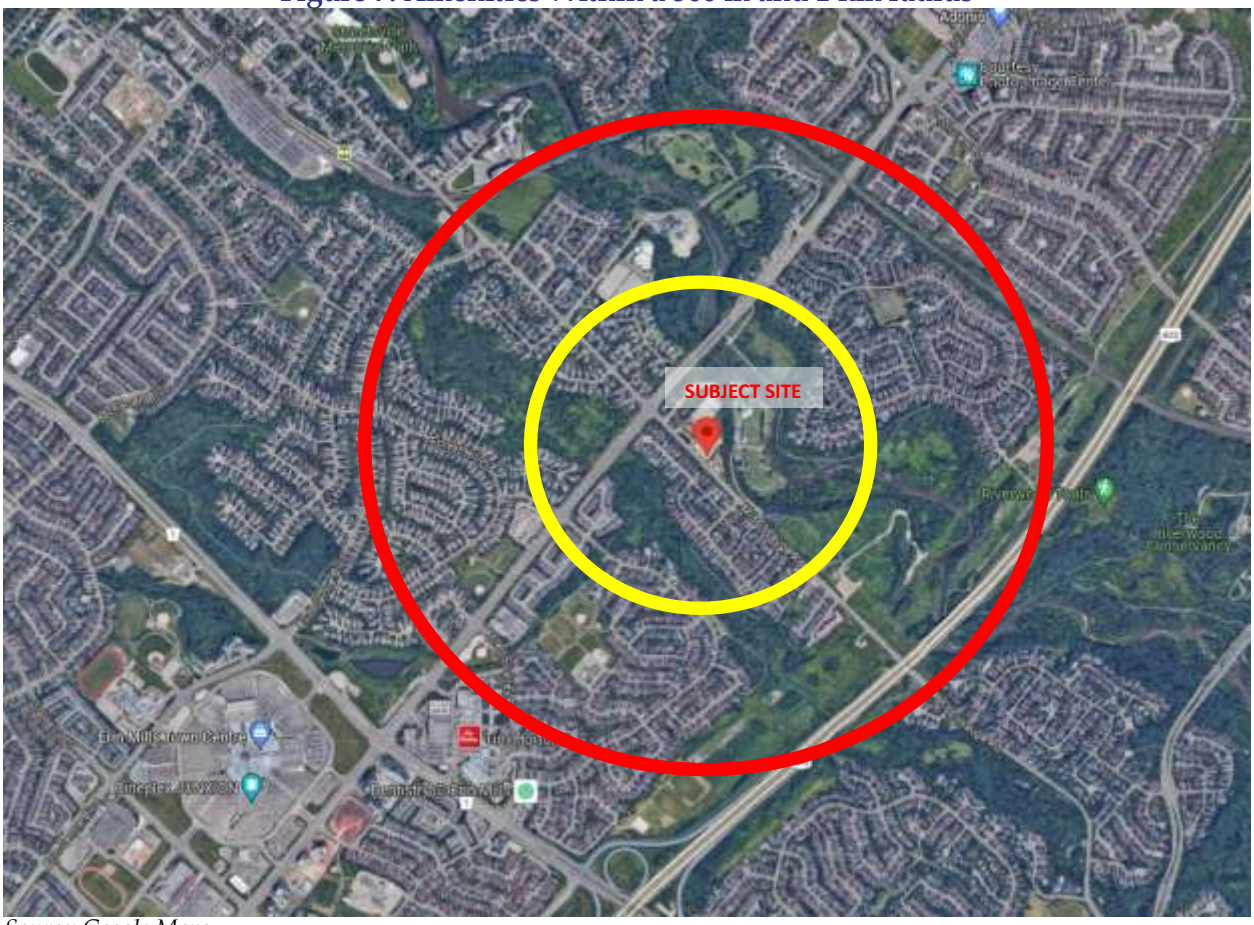
Source: https://www.gotransit.com/en/trip-

2.3 Active Transportation Network

Active transportation network involves human-powered forms of travel with walking and cycling being the most dominant and can be combined with other modes such as public transit. The following amenities are located within an area that is well serviced by the existing active transportation network and are located within an easily walkable or bikeable area of 500 m and 1 km. The area is illustrated in **Figure 7.**

- Hwy 403
- Grocery Stores
- Banks
- Hospital
- Pharmacy and Clinics
- Restaurants
- Parks and Trails
- Community Centre

Figure 7: Amenities Within a 500 m and 1 km radius



Source: Google Maps

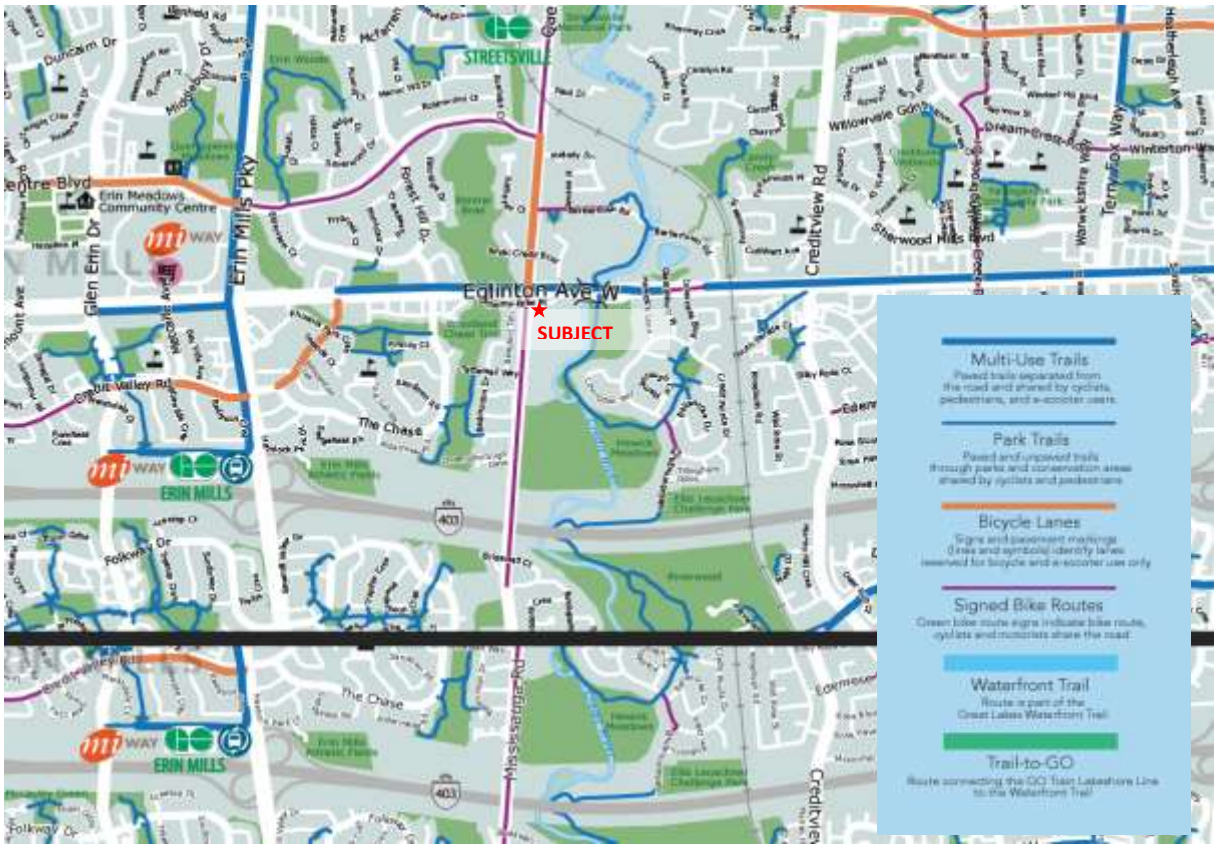
2.3.1 Sidewalk Network

Currently, there is a continuous walk located on the west side of Mississauga Road, and the east sidewalk begins at subject site moving north. Eglington Avenue West has a sidewalk to the south of the road, and a multi-use path to the north of the road. The proposed development provides direct sidewalk connections to the surrounding road network. The sidewalk connections to the surrounding intersections and roadways will facilitate pedestrian movement to and from the development.

2.3.2 Bicycle Network

Currently, within the general area of the proposed development, Mississauga Road and Eglington Avenue West are both designated cycling routes/on-road bike lanes. See **Figure 8** for details.

Figure 8: Current Cycling Network Map



Source: Mississauga.ca

Based on the above, it is UrbanTrans' opinion that the area surrounding the proposed development is well served by existing and proposed active transportation, including walking, cycling, and transit. The existing and future network will continue to reduce the demand of residents for single occupancy vehicles.

2.4 2016 Transportation Tomorrow Survey Non-Auto Modal Split

UrbanTrans reviewed the 2016 Transportation Tomorrow Survey Data Ward 8, in the City of Mississauga. **Table 4** summarizes the non-auto modal split information catered to the proposed development and provided in **Appendix E**.

Table 4: Non-Auto Modal Split Based on 2016 TTS Data (6-9 AM)

Mode of Travel	Percentage	
	Trips Made by Residents (Ward 8)	Trips Made to (Ward 8)
Driver	67%	69%
Passenger (Carpool)	13%	13%
Transit	7%	10%
GO Train	4%	-
Walk & Cycle	5%	5%
Other	5%	3%
Total	100%	100%

Based on the information outlined in Table 4, it is suggested that there is a considerable number of trips made by residents in Ward 8 and trips made to Ward 8 that are non-single occupant vehicles (non-SOV) with approximately 33% and 31%, respectively. This assessment suggests that there are viable alternative modes of transportation other than driving private automobiles.

This assessment suggests that there are viable alternative modes of transportation other than driving private automobiles as outlined previously in this report.

2.5 Traffic Data

Based on discussion and acceptance from City Staff (see Appendix A), the study will review and evaluate the following intersections in the vicinity of the subject site:

- Eglinton Ave W & Mississauga Rd (Signalized)
- Mississauga Road & Proposed Site Access (Unsignalized)

The existing traffic volumes at the abovementioned study area intersections were undertaken by Spectrum Traffic Data Inc. on Tuesday, November 14, 2023, during the morning (7:00 AM to 10:00 AM) and afternoon (4:00 PM to 7:00 PM) peak hour periods. The existing 2023 lane configuration and traffic volumes are illustrated in **Figure 9** and the detailed traffic data and signal timing plans are provided for reference in **Appendix F**.

2.6 Base Year (2023) Traffic Operations

To assess the existing traffic conditions, UrbanTrans utilized window-based computer software Synchro Version 11.1.3.34 which incorporates the Highway Capacity Manual 2000 methodology (HCM 2000), to undertake capacity analysis (i.e., level of services, volume to capacity ratios, delays, queues, etc.) at the study area intersections during weekday AM and PM peak hour periods for the signalized and unsignalized intersections.

In accordance with Synchro 11.1.3.34 software, for signalized intersections, the Level of Service for the intersection is calculated by taking the total intersection Delay and converting it to a letter (A-F) using *Table 8-1 Signalized Intersection Level of Service*. Subsequently, for unsignalized two-way stopped controlled (TWSC), all-way stop-controlled (AWSC) or a roundabout intersection, the Level of Service for the intersection is calculated by taking the intersection Delay and converting it to a letter using Table 8-2 TWSC, AWSC and Roundabout Level of Service Criteria. **Table 5** details Synchro 11.1.3.34 software's *Table 8-1* and *Table 8-2* Delay to LOS conversions.

Table 5: Synchro 11.1.3.34 Software (Delay to LOS Conversions)

Intersection	Delay to LOS Conversion
Signalized	**Table 8-1 Signalized Intersection Level of Service** Control Delay Per Vehicle (s) / LOS ≤10 / A 10 to 20 / B 20 to 35 / C 35 to 55 / D 55 to 80 / E >80 / F
Unsignalized	**Table 8-2 TWSC, AWSC and Roundabout Level of Service Criteria** Control Delay Per Vehicle (s) / LOS ≤10 / A 10 to 15 / B 15 to 25 / C 25 to 35 / D 35 to 50 / E >50 / F

The detailed results of the analysis for existing 2023 baseline traffic conditions are provided in **Appendix G** and summarized in **Table 6**.

Table 6: Existing (2023) Traffic Peak Hour Level of Service Analysis

Intersection	Weekday AM Peak Hour					Weekday PM Peak Hour			
	Movement	Control Delay (s)	95th Queue (m)	V/C	LOS	Control Delay (s)	95th Queue (m)	V/C	LOS
Mississauga Road and Eglinton Avenue West (Signalized)	OVERALL	58.1	-	1.08	E	37.5	-	0.71	D
	EBL	21.1	29.6	0.44	C	38.6	50.5	0.66	D
	EBT	88.5	312.2	1.08	F	37	132.5	0.57	D
	EBR	16	34.2	0.27	B	6.3	12.3	0.18	A
	WBL	66.1	104.8	0.82	E	34.5	71.5	0.71	C
	WBT	29.9	111.4	0.47	C	38	172.6	0.67	D
	WBR	4.2	6.1	0.23	A	9.3	21.9	0.33	A
	NBL	62.4	47.5	0.51	E	64	62.3	0.59	E
	NBT	52.7	81.5	0.42	D	60.4	131.8	0.66	E
	NBR	15.9	41.5	0.47	B	26.5	66.3	0.53	C
	SBL	48.1	75.7	0.7	D	41.4	58.9	0.59	D
	SBTR	50.9	146.5	0.73	D	44.2	131.4	1.63	D

The intersection capacity analysis indicates that under existing traffic conditions, the signalized intersection is expected to operate near capacity due to high traffic volumes with acceptable levels of service, v/c ratios and delay. However, the eastbound through movement is operating with a failing level of service during the morning peak hour period and higher delay and v/c ratio under the existing traffic signal timing plan.

Although, in theory, it is not possible for an intersection to operate with a v/c ratio greater than 1.0 under existing conditions. In reality, the movement is expected to operate over capacity when long queues are formed, and vehicles are required to wait more than one cycle length to get through the intersection. This is considered a typical condition for signalized intersections where a major collector and major arterial roadway otherwise known as high capacity urban roadways meet. Furthermore, factors such as platooning, and gap opportunities are not considered in the analysis as those parameters do not appear in the Synchro inputs.

A v/c ratio > 1.0 means traffic demand exceeds the lane group's ability to discharge vehicles, even under ideal signal timing. This results in residual queues that grow with each signal cycle, possibly blocking upstream intersections.

However, it is UrbanTrans' opinion that no modifications are required under the existing conditions at this time. It should be noted that the proposed development contributes no site traffic volumes to the critical eastbound through during weekday morning peak hours.

It is recommended that the City of Mississauga continue to monitor traffic patterns and volumes associated with this and other area developments as occupancy progresses. Based on the findings of ongoing assessments, they should implement appropriate measures to address any emerging transportation needs. This may include, where warranted, the consideration of road widening or other infrastructure enhancements to ensure the road network continues to operate efficiently and safely as development in the area reaches full build-out

3.0 FUTURE BACKGROUND CONDITIONS

3.1 Horizon Years

Based on discussion and acceptance from City Staff (See **Appendix B**), a five-year horizon (2029) after the entire building process of the proposed development will be analyzed.

3.2 Growth Rate

Based on discussion and acceptance from City Staff (See **Appendix B**), the growth rates provided by the City are summarized in **Table 7**.

Table 7: Annual Growth Rates Obtained from City of Mississauga

Roadway	Movement	Peak Hour		Projected Year
		AM	PM	
Mississauga Rd	Northbound	1.0%	1.0%	(2029)
Mississauga Rd	Southbound	1.0%	0.5%	(2029)
Eglinton Ave W	Eastbound	0.5%	1.5%	(2029)
Eglinton Ave W	Westbound	1.5%	0.5%	(2029)

The growth rates compounded per annum detailed in Table 7 were applied to the 2023 baseline through traffic volumes to estimate the future (2029) background corridor traffic growth.

3.3 Future Background Developments

In addition to general corridor traffic growth, specific allowances have also been made to account for traffic generated by other area developments in the vicinity of the site that are either undergoing the approval process or under construction at the time of this study.

In accordance with the active development applications in the City of Mississauga's Ward 8, the future background developments in this study area have been determined as per the agreed upon Terms of Reference with the City Staff (see **Appendix B**). The background developments that have been reviewed for analysis purposes are as follow:

- 1786 Polaris Way (TIS conducted by UrbanTrans Engineering dated December 2023) – the development proposal involves two (2) semi-detached homes and 34 three-storey townhomes totalling 36 residential units.

The site traffic volumes for 1786 Polaris Way are provided in **Appendix H**. On this basis, the background developments growth rates from section 3.2 and background development site traffic from section 3.3 will ultimately provide the volumes for the future (2029) background traffic conditions.

3.4 Future Background Traffic Operations

To assess the future background traffic conditions, UrbanTrans utilized window-based computer software Synchro Version 11.1.3.34 which incorporates the Highway Capacity Manual 2000 methodology (HCM 2000), to undertake capacity analysis (i.e., level of services, volume to capacity ratios, delays, queues, etc.) at the study area intersections during weekday AM and PM peak hour periods for the signalized and unsignalized intersections.

The estimated future (2029) background traffic volumes are illustrated in **Figure 10**. The detailed results of the analysis are provided in **Appendix I** and summarized in **Table 8**.

Table 8: Future (2029) Background Traffic Peak Hour Level of Service Analysis

Intersection	Weekday AM Peak Hour					Weekday PM Peak Hour			
	Movement	Control Delay (s)	95th Queue (m)	V/C	LOS	Control Delay (s)	95th Queue (m)	V/C	LOS
Mississauga Road and Eglinton Avenue West (Signalized)	OVERALL	54.3	-	1.05	D	40	-	0.77	D
	EBL	22.4	29.1	0.48	C	50.7	61	0.7	D
	EBT	79.4	318	1.05	E	39.1	143.9	0.63	D
	EBR	15.5	36.3	0.26	B	7.1	18.8	0.21	A
	WBL	70.7	108.5	0.85	E	45	104.4	0.77	D
	WBT	30.6	122.1	0.51	C	40.3	193.3	0.73	D
	WBR	5.5	14.7	0.19	A	10.7	33.2	0.29	B
	NBL	64.7	57.5	0.57	E	63.3	69.1	0.61	E
	NBT	54.3	91.2	0.47	D	62.1	140.3	0.71	E
	NBR	16.7	48.3	0.49	B	28.6	71	0.55	C
	SBL	42.5	77.9	0.59	D	41.4	56.6	0.6	D
	SBTR	48.8	156.2	0.68	D	42.5	126.9	0.58	D

The intersection capacity analysis indicates that under the future (2029) background conditions, the intersection is currently operating at acceptable levels of service based on overall intersection levels of service, v/c ratios and delay with no critical movements identified.

It is recommended that the City monitor these movements in the future and make appropriate adjustments as required based on the optimized signal timings recommended in this study. Furthermore, it is recommended that the Region and City monitors the growth rates along Mississauga Road and Eglinton Ave West and other main corridors in the area so that signal timing plan will be appropriately prioritized for transit vehicles and other modes of transportation. This will facilitate and encourage new residents and employees to take alternative and sustainable modes of transportation to work, school, shopping or other discretionary trips during the peak periods.

4.0 SITE GENERATED TRAFFIC VOLUMES

4.1 Proposed Development

As previously mentioned, the subject lands are currently occupied by four (4) single detached dwelling units and vacant land. The site plan has been revised to 99 three-storey townhouses. A total of 224 parking spaces are proposed including 198 residential parking spaces and 25 visitor parking spaces. A full movement vehicular entrance is proposed via Mississauga Road.

4.2 Trip Generation

The number of vehicular trips generated by the proposed development is estimated using the information contained in the ITE Trip Generation Manual (11th Edition) published by the Institute of Transportation Engineers (ITE). For the purpose of this assessment, the average rate of the ITE Land Use Code (LUC 215) "Single-Family Attached Housing" has been utilized for the proposed development provided in **Appendix J**.

Table 9 summarizes the trip generation volumes for the proposed development during the weekday AM and PM peak hour for full build-out. For the purpose of this assessment, no modal split reduction has been assumed for the proposed development for conservative analysis.

Table 9: Site Traffic Trip Generation

Land Use (Magnitude)		Weekday AM Peak Hour			Weekday PM Peak Hour		
		In	Out	Total	In	Out	Total
Single-Family Attached Housing (99 Units)	New Trip	12	36	48	33	23	56
Total New Trips		**12**	**36**	**48**	**33**	**23**	**56**

Based on the trip generation calculations, the proposed development is estimated to generate a total 48 two-way trips (12 inbound and 36 outbound) during the weekday morning peak hour and 56 two-way trips (33 inbound and 23 outbound) during the afternoon peak hour.

4.3 Trip Distribution and Trip Assignment

The trips generated by the proposed development were distributed to and from the boundary road network based on the 2016 Transportation Tomorrow Survey (TTS) data. Trip distribution was conducted for traffic zone 3684 which is located in the City of Mississauga. The TTS data detailing the trip distributions are provided in **Appendix K.** The site generated trips were distributed to the study intersections based on the TTS data and engineering judgement. The distribution of trips to the study area intersections are summarized in **Table 10** and illustrated in **Figure 11.**

Table 10: Trip Distribution

Direction	Roadway	To Proposed Development	From Proposed Development
North	Mississauga Rd	15%	15%
South	Mississauga Rd	30%	30%
East	Eglinton Ave W	30%	15%
West	Eglinton Ave W	25%	40%
Total		100%	100%

5.0 FUTURE TOTAL CONDITIONS

The future total traffic volumes are the sum of the existing traffic volumes plus the proposed site generated traffic volumes. To assess the future total traffic conditions for stop-controlled intersections, UrbanTrans utilized window-based computer software Synchro Version 11.1.3.34 which incorporates the Highway Capacity Manual 2000 methodology (HCM 2000), to undertake capacity analysis (i.e., level of services, volume to capacity ratios, delays, queues, etc.) at the study area intersections during weekday AM and PM peak hour periods for the signalized and unsignalized intersections.

The estimated future (2029) total traffic volumes are illustrated in **Figure 12**. The detailed results of the analysis are provided in **Appendix L** and summarized in **Table 11**.

Table 11: Future (2029) Total Traffic Peak Hour Level of Service Analysis

Intersection	Weekday AM Peak Hour					Weekday PM Peak Hour			
	Movement	Control Delay (s)	95th Queue (m)	V/C	LOS	Control Delay (s)	95th Queue (m)	V/C	LOS
Mississauga Road and Eglinton Avenue West (Signalized)	OVERALL	54.3	-	1.05	D	40.3	-	0.79	D
	EBL	22.6	29.6	0.48	C	50.9	62.2	0.7	D
	EBT	79.4	318	1.05	E	39.1	143.9	0.63	D
	EBR	15.5	36.6	0.27	B	7	19.9	0.23	A
	WBL	74.3	116.3	0.87	E	46.6	109.2	0.79	D
	WBT	30.9	123.9	0.51	C	40.3	193.3	0.73	D
	WBR	5.5	14.9	0.19	A	10.7	33.2	0.29	B
	NBL	67.6	62.6	0.62	E	66.8	73.9	0.66	E
	NBT	54.3	92.5	0.48	D	62.4	141.6	0.71	E
	NBR	18.2	52.9	0.51	B	29.1	72.7	0.56	C
	SBL	42.4	77	0.59	D	41.7	56.4	0.6	D
	SBTR	48.6	155.3	0.68	D	42.9	129	0.59	D
Mississauga Road and Site Access (Unsignalized)	WBLR	20.7	4	0.15	C	24.7	3.2	0.12	C

Mississauga Road and Eglinton Avenue West (Signalized)

The intersection capacity analysis indicates that under the future (2029) total conditions, the intersection is currently operating at acceptable levels of service based on overall intersection levels of service, v/c ratios and delay with no critical movements identified.

Mississauga Road and Site Access (Unsignalized)

The intersection capacity analysis indicates that under the future (2029) total conditions, the intersection is currently operating at acceptable levels of service based on overall intersection levels of service, v/c ratios and delay with no critical movements identified.

Table 12 details the changes in traffic operations from future background (2029) to future (2029) total traffic conditions for all movements during the morning and afternoon peak hour period.

Table 12: Future Background vs Future Total Level of Services Comparison

Intersection	Weekday AM Peak Hour				Weekday PM Peak Hour		
	Movement	Control Delay (s)	95th Queue (m)	V/C	Control Delay (s)	95th Queue (m)	V/C
Mississauga Road and Eglinton Avenue West (Signalized)	OVERALL	-	-	<0.01	0.3	-	0.02
	EBL	0.2	0.5	<0.01	0.2	1.2	<0.01
	EBT	-	-	<0.01	-	-	<0.01
	EBR	-	0.3	0.01	-0.1	1.1	0.02
	WBL	3.6	7.8	0.02	1.6	4.8	0.02
	WBT	0.3	1.8	<0.01	-	-	<0.01
	WBR	-	0.2	<0.01	-	-	<0.01
	NBL	2.9	5.1	0.05	3.5	4.8	0.05
	NBT	-	1.3	0.01	0.3	1.3	<0.01
	NBR	1.5	4.6	0.02	0.5	1.7	0.01
	SBL	-0.1	-0.9	<0.01	0.3	-0.2	<0.01
	SBTR	-0.2	-0.9	<0.01	0.4	2.1	0.01

Based on the analysis presented in Table 12, the proposed development site traffic adds negligible delay to the overall intersection operations. Given these findings, we recommend that municipal authorities maintain ongoing surveillance of these traffic movements. As the proposed development and other future projects in the vicinity reach full occupancy, authorities should be prepared to implement suitable modifications as warranted by changing traffic patterns. This proactive approach will ensure that the transportation infrastructure continues to meet the evolving needs of the area while maintaining optimal traffic flow and safety standards.

As previously mentioned, it is recommended that the City of Mississauga continue to monitor traffic patterns and volumes associated with this and other area developments as occupancy progresses. Based on the findings of ongoing assessments, they should implement appropriate measures to address any emerging transportation needs. This may include, where warranted, the consideration of road widening or other infrastructure enhancements to ensure the road network continues to operate efficiently and safely as development in the area reaches full build-out.

Table 13 summarizes the changes in 95th, queue lengths of the critical movements at the major signalized intersection during the morning peak period in Synchro outputs under future (2029) background and future (2029) total traffic conditions. The detailed Synchro results of the analysis for all movements for the signalized intersection are provided in **Appendix L.**

Table 13: 95th Percentile Queue Lengths (Synchro)

Intersection	Movements	Synchro Output 95th Queue (m)
Future (2029) Background Traffic Conditions		
Eglinton Avenue West and Mississauga Road (Signalized)	NBL NBT NBR	57.4 91.2 48.3
Future (2029) Total Traffic Conditions		
Eglinton Avenue West and Mississauga Road (Signalized)	NBL NBT NBR	62.6 92.5 52.9

As indicated in **Table 13**, the longest 95th percentile queue for the northbound approach movement including northbound left-turn, through and right-turn at the intersection of Eglinton Avenue West and Mississauga Road is 62.2, 92.5, 52.9 m, respectively during the morning peak hour. Therefore, the proposed full moves site access is located approximately 95 m from the stop line on Mississauga Road is not expected to be blocked by the north traffic queues at the intersection of Eglinton Avenue West and Mississauga Road.

As previously mentioned, the proposed development site traffic adds negligible delay to the overall intersection operations. **Table 13** details the changes in traffic operations from existing to future total traffic conditions for all movements during the morning and afternoon peak hour period.

7.0 TRANSPORTATION IMPACT ASSESSMENT

7.1 Site Access

As previously mentioned, a full movement vehicular entrance is proposed via Mississauga Road.

7.2 On-site Circulation

AutoTURN software was used to generate vehicular turning templates to confirm and demonstrate the accessibility for typical 5.6m long passenger vehicle (P TAC-2017) and 9.85m Front-End Bin Loading Waste (Region of Peel), and Fire/Emergency Truck.

Figure 13 to **Figure 15** illustrate the turning movement templates for passenger vehicles, waste collection, and fire/emergency vehicles, respectively. The analysis demonstrates that a passenger vehicle, waste collection and fire/emergency vehicles can maneuver within the designated route with no conflicts.

7.3 Signage and Pavement Marking Plan

In accordance with the Ontario Traffic Manuel (OTM) Book 5, UrbanTrans' recommends STOP Sign (Ra-1) be provided at the entrance via Mississauga Road with STOP BAR (solid white retro-reflective line between 30cm and 60cm wide) and solid yellow pavement marking line separating two-way traffic flow. In addition, a STOP Sign (Ra-1) is also recommended for the outbound vehicles exiting the underground parking spaces. Based on the recommended signages and pedestrian sidewalk within the subject site, it is our opinion the site will operate safely and efficiently for both motorists and pedestrian connectivity.

7.4. Corner Clearance to Accesses or Public Lanes at Major Intersection

Figure 8.8.2 Suggest Minimum Corner Clearances to Accesses or Public Lanes at Major Intersections in the Transportation Association of Canada Geometric Design Guide for Canadian Road (GDGCR) 2017 GDGCR outlines minimum recommended corner clearances to accesses from intersections. Mississauga is classified as a "major collector" roadway. The recommended minimum corner clearance from signalized intersection for the site access is 55 m and a minimum of 25 m from a stop-controlled intersection.

The proposed site access location results in a corner clearance of approximately 85 m from the signalized intersection at Eglinton Avenue West. Therefore, the proposed site access meets the minimum recommended intersection corner clearance and spacing requirements outlined in the TAC GDGCR.

Google Street View and Good Earth have confirmed that there are no obstructions, such as vegetation or noise walls, to the north and south of the driveway. As a result, vehicles exiting the proposed driveway will have an adequate sight line to observe pedestrians and traffic on Mississauga Road.

7.5. Clear Throat Length

The clear throat length or set back distance is used to prevent blocking on-site circulation roads and queueing of entering vehicles. *Table 8.9.3* in the GDGCR provides a guideline for suggested minimum clear throat lengths for the various development. **Table 4** highlights the recommended values or the minimum throat length for apartments with 100-200 units (similar land use as a townhouse development) connecting to a collector road in comparison to the existing road conditions. A minimum clear throat length of 15m is recommended for apartments with less than 100 units. The site driveway throat length was measured to be 15 m, which satisfied this requirement.

Table 14: Clear Throat Length

Measurement	TAC Guide Distance	Driveway Measurement (m)	Requirement Satisfied
Driveway Throat Length for Apartment with 100-200 units connecting to Arterial Road	15	15	Yes

Appendix M illustrates a comparative analysis of throat length and 95th percentile queue lengths during afternoon peak periods, as projected by Synchro simulations for the future (2029) total condition. The analysis demonstrates that the provided clear throat length of 15 meters is sufficient to accommodate the anticipated 95th percentile queue length of 4 and 3.2 meters during morning and afternoon peak periods at the site access point. This indicates that the designed throat length adequately addresses potential queuing concerns during peak afternoon traffic periods in the projected future scenario.

7.6. Sight Distance Analysis

7.6.1 Sight Distance Evaluation

Currently the posted speed limit on Mississauga Road is 50 km/h. for the purpose of sight distance assessment, a design speed of 70 km/h under stop control will be utilized. Sight distance requirements will be evaluated for the following movements:

1. Westbound left turn vehicles from Site Access to Mississauga Road
2. Westbound right turn vehicles from Site Access to Mississauga Road
3. Southbound left turn vehicles from Mississauga Road to Site Access

These assessments will consider both approaching and departing distances for passengers vehicles from a stopped position.

7.6.2. Stopping Sight Distance

Stopping Sight distance (SSD) is a near worst-case distance where a vehicle driver must be able to see in order to have room to stop before colliding with something in the roadway such as a pedestrian in crosswalk, a stopped vehicle, an intersection ahead and/or road debris.

Based on *Transportation Association of Canada's (TAC 2017) Geometric Design Guide for Canadian Roads Section 2.4.3.3* states the driver eye height of 1.08 m should be applied, and *Section 2.5.2.1*, target object height of 0.6 m for vehicle tail lights or brake light can be used. As such, these values (1.08 m and 0.6 m) have been used in the *2017 TAC* to determine stopping sight distance requirement outlined in *Table 2.5.2*. Based on TAC guidelines, road grades less than 3% can be considered to be level grade for the purposes of its impact on braking distance which is factored is stopping sight distance. Furthermore, brake distance is predicated on a time of 2.5 seconds and deceleration rate of 3.4 m/s^2 is used to determine calculated sight distance. As a result, the minimum stopping sight distance for a design speed of 70 km/h on level grade is 105 m based on *Table 2.5.2* of the TAC Design Guide.

Table 15: SSD Assessment at Mississauga Road and Site Access

Intersection Movement	Approach from	Required	Achieved	Difference
Southbound Left	North	105m	250m	**145m**
Northbound Right	South	105m	250m	**145m**

Table 15 indicates that the stopping sight distance achieves an excess of 145 m in distances for the northbound right and southbound left turning movements.

Given the information summarized above, it is our opinion that a driver approaching from the north with standard eye height has sufficient time to stop safely and is supportable from a traffic engineering and stopping sight distance perspective.

Departure Sight Distance

Departure Sight distance (DSD) is defined as the sight distance available from a point where vehicles are stopped before the intersecting road, where drivers are looking left and right along the major roadway, before entering or crossing the major road.

Departure Sight distance is considered for each of the three basic maneuvers, left turn, right turn and through for a stopped vehicle at an intersection.

Based on *Transportation Association of Canada's (TAC 2017) Geometric Design Guide for Canadian Roads Section 9.9.2.2* departure site triangles the traffic control Case B1- Left turn from the Minor Road guidelines was applied to determine the minimum/required intersection sight distance for left turn from stop sign controlled intersection. As such, based on *Table 9.9.4*, the minimum departure sight distance for a passenger car turning left on a two-lane road with no median, a grade less than 3% and a design speed of 60 km/h is 130 m.

Actual sight distances for southbound traffic approaching Mississauga Road on Site Access have been determined through Google Streetview. Actual sight distance on site was conducted at 4.4 m (the Vertex) from the edge of the major-road travelled way which represents the typical position of the minor-road driver's eye when a vehicle is stopped relatively close to the major road.

The departure sight distances are illustrated in **Figure 16** results are summarized in **Table 16**.

Table 16: DSD Assessment at Mississauga Road and Site Access

Intersection Movement	Approach from	Required	Achieved	Difference
Westbound Left	North	150m	250m	**+100m**
	South	150m	250m	**+100m**
Westbound Right	South	130m	250m	**+120m**

Table 16 indicates that the departure sight distance achieves an excess of 100m and 120m for the northbound and southbound approaches.

Given the information summarized above, it is our opinion that vehicles can sufficiently complete a right turn and left turns from proposed future driveway location and is supportable from a traffic engineering and departure sight distance perspective.

8.0 PARKING REQUIREMENT

8.1 Zoning By-law Review

As previously mentioned, the subject lands are currently occupied by four (4) single detached dwelling units and vacant land. The site plan has been revised to 99 three-storey townhouses. A total of 224 parking spaces are proposed including 198 residential parking spaces and 25 visitor parking spaces. A full movement vehicular entrance is proposed via Mississauga Road.

The City of Mississauga's Zoning By-law No. 0225-2007 (In Effect) is applied to the proposed development. The parking requirement and supply for the proposed development is detailed in **Table 17**.

Table 17: City of Mississauga Zoning By-law No. 0225-2007 Vehicle Parking Requirements

Type of Use	GFA (Units)	Parking Rates	Required	Provided	Difference
Townhouses	99	2.0 residential spaces per unit	198	198	-
		0.25 visitor spaces per unit	25	25	
		Accessible Parking Space	1	1	-
Total			**224**	**224**	**-**

Based on the applicable Zoning By-law No. 0225-2007 detailed in Table 17, the proposed development is required to provide 224 parking spaces and a total of 224 parking spaces are proposed including 198 residential parking spaces and 25 visitor parking spaces. Furthermore, if the number of visitor parking spaces is between 13-100 spaces, the minimum number of required accessible parking spaces is a minimum of 1 parking spaces must comply with the minimum dimensions for an accessible parking space thereby meeting the proposed 1 accessible parking space located within the ground level.

9.0 TRANSPORATION DEMAND MANAGEMENT (TDM)

Transportation Demand Management (TDM) Plan discusses measures to reduce congestion, minimize the number of single-occupant vehicles and encourage non-auto modes of travel such as walking, cycling and transit as well as ridesharing. TDM plans consist of specialized policies, targeted plans, innovative mobility services and products that encourage people to use sustainable modes of transportation, rather than driving alone, or make fewer trips by car.

TDM strategies have multiple benefits including reduce auto-related emissions to improve air quality, decreased traffic congestion to reduce travel time, increased travel options, reduce

personal transportation costs and energy consumption and support Provincial smart growth objectives.

The primary objective of this TDM plan are as follows:

- Provision of facilities/operations to promote behavioural change for reduced automobile uses and encourage the use of alternative sustainable transportation modes aside from single-occupancy vehicle (SOV).
- Maximize average auto occupancies, with the intent of a net minimization of site-related auto trips.
- Create and support opportunities for an inclusive transportation system to accommodate and facilitate all potential road uses in a safe and efficient manner.

9.1 City of Mississauga Traffic Management Plan (TDM)

City recognizes the limitations in expanding its road network and identifies the adverse effects of continued growth in motor vehicle trips, particularly single occupancy vehicles (SOV). To enhance the efficiency of transportation, the City is focusing on promoting more sustainable modes of travel. The Transportation Demand Management (TDM) Plan, building on prior initiatives by the City and other government levels such as the Region of Peel and the Province of Ontario, highlights the significance of TDM in an urbanizing environment. The plan recommends measures to reduce automobile usage by enhancing the appeal of sustainable modes, including walking, cycling, carpooling, and public transit.

9.2 Smart Commute

The Smart Commute Mississauga and Smart Commute Pearson Airport are non-profit Transportation Management Associations (TMAs) that promote commuter options and transportation services and promote sustainable transportation which are ways of travelling between places with little or no effect on the environment. The Smart Commute are partnered with Metrolinx and the Greater Toronto/Hamilton Area (GTHA) municipalities. The aim is to reduce traffic and fight climate change by encouraging people to use cleaner ways of travelling in and around Mississauga and Pearson Airport. They are devoted to:

- Reduce traffic congestion, and improve air quality and health by reducing vehicle emissions
- Support for improved transit service, and increased local transportation infrastructure
- Bus-only and cycling lanes, and a wider network of subway and light rapid transit;
- Encourage the benefits of transit-supportive development and smart-growth strategies.
- Promote legislative flexibility in support of high value, cost effective transportation strategies such as vanpools, telework, transit subsidies and shuttle services; and,
- Increase opportunities for TMA collaboration with business and government.

9.3 TDM Incentives and Recommendations

The following TDM measures and incentives are recommended for the proposed development:

- The Owner shall provide direct shared pedestrian/bicycle connections from the proposed development to Mississauga Road.

- The Owner shall coordinate with City of Mississauga to deliver and promote the Transit Incentive information packages and programs for new residents. The information packages include TTC/Miway schedules, community and cycling maps, where appropriate. The Information Package can be distributed at the sale office; and
- Provide one-time pre-loaded PRESTO Cards with the starting value of $25 (inclusive of the registration fee) for each residential unit on demand basis. This will help the future residents to consider taking TTC/Miway transit network and GO Transit services as an alternative mode of transportation. The pre-loaded PRESTO Cards can be distributed in conjunction with the Information Package at the time of occupancy.

It is UrbanTrans' opinion that the abovementioned Transportation Demand Management measures and incentives will reduce the numbers of single-occupant-vehicles to and from the proposed development.

10.0 MISSISSAUGA TRANSPORTATION MASTER PLAN, MAY 2019

This comprehensive plan is the outcome of extensive stakeholder and public engagement, backed by in-depth, evidence-based research and analysis. Serving as a guiding framework, it directs the City's investment and stewardship of the transportation system, recognizing its large scope going beyond roads and traffic lanes. Encompassing infrastructure, public spaces, services, regulations, and people's interactions, the plan adopts a long-term strategic view to determine appropriate actions for the short, medium, and long term. Initial steps involve detailed network planning, forecasting, project scoping, costing, budgeting, and annual prioritization. Ultimately, the plan is intended to steer Mississauga and its transportation system toward future goals.

10.1 City of Mississauga Transit and Road Infrastructure Plan (TRIP)

The Transit and Road Infrastructure Plan (TRIP) is a comprehensive city-wide initiative aimed at addressing road-use challenges and enhancing transportation experiences for city users. The plan is designed to establish both a long-term transit network and road network, facilitating additional infrastructure support and promoting diverse modes of travel, including transit, cycling, and walking. Over the next two decades, TRIP will serve as a guiding framework for City actions, policies, and investments in transportation, aligning with the key principles outlined in the previously approved Transportation Master Plan (TMP) of 2019. The TMP functions as a comprehensive guide shaping the future of transportation in Mississauga.
The plan aims to:

- Evaluate existing restrictions in the transportation network.
- Assess network connectivity and multimodal additions at key locations (e.g., nodes, major transit station areas, mobility hubs, and major transfer points).
- Review the needs and justification for road capacity improvements outlined in the Capital Plan.
- Examine and evaluate various potential transit options, including priority, high-frequency, and rapid transit alternatives.

- Assess people movement options to improve on the congestion at critical points in the transportation network.
- Include safety principles from Vision Zero into transportation infrastructure improvement options.
- Prepare a strategy for establishing mode share targets.
- Evaluate the potential need and justification for additional rail grade separations in the City.
- Develop a prioritization and phasing plan for recommended transportation infrastructure improvements.

Based on our review of the Official Plan Transportation Policies and directions indicate that there is a desire to steer development towards areas with a well-developed transportation network. This will have the effect of reducing single-occupant-vehicle trips and to support other modes of transportation such as public transit and active transportation.

10.2 City of Mississauga, Cycling Master Plan

The Cycling Master Plan will provide recommendations for the City's cycling network, comprising 897 kilometers of infrastructure to be constructed over a 27-year period. This plan includes the following key items to improve the City of Mississauga's cycling network.

- Cycle tracks: Physically separated from the road by a curb, at sidewalk level or slightly lower, reserved for bicycles only.
- Bicycle lanes with separation from traffic lanes using flexible posts, planters, parking stalls, curbs, or other barriers, reserved for bicycles only.
- Bicycle lanes where cyclists travel in a lane beside regular traffic lanes, reserved for bicycles only.
- Multi-use trails along boulevards and through parks.
- Shared routes between cyclists and motorists on roads with lower speeds.

Refer to **Figure 17** for an illustration of future development of long term cycling routes within the vicinity of the subject site.

Figure 17: Long Term Cycling Routes Map

Source: Mississauga.ca

The proposed City of Mississauga Cycling Master Plan outlines different programs to implement to improve the existing cycling network. There will be several improvements surrounding the residential site off Polaris Way. This includes a Primary On-Road/Boulevard Routes along Eglington Avenue West & Mississauga Road.

10.3 Port Credit GO Station Improvements

Metrolinx has officially named the Hurontario light rail transit (LRT) project as the Hazel McCallion Line, honoring the former Mississauga mayor. The 18-kilometer Hazel McCallion Line, once operational, will provide a new, environmentally friendly, and reliable transportation option for a growing region. The transit system will feature 19 stops, cross between two urban growth centres, and connect to major transit systems, including GO Transit (Milton and Lakeshore West lines), the Mississauga Transitway, Brampton Transit, ZUM, and MiWay. Operating in its own dedicated lane, the Hazel McCallion Line is designed for a smooth and convenient ride along the region's busiest street. As both Mississauga and Brampton expand, the line addresses the need for sustainable and reliable transit with clean, electrically powered light rail vehicles, producing near-zero emissions.

10.4 Milton Line GO Expansion

The Milton GO line provides weekday rush-hour service running east in the morning and west in the afternoon, connecting Milton to Toronto and all stops in between. The service aims to accommodate commuters living outside the city who work away from home. Efforts have been made to enhance the rush-hour commute, including the addition of new trains, more trips, and supplying 3,000 additional seats. The initiative also seeks to expand service frequency at all stops

along the line, offering more transit choices for residents in Milton, Mississauga, Etobicoke, central Toronto, and neighboring communities.

The latest improvements on the Milton GO Line will enhance smoother transit services, including a 30% increase in trips, providing higher frequency with a 15-minute interval during rush hours. This initiative brings substantial improvements, featuring an additional 3,000 seats, the introduction of a new train, and the inclusion of two new trips. Furthermore, the transit enhancements contribute to increased connectivity with three transit hub connections, making commuting more efficient and accommodating the diverse needs of residents and commuters. **Figure 18** illustrates Milton GO Line Expansion Map.

Figure 18: Milton GO Line Expansion Map

These improvements will have the effect of reducing single-occupant-vehicle trips and supporting other modes of transportation such as public transit and active transportation and will therefore support a reduction in the parking supply.

11.0 CONCLUSIONS

The following section provides a brief overview of the study findings and our assessment of the transportation related aspects of the proposed development.

DEVELOPMENT PROPOSAL

The following section provides a brief overview of the study findings and our assessment of the transportation related aspects of the proposed development.

DEVELOPMENT PROPOSAL

The subject lands are currently occupied by four (4) single detached dwelling units and vacant land. The site plan has been revised to 99 three-storey townhouses. A total of 224 parking spaces are proposed including 198 residential parking spaces and 25 visitor parking spaces. A full movement vehicular entrance is proposed via Mississauga Road.

Base Year (2023) Traffic Operations

The intersection capacity analysis indicates that under existing traffic conditions, the signalized intersection is expected to operate near capacity due to high traffic volumes with acceptable levels of service, v/c ratios and delay. However, the eastbound through movement is operating with a failing level of service during the morning peak hour period and higher delay and v/c ratio under the existing traffic signal timing plan.

Although, in theory, it is not possible for an intersection to operate with a v/c ratio greater than 1.0 under existing conditions. In reality, the movement is expected to operate over capacity when long queues are formed, and vehicles are required to wait more than one cycle length to get through the intersection. This is considered a typical condition for signalized intersections where a major collector and major arterial roadway otherwise known as high capacity urban roadways meet. Furthermore, factors such as platooning, and gap opportunities are not considered in the analysis as those parameters do not appear in the Synchro inputs.

A v/c ratio > 1.0 means traffic demand exceeds the lane group's ability to discharge vehicles, even under ideal signal timing. This results in residual queues that grow with each signal cycle, possibly blocking upstream intersections.

However, it is UrbanTrans' opinion that no modifications are required under the existing conditions at this time. It should be noted that the proposed development contributes no site traffic volumes to the critical eastbound through during weekday morning peak hours.

Future (2029) Background Traffic Volumes

The intersection capacity analysis indicates that under the future (2029) background conditions, the intersection is currently operating at acceptable levels of service based on overall intersection levels of service, v/c ratios and delay with no critical movements identified.

Site Generated Traffic Volumes

Based on the trip generation calculations, the proposed development is estimated to generate a total 48 two-way trips (12 inbound and 36 outbound) during the weekday morning peak hour and 56 two-way trips (33 inbound and 23 outbound) during the afternoon peak hour.

Future Total Traffic Operations

Mississauga Road and Eglinton Avenue West (Signalized)

The intersection capacity analysis indicates that under the future (2029) total conditions, the intersection is currently operating at acceptable levels of service based on overall intersection levels of service, v/c ratios and delay with no critical movements identified.

Mississauga Road and Site Access (Unsignalized)

The intersection capacity analysis indicates that under the future (2029) total conditions, the intersection is currently operating at acceptable levels of service based on overall intersection levels of service, v/c ratios and delay with no critical movements identified.

Table 12 details the changes in traffic operations from future background (2029) to future (2029) total traffic conditions for all movements during the morning and afternoon peak hour period.

Site Access

As previously mentioned, a full movement vehicular entrance is proposed via Mississauga Road.

On-site Circulation

Figure 13 to **Figure 15** illustrate the turning movement templates for passenger vehicles, waste collection, and fire/emergency vehicles, respectively. The analysis demonstrates that a passenger vehicle, waste collection and fire/emergency vehicles can maneuver within the designated route with no conflicts.

Signage and Pavement Marking Plan

In accordance with the Ontario Traffic Manuel (OTM) Book 5, UrbanTrans' recommends STOP Sign (Ra-1) be provided at the entrance via Mississauga Road with STOP BAR (solid white retro-reflective line between 30cm and 60cm wide) and solid yellow pavement marking line separating two-way traffic flow. In addition, a STOP Sign (Ra-1) is also recommended for the outbound vehicles exiting the underground parking spaces. Based on the recommended signages and pedestrian sidewalk within the subject site, it is our opinion the site will operate safely and efficiently for both motorists and pedestrian connectivity.

Corner Clearance to Accesses or Public Lanes at Major Intersection

The proposed site access location results in a corner clearance of approximately 85 m from the signalized intersection at Eglinton Avenue West. Therefore, the proposed site access meets the minimum recommended intersection corner clearance and spacing requirements outlined in the TAC GDGCR.

Google Street View and Good Earth have confirmed that there are no obstructions, such as vegetation or noise walls, to the north and south of the driveway. As a result, vehicles exiting the proposed driveway will have an adequate sight line to observe pedestrians and traffic on Mississauga Road.

Clear Throat Length

Appendix N illustrates a comparative analysis of throat length and 95th percentile queue lengths during afternoon peak periods, as projected by Synchro simulations for the future (2029) total condition. The analysis demonstrates that the provided clear throat length of 15 meters is sufficient to accommodate the anticipated 95th percentile queue length of 4 and 3.2 meters during morning and afternoon peak periods at the site access point. This indicates that the designed

throat length adequately addresses potential queuing concerns during peak afternoon traffic periods in the projected future scenario.

Sight Distance Analysis

Table 15 indicates that the stopping sight distance achieves an excess of 145 m in distances for the northbound right and southbound left turning movements.

Given the information summarized above, it is our opinion that a driver approaching from the north with standard eye height has sufficient time to stop safely and is supportable from a traffic engineering and stopping sight distance perspective.

Table 16 indicates that the departure sight distance achieves an excess of 100m and 120m for the northbound and southbound approaches.

Given the information summarized above, it is our opinion that vehicles can sufficiently complete a right turn and left turns from proposed future driveway location and is supportable from a traffic engineering and departure sight distance perspective.

Parking Requirement

Based on the applicable Zoning By-law No. 0225-2007 detailed in Table 17, the proposed development is required to provide 224 parking spaces and a total of 224 parking spaces are proposed including 198 residential parking spaces and 25 visitor parking spaces. Furthermore, if the number of visitor parking spaces is between 13-100 spaces, the minimum number of required accessible parking spaces is a minimum of 1 parking spaces must comply with the minimum dimensions for an accessible parking space thereby meeting the proposed 1 accessible parking space located within the ground level.

12.0 RECOMMNEDATIONS

The following section provides our recommendations for the proposed development.

- UrbanTrans assessed several scenarios of signal timing optimization to address the existing morning and afternoon peak periods with critical movements and to reduce queues. As such, UrbanTrans recommends optimizing the splits and phases during the morning and afternoon peak hour periods while maintaining the 160 second cycle length, respectively in order to achieve v/c ratios under 1.0 and no failing level of services.
- The recommended splits and phase diagram are detailed in **Table 15** for the morning peak hour period. It is important to note, UrbanTrans recommended removing the permitted + protected (pm+pt) phase for the southbound left to only permitted (perm).
- It is recommended that the Region and City monitor these movements in the future and make appropriate adjustments as required based on the optimized signal timings recommended in this study. Furthermore, it is recommended that the Region and City monitors the growth rates along Mississauga Road and Eglinton Ave West and other main corridors in the area so that signal timing plan will be appropriately prioritized for transit

vehicles and other modes of transportation. This will facilitate and encourage new residents and employees to take alternative and sustainable modes of transportation to work, school, shopping or other discretionary trips during the peak periods.

- In accordance with the Ontario Traffic Manuel (OTM) Book 5, UrbanTrans' recommends appropriate internal signages and pavement marking plans for the proposed concept plan.

The primary objective of this TDM plan are as follows:

- Provision of facilities/operations to promote behavioral change for reduced automobile uses and encourage the use of alternative sustainable transportation modes aside from single-occupancy vehicle (SOV).
- Maximize average auto occupancies, with the intent of a net minimization of site-related auto trips.
- Create and support opportunities for an inclusive transportation system to accommodate and facilitate all potential road uses in a safe and efficient manner.

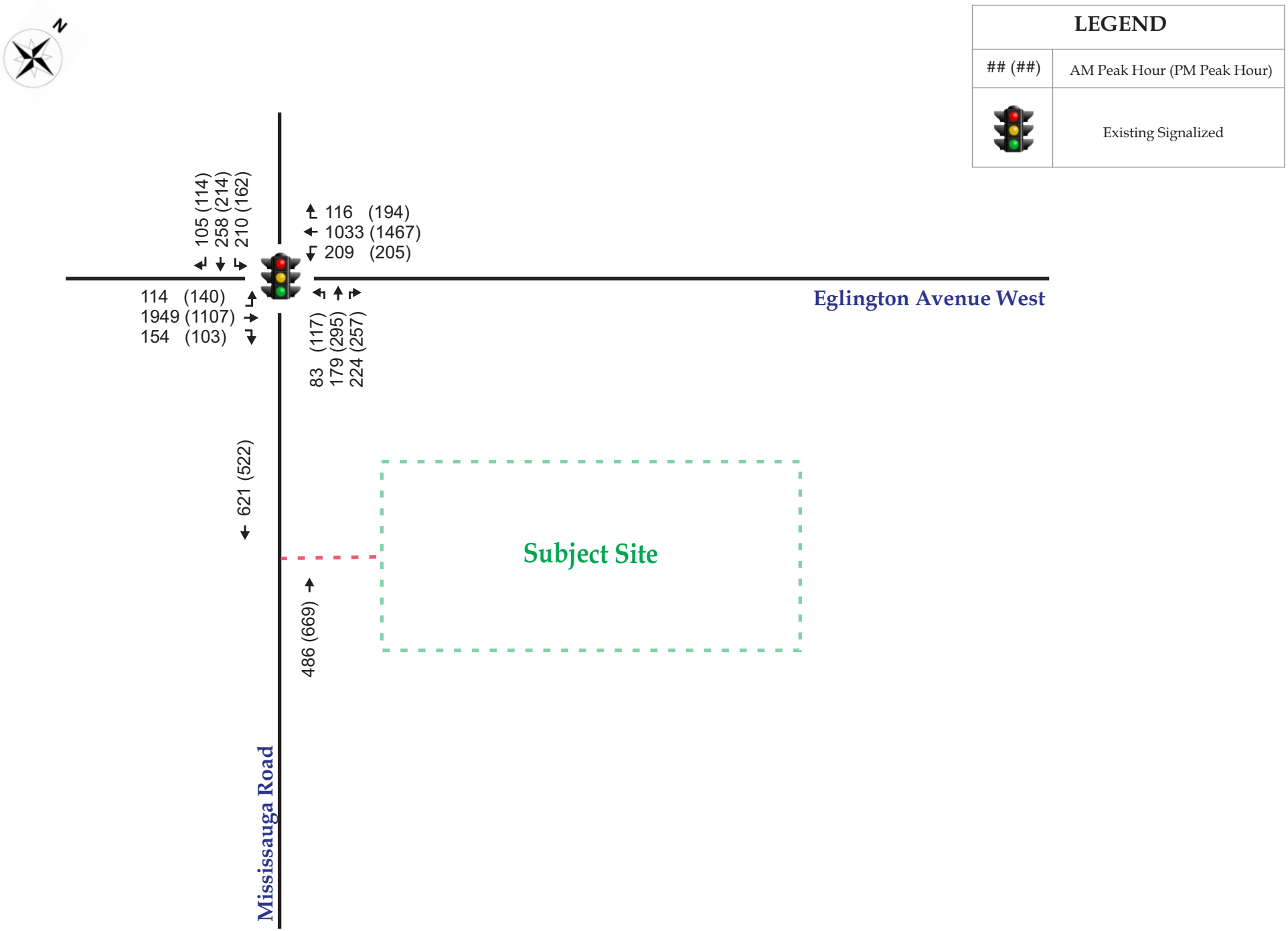


Figure 9 - Existing (2023) Traffic Volumes

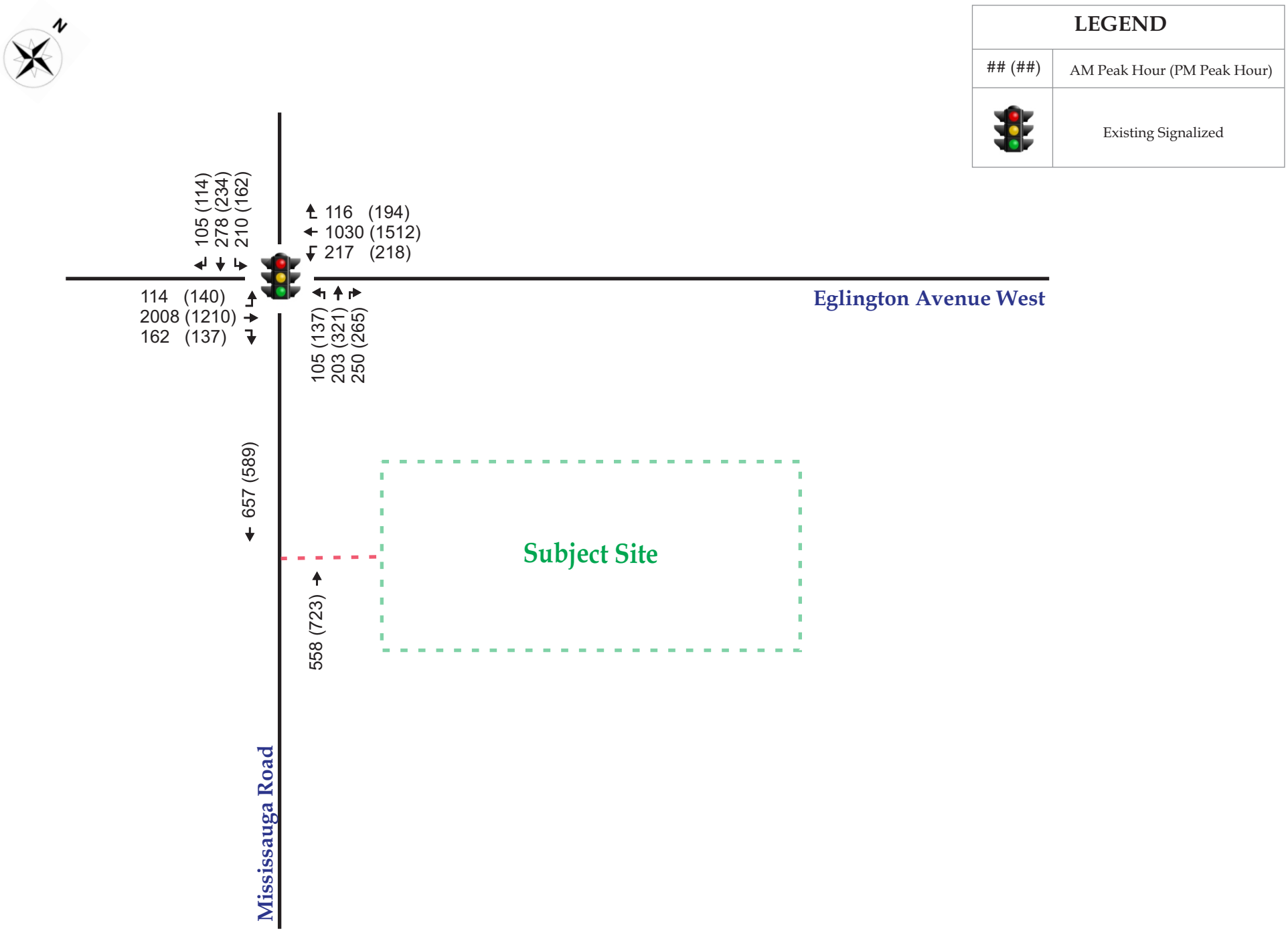
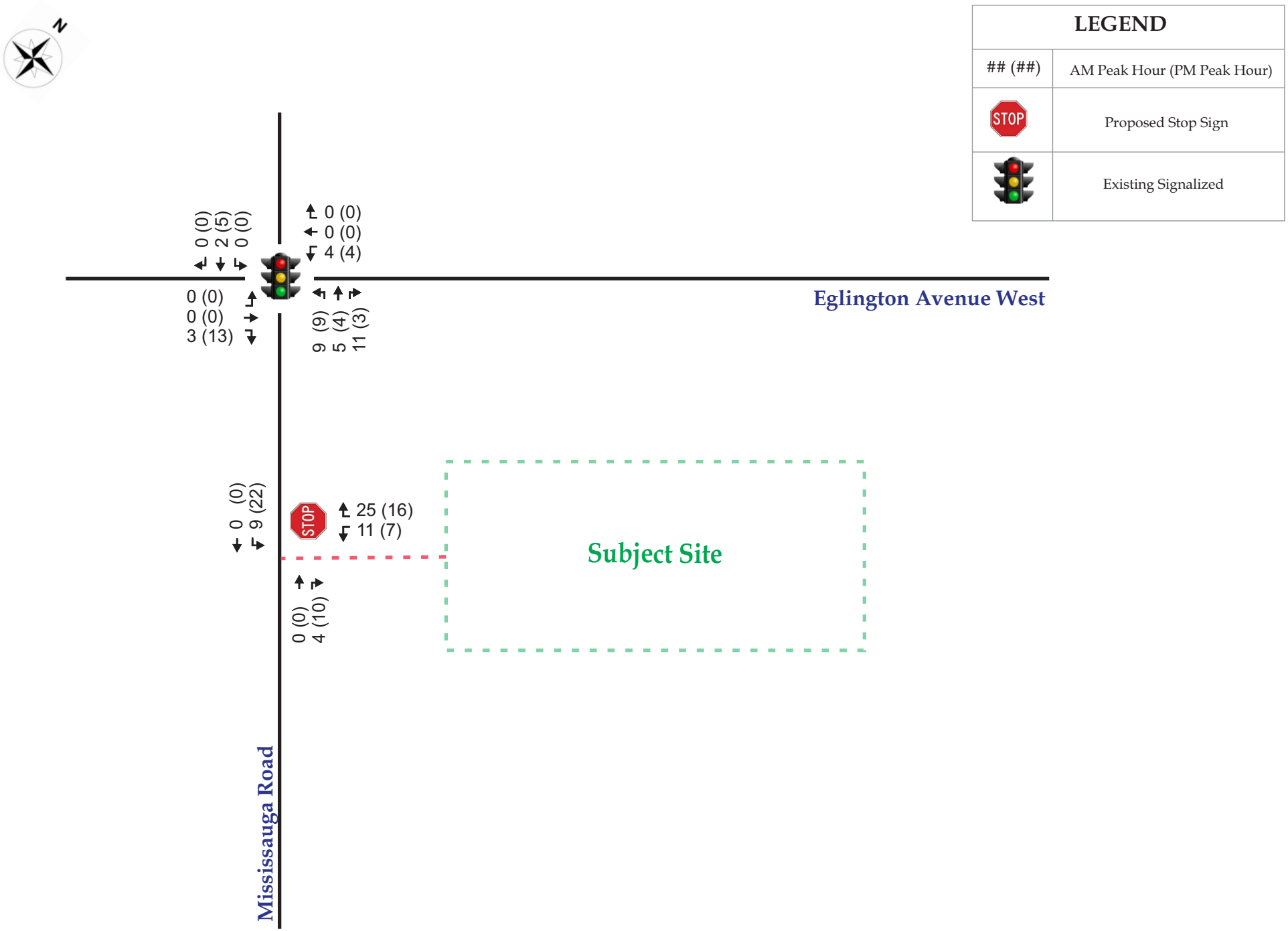


Figure 10 - Future (2029) Background Total Traffic Volumes



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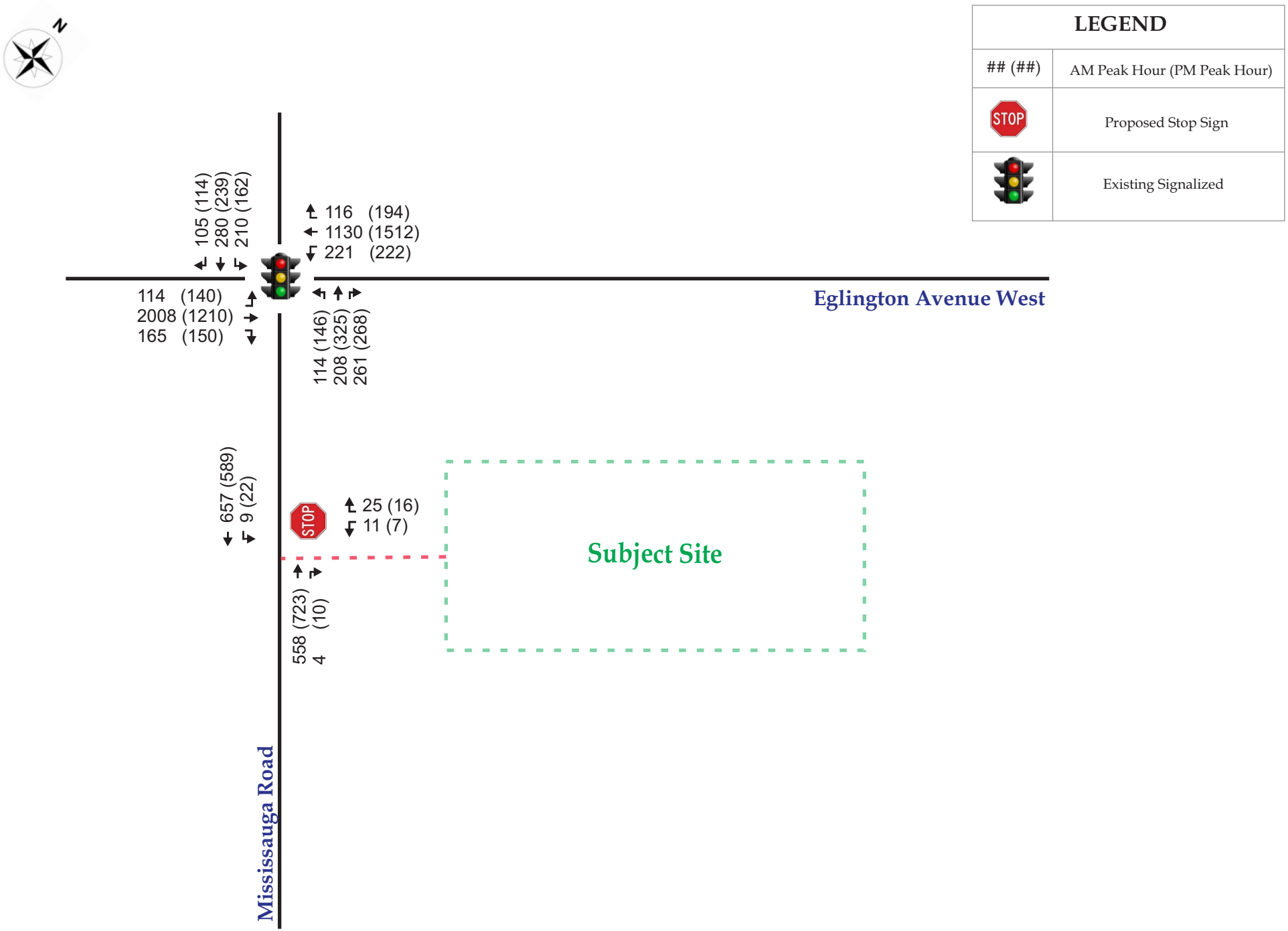
1775 Thorny Brae Place, City of Mississauga ON
Project No. UT-22-063
June 2025

Figure 11- Site Generated Traffic Volumes



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June 2025

Figure 12 - Future (2029) Total Traffic Volumes

EGLINTON AVENUE WEST

BUS STOP ACCESS

APPROXIMATE LOCATION OF EXISTING FIRE HYDRANT

MISSISSAUGA ROAD

GARBAGE AREA

BLOCK 1
3 STORY
STACKED
TOWNHOUSES

BLOCK 2
3 STORY
STACKED TOWNHOUSES

BLOCK 3
3 STORY
STACKED
TOWNHOUSES

BLOCK 4
3 STORY
STACKED
TOWNHOUSES

BLOCK 5
3 STORY
STACKED
TOWNHOUSES

BLOCK 6
3 STORY
STACKED
TOWNHOUSES

BLOCK 7
3 STORY
STACKED
TOWNHOUSES

BLOCK 8
3 STORY
STACKED
TOWNHOUSES

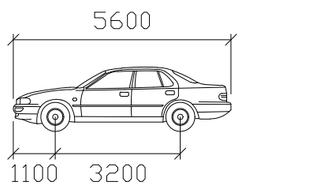
BLOCK 9
3 STORY
STACKED
TOWNHOUSES

BLOCK 10
3 STORY
STACKED
TOWNHOUSES

BLOCK 11
3 STORY
STACKED
TOWNHOUSES

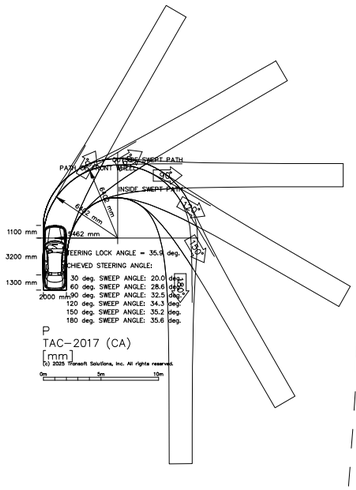
6M FIRE ROUTE
HEAVY DUTY ASPHALT

PLAY SURFACE



P

	mm
Width	: 2000
Track	: 2000
Lock to Lock Time	: 6.0
Steering Angle	: 35.9

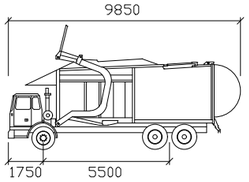


URBANTRANS
Engineering Solutions Inc.

Project Name:

Proposed Residential Development
1775 Thorny Brae Place, City of Mississauga

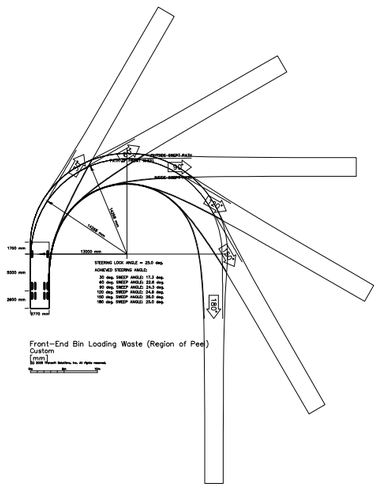
Drawing Title:	AutoTURN Analysis Passenger Car (P TAC-2017)		
Drawing No.:	Figure 13	Date:	June 18, 2025
Project No.:	UT-22-063	Drawn By:	AS
Scale:	NTS	Notes:	

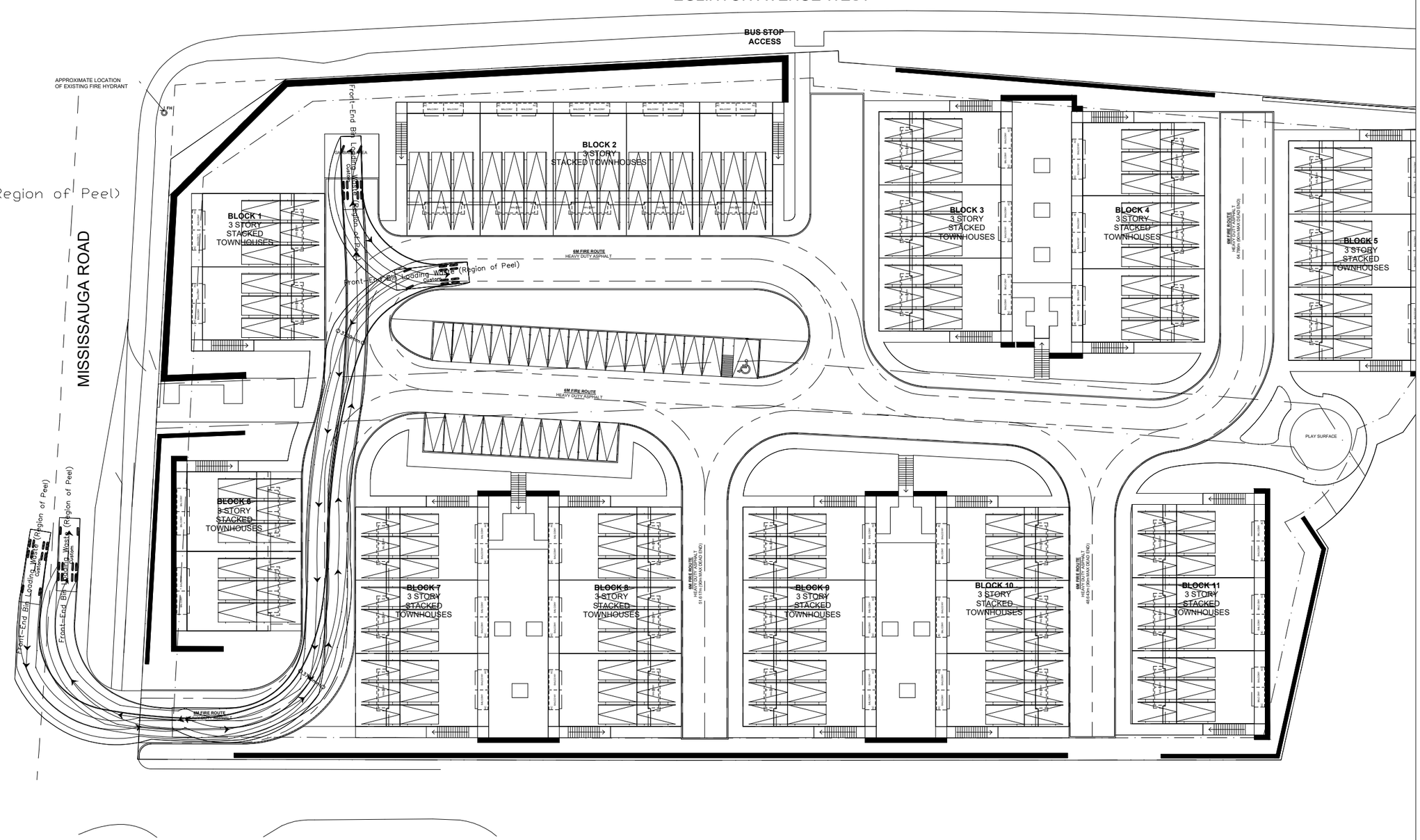


Front-End Bin Loading Waste (Region of Peel)

mm

Width	: 2770
Track	: 2600
Lock to Lock Time	6.0
Steering Angle	: 25.0



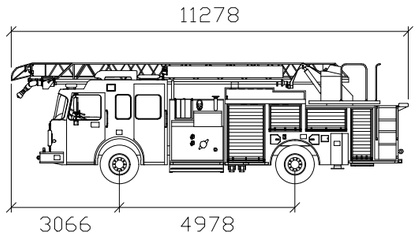


URBANTRANS Engineering Solutions Inc.

Project Name:

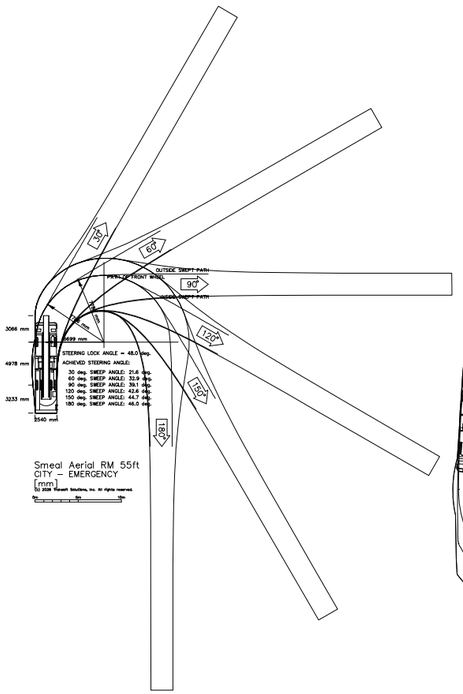
Proposed Residential Development
1775 Thorny Brae Place, City of Mississauga

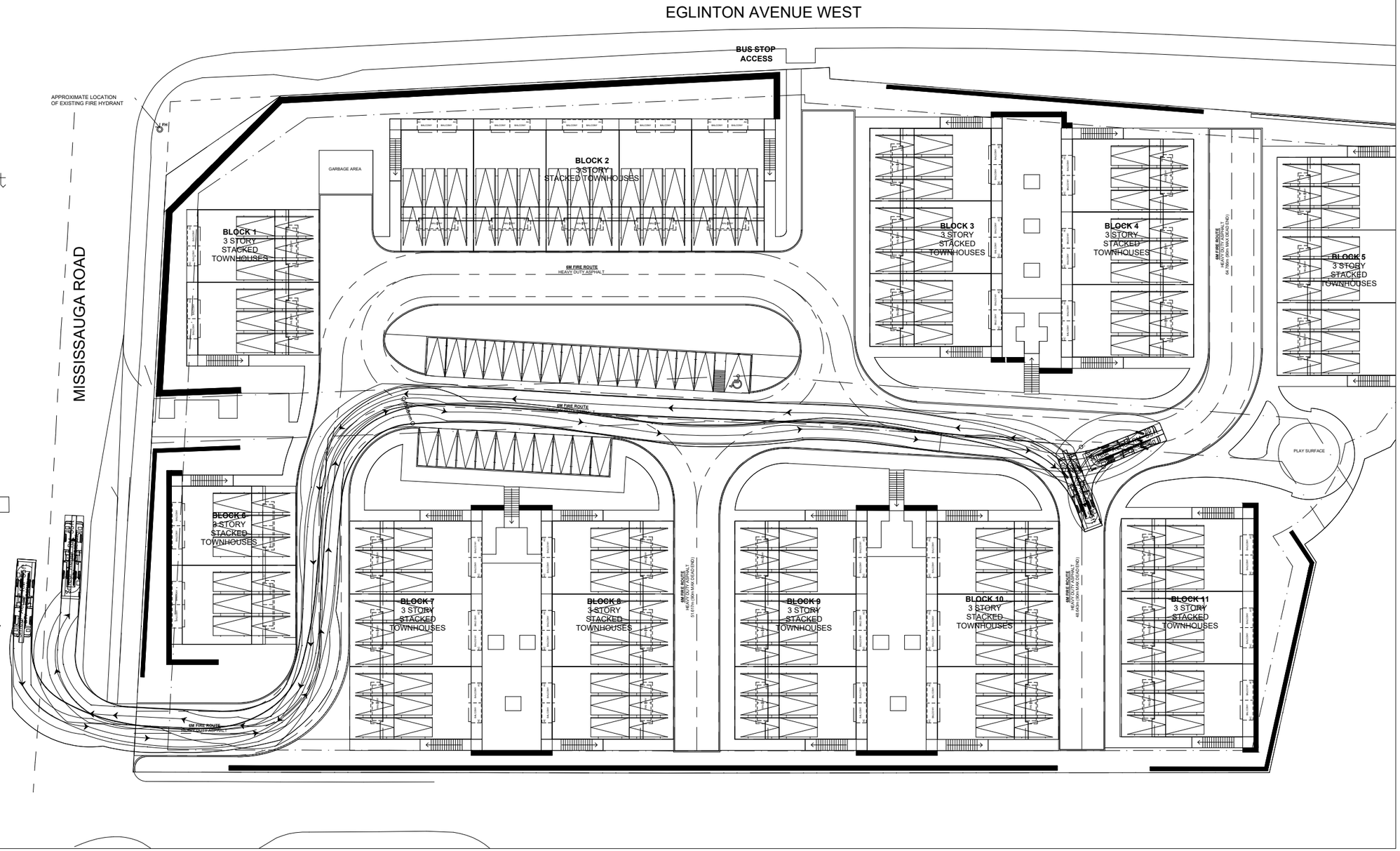
Drawing Title:	AutoTURN Analysis Front-end Bin Loading Waste (Region of Peel)		
Drawing No.:	Figure 14	Date:	June 18, 2025
Project No.:	UT-22-063	Drawn By:	AS
Scale:	NTS	Notes:	



Smeal Aerial RM 55ft

	mm
Width	: 2540
Track	: 2403
Lock to Lock Time	6.0
Steering Angle	: 48.0





URBANTRANS Engineering Solutions Inc.

Project Name:

Proposed Residential Development
1775 Thorny Brae Place, City of Mississauga

Drawing Title:	AutoTURN Analysis Fire/Emergency Truck		
Drawing No.:	Figure 15	Date:	June 18, 2025
Project No.:	UT-22-063	Drawn By:	AS
Scale:	NTS	Notes:	

LEGEND	
↔	Available Sight Distance
↔	Stopping Sight Distance (SSD)
↔	Departure Sight Distance (DSD)

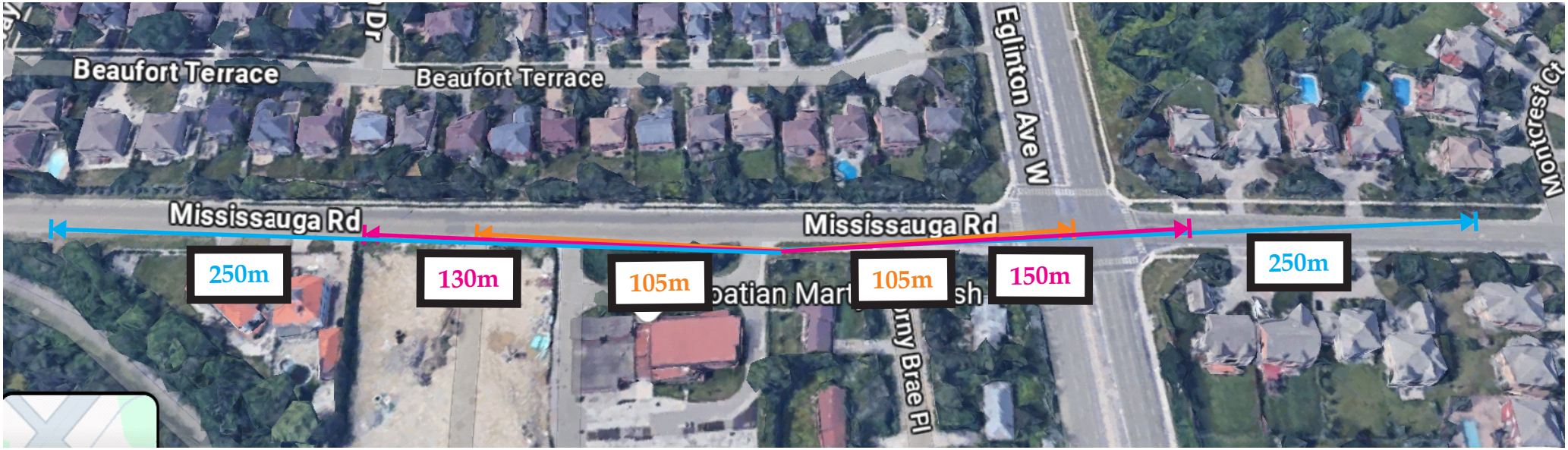


Figure 16 - Sight Distance (Mississauga Road and Site Access)

Appendix A
Revised Concept Plan

Chamberlain

Architects
Constructors
Managers

Chamberlain Architect Services Limited

4671 Palladium Way (Unit 1)
Burlington, Ontario. L7M 0W9
CANADA

Phone: 905.631.7777

www.chamberlainIPD.com

NO.	ISSUED	DATE
1	CLIENT REVIEW	24-04-17
2	CLIENT REVIEW	24-08-14
3	CLIENT REVIEW	24-09-26
4	GARBAGE OPTIONS	24-09-27
5	CLIENT REVIEW	24-10-25
6	CLIENT REVIEW	25-01-15
7	CLIENT REVIEW	25-05-14
8	CLIENT REVIEW	25-05-27
9	CONSULANT COORDINATION	25-06-02
	OPA/ZBA SUBMISSION	25-06-13

SEAL

CONSTRUCTION NORTH

TRUE NORTH

THORNY BRAE

1765, 1775 THORNY BRAE PLACE
MISSISSAUGA, ON

SHEET NAME

SITE PLAN

START DATE	APRIL 2024
DRAWN BY	MR/MW
CHECKED BY	CMC
SCALE	1 : 250
PROJECT NO.	124015
DRAWING	A001

D:\1 - Revit Local Files\124015 - Thorny Brae - Site - 2025-04-25_mwoodcock7TBRG.rvt

2025-06-16 10:39:51 AM

Appendix B
Terms of Reference Comments (City of Mississauga)

Appendix B

APPROVED
By Cyrus Hiranandani at 11:28 am, Dec 22, 2023

Pre-Study Consultation Checklist

Description	Information	Section Reference
Development Information		
Development Description (land use, size, and number of phases of development)	• Phase 1: The proposed development is located at southeast corner of Mississauga Road and Eglington Avenue West municipally known as 1775 Thorny Brae Place, in the City of Mississauga. • Phase 2: The development proposes eight (8) semi-detached dwelling unit and 208 stacked townhouses totalling 216 residential units. An underground parking level will be provided for residential tenants and visitor parking spaces. A full movement vehicular entrance is proposed • Phase 3: approximately 86.46m south of the signalized intersection via Mississauga Road.	2.3.6
Transportation Impact Assessment		
Step 1 – Screening		
Type of Application (attach a drawing)	☑ Official Plan Amendment ☑ Zoning Amendment ☐ Site Plan Control Application ☐ Plan of Subdivision ☐ Other_____	2.3.5
Screening Criteria	☑ Trip Generation Trigger Satisfied ☐ Location Trigger Satisfied ☑ Operational/Safety Trigger Satisfied	2.2.1
Type of Study	☑ Transportation Impact Study ☐ Access Review ☐ No Additional Study Required	2.2.1
Step 2 – Scoping		
Study Area (intersections to be analyzed) Note: The Transportation Consultant is responsible to identify any further intersections impacted as the study progresses.	• Turning movement counts undertaken during weekday AM • (7am-10am) and weekday PM (4pm-7pm) peak periods at • the following study area intersections: • -Mississauga Road and Eglinton Avenue W • (Signalized) • -Mississauga Road and Site Access (Unsignalized) • • • •	2.3.8

Description	Information	Section Reference
Horizon Years	☑ 5 years from date of TIS ☐ Interim years_____ ☐ Other_____	2.3.9
Analysis Periods	☑ AM weekday peak hour of adjacent roadway ☑ PM weekday peak hour of adjacent roadway ☐ Saturday peak hour of adjacent roadway ☐ AM weekday peak hour of development ☐ PM weekday peak hour of development ☐ Saturday peak hour of development ☐ Other _____	2.3.10
Input Parameters and Assumptions (potential deviations)	• • • •	2.3.13
Existing Transportation Conditions	☐ City data sources ☑ New data collection_____ ☐ Other _____	2.3.14
Planned Network Improvements (with timing)	• On-road bike lanes are planned for Mississauga Road between Eglinton Ave & Eckland Crt. Construction tentatively planned for 2024.	2.3.16
Other Planned Developments (per City's Website)	• • • • • •	2.3.17
Identification of Mitigation Improvement Measures	☐ Neighbourhood Traffic Management Plan ☐ Other_____	2.3.23
Safety Analysis (any special issues)	• • • •	2.3.25
Site Access and Circulation (design vehicles)	☑ Passenger Car (P) ☐ Light Single Unit Truck (LSU) ☐ Medium Single Unit Truck (MSU) ☐ Heavy Single Unit Truck (HSU) ☐ Pumper Fire Truck ☐ WB-20 Tractor Semi-Trailer Truck ☑ Other Waste Collection and Fire/Emergency Truck	2.3.26
Impacts During Construction (any special issues)	• • • •	2.3.27

Description	Information	Section Reference
Step 3 – Forecasting		
Growth Rate	☑ Obtained from City ☐ Historical traffic counts ☐ Travel demand forecasts ☐ Proposed Growth Rate: _____	2.3.15
Site Trip Generation	☑ ITE Trip Generation Manual ☐ "First Principles" ☐ Observed rates for similar developments in area ☐ Other _____	2.3.19
Trip Reductions	☐ Internal capture reductions for mixed-use developments ☐ Pass-by reductions ☑ Other Non-Auto Modal Splits	2.3.19
Trip Distribution	☐ Local traffic patterns ☑ TTS ☐ Travel demand model ☐ Population and employment distribution ☐ Market analysis of catchment area ☐ Other _____	2.3.20
Trip Assignment	☑ Local traffic patterns ☐ Shortest distance ☑ Site layout, access design and logical routing ☐ Existing turning movements ☐ Other _____	2.3.21
Transportation Demand Management Plan		
Format	☑ Within a TIA Report ☐ Standalone	3.2.1
Type of Transportation Demand Management Plan	☑ TDM Statement ☑ TDM Scheme	3.2.2
Pedestrian Circulation Plan		
Format	☑ Within a TIA Report ☐ Standalone	4.2.1
Additional Comments		
• Access Review: Ensure that the proposed site access conform to all TAC standards (e.g. corner clearances, clear throat lengths, veh & ped sight line distances for ingress/egress, proximity/alignment to other driveways/roads, etc.); Provide confirmation and technical justification of whether the site access location and design are safe for all roadway users and why. • Recommendations: Detailed Recommendations regarding on-site/off-site roadway improvements, site access, site circulation, and TDM measures shall be made. • Community Impacts: Any transportation related impacts on the existing community and comments from the public through the planning approvals process shall be addressed in the report.		

From: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Sent: Monday, December 11, 2023 10:48 AM
To: Annosan Srikantha <annosan@uteng.ca>
Subject: RE: Terms of Reference (1786 Polaris Way)

Correct, through volumes only.

Enjoy the day!

Tyler Xuereb
Transportation Planning Analyst
T 905-615-3200 ext.4783
Tyler.xuereb@mississauga.ca

City of Mississauga | Transportation and Works Department,
Infrastructure Planning and Engineering Services Division

From: Annosan Srikantha <annosan@uteng.ca>
Sent: Monday, December 11, 2023 10:46 AM
To: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Cc: Annosan Srikantha <annosan@uteng.ca>
Subject: RE: Terms of Reference (1786 Polaris Way)

Thank you very much Tyler and this is considered for through volumes only correct?

Kind regards,

Annosan Srikantha, P.Eng.
President

P: 437-236-7085
E: annosan@uteng.ca
10-9275 Markham Road, Suite 146 | Markham ON | L6E 0H9

From: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Sent: Monday, December 11, 2023 10:45 AM
To: Annosan Srikantha <annosan@uteng.ca>
Subject: RE: Terms of Reference (1786 Polaris Way)

Hi Annosan,

Below are the recommended growth rates to be used along Eglinton Avenue and Mississauga Road. These rates are compounded annually from existing to 2028.

Eglinton Avenue

	Compounded Annual Growth from Existing to 2028	
	EB	WB
AM Peak	0.5%	1.5%
PM Peak	1.5%	0.5%

Mississauga Road

	Compounded Annual Growth from Existing to 2028	
	NB	SB
AM Peak	1.0%	1.0%
PM Peak	1.0%	0.5%

Regards,

Tyler Xuereb
Transportation Planning Analyst
T 905-615-3200 ext.4783
Tyler.xuereb@mississauga.ca

City of Mississauga | Transportation and Works Department,
Infrastructure Planning and Engineering Services Division

From: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Sent: Monday, January 15, 2024 10:55 AM
To: Annosan Srikantha <annosan@uteng.ca>
Subject: RE: Terms of Reference (1775 Thorny Brae Pl)

Hi Annosan,

The rates that I provided for 1786 Polaris Way would also be acceptable to be used for 1775 Thorny Brae Place as these locations are very close to each other. When calculating these the rates we used a 2031 horizon year, which means these rates can be applied to your 2029 horizon.

Regards,

MISSISSAUGA

Tyler Xuereb
Transportation Planning Analyst
T 905-615-3200 ext.4783
Tyler.xuereb@mississauga.ca

City of Mississauga | Transportation and Works Department,
Infrastructure Planning and Engineering Services Division

From: Annosan Srikantha <annosan@uteng.ca>
Sent: Monday, January 15, 2024 9:20 AM
To: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Cc: Annosan Srikantha <annosan@uteng.ca>
Subject: RE: Terms of Reference (1775 Thorny Brae Pl)

Hi Tyler,

Yes, we received ToR comments back from the City please see attached email.

At this time, the only future background development we will be incorporating in our study is the one we preivously completed with a municipal address 1786 Polaris Way. I have attached the ToR for that Study along with the growth rates you had previously provided (horizon period 2028).

Kind regards,

URBANTRANS
Engineering Solutions Inc.

Annosan Srikantha, P.Eng.
President

From: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Sent: Monday, January 8, 2024 9:10 AM
To: Annosan Srikantha <annosan@uteng.ca>
Subject: RE: Terms of Reference (1775 Thorny Brae Pl)

Good Morning Annosan,

I just have a couple questions in regards to your analysis.

-Has a ToR been provided to the City and have you received comments back?
-What background developments are included in your analysis?

Regards,

Tyler Xuereb
Transportation Planning Analyst
T 905-615-3200 ext.4783
Tyler.xuereb@mississauga.ca

City of Mississauga | Transportation and Works Department,
Infrastructure Planning and Engineering Services Division

From: Annosan Srikantha <annosan@uteng.ca>
Sent: Friday, January 5, 2024 2:26 PM
To: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Cc: Annosan Srikantha <annosan@uteng.ca>
Subject: Terms of Reference (1775 Thorny Brae Pl)

Hi Tyler,

Can you please provide growth rates for horizon period 2029 at Mississauga Road and Eglinton Avenue West.

Kind regards,

Annosan Srikantha, P.Eng.
President

P: 437-236-7085
E: annosan@uteng.ca
10-9275 Markham Road, Suite 146 | Markham ON | L6E 0H9

From: Cyrus Hiranandani <Cyrus.Hiranandani@mississauga.ca>
Sent: Friday, December 22, 2023 11:36 AM
To: Annosan Srikantha <annosan@uteng.ca>
Cc: 'Dan Marion' <dan@kingridgedevelopments.ca>; 'Mark Fogliato' <mark@kingridgedevelopments.ca>; Annosan Srikantha <annosan@uteng.ca>; Trans Projects <Trans.Projects@mississauga.ca>
Subject: RE: Terms of Reference (1775 Thorny Brae Pl)

Good morning Annosan,

Please find attached stamped and approved ToR for the proposed development, which encompasses City comments. Be advised that **all comments shall be considered preliminary and subject to change**, as a formal DARC application has not yet been submitted to the City. Other items to note:

· Certification Form - The Transportation Consultant must complete, sign, and seal (if appropriate) the attached Certification Form from the City's TIS Guidelines (2022) and submit the document with the application/report to ensure compliance with qualification requirements. The TIS Guidelines can be found at https://www.mississauga.ca/wp-content/uploads/2023/03/CMississauga-TIS-Guidelines-Version-5.1-Dec-2022.pdf . It must be ensured that the report conforms to the City's TIS Guidelines.
· Growth Rates/Traffic Data - Please contact Tyler Xuereb from the City's Transportation Planning Section (tyler.xuereb@mississauga.ca, Ext. 4783) to confirm growth rates and/or obtain traffic data for the study area roadways.
· Signal Timing Plans - Signal timing plans for signalized intersections under the City's jurisdiction can be obtained from Jim Kartsomanis (Jim.Kartsomanis@mississauga.ca, Ext. 3964).

Let me know if you have any questions.

Thank you,

Cyrus Hiranandani, E.I.T.
Traffic Planning Technologist
T 905-615-3200 ext. 4363
cyrus.hiranandani@mississauga.ca

City of Mississauga | Transportation & Works Department
300 City Centre Drive | Mississauga ON | L5B 3C1

From: Annosan Srikantha <annosan@uteng.ca>
Sent: Tuesday, December 12, 2023 12:48 PM
To: Kate Vassilyev <Kate.Vassilyev@mississauga.ca>
Cc: 'Dan Marion' <dan@kingridgedevelopments.ca>; 'Mark Fogliato' <mark@kingridgedevelopments.ca>; Annosan Srikantha <annosan@uteng.ca>
Subject: Terms of Reference (1775 Thorny Brae Pl)

Hi Kate,

Hope this email finds you well!

Please see attached Pre-Consultation Checklist for your review on the subject property located at 1775 Thorny Brae Place, in the City of Mississauga. Please also see attached site plan attached for your reference. We are facing an extremely time sensitive deadline and your flexibility in providing your comments and approval at your earliest is greatly appreciated.

Kind regards,

URBANTRANS
Engineering Solutions Inc.

Annosan Srikantha, P.Eng.
President

P: 437-236-7085
E: annosan@uteng.ca
10-9275 Markham Road, Suite 146 | Markham ON | L6E 0H9

Appendix C
Certification Form

Appendix A

Certification Form

Individuals submitting reports will be responsible for all aspects of development-related transportation assessment and reporting, and undertaking such work, in accordance and compliance with the City of Mississauga's Official Plan, Transportation Master Plan, and Transportation Impact Study Guidelines.

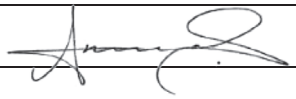
By submitting the attached report (and any associated documents) and signing this document, I acknowledge that:

- I have reviewed and have a sound understanding of the objectives, needs, and requirements of the City of Mississauga's Official Plan, Transportation Master Plan, and the Transportation Impact Study Guidelines as they apply to this submission;
- I have sound knowledge of industry standard practices pertaining to the preparation of development-related transportation study reports;
- I have substantial experience (more than five years) in completing development-related transportation studies and strong background knowledge of the transportation planning and engineering principles underpinning these studies; and
- I am registered as a Professional Engineer (P.Eng.), Licensed Engineering Technologist (LET), Certified Engineering Technologist (C.E.T.), or Registered Professional Planner (RPP) in good standing in the Province of Ontario with specific training in transportation planning and engineering.

Dated at Markham _____ this 20th day June, 2025 .
(City)

Name: Annosan Srikantha

Professional Title: registered Professional Engineer (P.Eng.)

Signature: 

Office Contact Information (Please Print)

Address: 10-9275 Markham Rd,

City/Postal Code: Markham ON L6E 0H9

Telephone/Extension: 437-236-7085

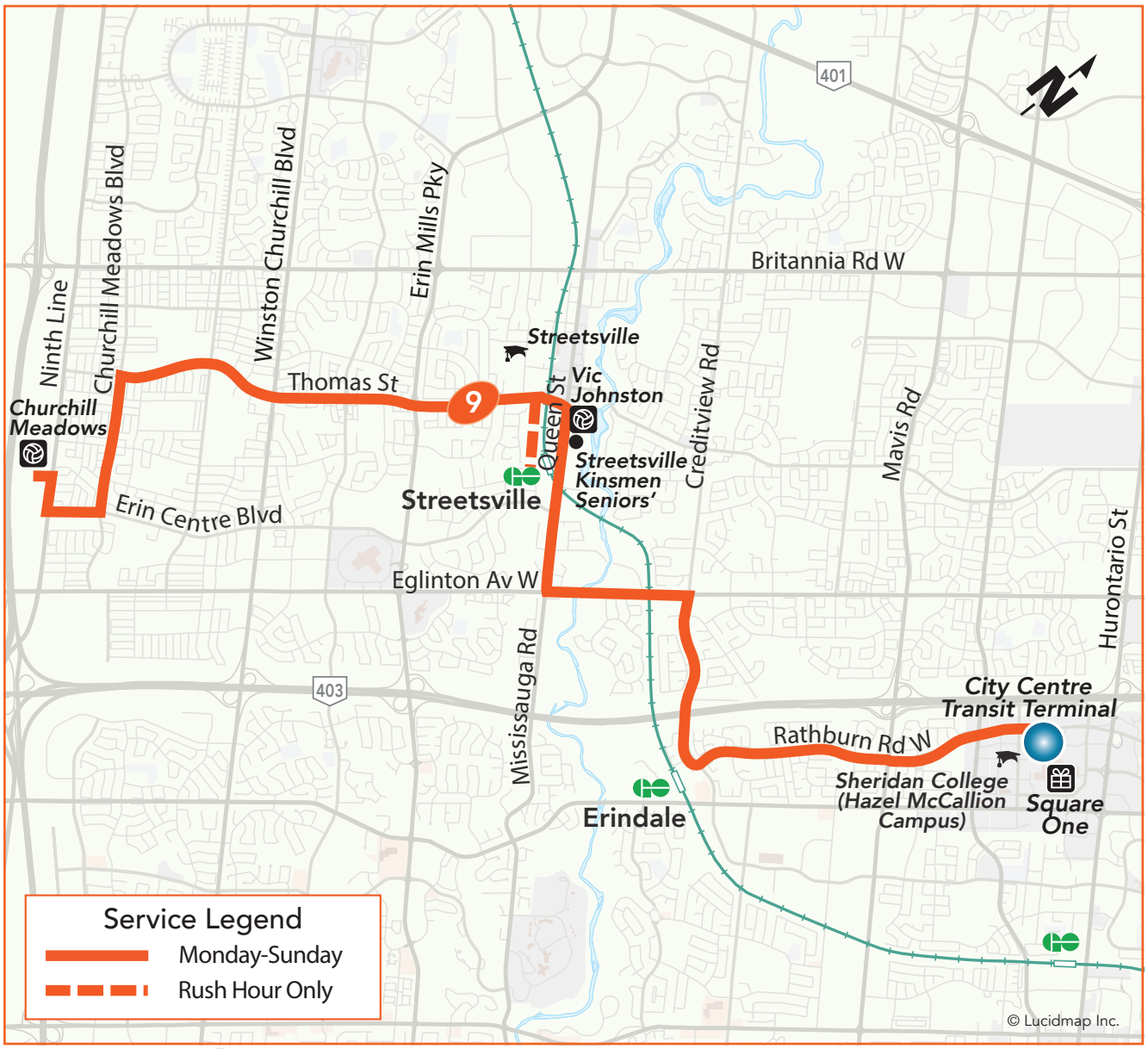
E-mail Address: annosan@uteng.ca

Appendix D
Transit Routes

9 Rathburn-Thomas

Local Route
Monday to Sunday

Eastbound to City Centre Transit Terminal
Westbound to Churchill Meadows Community Centre Terminal



Legend

- Terminal
- Transitway Station
- High School, University or College
- TTC Subway Station
- GO Train Station
- Hospital
- Library
- Community Centre
- Shopping Centre

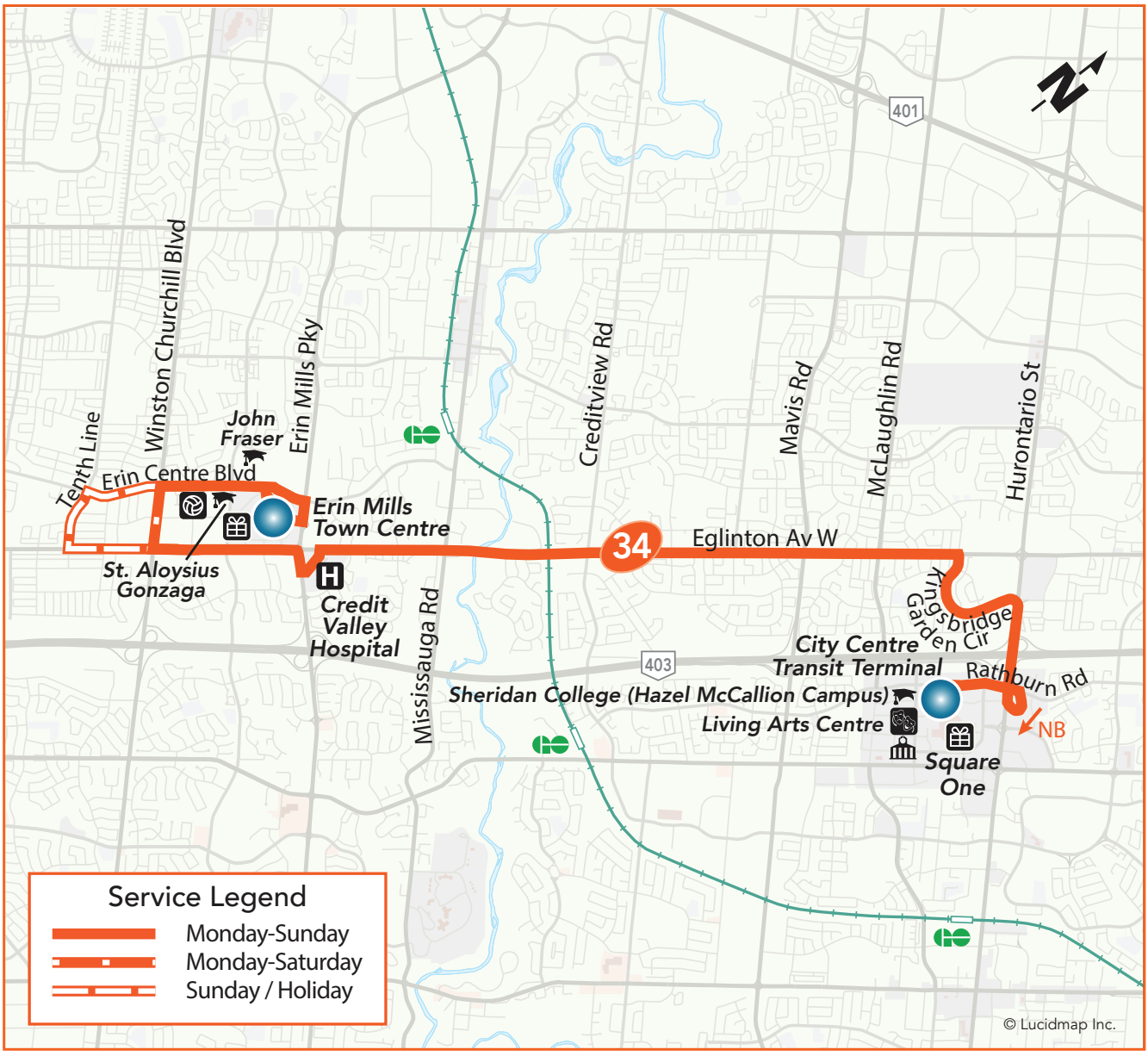
Effective: October 25, 2021

MiWAY MISSISSAUGA

34 Credit Valley

Local Route
Monday to Sunday

Eastbound to City Centre Transit Terminal
Westbound to Erin Mills Town Centre



Legend

- Terminal
- Transitway Station
- High School, University or College
- TTC Subway Station
- GO Train Station
- Hospital
- Library
- Community Centre
- Shopping Centre

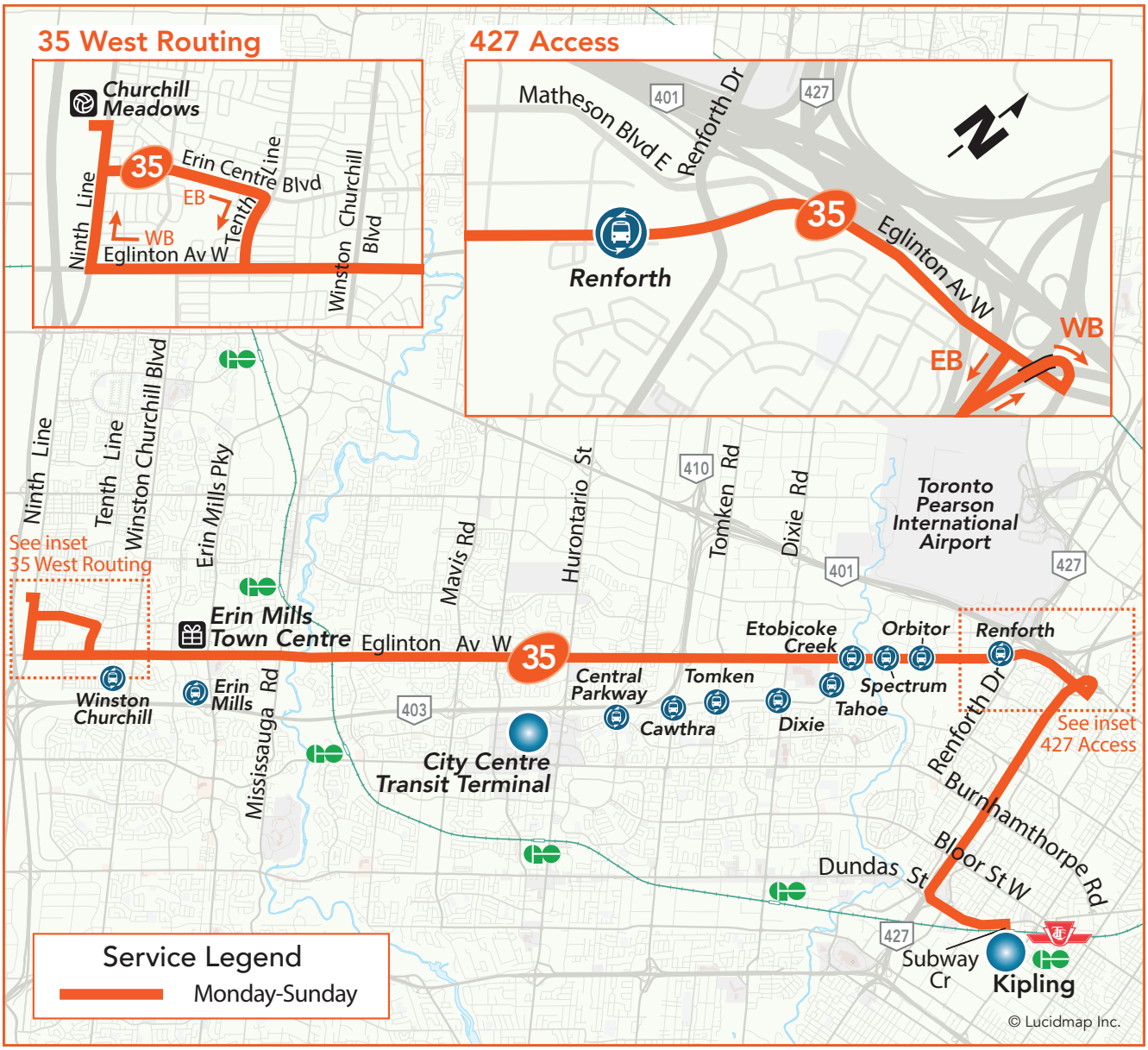
Effective: February 26, 2018

MiWAY MISSISSAUGA

35 Eglinton

Local Route
Monday to Sunday

Eastbound to Kipling Bus Terminal
Westbound to Churchill Meadows Community Centre Terminal



Legend

- Terminal
- Transitway Station
- High School, University or College
- TTC Subway Station
- GO Train Station
- Hospital
- Library
- Community Centre
- Shopping Centre

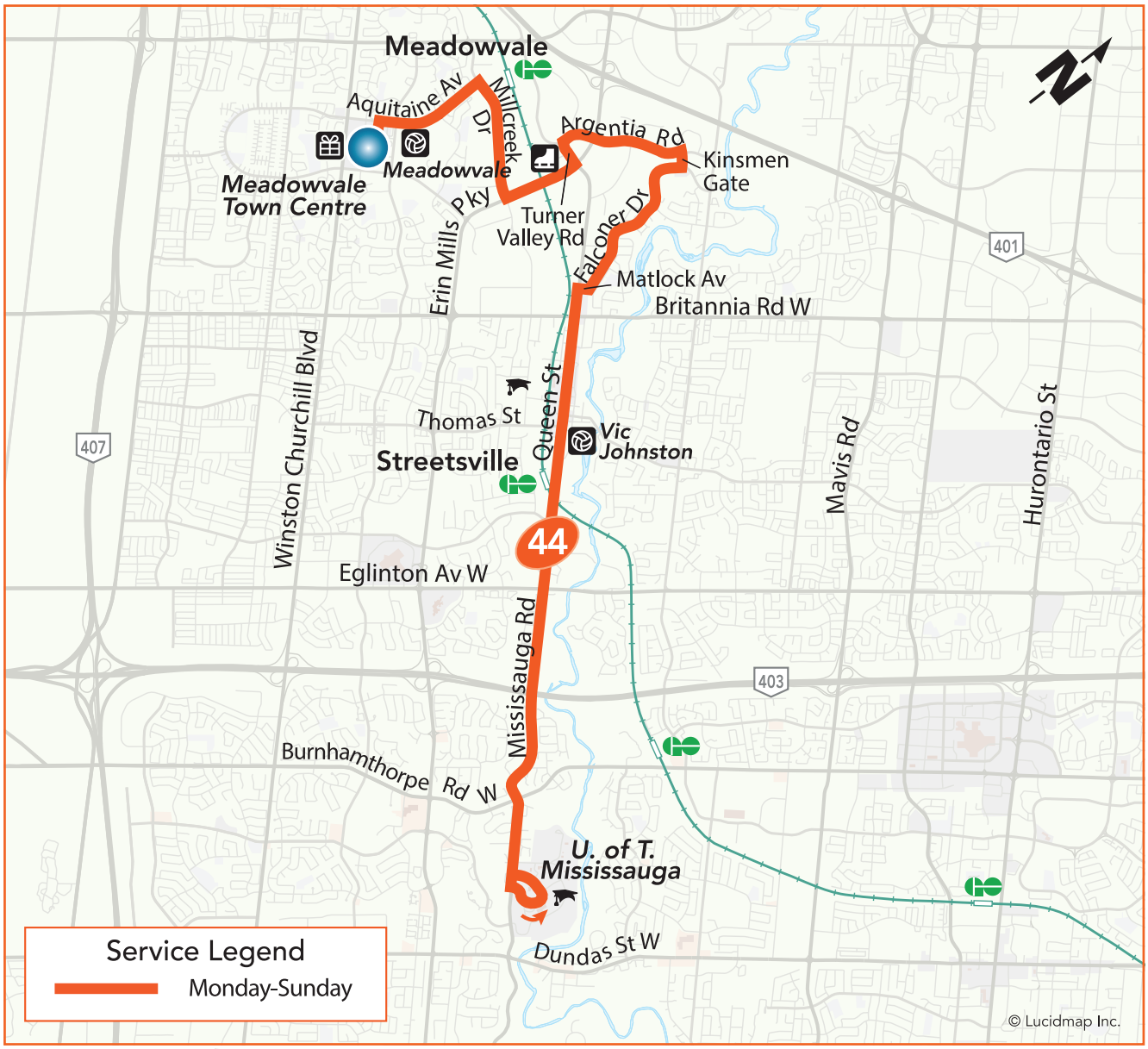
Effective: October 25, 2021

MiWAY
MISSISSAUGA

44 Mississauga Road

Local Route
Monday to Sunday

Northbound to Meadowvale Town Centre
Southbound to U of T Mississauga



Legend

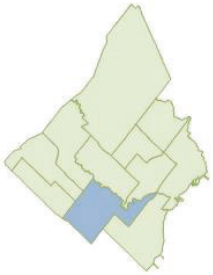
- Terminal
- Transitway Station
- High School, University or College
- TTC Subway Station
- GO Train Station
- Hospital
- Library
- Community Centre
- Shopping Centre

Effective: June 28, 2021

MiWAY MISSISSAUGA

Appendix E
2016 TTS Data (City of Mississauga - Ward 8

CITY OF MISSISSAUGA
WARD 8



WARD 8

HOUSEHOLD CHARACTERISTICS

Households	Dwelling Type			Household Size					Number of Available Vehicles					Household Averages				
	House	Townhouse	Apartment	1	2	3	4	5+	0	1	2	3	4+	Persons	Workers	Drivers	Vehicles	Trips/Day
23,000	56%	20%	24%	17%	28%	20%	20%	15%	6%	33%	44%	12%	5%	2.9	1.5	2.1	1.8	5.9

POPULATION CHARACTERISTICS

Population	Age							Daily Trips per Person (age 11+)	Daily Work Trips per Worker	Population	Employment Type			Student	Licensed	Transit Pass
	0-10	11-15	16-25	26-45	46-64	65+	Median				Full Time	Part Time	At Home			
										Male						
										32,700	43%	7%	4%	24%	73%	20%
										Female						
67,700	12%	6%	14%	24%	29%	16%	41.3	2.3	0.73	35,000	32%	9%	3%	22%	67%	21%

TRIPS MADE BY RESIDENTS OF CITY OF MISSISSAUGA - WARD 8

Time Period	Trips	% 24hr	Trip Purpose				Mode of Travel						Median Trip Length (km)			
			HB-W	HB-S	HB-D	N-HB	Driver	Pass.	Transit	GO Train	Walk & Cycle	Other	Driver	Pass.	Transit	GO Train
6-9 AM	33,600	24.8%	45%	21%	26%	8%	67%	13%	7%	4%	5%	5%	8.2	2.8	6.8	27.7
24 Hrs	135,500		31%	13%	43%	13%	70%	14%	7%	3%	4%	3%	6.6	4.8	6.5	27.8

TRIPS MADE TO CITY OF MISSISSAUGA - WARD 8 - BY RESIDENTS OF THE TTS AREA

Time Period	Trips	% 24 hr	Trip Purpose				Mode of Travel						Median Trip Length (km)			
			Work	School	Home	Other	Driver	Pass.	Transit	GO Train	Walk & Cycle	Other	Driver	Pass.	Transit	GO Train
6-9 AM	33,300	23%	45%	23%	8%	24%	69%	13%	10%	0%	5%	3%	7.6	3.8	7.2	22.4
24 Hrs	144,900		16%	9%	40%	34%	70%	14%	9%	1%	4%	2%	6.5	5.2	6.6	27.6

Appendix F
Existing Traffic Data & Signal Timing Plan

Spectrum

Turning Movement Count
Location Name: EGLINTON AVE W & MISSISSAUGA RD
Date: Tue, Nov 14, 2023 Deployment Lead: David Chu

Urban Trans Engineering Solutions Inc
146 9275 MARKHAM ROAD
MARKHAM ONTARIO, L6E 0H9
CANADA

Turning Movement Count (1 . EGLINTON AVE W & MISSISSAUGA RD)

Start Time	N Approach MISSISSAUGA RD						E Approach EGLINTON AVE						S Approach MISSISSAUGA RD						W Approach EGLINTON AVE						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:00:00	12	19	26	0	3	57	8	111	18	0	0	137	21	28	12	0	0	61	12	160	15	0	4	187	442	
07:15:00	22	15	24	0	1	61	15	170	26	0	1	211	22	24	1	0	3	47	16	188	16	0	0	220	539	
07:30:00	24	54	21	0	3	99	16	210	42	0	2	268	31	34	12	0	5	77	16	239	22	0	4	277	721	
07:45:00	20	55	38	0	9	113	21	222	45	0	0	288	55	42	15	0	0	112	25	358	26	0	5	409	922	2624
08:00:00	19	54	38	0	9	111	27	259	47	0	0	333	64	41	23	0	3	128	32	503	31	0	1	566	1138	3320
08:15:00	24	71	59	0	11	154	26	230	54	0	0	310	64	48	19	0	1	131	34	491	26	0	5	551	1146	3927
08:30:00	33	79	72	0	5	184	39	280	52	0	2	371	46	50	22	0	2	118	43	558	29	0	7	630	1303	4509
08:45:00	29	54	41	0	11	124	24	264	56	0	0	344	50	40	19	0	2	109	45	397	28	0	6	470	1047	4634
09:00:00	26	29	44	0	5	99	20	207	32	0	0	259	60	51	26	0	0	137	14	310	33	0	3	357	852	4348
09:15:00	10	31	38	0	10	79	21	201	23	0	0	245	50	36	16	0	0	102	14	255	27	0	7	296	722	3924
09:30:00	17	29	33	0	14	79	25	185	42	0	0	252	30	45	26	0	1	101	22	206	20	0	4	248	680	3301
09:45:00	16	25	26	0	1	67	27	208	28	1	0	264	24	36	16	0	1	76	22	247	20	0	4	289	696	2950
BREAK																										
16:00:00	27	42	36	0	3	105	36	340	40	0	3	416	48	56	23	0	12	127	26	301	39	0	1	366	1014	
16:15:00	26	48	41	0	11	115	39	315	50	0	1	404	47	86	31	0	6	164	32	263	33	0	3	328	1011	
16:30:00	16	54	41	0	3	111	38	348	66	0	6	452	60	77	32	0	8	169	23	255	35	0	6	313	1045	
16:45:00	20	62	40	0	6	122	62	371	43	0	0	476	57	73	31	0	1	161	31	278	37	0	3	346	1105	4175
17:00:00	32	56	30	0	2	118	46	347	52	0	3	445	69	81	33	0	2	183	24	244	30	0	5	298	1044	4205
17:15:00	39	53	46	0	7	138	44	371	56	0	0	471	64	67	26	0	0	157	18	307	34	0	1	359	1125	4319
17:30:00	23	43	46	0	6	112	42	378	54	0	7	474	67	74	27	0	11	168	30	278	39	0	5	347	1101	4375
17:45:00	40	60	39	0	1	139	53	330	62	0	3	445	64	56	39	0	3	159	25	282	29	0	1	336	1079	4349
18:00:00	35	32	41	0	4	108	47	342	45	0	2	434	49	63	26	0	9	138	25	284	38	0	3	347	1027	4332
18:15:00	17	26	32	0	2	75	38	257	39	0	4	334	58	62	20	0	1	140	15	242	30	0	3	287	836	4043
18:30:00	28	37	31	0	0	96	33	249	58	0	2	340	43	51	21	0	4	115	30	248	36	0	3	314	865	3807
18:45:00	29	31	26	0	3	86	37	248	44	0	0	329	69	51	14	0	0	134	19	249	39	0	2	307	856	3584
Grand Total	584	1059	909	0	130	2552	784	6443	1074	1	36	8302	1212	1272	530	0	75	3014	593	7143	712	0	86	8448	**22316**	-
Approach%	22.9%	41.5%	35.6%	0%		-	9.4%	77.6%	12.9%	0%		-	40.2%	42.2%	17.6%	0%		-	7%	84.6%	8.4%	0%		-	**-**	-
Totals %	2.6%	4.7%	4.1%	0%		11.4%	3.5%	28.9%	4.8%	0%		37.2%	5.4%	5.7%	2.4%	0%		13.5%	2.7%	32%	3.2%	0%		37.9%	**-**	-
Heavy	24	40	35	0		-	37	141	16	0		-	18	32	5	0		-	10	149	19	0		-	**-**	-
Heavy %	4.1%	3.8%	3.9%	0%		-	4.7%	2.2%	1.5%	0%		-	1.5%	2.5%	0.9%	0%		-	1.7%	2.1%	2.7%	0%		-	**-**	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	**-**	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	**-**	-

Spectrum

Turning Movement Count
Location Name: EGLINTON AVE W & MISSISSAUGA RD
Date: Tue, Nov 14, 2023 Deployment Lead: David Chu

Urban Trans Engineering Solutions Inc
146 9275 MARKHAM ROAD
MARKHAM ONTARIO, L6E 0H9
CANADA

Peak Hour: 08:00 AM - 09:00 AM Weather: Broken Clouds (5.16 °C)

Start Time	N Approach MISSISSAUGA RD						E Approach EGLINTON AVE						S Approach MISSISSAUGA RD						W Approach EGLINTON AVE						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:00:00	19	54	38	0	9	111	27	259	47	0	0	333	64	41	23	0	3	128	32	503	31	0	1	566	1138
08:15:00	24	71	59	0	11	154	26	230	54	0	0	310	64	48	19	0	1	131	34	491	26	0	5	551	1146
08:30:00	33	79	72	0	5	184	39	280	52	0	2	371	46	50	22	0	2	118	43	558	29	0	7	630	1303
08:45:00	29	54	41	0	11	124	24	264	56	0	0	344	50	40	19	0	2	109	45	397	28	0	6	470	1047
Grand Total	105	258	210	0	36	573	116	1033	209	0	2	1358	224	179	83	0	8	486	154	1949	114	0	19	2217	**4634**
Approach%	18.3%	45%	36.6%	0%		-	8.5%	76.1%	15.4%	0%		-	46.1%	36.8%	17.1%	0%		-	6.9%	87.9%	5.1%	0%		-	**-**
Totals %	2.3%	5.6%	4.5%	0%		12.4%	2.5%	22.3%	4.5%	0%		29.3%	4.8%	3.9%	1.8%	0%		10.5%	3.3%	42.1%	2.5%	0%		47.8%	**-**
PHF	0.8	0.82	0.73	0		0.78	0.74	0.92	0.93	0		0.92	0.88	0.9	0.9	0		0.93	0.86	0.87	0.92	0		0.88	**-**
Heavy	10	13	8	0		31	11	22	1	0		34	3	7	2	0		12	5	43	1	0		49	**-**
Heavy %	9.5%	5%	3.8%	0%		5.4%	9.5%	2.1%	0.5%	0%		2.5%	1.3%	3.9%	2.4%	0%		2.5%	3.2%	2.2%	0.9%	0%		2.2%	**-**
Lights	95	243	202	0		540	105	1011	208	0		1324	221	172	81	0		474	149	1906	113	0		2168	**-**
Lights %	90.5%	94.2%	96.2%	0%		94.2%	90.5%	97.9%	99.5%	0%		97.5%	98.7%	96.1%	97.6%	0%		97.5%	96.8%	97.8%	99.1%	0%		97.8%	**-**
Single-Unit Trucks	1	4	1	0		6	0	7	1	0		8	2	2	0	0		4	2	13	0	0		15	**-**
Single-Unit Trucks %	1%	1.6%	0.5%	0%		1%	0%	0.7%	0.5%	0%		0.6%	0.9%	1.1%	0%	0%		0.8%	1.3%	0.7%	0%	0%		0.7%	**-**
Buses	5	8	6	0		19	11	14	0	0		25	1	5	2	0		8	3	26	0	0		29	**-**
Buses %	4.8%	3.1%	2.9%	0%		3.3%	9.5%	1.4%	0%	0%		1.8%	0.4%	2.8%	2.4%	0%		1.6%	1.9%	1.3%	0%	0%		1.3%	**-**
Articulated Trucks	4	1	1	0		6	0	1	0	0		1	0	0	0	0		0	0	4	1	0		5	**-**
Articulated Trucks %	3.8%	0.4%	0.5%	0%		1%	0%	0.1%	0%	0%		0.1%	0%	0%	0%	0%		0%	0%	0.2%	0.9%	0%		0.2%	**-**
Bicycles on Road	0	2	0	0		2	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Bicycles on Road %	0%	0.8%	0%	0%		0.3%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	35	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	-	18	-	**-**
Pedestrians%	-	-	-	-	53.8%		-	-	-	-	1.5%		-	-	-	-	10.8%		-	-	-	-	27.7%		**-**
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	**-**
Bicycles on Crosswalk%	-	-	-	-	1.5%		-	-	-	-	1.5%		-	-	-	-	1.5%		-	-	-	-	1.5%		**-**

Spectrum

Turning Movement Count
Location Name: EGLINTON AVE W & MISSISSAUGA RD
Date: Tue, Nov 14, 2023 Deployment Lead: David Chu

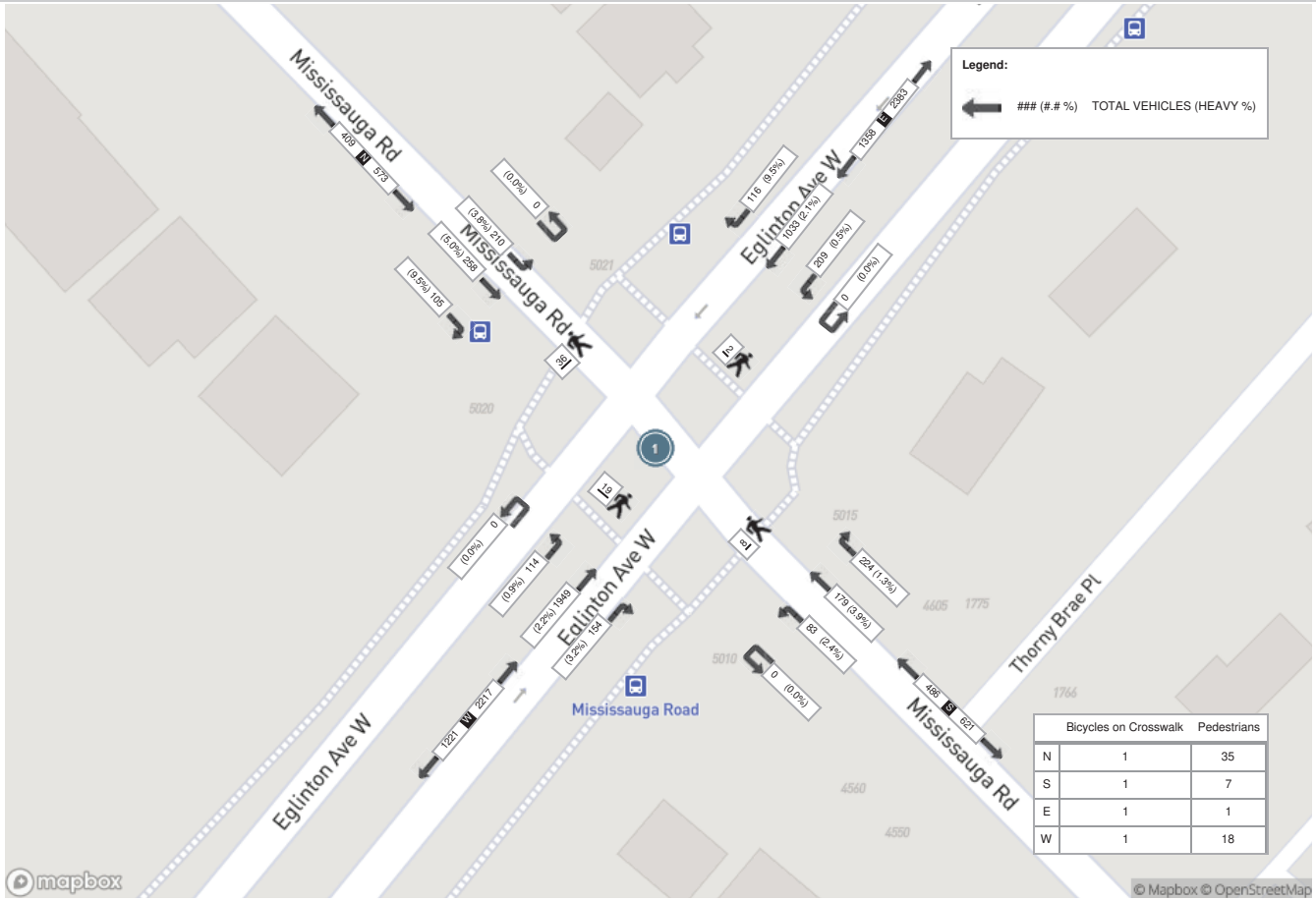
Urban Trans Engineering Solutions Inc
146 9275 MARKHAM ROAD
MARKHAM ONTARIO, L6E 0H9
CANADA

Peak Hour: 04:45 PM - 05:45 PM **Weather: Few Clouds (8 °C)**

Start Time	N Approach MISSISSAUGA RD						E Approach EGLINTON AVE						S Approach MISSISSAUGA RD						W Approach EGLINTON AVE						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
16:45:00	20	62	40	0	6	122	62	371	43	0	0	476	57	73	31	0	1	161	31	278	37	0	3	346	1105
17:00:00	32	56	30	0	2	118	46	347	52	0	3	445	69	81	33	0	2	183	24	244	30	0	5	298	1044
17:15:00	39	53	46	0	7	138	44	371	56	0	0	471	64	67	26	0	0	157	18	307	34	0	1	359	1125
17:30:00	23	43	46	0	6	112	42	378	54	0	7	474	67	74	27	0	11	168	30	278	39	0	5	347	1101
Grand Total	114	214	162	0	21	490	194	1467	205	0	10	1866	257	295	117	0	14	669	103	1107	140	0	14	1350	**4375**
Approach%	23.3%	43.7%	33.1%	0%		-	10.4%	78.6%	11%	0%		-	38.4%	44.1%	17.5%	0%		-	7.6%	82%	10.4%	0%		-	**-**
Totals %	2.6%	4.9%	3.7%	0%		11.2%	4.4%	33.5%	4.7%	0%		42.7%	5.9%	6.7%	2.7%	0%		15.3%	2.4%	25.3%	3.2%	0%		30.9%	**-**
PHF	0.73	0.86	0.88	0		0.89	0.78	0.97	0.92	0		0.98	0.93	0.91	0.89	0		0.91	0.83	0.9	0.9	0		0.94	**-**
Heavy	2	5	4	0		11	4	15	1	0		20	0	4	0	0		4	1	12	1	0		14	**-**
Heavy %	1.8%	2.3%	2.5%	0%		2.2%	2.1%	1%	0.5%	0%		1.1%	0%	1.4%	0%	0%		0.6%	1%	1.1%	0.7%	0%		1%	**-**
Lights	112	208	158	0		478	190	1452	204	0		1846	257	291	117	0		665	102	1095	139	0		1336	**-**
Lights %	98.2%	97.2%	97.5%	0%		97.6%	97.9%	99%	99.5%	0%		98.9%	100%	98.6%	100%	0%		99.4%	99%	98.9%	99.3%	0%		99%	**-**
Single-Unit Trucks	1	1	1	0		3	0	7	0	0		7	0	1	0	0		1	1	2	0	0		3	**-**
Single-Unit Trucks %	0.9%	0.5%	0.6%	0%		0.6%	0%	0.5%	0%	0%		0.4%	0%	0.3%	0%	0%		0.1%	1%	0.2%	0%	0%		0.2%	**-**
Buses	0	4	2	0		6	3	8	1	0		12	0	3	0	0		3	0	9	0	0		9	**-**
Buses %	0%	1.9%	1.2%	0%		1.2%	1.5%	0.5%	0.5%	0%		0.6%	0%	1%	0%	0%		0.4%	0%	0.8%	0%	0%		0.7%	**-**
Articulated Trucks	1	0	1	0		2	1	0	0	0		1	0	0	0	0		0	0	1	1	0		2	**-**
Articulated Trucks %	0.9%	0%	0.6%	0%		0.4%	0.5%	0%	0%	0%		0.1%	0%	0%	0%	0%		0%	0%	0.1%	0.7%	0%		0.1%	**-**
Bicycles on Road	0	1	0	0		1	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Bicycles on Road %	0%	0.5%	0%	0%		0.2%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	19	-	-	-	-	-	10	-	-	-	-	-	14	-	-	-	-	-	14	-	**-**
Pedestrians%	-	-	-	-	32.2%		-	-	-	-	16.9%		-	-	-	-	23.7%		-	-	-	-	23.7%		**-**
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	3.4%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

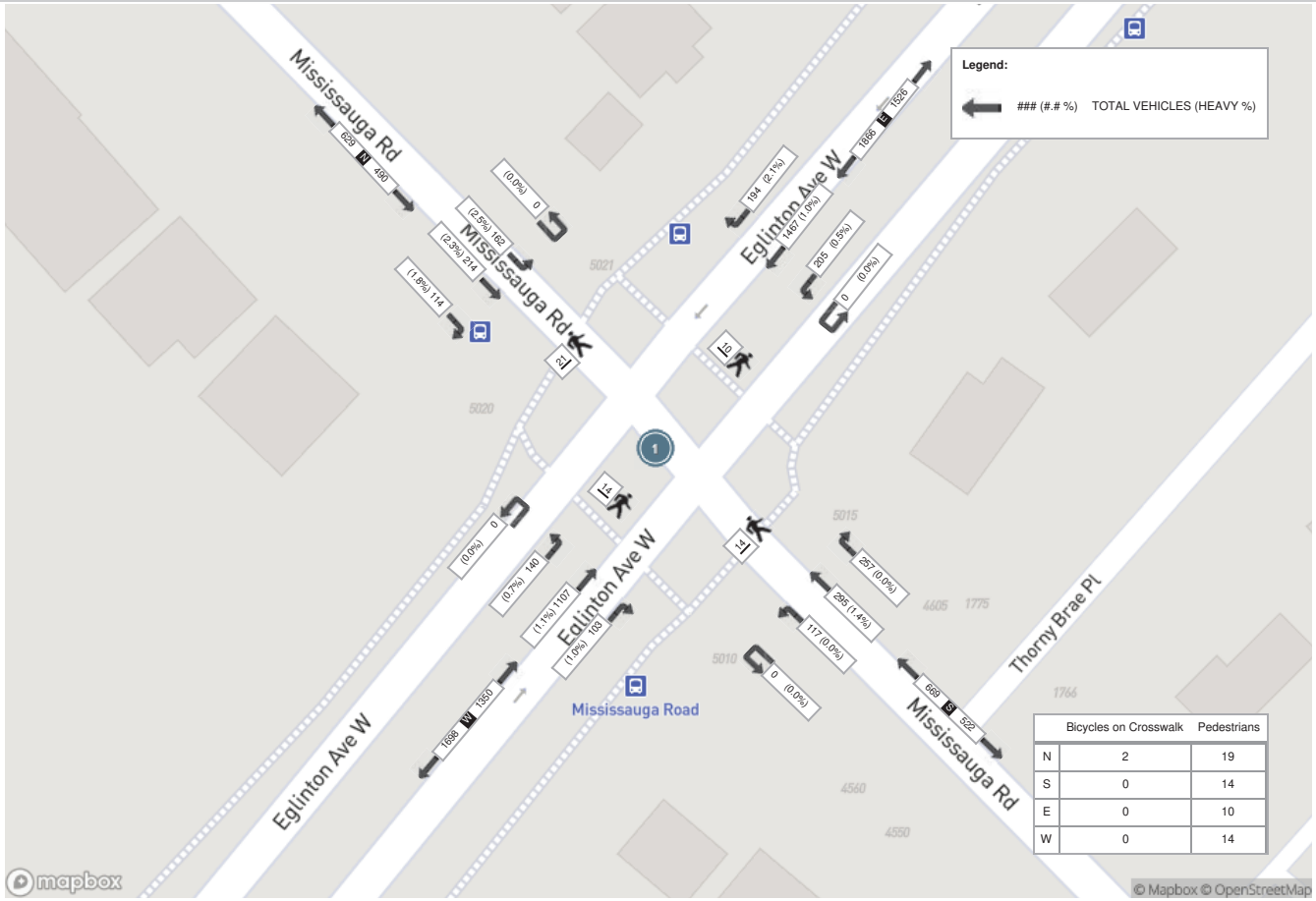
Urban Trans Engineering Solutions Inc
146 9275 MARKHAM ROAD
MARKHAM ONTARIO, L6E 0H9
CANADA

Peak Hour: 08:00 AM - 09:00 AM **Weather: Broken Clouds (5.16 °C)**



Urban Trans Engineering Solutions Inc
146 9275 MARKHAM ROAD
MARKHAM ONTARIO, L6E 0H9
CANADA

Peak Hour: 04:45 PM - 05:45 PM **Weather: Few Clouds (8 °C)**



	Bicycles on Crosswalk	Pedestrians
N	2	19
S	0	14
E	0	10
W	0	14

File: CA.13.SIG
Signal Timing Request
RT.07.3105

November 17, 2023

To Annosan Srikantha:

Re: Traffic Signal Timing

Eglinton Avenue at Mississauga Road

The side street phases (4,8) are actuated, unless noted in the timing plan, this means a vehicle or pedestrian must be present on the side street before the side street is given a green indication. Phases 1,3 & 5 are also actuated. Vehicle presence on the side street would result in a possible green time of between the minimum and maximum time noted, depending on demand. 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 (2,6).

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

The time of day plan is used for system control operation. In the event that the coordination pattern has a cycle length, offset and split value identified, the cycle length, split and offset values, as noted, would be used. However, when the time of day plan is programed using 'Action' 7 and/or 8, the mode is 'Free', meaning no cycle length, split and offset values are given and the intersection operates using the phase timings provided in the report.

Should you require further information, please contact Steve Gee, at 905-615-3200 ext. 5169.

Thank you,

Steve Gee
Traffic System Coordinator, Traffic Systems and ITS
Traffic Systems and ITS
Transportation and Works Department
City of Mississauga
905-615-3200 ext. 5169
steve.gee@mississauga.ca

c: Jim Kartsomanis, Supervisor, Traffic Systems and ITS

Intelight 3105 EGLINTON AVENUE E @ Mississauga Road

Phase - Parameter 1-16	Units	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Phase Description*	String								
Walk	Sec	0	10	0	10	0	10	0	10
Ped Clear	Sec	0	20	0	31	0	20	0	31
Min Green	Sec	7	10	7	10	7	10	0	10
Passage	Sec	2.0	3.0	2.0	3.0	2.0	3.0	0.0	3.0
Maximum 1	Sec	10	42	10	30	10	42	0	30
Maximum 2	Sec	10	42	10	30	10	42	0	35
Yellow Change	Sec	3.0	4.0	3.0	3.5	3.0	4.0	3.0	3.5
Red Clearance	Sec	0.0	2.5	0.0	4.0	0.0	2.5	0.0	4.0
Red Revert	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	Sec	0	0	0	0	0	0	0	0
Time Before Reduction	Sec	0	0	0	0	0	0	0	0
Cars Before Reduction	Veh	0	0	0	0	0	0	0	0
Time To Reduce	Sec	0	0	0	0	0	0	0	0
Reduce By	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dynamic Max Limit	Sec	0	0	0	0	0	0	0	0
Dynamic Max Step	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
[P2] Start Up	Enum	phaseNotOn	redClear	phaseNotOn	phaseNotOn	phaseNotOn	redClear	other	phaseNotOn
[P2] Options	Bit	0:Enabled Phase 5:Non Lock Detector Memory	0:Enabled Phase 3:Non-Actuated 1 7:Max Vehicle Recall 8:Ped. Recall 10:Dual Entry Phase 13:Actuated Rest In Walk	0:Enabled Phase 5:Non Lock Detector Memory	0:Enabled Phase 5:Non Lock Detector Memory 10:Dual Entry Phase	0:Enabled Phase 5:Non Lock Detector Memory	0:Enabled Phase 3:Non-Actuated 1 7:Max Vehicle Recall 8:Ped. Recall 10:Dual Entry Phase 13:Actuated Rest In Walk		0:Enabled Phase 5:Non Lock Detector Memory 10:Dual Entry Phase
[P2] Ring	Ring	1	1	1	1	2	2	0	2
[P2] Concurrency	Phase (,)	(5,6,15,11)	(5,6,15,11)	(8)	(8)	(1,2,15)	(1,2,15,11)	()	(3,4)

Coordination - Pattern 1-32	Units	1	2	3	4	5	6	7	8
Cycle Time	Sec	160	160	160	0	0	0	0	0
Offset	Sec	29	106	31	0	0	0	0	0
Split	Split	1	2	3	4	5	6	7	8
Sequence	Sequence	1	1	1	1	1	1	1	1
Phase Parameter Table*	Number								
Coord Phase Reference Point*	Enum								
Coord Mode*	Enum								

Coordination - Splits	Units	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Split 1 - Mode	Enum	none	none	none	none	none	none	none	none
Split 1 - Time	Sec	16	72	16	56	16	72	0	72
Split 1 - Coord	Enum	False	True	False	False	False	True	False	False
Split 1 - Coord Phase Options*	Bit								
Split 2 - Mode	Enum	none	none	none	none	none	none	none	none
Split 2 - Time	Sec	24	59	23	54	17	66	0	77
Split 2 - Coord	Enum	False	True	False	False	False	True	False	False
Split 2 - Coord Phase Options*	Bit								
Split 3 - Mode	Enum	none	none	none	none	none	none	none	none
Split 3 - Time	Sec	14	72	17	57	14	72	0	74
Split 3 - Coord	Enum	False	True	False	False	False	True	False	False
Split 3 - Coord Phase Options*	Bit								
Split 4 - Mode	Enum	none	none	none	none	none	none	none	none
Split 4 - Time	Sec	0	0	0	0	0	0	0	0
Split 4 - Coord	Enum	False	True	False	False	False	True	False	False
Split 4 - Coord Phase Options*	Bit								

Time Base - Day Plans	Units	Evt 1	Evt 2	Evt 3	Evt 4	Evt 5	Evt 6
Plan 1 Hour	Hour	0	6	9	15	19	3
Plan 1 Minute	Min	0	0	30	0	30	0
Plan 1 Action	Number	8	1	2	3	2	7
Plan 2 Hour	Hour	0	7	3	0	0	0
Plan 2 Minute	Min	0	0	0	0	0	0
Plan 2 Action	Number	8	2	7	0	0	0
Plan 3 Hour	Hour	0	8	23	3	0	0
Plan 3 Minute	Min	0	0	0	0	0	0
Plan 3 Action	Number	8	2	8	7	0	0

Time Base - Action 1-32	Units	1	2	3	4	5	6	7	8
Pattern	Enum	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Free	Free
Aux. Functions	Bit								
Spec. Functions	Bit								

Time Base - Action 1-32	Units	9	10
Pattern	Enum	Pattern 9	Pattern 10
Aux. Functions	Bit		
Spec. Functions	Bit		

Appendix G
Existing (2023) Traffic Level of Service Calculations

3: Mississauga Rd & Eglinton Ave W

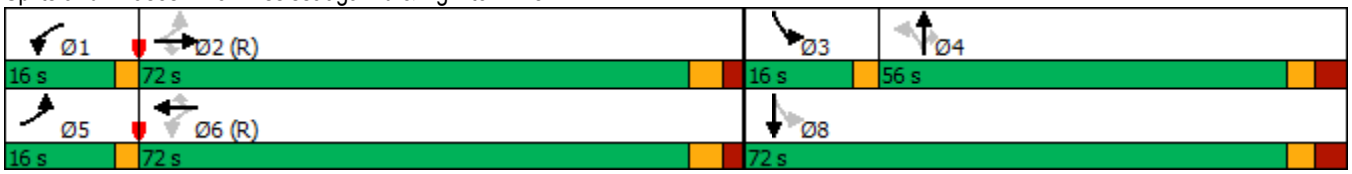
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	1949	154	209	1033	116	83	179	224	210	258	105
Future Volume (vph)	114	1949	154	209	1033	116	83	179	224	210	258	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Grade (%)		0%			0%			0%			0%	
Storage Length (m)	95.0		0.0	65.0		0.0	110.0		35.0	0.0		0.0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Satd. Flow (prot)	1787	5085	1568	1787	5085	1468	1770	1827	1599	1736	1689	0
Flt Permitted	0.208			0.058			0.378			0.486		
Satd. Flow (perm)	386	5085	1504	109	5085	1301	697	1827	1576	886	1689	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			91			157			192		16	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		188.0			178.1			229.5			139.1	
Travel Time (s)		11.3			10.7			16.5			10.0	
Confl. Peds. (#/hr)	36		8	8		36	19		2	2		19
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.87	0.86	0.93	0.92	0.74	0.90	0.90	0.88	0.73	0.82	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	3%	1%	2%	10%	2%	4%	1%	4%	5%	10%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	2240	179	225	1123	157	92	199	255	288	446	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	3	8	
Switch Phase												
Minimum Initial (s)	7.0	30.0	30.0	7.0	30.0	30.0	41.0	41.0	41.0	7.0	41.0	
Minimum Split (s)	10.0	36.5	36.5	10.0	36.5	36.5	48.5	48.5	48.5	10.0	48.5	
Total Split (s)	16.0	72.0	72.0	16.0	72.0	72.0	56.0	56.0	56.0	16.0	72.0	
Total Split (%)	10.0%	45.0%	45.0%	10.0%	45.0%	45.0%	35.0%	35.0%	35.0%	10.0%	45.0%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	0.0	2.5	2.5	0.0	2.5	2.5	4.0	4.0	4.0	0.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	7.5	7.5	7.5	3.0	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	79.6	65.5	65.5	92.3	75.2	75.2	41.2	41.2	41.2	61.7	57.2	
Actuated g/C Ratio	0.50	0.41	0.41	0.58	0.47	0.47	0.26	0.26	0.26	0.39	0.36	
v/c Ratio	0.44	1.08	0.27	0.82	0.47	0.23	0.51	0.42	0.47	0.70	0.73	
Control Delay	21.1	88.5	16.0	66.1	29.9	4.2	62.4	52.7	15.9	48.1	50.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	21.1	88.5	16.0	66.1	29.9	4.2	62.4	52.7	15.9	48.1	50.9	

3: Mississauga Rd & Eglinton Ave W

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	F	B	E	C	A	E	D	B	D	D	
Approach Delay		80.1			32.7			37.2			49.8	
Approach LOS		F			C			D			D	
Queue Length 50th (m)	18.2	~304.6	18.4	56.5	92.0	0.0	26.6	56.1	16.5	71.0	125.7	
Queue Length 95th (m)	29.6	#312.2	34.2	#104.8	111.4	6.1	47.5	81.5	41.5	75.7	146.5	
Internal Link Dist (m)		164.0			154.1			205.5			115.1	
Turn Bay Length (m)	95.0			65.0			110.0		35.0			
Base Capacity (vph)	313	2081	669	275	2389	694	211	553	611	410	690	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.40	1.08	0.27	0.82	0.47	0.23	0.44	0.36	0.42	0.70	0.65	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 29 (18%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 58.1		Intersection LOS: E	
Intersection Capacity Utilization 138.8%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Mississauga Rd & Eglinton Ave W



3: Mississauga Rd & Eglinton Ave W

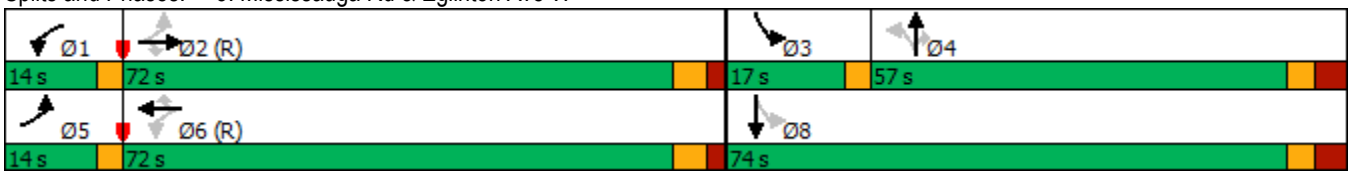
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	1107	103	205	1467	194	117	295	257	162	214	114
Future Volume (vph)	140	1107	103	205	1467	194	117	295	257	162	214	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Grade (%)		0%			0%			0%			0%	
Storage Length (m)	95.0		0.0	65.0		0.0	110.0		35.0	0.0		0.0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Satd. Flow (prot)	1787	5136	1599	1805	5136	1583	1805	1881	1615	1752	1736	0
Flt Permitted	0.088			0.131			0.454			0.292		
Satd. Flow (perm)	166	5136	1509	248	5136	1465	855	1881	1577	536	1736	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115			188			149		24	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		188.0			178.1			229.5			139.1	
Travel Time (s)		11.3			10.7			16.5			10.0	
Confl. Peds. (#/hr)	21		14	14		21	14		10	10		14
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.83	0.92	0.97	0.78	0.89	0.91	0.93	0.88	0.86	0.73
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	0%	1%	2%	0%	1%	0%	3%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	1230	124	223	1512	249	131	324	276	184	405	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	3	8	
Switch Phase												
Minimum Initial (s)	7.0	30.0	30.0	7.0	30.0	30.0	41.0	41.0	41.0	7.0	41.0	
Minimum Split (s)	10.0	43.5	43.5	10.0	43.5	43.5	48.5	48.5	48.5	10.0	48.5	
Total Split (s)	14.0	72.0	72.0	14.0	72.0	72.0	57.0	57.0	57.0	17.0	74.0	
Total Split (%)	8.8%	45.0%	45.0%	8.8%	45.0%	45.0%	35.6%	35.6%	35.6%	10.6%	46.3%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	0.0	2.5	2.5	0.0	2.5	2.5	4.0	4.0	4.0	0.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	7.5	7.5	7.5	3.0	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	85.1	67.1	67.1	90.6	70.3	70.3	41.5	41.5	41.5	62.6	58.1	
Actuated g/C Ratio	0.53	0.42	0.42	0.57	0.44	0.44	0.26	0.26	0.26	0.39	0.36	
v/c Ratio	0.66	0.57	0.18	0.71	0.67	0.33	0.59	0.66	0.53	0.59	0.63	
Control Delay	38.6	37.0	6.3	34.5	38.0	9.3	64.0	60.4	26.5	41.4	44.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	38.6	37.0	6.3	34.5	38.0	9.3	64.0	60.4	26.5	41.4	44.2	

3: Mississauga Rd & Eglinton Ave W

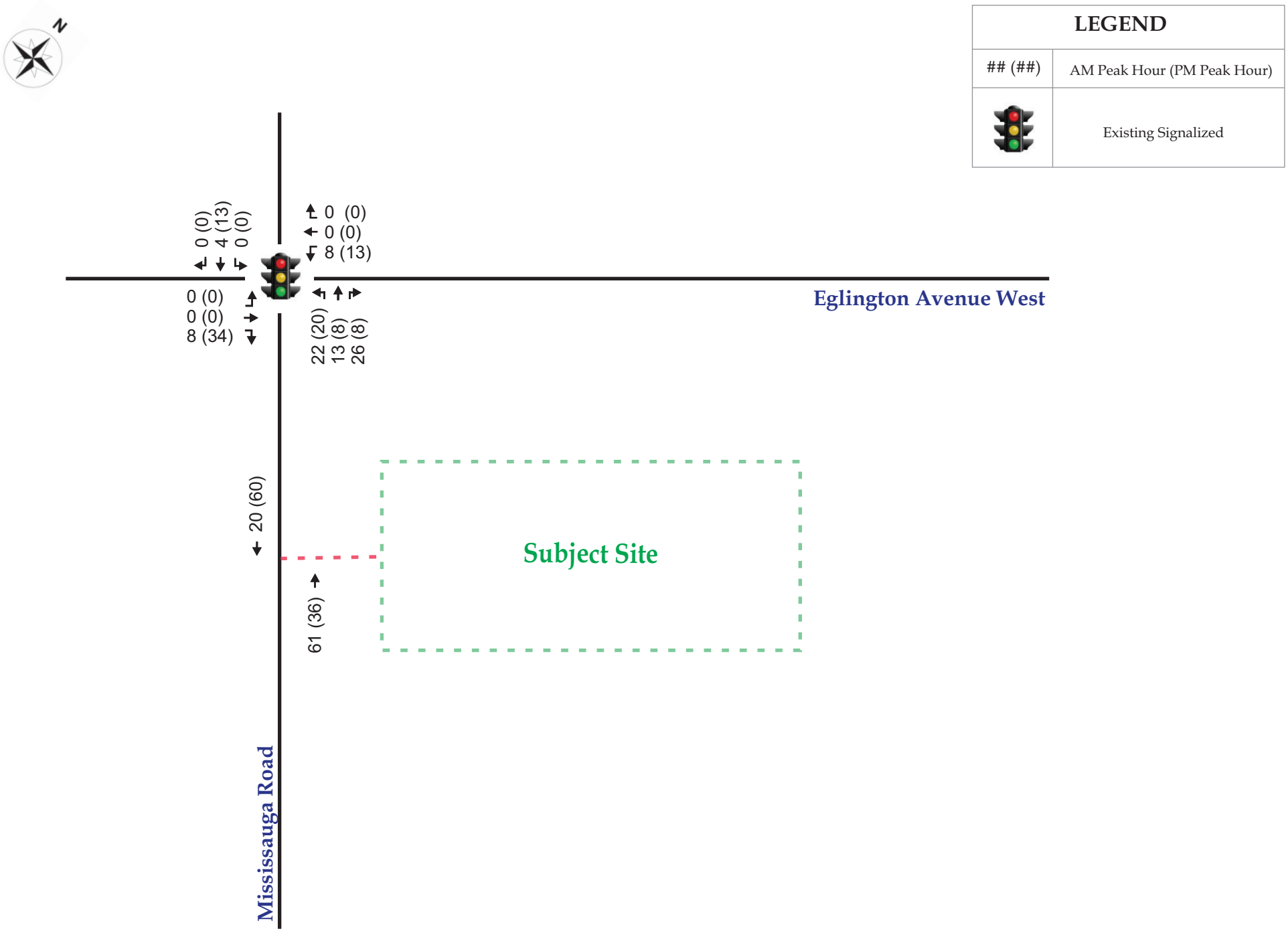
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D	A	C	D	A	E	E	C	D	D	
Approach Delay		34.7			34.0			48.3			43.3	
Approach LOS		C			C			D			D	
Queue Length 50th (m)	24.4	115.6	1.8	35.4	147.3	12.0	38.9	98.3	36.3	41.8	105.6	
Queue Length 95th (m)	50.5	132.5	12.3	#71.5	172.6	21.9	62.3	131.8	66.3	58.9	131.4	
Internal Link Dist (m)		164.0			154.1			205.5			115.1	
Turn Bay Length (m)	95.0			65.0			110.0		35.0			
Base Capacity (vph)	237	2152	699	314	2257	749	264	581	590	315	735	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.66	0.57	0.18	0.71	0.67	0.33	0.50	0.56	0.47	0.58	0.55	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 31 (19%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 37.5		Intersection LOS: D	
Intersection Capacity Utilization 125.9%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Mississauga Rd & Eglinton Ave W



Appendix H
Future Background Development Site Traffic (1786 Polaris Way)


LEGEND
(##)
AM Peak Hour (PM Peak Hour)
Existing Signalized
0 (0)
4 (13)
0 (0)
0 (0)
0 (0)
8 (13)
0 (0)
0 (0)
8 (34)
22 (20)
13 (8)
26 (8)
Eglington Avenue West
20 (60)
61 (36)
Subject Site
Mississauga Road

Appendix I
Future (2029) Background Traffic Level of Service Calculations

3: Mississauga Rd & Eglinton Ave W

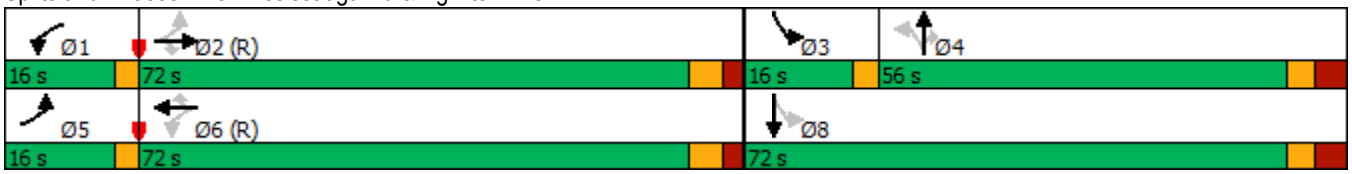
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	2008	162	217	1130	116	105	203	250	210	278	105
Future Volume (vph)	114	2008	162	217	1130	116	105	203	250	210	278	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Grade (%)		0%			0%			0%			0%	
Storage Length (m)	95.0		0.0	65.0		0.0	110.0		35.0	0.0		0.0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Satd. Flow (prot)	1787	5085	1568	1787	5085	1468	1770	1827	1599	1736	1697	0
Flt Permitted	0.178			0.058			0.424			0.449		
Satd. Flow (perm)	331	5085	1504	109	5085	1301	781	1827	1576	819	1697	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			92			117			202		14	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		188.0			178.1			104.1			139.1	
Travel Time (s)		11.3			10.7			7.5			10.0	
Confl. Peds. (#/hr)	36		8	8		36	19		2	2		19
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	3%	1%	2%	10%	2%	4%	1%	4%	5%	10%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	2183	176	236	1228	126	114	221	272	228	416	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	3	8	
Switch Phase												
Minimum Initial (s)	7.0	30.0	30.0	7.0	30.0	30.0	41.0	41.0	41.0	7.0	41.0	
Minimum Split (s)	10.0	36.5	36.5	10.0	36.5	36.5	48.5	48.5	48.5	10.0	48.5	
Total Split (s)	16.0	72.0	72.0	16.0	72.0	72.0	56.0	56.0	56.0	16.0	72.0	
Total Split (%)	10.0%	45.0%	45.0%	10.0%	45.0%	45.0%	35.0%	35.0%	35.0%	10.0%	45.0%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	0.0	2.5	2.5	0.0	2.5	2.5	4.0	4.0	4.0	0.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	7.5	7.5	7.5	3.0	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	79.5	65.5	65.5	92.5	75.5	75.5	41.0	41.0	41.0	61.5	57.0	
Actuated g/C Ratio	0.50	0.41	0.41	0.58	0.47	0.47	0.26	0.26	0.26	0.38	0.36	
v/c Ratio	0.48	1.05	0.26	0.85	0.51	0.19	0.57	0.47	0.49	0.59	0.68	
Control Delay	22.4	79.4	15.5	70.7	30.6	5.5	64.7	54.3	16.7	42.5	48.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	22.4	79.4	15.5	70.7	30.6	5.5	64.7	54.3	16.7	42.5	48.8	

3: Mississauga Rd & Eglinton Ave W

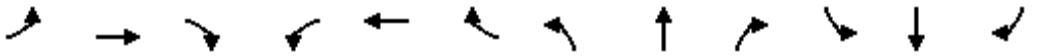
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	E	B	E	C	A	E	D	B	D	D	
Approach Delay		72.0			34.6			39.4			46.6	
Approach LOS		E			C			D			D	
Queue Length 50th (m)	18.2	~290.1	17.5	60.6	103.5	1.6	33.5	63.1	18.4	53.9	114.6	
Queue Length 95th (m)	29.1	#318.0	36.3	#108.5	122.1	14.7	57.5	91.2	48.3	77.9	156.2	
Internal Link Dist (m)		164.0			154.1			80.1			115.1	
Turn Bay Length (m)	95.0			65.0			110.0		35.0			
Base Capacity (vph)	288	2081	670	278	2398	675	236	553	618	389	692	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.43	1.05	0.26	0.85	0.51	0.19	0.48	0.40	0.44	0.59	0.60	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 29 (18%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 54.0		Intersection LOS: D	
Intersection Capacity Utilization 140.4%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Mississauga Rd & Eglinton Ave W



3: Mississauga Rd & Eglinton Ave W



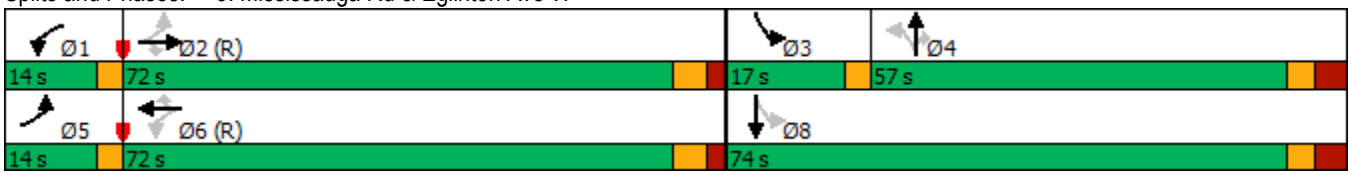
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	1210	137	218	1512	194	137	321	265	162	234	114
Future Volume (vph)	140	1210	137	218	1512	194	137	321	265	162	234	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Grade (%)		0%			0%			0%			0%	
Storage Length (m)	95.0		0.0	65.0		0.0	110.0		35.0	0.0		0.0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Satd. Flow (prot)	1787	5136	1599	1805	5136	1583	1805	1881	1615	1752	1755	0
Flt Permitted	0.066			0.108			0.497			0.259		
Satd. Flow (perm)	124	5136	1509	205	5136	1465	935	1881	1577	475	1755	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			147			145		19	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		188.0			178.1			104.1			139.1	
Travel Time (s)		11.3			10.7			7.5			10.0	
Confl. Peds. (#/hr)	21		14	14		21	14		10	10		14
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	0%	1%	2%	0%	1%	0%	3%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	152	1315	149	237	1643	211	149	349	288	176	378	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	3	8	
Switch Phase												
Minimum Initial (s)	7.0	30.0	30.0	7.0	30.0	30.0	41.0	41.0	41.0	7.0	41.0	
Minimum Split (s)	10.0	43.5	43.5	10.0	43.5	43.5	48.5	48.5	48.5	10.0	48.5	
Total Split (s)	14.0	72.0	72.0	14.0	72.0	72.0	57.0	57.0	57.0	17.0	74.0	
Total Split (%)	8.8%	45.0%	45.0%	8.8%	45.0%	45.0%	35.6%	35.6%	35.6%	10.6%	46.3%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	0.0	2.5	2.5	0.0	2.5	2.5	4.0	4.0	4.0	0.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	7.5	7.5	7.5	3.0	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	83.7	65.5	65.5	90.1	69.9	69.9	42.0	42.0	42.0	62.9	58.4	
Actuated g/C Ratio	0.52	0.41	0.41	0.56	0.44	0.44	0.26	0.26	0.26	0.39	0.36	
v/c Ratio	0.70	0.63	0.21	0.77	0.73	0.29	0.61	0.71	0.55	0.60	0.58	
Control Delay	50.7	39.1	7.1	45.0	40.3	10.7	63.3	62.1	28.6	41.4	42.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.7	39.1	7.1	45.0	40.3	10.7	63.3	62.1	28.6	41.4	42.5	

3: Mississauga Rd & Eglinton Ave W

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D	A	D	D	B	E	E	C	D	D	
Approach Delay		37.3			37.8			50.1			42.1	
Approach LOS		D			D			D			D	
Queue Length 50th (m)	30.1	127.4	3.8	43.8	167.7	12.7	44.5	107.6	41.6	39.8	97.3	
Queue Length 95th (m)	#61.0	143.9	18.8	#104.4	193.3	33.2	69.1	140.3	71.0	56.6	126.9	
Internal Link Dist (m)		164.0			154.1			80.1			115.1	
Turn Bay Length (m)	95.0			65.0			110.0		35.0			
Base Capacity (vph)	218	2102	694	306	2243	722	289	581	588	298	740	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.70	0.63	0.21	0.77	0.73	0.29	0.52	0.60	0.49	0.59	0.51	

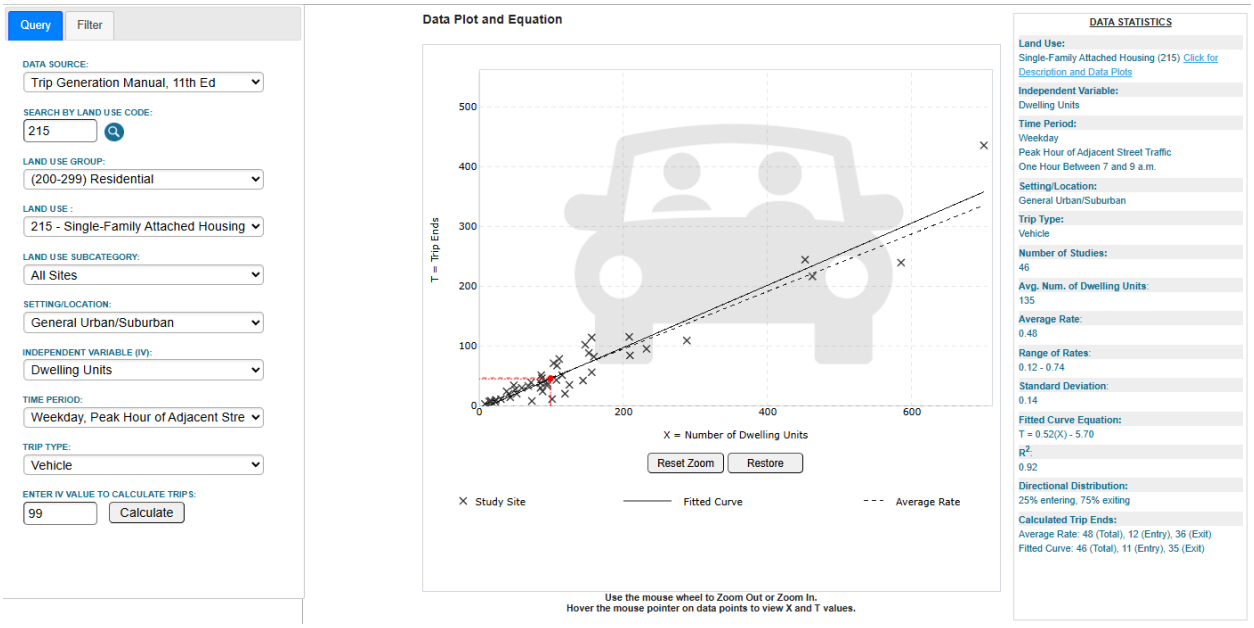
Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 31 (19%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 40.0		Intersection LOS: D	
Intersection Capacity Utilization 126.7%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Mississauga Rd & Eglinton Ave W

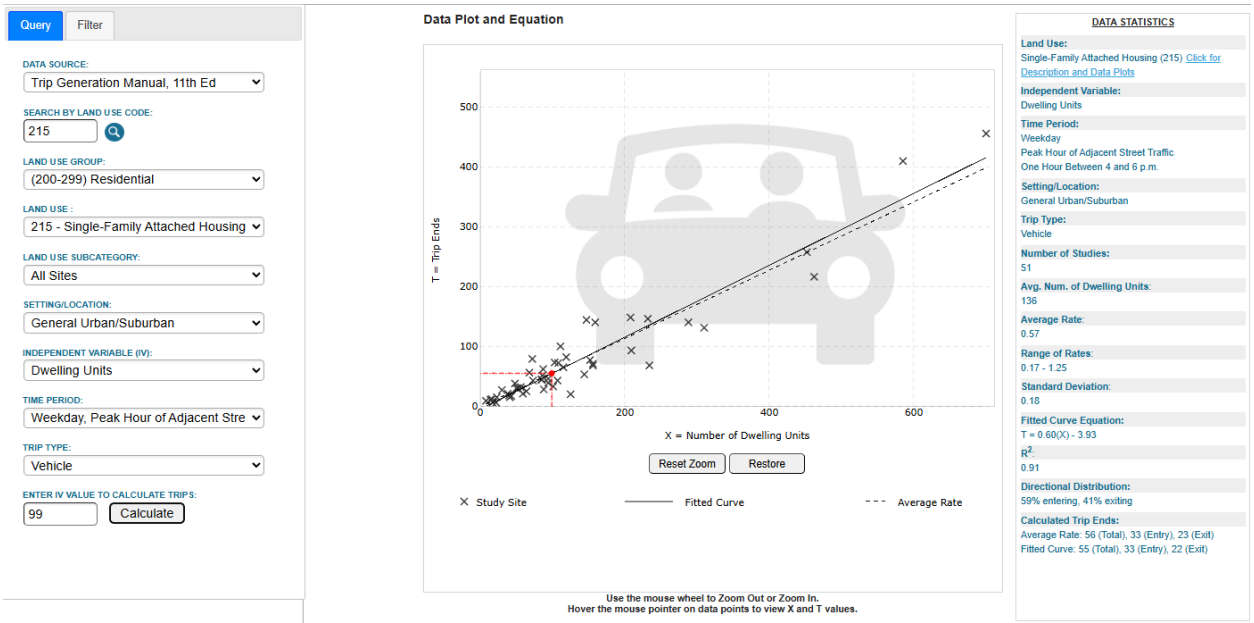


Appendix J
ITE 11th Edition (Trip Generation Calculations)

Morning Peak



Afternoon Peak



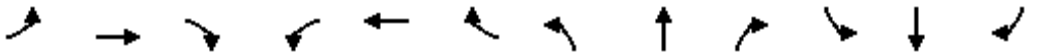
Appendix K
2016 TTS Data Trip Distribution

Column1	Column2	Column3	Column4	Column5	Column6	Column7	Column8	Column9	Column10	Column11	Column12	Column13	Column14	Column15
Sat Dec 09 2023 13:50:31 GMT-0500 (Eastern Standard Time) - Run Time: 3421ms														
Cross Tabulation Query Form - Trip - 2016 v1.1														
Row: 2006 GTA zone of origin - gta06_orig														
Column: Planning district of destination - pd_dest														
Filters:														
(2006 GTA zone of origin - gta06_orig In 3684														
and														
Start time of trip - start_time In 600-859														
and														
Trip purpose of origin - purp_orig In H	)													
Trip 2016														
Table:														
	PD 1 of Toronto	PD 7 of Toronto	PD 8 of Toronto	PD 9 of Toronto	PD 10 of Toronto	King	Vaughan	Brampton	Mississauga	Oakville	Burlington	Hamilton	Waterloo	
3684	157	21	20	35	33	29	31	49	712	63	64	21	8	1243
to	E 50 S 50	S 100	E 50 S 50	E 100	E 100	E 100	E 100	W 33 N 33 E 33	25 N/S/E/W	W 50 S 50	W 100	w 100	W 50 N 50	
from	S 50 W 50	S 100	S 50 W 50	S 100	S 33 N 33 W 33	w 100	w 100	W 33 N 33 E 33	25 N/S/E/W	W 50 S 50	W 50 S 50	w 100	w 100	

to				
	N	198	16%	15%
	S	319	26%	30%
	E	411	33%	30%
	W	315	25%	25%
		1243	100%	100%
from	N	205	17%	15%
	S	397	32%	30%
	E	194	16%	15%
	W	446	36%	40%
		1242	100%	100%

Appendix L
Future (2029) Total Traffic Level of Service Calculations

3: Mississauga Rd & Eglinton Ave W



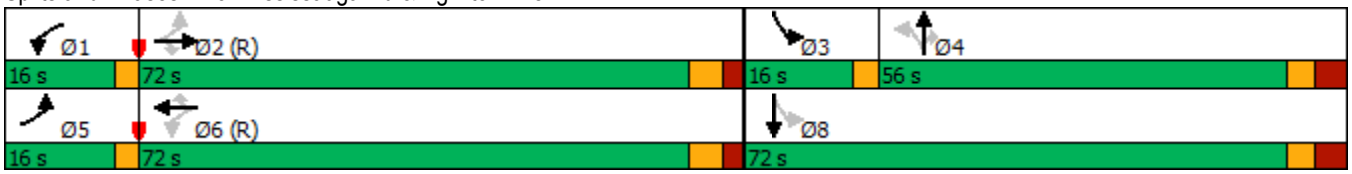
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	2008	165	221	1130	116	114	208	261	210	280	105
Future Volume (vph)	114	2008	165	221	1130	116	114	208	261	210	280	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Grade (%)		0%			0%			0%			0%	
Storage Length (m)	95.0		0.0	65.0		0.0	110.0		35.0	0.0		0.0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Satd. Flow (prot)	1787	5085	1568	1787	5085	1468	1770	1827	1599	1736	1697	0
Flt Permitted	0.176			0.058			0.422			0.442		
Satd. Flow (perm)	328	5085	1504	109	5085	1301	777	1827	1576	806	1697	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94			117			201		14	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		188.0			178.1			104.1			139.1	
Travel Time (s)		11.3			10.7			7.5			10.0	
Confl. Peds. (#/hr)	36		8	8		36	19		2	2		19
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	3%	1%	2%	10%	2%	4%	1%	4%	5%	10%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	2183	179	240	1228	126	124	226	284	228	418	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	3	8	
Switch Phase												
Minimum Initial (s)	7.0	30.0	30.0	7.0	30.0	30.0	41.0	41.0	41.0	7.0	41.0	
Minimum Split (s)	10.0	36.5	36.5	10.0	36.5	36.5	48.5	48.5	48.5	10.0	48.5	
Total Split (s)	16.0	72.0	72.0	16.0	72.0	72.0	56.0	56.0	56.0	16.0	72.0	
Total Split (%)	10.0%	45.0%	45.0%	10.0%	45.0%	45.0%	35.0%	35.0%	35.0%	10.0%	45.0%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	0.0	2.5	2.5	0.0	2.5	2.5	4.0	4.0	4.0	0.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	7.5	7.5	7.5	3.0	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	79.6	65.5	65.5	92.3	75.2	75.2	41.2	41.2	41.2	61.7	57.2	
Actuated g/C Ratio	0.50	0.41	0.41	0.58	0.47	0.47	0.26	0.26	0.26	0.39	0.36	
v/c Ratio	0.48	1.05	0.27	0.87	0.51	0.19	0.62	0.48	0.51	0.59	0.68	
Control Delay	22.6	79.4	15.5	74.3	30.9	5.5	67.6	54.3	18.2	42.4	48.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	22.6	79.4	15.5	74.3	30.9	5.5	67.6	54.3	18.2	42.4	48.6	

3: Mississauga Rd & Eglinton Ave W

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	E	B	E	C	A	E	D	B	D	D	
Approach Delay		71.9			35.4			40.7			46.4	
Approach LOS		E			D			D			D	
Queue Length 50th (m)	18.2	~290.1	17.7	62.1	103.5	1.6	37.1	64.8	22.2	53.9	115.4	
Queue Length 95th (m)	29.6	#318.0	36.6	#116.3	123.9	14.9	62.6	92.5	52.9	77.0	155.3	
Internal Link Dist (m)		164.0			154.1			80.1			115.1	
Turn Bay Length (m)	95.0			65.0			110.0		35.0			
Base Capacity (vph)	288	2081	671	275	2390	673	235	553	617	386	692	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.43	1.05	0.27	0.87	0.51	0.19	0.53	0.41	0.46	0.59	0.60	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 29 (18%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 54.3		Intersection LOS: D	
Intersection Capacity Utilization 140.6%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Mississauga Rd & Eglinton Ave W



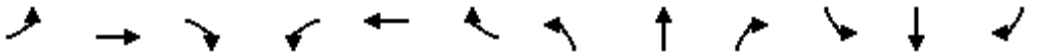
7: Site Access & Mississauga Rd

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	11	25	558	4	9	657
Future Volume (Veh/h)	11	25	558	4	9	657
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	27	607	4	10	714
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						104
pX, platoon unblocked	0.73					
vC, conflicting volume	1343	306			611	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1285	306			611	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	96			99	
cM capacity (veh/h)	113	690			964	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1
Volume Total	39	405	206	724
Volume Left	12	0	0	10
Volume Right	27	0	4	0
cSH	268	1700	1700	964
Volume to Capacity	0.15	0.24	0.12	0.01
Queue Length 95th (m)	4.0	0.0	0.0	0.3
Control Delay (s)	20.7	0.0	0.0	0.3
Lane LOS	C			A
Approach Delay (s)	20.7	0.0		0.3
Approach LOS	C			

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		

3: Mississauga Rd & Eglinton Ave W



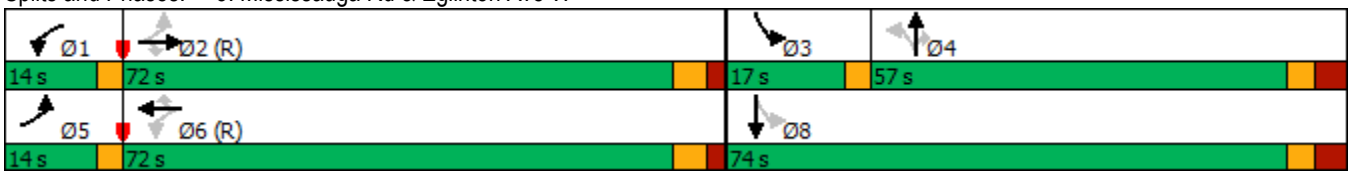
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	1210	150	222	1512	194	146	325	268	162	239	114
Future Volume (vph)	140	1210	150	222	1512	194	146	325	268	162	239	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Grade (%)		0%			0%			0%			0%	
Storage Length (m)	95.0		0.0	65.0		0.0	110.0		35.0	0.0		0.0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Satd. Flow (prot)	1787	5136	1599	1805	5136	1583	1805	1881	1615	1752	1757	0
Flt Permitted	0.066			0.108			0.488			0.254		
Satd. Flow (perm)	124	5136	1509	205	5136	1465	918	1881	1577	466	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			142			147			144		18	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		188.0			178.1			104.1			139.1	
Travel Time (s)		11.3			10.7			7.5			10.0	
Confl. Peds. (#/hr)	21		14	14		21	14		10	10		14
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	0%	1%	2%	0%	1%	0%	3%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	152	1315	163	241	1643	211	159	353	291	176	384	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2		2	6		6	4		4	8		
Detector Phase	5	2	2	1	6	6	4	4	4	3	8	
Switch Phase												
Minimum Initial (s)	7.0	30.0	30.0	7.0	30.0	30.0	41.0	41.0	41.0	7.0	41.0	
Minimum Split (s)	10.0	43.5	43.5	10.0	43.5	43.5	48.5	48.5	48.5	10.0	48.5	
Total Split (s)	14.0	72.0	72.0	14.0	72.0	72.0	57.0	57.0	57.0	17.0	74.0	
Total Split (%)	8.8%	45.0%	45.0%	8.8%	45.0%	45.0%	35.6%	35.6%	35.6%	10.6%	46.3%	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.5	3.5	3.5	3.0	3.5	
All-Red Time (s)	0.0	2.5	2.5	0.0	2.5	2.5	4.0	4.0	4.0	0.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.5	6.5	3.0	6.5	6.5	7.5	7.5	7.5	3.0	7.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Act Effct Green (s)	83.6	65.5	65.5	90.1	69.9	69.9	42.1	42.1	42.1	63.0	58.5	
Actuated g/C Ratio	0.52	0.41	0.41	0.56	0.44	0.44	0.26	0.26	0.26	0.39	0.37	
v/c Ratio	0.70	0.63	0.23	0.79	0.73	0.29	0.66	0.71	0.56	0.60	0.59	
Control Delay	50.9	39.1	7.0	46.6	40.3	10.7	66.8	62.4	29.1	41.7	42.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.9	39.1	7.0	46.6	40.3	10.7	66.8	62.4	29.1	41.7	42.9	

3: Mississauga Rd & Eglinton Ave W

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D	A	D	D	B	E	E	C	D	D	
Approach Delay		37.0			38.0			51.2			42.5	
Approach LOS		D			D			D			D	
Queue Length 50th (m)	30.1	127.4	4.2	45.3	167.7	12.7	48.3	109.1	43.0	39.8	99.7	
Queue Length 95th (m)	#62.2	143.9	19.9	#109.2	193.3	33.2	73.9	141.6	72.7	56.4	129.0	
Internal Link Dist (m)		164.0			154.1			80.1			115.1	
Turn Bay Length (m)	95.0			65.0			110.0		35.0			
Base Capacity (vph)	217	2102	701	305	2243	722	284	581	587	295	740	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.70	0.63	0.23	0.79	0.73	0.29	0.56	0.61	0.50	0.60	0.52	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 31 (19%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 40.3		Intersection LOS: D	
Intersection Capacity Utilization 126.9%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 3: Mississauga Rd & Eglinton Ave W



7: Site Access & Mississauga Rd

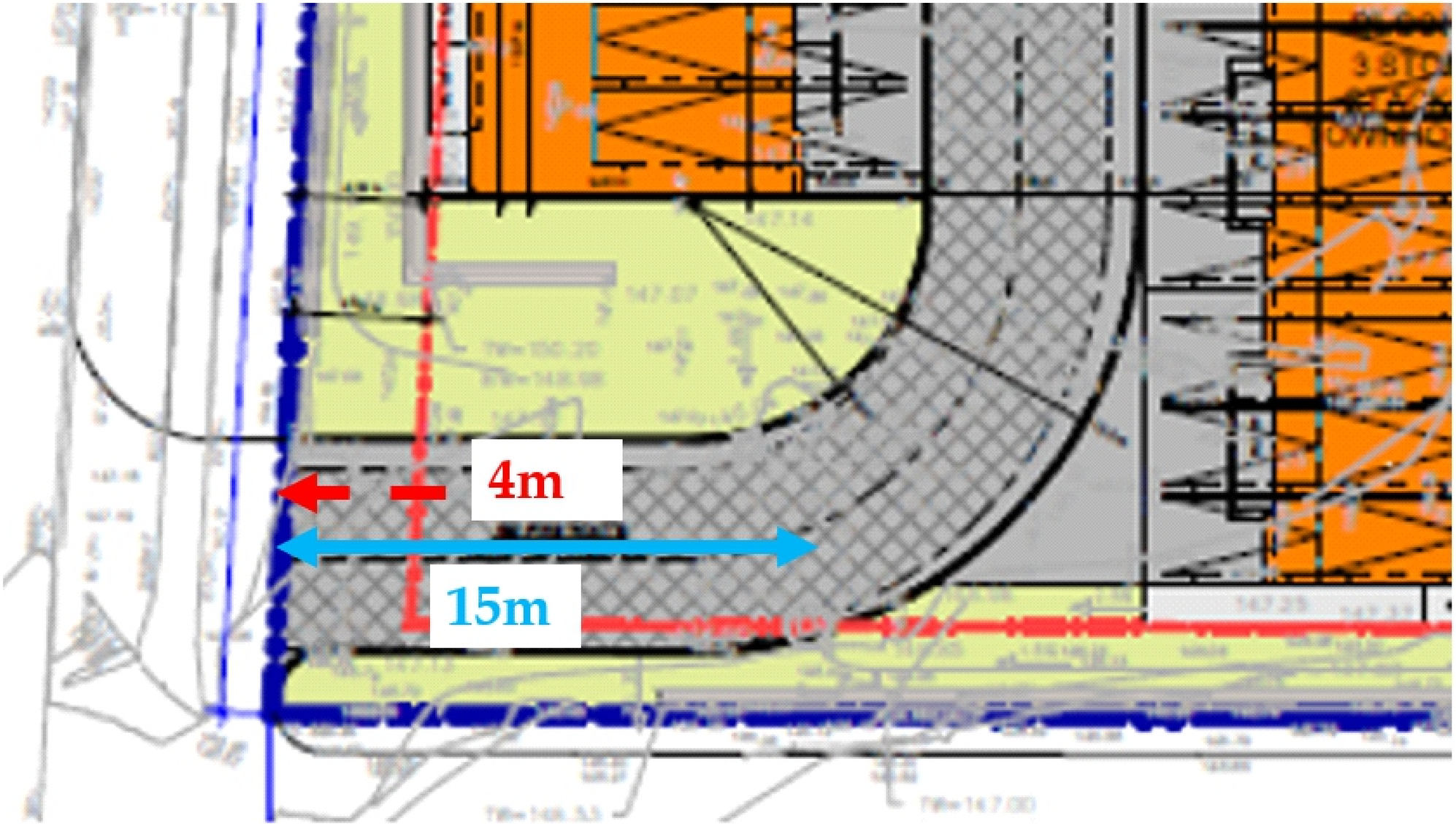
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	7	16	723	10	22	589
Future Volume (Veh/h)	7	16	723	10	22	589
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	17	786	11	24	640
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						104
pX, platoon unblocked	0.76					
vC, conflicting volume	1480	398			797	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1473	398			797	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	97			97	
cM capacity (veh/h)	87	601			821	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1
Volume Total	25	524	273	664
Volume Left	8	0	0	24
Volume Right	17	0	11	0
cSH	208	1700	1700	821
Volume to Capacity	0.12	0.31	0.16	0.03
Queue Length 95th (m)	3.2	0.0	0.0	0.7
Control Delay (s)	24.7	0.0	0.0	0.8
Lane LOS	C			A
Approach Delay (s)	24.7	0.0		0.8
Approach LOS	C			

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		

Appendix M
Clear Throat Length

LEGEND	
	Throat Length
	95th queue (Future 2029 Total)



URBANTRANS Engineering Solutions Inc.

Project Name:

PROPOSED RESIDENTIAL DEVELOPMENT

1775 Thorny Brae Place, City of Mississauga

Drawing Title:	Clear Throat Length		
Drawing No.:	Appendix M	Date:	June 19, 2025
Project No.:	UT-22-063	Drawn By:	AS
Scale:	NTS	Notes:	