

Transportation Impact Study

Proposed Commercial/Office Development

3650 Eglinton Avenue West
City of Mississauga, Ontario

March 2025

Project No: NT-21-269

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NextEng Consulting Group Inc.

March 10, 2025

U & N Enterprise Ltd.

**Re: Transportation Impact Study
 Proposed Commercial/Office Development
 3650 Eglinton Avenue West, City of Mississauga, ON
 Our Project No. NT-22-129**

Nextrans Consulting Engineers (a Division of NextEng Consulting Group Inc.) is pleased to present the enclosed Transportation Impact Study for the above noted site in support of Site Plan application.

The subject property is located at 3650 Eglinton Avenue West, south of Eglinton Avenue West and west of Ridgeway Drive. The proposed development consists of two storeys building with 871.4 m² GFA of commercial and 949.5 m² GFA of office. A total of 59 vehicle parking spaces will be provided. The proposed access will be shared with existing commercial plaza located to the east of the property.

The transportation study concludes that the proposed development can adequately be accommodated by the existing transportation network, transit network as well as the Transportation Demand Management measures and incentives recommended in this report.

We trust the enclosed sufficiently addresses your needs. Should you have any questions, please do not hesitate to contact the undersigned.

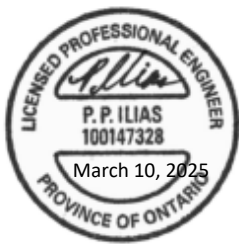
Yours truly,

Nextrans Consulting Engineers
A Division of NextEng Consulting Group Inc.

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Issues and Revisions Registry

Identification	Date	Description of issued and/or revision
Final Report	March 10, 2025	For Client Submission

EXECUTIVE SUMMARY

NexTrans Consulting Engineers (A Division of NextEng Consulting Group Inc.) was retained by U & N Enterprise Ltd. (the Client) to undertake a Transportation Impact Study in support of a Site Plan application. The subject property is located at 3650 Eglinton Avenue West, south of Eglinton Avenue West and west of Ridgeway Drive, in the City of Mississauga.

Proposed Development and Access

The subject site is currently occupied by a single house. The redevelopment proposal includes two storeys building with 895.64 m² GFA of commercial and 924.93 m² GFA of office with total of 57 parking spaces. The proposed development will provide one full movement onto commercial plaza shared driveway located to the east of the property.

Capacity Analysis

The proposed development is expected to generate:

- 41 total new two-way trips (36 inbound and 5 outbound) during the weekday morning and 43 total new two-way trips (7 inbound and 36 outbound) during the afternoon peak hours, respectively.
- 37 total new two-way auto trips (32 inbound and 5 outbound) during the weekday morning and 38 total new two-way auto trips (6 inbound and 32 outbound) during the afternoon peak hours, respectively.
- 4 total new two-way internal trips (4 inbound and 0 outbound) during the weekday morning and 5 total new two-way internal trips (4 inbound and 1 outbound) during the afternoon peak hours, respectively.

Auto Mode Assessment

Under the existing, future 2029 background and future 2029 total conditions, the intersection operation capacity analysis indicates that all intersections considered are expected to operate at acceptable levels of service, except the northbound left turn movement at Eglinton Ave W and Ridgeway Dr intersection during afternoon peak hours. Nextrans has optimized the signal timing plan for afternoon peak period by adding minimum green time for this critical movement and keeping the same cycle time. The level of service of this intersection has been significantly improved with optimized signal timing plan. It should be noted that similar suggested signal timing plan optimization measures are applied to the 2029 future background conditions for all intersections with critical movements. No physical improvement is required to accommodate the proposed development.

Active Transportation Mode Assessment

Sidewalk

Currently, there are sidewalks located on both sides of public roads, except the south side of Eglinton Ave W and south side of Southwick Street, in the vicinity of the proposed development. City of Mississauga is planning to construct new sidewalk on south side of Eglinton Avenue West between Ninth Line and Ridgeway Drive, the timing of construction is planned in 2024/2025. As such, in the future, the study area is fully well served by a network of complete sidewalk.

Bicycle Facility

Currently, there is dedicated bicycle lane on both sides of Ridgeway Drive in the vicinity of the proposed development. It is Nextrans' opinion that cycling facilities could be improved in the area, as part of the future City capital projects or cycling initiatives. These types of projects are beyond the scope of the proposed development.

Parking Review

Based on the City's Zoning By-Law 0225-2007, the proposed development requires 78 parking spaces. However, the proposed development provides 57 vehicle parking spaces, which presents a technical shortfall of 21 parking spaces or a 26.9% reduction.

Based on the City's Zoning By-Law 0225-2007, a total of 3 bicycle parking space types A and 4 bicycle parking spaces type B are required for the proposed development. It is our understanding that the proposed development provides bicycle parking spaces to meet the requirement.

Transportation Demand Management Measures and Incentives

The TDM measures and incentives related to the proposed development have been assessed and recommended in Section 8 of this report to support active transportation and transit, to meet the objectives and requirements of the City of Mississauga's transportation policies.

Loading Requirement

The proposed development provides 1 loading space. AutoTURN software was used to generate vehicular turning templates to confirm and demonstrate the accessibility for provided loading space.

Study Conclusions and Recommendations

Based on the assessment, our report recommends that:

- The proposed development implements the TDM measures and incentives identified in this report to support active transportation and transit and to reduce the numbers of single-occupant-vehicle trips to and from the proposed development.
- The proposed development provides direct shared pedestrian and cycling connections from the proposed development building entrances directly to Eglinton Avenue W, where appropriate.
- Reduce vehicle parking rate to reduce single auto occupant trip.
- Recommended signal timing plan for Eglinton Avenue W and Ridgeway Dr.

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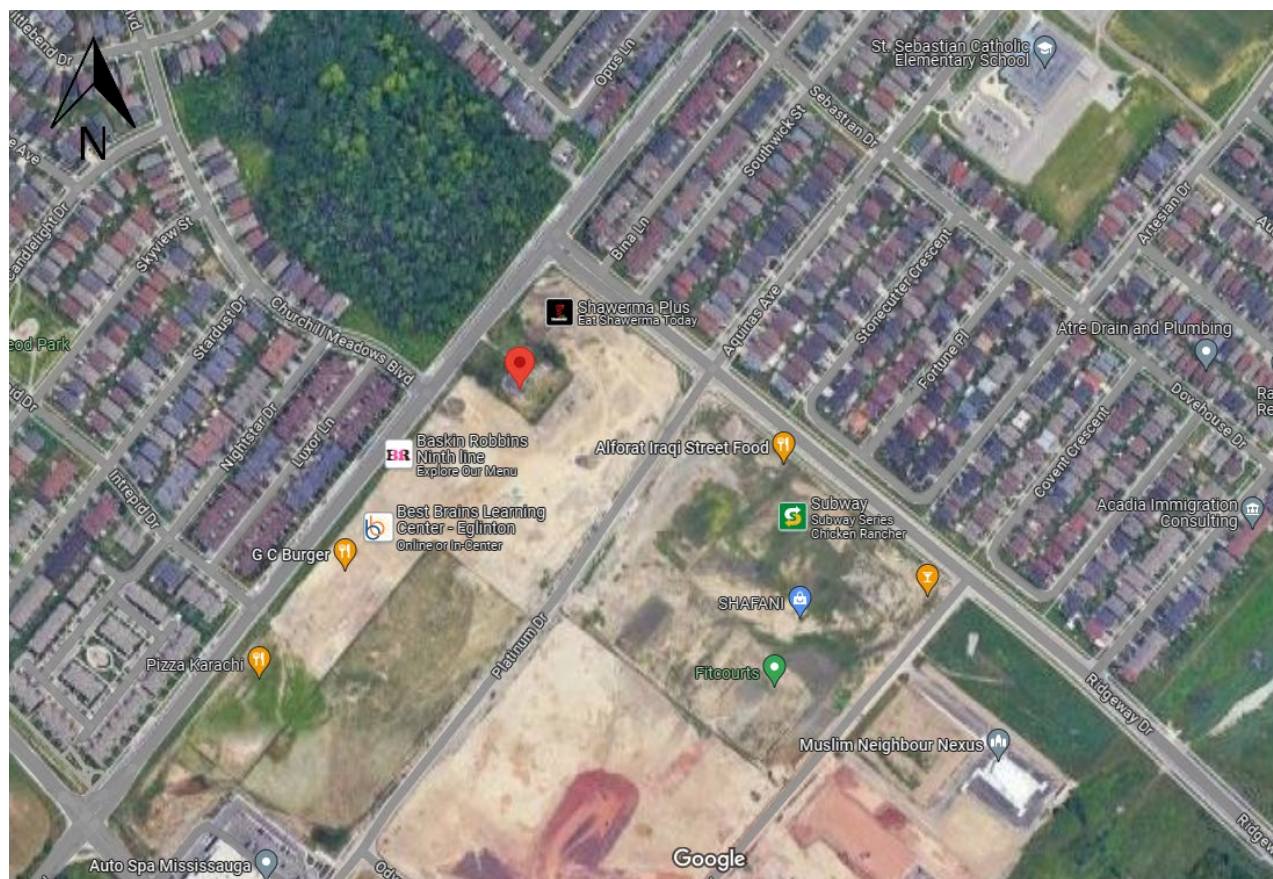
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1.0 INTRODUCTION

NexTrans Consulting Engineers (A Division of NextEng Consulting Group Inc.) was retained by U & N Enterprise Ltd. (the Client) to undertake a Transportation Impact Study in support of a Site Plan application. The subject property is located at 3650 Eglinton Avenue West, south of Eglinton Avenue West and west of Ridgeway Drive, in the City of Mississauga.

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

Figure 1 – Proposed Development Location

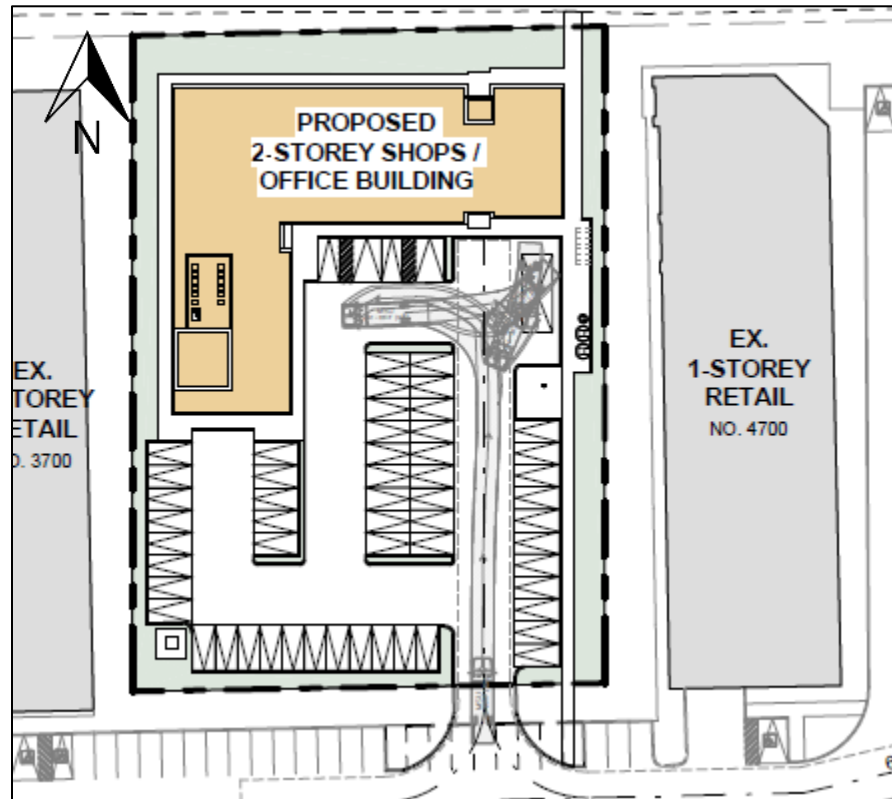


Source: Google Map

The subject site is currently occupied by a single house. The redevelopment proposal includes two storeys building with 895.64 m² GFA of commercial and 924.93 m² GFA of office with total of 57 parking spaces. The proposed development will provide one full movement onto commercial plaza shared driveway located to the east of the property.

Figure 2 illustrates the proposed development site plan.

Figure 2 – Proposed Concept Site Plan



2.0 EXISTING TRAFFIC CONDITIONS

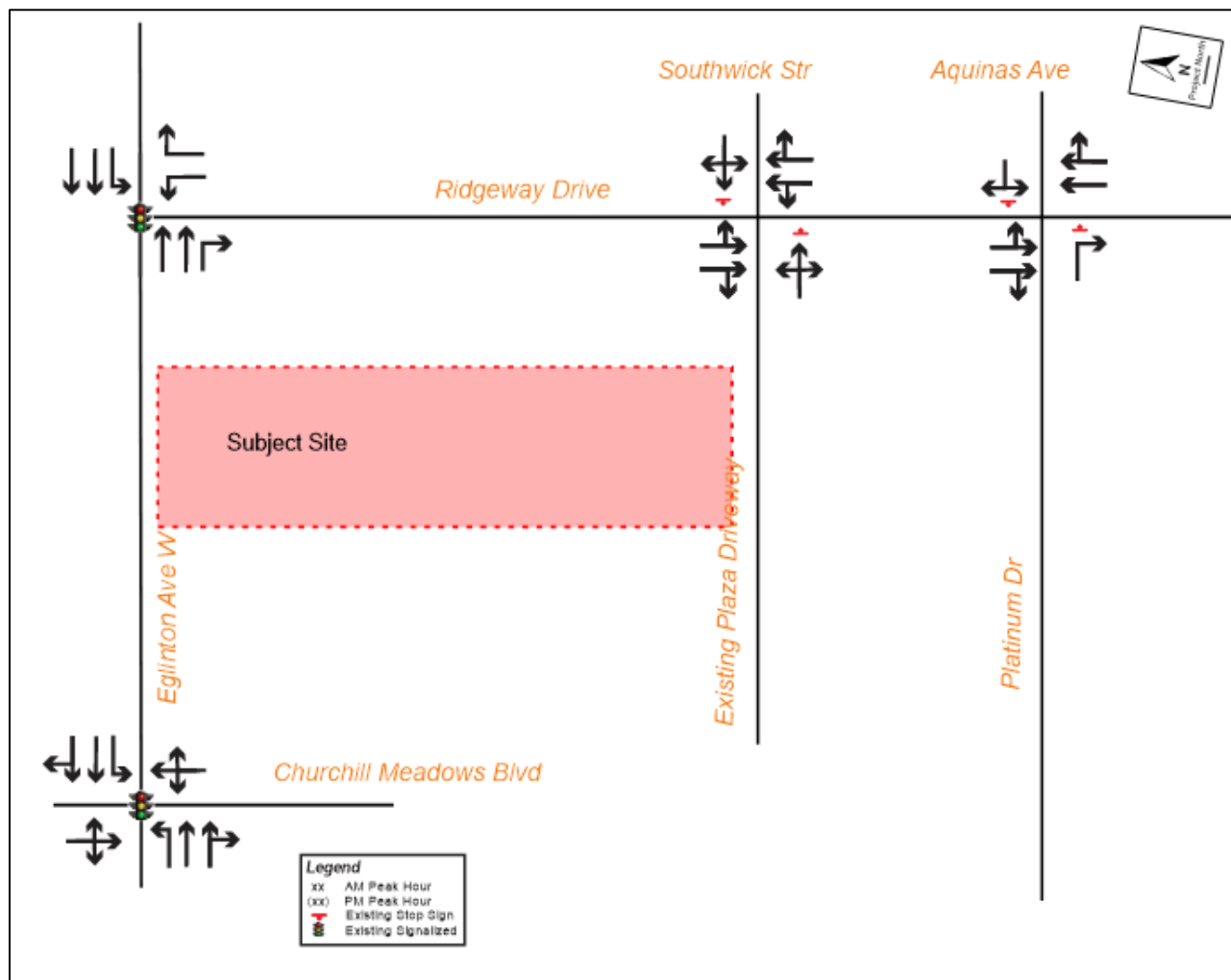
2.1. Existing Road Network

The subject property is bounded by Eglinton Avenue West to the north, existing 1-storey retail to the east, west and south, in the City of Mississauga. The road network is described as follows:

- **Eglinton Avenue West:** is east-west regional road under the jurisdiction of Peel Region. It has a four-lane cross-section, and it maintains a posted speed limit of 50 km/h near the subject site.
- **Ridgeway Drive:** is north-south collector road under the jurisdiction of City of Mississauga. It has four lane cross section, and it maintains an unposted speed of 50 km/h in the urban areas.
- **Southwick Street:** is east-west local roadway under the jurisdiction of the City of Mississauga. It has a two-lane cross section and maintains an unposted speed of 40 km/h in the urban areas.
- **Platinum Drive/ Aquinas Avenue:** is east-west local roadway under the jurisdiction of the City of Mississauga. It has a two-lane cross section and maintains an unposted speed of 40 km/h in the urban areas. The Platinum Drive at Ridgeway Dr is restricted as RI-RO with pork chop island.

Figure 3 illustrates the existing lane configuration and traffic control.

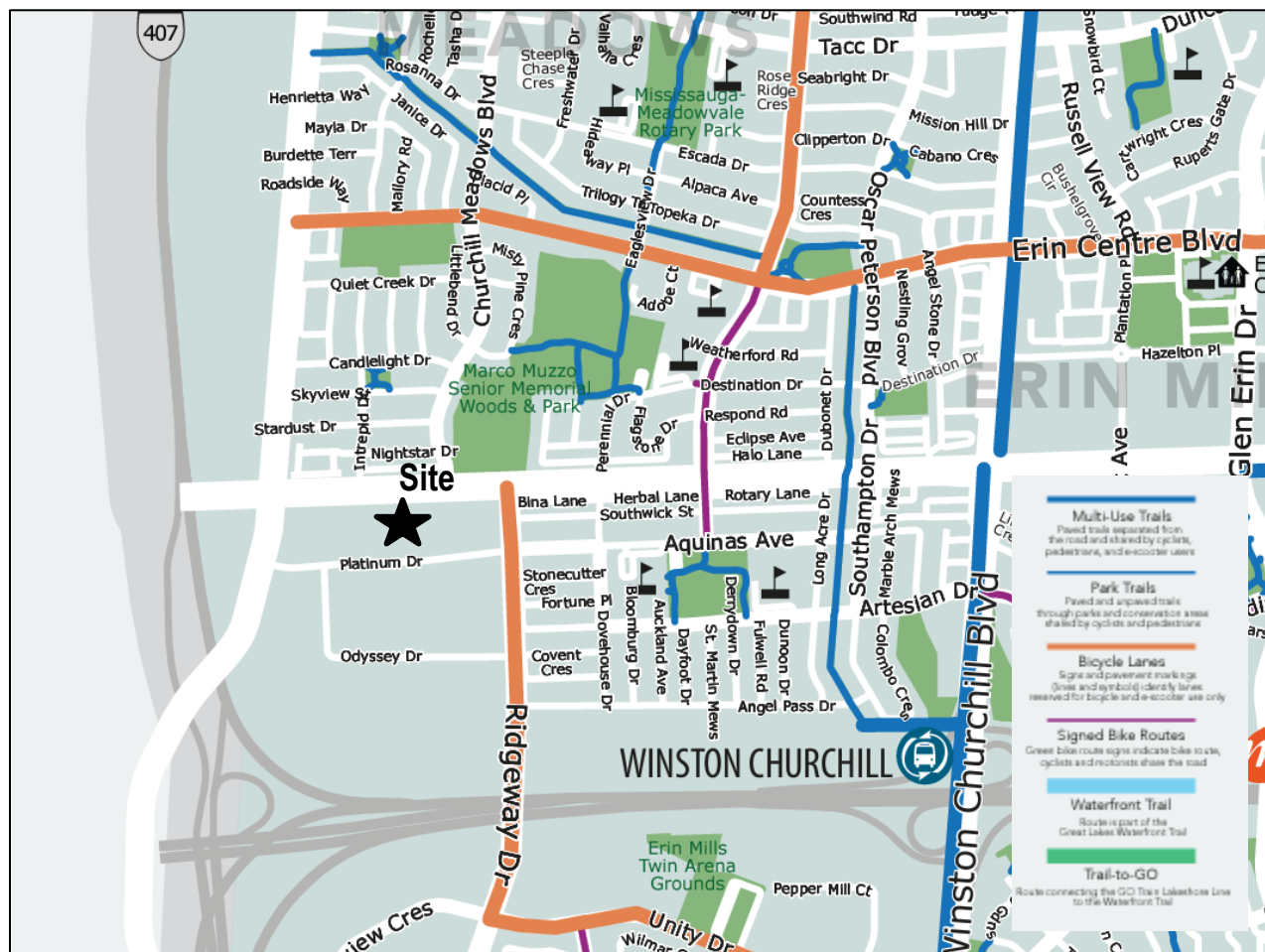
Figure 3 – Existing Lane Configuration and Traffic Control



2.2. Existing Active Transportation Network

Figure 4 illustrates the existing active transportation network in the study area.

Figure 4 – Existing Active Transportation Network in the Study Area



Source: City of Mississauga Cycling Map

2.3. Existing Active Transportation Assessment

Sidewalk

Currently, there are sidewalks located on both sides of public roads, except the south side of Eglinton Ave W and south side of Southwick Street, in the vicinity of the proposed development.

Bicycle Facility

Currently, there is dedicated bicycle lane on both sides of Ridgeway Drive in the vicinity of the proposed development. It is Nextrans' opinion that cycling facilities could be improved in the area, as part of the future City capital projects or cycling initiatives. These types of projects are beyond the scope of the proposed development.

2.4. Existing Miway System

The proposed development is located about 100 m to Miway Bus Route 35 Eglinton at Eglinton Ave W and Churchill Meadows Blvd intersection. The existing transit network in the area is illustrated in **Figure 5**.

Figure 5 – Existing Transit Network in the Area



Source: Miway Website

Miway Bus Route descriptions:

- **Miway Bus Route 35 Eglinton** – The bus route 35 operates in an east-west direction between Kipling Bus Terminal and Churchill Meadows Community Centre Terminal. This route operates everyday, and the service frequency are about 10 minutes during the peak periods.

2.3. Existing Traffic Volumes

Existing traffic volumes at the study area intersections were collected by Spectrum on Tuesday, January 24th, 2023, during morning peak period 7am-10am and afternoon peak period 4pm-7pm for following intersections:

- Eglinton Avenue West and Churchill Meadow Blvd (signalized)
- Eglinton Avenue West and Ridgeway Dr (signalized)
- Ridgeway Dr and Platinum Drive/ Aquinas Ave (unsignalized)
- Ridgeway Dr and Southwick Str (unsignalized)

2.4. Existing Traffic Assessment

The existing volumes in **Figure 6** were analyzed using Synchro Version 11 software. The methodology of the software follows the procedures described and outlined in the Highway Capacity Manual, HCM 2000, published by the Transportation Research Board. The detailed results are provided in **Appendix B** and summarized in **Table 1**.

Table 1 - Existing Levels of Service for Study Intersections

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		LOS (v/c)	Delay (s)	95 TH Queue	LOS (v/c)	Delay (s)	95 TH Queue
Eglinton Ave W and Ridgeway Dr (signalized)	Overall	B	0.71	15.0	D	0.80	41.9
	EBT	B	0.34	12.7	B	0.35	16.0
	EBR	B	0.44	14.8	B	0.23	15.0
	WBL	A	0.69	9.8	B	0.64	11.1
	WBT	A	0.19	4.7	A	0.32	7.8
	NBL	E	0.74	63.6	F	1.29	206.1
	NBR	B	0.12	10.7	B	0.37	16.9
Eglinton Ave W and Ridgeway Dr (signalized)	Overall				C	0.79	28.2
	EBT				C	0.43	26.5
	EBR				C	0.29	24.6
	WBL	-	-	-	C	0.72	20.2
	WBT				B	0.37	13.7
	NBL				E	0.89	64.9
	NBR				C	0.41	27.0
Eglinton Ave W and Churchill Meadows Blvd(signalized)	Overall	C	0.77	30.5	B	0.67	13.9
	EBL	B	0.02	13.5	A	0.11	8.9
	EBT	B	0.53	18.5	A	0.37	9.5
	WBL	B	0.14	15.5	A	0.20	9.3
	WBT	B	0.46	17.5	B	0.63	12.5
	NBLTR	B	0.04	13.5	B	0.33	18.7
	SBLTR	E	1.02	65.2	C	0.75	29.8
Ridgeway Dr and Platinum Dr/ Aquinas Ave (unsignalized)	EBLTR	C	0.23	19.8	D	0.37	25.6
	WBLTR	C	0.35	18.8	F	0.53	61.6
	NBLTR	-	-	-	A	0.01	0.3
	SBLTR	A	0.04	1.2	A	0.02	0.8
Ridgeway Dr and ex plaza driveway/ Southwick St (unsignalized)	EBLTR	C	0.05	17.3	E	0.46	41.6
	WBLTR	C	0.12	17.7	F	0.14	54.3
	NBLTR	A	0.02	0.8	A	0.07	1.7
	SBLTR	A	0.00	0.1	A	0.00	0.2

Table 1 indicates that the study area intersections are currently operating at acceptable overall LOS 'D' or better during both peak hour periods, except the northbound left turn movement at Eglinton Ave W and Ridgeway Dr intersection during afternoon peak hours. Nextrans has optimized the signal timing plan for afternoon peak period by adding minimum green time for this critical movement and keeping the same cycle time. The level of service of this intersection has been significantly improved with optimized signal timing plan. It should be noted that similar suggested signal timing plan optimization measures are applied to the 2029 future background conditions for all intersections with critical movements.

It is Nextrans' opinion that physical improvements such as road widenings are not always the best solutions to solve congestion and delay at existing intersections as road widenings may create some capacity, however, this capacity will be utilized as soon as it becomes available to other drivers and support increased traffic usage. This called induced

traffic demand. In addition, road widenings will also impact pedestrian and cyclist crossing distance at the intersection, which will result in operational and safety concerns for pedestrian and cyclist.

It should be noted that, regardless of Nextrans suggestions for the signal timing plan optimization, it is in the City's and the Region's discretion to review and optimize the signal timing plans at their respective intersections as required to serve their best interests and objectives.

3.0 TRANSPORTATION PLANNING CONTEXT IN THE AREA

City of Mississauga is planning to construct new sidewalk on south side of Eglinton Avenue West between Ninth Line and Ridgeway Drive, the timing of construction is planned in 2024/2025, as such in the future the study area is fully well served by a network of complete sidewalk. In addition, Ninth Line will also be widening to four lanes between Derry Road and Eglinton Avenue, the construction is planned to start in 2025.

4.0 FUTURE BACKGROUND CONDITIONS

4.1. Analysis Horizon

For the purposes of this assessment, a five-year horizon (2029) has been carried out for the study analysis.

4.2. Future Background Corridor Growth

Nextrans has coordinated with City staff regarding the background corridor growth, the city staff provided the compounded growth rate per annum for Eglinton Avenue and Ridgeway Drive, the growth rate will be applied to all turning movement, and detailed is in **Appendix C. Table 2** summarizes the provided growth rate.

Table 2 – Growth Rate

Street	Direction	AM Rate	PM Rate
Eglinton Avenue West	Eastbound	1.5%	1.5%
	Westbound	1.5%	2%
Ridgeway Dr	Northbound	1%	0.5%
	Southbound	0.5%	1%

4.3. Background Development Applications

A full review of active developments within the study area was conducted based on the City of Mississauga Planning Development website portal. **Table 3** summarizes the background development, however, the compounded growth rate already included the background traffic volumes from below listed, therefore, to avoid double counts, no additional traffic volumes will be added.

Table 3– Background Developments in the Area

Site Location	Site Description
3645 Platinum Dr	120 hotel room
3539,3541& 3545 Platinum Dr	Self storage – 11660 m ²
0 Platinum Dr	-

4.4. Future 2029 Background Traffic Assessment

The estimated 2029 future background traffic volumes are illustrated in **Figure 7** and were analyzed using Synchro Version 11 software. The detailed calculations are provided in **Appendix D** and summarized in **Table 4**.

Table 4 – Table Levels of Service for Study Intersections

Intersection	Movement	Weekday AM Peak Hour				Weekday PM Peak Hour			
		LOS (v/c)		Delay (s)	95 TH Queue	LOS (v/c)		Delay (s)	95 TH Queue
Eglinton Ave W and Ridgeway Dr (signalized)	Overall	B	0.79	17.1		C	0.87	31.4	
	EBT	B	0.38	14.6	100.2	C	0.49	29.8	120.8
	EBR	B	0.49	17.3	123.0	C	0.33	27.5	71.3
	WBL	B	0.78	14.3	58.9	C	0.82	28.4	80.4
	WBT	A	0.21	4.9	33.4	B	0.41	14.4	83.7
	NBL	E	0.78	67.8	96.2	E	0.92	71.7	238.8
	NBR	B	0.13	12.0	12.8	C	0.44	29.9	55.2
Eglinton Ave W and Churchill Meadows Blvd(signalized)	Overall	C	0.80	30.3		B	0.72	14.6	
	EBL	B	0.03	13.7	3.0	B	0.16	10.5	6.8
	EBT	B	0.58	19.2	73.0	A	0.40	9.8	53.3
	WBL	B	0.18	16.5	9.6	B	0.24	10.0	17.5
	WBT	B	0.51	18.1	59.5	B	0.71	14.0	111.2
	NBLTR	B	0.04	13.5	6.8	B	0.33	18.7	26.1
	SBLTR	E	1.02	65.2	86.4	C	0.75	29.8	52.3
Ridgeway Dr and Platinum Dr/ Aquinas Ave (unsignalized)	EBLTR	C	0.24	20.9	7.4	D	0.40	28.4	14.4
	WBLTR	C	0.37	20.3	13.5	F	0.58	72.0	22.5
	NBLTR	-	-	-	-	A	0.01	0.3	0.2
	SBLTR	A	0.04	1.2	1.0	A	0.02	0.8	0.6
Ridgeway Dr and ex plaza driveway/ Southwick St (unsignalized)	EBLTR	C	0.05	18.0	1.4	E	0.50	48.6	19.5
	WBLTR	C	0.13	18.6	3.4	F	0.16	60.8	4.2
	NBLTR	A	0.02	0.8	0.4	A	0.07	1.8	1.8
	SBLTR	A	0.00	0.1	0.0	A	0.00	0.2	0.1

Based on Table 3, the study intersection operation capacity analysis indicates that all intersections considered are expected to operate at acceptable level of service with recommended optimized signal timing plan.

5.0 SITE TRAFFIC

5.1. Proposed Development

As indicated, the redevelopment proposal consists of two storeys building with 895.64 m² GFA of commercial and 924.93 m² GFA of office with total of 57 parking spaces.

The 2016 Transportation Tomorrow Survey (TTS), and the *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE) information was reviewed to estimate the modal split, trip distribution and trip generation for the proposed development.

5.2. Modes of Travel Assessment in the Area

Table 5 summarizes the travel mode split information, based on the review of the 2016 Transportation Tomorrow Survey data, for traffic zone 3636. The detailed analysis and TTS data extraction are included in **Appendix E**.

Table 5 – Modes of Travel based on 2016 TTS Data for Traffic Zone 3636

Time	Trips Made by Traffic Zones 3636					
	Auto Driver	Auto Passenger	Taxi/Paid Ride Share	Transit	Cycle	Walk
AM Peak Period (6:00-9:00 AM)	87%	5%	0%	1%	0%	7%
PM Peak Period (4:00-7:00 PM)	80%	9%	0%	10%	1%	0%

Based on the information outlined in the table above, the predominant modes of travel to and from the area are driving with 87% and 80% during the morning and the afternoon peak periods, respectively. This assessment suggests that there are viable alternative modes of transportation other than driving private automobiles.

5.3. Site Trip Generation

For the purposes of this assessment, the *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE) was reviewed to estimate the site generated trips. Based on our review, the selected corresponding land use code is “General Office Building – General Urban/Suburban” Land Use Code (LUC) 710. **Table 6** summarizes the site trip generation estimate for the current development proposal based on the ITE trip fitted curve equations, where appropriate. Given the proposed development is located in the commercial plaza, 10% of internal trip will be applied.

Table 6 – Site Total Trip Generation for Proposed Development

ITE Land Use	Magnitude (sqf)	Parameter	Morning Peak			Afternoon Peak		
			In	Out	Total	In	Out	Total
General Office (LUC 710) General Urban/Suburban	19600	Total Trips	36	5	41	7	36	43
		Auto Trips – 90%	32	5	37	6	32	38
		Internal Trip – 10%	4	0	4	1	4	5

The proposed development is expected to generate:

- 41 total new two-way trips (36 inbound and 5 outbound) during the weekday morning and 43 total new two-way trips (7 inbound and 36 outbound) during the afternoon peak hours, respectively.
- 37 total new two-way auto trips (32 inbound and 5 outbound) during the weekday morning and 38 total new two-way auto trips (6 inbound and 32 outbound) during the afternoon peak hours, respectively.
- 4 total new two-way internal trips (4 inbound and 0 outbound) during the weekday morning and 5 total new two-way internal trips (4 inbound and 1 outbound) during the afternoon peak hours, respectively.

5.4. Site Trip Distribution and Assignment

The 2016 Transportation Tomorrow Survey (TTS) data was reviewed for traffic zones 3636 to estimate the general trip distribution for the proposed development. **Table 7** summarizes the planning district/traffic zones distribution based on the 2016 TTS data.

Table 7 – Trip Distribution

Mode	Toronto	York Region	Peel Region and West	Total
Auto	4%	2%	94%	100%

Table 8 summarizes the site trip assignment based on the 2016 TTS and existing transportation network in the area for the residential component of proposed development.

Table 8– Site Trip Distribution

General Direction of Travel (To/From)	Auto
North	34%
South	27%
East	33%
West	7%
Total	100%

Figure 8 illustrates the proposed development generated traffic volumes. It should be noted that the auto site trip distribution and assignment have been taken into consideration the TTS information, existing turning restrictions, as well as existing intersection operations and capacity constraints.

6.0 FUTURE TOTAL TRAFFIC CONDITIONS

6.1. Future 2029 Total Traffic Assessment

The estimated future 2029 total traffic volumes are illustrated in **Figure 9** and were analyzed using Synchro Version 11 software. The detailed calculations are provided in **Appendix F** and summarized in **Table 9**.

Table 9 – Future Total 2029 Traffic Assessment

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		LOS (v/c)	Delay (s)	95 TH Queue	LOS (v/c)	Delay (s)	95 TH Queue
Eglinton Ave W and Ridgeway Dr (signalized)	Overall	B	0.80	17.1	C	0.86	29.7
	EBT	B	0.38	14.7	C	0.50	28.8
	EBR	B	0.50	17.4	C	0.32	26.3
	WBL	B	0.78	14.7	C	0.82	26.8
	WBT	A	0.22	5.0	B	0.40	13.4
	NBL	E	0.77	67.6	E	0.91	70.0
	NBR	B	0.13	12.1	C	0.41	28.2
Eglinton Ave W and Churchill Meadows Blvd(signalized)	Overall	C	0.80	30.6	B	0.74	15.2
	EBL	B	0.03	13.7	B	0.16	11.1
	EBT	B	0.58	19.3	A	0.41	10.2
	WBL	B	0.31	19.8	B	0.26	10.6
	WBT	B	0.51	18.1	B	0.72	14.5
	NBLTR	B	0.02	13.5	B	0.36	18.8
	SBLTR	E	1.02	66.8	C	0.77	31.8
Ridgeway Dr and Platinum Dr/ Aquinas Ave (unsignalized)	EBLTR	C	0.23	19.6	D	0.38	26.9
	WBLTR	C	0.36	19.4	F	0.52	60.2
	NBLTR	-	-	-	A	0.01	0.3
	SBLTR	A	0.04	1.2	A	0.02	0.8
Ridgeway Dr and ex plaza driveway/ Southwick St (unsignalized)	EBLTR	C	0.06	16.5	E	0.49	40.5
	WBLTR	C	0.12	18.5	F	0.14	55.2
	NBLTR	A	0.03	1.2	A	0.07	1.7
	SBLTR	A	0.00	0.1	A	0.00	0.2

Under the 2029 future total condition, similar to the 2029 future background condition, the intersections are expected to operate at acceptable levels of service with recommended optimize signal timing plan. It is important to be noted that the proposed development has negligible impact to the study area. No improvement is required to accommodate the proposed development.

7.0 COMMUNITY IMPACT

Based on the traffic analysis, the proposed development does not have significant impact on the existing road network. The proposed development only adds 1-2s on delay which is negligible impacts to the existing, future traffic, no physical improvements are required to accommodate the proposed development.

Based on our review of existing transportation facilities, the area is currently well served by existing transportation facilities, active transportation facilities with sidewalks and bike routes, it is our opinion that the proposed development is necessary to serve the need of the surrounding communities and minimize the need for residents to drive further distance to others areas of the City to seek for services.

8.0 SITE PLAN REVIEW

8.1. Loading Space

The proposed development provides 1 loading space. AutoTURN software was used to generate vehicular turning templates to confirm and demonstrate the accessibility for provided loading spaces. **Figure 10** illustrates the turning movement templates for the MSU truck.

8.2. Driveway Location and Configuration

The proposed development will provide one access to the shared driveway with existing plaza which connects to Ridgeway Drive. The analysis indicates that the proposed access is expected to operate at acceptable levels of service with minimal delays or queues.

9.0 PARKING ASSESSMENT

9.1. Vehicle Parking Requirement

9.1.1. City of Mississauga Zoning By-law

City of Mississauga Zoning By-Law 0225-2007 is applied to the proposed development. The parking requirement and supply for the proposed development is summarized in **Table 10**.

Table 10 – City of Mississauga Zoning By-law Vehicle Parking Requirements

Type	GFA (m ²)	Parking Rates	Parking Requirement
Retail Centre (less than 2000m ²)	1820.57	4.3 spaces per 100 m ²	78 spaces

Based on the City's Zoning By-Law 0225-2007, the proposed development requires 78 parking spaces. However, the proposed development provides 57 vehicle parking spaces, which presents a technical shortfall of 21 parking spaces or a 26.9% reduction. A parking justification study is prepared to justify the proposed parking reduction.

9.1.2. Transportation Demand Management

Transportation Demand Management (TDM) is a co-ordinated series of actions aimed at maximizing the people moving capability of the transportation system. It is intended to help reduce single-occupant auto use. Potential TDM measures may include but not limited to: TDM supportive land use, bicycle and pedestrian programs and facilities, public transit

improvements, preferential treatments for buses and high occupancy vehicles (if applicable), ridesharing, and employee incentives.

- Reduce parking rates to reduce the numbers of single-occupant vehicles trips to and from the proposed development.
- Provide bicycle parking spaces at convenient and secured locations.
- Encourage employees to take transit, carpool or other modes of transportation such as walking and cycling to and from work. The owner can also consider providing incentives for employees such as subsidized monthly transit passes.

9.2. City of Mississauga Zoning Bylaw Bicycle Parking Requirement

City of Mississauga Zoning By-Law 0225-2007 is applied to the proposed development. The bicycle parking requirement and supply for the proposed development is summarized in **Table 11**.

Table 11 – City of Mississauga Zoning By-law Bicycle Parking Requirements

Type	GFA (m ²)	Parking Rates		Parking Requirement	Parking Provided
Retail Centre (less than 2000m ²)	1820.57	0.15 type A spaces per 100 m ²	0.2 type B spaces per 100 m ²	3 space type A and 4 space type B	3 space type A and 4 space type B
Total					

Based on the City's Zoning By-Law 0225-2007, a total of 3 bicycle parking space types A and 4 bicycle parking spaces type B are required for the proposed development. It is our understanding that the proposed development provides bicycle parking spaces to meet the requirement.

10.0 CONCLUSIONS / FINDINGS

10.1. Study Conclusions

The findings and conclusions of the analysis are as follows:

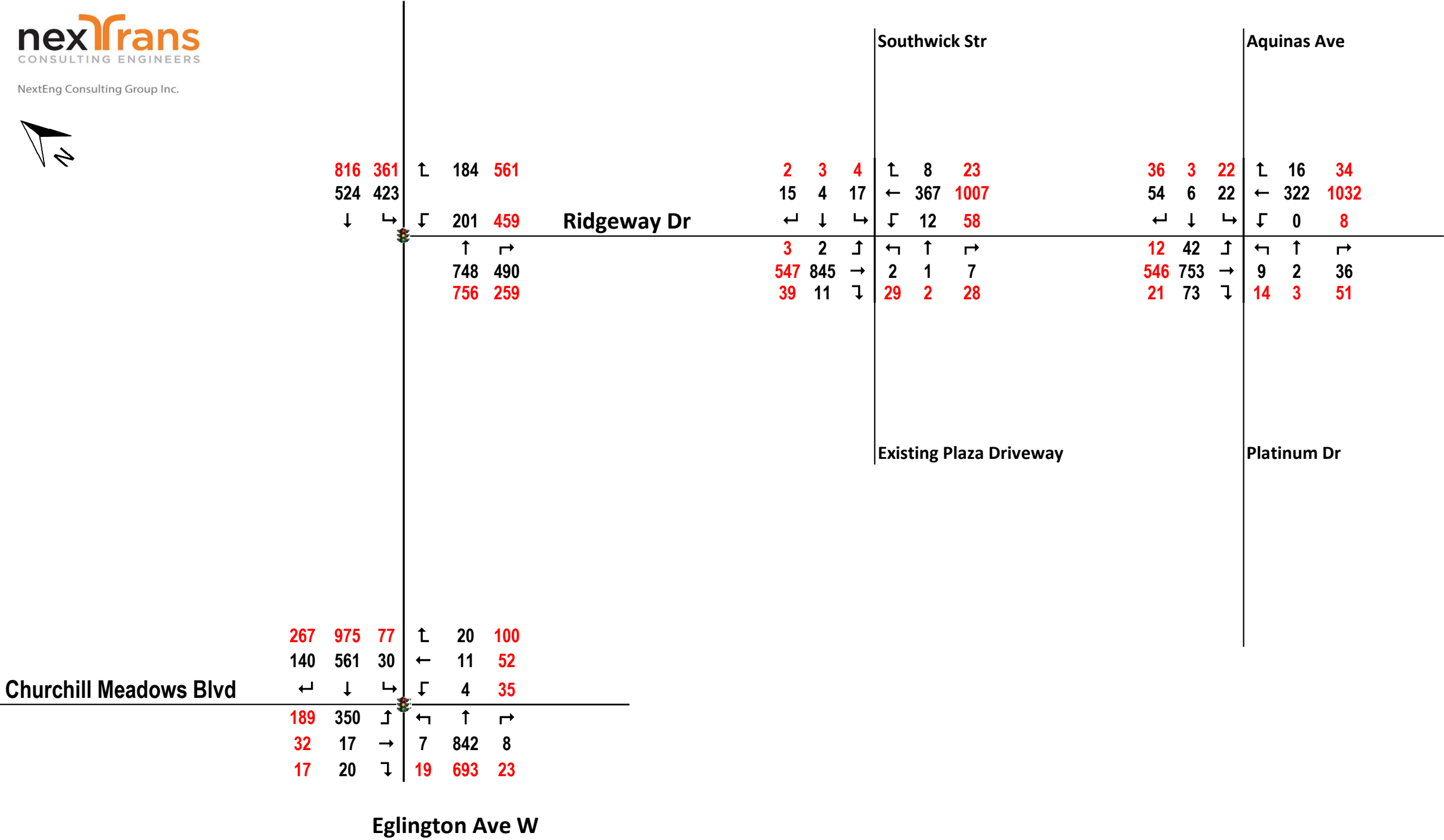
- The proposed development is expected to generate:
 - 41 total new two-way trips (36 inbound and 5 outbound) during the weekday morning and 43 total new two-way trips (7 inbound and 36 outbound) during the afternoon peak hours, respectively.
 - 37 total new two-way auto trips (32 inbound and 5 outbound) during the weekday morning and 38 total new two-way auto trips (6 inbound and 32 outbound) during the afternoon peak hours, respectively.
 - 4 total new two-way internal trips (4 inbound and 0 outbound) during the weekday morning and 5 total new two-way internal trips (4 inbound and 1 outbound) during the afternoon peak hours, respectively.
- Under the existing, future 2029 background and future 2029 total conditions, the intersection operation capacity analysis indicates that all intersections considered are expected to operate at acceptable levels of service with optimized signal timing for Eglinton Avenue W and Ridgeway Drive. No physical improvement is required to accommodate the proposed development.

- Based on the City's Zoning By-Law 0225-2007, the proposed development requires 78 parking spaces. However, the proposed development provides 57 vehicle parking spaces, which presents a technical shortfall of 21 parking spaces or a 26.9% reduction.
- Based on the City's Zoning By-Law 0225-2007, a total of 3 bicycle parking space types A and 4 bicycle parking spaces type B are required for the proposed development. It is our understanding that the proposed development provides bicycle parking spaces to meet the requirement.

10.2. Study Recommendations

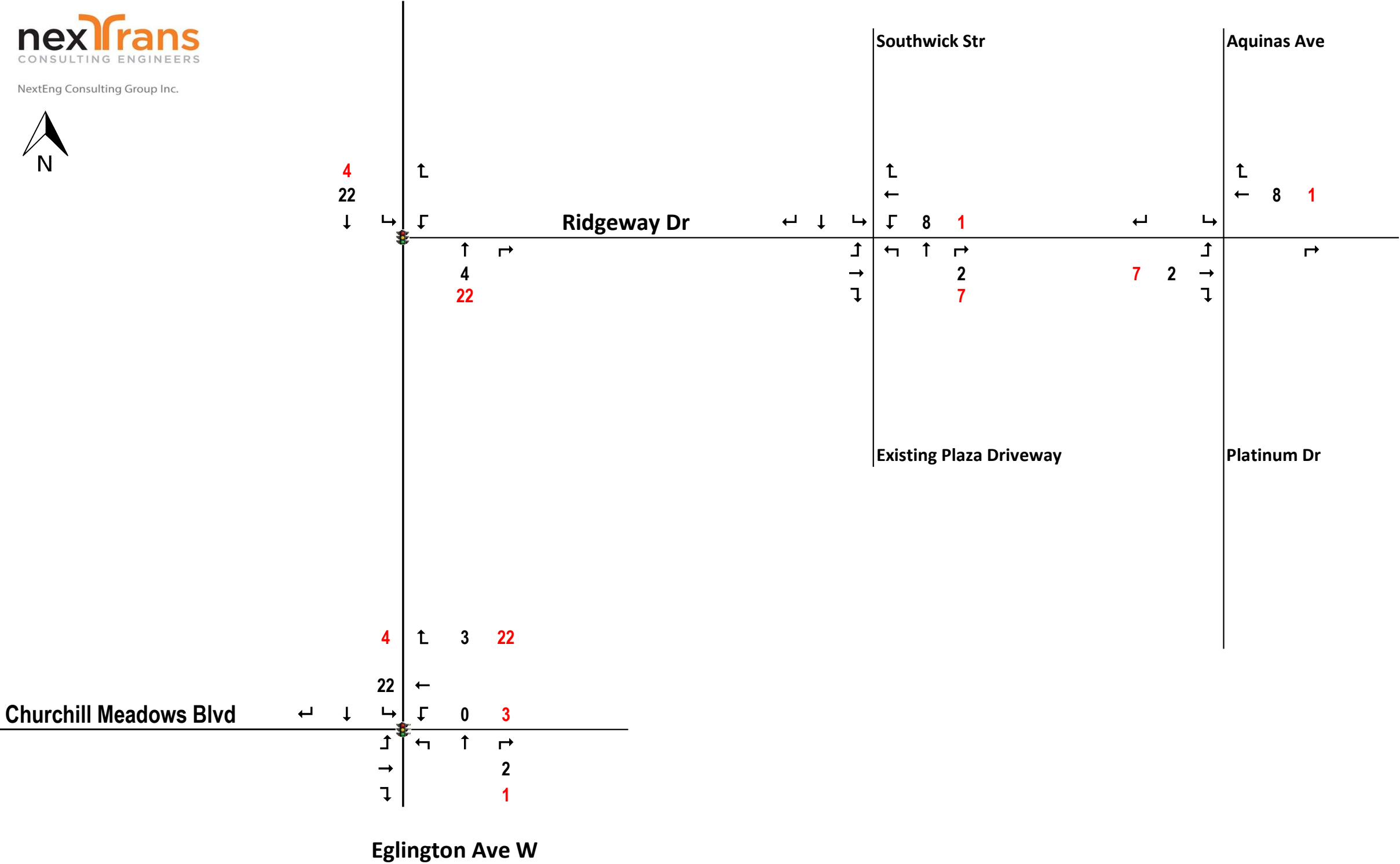
Based on the assessment, our report recommends that:

- The proposed development implements the TDM measures and incentives identified in this report to support active transportation and transit and to reduce the numbers of single-occupant-vehicle trips to and from the proposed development.
- The proposed development provides direct shared pedestrian and cycling connections from the proposed development building entrances directly to Eglinton Avenue W, where appropriate.
- Reduce vehicle parking rate to reduce single auto occupant trip.
- Recommended signal timing plan for Eglinton Avenue W and Ridgeway Dr.



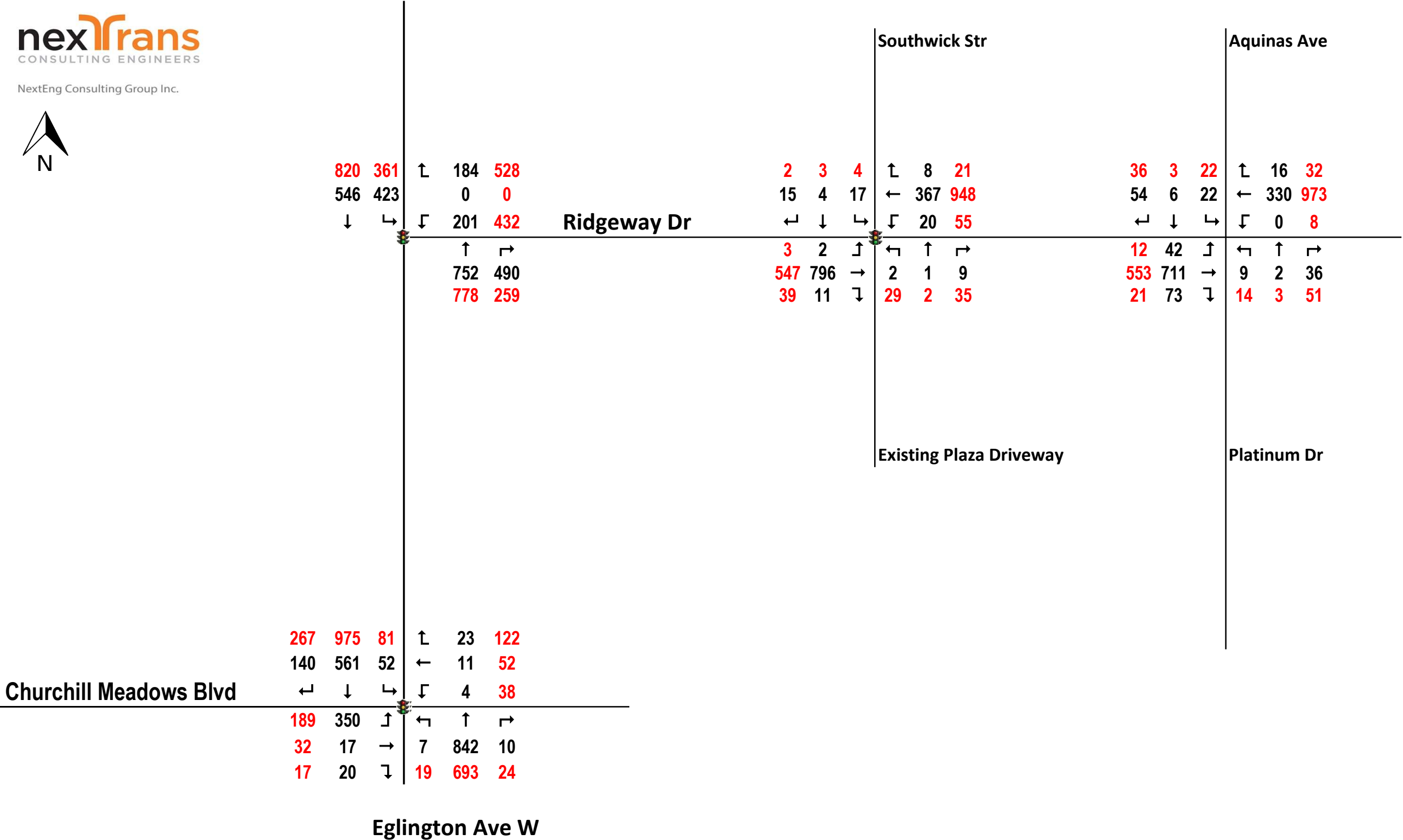
LEGEND:
XX - AM TRAFFIC VOLUME
XX - PM TRAFFIC VOLUME

Figure 7 - Future Background Traffic Volumes



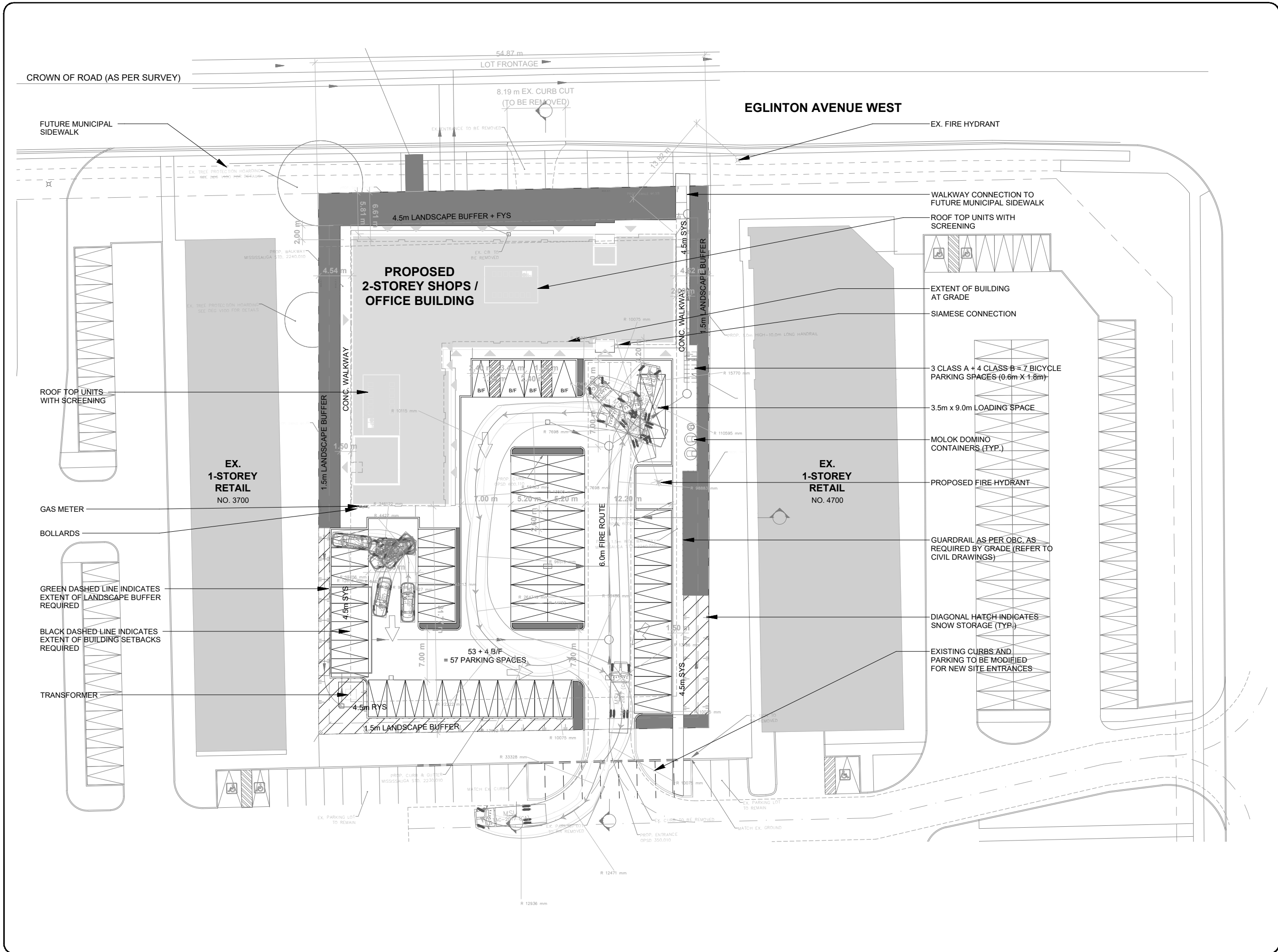
LEGEND:
XX - AM TRAFFIC VOLUME
XX - PM TRAFFIC VOLUME

Figure 8 - Site Traffic Volumes



LEGEND:
XX - AM TRAFFIC VOLUME
XX - PM TRAFFIC VOLUME

Figure 9 - Future Total Traffic Volumes



KEY PLAN

BENCHMARK

REVISIONS			
NO	REVISION	DATE	BY

STAMP

nextrans
CONSULTING ENGINEERS
Suite 201, 520 Industrial Parkway South
Aurora ON L4G 6W8
Tel: 905-503-2563
Web: www.nextrans.ca

PROJECT NAME:
Commercial/Office Development
3650 Eglinton Ave W
City of Mississauga

DRAWING TITLE:
AutoTURN Analysis
P& MSU TAC-2017

DESIGN BY: K.A.	DATE: March 5, 2025
CHECKED BY: R.P.	PROJECT NO. NT-22-129
DRAWN BY: K.A.	DRAWING NO.
SCALE: NTS	Figure 1

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 Aurora this 23 day of Oct, 2023.
(City) (Day) (Month) (Year)

Name: Peter Illias

Professional Title: P.Eng

Signature: _____

Office Contact Information (Please Print)

Address: 520 INDUSTRIAL PARKWAY SOUTH, SUITE 201

City/Postal Code: L4G 6W8

Telephone/Extension: 905-503-2563

E-mail Address: PETER@NEXTRANS.CA

Appendix B

Pre-Study Consultation Checklist

Description	Information	Section Reference
Development Information		
Development Description (land use, size, and number of phases of development)	Phase 1: 2 storey commercial/office building, total GFA is 2,435.70m²	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.	- Eglinton Ave W and Ridgeway Dr - Ridgeway Dr and Platinum Dr/ Aquinas Ave - Eglinton Ave W and Churchill Meadows Blvd - Ridgeway Dr and Southwick St / Site Access	2.3.8
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	2.3.10

Description	Information	Section Reference
	☐ AM weekday peak hour of development ☐ PM weekday peak hour of development ☐ Saturday peak hour of development ☐ Other _____	
Input Parameters and Assumptions (potential deviations)	• Use existing PHF • STP obtained from city • •	2.3.13
Existing Transportation Conditions	☐ City data sources ☒ New data collection_January 24, 2023_ ☐ Other _____	2.3.14
Planned Network Improvements (with timing)	• New sidewalk – south side of Eglinton Ave W b/w Ninth Line & Ridgeway Dr – Construction tentatively planned in ~2024/2025 • Ninth Line widening to 4 lanes b/w Derry Rd & Eglinton Ave – Construction tentatively planned to start in 2025 •	2.3.16
Other Planned Developments (per City's Website)	• 3645 Platinum Dr • 3539, 3541, & 3545 Platinum Dr • 0 Platinum Dr (site located between the two above noted sites) • •	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 _____	2.3.26
Impacts During Construction (any special issues)	• • • •	2.3.27
Step 3 – Forecasting		

Growth Rate	☒ Obtained from City ☐ Historical traffic counts ☐ Travel demand forecasts ☐ Proposed Growth Rate: _____	2.3.15
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Description	Information	Section Reference
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 _____	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		
- 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. - Access: As noted in Development Agreement 43M-1875, vehicular access will not be permitted on Eglinton Avenue West. The applicant will be required to make arrangements with the adjacent property to establish a private access easement. - Recommendations: Detailed Recommendations regarding on-site/off-site roadway improvements, site access, site circulation, and TDM measures shall be made.		

Appendix A – Existing Traffic Data



Turning Movement Count (1 . EGLINTON AVE W & CHURCHILL MEADOWS BLVD)

Start Time	N Approach CHURCHILL MEADOWS BLVD						E Approach EGLINTON AVE W						S Approach CHURCHILL MEADOWS BLVD						W Approach EGLINTON AVE W						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	2	3	19	0	2	24	4	63	0	0	1	67	4	17	1	0	0	22	0	112	1	0	1	113	226	
07:15:00	3	0	49	0	2	52	15	84	2	0	0	101	2	1	1	0	0	4	1	140	1	0	3	142	299	
07:30:00	2	3	73	0	2	78	6	84	2	0	0	92	1	1	3	0	0	5	1	184	5	0	1	190	365	
07:45:00	3	1	71	0	2	75	13	105	2	0	0	120	1	0	2	0	0	3	1	201	3	0	2	205	403	1293
08:00:00	8	1	99	0	2	108	29	146	9	0	0	184	1	1	0	0	0	2	1	178	1	0	0	180	474	1541
08:15:00	1	3	89	0	1	93	31	130	1	0	0	162	4	2	2	0	0	8	2	194	3	0	0	199	462	1704
08:30:00	7	6	78	0	2	91	31	127	5	0	0	163	9	3	1	0	0	13	2	200	0	0	2	202	469	1808
08:45:00	4	7	84	0	2	95	37	110	12	0	1	159	6	5	1	0	1	12	2	198	2	0	2	202	468	1873
09:00:00	1	5	51	0	0	57	29	90	5	0	0	124	2	3	1	0	0	6	1	195	1	0	0	197	384	1783
09:15:00	3	3	30	0	0	36	17	75	3	0	1	95	9	2	1	0	1	12	3	164	1	0	0	168	311	1632
09:30:00	2	2	29	0	0	33	10	85	6	0	2	101	5	1	1	0	1	7	1	145	3	0	0	149	290	1453
09:45:00	3	0	40	0	0	43	8	75	6	0	1	89	2	2	1	0	0	5	3	115	1	0	1	119	256	1241
BREAK																										
16:00:00	2	4	27	0	0	33	47	201	6	0	1	254	31	14	11	0	1	56	5	127	10	0	3	142	485	
16:15:00	1	5	38	0	0	44	49	206	16	0	1	271	19	11	6	0	1	36	1	133	6	1	0	141	492	
16:30:00	3	5	43	0	3	51	50	201	12	0	3	263	27	4	16	0	3	47	1	147	5	0	7	153	514	
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17:30:00	6	10	38	0	2	54	54	212	16	0	2	282	30	12	11	0	1	53	7	155	6	0	2	168	557	2228
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18:00:00	3	12	36	0	3	51	64	204	17	0	5	285	29	16	14	0	2	59	8	156	5	0	4	169	564	2249
18:15:00	5	8	21	0	1	34	44	148	28	0	2	220	26	19	15	0	2	60	7	135	12	0	8	154	468	2158
18:30:00	3	8	30	0	1	41	44	137	13	0	1	194	21	8	16	0	0	45	6	131	7	0	2	144	424	2025
18:45:00	4	11	40	0	1	55	48	168	13	0	1	229	21	7	6	0	1	34	8	118	5	0	1	131	449	1905
Grand Total	80	127	1176	0	35	1383	864	3517	240	0	26	4621	338	179	142	0	16	659	76	3765	95	1	50	3937	10600	-
Approach%	5.8%	9.2%	85%	0%	-	-	18.7%	76.1%	5.2%	0%	-	-	51.3%	27.2%	21.5%	0%	-	-	1.9%	95.6%	2.4%	0%	-	-	-	-
Totals %	0.8%	1.2%	11.1%	0%	-	13%	8.2%	33.2%	2.3%	0%	43.6%	-	3.2%	1.7%	1.3%	0%	6.2%	0.7%	35.5%	0.9%	0%	-	37.1%	-	-	
Heavy	1	0	13	0	-	-	8	83	1	0	-	-	1	0	1	0	-	-	0	54	2	0	-	-	-	-
Heavy %	1.3%	0%	1.1%	0%	-	-	0.9%	2.4%	0.4%	0%	-	-	0.3%	0%	0.7%	0%	-	0%	1.4%	2.1%	0%	-	-	-	-	-
Bicycles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycle %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Peak Hour: 08:00 AM - 09:00 AM Weather: Overcast Clouds (-0.48 °C)

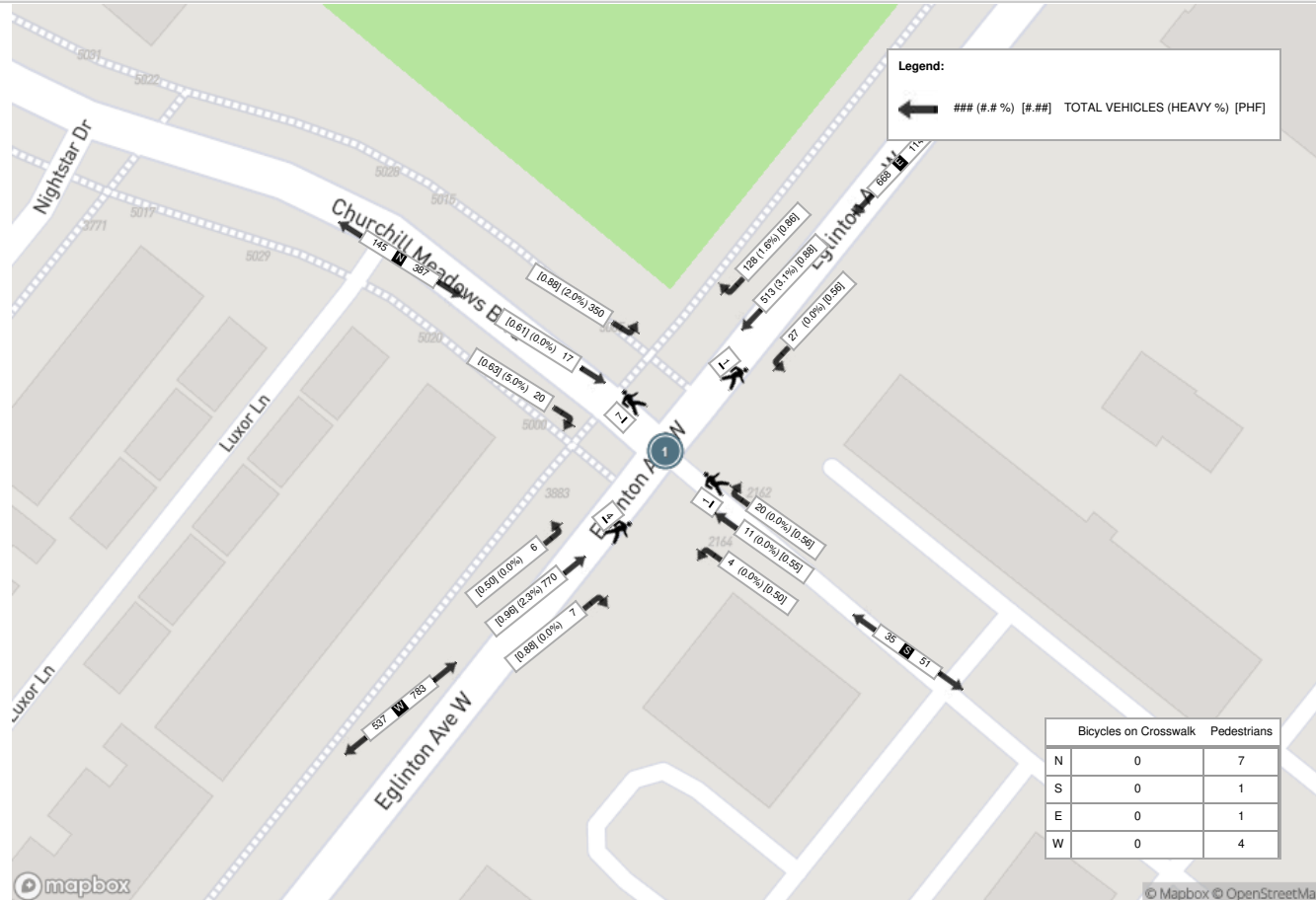
Start Time	N Approach CHURCHILL MEADOWS BLVD						E Approach EGLINTON AVE W						S Approach CHURCHILL MEADOWS BLVD						W Approach EGLINTON AVE W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:00:00	8	1	99	0	2	108	29	146	9	0	0	184	1	1	0	0	0	2	1	178	1	0	0	180	474
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08:45:00	4	7	84	0	2	95	37	110	12	0	1	159	6	5	1	0	1	12	2	198	2	0	2	202	468
Grand Total	20	17	350	0	7	387	128	513	27	0	1	668	20	11	4	0	1	35	7	770	6	0	4	783	1873
Approach%	5.2%	4.4%	90.4%	0%		-	19.2%	76.8%	4%	0%		-	57.1%	31.4%	11.4%	0%		-	0.9%	98.3%	0.8%	0%		-	-
Totals %	1.1%	0.9%	18.7%	0%		20.7%	6.8%	27.4%	1.4%	0%		35.7%	1.1%	0.6%	0.2%	0%		1.9%	0.4%	41.1%	0.3%	0%		41.8%	-
PHF	0.63	0.61	0.88	0		0.9	0.86	0.88	0.56	0		0.91	0.56	0.55	0.5	0		0.67	0.88	0.96	0.5	0		0.97	-
Heavy	1	0	7	0		8	2	16	0	0		18	0	0	0	0		0	0	18	0	0		18	-
Heavy %	5%	0%	2%	0%		2.1%	1.6%	3.1%	0%	0%		2.7%	0%	0%	0%	0%		0%	0%	2.3%	0%	0%		2.3%	-
Lights	19	17	343	0		379	126	497	27	0		650	20	11	4	0		35	7	752	6	0		765	-
Lights %	95%	100%	98%	0%		97.9%	98.4%	96.9%	100%	0%		97.3%	100%	100%	100%	0%		100%	100%	97.7%	100%	0%		97.7%	-
Single-Unit Trucks	0	0	0	0		0	1	4	0	0		5	0	0	0	0		0	0	10	0	0		10	-
Single-Unit Trucks %	0%	0%	0%	0%		0%	0.8%	0.8%	0%	0%		0.7%	0%	0%	0%	0%		0%	0%	1.3%	0%	0%		1.3%	-
Buses	1	0	7	0		8	1	10	0	0		11	0	0	0	0		0	0	4	0	0		4	-
Buses %	5%	0%	2%	0%		2.1%	0.8%	1.9%	0%	0%		1.6%	0%	0%	0%	0%		0%	0%	0.5%	0%	0%		0.5%	-
Articulated Trucks	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	0	4	0	0		4	-
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0.4%	0%	0%		0.3%	0%	0%	0%	0%		0%	0%	0.5%	0%	0%		0.5%	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	4	-	-
Pedestrians%	-	-	-	-	53.8%	-	-	-	-	-	7.7%	-	-	-	-	-	7.7%	-	-	-	-	-	30.8%	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-



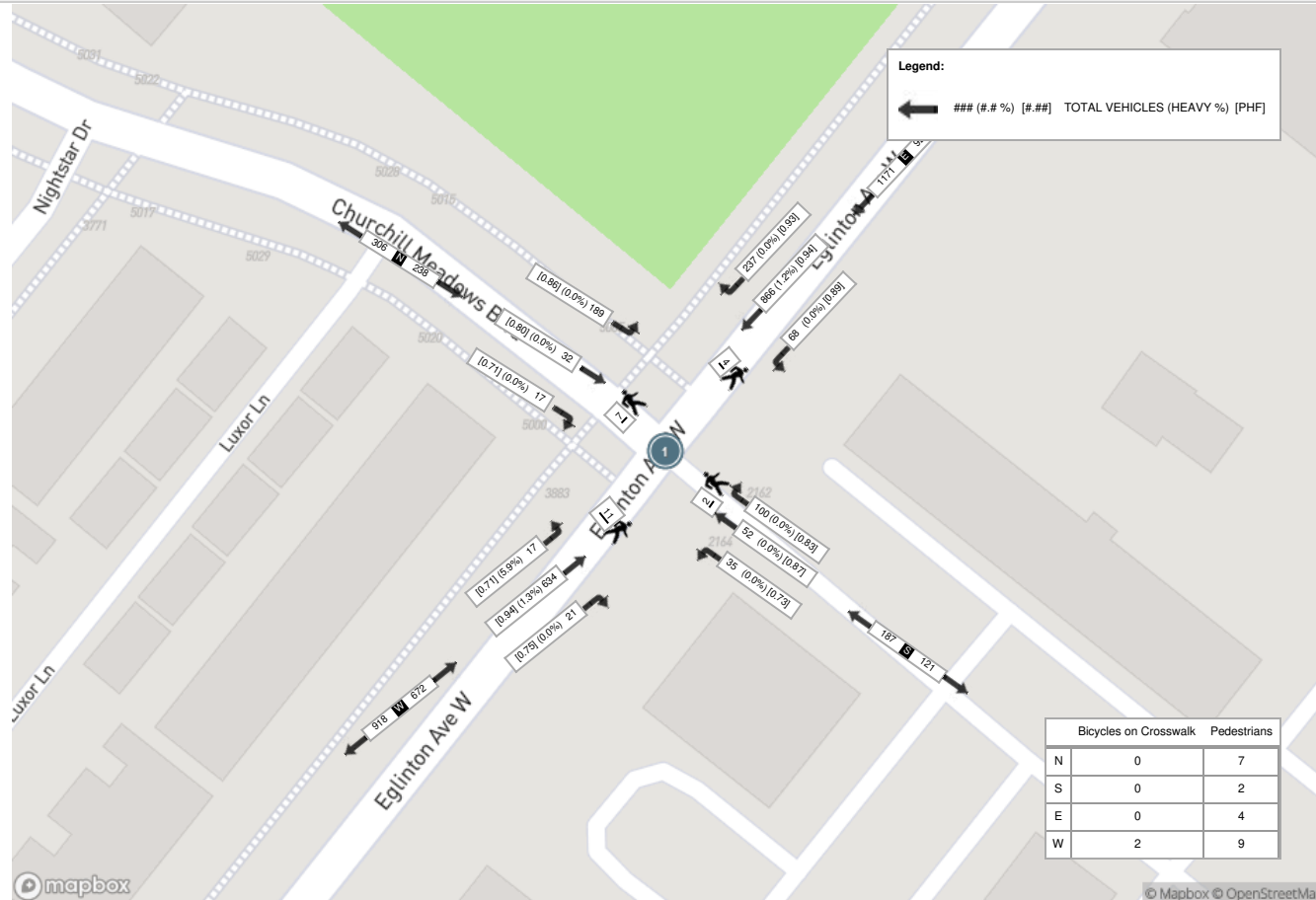
Peak Hour: 05:00 PM - 06:00 PM Weather: Scattered Clouds (2 °C)

Start Time	N Approach CHURCHILL MEADOWS BLVD						E Approach EGLINTON AVE W						S Approach CHURCHILL MEADOWS BLVD						W Approach EGLINTON AVE W						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	
17:00:00	4	9	41	0	1	54	60	231	18	0	0	309	27	15	7	0	1	49	4	161	6	0	3	171	583
17:15:00	4	6	55	0	1	65	59	205	15	0	0	279	15	13	12	0	0	40	5	168	2	0	2	175	559
17:30:00	6	10	38	0	2	54	54	212	16	0	2	282	30	12	11	0	1	53	7	155	6	0	2	168	557
17:45:00	3	7	55	0	3	65	64	218	19	0	2	301	28	12	5	0	0	45	5	150	3	0	4	158	569
Grand Total	17	32	189	0	7	238	237	866	68	0	4	1171	100	52	35	0	2	187	21	634	17	0	11	672	2268
Approach%	7.1%	13.4%	79.4%	0%		-	20.2%	74%	5.8%	0%		-	53.5%	27.8%	18.7%	0%		-	3.1%	94.3%	2.5%	0%		-	-
Totals %	0.7%	1.4%	8.3%	0%		10.5%	10.4%	38.2%	3%	0%		51.6%	4.4%	2.3%	1.5%	0%		8.2%	0.9%	28%	0.7%	0%		29.6%	-
PHF	0.71	0.8	0.86	0		0.92	0.93	0.94	0.89	0		0.95	0.83	0.87	0.73	0		0.88	0.75	0.94	0.71	0		0.96	-
Heavy	0	0	0	0		0	0	10	0	0		10	0	0	0	0		0	0	8	1	0		9	-
Heavy %	0%	0%	0%	0%		0%	0%	1.2%	0%	0%		0.9%	0%	0%	0%	0%		0%	0%	1.3%	5.9%	0%		1.3%	-
Lights	17	32	189	0		238	237	856	68	0		1161	100	52	35	0		187	21	626	16	0		663	-
Lights %	100%	100%	100%	0%		100%	100%	98.8%	100%	0%		99.1%	100%	100%	100%	0%		100%	100%	98.7%	94.1%	0%		98.7%	-
Single-Unit Trucks	0	0	0	0		0	0	4	0	0		4	0	0	0	0		0	0	6	1	0		7	-
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	0.5%	0%	0%		0.3%	0%	0%	0%	0%		0%	0%	0.9%	5.9%	0%		1%	-
Buses	0	0	0	0		0	0	6	0	0		6	0	0	0	0		0	0	1	0	0		1	-
Buses %	0%	0%	0%	0%		0%	0%	0.7%	0%	0%		0.5%	0%	0%	0%	0%		0%	0%	0.2%	0%	0%		0.1%	-
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	-
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0.2%	0%	0%		0.1%	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	4	-	-	-	-	-	2	-	-	-	-	-	9	-	-
Pedestrians%	-	-	-	-	29.2%	-	-	-	-	-	16.7%	-	-	-	-	-	8.3%	-	-	-	-	-	37.5%	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-
Bicycles on Crosswalk%	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	8.3%	-	-

Peak Hour: 08:00 AM - 09:00 AM Weather: Overcast Clouds (-0.48 °C)



Peak Hour: 05:00 PM - 06:00 PM Weather: Scattered Clouds (2 °C)





Turning Movement Count (2 . EGLINTON AVE W & RIDGEWAY DR)

Start Time	E Approach EGLINTON AVE W					S Approach RIDGEWAY DR					W Approach EGLINTON AVE W					Int. Total (15 min)	Int. Total (1 hr)
	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	UTurn W:W	Peds W:	Approach Total		
07:00:00	58	54	0	0	112	59	14	0	0	73	49	88	0	0	137	322	
07:15:00	74	49	0	1	123	25	26	0	0	51	53	130	0	1	183	357	
07:30:00	75	69	0	1	144	28	15	0	0	43	86	158	0	4	244	431	
07:45:00	97	107	0	1	204	39	32	0	0	71	109	183	0	0	292	567	1677
08:00:00	132	97	0	1	229	48	49	0	2	97	108	144	0	0	252	578	1933
08:15:00	118	101	0	0	219	43	45	0	0	88	113	191	0	0	304	611	2187
08:30:00	112	85	0	1	197	39	47	0	0	86	103	191	0	2	294	577	2333
08:45:00	117	104	0	0	221	43	48	0	1	91	124	158	0	1	282	594	2360
09:00:00	91	89	0	0	180	32	28	0	0	60	102	154	0	0	256	496	2278
09:15:00	75	48	0	0	123	37	20	0	0	57	62	142	0	3	204	384	2051
09:30:00	81	74	0	2	155	34	26	0	1	60	51	126	0	1	177	392	1866
09:45:00	64	52	1	0	117	26	22	0	0	48	36	118	0	0	154	319	1591
BREAK																	
16:00:00	161	58	0	0	219	111	94	0	3	205	48	122	0	2	170	594	
16:15:00	192	59	0	3	251	87	80	0	3	167	44	158	0	1	202	620	
16:30:00	167	63	0	1	230	135	110	0	3	245	55	156	0	3	211	686	
16:45:00	172	87	0	1	259	117	104	0	0	221	57	152	1	3	210	690	2590
17:00:00	185	79	0	1	264	153	109	0	6	262	55	184	0	1	239	765	2761
17:15:00	160	95	0	0	255	134	122	0	3	256	64	162	0	2	226	737	2878
17:30:00	179	61	0	1	240	142	108	0	0	250	51	181	0	4	232	722	2914
17:45:00	201	86	0	2	287	115	106	0	5	221	67	164	0	0	231	739	2963
18:00:00	177	71	0	0	248	120	96	0	3	216	60	151	0	1	211	675	2873
18:15:00	155	88	0	1	243	98	63	0	6	161	50	159	0	2	209	613	2749
18:30:00	140	52	0	0	192	69	61	0	5	130	56	125	0	0	181	503	2530
18:45:00	147	76	0	0	223	84	81	0	1	165	55	115	0	2	170	558	2349
Grand Total	3130	1804	1	17	4935	1818	1506	0	42	3324	1658	3612	1	33	5271	13530	-
Approach%	63.4%	36.6%	0%		-	54.7%	45.3%	0%		-	31.5%	68.5%	0%		-	-	-
Totals %	23.1%	13.3%	0%		36.5%	13.4%	11.1%	0%		24.6%	12.3%	26.7%	0%		39%	-	-
Heavy	74	30	0		-	18	20	0		-	20	48	0		-	-	-
Heavy %	2.4%	1.7%	0%		-	1%	1.3%	0%		-	1.2%	1.3%	0%		-	-	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	-	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	-	-



Peak Hour: 08:00 AM - 09:00 AM Weather: Overcast Clouds (-0.48 °C)

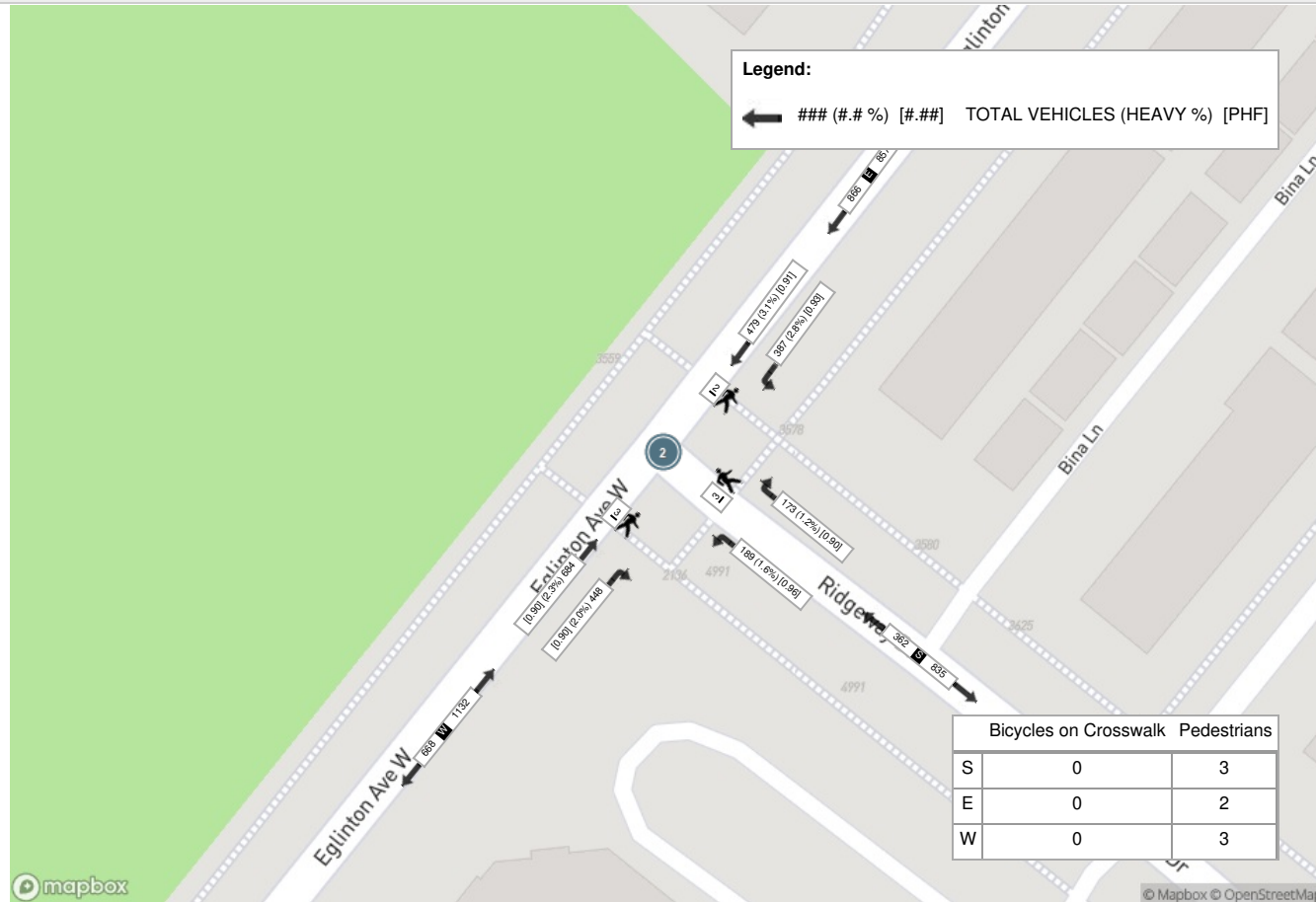
Start Time	E Approach EGLINTON AVE W					S Approach RIDGEWAY DR					W Approach EGLINTON AVE W					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
08:00:00	132	97	0	1	229	48	49	0	2	97	108	144	0	0	252	578
08:15:00	118	101	0	0	219	43	45	0	0	88	113	191	0	0	304	611
08:30:00	112	85	0	1	197	39	47	0	0	86	103	191	0	2	294	577
08:45:00	117	104	0	0	221	43	48	0	1	91	124	158	0	1	282	594
Grand Total	479	387	0	2	866	173	189	0	3	362	448	684	0	3	1132	2360
Approach%	55.3%	44.7%	0%		-	47.8%	52.2%	0%		-	39.6%	60.4%	0%		-	-
Totals %	20.3%	16.4%	0%		36.7%	7.3%	8%	0%		15.3%	19%	29%	0%		48%	-
PHF	0.91	0.93	0		0.95	0.9	0.96	0		0.93	0.9	0.9	0		0.93	-
Heavy	15	11	0		26	2	3	0		5	9	16	0		25	-
Heavy %	3.1%	2.8%	0%		3%	1.2%	1.6%	0%		1.4%	2%	2.3%	0%		2.2%	-
Lights	464	376	0		840	171	186	0		357	439	668	0		1107	-
Lights %	96.9%	97.2%	0%		97%	98.8%	98.4%	0%		98.6%	98%	97.7%	0%		97.8%	-
Single-Unit Trucks	4	6	0		10	1	1	0		2	4	6	0		10	-
Single-Unit Trucks %	0.8%	1.6%	0%		1.2%	0.6%	0.5%	0%		0.6%	0.9%	0.9%	0%		0.9%	-
Buses	9	3	0		12	0	2	0		2	3	8	0		11	-
Buses %	1.9%	0.8%	0%		1.4%	0%	1.1%	0%		0.6%	0.7%	1.2%	0%		1%	-
Articulated Trucks	2	2	0		4	1	0	0		1	2	2	0		4	-
Articulated Trucks %	0.4%	0.5%	0%		0.5%	0.6%	0%	0%		0.3%	0.4%	0.3%	0%		0.4%	-
Pedestrians	-	-	-	2	-	-	-	-	3	-	-	-	-	3	-	-
Pedestrians%	-	-	-	25%	-	-	-	-	37.5%	-	-	-	-	37.5%	-	-
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-



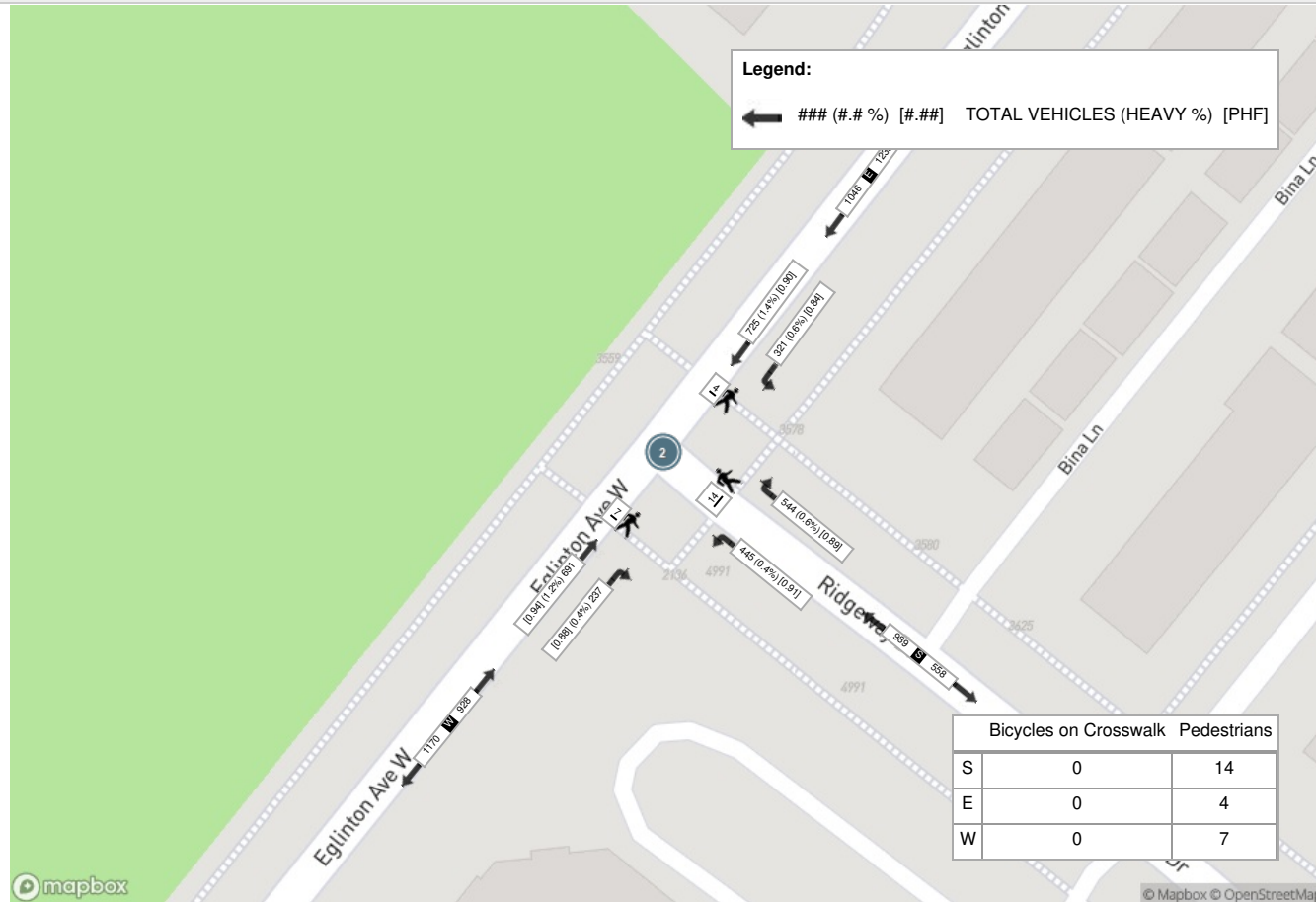
Peak Hour: 05:00 PM - 06:00 PM Weather: Scattered Clouds (2 °C)

Start Time	E Approach EGLINTON AVE W					S Approach RIDGEWAY DR					W Approach EGLINTON AVE W					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
17:00:00	185	79	0	1	264	153	109	0	6	262	55	184	0	1	239	765
17:15:00	160	95	0	0	255	134	122	0	3	256	64	162	0	2	226	737
17:30:00	179	61	0	1	240	142	108	0	0	250	51	181	0	4	232	722
17:45:00	201	86	0	2	287	115	106	0	5	221	67	164	0	0	231	739
Grand Total	725	321	0	4	1046	544	445	0	14	989	237	691	0	7	928	2963
Approach%	69.3%	30.7%	0%		-	55%	45%	0%		-	25.5%	74.5%	0%		-	-
Totals %	24.5%	10.8%	0%		35.3%	18.4%	15%	0%		33.4%	8%	23.3%	0%		31.3%	-
PHF	0.9	0.84	0		0.91	0.89	0.91	0		0.94	0.88	0.94	0		0.97	-
Heavy	10	2	0		12	3	2	0		5	1	8	0		9	-
Heavy %	1.4%	0.6%	0%		1.1%	0.6%	0.4%	0%		0.5%	0.4%	1.2%	0%		1%	-
Lights	715	319	0		1034	541	443	0		984	236	683	0		919	-
Lights %	98.6%	99.4%	0%		98.9%	99.4%	99.6%	0%		99.5%	99.6%	98.8%	0%		99%	-
Single-Unit Trucks	3	1	0		4	1	2	0		3	1	6	0		7	-
Single-Unit Trucks %	0.4%	0.3%	0%		0.4%	0.2%	0.4%	0%		0.3%	0.4%	0.9%	0%		0.8%	-
Buses	7	0	0		7	1	0	0		1	0	1	0		1	-
Buses %	1%	0%	0%		0.7%	0.2%	0%	0%		0.1%	0%	0.1%	0%		0.1%	-
Articulated Trucks	0	1	0		1	1	0	0		1	0	1	0		1	-
Articulated Trucks %	0%	0.3%	0%		0.1%	0.2%	0%	0%		0.1%	0%	0.1%	0%		0.1%	-
Pedestrians	-	-	-	4	-	-	-	-	14	-	-	-	-	7	-	-
Pedestrians%	-	-	-	16%	-	-	-	-	56%	-	-	-	-	28%	-	-
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-

Peak Hour: 08:00 AM - 09:00 AM Weather: Overcast Clouds (-0.48 °C)



Peak Hour: 05:00 PM - 06:00 PM Weather: Scattered Clouds (2 °C)





Turning Movement Count (3 . RIDGEWAY DR & PLATINUM DR & AQUINAS AVE)

Start Time	N Approach RIDGEWAY DR						E Approach AQUINAS AVE						S Approach RIDGEWAY DR						W Approach PLATINUM DR						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	4	98	1	0	0	103	2	0	1	0	0	3	3	76	2	0	0	81	2	0	0	0	0	2	189	
07:15:00	7	97	0	0	0	104	5	0	1	0	0	6	1	48	1	0	0	50	1	0	0	0	2	1	161	
07:30:00	9	149	4	0	1	162	7	0	6	0	2	13	1	42	0	0	0	43	5	0	0	0	6	5	223	
07:45:00	11	206	5	0	0	222	6	1	7	0	0	14	2	59	0	0	0	61	4	0	2	0	0	6	303	876
08:00:00	9	196	5	0	0	210	12	1	4	0	0	17	2	83	0	0	0	85	5	0	2	0	0	7	319	1006
08:15:00	21	183	13	0	0	217	10	2	5	0	0	17	4	83	0	0	0	87	10	1	1	0	0	12	333	1178
08:30:00	27	157	9	0	0	193	12	0	1	0	1	13	5	65	0	0	0	70	6	0	4	0	2	10	286	1241
08:45:00	16	195	15	0	0	226	20	3	12	0	0	35	4	72	0	0	0	76	15	1	2	0	1	18	355	1293
09:00:00	11	170	4	0	0	185	8	1	7	0	0	16	0	56	0	0	0	56	13	0	1	0	0	14	271	1245
09:15:00	5	96	4	0	0	105	3	2	4	0	1	9	1	46	0	0	0	47	4	0	2	0	1	6	167	1079
09:30:00	6	112	1	0	0	119	4	3	6	0	0	13	2	53	1	0	1	56	5	0	2	0	0	7	195	988
09:45:00	3	84	1	0	0	88	1	0	0	0	0	1	3	50	0	0	0	53	2	0	2	0	0	4	146	779
BREAK																										
16:00:00	15	83	4	0	0	102	11	1	3	0	1	15	9	200	2	0	2	211	19	3	2	0	3	24	352	
16:15:00	12	86	1	0	0	99	5	1	3	0	3	9	7	182	2	0	0	191	13	0	1	0	0	14	313	
16:30:00	10	106	3	0	0	119	3	0	4	0	2	7	7	275	1	0	0	283	10	1	5	0	2	16	425	
16:45:00	4	133	5	0	0	142	9	1	3	0	0	13	9	210	1	0	0	220	6	2	2	0	0	10	385	1475
17:00:00	3	119	1	0	0	123	8	2	6	0	0	16	9	289	0	0	0	298	17	3	5	0	1	25	462	1585
17:15:00	7	151	5	0	0	163	7	0	5	0	0	12	5	243	2	0	0	250	15	0	5	0	4	20	445	1717
17:30:00	5	107	1	0	0	113	10	0	7	0	2	17	7	250	6	0	0	263	10	0	2	0	0	12	405	1697
17:45:00	6	137	5	0	0	148	11	1	4	0	0	16	12	220	0	0	0	232	9	0	2	0	1	11	407	1719
18:00:00	8	111	5	0	2	124	17	1	4	0	3	22	11	222	0	0	1	233	11	0	2	0	4	13	392	1649
18:15:00	7	109	3	0	1	119	4	0	2	0	2	6	3	152	3	0	0	158	9	2	0	0	0	11	294	1498
18:30:00	4	90	5	0	0	99	6	1	3	0	1	10	6	142	2	0	0	150	15	0	2	0	2	17	276	1369
18:45:00	6	116	4	0	0	126	9	0	5	0	0	14	5	142	1	0	0	148	14	2	2	0	1	18	306	1268
Grand Total	216	3091	104	0	4	3411	190	21	103	0	18	314	118	3260	24	0	4	3402	220	15	48	0	30	283	7410	-
Approach%	6.3%	90.6%	3%	0%		-	60.5%	6.7%	32.8%	0%		-	3.5%	95.8%	0.7%	0%		-	77.7%	5.3%	17%	0%		-	-	-
Totals %	2.9%	41.7%	1.4%	0%		46%	2.6%	0.3%	1.4%	0%		4.2%	1.6%	44%	0.3%	0%		45.9%	3%	0.2%	0.6%	0%		3.8%	-	-
Heavy	6	29	1	0		-	3	0	2	0		-	2	34	0	0		-	4	0	2	0		-	-	-
Heavy %	2.8%	0.9%	1%	0%		-	1.6%	0%	1.9%	0%		-	1.7%	1%	0%	0%		-	1.8%	0%	4.2%	0%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-



Peak Hour: 08:00 AM - 09:00 AM Weather: Overcast Clouds (-0.48 °C)

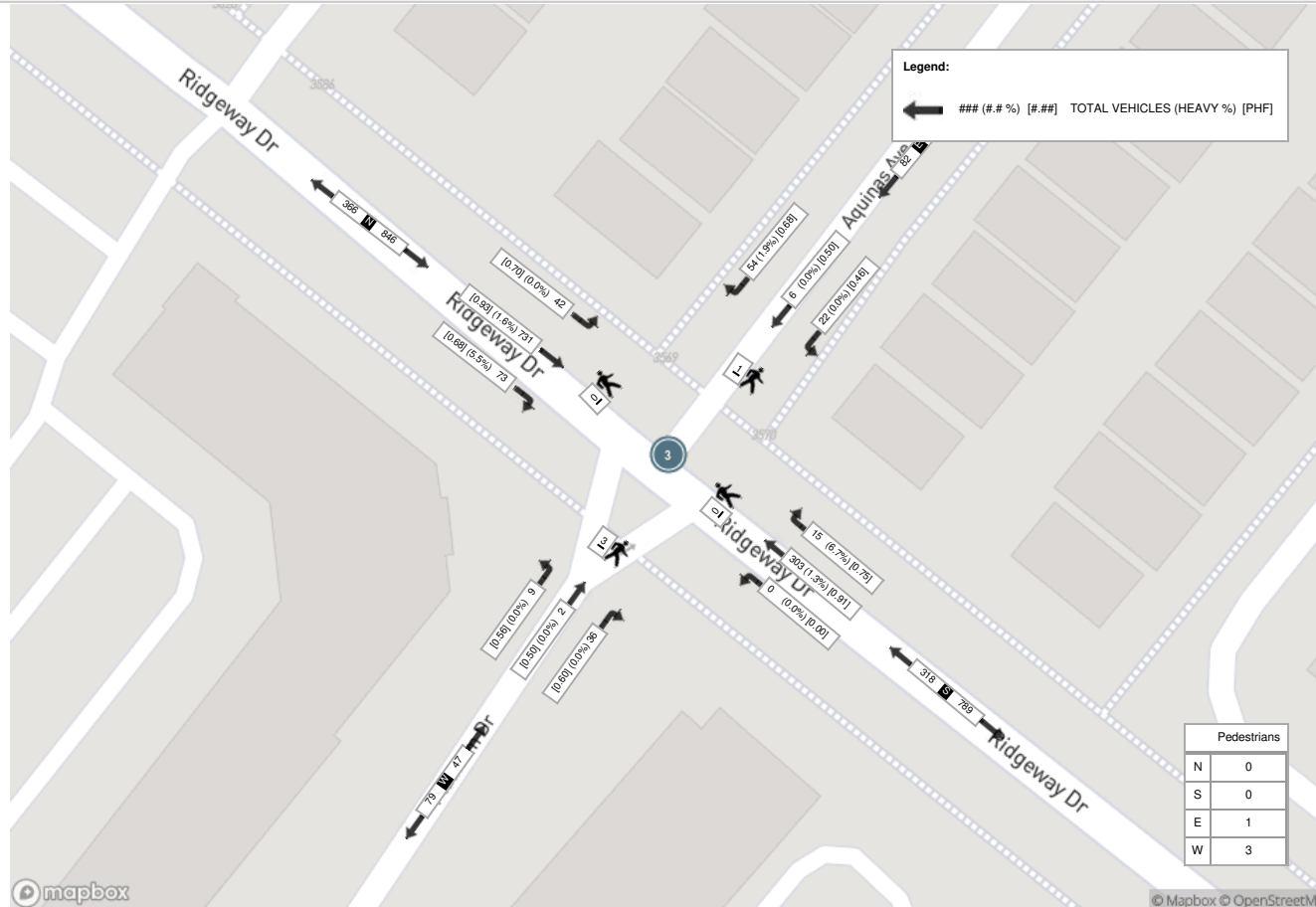
Start Time	N Approach RIDGEWAY DR						E Approach AQUINAS AVE						S Approach RIDGEWAY DR						W Approach PLATINUM DR						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:00:00	9	196	5	0	0	210	12	1	4	0	0	17	2	83	0	0	0	85	5	0	2	0	0	7	319
08:15:00	21	183	13	0	0	217	10	2	5	0	0	17	4	83	0	0	0	87	10	1	1	0	0	12	333
08:30:00	27	157	9	0	0	193	12	0	1	0	1	13	5	65	0	0	0	70	6	0	4	0	2	10	286
08:45:00	16	195	15	0	0	226	20	3	12	0	0	35	4	72	0	0	0	76	15	1	2	0	1	18	355
Grand Total	73	731	42	0	0	846	54	6	22	0	1	82	15	303	0	0	0	318	36	2	9	0	3	47	1293
Approach%	8.6%	86.4%	5%	0%		-	65.9%	7.3%	26.8%	0%		-	4.7%	95.3%	0%	0%		-	76.6%	4.3%	19.1%	0%		-	-
Totals %	5.6%	56.5%	3.2%	0%		65.4%	4.2%	0.5%	1.7%	0%		6.3%	1.2%	23.4%	0%	0%		24.6%	2.8%	0.2%	0.7%	0%		3.6%	-
PHF	0.68	0.93	0.7	0		0.94	0.68	0.5	0.46	0		0.59	0.75	0.91	0	0		0.91	0.6	0.5	0.56	0		0.65	-
Heavy	4	12	0	0		16	1	0	0	0		1	1	4	0	0		5	0	0	0	0		0	-
Heavy %	5.5%	1.6%	0%	0%		1.9%	1.9%	0%	0%	0%		1.2%	6.7%	1.3%	0%	0%		1.6%	0%	0%	0%	0%		0%	-
Lights	69	718	42	0		829	53	6	22	0		81	13	298	0	0		311	36	2	9	0		47	-
Lights %	94.5%	98.2%	100%	0%		98%	98.1%	100%	100%	0%		98.8%	86.7%	98.3%	0%	0%		97.8%	100%	100%	100%	0%		100%	-
Single-Unit Trucks	2	5	0	0		7	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	-
Single-Unit Trucks %	2.7%	0.7%	0%	0%		0.8%	0%	0%	0%	0%		0%	0%	0.7%	0%	0%		0.6%	0%	0%	0%	0%		0%	-
Buses	2	4	0	0		6	1	0	0	0		1	1	1	0	0		2	0	0	0	0		0	-
Buses %	2.7%	0.5%	0%	0%		0.7%	1.9%	0%	0%	0%		1.2%	6.7%	0.3%	0%	0%		0.6%	0%	0%	0%	0%		0%	-
Articulated Trucks	0	3	0	0		3	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	-
Articulated Trucks %	0%	0.4%	0%	0%		0.4%	0%	0%	0%	0%		0%	0%	0.3%	0%	0%		0.3%	0%	0%	0%	0%		0%	-
Bicycles on Road	0	1	0	0		1	0	0	0	0		0	1	1	0	0		2	0	0	0	0		0	-
Bicycles on Road %	0%	0.1%	0%	0%		0.1%	0%	0%	0%	0%		0%	6.7%	0.3%	0%	0%		0.6%	0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	-	-
Pedestrians%	-	-	-	-	0%	-	-	-	-	-	25%	-	-	-	-	-	0%	-	-	-	-	-	75%	-	-



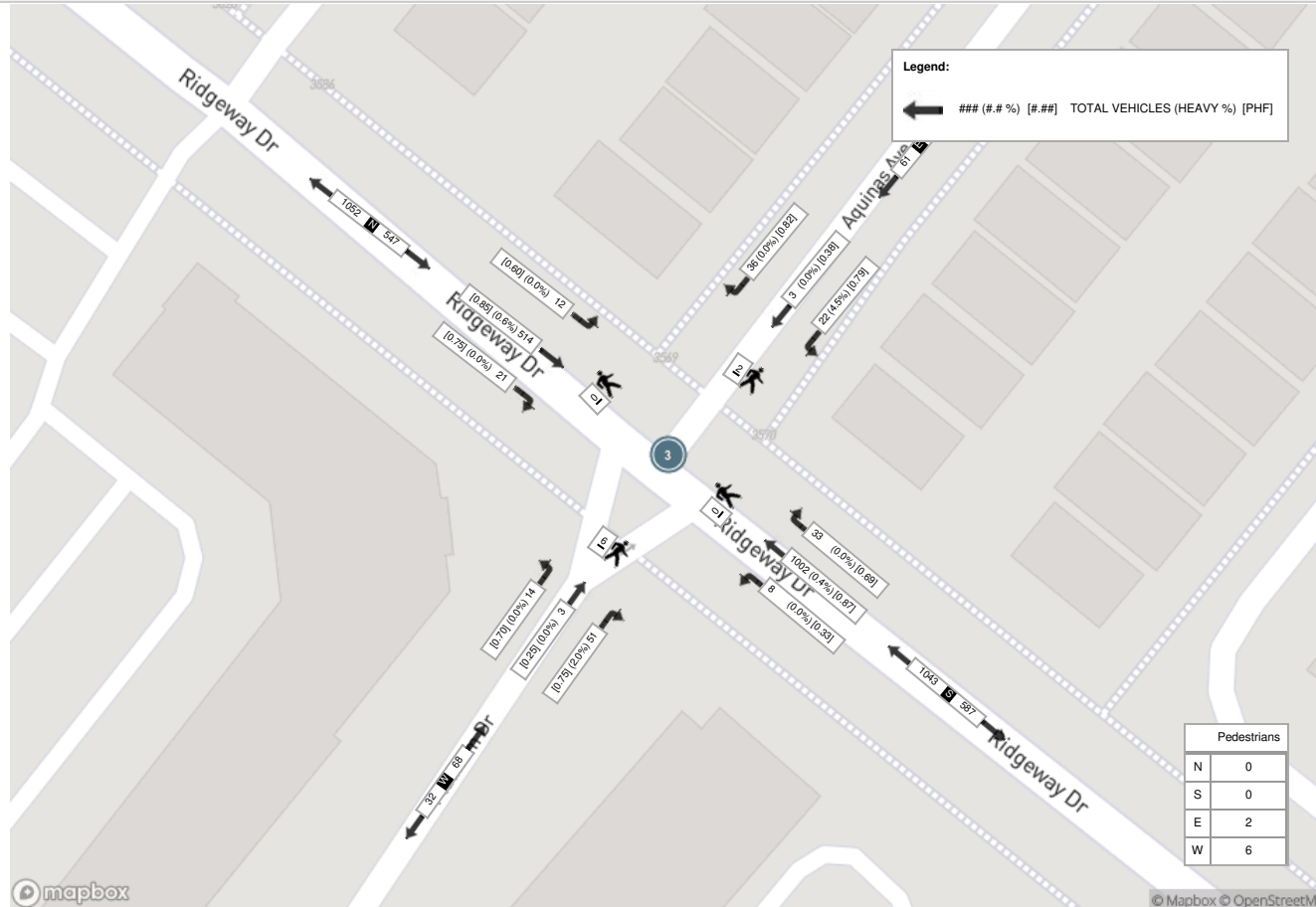
Peak Hour: 05:00 PM - 06:00 PM Weather: Scattered Clouds (2 °C)

Start Time	N Approach RIDGEWAY DR						E Approach AQUINAS AVE						S Approach RIDGEWAY DR						W Approach PLATINUM DR						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	
17:00:00	3	119	1	0	0	123	8	2	6	0	0	16	9	289	0	0	0	298	17	3	5	0	1	25	462
17:15:00	7	151	5	0	0	163	7	0	5	0	0	12	5	243	2	0	0	250	15	0	5	0	4	20	445
17:30:00	5	107	1	0	0	113	10	0	7	0	2	17	7	250	6	0	0	263	10	0	2	0	0	12	405
17:45:00	6	137	5	0	0	148	11	1	4	0	0	16	12	220	0	0	0	232	9	0	2	0	1	11	407
Grand Total	21	514	12	0	0	547	36	3	22	0	2	61	33	1002	8	0	0	1043	51	3	14	0	6	68	1719
Approach%	3.8%	94%	2.2%	0%		-	59%	4.9%	36.1%	0%		-	3.2%	96.1%	0.8%	0%		-	75%	4.4%	20.6%	0%		-	-
Totals %	1.2%	29.9%	0.7%	0%		31.8%	2.1%	0.2%	1.3%	0%		3.5%	1.9%	58.3%	0.5%	0%		60.7%	3%	0.2%	0.8%	0%		4%	-
PHF	0.75	0.85	0.6	0		0.84	0.82	0.38	0.79	0		0.9	0.69	0.87	0.33	0		0.88	0.75	0.25	0.7	0		0.68	-
Heavy	0	3	0	0		3	0	0	1	0		1	0	4	0	0		4	1	0	0	0		1	-
Heavy %	0%	0.6%	0%	0%		0.5%	0%	0%	4.5%	0%		1.6%	0%	0.4%	0%	0%		0.4%	2%	0%	0%	0%		1.5%	-
Lights	21	511	12	0		544	36	3	21	0		60	33	998	8	0		1039	50	3	14	0		67	-
Lights %	100%	99.4%	100%	0%		99.5%	100%	100%	95.5%	0%		98.4%	100%	99.6%	100%	0%		99.6%	98%	100%	100%	0%		98.5%	-
Single-Unit Trucks	0	2	0	0		2	0	0	1	0		1	0	2	0	0		2	1	0	0	0		1	-
Single-Unit Trucks %	0%	0.4%	0%	0%		0.4%	0%	0%	4.5%	0%		1.6%	0%	0.2%	0%	0%		0.2%	2%	0%	0%	0%		1.5%	-
Buses	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	-
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0.1%	0%	0%		0.1%	0%	0%	0%	0%		0%	-
Articulated Trucks	0	1	0	0		1	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	-
Articulated Trucks %	0%	0.2%	0%	0%		0.2%	0%	0%	0%	0%		0%	0%	0.1%	0%	0%		0.1%	0%	0%	0%	0%		0%	-
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	-
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	6	-	-
Pedestrians%	-	-	-	-	0%	-	-	-	-	-	25%	-	-	-	-	-	0%	-	-	-	-	-	75%	-	-

Peak Hour: 08:00 AM - 09:00 AM Weather: Overcast Clouds (-0.48 °C)



Peak Hour: 05:00 PM - 06:00 PM Weather: Scattered Clouds (2 °C)





Turning Movement Count (4 . RIDGEWAY DR & SOUTHWICK ST)

Start Time	N Approach RIDGEWAY DR						E Approach SOUTHWICK ST						S Approach RIDGEWAY DR						W Approach WEST DRIVEWAY						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	1	99	0	0	0	100	0	0	1	0	0	1	0	76	1	0	0	77	0	0	1	0	0	1	179		
07:15:00	1	102	0	0	0	103	0	0	2	0	0	2	0	50	2	1	0	53	0	0	1	0	1	1	159		
07:30:00	0	152	0	0	0	152	1	0	4	0	3	5	1	43	4	0	0	48	3	0	1	0	2	4	209		
07:45:00	4	211	1	0	0	216	1	1	4	0	0	6	0	63	5	1	0	69	2	1	0	0	1	3	294	841	
08:00:00	0	204	1	0	0	205	6	0	6	0	0	12	2	94	0	0	0	96	1	0	0	0	1	1	314	976	
08:15:00	1	211	0	0	0	212	5	3	3	0	0	11	4	87	3	0	0	94	2	0	0	0	0	2	319	1136	
08:30:00	3	188	0	0	0	191	3	0	3	0	1	6	1	77	2	0	0	80	2	1	1	0	2	4	281	1208	
08:45:00	7	217	1	0	0	225	1	1	5	0	0	7	1	88	6	0	0	95	2	0	1	0	1	3	330	1244	
09:00:00	7	184	0	0	0	191	1	0	2	0	1	3	1	60	4	0	0	65	0	1	3	0	0	4	263	1193	
09:15:00	6	102	1	0	0	109	0	0	0	0	0	0	1	48	2	0	1	51	1	1	1	0	1	3	163	1037	
09:30:00	8	116	1	0	0	125	1	0	1	0	0	2	1	54	3	0	0	58	5	0	4	0	1	9	194	950	
09:45:00	7	83	0	0	0	90	0	0	2	0	0	2	1	49	4	0	1	54	1	0	2	0	0	3	149	769	
BREAK																											
16:00:00	13	91	2	0	0	106	0	0	2	0	0	2	4	194	14	0	0	212	8	1	9	0	5	18	338		
16:15:00	9	92	0	0	0	101	2	0	0	0	4	2	3	169	19	1	0	192	7	2	4	0	2	13	308		
16:30:00	10	108	0	0	0	118	2	0	1	0	4	3	4	254	21	0	0	279	8	2	3	0	3	13	413		
16:45:00	12	133	0	0	0	145	0	1	2	0	1	3	2	203	20	0	0	225	8	2	3	0	1	13	386	1445	
17:00:00	15	119	0	0	0	134	1	1	1	0	1	3	4	270	19	1	0	294	2	0	8	0	1	10	441	1548	
17:15:00	8	151	0	0	0	159	1	2	0	0	0	3	4	241	13	0	0	258	13	0	7	0	4	20	440	1680	
17:30:00	5	105	2	0	0	112	0	0	2	0	2	2	9	243	9	0	0	261	5	1	5	0	0	11	386	1653	
17:45:00	11	140	1	0	0	152	0	0	1	0	0	1	5	223	15	0	0	243	8	1	9	0	1	18	414	1681	
18:00:00	16	114	0	0	0	130	3	2	0	0	3	5	6	210	22	0	0	238	8	3	6	0	4	17	390	1630	
18:15:00	30	107	0	0	0	137	1	2	0	0	1	3	1	145	13	0	0	159	11	4	8	0	0	23	322	1512	
18:30:00	20	87	1	0	0	108	0	1	2	0	1	3	3	125	15	0	0	143	11	2	4	0	2	17	271	1397	
18:45:00	14	115	0	0	0	129	2	0	1	0	0	3	3	151	11	0	0	165	9	1	11	0	1	21	318	1301	
Grand Total	208	3231	11	0	0	3450	31	14	45	0	22	90	61	3217	227	4	2	3509	117	23	92	0	34	232	7281	-	
Approach%	6%	93.7%	0.3%	0%		-	34.4%	15.6%	50%	0%		-	1.7%	91.7%	6.5%	0.1%		-	50.4%	9.9%	39.7%	0%		-	-	-	
Totals %	2.9%	44.4%	0.2%	0%		47.4%	0.4%	0.2%	0.6%	0%		1.2%	0.8%	44.2%	3.1%	0.1%		48.2%	1.6%	0.3%	1.3%	0%		3.2%	-	-	
Heavy	1	43	1	0		-	0	0	0	0		-	1	38	2	0		-	0	0	0	0		-	-	-	
Heavy %	0.5%	1.3%	9.1%	0%		-	0%	0%	0%	0%		-	1.6%	1.2%	0.9%	0%		-	0%	0%	0%	0%		-	-	-	
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	



Peak Hour: 08:00 AM - 09:00 AM Weather: Overcast Clouds (-0.48 °C)

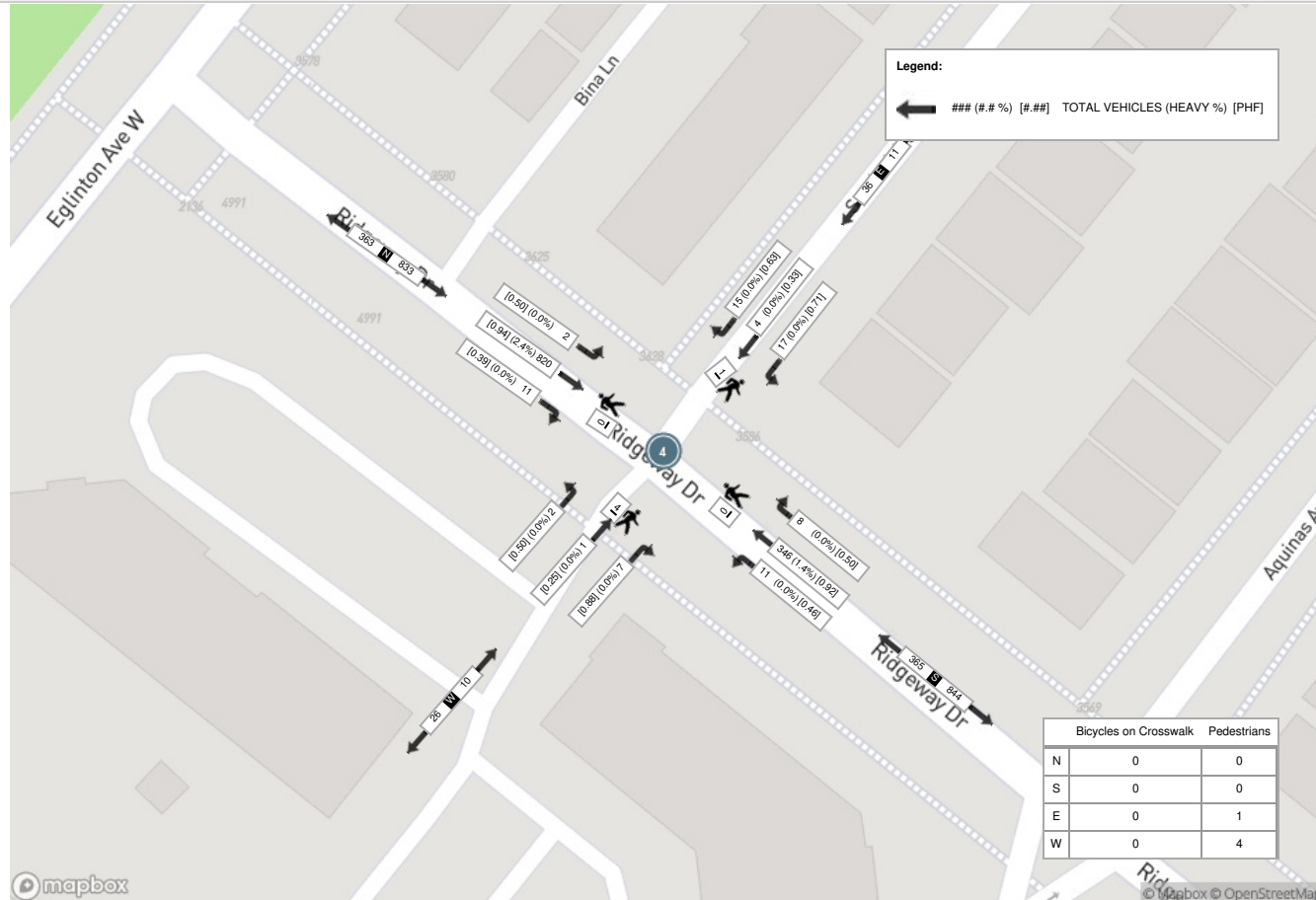
Start Time	N Approach RIDGEWAY DR						E Approach SOUTHWICK ST						S Approach RIDGEWAY DR						W Approach WEST DRIVEWAY						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:00:00	0	204	1	0	0	205	6	0	6	0	0	12	2	94	0	0	0	96	1	0	0	0	1	1	314
08:15:00	1	211	0	0	0	212	5	3	3	0	0	11	4	87	3	0	0	94	2	0	0	0	0	2	319
08:30:00	3	188	0	0	0	191	3	0	3	0	1	6	1	77	2	0	0	80	2	1	1	0	2	4	281
08:45:00	7	217	1	0	0	225	1	1	5	0	0	7	1	88	6	0	0	95	2	0	1	0	1	3	330
Grand Total	11	820	2	0	0	833	15	4	17	0	1	36	8	346	11	0	0	365	7	1	2	0	4	10	1244
Approach%	1.3%	98.4%	0.2%	0%		-	41.7%	11.1%	47.2%	0%		-	2.2%	94.8%	3%	0%		-	70%	10%	20%	0%		-	-
Totals %	0.9%	65.9%	0.2%	0%		67%	1.2%	0.3%	1.4%	0%		2.9%	0.6%	27.8%	0.9%	0%		29.3%	0.6%	0.1%	0.2%	0%		0.8%	-
PHF	0.39	0.94	0.5	0		0.93	0.63	0.33	0.71	0		0.75	0.5	0.92	0.46	0		0.95	0.88	0.25	0.5	0		0.63	-
Heavy	0	20	0	0		20	0	0	0	0		0	0	5	0	0		5	0	0	0	0		0	-
Heavy %	0%	2.4%	0%	0%		2.4%	0%	0%	0%	0%		0%	0%	1.4%	0%	0%		1.4%	0%	0%	0%	0%		0%	-
Lights	11	800	2	0		813	15	4	17	0		36	8	341	11	0		360	7	1	2	0		10	-
Lights %	100%	97.6%	100%	0%		97.6%	100%	100%	100%	0%		100%	100%	98.6%	100%	0%		98.6%	100%	100%	100%	0%		100%	-
Single-Unit Trucks	0	10	0	0		10	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	-
Single-Unit Trucks %	0%	1.2%	0%	0%		1.2%	0%	0%	0%	0%		0%	0%	0.6%	0%	0%		0.5%	0%	0%	0%	0%		0%	-
Buses	0	6	0	0		6	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	-
Buses %	0%	0.7%	0%	0%		0.7%	0%	0%	0%	0%		0%	0%	0.6%	0%	0%		0.5%	0%	0%	0%	0%		0%	-
Articulated Trucks	0	4	0	0		4	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	-
Articulated Trucks %	0%	0.5%	0%	0%		0.5%	0%	0%	0%	0%		0%	0%	0.3%	0%	0%		0.3%	0%	0%	0%	0%		0%	-
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	-
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	4	-	-
Pedestrians%	-	-	-	-	0%	-	-	-	-	-	20%	-	-	-	-	-	0%	-	-	-	-	-	80%	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-



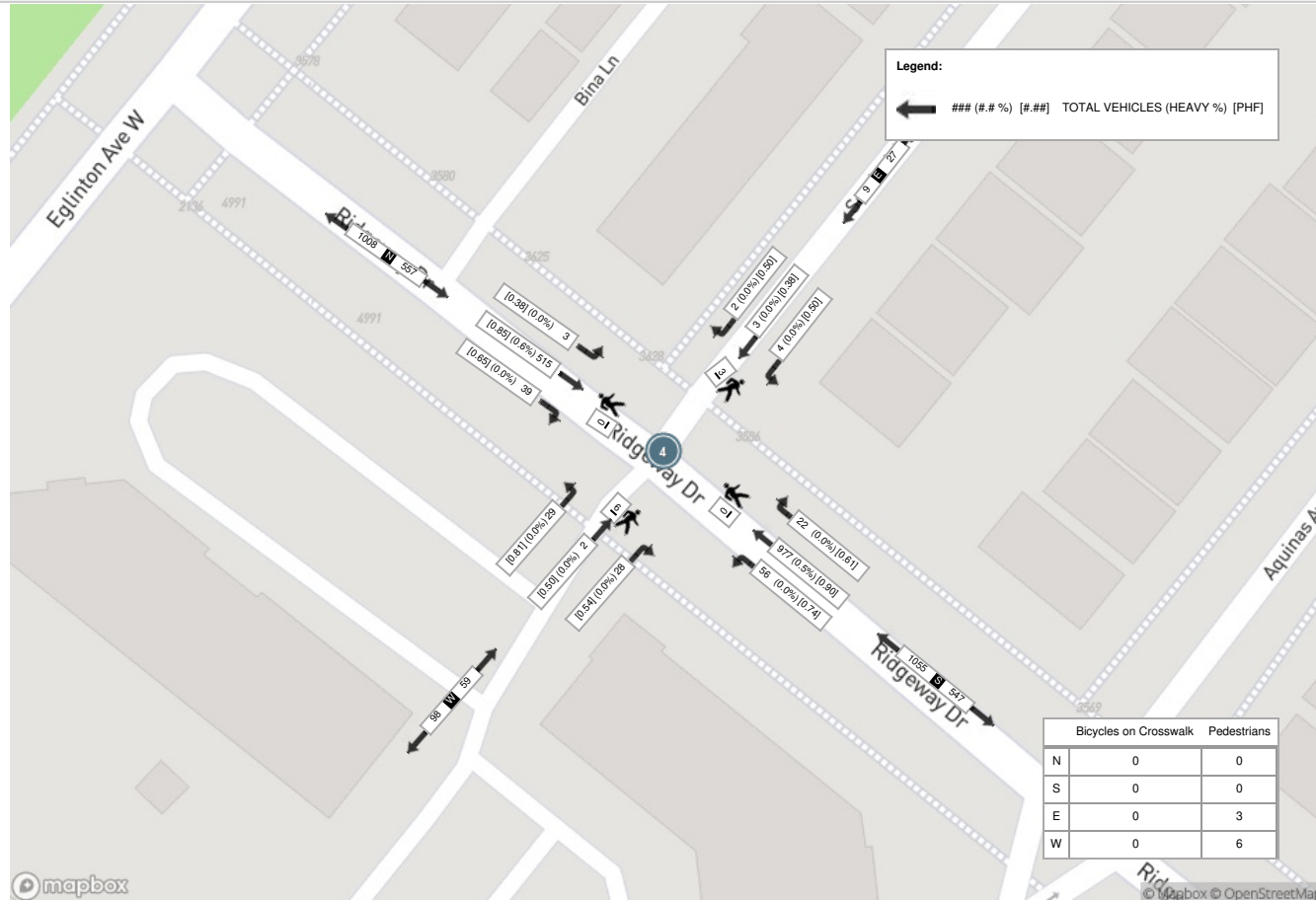
Peak Hour: 05:00 PM - 06:00 PM Weather: Scattered Clouds (2 °C)

Start Time	N Approach RIDGEWAY DR						E Approach SOUTHWICK ST						S Approach RIDGEWAY DR						W Approach WEST DRIVEWAY						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	
17:00:00	15	119	0	0	0	134	1	1	1	0	1	3	4	270	19	1	0	294	2	0	8	0	1	10	441
17:15:00	8	151	0	0	0	159	1	2	0	0	0	3	4	241	13	0	0	258	13	0	7	0	4	20	440
17:30:00	5	105	2	0	0	112	0	0	2	0	2	2	9	243	9	0	0	261	5	1	5	0	0	11	386
17:45:00	11	140	1	0	0	152	0	0	1	0	0	1	5	223	15	0	0	243	8	1	9	0	1	18	414
Grand Total	39	515	3	0	0	557	2	3	4	0	3	9	22	977	56	1	0	1056	28	2	29	0	6	59	1681
Approach%	7%	92.5%	0.5%	0%		-	22.2%	33.3%	44.4%	0%		-	2.1%	92.5%	5.3%	0.1%		-	47.5%	3.4%	49.2%	0%		-	-
Totals %	2.3%	30.6%	0.2%	0%		33.1%	0.1%	0.2%	0.2%	0%		0.5%	1.3%	58.1%	3.3%	0.1%		62.8%	1.7%	0.1%	1.7%	0%		3.5%	-
PHF	0.65	0.85	0.38	0		0.88	0.5	0.38	0.5	0		0.75	0.61	0.9	0.74	0.25		0.9	0.54	0.5	0.81	0		0.74	-
Heavy	0	3	0	0		3	0	0	0	0		0	0	5	0	0		5	0	0	0	0		0	-
Heavy %	0%	0.6%	0%	0%		0.5%	0%	0%	0%	0%		0%	0%	0.5%	0%	0%		0.5%	0%	0%	0%	0%		0%	-
Lights	39	512	3	0		554	2	3	4	0		9	22	972	56	1		1051	28	2	29	0		59	-
Lights %	100%	99.4%	100%	0%		99.5%	100%	100%	100%	0%		100%	100%	99.5%	100%	100%		99.5%	100%	100%	100%	0%		100%	-
Single-Unit Trucks	0	2	0	0		2	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	-
Single-Unit Trucks %	0%	0.4%	0%	0%		0.4%	0%	0%	0%	0%		0%	0%	0.3%	0%	0%		0.3%	0%	0%	0%	0%		0%	-
Buses	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	-
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0.1%	0%	0%		0.1%	0%	0%	0%	0%		0%	-
Articulated Trucks	0	1	0	0		1	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	-
Articulated Trucks %	0%	0.2%	0%	0%		0.2%	0%	0%	0%	0%		0%	0%	0.1%	0%	0%		0.1%	0%	0%	0%	0%		0%	-
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	-
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	6	-	-
Pedestrians%	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	0%	-	-	-	-	-	66.7%	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
Bicycles on Crosswalk%	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-

Peak Hour: 08:00 AM - 09:00 AM Weather: Overcast Clouds (-0.48 °C)



Peak Hour: 05:00 PM - 06:00 PM Weather: Scattered Clouds (2 °C)



Generic ASC		5714				EGLINTON AVENUE W W @ Ridgeway Drive			
Phase - Parameter 1-16	Units	1	2	3	4	5	6	7	8
Walk	Sec	0	10	0	10	0	0	0	0
Ped Clear	Sec	0	19	0	18	0	0	0	0
Min Green	Sec	7	10	0	10	0	0	0	0
Passage	Sec	2.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0
Maximum 1	Sec	10	20	0	35	0	0	0	0
Maximum 2	Sec	10	20	0	35	0	0	0	0
Yellow Change	Sec	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
Red Clearance	Sec	0.0	2.5	0.0	2.0	0.0	0.0	0.0	0.0
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	other	phaseNotOn	other	other	other	other
[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 13:Actuated Rest In Walk		0:Enabled Phase 5:Non Lock Detector Memory			
[P2] Ring	Ring	1	1	0	1	0	0	0	0
[P2] Concurrency	Phase (.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Phase - Parameter 1-16	Units	9	10	11	12	13	14	15	16
Walk	Sec	0	0	0	0	0	0	0	0
Ped Clear	Sec	0	0	0	0	0	0	0	0
Min Green	Sec	0	0	1	1	1	1	1	1
Passage	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum 1	Sec	0	0	0	0	0	0	0	0
Maximum 2	Sec	0	0	0	0	0	0	0	0
Yellow Change	Sec	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	other	other	other	other	other	other	other	other
[P2] Options	Bit								
[P2] Ring	Ring	0	0	0	0	0	0	0	0
[P2] Concurrency	Phase (.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Coordination - Pattern 1-16	Units	1	2	3	4	5	6	7	8
Cycle Time	Sec	160	0	160	0	0	0	0	0
Offset	Sec	124	0	108	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
Coordination - Pattern 1-16	Units	9	10	11	12	13	14	15	
Cycle Time	Sec	0	0	0	0	0	0	0	
Offset	Sec	0	0	0	0	0	0	0	
Split	Split	9	10	11	12	13	14	15	
Sequence	Sequence	1	1	1	1	1	1	1	
Coordination - Splits	Units	Phase 1	Phase 2	Phase 4					
Split 1 - Mode	Enum	none	none	none					
Split 1 - Time	Sec	38	87	35					
Split 1 - Coord	Enum	False	True	False					
Split 2 - Mode	Enum	none	none	none					
Split 2 - Time	Sec	0	0	0					
Split 2 - Coord	Enum	False	True	False					
Split 3 - Mode	Enum	none	none	pedestrianRecall					
Split 3 - Time	Sec	18	84	58					
Split 3 - Coord	Enum	False	True	False					
Time Base - Schedule 1-16	Units	1	2	3	4	5	6	7	8
Month	Bit	JFMMAMJJASOND	JFMMAMJJASOND	JFMMAMJJASOND	J-----	-F-----	-A-----	-M-----	-J-----
Day of Week	Bit	-MTWTFT-	S-----	-----S	-M----	-JM----	-----F-	-JM----	-----F-
Day of Month	Bit	1234567890123456789012345678901	1234567890123456789012345678901	1234567890123456789012345678901	-3-----1-----	-----5-----	-----3-----	-----1-----	
Day Plan	Number	1	3	2	3	3	3	3	3
Time Base - Schedule 1-16	Units	9	10	11	12	13	14	15	16
Month	Bit	-----A----	-----S----	-----O----	-----D-----	-----D-----	-----D-----	-----S----	-----
Day of Week	Bit	-M-----	-M-----	-M-----	SMTWTFS	SMTWTFS	SMTWTFS	-----F-	SMTWTFS
Day of Month	Bit	1-----5-----	-----0-----	-----0-----	-----7-----	-----8-----	-----4-----	-----0-----	
Day Plan	Number	3	3	3	3	3	3	3	0
Time Base - Day Plans	Units	Evt 1	Evt 2	Evt 3	Evt 4	Evt 5	Evt 6		
Plan 1 Hour	Hour	0	7	9	15	19	3		
Plan 1 Minute	Min	0	0	30	0	30	0		
Plan 1 Action	Number	8	1	8	3	8	7		
Plan 2 Hour	Hour	0	3	0	0	0	0		
Plan 2 Minute	Min	0	0	0	0	0	0		
Plan 2 Action	Number	8	7	0	0	0	0		
Plan 3 Hour	Hour	0	3	0	0	0	0		
Plan 3 Minute	Min	0	0	0	0	0	0		
Plan 3 Action	Number	8	7	0	0	0	0		
Time Base - Action 1-16	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 1-16	Units	9	10						
Pattern	Enum	Pattern 9	Pattern 10						
Aux. Functions	Bit								
Spec. Functions	Bit								

Phase - Parameter 1-16	Units	1	2	3	4
Walk	Sec	0	10	0	10
Ped Clear	Sec	0	13	0	16
Min Green	Sec	0	10	0	10
Passage	Sec	0.0	3.0	0.0	3.0
Maximum 1	Sec	0	30	0	30
Maximum 2	Sec	0	30	0	30
Yellow Change	Sec	3.0	4.0	3.0	3.5
Red Clearance	Sec	0.0	2.0	0.0	2.5
Red Revert	Sec	0.0	0.0	0.0	0.0
Added Initial	Sec	0.0	0.0	0.0	0.0
Max Initial	Sec	0	0	0	0
Time Before Reduction	Sec	0	0	0	0
Cars Before Reduction	Veh	0	0	0	0
Time To Reduce	Sec	0	0	0	0
Reduce By	Sec	0.0	0.0	0.0	0.0
Min Gap	Sec	0.0	0.0	0.0	0.0
Dynamic Max Limit	Sec	0	0	0	0
Dynamic Max Step	Sec	0.0	0.0	0.0	0.0
[P2] Start Up	Enum	other	redClear	other	phaseNotOn
[P2] Options	Bit		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	0	1	0	1
[P2] Concurrency	Phase (,)	()	(6)	()	(8)
Phase - Parameter 1-16	Units	9	10	11	12
Walk	Sec	0	0	0	0
Ped Clear	Sec	0	0	0	0
Min Green	Sec	0	0	1	1
Passage	Sec	0.0	0.0	0.0	0.0
Maximum 1	Sec	0	0	0	0
Maximum 2	Sec	0	0	0	0
Yellow Change	Sec	3.0	3.0	3.0	3.0
Red Clearance	Sec	0.0	0.0	0.0	0.0
Red Revert	Sec	0.0	0.0	0.0	0.0
Added Initial	Sec	0.0	0.0	0.0	0.0

Max Initial	Sec	0	0	0	0
Time Before Reduction	Sec	0	0	0	0
Cars Before Reduction	Veh	0	0	0	0
Time To Reduce	Sec	0	0	0	0
Reduce By	Sec	0.0	0.0	0.0	0.0
Min Gap	Sec	0.0	0.0	0.0	0.0
Dynamic Max Limit	Sec	0	0	0	0
Dynamic Max Step	Sec	0.0	0.0	0.0	0.0
[P2] Start Up	Enum	other	other	other	other
[P2] Options	Bit				
[P2] Ring	Ring	0	0	0	0
[P2] Concurrency	Phase (,)	()	()	()	()
Detector - Veh Parameter 1-16	Units	4	8		
Options	Bit	4:Passage 7:Call	4:Passage 7:Call		
Call Phase	Phase	4	8		
Switch Phase	Phase	0	0		
Delay	Sec	0.0	0.0		
Extend	Sec	0.0	0.0		
Queue Limit	Sec	0	0		
No Activity	Min	0	0		
Max Presence	Min	60	60		
Erratic Counts	Counts/Min	0	0		
Fail Time	Sec	255	255		
Detector - Ped Parameter 1-8	Units	2	4	6	8
Call Phase	Phase	2	4	6	8
No Activity	Min	0	0	0	0
Max Presence	Min	0	1	0	1
Erratic Counts	Counts/Min	0	0	0	0
Unit - Parameter	Units	Value			
Start Up Flash	Sec	0			
Auto Ped Clear	Enum	enable			
Back Up Time	Sec	300			
Red Revert	Sec	0.0			
Coordination - Parameter	Units	Value			
Operational Mode	Enum	Automatic			
Correction Mode	Enum	shortway			
Maximum Mode	Enum	maxInhibit			

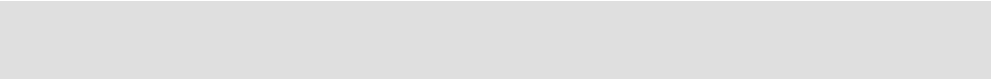
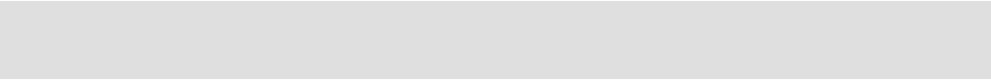
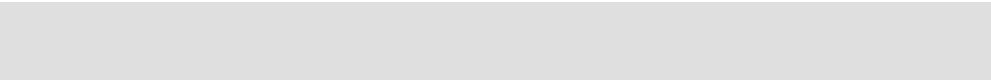
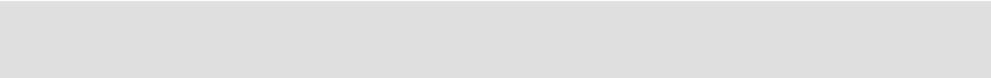
Force Mode	Enum	other			
Coordination - Pattern 1-16	Units	1	2	3	4
Cycle Time	Sec	80	0	80	0
Offset	Sec	34	0	78	0
Split	Split	1	2	3	4
Sequence	Sequence	1	1	1	1
Coordination - Pattern 1-16	Units	9	10	11	12
Cycle Time	Sec	0	0	0	0
Offset	Sec	0	0	0	0
Split	Split	9	10	11	12
Sequence	Sequence	1	1	1	1
Coordination - Splits	Units	Phase 2	Phase 4	Phase 6	Phase 8
Split 1 - Mode	Enum	none	none	none	none
Split 1 - Time	Sec	40	40	40	40
Split 1 - Coord	Enum	True	False	True	False
Split 2 - Mode	Enum	none	none	none	none
Split 2 - Time	Sec	0	0	0	0
Split 2 - Coord	Enum	True	False	True	False
Split 3 - Mode	Enum	none	none	none	none
Split 3 - Time	Sec	40	40	40	40
Split 3 - Coord	Enum	True	False	True	False
Time Base - Parameter	Units	Value			
Daylight Saving	Enum	enableUSDST			
Standard Time Zone	Sec	-18000			
Pattern Sync	Sec	0			
Time Base - Schedule 1-16	Units	1	2	3	4
Month	Bit	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	J-----
Day of Week	Bit	-MTWTF-	S-----	-----S	-M----
Day of Month	Bit	1234567890123456789012345678901	1234567890123456789012345678901	1234567890123456789012345678901	--3----- - -
Day Plan	Number	1	3	2	3
Time Base - Schedule 1-16	Units	9	10	11	12
Month	Bit	-----A---	-----S--	-----O--	-----D
Day of Week	Bit	-M----	-M----	-M----	--T---
Day of Month	Bit	1-----5-----0-----7---	- -	- -	- -
Day Plan	Number	3	3	3	3

Time Base - Day Plans	Units	Evt 1	Evt 2	Evt 3	Evt 4
Plan 1 Hour	Hour	0	7	9	15
Plan 1 Minute	Min	0	0	30	0
Plan 1 Action	Number	8	1	8	3
Plan 2 Hour	Hour	0	0	0	0
Plan 2 Minute	Min	0	0	0	0
Plan 2 Action	Number	8	0	0	0
Plan 3 Hour	Hour	0	0	0	0
Plan 3 Minute	Min	0	0	0	0
Plan 3 Action	Number	8	0	0	0
Time Base - Action 1-16	Units	1	2	3	4
Pattern	Enum	Pattern 1	Pattern 2	Pattern 3	Pattern 4
Aux. Functions	Bit				
Spec. Functions	Bit				
Time Base - Action 1-16	Units	9	10		
Pattern	Enum	Pattern 9	Pattern 10		
Aux. Functions	Bit				
Spec. Functions	Bit				
Time Base - Daylight Saving	Units	Value			
Begin Month	Enum	march			
Begin Occurrence	Enum	second			
Begin DOW	Enum	sunday			
Begin DOM	Date	1			
Begin Seconds	Sec	7200			
End Month	Enum	november			
End Occurrence	Enum	first			
End DOW	Enum	sunday			
End DOM	Date	1			
End Seconds	Sec	7200			
Adjustment	Sec	3600			
Channel - Parameter 1-16	Units	2	4	6	8
Control Source	Phase or Overlap	2	4	6	8
Control Type	Enum	phaseVehicle	phaseVehicle	phaseVehicle	phaseVehicle
Flash	Bit	2:Flash Red	2:Flash Red 3:Flash Alternate Half Hertz	2:Flash Red	2:Flash Red 3:Flash Alternate Half Hertz
Dimming	Bit				

5	6	7	8
0	10	0	10
0	13	0	16
0	10	0	10
0.0	3.0	0.0	3.0
0	30	0	30
0	30	0	30
3.0	4.0	3.0	3.5
0.0	2.0	0.0	2.5
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0	0	0	0
0.0	0.0	0.0	0.0
other	redClear	other	phaseNotOn
	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
0	2	0	2
()	(2)	()	(4)
13	14	15	16
0	0	0	0
0	0	0	0
1	1	1	1
0.0	0.0	0.0	0.0
0	0	0	0
0	0	0	0
3.0	3.0	3.0	3.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0	0	0	0
0.0	0.0	0.0	0.0
other	other	other	other

0	0	0	0
()	()	()	()



5	6	7	8
---	---	---	---

0	0	0	0
0	0	0	0
5	6	7	8
1	1	1	1

13	14	15
----	----	----

0	0	0
0	0	0
13	14	15
1	1	1

--

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5	6	7	8
---	---	---	---

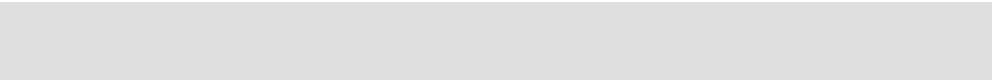
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-M----	----F-	-M----	----F-
-----1-----	-----5-----	-----3-----	1-----
-	-	-	-
3	3	3	3

13	14	15	16
----	----	----	----

-----D	-----D	-----S---	-----
-M----	--W---	----F-	SMTWTFS
-----6-----	-----8-----	-----	-----
-	-	0-	-
3	3	3	0

Evt 5	Evt 6
19	3
30	0
8	7
0	3
0	0
0	7
0	3
0	0
0	7

5	6	7	8
Pattern 5	Pattern 6	Free	Free



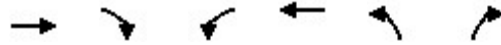
9	10	11	12
2	4	6	8
phasePedestrian	phasePedestrian	phasePedestrian	phasePedestrian

Appendix B – Existing Traffic Level of Service Calculations

Queues

3: Ridgeway Dr & Eglinton Ave W

12-21-2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	735	482	407	504	203	186
Act Effct Green (s)	81.4	81.4	102.6	99.6	20.5	81.4
Actuated g/C Ratio	0.62	0.62	0.78	0.75	0.16	0.62
v/c Ratio	0.34	0.47	0.67	0.19	0.74	0.18
Control Delay	14.0	12.1	10.8	5.2	70.3	2.3
Queue Delay	0.5	1.2	0.0	0.0	0.0	0.0
Total Delay	14.5	13.3	10.8	5.2	70.3	2.3
LOS	B	B	B	A	E	A
Approach Delay	14.0			7.7	37.8	
Approach LOS	B			A	D	
Queue Length 50th (m)	48.1	45.5	27.5	18.1	53.4	0.0
Queue Length 95th (m)	79.3	93.3	51.6	30.6	85.0	11.3
Internal Link Dist (m)	143.0			390.2	73.1	
Turn Bay Length (m)		12.0	25.0			
Base Capacity (vph)	2180	1029	779	3203	390	1046
Starvation Cap Reductn	938	329	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.69	0.52	0.16	0.52	0.18

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 132.1

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 15.4

Intersection LOS: B

Intersection Capacity Utilization 64.2%

ICU Level of Service C

Analysis Period (min) 15

HCM Signalized Intersection Capacity Analysis

3: Ridgeway Dr & Eglinton Ave W

12-21-2023

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↗
Traffic Volume (vph)	684	448	387	479	189	173
Future Volume (vph)	684	448	387	479	189	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	1.00	1.00	0.32	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	604	3539	1770	1583
Peak-hour factor, PHF	0.93	0.93	0.95	0.95	0.93	0.93
Adj. Flow (vph)	735	482	407	504	203	186
RTOR Reduction (vph)	0	54	0	0	0	71
Lane Group Flow (vph)	735	428	407	504	203	115
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2	6			2
Actuated Green, G (s)	81.4	81.4	99.6	99.6	20.5	81.4
Effective Green, g (s)	81.4	81.4	99.6	99.6	20.5	81.4
Actuated g/C Ratio	0.62	0.62	0.75	0.75	0.16	0.62
Clearance Time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2180	975	589	2668	274	975
v/s Ratio Prot	0.21		c0.08	0.14	c0.11	
v/s Ratio Perm		0.27	c0.44			0.07
v/c Ratio	0.34	0.44	0.69	0.19	0.74	0.12
Uniform Delay, d1	12.3	13.3	6.3	4.7	53.3	10.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	1.4	3.5	0.0	10.3	0.2
Delay (s)	12.7	14.8	9.8	4.7	63.6	10.7
Level of Service	B	B	A	A	E	B
Approach Delay (s)	13.5			7.0	38.3	
Approach LOS	B			A	D	
Intersection Summary						
HCM 2000 Control Delay			15.0		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.71			
Actuated Cycle Length (s)			132.1		Sum of lost time (s)	15.0
Intersection Capacity Utilization			64.2%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

Queues

5: Churchill Meadows Blvd & Eglinton Ave W

12-21-2023



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	6	801	30	705	38	577
Act Effct Green (s)	34.0	34.0	34.0	34.0	34.0	34.0
Actuated g/C Ratio	0.42	0.42	0.42	0.42	0.42	0.42
v/c Ratio	0.02	0.53	0.14	0.47	0.05	1.02
Control Delay	13.8	18.7	16.3	16.6	8.4	67.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.8	18.7	16.3	16.6	8.4	67.8
LOS	B	B	B	B	A	E
Approach Delay		18.7		16.6	8.4	67.8
Approach LOS		B		B	A	E
Queue Length 50th (m)	0.6	48.4	2.8	38.2	1.4	~93.0
Queue Length 95th (m)	2.8	65.4	8.6	53.4	6.8	86.4
Internal Link Dist (m)		466.9		143.0	69.3	69.0
Turn Bay Length (m)	25.0		25.0			
Base Capacity (vph)	250	1503	210	1486	708	567
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.53	0.14	0.47	0.05	1.02

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 30.9

Intersection LOS: C

Intersection Capacity Utilization 60.6%

ICU Level of Service B

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

5: Churchill Meadows Blvd & Eglinton Ave W

12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	770	7	27	513	128	4	11	20	350	17	20
Future Volume (vph)	6	770	7	27	513	128	4	11	20	350	17	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.97			0.92			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.96	
Satd. Flow (prot)	1770	3535		1770	3433			1708			1770	
Flt Permitted	0.32	1.00		0.27	1.00			0.95			0.72	
Satd. Flow (perm)	590	3535		496	3433			1637			1330	
Peak-hour factor, PHF	0.97	0.97	0.97	0.91	0.91	0.91	0.90	0.90	0.90	0.67	0.67	0.67
Adj. Flow (vph)	6	794	7	30	564	141	4	12	22	522	25	30
RTOR Reduction (vph)	0	1	0	0	28	0	0	13	0	0	2	0
Lane Group Flow (vph)	6	800	0	30	677	0	0	25	0	0	575	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			34.0			34.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			34.0			34.0	
Actuated g/C Ratio	0.42	0.42		0.42	0.42			0.42			0.42	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	250	1502		210	1459			695			565	
v/s Ratio Prot		c0.23			0.20							
v/s Ratio Perm	0.01			0.06				0.02			c0.43	
v/c Ratio	0.02	0.53		0.14	0.46			0.04			1.02	
Uniform Delay, d1	13.4	17.1		14.1	16.5			13.4			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.2	1.4		1.4	1.1			0.0			42.2	
Delay (s)	13.5	18.5		15.5	17.5			13.5			65.2	
Level of Service	B	B		B	B			B			E	
Approach Delay (s)		18.4			17.5			13.5			65.2	
Approach LOS		B			B			B			E	
Intersection Summary												
HCM 2000 Control Delay		30.5			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.77										
Actuated Cycle Length (s)		80.0			Sum of lost time (s)			12.0				
Intersection Capacity Utilization		60.6%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

8: Ridgeway Dr & Platinum Dr/Aquinas Ave

12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	2	36	22	6	54	0	303	15	42	731	73
Future Volume (Veh/h)	9	2	36	22	6	54	0	303	15	42	731	73
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.65	0.65	0.65	0.59	0.59	0.59	0.91	0.91	0.91	0.94	0.94	0.94
Hourly flow rate (vph)	14	3	55	37	10	92	0	333	16	45	778	78
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (m)												190
pX, platoon unblocked												
vC, conflicting volume	1170	1256	428	876	1287	174	856				349	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1170	1256	428	876	1287	174	856				349	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	89	98	90	82	94	89	100				96	
cM capacity (veh/h)	122	164	575	210	157	839	780				1207	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	72	139	222	127	434	467						
Volume Left	14	37	0	0	45	0						
Volume Right	55	92	0	16	0	78						
cSH	315	398	1700	1700	1207	1700						
Volume to Capacity	0.23	0.35	0.13	0.07	0.04	0.27						
Queue Length 95th (m)	6.9	12.3	0.0	0.0	0.9	0.0						
Control Delay (s)	19.8	18.8	0.0	0.0	1.2	0.0						
Lane LOS	C	C			A							
Approach Delay (s)	19.8	18.8	0.0		0.6							
Approach LOS	C	C										
Intersection Summary												
Average Delay			3.1									
Intersection Capacity Utilization			Err%	ICU Level of Service					H			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

11: Ridgeway Dr & EX plaza driveway/Southwick St

12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	1	7	17	4	15	11	346	8	2	820	11
Future Volume (Veh/h)	2	1	7	17	4	15	11	346	8	2	820	11
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.63	0.63	0.63	0.93	0.93	0.93	0.95	0.95	0.95	0.93	0.93	0.93
Hourly flow rate (vph)	3	2	11	18	4	16	12	364	8	2	882	12
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1116	1288	447	849	1290	186	894				372	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1116	1288	447	849	1290	186	894				372	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	98	99	98	93	97	98	98				100	
cM capacity (veh/h)	154	160	559	244	159	824	755				1183	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	16	38	194	190	443	453						
Volume Left	3	18	12	0	2	0						
Volume Right	11	16	0	8	0	12						
cSH	310	321	755	1700	1183	1700						
Volume to Capacity	0.05	0.12	0.02	0.11	0.00	0.27						
Queue Length 95th (m)	1.3	3.2	0.4	0.0	0.0	0.0						
Control Delay (s)	17.3	17.7	0.8	0.0	0.1	0.0						
Lane LOS	C	C	A		A							
Approach Delay (s)	17.3	17.7	0.4		0.0							
Approach LOS	C	C										
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			35.4%		ICU Level of Service				A			
Analysis Period (min)			15									

Queues

3: Ridgeway Dr & Eglinton Ave W

12-21-2023

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↑
Traffic Volume (vph)	691	237	321	725	445	544
Future Volume (vph)	691	237	321	725	445	544
Lane Group Flow (vph)	712	244	353	797	473	579
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	3	
Permitted Phases		2	6			2
Detector Phase	2	2	1	6	3	2
Switch Phase						
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0	10.0
Minimum Split (s)	35.5	35.5	10.0	35.0	34.0	35.5
Total Split (s)	72.0	72.0	38.0	110.0	50.0	72.0
Total Split (%)	45.0%	45.0%	23.8%	68.8%	31.3%	45.0%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Lead/Lag	Lag	Lag	Lead			Lag
Lead-Lag Optimize?	Yes	Yes	Yes			Yes
Recall Mode	Max	Max	None	None	None	Max
Act Effct Green (s)	66.1	66.1	90.8	87.8	42.7	66.1
Actuated g/C Ratio	0.46	0.46	0.64	0.62	0.30	0.46
v/c Ratio	0.43	0.32	0.70	0.37	0.89	0.57
Control Delay	27.3	19.6	20.0	14.2	68.4	6.1
Queue Delay	0.9	0.0	0.0	0.0	0.0	0.0
Total Delay	28.2	19.6	20.0	14.2	68.4	6.1
LOS	C	B	C	B	E	A
Approach Delay	26.0			16.0	34.1	
Approach LOS	C			B	C	
Queue Length 50th (m)	74.7	33.3	46.1	60.1	134.4	10.5
Queue Length 95th (m)	98.8	58.0	64.0	73.0	#209.0	43.0
Internal Link Dist (m)	143.0			390.2	73.1	
Turn Bay Length (m)		12.0	25.0			
Base Capacity (vph)	1641	767	644	2587	547	1011
Starvation Cap Reductn	598	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.32	0.55	0.31	0.86	0.57
Intersection Summary						
Cycle Length: 160						
Actuated Cycle Length: 142.5						
Natural Cycle: 80						
Control Type: Semi Act-Uncoord						
Maximum v/c Ratio: 0.89						
Intersection Signal Delay: 25.1				Intersection LOS: C		
Intersection Capacity Utilization 74.9%				ICU Level of Service D		
Analysis Period (min) 15						
# 95th percentile volume exceeds capacity, queue may be longer.						

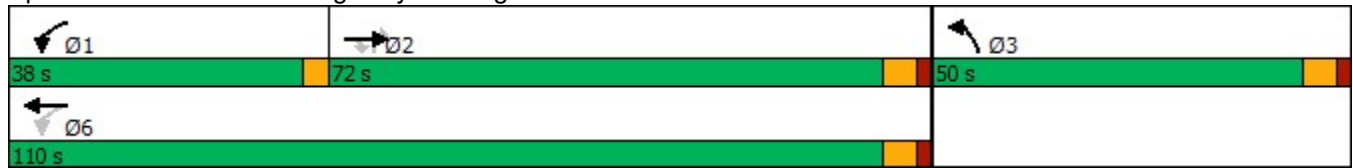
Queues

3: Ridgeway Dr & Eglinton Ave W

12-21-2023

Queue shown is maximum after two cycles.

Splits and Phases: 3: Ridgeway Dr & Eglinton Ave W



HCM Signalized Intersection Capacity Analysis

3: Ridgeway Dr & Eglinton Ave W

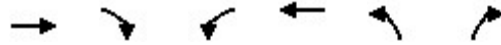
12-21-2023

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↙	↑↑	↙	↗
Traffic Volume (vph)	691	237	321	725	445	544
Future Volume (vph)	691	237	321	725	445	544
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	1.00	1.00	0.29	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	534	3539	1770	1583
Peak-hour factor, PHF	0.97	0.97	0.91	0.91	0.94	0.94
Adj. Flow (vph)	712	244	353	797	473	579
RTOR Reduction (vph)	0	33	0	0	0	277
Lane Group Flow (vph)	712	211	353	797	473	302
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	3	
Permitted Phases		2	6			2
Actuated Green, G (s)	66.1	66.1	87.8	87.8	42.7	66.1
Effective Green, g (s)	66.1	66.1	87.8	87.8	42.7	66.1
Actuated g/C Ratio	0.46	0.46	0.62	0.62	0.30	0.46
Clearance Time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1641	734	491	2180	530	734
v/s Ratio Prot	0.20		c0.09	0.23	c0.27	
v/s Ratio Perm		0.13	c0.35			0.19
v/c Ratio	0.43	0.29	0.72	0.37	0.89	0.41
Uniform Delay, d1	25.6	23.6	15.2	13.6	47.7	25.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	1.0	5.0	0.1	17.1	1.7
Delay (s)	26.5	24.6	20.2	13.7	64.9	27.0
Level of Service	C	C	C	B	E	C
Approach Delay (s)	26.0			15.6	44.0	
Approach LOS	C			B	D	
Intersection Summary						
HCM 2000 Control Delay			28.2	HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio			0.79			
Actuated Cycle Length (s)			142.5	Sum of lost time (s)		15.0
Intersection Capacity Utilization			74.9%	ICU Level of Service		D
Analysis Period (min)			15			
c Critical Lane Group						

Queues

3: Ridgeway Dr & Eglinton Ave W

12-21-2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	712	244	353	797	473	579
Act Effct Green (s)	81.1	81.1	102.1	99.1	29.0	81.1
Actuated g/C Ratio	0.58	0.58	0.73	0.71	0.21	0.58
v/c Ratio	0.35	0.26	0.62	0.32	1.29	0.50
Control Delay	16.4	11.0	11.7	8.1	194.2	2.7
Queue Delay	0.6	0.0	0.0	0.0	0.0	0.0
Total Delay	17.1	11.0	11.7	8.1	194.2	2.7
LOS	B	B	B	A	F	A
Approach Delay	15.5			9.2	88.8	
Approach LOS	B			A	F	
Queue Length 50th (m)	55.1	22.5	31.4	42.2	~175.0	0.0
Queue Length 95th (m)	73.3	40.7	43.6	51.4	#254.7	16.5
Internal Link Dist (m)	143.0			390.2	73.1	
Turn Bay Length (m)		12.0	25.0			
Base Capacity (vph)	2047	947	731	3007	366	1159
Starvation Cap Reductn	909	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.26	0.48	0.27	1.29	0.50

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 140.1

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.29

Intersection Signal Delay: 37.6

Intersection LOS: D

Intersection Capacity Utilization 74.9%

ICU Level of Service D

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.

HCM Signalized Intersection Capacity Analysis

3: Ridgeway Dr & Eglinton Ave W

12-21-2023

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↑
Traffic Volume (vph)	691	237	321	725	445	544
Future Volume (vph)	691	237	321	725	445	544
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	1.00	1.00	0.32	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	604	3539	1770	1583
Peak-hour factor, PHF	0.97	0.97	0.91	0.91	0.94	0.94
Adj. Flow (vph)	712	244	353	797	473	579
RTOR Reduction (vph)	0	31	0	0	0	244
Lane Group Flow (vph)	712	213	353	797	473	335
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	3	
Permitted Phases		2	6			2
Actuated Green, G (s)	81.0	81.0	99.0	99.0	29.0	81.0
Effective Green, g (s)	81.0	81.0	99.0	99.0	29.0	81.0
Actuated g/C Ratio	0.58	0.58	0.71	0.71	0.21	0.58
Clearance Time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2047	915	552	2502	366	915
v/s Ratio Prot	0.20		c0.07	0.23	c0.27	
v/s Ratio Perm		0.13	c0.38			0.21
v/c Ratio	0.35	0.23	0.64	0.32	1.29	0.37
Uniform Delay, d1	15.6	14.4	8.6	7.7	55.5	15.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.6	2.4	0.1	150.6	1.1
Delay (s)	16.0	15.0	11.1	7.8	206.1	16.9
Level of Service	B	B	B	A	F	B
Approach Delay (s)	15.8			8.8	102.0	
Approach LOS	B			A	F	
Intersection Summary						
HCM 2000 Control Delay			41.9		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.80			
Actuated Cycle Length (s)			140.0		Sum of lost time (s)	15.0
Intersection Capacity Utilization			74.9%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Queues

5: Churchill Meadows Blvd & Eglinton Ave W

12-21-2023



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	18	682	72	1161	213	258
Act Effct Green (s)	34.3	34.3	34.3	34.3	18.7	18.7
Actuated g/C Ratio	0.53	0.53	0.53	0.53	0.29	0.29
v/c Ratio	0.11	0.37	0.20	0.63	0.41	0.75
Control Delay	12.6	10.8	12.2	13.6	12.8	34.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.6	10.8	12.2	13.6	12.8	34.6
LOS	B	B	B	B	B	C
Approach Delay		10.9		13.5	12.8	34.6
Approach LOS		B		B	B	C
Queue Length 50th (m)	1.0	24.0	4.4	47.5	11.9	28.6
Queue Length 95th (m)	5.7	48.0	15.2	92.3	26.1	52.3
Internal Link Dist (m)		466.9		143.0	69.3	69.0
Turn Bay Length (m)	25.0		25.0			
Base Capacity (vph)	170	1857	366	1830	867	624
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.37	0.20	0.63	0.25	0.41

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 65.2

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 15.0

Intersection LOS: B

Intersection Capacity Utilization 83.8%

ICU Level of Service E

Analysis Period (min) 15

HCM Signalized Intersection Capacity Analysis

5: Churchill Meadows Blvd & Eglinton Ave W

12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	634	21	68	866	237	35	52	100	189	32	17
Future Volume (vph)	17	634	21	68	866	237	35	52	100	189	32	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.97			0.93			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.96	
Satd. Flow (prot)	1770	3522		1770	3425			1712			1775	
Flt Permitted	0.17	1.00		0.37	1.00			0.91			0.64	
Satd. Flow (perm)	325	3522		696	3425			1565			1179	
Peak-hour factor, PHF	0.96	0.96	0.96	0.95	0.95	0.95	0.88	0.88	0.88	0.92	0.92	0.92
Adj. Flow (vph)	18	660	22	72	912	249	40	59	114	205	35	18
RTOR Reduction (vph)	0	2	0	0	26	0	0	64	0	0	4	0
Lane Group Flow (vph)	18	680	0	72	1135	0	0	149	0	0	254	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	34.3	34.3		34.3	34.3			18.7			18.7	
Effective Green, g (s)	34.3	34.3		34.3	34.3			18.7			18.7	
Actuated g/C Ratio	0.53	0.53		0.53	0.53			0.29			0.29	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	171	1858		367	1807			450			339	
v/s Ratio Prot		0.19			c0.33							
v/s Ratio Perm	0.06			0.10				0.10			c0.22	
v/c Ratio	0.11	0.37		0.20	0.63			0.33			0.75	
Uniform Delay, d1	7.7	9.0		8.1	10.8			18.2			21.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.2	0.6		1.2	1.7			0.4			8.7	
Delay (s)	8.9	9.5		9.3	12.5			18.7			29.8	
Level of Service	A	A		A	B			B			C	
Approach Delay (s)		9.5			12.3			18.7			29.8	
Approach LOS		A			B			B			C	
Intersection Summary												
HCM 2000 Control Delay			13.9			HCM 2000 Level of Service				B		
HCM 2000 Volume to Capacity ratio			0.67									
Actuated Cycle Length (s)			65.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			83.8%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

8: Ridgeway Dr & Platinum Dr/Aquinas Ave

12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	3	51	22	3	36	8	1002	33	12	514	21
Future Volume (Veh/h)	14	3	51	22	3	36	8	1002	33	12	514	21
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.68	0.68	0.68	0.90	0.90	0.90	0.88	0.88	0.88	0.84	0.84	0.84
Hourly flow rate (vph)	21	4	75	24	3	40	9	1139	38	14	612	25
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage veh												
Upstream signal (m)	190											
pX, platoon unblocked												
vC, conflicting volume	1282	1848	318	1587	1841	588	637	1177				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1282	1848	318	1587	1841	588	637	1177				
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	80	94	89	60	96	91	99	98				
cM capacity (veh/h)	105	71	677	60	72	452	943	589				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	100	67	578	608	320	331						
Volume Left	21	24	9	0	14	0						
Volume Right	75	40	0	38	0	25						
cSH	273	127	943	1700	589	1700						
Volume to Capacity	0.37	0.53	0.01	0.36	0.02	0.19						
Queue Length 95th (m)	12.9	20.1	0.2	0.0	0.6	0.0						
Control Delay (s)	25.6	61.6	0.3	0.0	0.8	0.0						
Lane LOS	D	F	A		A							
Approach Delay (s)	25.6	61.6	0.1		0.4							
Approach LOS	D	F										
Intersection Summary												
Average Delay			3.5									
Intersection Capacity Utilization			Err%	ICU Level of Service					H			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

11: Ridgeway Dr & EX plaza driveway/Southwick St

12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	2	28	4	3	2	56	977	22	3	515	39
Future Volume (Veh/h)	29	2	28	4	3	2	56	977	22	3	515	39
Sign Control	Stop		Stop		Free		Free		Free		Free	
Grade	0%		0%		0%		0%		0%		0%	
Peak Hour Factor	0.74	0.74	0.74	0.75	0.75	0.75	0.90	0.90	0.90	0.88	0.88	0.88
Hourly flow rate (vph)	39	3	38	5	4	3	62	1086	24	3	585	44
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1285	1847	314	1560	1857	555	629			1110		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1285	1847	314	1560	1857	555	629			1110		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	64	96	94	92	94	99	93			100		
cM capacity (veh/h)	109	69	681	66	68	475	949			625		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	80	12	605	567	296	336						
Volume Left	39	5	62	0	3	0						
Volume Right	38	3	0	24	0	44						
cSH	176	85	949	1700	625	1700						
Volume to Capacity	0.46	0.14	0.07	0.33	0.00	0.20						
Queue Length 95th (m)	17.1	3.8	1.7	0.0	0.1	0.0						
Control Delay (s)	41.6	54.3	1.7	0.0	0.2	0.0						
Lane LOS	E	F	A		A							
Approach Delay (s)	41.6	54.3	0.9		0.1							
Approach LOS	E	F										
Intersection Summary												
Average Delay												
Intersection Capacity Utilization												
Analysis Period (min)												

Appendix C – Background Information

Appendix B

Pre-Study Consultation Checklist

Description	Information	Section Reference
Development Information		
Development Description (land use, size, and number of phases of development)	Phase 1: 2 storey commercial/office building, total GFA is 2,435.70m²	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.	- Eglinton Ave W and Ridgeway Dr - Ridgeway Dr and Platinum Dr/ Aquinas Ave - Eglinton Ave W and Churchill Meadows Blvd - Ridgeway Dr and Southwick St / Site Access	2.3.8
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	2.3.10

Description	Information	Section Reference
	☐ AM weekday peak hour of development ☐ PM weekday peak hour of development ☐ Saturday peak hour of development ☐ Other _____	
Input Parameters and Assumptions (potential deviations)	• Use existing PHF • STP obtained from city • •	2.3.13
Existing Transportation Conditions	☐ City data sources ☒ New data collection_January 24, 2023_ ☐ Other _____	2.3.14
Planned Network Improvements (with timing)	• New sidewalk – south side of Eglinton Ave W b/w Ninth Line & Ridgeway Dr – Construction tentatively planned in ~2024/2025 • Ninth Line widening to 4 lanes b/w Derry Rd & Eglinton Ave – Construction tentatively planned to start in 2025 •	2.3.16
Other Planned Developments (per City's Website)	• 3645 Platinum Dr • 3539, 3541, & 3545 Platinum Dr • 0 Platinum Dr (site located between the two above noted sites) • •	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 _____	2.3.26
Impacts During Construction (any special issues)	• • • •	2.3.27
Step 3 – Forecasting		

Growth Rate	☒ Obtained from City ☐ Historical traffic counts ☐ Travel demand forecasts ☐ Proposed Growth Rate: _____	2.3.15
-------------	--	--------

Description	Information	Section Reference
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 _____	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		
- 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. - Access: As noted in Development Agreement 43M-1875, vehicular access will not be permitted on Eglinton Avenue West. The applicant will be required to make arrangements with the adjacent property to establish a private access easement. - Recommendations: Detailed Recommendations regarding on-site/off-site roadway improvements, site access, site circulation, and TDM measures shall be made.		

From: Sam Nguyen <sam@nextrans.ca>
Sent: Monday, November 13, 2023 11:13 AM
To: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Subject: RE: 3650 Eglinton Avenue West Term of Reference

Hi Tyler,

The horizon year is 5 year so will be 2028-2029. Do you also provide the growth rate for small road too?

- Eglinton Ave W and Ridgeway Dr
- Ridgeway Dr and Platinum Dr/ Aquinas Ave
- Eglinton Ave W and Churchill Meadows Blvd
- Ridgeway Dr and Southwick St / Site Access
-
-

Thanks

Sam

From: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Sent: Monday, November 13, 2023 11:07 AM
To: Sam Nguyen <sam@nextrans.ca>
Subject: RE: 3650 Eglinton Avenue West Term of Reference

Hi Sam,

Sure can. Can you please provide me with the horizon year.

Thanks,



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

Please consider the environment before printing.

From: Sam Nguyen <sam@nextrans.ca>
Sent: Monday, November 13, 2023 11:05 AM
To: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>

Subject: FW: 3650 Eglinton Avenue West Term of Reference

Hi Tyler,

Can you please help me with the growth rate of Eglinton Ave West?

Thanks

Sam

From: Cyrus Hiranandani <Cyrus.Hiranandani@mississauga.ca>

Sent: Monday, November 13, 2023 11:02 AM

To: Sam Nguyen <sam@nexttrans.ca>

Cc: Trans Projects <Trans.Projects@mississauga.ca>

Subject: RE: 3650 Eglinton Avenue West Term of Reference

Hi Sam,

Please find attached stamped and approved ToR for the proposed development, which encompasses City comments. 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

Please consider the environment before printing.

From: Michael Turco <Michael.Turco@mississauga.ca> **On Behalf Of** Trans Projects
Sent: Wednesday, October 25, 2023 1:56 PM
To: Sam Nguyen <sam@nextrans.ca>
Cc: Cyrus Hiranandani <Cyrus.Hiranandani@mississauga.ca>
Subject: FW: 3650 Eglinton Avenue West Term of Reference

Thank you, Sam. Cyrus (cc'd) from our team will review and provide comments.

Regards,

Michael Turco, C.E.T., CPT, MITE
Traffic Planning Coordinator
T 905-615-3200 ext. 3597

From: Sam Nguyen <sam@nextrans.ca>
Sent: Wednesday, October 25, 2023 1:29 PM
To: Trans Projects <Trans.Projects@mississauga.ca>
Subject: RE: 3650 Eglinton Avenue West Term of Reference

Good afternoon Michael,

Please find attached checklist I have been filled.

Thanks

Sam

From: Michael Turco <Michael.Turco@mississauga.ca> **On Behalf Of** Trans Projects
Sent: Wednesday, October 25, 2023 1:05 PM
To: Sam Nguyen <sam@nextrans.ca>
Subject: RE: 3650 Eglinton Avenue West Term of Reference

Good afternoon Sam,

Thank you for your email. Based on the City's latest [TIS Guidelines](#), we have a new procedure to follow for Terms of References. To expedite the process, Transportation Consultants must complete and submit the Pre-Study Consultation Checklist (attached) provided in Appendix B of the TIS Guidelines. The City will review and comment on the ToR assumptions once the document is submitted.

Please let me know if you have any questions.

Thank you,



Michael Turco, C.E.T., CPT, MITE

Traffic Planning Coordinator

T 905-615-3200 ext. 3597

michael.turco@mississauga.ca

[City of Mississauga](#) | Transportation & Works Department

300 City Centre Drive | Mississauga ON | L5B 3C1

Please consider the environment before printing.

From: Sam Nguyen <sam@nextrans.ca>

Sent: Tuesday, October 24, 2023 4:58 PM

To: Ryan Au <ryan.au@mississauga.ca>

Subject: 3650 Eglinton Avenue West Term of Reference

Importance: High

Good afternoon Ryan,

We are currently working on a TIS to support the proposed development located at 3650 Eglinton Avenue W, in the City of Mississauga. This site is proposing an office. The proposed scope of work is provided below. If possible, please provide us with your comments at your earliest convenient.

1. Study Area intersections:
 - Eglinton Ave W and Ridgeway Dr
 - Ridgeway Dr and Platinum Dr and Aquinas Ave
2. Horizon Year
 - 5 horizon year at the report date
1. Background Developments and Growth Rate
 - a. Obtain growth rate from the City/Region
 - b. Background developments:
 - All in-stream and recently approved background developments within approximately 1km from the subject site will be included.
 - Will use the following link to gather information on any developments proposed in the area for background traffic:
<http://www.mississauga.ca/portal/residents/developmentinformation>
4. Trip Generation
 - a. ITE Trip Generation Manual 11th Edition
 - b. Multimodal trip generation using 2016 TTS modal split data.
5. Trip Distribution
 - a. Extract 2016 TTS data based on the surrounding traffic zones where appropriate.

4. Future Total Assessment

- The following tasks will be conducted for the future total conditions:
- Future Total Traffic Assessment for Auto Mode
- Future Transit Mode Assessment
- Future Active Transportation Mode Assessment
- Proposed Access and Operation/Safety Assessment
- Loading Requirement and Assessment
- Vehicular and Bicycle Parking Assessment
- Internal Site Circulation (if necessary)
- On-Site Circulation & Garbage Loading

7. Transit, Active Transportation and TDM

- a. Conduct a review of the existing and proposed future transit network in the area. Based on these findings, appropriate recommendations will be provided to ensure adequate walking distances to/from the proposed development to transit stations/stops.
 - b. Review the existing and proposed future active transportation network in the area. Based on these findings, Nextrans will identify missing gaps and additional interconnections and connections from the proposed development to adjacent land uses, the City and the Region's facilities, as well as to transition stations/stops.
 - c. A Transportation Demand Management (TDM) assessment will be undertaken to identify specific measures and programs to reduce single-occupant-vehicle trips to/from the proposed development. These TDM measures and programs may include but not limited to, Carpooling, Auto Share, Bike racks, Parking management strategies, etc. The TDM report will be completed and included as part of this Study for submission purposes submitted in accordance with the City and the Region requirements.
8. Parking Justification Study – We will contact the Planning Section (ParkingStudy.Review@mississauga.ca) to confirm the terms of reference for the Parking Study if needed.
 9. Community Impacts: Any transportation related impacts on the existing community and comments from the public through the planning approvals process will be addressed in the report.
 10. Detailed Recommendations regarding on-site/off-site roadway improvements, site access, site circulation, and TDM measures shall be made.

Thanks,

Sam (Trang) Nguyen

Transportation Analyst

o: 905-503-2563 ext. 207

e: sam@nextrans.ca

w: www.nextrans.ca

NexTrans Consulting Engineers

A Division of NextEng Consulting Group Inc.

520 Industrial Parkway South, Suite 201

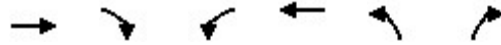
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Appendix D – Future Background 2029 Traffic Level of Service Calculations

Queues

3: Ridgeway Dr & Eglinton Ave W

12-21-2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	804	527	445	552	216	198
Act Effct Green (s)	81.6	81.6	105.7	102.7	21.4	81.6
Actuated g/C Ratio	0.60	0.60	0.78	0.75	0.16	0.60
v/c Ratio	0.38	0.52	0.76	0.21	0.78	0.19
Control Delay	16.3	15.0	15.0	5.4	74.9	2.6
Queue Delay	0.7	1.7	0.0	0.0	0.0	0.0
Total Delay	17.0	16.7	15.0	5.4	74.9	2.6
LOS	B	B	B	A	E	A
Approach Delay	16.9			9.7	40.3	
Approach LOS	B			A	D	
Queue Length 50th (m)	57.5	57.7	32.7	21.2	58.3	0.0
Queue Length 95th (m)	100.2	123.0	58.9	33.4	96.2	12.8
Internal Link Dist (m)	143.0			390.2	73.1	
Turn Bay Length (m)		12.0	25.0			
Base Capacity (vph)	2120	1005	739	3115	379	1027
Starvation Cap Reductn	885	305	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.75	0.60	0.18	0.57	0.19

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 136.2

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 17.8

Intersection LOS: B

Intersection Capacity Utilization 68.6%

ICU Level of Service C

Analysis Period (min) 15

HCM Signalized Intersection Capacity Analysis

3: Ridgeway Dr & Eglinton Ave W

12-21-2023

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↙	↑↑	↙	↗
Traffic Volume (vph)	748	490	423	524	201	184
Future Volume (vph)	748	490	423	524	201	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	1.00	1.00	0.29	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	543	3539	1770	1583
Peak-hour factor, PHF	0.93	0.93	0.95	0.95	0.93	0.93
Adj. Flow (vph)	804	527	445	552	216	198
RTOR Reduction (vph)	0	57	0	0	0	79
Lane Group Flow (vph)	804	470	445	552	216	119
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2	6			2
Actuated Green, G (s)	81.7	81.7	102.7	102.7	21.4	81.7
Effective Green, g (s)	81.7	81.7	102.7	102.7	21.4	81.7
Actuated g/C Ratio	0.60	0.60	0.75	0.75	0.16	0.60
Clearance Time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2124	950	572	2670	278	950
v/s Ratio Prot	0.23		c0.10	0.16	c0.12	
v/s Ratio Perm		0.30	c0.48			0.08
v/c Ratio	0.38	0.49	0.78	0.21	0.78	0.13
Uniform Delay, d1	14.1	15.5	7.7	4.9	55.1	11.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	1.8	6.6	0.0	12.8	0.3
Delay (s)	14.6	17.3	14.3	4.9	67.8	12.0
Level of Service	B	B	B	A	E	B
Approach Delay (s)	15.7			9.1	41.1	
Approach LOS	B			A	D	
Intersection Summary						
HCM 2000 Control Delay			17.1	HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.79			
Actuated Cycle Length (s)			136.1	Sum of lost time (s)		15.0
Intersection Capacity Utilization			68.6%	ICU Level of Service		C
Analysis Period (min)			15			
c Critical Lane Group						

Queues

5: Churchill Meadows Blvd & Eglinton Ave W

12-21-2023



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	7	876	33	770	38	577
Act Effct Green (s)	34.0	34.0	34.0	34.0	34.0	34.0
Actuated g/C Ratio	0.42	0.42	0.42	0.42	0.42	0.42
v/c Ratio	0.03	0.58	0.18	0.52	0.05	1.02
Control Delay	14.1	19.5	17.6	17.3	8.4	67.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.1	19.5	17.6	17.3	8.4	67.8
LOS	B	B	B	B	A	E
Approach Delay		19.5		17.3	8.4	67.8
Approach LOS		B		B	A	E
Queue Length 50th (m)	0.6	54.5	3.2	43.1	1.4	~93.0
Queue Length 95th (m)	3.0	73.0	9.6	59.5	6.8	86.4
Internal Link Dist (m)		466.9		143.0	69.3	69.0
Turn Bay Length (m)	25.0		25.0			
Base Capacity (vph)	223	1503	181	1486	708	567
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.58	0.18	0.52	0.05	1.02

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 30.7

Intersection LOS: C

Intersection Capacity Utilization 63.1%

ICU Level of Service B

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

5: Churchill Meadows Blvd & Eglinton Ave W

12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	842	8	30	561	140	4	11	20	350	17	20
Future Volume (vph)	7	842	8	30	561	140	4	11	20	350	17	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.97			0.92			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.96	
Satd. Flow (prot)	1770	3534		1770	3433			1708			1770	
Flt Permitted	0.28	1.00		0.23	1.00			0.95			0.72	
Satd. Flow (perm)	525	3534		429	3433			1637			1330	
Peak-hour factor, PHF	0.97	0.97	0.97	0.91	0.91	0.91	0.90	0.90	0.90	0.67	0.67	0.67
Adj. Flow (vph)	7	868	8	33	616	154	4	12	22	522	25	30
RTOR Reduction (vph)	0	1	0	0	28	0	0	13	0	0	2	0
Lane Group Flow (vph)	7	875	0	33	742	0	0	25	0	0	575	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			34.0			34.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			34.0			34.0	
Actuated g/C Ratio	0.42	0.42		0.42	0.42			0.42			0.42	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	223	1501		182	1459			695			565	
v/s Ratio Prot		c0.25			0.22							
v/s Ratio Perm	0.01			0.08				0.02			c0.43	
v/c Ratio	0.03	0.58		0.18	0.51			0.04			1.02	
Uniform Delay, d1	13.4	17.6		14.3	16.9			13.4			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.3	1.7		2.2	1.3			0.0			42.2	
Delay (s)	13.7	19.2		16.5	18.1			13.5			65.2	
Level of Service	B	B		B	B			B			E	
Approach Delay (s)		19.2			18.1			13.5			65.2	
Approach LOS		B			B			B			E	
Intersection Summary												
HCM 2000 Control Delay			30.3			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			80.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			63.1%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

8: Ridgeway Dr & Platinum Dr/Aquinas Ave

12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	2	36	22	6	54	0	334	16	42	755	73
Future Volume (Veh/h)	9	2	36	22	6	54	0	334	16	42	755	73
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.65	0.65	0.65	0.59	0.59	0.59	0.91	0.91	0.91	0.94	0.94	0.94
Hourly flow rate (vph)	14	3	55	37	10	92	0	367	18	45	803	78
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)	190											
pX, platoon unblocked												
vC, conflicting volume	1212	1317	440	924	1347	192	881			385		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1212	1317	440	924	1347	192	881			385		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	88	98	90	81	93	89	100			96		
cM capacity (veh/h)	112	150	564	194	144	817	763			1170		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	72	139	245	140	446	480						
Volume Left	14	37	0	0	45	0						
Volume Right	55	92	0	18	0	78						
cSH	298	372	1700	1700	1170	1700						
Volume to Capacity	0.24	0.37	0.14	0.08	0.04	0.28						
Queue Length 95th (m)	7.4	13.5	0.0	0.0	1.0	0.0						
Control Delay (s)	20.9	20.3	0.0	0.0	1.2	0.0						
Lane LOS	C	C			A							
Approach Delay (s)	20.9	20.3	0.0		0.6							
Approach LOS	C	C										
Intersection Summary												
Average Delay			3.2									
Intersection Capacity Utilization			Err%	ICU Level of Service					H			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

11: Ridgeway Dr & EX plaza driveway/Southwick St

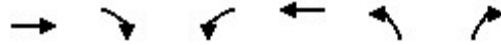
12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	1	7	17	4	15	12	367	8	2	845	11
Future Volume (Veh/h)	2	1	7	17	4	15	12	367	8	2	845	11
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.63	0.63	0.63	0.93	0.93	0.93	0.95	0.95	0.95	0.93	0.93	0.93
Hourly flow rate (vph)	3	2	11	18	4	16	13	386	8	2	909	12
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1156	1339	460	886	1341	197	921			394		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1156	1339	460	886	1341	197	921			394		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	99	98	92	97	98	98			100		
cM capacity (veh/h)	143	149	548	228	148	811	737			1161		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	16	38	206	201	456	466						
Volume Left	3	18	13	0	2	0						
Volume Right	11	16	0	8	0	12						
cSH	294	303	737	1700	1161	1700						
Volume to Capacity	0.05	0.13	0.02	0.12	0.00	0.27						
Queue Length 95th (m)	1.4	3.4	0.4	0.0	0.0	0.0						
Control Delay (s)	18.0	18.6	0.8	0.0	0.1	0.0						
Lane LOS	C	C	A		A							
Approach Delay (s)	18.0	18.6	0.4		0.0							
Approach LOS	C	C										
Intersection Summary												
Average Delay												
Intersection Capacity Utilization												
Analysis Period (min)												

Queues

3: Ridgeway Dr & Eglinton Ave W

12-21-2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	779	267	397	897	488	597
Act Effct Green (s)	66.1	66.1	94.2	91.2	44.1	66.1
Actuated g/C Ratio	0.45	0.45	0.64	0.62	0.30	0.45
v/c Ratio	0.49	0.36	0.81	0.41	0.92	0.60
Control Delay	30.7	22.5	27.0	14.8	74.3	7.4
Queue Delay	1.4	0.8	0.0	0.0	0.0	0.0
Total Delay	32.1	23.3	27.0	14.8	74.3	7.4
LOS	C	C	C	B	E	A
Approach Delay	29.8			18.6	37.5	
Approach LOS	C			B	D	
Queue Length 50th (m)	86.2	39.5	53.5	70.3	143.4	14.2
Queue Length 95th (m)	120.8	71.3	80.4	83.7	#238.8	55.2
Internal Link Dist (m)	143.0			390.2	73.1	
Turn Bay Length (m)		12.0	25.0			
Base Capacity (vph)	1588	744	607	2502	529	994
Starvation Cap Reductn	568	234	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.52	0.65	0.36	0.92	0.60

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 147.3

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 28.0

Intersection LOS: C

Intersection Capacity Utilization 79.7%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Ridgeway Dr & Eglinton Ave W

12-21-2023

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↗
Traffic Volume (vph)	756	259	361	816	459	561
Future Volume (vph)	756	259	361	816	459	561
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	1.00	1.00	0.25	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	463	3539	1770	1583
Peak-hour factor, PHF	0.97	0.97	0.91	0.91	0.94	0.94
Adj. Flow (vph)	779	267	397	897	488	597
RTOR Reduction (vph)	0	34	0	0	0	284
Lane Group Flow (vph)	779	233	397	897	488	313
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	3	
Permitted Phases		2	6			2
Actuated Green, G (s)	66.1	66.1	91.2	91.2	44.1	66.1
Effective Green, g (s)	66.1	66.1	91.2	91.2	44.1	66.1
Actuated g/C Ratio	0.45	0.45	0.62	0.62	0.30	0.45
Clearance Time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1588	710	482	2191	529	710
v/s Ratio Prot	0.22		c0.12	0.25	c0.28	
v/s Ratio Perm		0.15	c0.39			0.20
v/c Ratio	0.49	0.33	0.82	0.41	0.92	0.44
Uniform Delay, d1	28.7	26.2	17.5	14.3	49.9	27.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	1.2	10.9	0.1	21.8	2.0
Delay (s)	29.8	27.5	28.4	14.4	71.7	29.9
Level of Service	C	C	C	B	E	C
Approach Delay (s)	29.2			18.7	48.7	
Approach LOS	C			B	D	
Intersection Summary						
HCM 2000 Control Delay			31.4		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			147.3		Sum of lost time (s)	15.0
Intersection Capacity Utilization			79.7%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Queues

5: Churchill Meadows Blvd & Eglinton Ave W

12-21-2023



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	20	746	81	1307	213	258
Act Effct Green (s)	34.3	34.3	34.3	34.3	18.7	18.7
Actuated g/C Ratio	0.53	0.53	0.53	0.53	0.29	0.29
v/c Ratio	0.16	0.40	0.24	0.71	0.41	0.75
Control Delay	14.7	11.2	13.2	15.5	12.8	34.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.7	11.2	13.2	15.5	12.8	34.6
LOS	B	B	B	B	B	C
Approach Delay		11.3		15.3	12.8	34.6
Approach LOS		B		B	B	C
Queue Length 50th (m)	1.2	26.8	5.1	57.4	11.9	28.6
Queue Length 95th (m)	6.8	53.3	17.5	111.2	26.1	52.3
Internal Link Dist (m)		466.9		143.0	69.3	69.0
Turn Bay Length (m)	25.0		25.0			
Base Capacity (vph)	128	1857	334	1830	867	624
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.40	0.24	0.71	0.25	0.41

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 65.2

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 15.8

Intersection LOS: B

Intersection Capacity Utilization 87.8%

ICU Level of Service E

Analysis Period (min) 15

HCM Signalized Intersection Capacity Analysis

5: Churchill Meadows Blvd & Eglinton Ave W

12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	693	23	77	975	267	35	52	100	189	32	17
Future Volume (vph)	19	693	23	77	975	267	35	52	100	189	32	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.97			0.93			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.96	
Satd. Flow (prot)	1770	3522		1770	3425			1712			1775	
Flt Permitted	0.13	1.00		0.34	1.00			0.91			0.64	
Satd. Flow (perm)	244	3522		635	3425			1565			1179	
Peak-hour factor, PHF	0.96	0.96	0.96	0.95	0.95	0.95	0.88	0.88	0.88	0.92	0.92	0.92
Adj. Flow (vph)	20	722	24	81	1026	281	40	59	114	205	35	18
RTOR Reduction (vph)	0	2	0	0	26	0	0	64	0	0	4	0
Lane Group Flow (vph)	20	744	0	81	1281	0	0	149	0	0	254	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	34.3	34.3		34.3	34.3			18.7			18.7	
Effective Green, g (s)	34.3	34.3		34.3	34.3			18.7			18.7	
Actuated g/C Ratio	0.53	0.53		0.53	0.53			0.29			0.29	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	128	1858		335	1807			450			339	
v/s Ratio Prot		0.21			c0.37							
v/s Ratio Perm	0.08			0.13				0.10			c0.22	
v/c Ratio	0.16	0.40		0.24	0.71			0.33			0.75	
Uniform Delay, d1	7.9	9.2		8.3	11.6			18.2			21.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.6	0.6		1.7	2.4			0.4			8.7	
Delay (s)	10.5	9.8		10.0	14.0			18.7			29.8	
Level of Service	B	A		B	B			B			C	
Approach Delay (s)		9.9			13.7			18.7			29.8	
Approach LOS		A			B			B			C	
Intersection Summary												
HCM 2000 Control Delay		14.6			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		65.0			Sum of lost time (s)			12.0				
Intersection Capacity Utilization		87.8%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

8: Ridgeway Dr & Platinum Dr/Aquinas Ave

12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	3	51	22	3	36	8	1032	34	12	546	21
Future Volume (Veh/h)	14	3	51	22	3	36	8	1032	34	12	546	21
Sign Control	Stop		Stop		Free		Free		Free		Free	
Grade	0%		0%		0%		0%		0%		0%	
Peak Hour Factor	0.68	0.68	0.68	0.90	0.90	0.90	0.88	0.88	0.88	0.84	0.84	0.84
Hourly flow rate (vph)	21	4	75	24	3	40	9	1173	39	14	650	25
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1336	1920	338	1640	1914	606	675			1212		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1336	1920	338	1640	1914	606	675			1212		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	78	94	89	56	95	91	99			98		
cM capacity (veh/h)	95	64	658	54	65	440	912			571		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	100	67	596	626	339	350						
Volume Left	21	24	9	0	14	0						
Volume Right	75	40	0	39	0	25						
cSH	252	116	912	1700	571	1700						
Volume to Capacity	0.40	0.58	0.01	0.37	0.02	0.21						
Queue Length 95th (m)	14.4	22.5	0.2	0.0	0.6	0.0						
Control Delay (s)	28.4	72.0	0.3	0.0	0.8	0.0						
Lane LOS	D	F	A		A							
Approach Delay (s)	28.4	72.0	0.1		0.4							
Approach LOS												
Intersection Summary												
Average Delay												
Intersection Capacity Utilization												
Analysis Period (min)												

HCM Unsignalized Intersection Capacity Analysis

11: Ridgeway Dr & EX plaza driveway/Southwick St

12-21-2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	2	28	4	3	2	58	1007	23	3	547	39
Future Volume (Veh/h)	29	2	28	4	3	2	58	1007	23	3	547	39
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.74	0.74	0.74	0.75	0.75	0.75	0.90	0.90	0.90	0.88	0.88	0.88
Hourly flow rate (vph)	39	3	38	5	4	3	64	1119	26	3	622	44
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1342	1923	333	1616	1932	572	666				1145	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1342	1923	333	1616	1932	572	666				1145	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	60	95	94	92	93	99	93				100	
cM capacity (veh/h)	98	61	663	59	60	463	919				606	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	80	12	624	586	314	355						
Volume Left	39	5	64	0	3	0						
Volume Right	38	3	0	26	0	44						
cSH	159	76	919	1700	606	1700						
Volume to Capacity	0.50	0.16	0.07	0.34	0.00	0.21						
Queue Length 95th (m)	19.5	4.2	1.8	0.0	0.1	0.0						
Control Delay (s)	48.6	60.8	1.8	0.0	0.2	0.0						
Lane LOS	E	F	A	A								
Approach Delay (s)	48.6	60.8	0.9	0.1								
Approach LOS	E	F										
Intersection Summary												
Average Delay	2.9											
Intersection Capacity Utilization	61.2%			ICU Level of Service					B			
Analysis Period (min)	15											

Appendix E – 2016 TTS Data Extraction

Thu Dec 21 2023 09:28:01 GMT-0500 (Eastern Standard Time) - Run Time: 2987ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: 2006 GTA zone of destination - gta06_dest
Column: Primary travel mode of trip - mode_prime

Filters:

2006 GTA zone of destination - gta06_dest In 3636

and

Primary trav c d g h m p t u w

and

Start time of trip - start_time In 600-900

Trip 2016

Table:

	Transit exc	Auto driver	Auto passe	Walk	
3636	12	984	59	82	1137
	1%	87%	5%	7%	

Thu Dec 21 2023 09:32:55 GMT-0500 (Eastern Standard Time) - Run Time: 2461ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: 2006 GTA zone of destination - gta06_dest
Column: Primary travel mode of trip - mode_prime

Filters:

2006 GTA zone of destination - gta06_dest In 3636

and

Primary trav c d g h m p t u w

and

Start time of trip - start_time In 1600-1900

Trip 2016

Table:

	Transit exc	Cycle	Auto driver	GO rail onh	Auto passe	Paid rideshare	
3636	191	12	1821	50	198	12	2284
	8%	1%	80%	2%	9%	1%	

Thu Dec 21 2023 09:37:14 GMT-0500 (Eastern Standard Time) - Run Time: 2542ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: 2006 GTA zone of destination - gta06_dest
Column: Planning district of origin - pd_orig

Filters:

2006 GTA zone of destination - gta06_dest In 3636

and

Primary trav m t u p

and

Start time of trip - start_time In 600-900

Trip 2016

Table:

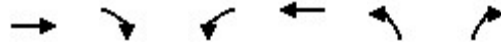
	PD 9 of Tor	PD 14 of Tc	Vaughan	Brampton	Mississaug	Halton Hill:	Oakville	Burlington	City of Guelph	
3636	32	12	18	72	834	19	20	16	19	1042
	3%	1%	2%	7%	80%	2%	2%	2%	2%	
	toronto			4%	north			34%		
	york region			2%	south			27%		
	peel region			94%	east			33%		
					west			7%		
								100%		

Appendix F – Future Total 2029 Traffic Level of Service Calculations

Queues

3: Ridgeway Dr & Eglinton Ave W

08-19-2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	809	527	445	575	216	198
Act Effct Green (s)	81.6	81.6	105.8	102.7	21.5	81.6
Actuated g/C Ratio	0.60	0.60	0.78	0.75	0.16	0.60
v/c Ratio	0.38	0.52	0.77	0.22	0.78	0.19
Control Delay	16.4	15.1	15.4	5.5	75.0	2.6
Queue Delay	0.7	1.7	0.0	0.0	0.0	0.0
Total Delay	17.1	16.8	15.4	5.5	75.0	2.6
LOS	B	B	B	A	E	A
Approach Delay	17.0			9.8	40.4	
Approach LOS	B			A	D	
Queue Length 50th (m)	57.9	57.9	32.7	22.2	58.3	0.0
Queue Length 95th (m)	101.2	123.6	60.6	35.1	96.4	12.8
Internal Link Dist (m)	143.0			390.2	73.1	
Turn Bay Length (m)		12.0	25.0			
Base Capacity (vph)	2119	1004	736	3113	379	1027
Starvation Cap Reductn	883	304	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.75	0.60	0.18	0.57	0.19

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 136.3

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 17.8

Intersection LOS: B

Intersection Capacity Utilization 68.7%

ICU Level of Service C

Analysis Period (min) 15

HCM Signalized Intersection Capacity Analysis

3: Ridgeway Dr & Eglinton Ave W

08-19-2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↙	↑↑	↙	↗
Traffic Volume (vph)	752	490	423	546	201	184
Future Volume (vph)	752	490	423	546	201	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	1.00	1.00	0.29	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	539	3539	1770	1583
Peak-hour factor, PHF	0.93	0.93	0.95	0.95	0.93	0.93
Adj. Flow (vph)	809	527	445	575	216	198
RTOR Reduction (vph)	0	57	0	0	0	79
Lane Group Flow (vph)	809	470	445	575	216	119
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2	6			2
Actuated Green, G (s)	81.6	81.6	102.7	102.7	21.5	81.6
Effective Green, g (s)	81.6	81.6	102.7	102.7	21.5	81.6
Actuated g/C Ratio	0.60	0.60	0.75	0.75	0.16	0.60
Clearance Time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2120	948	570	2668	279	948
v/s Ratio Prot	0.23		c0.10	0.16	c0.12	
v/s Ratio Perm		0.30	c0.48			0.07
v/c Ratio	0.38	0.50	0.78	0.22	0.77	0.13
Uniform Delay, d1	14.2	15.6	7.8	4.9	55.0	11.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	1.9	6.9	0.0	12.6	0.3
Delay (s)	14.7	17.4	14.7	5.0	67.6	12.1
Level of Service	B	B	B	A	E	B
Approach Delay (s)	15.8			9.2	41.0	
Approach LOS	B			A	D	
Intersection Summary						
HCM 2000 Control Delay			17.1	HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.80			
Actuated Cycle Length (s)			136.2	Sum of lost time (s)		15.0
Intersection Capacity Utilization			68.7%	ICU Level of Service		C
Analysis Period (min)			15			
c Critical Lane Group						

Queues

5: Churchill Meadows Blvd & Eglinton Ave W

08-19-2024



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	7	878	57	770	42	577
Act Effct Green (s)	34.0	34.0	34.0	34.0	34.0	34.0
Actuated g/C Ratio	0.42	0.42	0.42	0.42	0.42	0.42
v/c Ratio	0.03	0.58	0.31	0.52	0.06	1.02
Control Delay	14.1	19.5	21.3	17.3	7.9	68.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.1	19.5	21.3	17.3	7.9	68.9
LOS	B	B	C	B	A	E
Approach Delay		19.5		17.6	7.9	68.9
Approach LOS		B		B	A	E
Queue Length 50th (m)	0.6	54.5	5.8	43.1	1.4	~94.1
Queue Length 95th (m)	3.0	73.2	15.9	59.5	7.2	86.7
Internal Link Dist (m)		466.9		143.0	69.3	69.0
Turn Bay Length (m)	25.0		25.0			
Base Capacity (vph)	223	1502	181	1486	708	565
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.58	0.31	0.52	0.06	1.02

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 30.8

Intersection LOS: C

Intersection Capacity Utilization 75.1%

ICU Level of Service D

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

5: Churchill Meadows Blvd & Eglinton Ave W

08-19-2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	842	10	52	561	140	4	11	23	350	17	20
Future Volume (vph)	7	842	10	52	561	140	4	11	23	350	17	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.97			0.92			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.96	
Satd. Flow (prot)	1770	3533		1770	3433			1699			1770	
Flt Permitted	0.28	1.00		0.23	1.00			0.96			0.72	
Satd. Flow (perm)	525	3533		427	3433			1634			1324	
Peak-hour factor, PHF	0.97	0.97	0.97	0.91	0.91	0.91	0.90	0.90	0.90	0.67	0.67	0.67
Adj. Flow (vph)	7	868	10	57	616	154	4	12	26	522	25	30
RTOR Reduction (vph)	0	1	0	0	28	0	0	15	0	0	2	0
Lane Group Flow (vph)	7	877	0	57	742	0	0	27	0	0	575	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	34.0	34.0		34.0	34.0			34.0			34.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0			34.0			34.0	
Actuated g/C Ratio	0.42	0.42		0.42	0.42			0.42			0.42	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	223	1501		181	1459			694			562	
v/s Ratio Prot		c0.25			0.22							
v/s Ratio Perm	0.01			0.13				0.02			c0.43	
v/c Ratio	0.03	0.58		0.31	0.51			0.04			1.02	
Uniform Delay, d1	13.4	17.6		15.3	16.9			13.4			23.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.3	1.7		4.5	1.3			0.0			43.8	
Delay (s)	13.7	19.3		19.8	18.1			13.5			66.8	
Level of Service	B	B		B	B			B			E	
Approach Delay (s)		19.2			18.3			13.5			66.8	
Approach LOS		B			B			B			E	
Intersection Summary												
HCM 2000 Control Delay			30.6			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			80.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			75.1%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

8: Ridgeway Dr & Platinum Dr/Aquinas Ave

08-19-2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	2	36	22	6	54	0	330	16	42	711	73
Future Volume (Veh/h)	9	2	36	22	6	54	0	330	16	42	711	73
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.65	0.65	0.65	0.59	0.59	0.59	0.91	0.91	0.91	0.94	0.94	0.94
Hourly flow rate (vph)	14	3	55	37	10	92	0	363	18	45	756	78
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)												190
pX, platoon unblocked												
vC, conflicting volume	1164	1266	417	896	1296	190	834	381				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1164	1266	417	896	1296	190	834	381				
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	89	98	91	82	94	89	100	96				
cM capacity (veh/h)	123	161	585	204	155	819	795	1174				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	72	139	242	139	423	456						
Volume Left	14	37	0	0	45	0						
Volume Right	55	92	0	18	0	78						
cSH	317	388	1700	1700	1174	1700						
Volume to Capacity	0.23	0.36	0.14	0.08	0.04	0.27						
Queue Length 95th (m)	6.8	12.8	0.0	0.0	1.0	0.0						
Control Delay (s)	19.6	19.4	0.0	0.0	1.2	0.0						
Lane LOS	C	C			A							
Approach Delay (s)	19.6	19.4	0.0		0.6							
Approach LOS	C	C										
Intersection Summary												
Average Delay			3.1									
Intersection Capacity Utilization			Err%	ICU Level of Service					H			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

11: Ridgeway Dr & EX plaza driveway/Southwick St

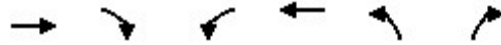
08-19-2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	1	9	17	4	15	20	367	8	2	796	11
Future Volume (Veh/h)	2	1	9	17	4	15	20	367	8	2	796	11
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.63	0.63	0.63	0.93	0.93	0.93	0.95	0.95	0.95	0.93	0.93	0.93
Hourly flow rate (vph)	3	2	14	18	4	16	21	386	8	2	856	12
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)	97											
pX, platoon unblocked												
vC, conflicting volume	1119	1302	434	879	1304	197	868	394				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1119	1302	434	879	1304	197	868	394				
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	98	99	98	92	97	98	97	100				
cM capacity (veh/h)	152	155	570	228	155	811	772	1161				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	19	38	214	201	430	440						
Volume Left	3	18	21	0	2	0						
Volume Right	14	16	0	8	0	12						
cSH	332	305	772	1700	1161	1700						
Volume to Capacity	0.06	0.12	0.03	0.12	0.00	0.26						
Queue Length 95th (m)	1.5	3.4	0.7	0.0	0.0	0.0						
Control Delay (s)	16.5	18.5	1.2	0.0	0.1	0.0						
Lane LOS	C	C	A	A								
Approach Delay (s)	16.5	18.5	0.6	0.0								
Approach LOS	C	C										
Intersection Summary												
Average Delay	1.0											
Intersection Capacity Utilization	36.7%			ICU Level of Service					A			
Analysis Period (min)	15											

Queues

3: Ridgeway Dr & Eglinton Ave W

08-19-2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	802	267	397	901	460	597
Act Effct Green (s)	66.3	66.3	94.6	91.6	41.5	66.3
Actuated g/C Ratio	0.46	0.46	0.65	0.63	0.29	0.46
v/c Ratio	0.50	0.35	0.80	0.40	0.91	0.59
Control Delay	30.3	22.4	26.3	14.1	73.5	6.1
Queue Delay	1.3	0.7	0.0	0.0	0.0	0.0
Total Delay	31.6	23.1	26.3	14.1	73.5	6.1
LOS	C	C	C	B	E	A
Approach Delay	29.5			17.8	35.4	
Approach LOS	C			B	D	
Queue Length 50th (m)	89.5	39.7	53.5	70.7	132.3	8.5
Queue Length 95th (m)	126.8	72.6	83.0	84.1	#220.6	43.6
Internal Link Dist (m)	143.0			390.2	73.1	
Turn Bay Length (m)		12.0	25.0			
Base Capacity (vph)	1616	756	613	2546	538	1020
Starvation Cap Reductn	562	233	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.51	0.65	0.35	0.86	0.59

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 145.2

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 26.9

Intersection LOS: C

Intersection Capacity Utilization 78.8%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Ridgeway Dr & Eglinton Ave W

08-19-2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↙	↑↑	↙	↗
Traffic Volume (vph)	778	259	361	820	432	561
Future Volume (vph)	778	259	361	820	432	561
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	1.00	1.00	0.24	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	451	3539	1770	1583
Peak-hour factor, PHF	0.97	0.97	0.91	0.91	0.94	0.94
Adj. Flow (vph)	802	267	397	901	460	597
RTOR Reduction (vph)	0	33	0	0	0	297
Lane Group Flow (vph)	802	234	397	901	460	300
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	3	
Permitted Phases		2	6			2
Actuated Green, G (s)	66.3	66.3	91.6	91.6	41.5	66.3
Effective Green, g (s)	66.3	66.3	91.6	91.6	41.5	66.3
Actuated g/C Ratio	0.46	0.46	0.63	0.63	0.29	0.46
Clearance Time (s)	6.0	6.0	3.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1617	723	487	2234	506	723
v/s Ratio Prot	0.23		c0.13	0.25	c0.26	
v/s Ratio Perm		0.15	c0.39			0.19
v/c Ratio	0.50	0.32	0.82	0.40	0.91	0.41
Uniform Delay, d1	27.7	25.1	16.7	13.2	50.0	26.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	1.2	10.1	0.1	20.1	1.8
Delay (s)	28.8	26.3	26.8	13.4	70.0	28.2
Level of Service	C	C	C	B	E	C
Approach Delay (s)	28.1			17.5	46.4	
Approach LOS	C			B	D	
Intersection Summary						
HCM 2000 Control Delay			29.7	HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio			0.86			
Actuated Cycle Length (s)			145.1	Sum of lost time (s)		15.0
Intersection Capacity Utilization			78.8%	ICU Level of Service		D
Analysis Period (min)			15			
c Critical Lane Group						

Queues

5: Churchill Meadows Blvd & Eglinton Ave W

08-19-2024



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	20	747	85	1307	241	258
Act Effct Green (s)	34.3	34.3	34.3	34.3	19.4	19.4
Actuated g/C Ratio	0.52	0.52	0.52	0.52	0.29	0.29
v/c Ratio	0.16	0.41	0.26	0.72	0.45	0.78
Control Delay	15.5	11.6	14.0	16.2	12.6	36.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	11.6	14.0	16.2	12.6	36.7
LOS	B	B	B	B	B	D
Approach Delay		11.7		16.0	12.6	36.7
Approach LOS		B		B	B	D
Queue Length 50th (m)	1.2	27.7	5.5	59.1	13.0	29.1
Queue Length 95th (m)	7.0	55.4	19.0	115.7	28.2	53.4
Internal Link Dist (m)		466.9		143.0	69.3	69.0
Turn Bay Length (m)	25.0		25.0			
Base Capacity (vph)	124	1837	328	1811	863	583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.41	0.26	0.72	0.28	0.44

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 65.9

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 16.5

Intersection LOS: B

Intersection Capacity Utilization 89.3%

ICU Level of Service E

Analysis Period (min) 15

HCM Signalized Intersection Capacity Analysis

5: Churchill Meadows Blvd & Eglinton Ave W

08-19-2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	693	24	81	975	267	38	52	122	189	32	17
Future Volume (vph)	19	693	24	81	975	267	38	52	122	189	32	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	0.97			0.92			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.96	
Satd. Flow (prot)	1770	3521		1770	3425			1703			1775	
Flt Permitted	0.13	1.00		0.34	1.00			0.91			0.60	
Satd. Flow (perm)	239	3521		630	3425			1560			1114	
Peak-hour factor, PHF	0.96	0.96	0.96	0.95	0.95	0.95	0.88	0.88	0.88	0.92	0.92	0.92
Adj. Flow (vph)	20	722	25	85	1026	281	43	59	139	205	35	18
RTOR Reduction (vph)	0	2	0	0	26	0	0	75	0	0	4	0
Lane Group Flow (vph)	20	745	0	85	1281	0	0	166	0	0	254	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)	34.4	34.4		34.4	34.4			19.5			19.5	
Effective Green, g (s)	34.4	34.4		34.4	34.4			19.5			19.5	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.30			0.30	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	124	1837		328	1787			461			329	
v/s Ratio Prot		0.21			c0.37							
v/s Ratio Perm	0.08			0.13				0.11			c0.23	
v/c Ratio	0.16	0.41		0.26	0.72			0.36			0.77	
Uniform Delay, d1	8.2	9.5		8.7	12.0			18.3			21.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.8	0.7		1.9	2.5			0.5			10.7	
Delay (s)	11.0	10.2		10.6	14.5			18.8			31.8	
Level of Service	B	B		B	B			B			C	
Approach Delay (s)		10.2			14.3			18.8			31.8	
Approach LOS		B			B			B			C	
Intersection Summary												
HCM 2000 Control Delay		15.2			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		65.9			Sum of lost time (s)			12.0				
Intersection Capacity Utilization		89.3%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

8: Ridgeway Dr & Platinum Dr/Aquinas Ave

08-19-2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	3	51	22	3	36	8	973	32	12	553	21
Future Volume (Veh/h)	14	3	51	22	3	36	8	973	32	12	553	21
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.68	0.68	0.68	0.90	0.90	0.90	0.88	0.88	0.88	0.84	0.84	0.84
Hourly flow rate (vph)	21	4	75	24	3	40	9	1106	36	14	658	25
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage veh												
Upstream signal (m)	190											
pX, platoon unblocked												
vC, conflicting volume	1311	1858	342	1576	1853	571	683	1142				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1311	1858	342	1576	1853	571	683	1142				
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	79	94	89	61	96	91	99	98				
cM capacity (veh/h)	100	70	654	61	71	464	906	608				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	100	67	562	589	343	354						
Volume Left	21	24	9	0	14	0						
Volume Right	75	40	0	36	0	25						
cSH	263	128	906	1700	608	1700						
Volume to Capacity	0.38	0.52	0.01	0.35	0.02	0.21						
Queue Length 95th (m)	13.6	19.8	0.2	0.0	0.6	0.0						
Control Delay (s)	26.9	60.2	0.3	0.0	0.8	0.0						
Lane LOS	D	F	A		A							
Approach Delay (s)	26.9	60.2	0.1		0.4							
Approach LOS	D	F										
Intersection Summary												
Average Delay			3.5									
Intersection Capacity Utilization			Err%	ICU Level of Service					H			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

11: Ridgeway Dr & EX plaza driveway/Southwick St

08-19-2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	2	39	4	3	2	55	948	23	3	547	39
Future Volume (Veh/h)	29	2	39	4	3	2	55	948	23	3	547	39
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.74	0.74	0.74	0.75	0.75	0.75	0.90	0.90	0.90	0.88	0.88	0.88
Hourly flow rate (vph)	39	3	53	5	4	3	61	1053	26	3	622	44
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)	97											
pX, platoon unblocked												
vC, conflicting volume	1304	1851	333	1560	1860	540	666	1079				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1304	1851	333	1560	1860	540	666	1079				
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	63	96	92	92	94	99	93	100				
cM capacity (veh/h)	106	68	663	64	67	486	919	642				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	95	12	588	552	314	355						
Volume Left	39	5	61	0	3	0						
Volume Right	53	3	0	26	0	44						
cSH	193	84	919	1700	642	1700						
Volume to Capacity	0.49	0.14	0.07	0.33	0.00	0.21						
Queue Length 95th (m)	19.4	3.8	1.7	0.0	0.1	0.0						
Control Delay (s)	40.5	55.2	1.7	0.0	0.2	0.0						
Lane LOS	E	F	A		A							
Approach Delay (s)	40.5	55.2	0.9		0.1							
Approach LOS	E	F										
Intersection Summary												
Average Delay	2.9											
Intersection Capacity Utilization	60.1%			ICU Level of Service					B			
Analysis Period (min)	15											