



# TRANSPORTATION IMPACT STUDY UPDATE

**Proposed Residential Development  
1970 & 1980 Fowler Drive, City of  
Mississauga**



LEA Consulting Ltd.

625 Cochrane Drive, 5<sup>th</sup> Floor

Markham, ON, L3R 9R9 Canada

T | 905 470 0015 F | 905 470 0030

WWW.LEA.CA

December 9, 2025

Reference Number:

26050

**Mr. Andrew Tenyenhuis**  
IMH 1970 & 1980 Fowler Drive Ltd.  
1400 - 3280 Bloor Street West  
Toronto, Ontario M8X 2X3

Dear Mr. Tenyenhuis,

**RE: Transportation Impact Study  
Proposed Residential Development  
1970 & 1980 Fowler Drive, Mississauga, Ontario**

LEA Consulting Ltd. is pleased to present the findings of our Transportation Impact Study for the proposed high-rise residential development located at 1970 & 1980 Fowler Drive in the City of Mississauga. This study has been prepared in support of the Official Plan Amendment (OPA) and Rezoning (RZ) applications for the site. This report concludes that the traffic associated with the proposed development will have an acceptable impact on the surrounding road network.

Please do not hesitate to contact the undersigned should you have any additional questions or concerns at [rkeel@lea.ca](mailto:rkeel@lea.ca).

Yours truly,

LEA CONSULTING LTD.

Robert Keel, M.Sc.Pl., MCIP, RPP  
Manager, Transportation Planning



## Disclaimer

*This Report represents the work of LEA Consulting Ltd ("LEA"). This Report may not be relied upon for detailed implementation or any other purpose not specifically identified within this Report. This Document is confidential and prepared solely for the use of IMH 1970 & 1980 Fowler Drive Ltd. Neither LEA, its sub-consultants nor their respective employees assume any liability for any reason, including, but not limited to, negligence, to any party other than IMH 1970 & 1980 Fowler Drive Ltd. for any information or representation herein.*



## TABLE OF CONTENTS

1	Introduction.....	1
1.1	<i>Proposed Development</i> .....	1
2	Existing Traffic Conditions .....	3
2.1	<i>Road Network</i> .....	3
2.2	<i>Transit Network</i> .....	4
2.3	<i>Cycling Network</i> .....	6
2.4	<i>Pedestrian Network</i> .....	7
2.5	<i>Traffic Data Collection</i> .....	8
2.6	<i>Existing Traffic volumes</i> .....	8
3	Future Background Transportation Conditions .....	9
3.1	<i>Growth Rates</i> .....	9
3.2	<i>Background Developments</i> .....	9
3.3	<i>Future Background Traffic Volumes</i> .....	10
4	Site-Generated Traffic.....	12
4.1	<i>Modal Split</i> .....	12
4.2	<i>Trip Generation</i> .....	12
4.3	<i>Trip Distribution and Assignment</i> .....	13
5	Future Total Transportation Conditions.....	15
5.1	<i>Road Network Improvements</i> .....	15
5.2	<i>Future Total Traffic Volumes</i> .....	15
6	Intersection Capacity Analysis.....	18
6.1	<i>Existing Synchro Model Inputs</i> .....	18
6.2	<i>Future Background Synchro Model Inputs</i> .....	18
6.3	<i>Future Total Synchro Model Inputs</i> .....	18
6.4	<i>Signalized Intersections</i> .....	18
6.5	<i>Unsignalized Intersections</i> .....	25
6.6	<i>Sensitivity Analysis</i> .....	37
6.7	<i>Conclusions</i> .....	38
7	Parking Review .....	39
7.1	<i>Bicycle Parking Zoning By-law Requirements</i> .....	39

7.2	<i>Vehicle Parking Zoning By-law Requirements</i> .....	40
7.3	<i>Vehicle Parking Justification</i> .....	40
7.4	<i>Accessible Parking Zoning by-law requirements</i> .....	44
8	Loading Review.....	45
9	Transportation Demand Management .....	46
9.1	<i>Cycling-Based Strategies</i> .....	46
9.2	<i>Pedestrian-Based Strategies</i> .....	47
9.3	<i>Transit-Based Strategies</i> .....	47
9.4	<i>Parking-Based Strategies</i> .....	47
10	Conclusions & Recommendations .....	49

## LIST OF TABLES

Table 1-1: Site Statistics .....	2
Table 2-1: Data Collection Summary .....	8
Table 3-1: Corridor Growth Rates .....	9
Table 3-2: Summary of Background Developments .....	9
Table 4-1: 2016 TTS Modal Split Summary .....	12
Table 4-2: Vehicle Trip Generation Rates – Existing Residential Use .....	12
Table 4-3: Trip Generation – Proposed Residential Use.....	12
Table 4-4: Multi-Modal Trip Generation .....	13
Table 4-5: General Trip Distribution.....	13
Table 6-1: Signal Timing Plan Adjustments - Erin Mills Parkway and Lincoln Green Way/ Sheridan Park Drive .....	19
Table 6-2: Intersection Capacity Analysis – Erin Mills Parkway & Lincoln Green Way/Sheridan Park Drive (2030) .....	19
Table 6-3: Intersection Capacity Analysis – Erin Mills Parkway & Lincoln Green Way/Sheridan Park Drive (2035) .....	20
Table 6-4: Intersection Capacity Analysis – Erin Mills Parkway & Lincoln Green Way/Sheridan Park Drive (2040) .....	21
Table 6-5: Intersection Capacity Analysis – Erin Mill Parkway & Fowler Drive/Leanne Boulevard (2030) .....	22
Table 6-6: Intersection Capacity Analysis – Erin Mills Parkway & Fowler Drive/Leanne Boulevard (2035) .....	23



Table 6-7: Intersection Capacity Analysis – Erin Mills Parkway & Fowler Drive/Leanne Boulevard (2040) .....	24
Table 6-8: Intersection Capacity Analysis - Fowler Drive & Roche Road/Sheridan Centre Access (2030) .....	25
Table 6-9: Intersection Capacity Analysis - Fowler Drive & Roche Road/Sheridan Centre Access (2035) .....	25
Table 6-10: Intersection Capacity Analysis - Fowler Drive & Roche Road/Sheridan Centre Access (2040) .....	26
Table 6-11: Intersection Capacity Analysis – Roche Court & 1970 Fowler Drive Access (2030) .....	27
Table 6-12: Intersection Capacity Analysis – Roche Court & 1970 Fowler Drive Access (2035) .....	27
Table 6-13: Intersection Capacity Analysis – Roche Court & 1970 Fowler Drive Access (2040) .....	28
Table 6-14: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive West Access (2030) .....	29
Table 6-15: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive West Access (2035) .....	29
Table 6-16: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive West Access (2040) .....	30
Table 6-17: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive East Access (2030) .....	30
Table 6-18: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive East Access (2035) .....	31
Table 6-19: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive East Access (2040) .....	31
Table 6-20: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive West Access (2030) .....	32
Table 6-21: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive West Access (2035) .....	32
Table 6-22: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive West Access (2040) .....	33
Table 6-23: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive East Access (2030) .....	33
Table 6-24: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive East Access (2035) .....	34
Table 6-25: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive East Access (2040) .....	34
Table 6-26: Intersection Capacity Analysis – Fowler Drive & North Sheridan Way/Sheridan Centre Access (2030) .....	35
Table 6-27: Intersection Capacity Analysis – Fowler Drive & North Sheridan Way/Sheridan Centre Access (2035) .....	35
Table 6-28: Intersection Capacity Analysis – Fowler Drive & North Sheridan Way/Sheridan Centre Access (2040) .....	36
Table 6-29: Intersection Capacity Analysis – Site Access & North Sheridan Way .....	37
Table 6-30: 2035 Sensitivity Analysis – Fowler Drive & North Sheridan Way/Sheridan Centre Access .....	37
Table 7-1: Zoning By-law Bicycle Parking Requirements .....	39
Table 7-2: Zoning By-law Vehicular Parking Requirements - Precinct 3 .....	40

Table 7-3: Parking Utilization Survey Results – 1970 & 1980 Fowler Drive.....	42
Table 7-4: Zoning By-law Accessible Parking Space Requirements.....	44
Table 8-1: Zoning By-law Loading Requirements.....	45
Table 9-1: TDM Measures Summary .....	48

## LIST OF FIGURES

Figure 1-1: Site Location .....	1
Figure 1-2: Proposed Site Plan .....	2
Figure 2-1: Existing Lane Configuration.....	3
Figure 2-2: Existing Transit Network .....	5
Figure 2-3: Existing Cycling Network .....	6
Figure 2-4: Existing Pedestrian Network .....	7
Figure 2-5: Existing Peak Hour Traffic Volumes .....	8
Figure 3-1: 2030 Future Background Peak Hour Traffic Volumes.....	10
Figure 3-2: 2035 Future Background Peak Hour Traffic Volumes.....	10
Figure 3-3: 2040 Future Background Peak Hour Traffic Volumes.....	11
Figure 4-1: Site-Generated Peak Hour Traffic Volumes.....	14
Figure 5-1: Future Background Lane Configuration .....	15
Figure 5-2: 2030 Future Total Peak Hour Traffic Volumes .....	16
Figure 5-3: 2035 Future Total Peak Hour Traffic Volumes .....	16
Figure 5-4: 2040 Future Total Traffic Volumes .....	17



## APPENDICES

APPENDIX A	TERMS OF REFERENCE
APPENDIX B	TRAFFIC DATA & SIGNAL TIMING PLANS
APPENDIX C	EXISTING GROWTH RATES
APPENDIX D	BACKGROUND DEVELOPMENTS
APPENDIX E	EXISTING TTS DATA
APPENDIX F	EXISTING INTERSECTION CAPACITY ANALYSIS
APPENDIX G	FUTURE BACKGROUND INTERSECTION CAPACITY ANALYSIS
APPENDIX H	FUTURE TOTAL INTERSECTION CAPACITY ANALYSIS
APPENDIX I	SIGNAL WARRANTS
APPENDIX J	SENSITIVITY ANALYSIS INTERSECTION CAPACITY ANALYSIS
APPENDIX K	PROXY PARKING DATA
APPENDIX L	SWEPT PATH ANALYSIS

## 1 INTRODUCTION

LEA Consulting Ltd. (LEA) has been retained by IMH 1970 & 1980 Fowler Drive Ltd. to undertake a Transportation Impact Study (TIS) for the proposed residential development located at 1970 & 1980 Fowler Drive (hereinafter referred to as the “subject site”) in the City of Mississauga.

The site is currently occupied by two high-rise residential apartment buildings. The site location is illustrated in **Figure 1-1**.

**Figure 1-1: Site Location**



Source: Google Maps, May 2025

The purpose of this assessment is to review the existing transportation infrastructure in the surrounding area, including the road network, transit network and active transportation network, and assess the traffic impact of the proposed development on the surrounding network. In addition, the proposed parking and loading provisions have been reviewed, and Transportation Demand Management (TDM) measures have been recommended to encourage the use of other modes of transportation.

### 1.1 PROPOSED DEVELOPMENT

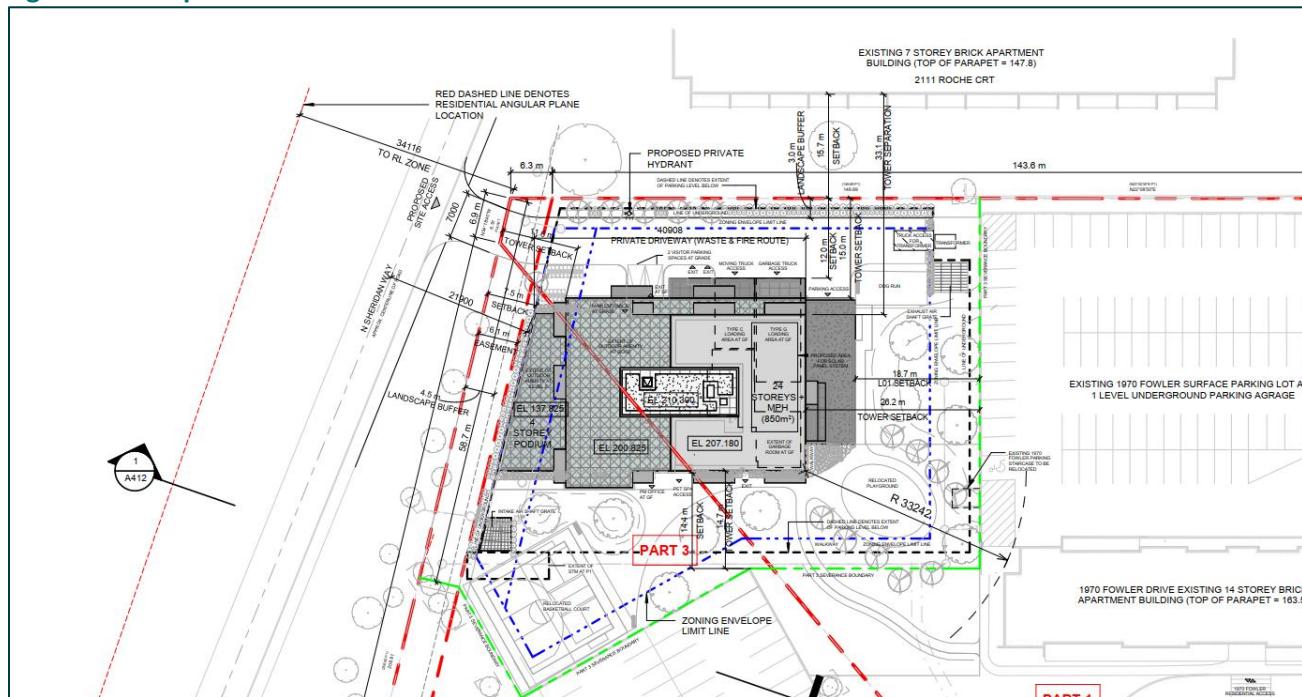
The proposed development consists of one (1) 24-storey building containing 285 residential apartment units. Four (4) levels of underground parking are proposed, accommodating 272 vehicle parking spaces. In addition, 186 bicycle parking spaces are proposed to support cycling to/from the proposed development.

Table 1-1: Site Statistics

Land Use	Unit Count/GFA
Studio	33 units
1-Bedroom	152 units
2-Bedroom	71 units
3-Bedroom	29 units
Total Residential	285 units

Vehicular access to the development is proposed via a private driveway connection to North Sheridan Way. Figure 1-2 illustrates the proposed site plan.

Figure 1-2: Proposed Site Plan



Source: Core Architects Inc., December 2025

## 2 EXISTING TRAFFIC CONDITIONS

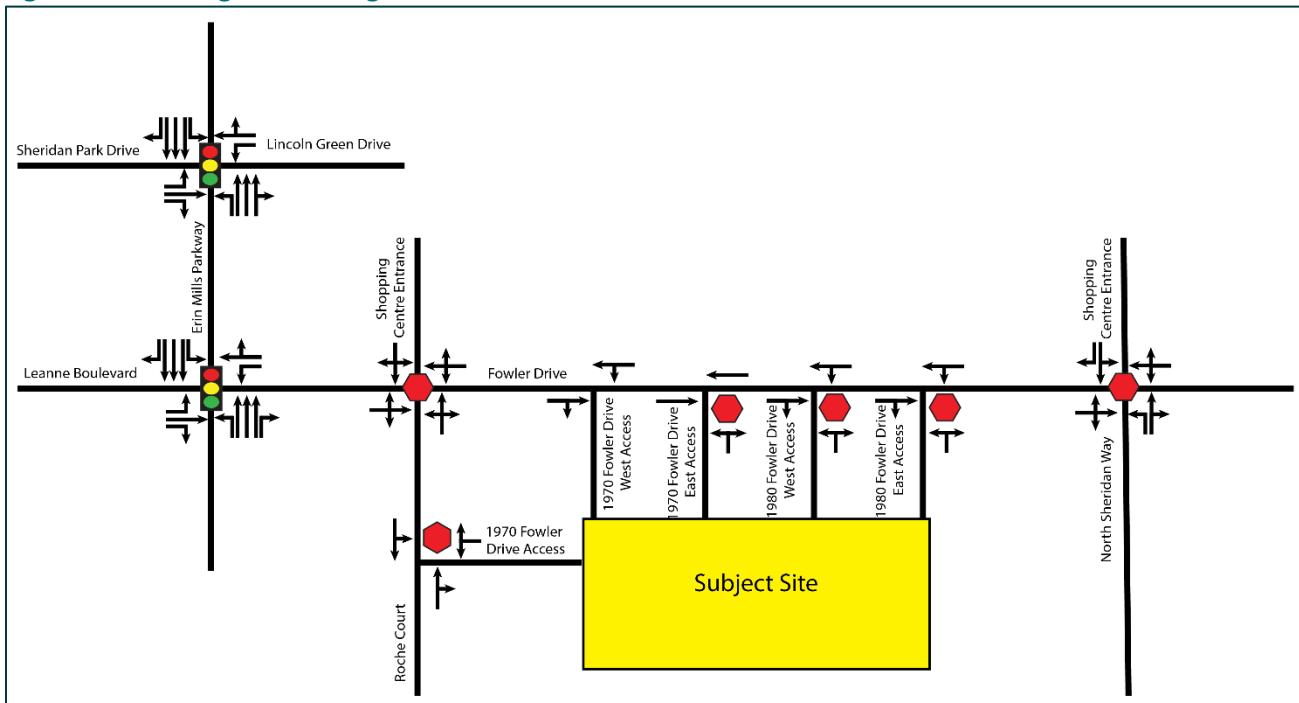
This section identifies and assesses the existing transportation conditions within the study area, including the road, transit, cycling, and pedestrian networks. The study area was determined by assessing the size of the proposed development and its anticipated transportation impact, and through consultation with City staff, as documented in **Appendix A**. The study area includes the following intersections:

- ▶ Fowler Drive & North Sheridan Way (Unsignalized);
- ▶ Roche Court and Fowler Drive (Unsignalized);
- ▶ Fowler Drive/Leanne Boulevard and Erin Mills Parkway (Signalized);
- ▶ Lincoln Green Way/Sheridan Park drive and Erin Mills Parkway (Signalized);
- ▶ 1970 Fowler Drive Access West & Fowler Drive (Unsignalized);
- ▶ 1970 Fowler Drive Access East & Fowler Drive (Unsignalized);
- ▶ 1980 Fowler Drive West Access & Fowler Drive (Unsignalized);
- ▶ 1980 Fowler Drive East Access & Fowler Drive (Unsignalized); And
- ▶ 1970 Fowler Drive Access & Roche Court (Unsignalized).

### 2.1 ROAD NETWORK

The following section provides a description and classification of the roadways within the study area. All roadways within the study area are under the jurisdiction of the City of Mississauga unless otherwise noted. **Figure 2-1** illustrates the existing lane configuration.

**Figure 2-1: Existing Lane Configuration**





**Erin Mills Parkway** is a north-south regional arterial road that operates with a six-lane cross-section (three lanes per direction) within the study area. Erin Mills Parkway operates from the Queen Elizabeth Way in the south to Mississauga Road in the north; south of the Queen Elizabeth Way, Erin Mills continues as Southdown Road. The roadway operates with a posted speed limit of 70 km/h within the study area.

**Sheridan Park Drive** is an east-west major collector road that operates with a two-lane cross-section (one lane per direction) within the study area. Sheridan Park Drive operates from Erin Mills Parkway to the east and terminates west of Speakman Drive. The roadway operates with a posted speed limit of 40 km/h within the study area.

**Lincoln Green Way** is an east-west major collector road that generally operates with a three-lane cross-section (one lane per direction with a two-way left turn in the center) within the study area. Lincoln Green Way operates from Erin Mills Parkway in the west and Robin Drive to the east. The roadway operates with a posted speed limit of 40 km/h within the study area.

**Fowler Drive** is an east-west major collector road that operates with a two-lane cross-section (one lane per direction) within the study area. Fowler Drive operates from Lincoln Green Way in the east to Erin Mills Parkway to the west. The roadway operates with a posted speed limit of 40 km/h within the study area.

**North Sheridan Way** is a north-south major collector road that operates with a two-lane cross-section (one lane per direction) within the study area. The study segment of North Sheridan Way operates between Mississauga Road in the south (as the road curves north) and Fowler Drive in the north. The roadway operates with a posted speed limit of 60 km/h within the study area.

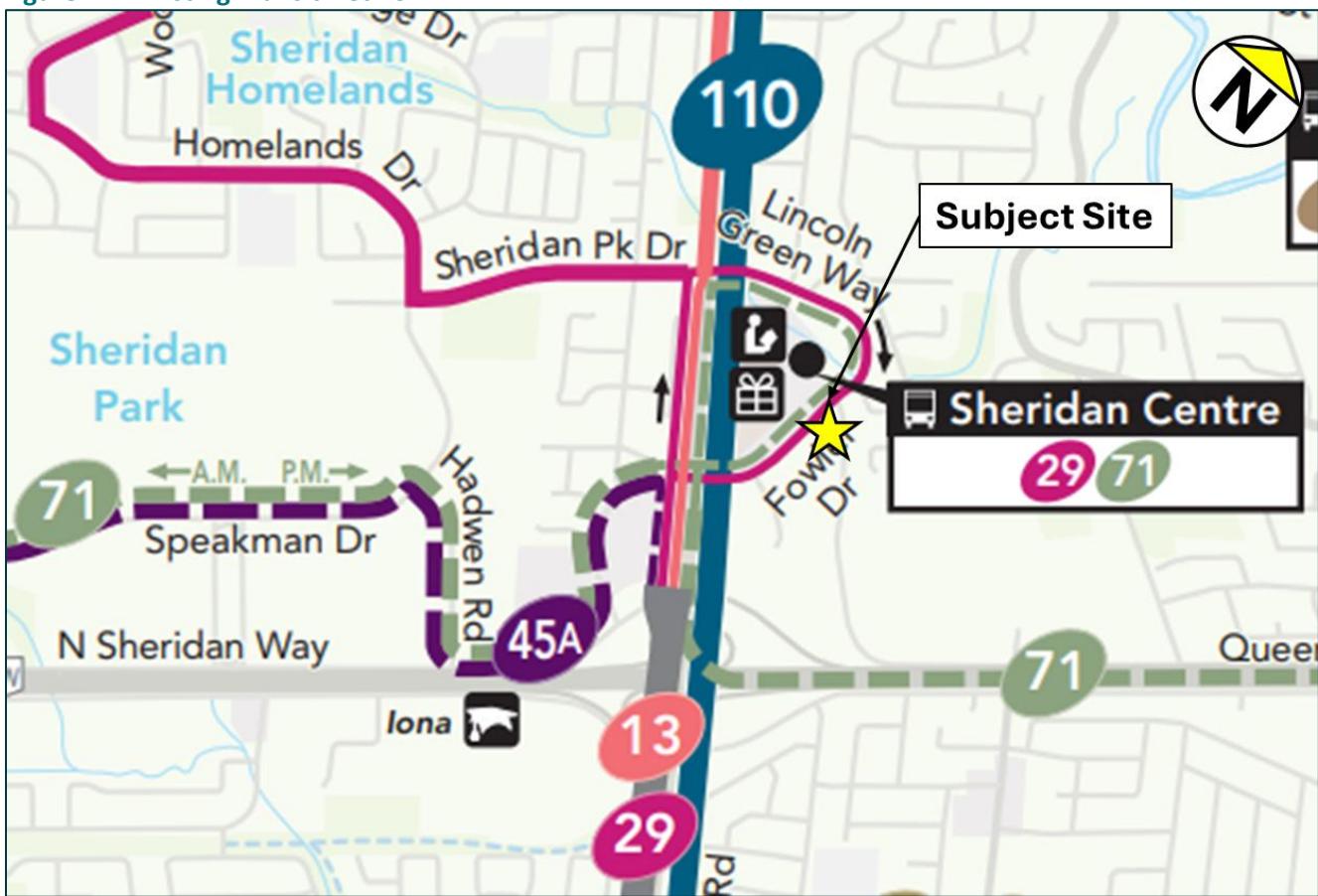
**Roche Court** is a north-south private road that operates with a two-lane cross-section (one lane per direction) within the study area. Roch Court connects to Fowler Drive and terminates as a cul-de-sac. There is no posted speed limit so it is assumed that the roadway operates with a speed limit of 40 km/h within the study area.

**Leanne Boulevard** is an east-west major collector road that operates with a four-lane cross-section (two lanes per direction) within the study area. Leanne Boulevard operates between Erin Mills Parkway in the east and North Sheridan Way to the west. The roadway operates with a speed limit of 50 km/h within the study area.

## 2.2 TRANSIT NETWORK

The subject site is located in an area well-serviced by the MiWay transit network. The subject site is within walking distance of bus stops at the Erin Mills Parkway & Fowler Drive intersection as well as along Fowler Drive. The transit routes servicing the area are illustrated in **Figure 2-2**.

Figure 2-2: Existing Transit Network



Source: MiWay, February 2024

**MiWay Route 71 – Sheridan** is a bus route that operates in an east-west direction between Kipling Bus Terminal to the area of Plymouth Drive/Winston Churchill Boulevard. Route 1C provides additional service to the South Common Centre.

*Access Location:* Route 71 is accessible near the intersection of Fowler Drive & North Sheridan Way, located 400m (equivalent to a 6-minute walk) from the subject site.

**MiWay Route 29 – Park Royal** is a bus route that operates in a north-south direction between South Common Centre Bus Terminal and the Clarkson GO station.

*Access Location:* Route 29 is accessible near the intersection of Fowler Drive & North Sheridan Way, located 400m (equivalent to a 6-minute walk) from the subject site.

**MiWay Route 110 – University Express** is a bus route that operates generally in a north-south direction between City Centre Transit Terminal and Clarkson GO Station/South Common Centre Bus Terminal, University of Toronto Mississauga Campus.

*Access Location:* Route 110 is accessible at the intersection of Erin Mills Parkway and Fowler Drive, which is approximately 750m from the subject site.

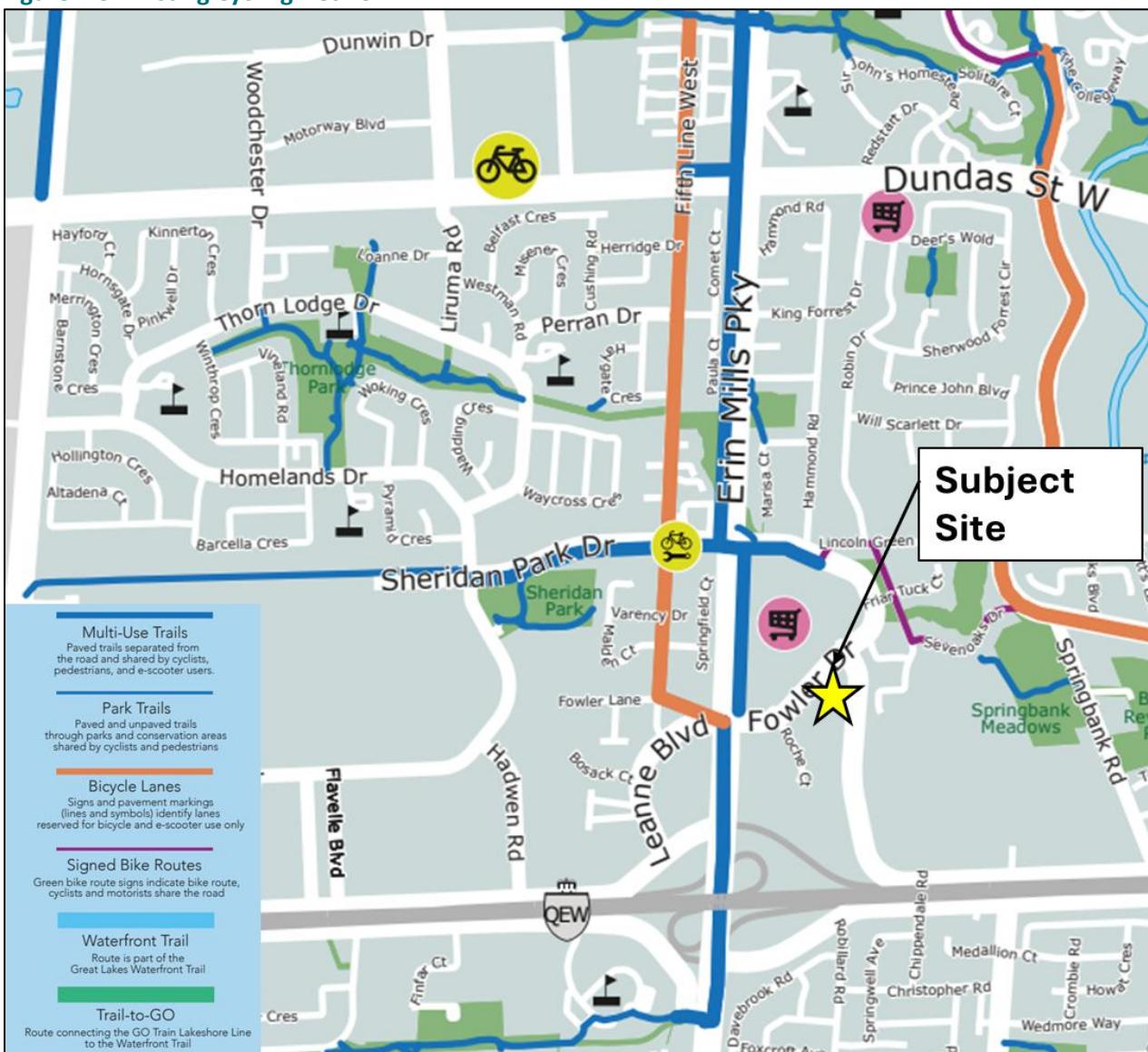
**MiWay Route 13 – Glen Erin** is a bus route that operates in a north-south direction between Meadowvale Town Centre Drop Off and Clarkson GO Station.

**Access Location:** Route 13 is accessible at the intersection of Erin Mills Parkway and Fowler Drive, which is approximately 750m from the subject site.

## 2.3 CYCLING NETWORK

The existing cycling network surrounding the site is illustrated in **Figure 2-3**. The subject site is located in a neighbourhood with some access to nearby cycling infrastructure, including a multi-use trail on Erin Mills Parkway and a bike lane on Fifth Line West.

**Figure 2-3: Existing Cycling Network**



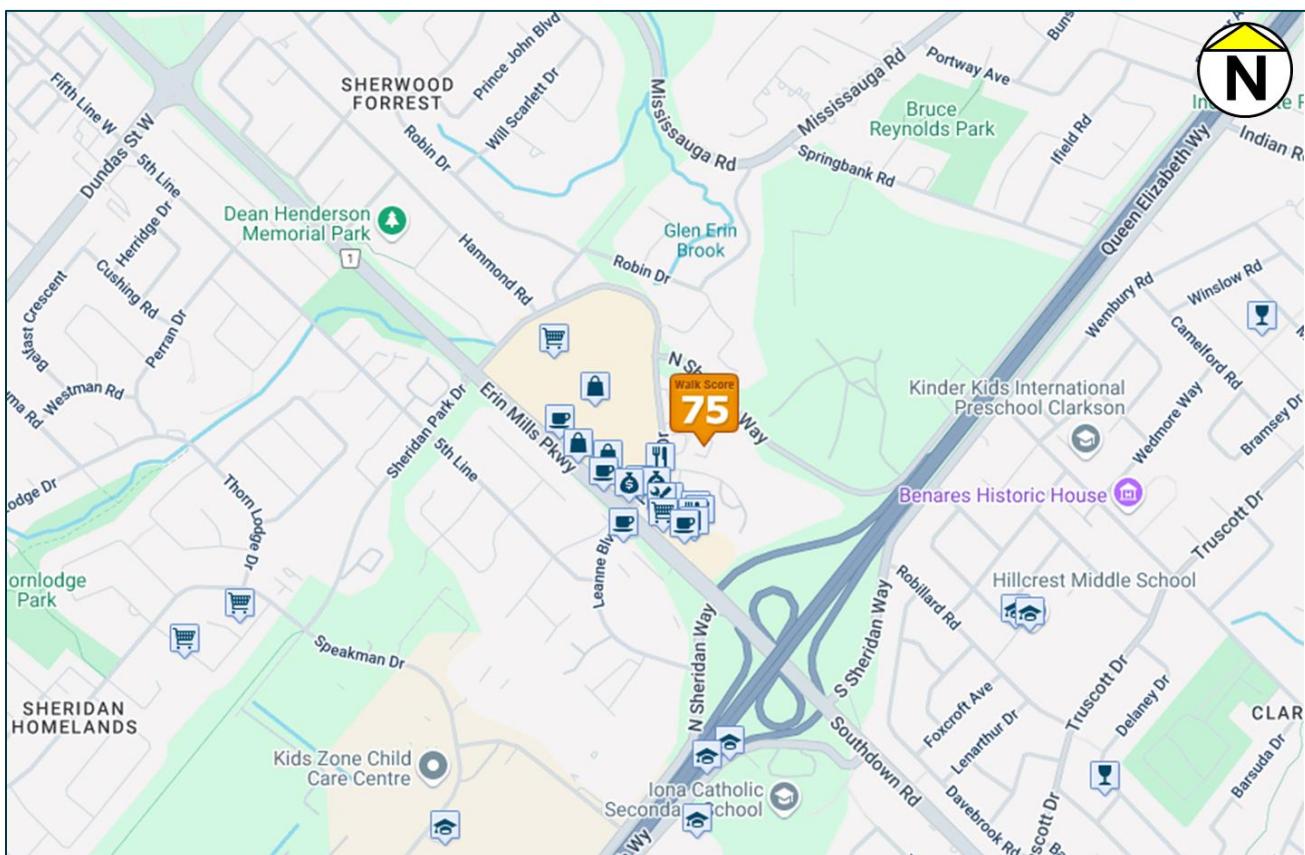
Source: City of Mississauga, June 2025

## 2.4 PEDESTRIAN NETWORK

In the area immediately surrounding the subject site, the existing pedestrian network consists of sidewalks along both sides of Fowler Drive, Erin Mills Parkway, and most nearby collector roads. A single-sided sidewalk is provided along North Sheridan Way. Pedestrian crosswalks are available on all approaches at all signalized intersections in the study area. The existing pedestrian network provides good connections between the residential and commercial uses in the area as well as nearby MiWay transit stops.

The subject site has a WalkScore™ of 75/100 – *Very Walkable*, an indication that most errands can be accomplished on foot<sup>1</sup>. As shown in **Figure 2-4** below, a 15-minute walk from the site provides access to amenities and services such as grocery stores, restaurants, retail stores, schools, parks, and pharmacies, ensuring that daily needs can be accommodated as a pedestrian.

**Figure 2-4: Existing Pedestrian Network**



Source: Walkscore, June 2025

<sup>1</sup> <https://www.walkscore.com/score/1970-fowler-dr-mississauga-on-canada>

## 2.5 TRAFFIC DATA COLLECTION

Turning movement counts (TMCs) were used as the source of traffic data for the intersection capacity analysis. Traffic counts were obtained by LEA Consulting Ltd. on Wednesday, May 21<sup>st</sup>, 2025, during the AM and PM peak periods. Signal timing plans (STPs) at the signalized intersections were obtained from the Regional Municipality of Peel. A summary of the TMC data collected is provided in **Table 2-1**, with detailed traffic counts and signal timing plans available in **Appendix B**.

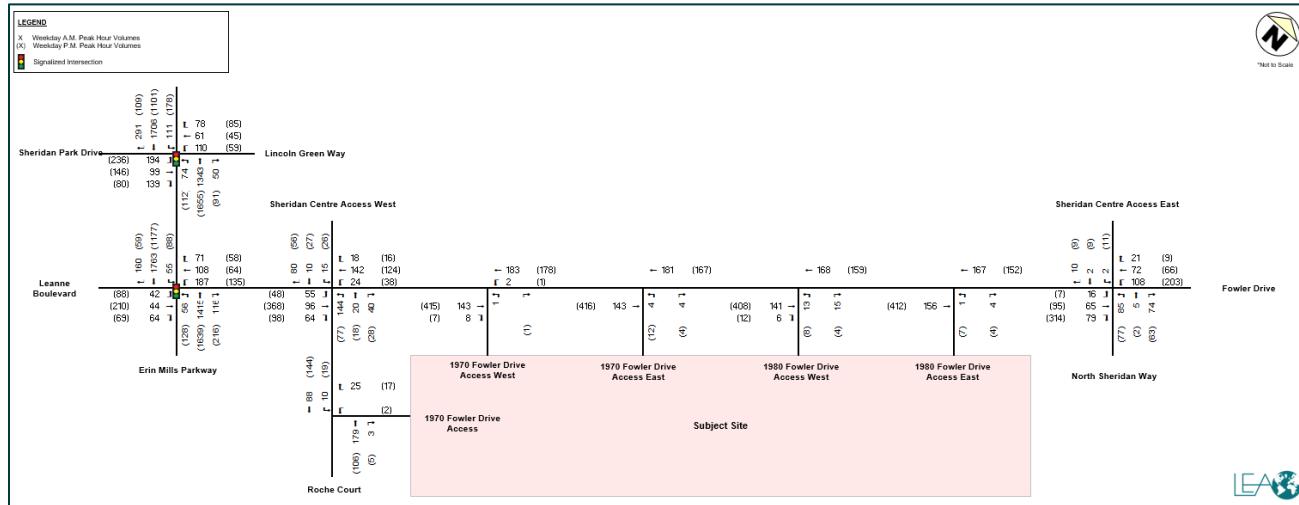
Table 2-1: Data Collection Summary

Intersection	TMC Date	Source
North Sheridan Way/ Sheridan Centre Access & Fowler Drive	Wednesday, May 21 <sup>st</sup> , 2025	LEA Consulting
Roche Court/ Sheridan Centre Access & Fowler Drive		
Erin Mills Parkway & Leanne Boulevard/Fowler Drive		
Erin Mills Parkway & Lincoln Green Way/ Sheridan Park Drive		
1970 Fowler Drive West Access & Fowler Drive		
1970 Fowler Drive East Access & Fowler Drive		
1980 Fowler Drive West Access & Fowler Drive		
1980 Fowler Drive East Access & Fowler Drive		
Roche Court & 1970 Fowler Drive Access		

## 2.6 EXISTING TRAFFIC VOLUMES

The existing traffic volumes for the weekday AM and PM peak hours is illustrated in **Figure 2-5**.

**Figure 2-5: Existing Peak Hour Traffic Volumes**



## 3 FUTURE BACKGROUND TRANSPORTATION CONDITIONS

For the analysis of future background traffic conditions, this study considers a 5-, 10- and 15- year buildup horizon to the years 2030, 2035, and 2040. It is assumed that the proposed development will be completed by the 2030 horizon. Future background conditions include traffic added to the network from other future developments, corridor growth, as well as planned infrastructure improvements within the study area. The future background conditions will be used as the baseline for evaluating the impact of the proposed development.

### 3.1 GROWTH RATES

Growth rates were provided by the City of Mississauga and Peel Region for Lincoln Green Way, Fowler Drive, Erin Mills Parkway and North Sheridan Way and are outlined below in **Table 3-1**. Growth rates were applied to the through movements on all identified roads. Supporting calculations are available in **Appendix C**.

Table 3-1: Corridor Growth Rates

Corridor	2025-2030		2030-2035		2035-2040	
	AM	PM	AM	PM	AM	PM
WB Lincoln Green Way	1.00%	0.50%	1.50%	0.50%	1.50%	0.50%
EB Fowler Drive	0.50%	1.00%	0.50%	1.50%	0.50%	1.50%
NB Fowler Drive	1.00%	0.50%	1.50%	0.50%	1.50%	0.50%
NB Erin Mills Pkwy	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
SB Erin Mills Pkwy	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
NB North Sheridan Way	3.50%	1.50%	2.00%	2.50%	2.00%	2.50%
SB North Sheridan Way	3.50%	1.50%	2.00%	2.50%	2.00%	2.50%

### 3.2 BACKGROUND DEVELOPMENTS

One (1) background development was identified within the immediate study area in consultation with the City. Background development traffic volumes were extracted from their traffic study and were subsequently assigned to the study area road network. The site statistics of the background developments are summarized in **Table 3-2**, and excerpts from the studies are provided in **Appendix D**.

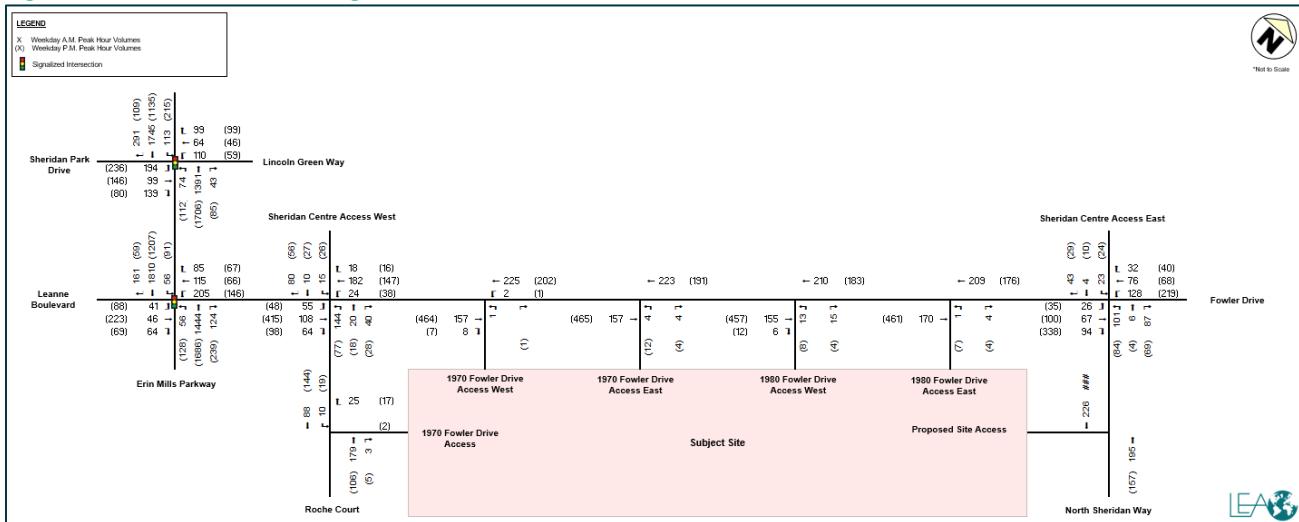
Table 3-2: Summary of Background Developments

#	Location	Proposed Development	Source of Traffic Volumes
1	2225 Erin Mills Parkway, Mississauga	620 residential units	WSP (May 2023)

### 3.3 FUTURE BACKGROUND TRAFFIC VOLUMES

Future background traffic volumes are illustrated in the figures below.

**Figure 3-1: 2030 Future Background Peak Hour Traffic Volumes**



**Figure 3-2: 2035 Future Background Peak Hour Traffic Volumes**

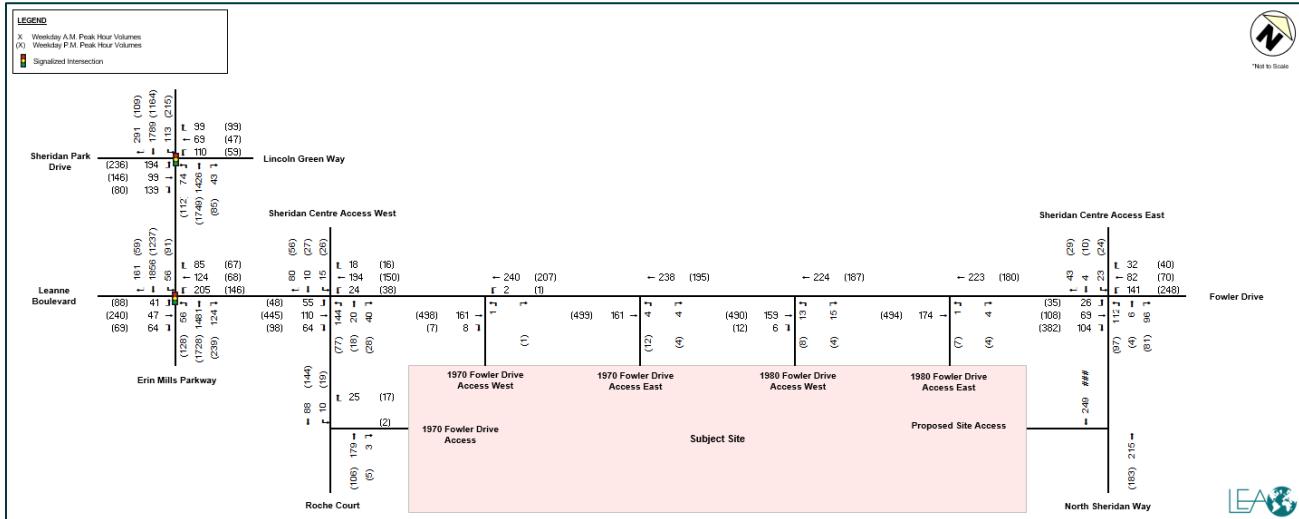
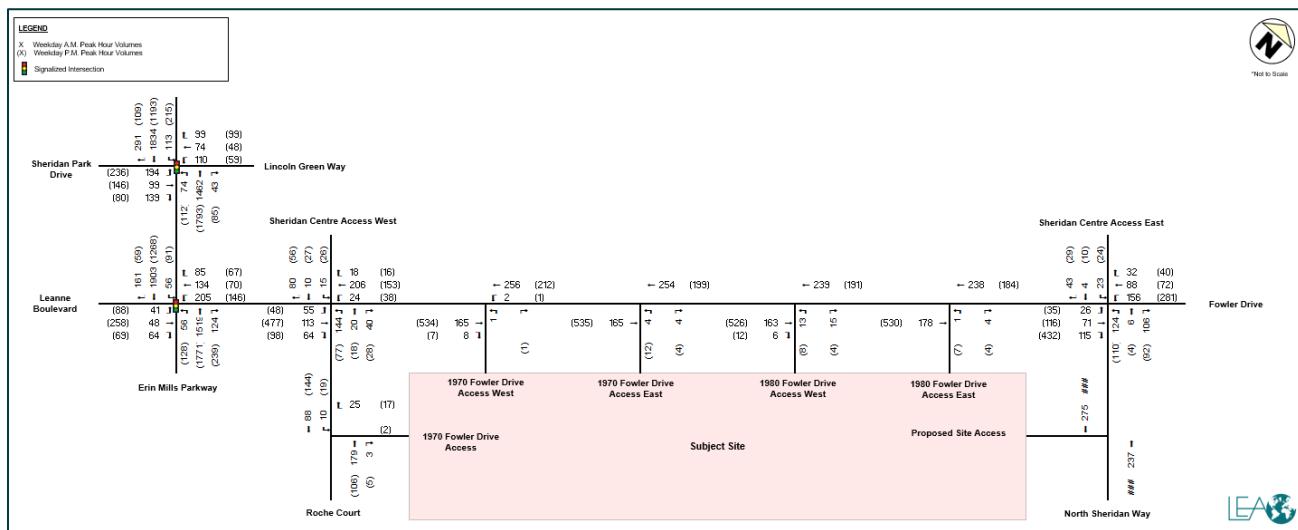


Figure 3-3: 2040 Future Background Peak Hour Traffic Volumes



## 4 SITE-GENERATED TRAFFIC

As previously mentioned, the proposed development will contain 285 residential units. Access to the development is proposed via an unsignalized full moves access onto North Sheridan Way. The sections below discuss the calculation, distribution, and assignment of site-generated vehicle trips.

### 4.1 MODAL SPLIT

Data from the 2022 Transportation Tomorrow Survey (TTS) was extracted to identify the modal split of the neighbourhood trips originating from the area during the weekday AM and PM peak hours (Traffic Area Zones (TAZ) 4400, 4409, 4412, 4663, 4676, 4683 and 4685). The existing modal split is summarized in **Table 4-1**. Detailed TTS calculations are provided in **Appendix E**.

Table 4-1: 2016 TTS Modal Split Summary

Travel Mode	Residential
Auto Driver	57%
Auto Passenger	13%
Taxi / Rideshare	1%
Transit	19%
Walk	10%
Cycle	0%
<b>Total</b>	<b>100%</b>

### 4.2 TRIP GENERATION

Trip generation for the proposed development was estimated using the observed trip generation rates at the existing apartment buildings located at 1970 and 1980 Fowler Drive. **Table 4-2** summarizes the existing trip generation rates; supporting data is provided in **Appendix B**.

Table 4-2: Vehicle Trip Generation Rates – Existing Residential Use

Location	Survey Date	Units	Description	Weekday AM Peak			Weekday PM Peak		
				In	Out	Total	In	Out	Total
1970-1980 Fowler Drive, Mississauga	Wednesday, May 21 <sup>st</sup> , 2025	332	Surveyed Trips	29	67	96	44	59	103
			Trip Rates (/unit)	0.09	0.20	0.29	0.13	0.18	0.31

Table 4-3: Trip Generation – Proposed Residential Use

Land Use	Description	Weekday AM Peak			Weekday PM Peak		
		In	Out	Total	In	Out	Total
Residential (285 units)	Proxy Trip Rate (/unit)	0.09	0.20	0.29	0.13	0.18	0.31
	Site Auto Trips	26	57	83	37	51	88

The proposed development is predicted to generate a total of 83 two-way auto trips during the AM peak hour (26 inbound, 57 outbound) and 88 two-way auto trips during the PM peak hour (37 inbound, 51 outbound). A breakdown of the expected number of site trips generated by mode is summarized in **Table 4-4**; multi-modal trip generation was calculated based on the local mode split described in **Section 4.1**.

Table 4-4: Multi-Modal Trip Generation

Land Use	Description	Modal Split	Weekday AM Peak Hour			Weekday PM Peak Hour		
			In	Out	Total	In	Out	Total
Proposed Residential	External Person Trips	100%	46	100	146	65	89	154
	Auto Driver Trips	57%	26	57	83	37	51	88
	Auto Passenger Trips	13%	6	13	19	8	11	19
	Taxi/Rideshare Trips	1%	0	1	1	1	1	2
	Transit Trips	19%	10	19	28	12	17	29
	Pedestrian Trips	10%	5	10	15	7	9	16
	Cycling Trips	0%	0	0	0	0	0	0

### 4.3 TRIP DISTRIBUTION AND ASSIGNMENT

The directional trip distribution of site traffic was derived using Transportation Tomorrow Survey (TTS) 2022 data. The site traffic was assigned to the road network based on trip patterns in the study area, logical routing, and the location and configuration of the site access. **Table 4-5** below outlines the assumed trip distribution for site traffic. Detailed TTS calculations are provided in **Appendix E**.

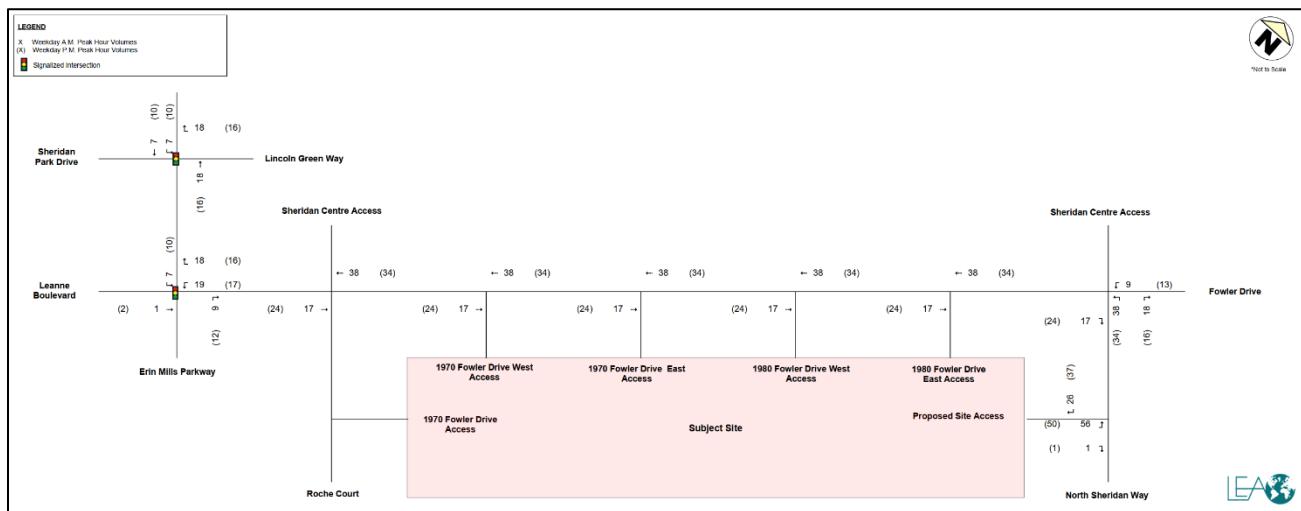
Table 4-5: General Trip Distribution

Origin/ Destination	Assigned Route	Residential Weekday AM/PM	
		In	Out
		Total	
North	Highway 400 Series via Erin Mills Parkway	11%	27%
	QEW via Erin Mills Parkway	5%	9%
	Erin Mills Parkway and EW Corridors	7%	9%
	Fowler Drive and NS Corridors	8%	0%
South	QEW via Erin Mills Parkway	14%	16%
	Erin Mills Parkway and EW Corridors	6%	6%
East	Highway 400 Series via Erin Mills Parkway	4%	2%
	QEW via Erin Mills Parkway	8%	8%
	North Sheridan Way and EW Corridors	0%	1%
	Fowler Drive and NS Corridors	13%	0%
West	Highway 400 Series via Erin Mills Parkway	4%	2%
	Erin Mills Parkway and EW Corridors	4%	20%
	Leanne Boulevard and NS Corridors	16%	0%
		Total	100%
		100%	

**Figure 4-1** illustrates the site-generated traffic volumes during the weekday AM and PM peak hours.

**Transportation Impact Study  
Proposed Residential Development  
1970 & 1980 Fowler Drive, City of Mississauga  
26050**

**Figure 4-1: Site-Generated Peak Hour Traffic Volumes**

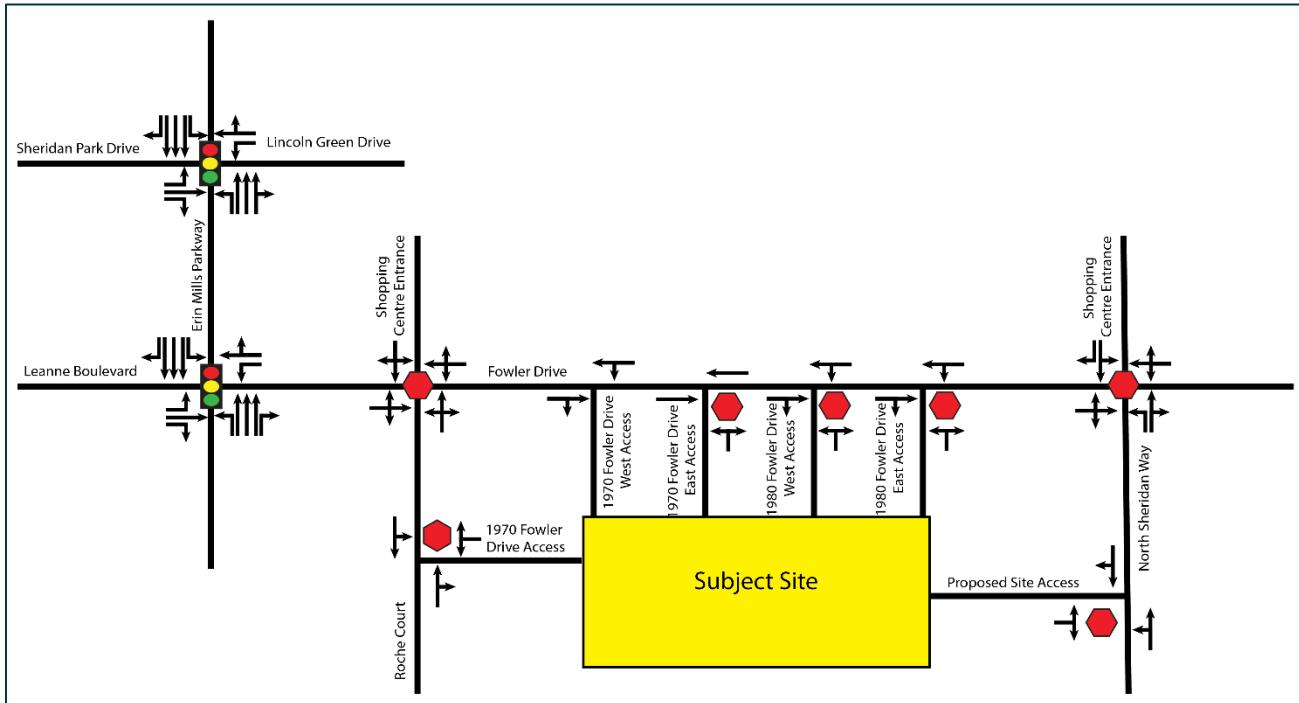


## 5 FUTURE TOTAL TRANSPORTATION CONDITIONS

### 5.1 ROAD NETWORK IMPROVEMENTS

Figure 5-1 below illustrates the future road network with the proposed site access.

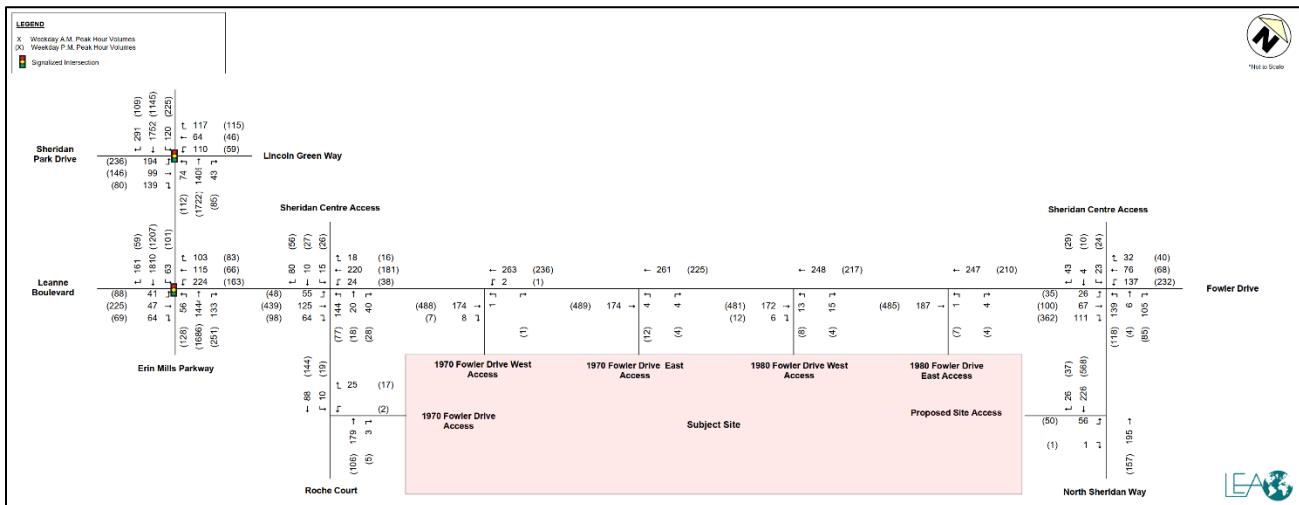
**Figure 5-1: Future Background Lane Configuration**



### 5.2 FUTURE TOTAL TRAFFIC VOLUMES

Future total traffic volumes during the weekday AM and PM peak hours are illustrated in the figures below.

## Figure 5-2: 2030 Future Total Peak Hour Traffic Volumes



### Figure 5-3: 2035 Future Total Peak Hour Traffic Volumes

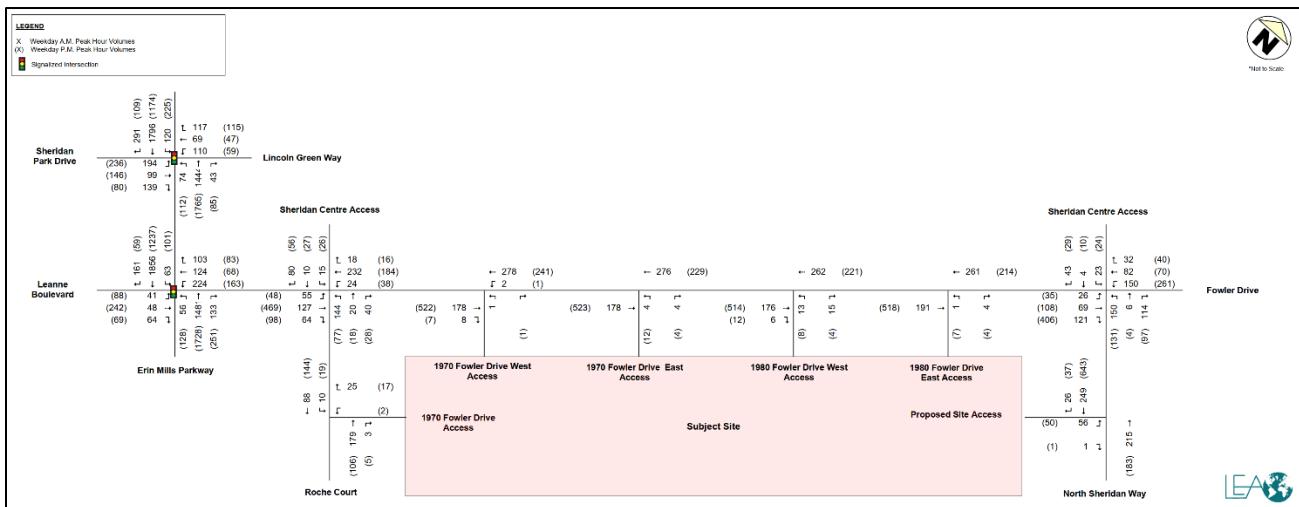
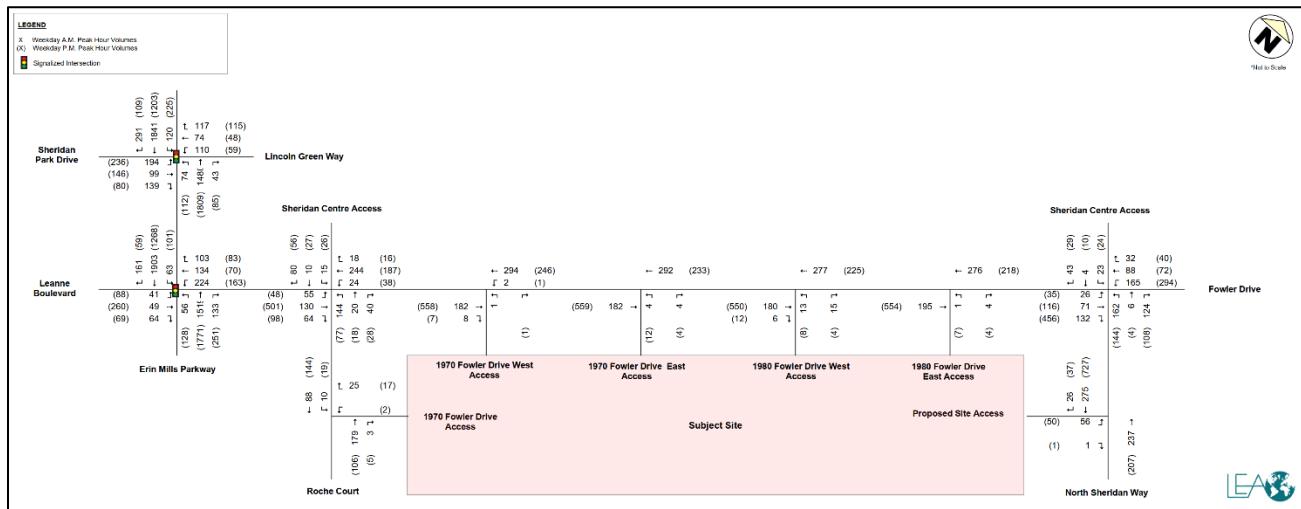


Figure 5-4: 2040 Future Total Traffic Volumes



## 6 INTERSECTION CAPACITY ANALYSIS

The intersection capacity analysis was undertaken using Synchro 11.0, which is based on the Highway Capacity Manual 6<sup>th</sup> edition methodology for signalized and unsignalized intersections. The analysis adheres to the City of Mississauga's *Transportation Impact Study Guidelines* (December 2022) and The Ministry of Transportation's (MTO) *General Guidelines for the Preparation of Traffic Impact Studies* (March 2023). As per Mississauga guidelines, critical movements at signalized intersections are identified as those with V/C ratios for individual movements greater than 1.0 or level-of-service (LOS) F. At unsignalized intersections, critical movements are identified as those with LOS E or worse.

The following sections outline a comparison of the capacity analysis results under existing, future background, and future total conditions. Detailed intersection capacity analysis results are provided in the following appendices:

- ▶ **Appendix F:** Existing Intersection Capacity Analysis
- ▶ **Appendix G:** Future Background Intersection Capacity Analysis
- ▶ **Appendix H:** Future Total Intersection Capacity Analysis

### 6.1 EXISTING SYNCHRO MODEL INPUTS

Existing traffic operations were assessed to provide a baseline for future traffic operations. The existing analysis incorporates the most recent signal timing plans for the study intersections obtained from the Region of Peel. Peak hour factors (PHF) were calculated based on collected survey data.

### 6.2 FUTURE BACKGROUND SYNCHRO MODEL INPUTS

Future background traffic conditions were determined by incorporating the future road network configuration, growth rates, and background development traffic along with existing traffic volumes. Signal splits at the intersection of Erin Mills Parkway and Lincoln Greenway/Sheridan Park Drive were optimized during the AM peak hour in the 2035 and 2040 horizons.

### 6.3 FUTURE TOTAL SYNCHRO MODEL INPUTS

Future total traffic conditions include the addition of site trips to the future background volumes. Changes under future background conditions were carried forward into future total conditions including signal timing optimization at the intersection of Erin Mills Parkway and Lincoln Greenway/Sheridan Park Drive.

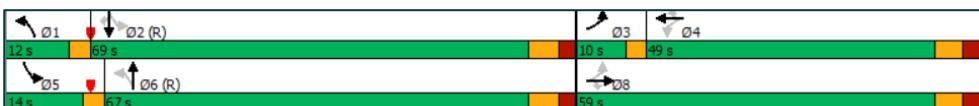
### 6.4 SIGNALIZED INTERSECTIONS

The results for the studied signalized intersections under each traffic scenario during the weekday AM and PM peak hours are summarized in the sections below.

#### 6.4.1 Erin Mills Parkway & Lincoln Green Way/Sheridan Park Drive

Signal optimization was undertaken at the intersection of Erin Mills Parkway and Lincoln Greenway/Sheridan Park Drive in the 2035 and 2040 horizons, as summarized in **Table 6-1**.

Table 6-1: Signal Timing Plan Adjustments - Erin Mills Parkway and Lincoln Green Way/ Sheridan Park Drive

Erin Mills Parkway and Lincoln Green Way/ Sheridan Park Drive									
Existing – AM Peak									
2035 and 2040 Future Optimized – AM Peak									

The intersection capacity analysis at Erin Mills Parkway and Lincoln Green Parkway/Sheridan Park Drive during the AM and PM peak hours are summarized in **Table 6-2**, **Table 6-3**, and **Table 6-4**.

Table 6-2: Intersection Capacity Analysis – Erin Mills Parkway & Lincoln Green Way/Sheridan Park Drive (2030)

AM	Existing (2025)				Future Background (2030)				Future Total (2030)			
	Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)
EBL	194	0.71	E (59)	54/74	194	0.72	E (59)	54/74	194	0.73	E (60)	54/74
EBT	99	0.24	D (43)	27/41	99	0.24	D (43)	27/41	99	0.24	D (43)	27/41
EBR	139	0.42	D (46)	25/44	139	0.42	D (45)	25/44	139	0.42	D (45)	25/44
WBL	110	0.53	E (56)	34/54	110	0.53	E (56)	34/54	110	0.52	E (56)	34/54
WBT	61	0.22	D (50)	18/31	64	0.23	D (50)	19/32	64	0.23	D (50)	19/32
WBR	78	0.35	D (52)	0/15	99	0.45	D (53)	0/17	117	0.52	D (54)	0/18
NBL	74	0.55	D (49)	12/51	74	0.57	D (53)	20/51	74	0.58	D (54)	21/52
NBTR	1393	0.52	B (19)	13/112	1434	0.53	B (20)	14/19	1452	0.54	B (20)	15/48
SBL	111	0.47	B (15)	10/21	113	0.49	B (16)	11/24	120	0.53	B (17)	11/28
SBT	1706	0.58	B (14)	96/131	1745	0.59	B (15)	100/136	1752	0.59	B (15)	100/137
SBR	291	0.00	(0)	12/30	291	0.00	(0)	12/31	291	0.00	(0)	12/31
PM	Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
EBL	236	0.90	F (88)	68/109	236	0.88	F (82)	68/109	236	0.86	E (77)	68/109
EBT	146	0.40	D (49)	41/61	146	0.39	D (48)	41/61	146	0.37	D (47)	41/61
EBR	80	0.27	D (47)	0/14	80	0.26	D (46)	0/14	80	0.25	D (46)	0/14
WBL	59	0.33	E (58)	18/33	59	0.32	E (57)	18/33	59	0.30	E (56)	18/33
WBT	45	0.20	E (55)	13/25	46	0.19	D (54)	13/26	46	0.18	D (53)	13/26
WBR	85	0.47	E (59)	0/17	99	0.52	E (59)	0/18	115	0.57	E (59)	0/19
NBL	112	0.32	B (10)	6/14	112	0.33	B (11)	6/15	112	0.34	B (12)	6/15
NBTR	1746	0.58	B (19)	50/59	1791	0.61	C (21)	51/64	1807	0.64	C (23)	52/66
SBL	178	0.76	C (28)	28/56	215	0.90	D (50)	45/75	225	0.91	E (57)	48/79
SBT	1101	0.37	B (14)	55/76	1135	0.38	B (14)	57/79	1145	0.39	B (15)	57/81

Table 6-3: Intersection Capacity Analysis – Erin Mills Parkway & Lincoln Green Way/Sheridan Park Drive (2035)

AM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
EBL	194	0.71	E (59)	54/74	194	0.73	E (60)	54/74	194	0.74	E (61)	54/74	
EBT	99	0.24	D (43)	27/41	99	0.24	D (43)	27/41	99	0.24	D (43)	27/41	
EBR	139	0.42	D (46)	25/44	139	0.42	D (45)	25/44	139	0.42	D (45)	25/44	
WBL	110	0.53	E (56)	34/54	110	0.52	E (56)	34/54	110	0.52	E (56)	34/54	
WBT	61	0.22	D (50)	18/31	69	0.25	D (51)	20/34	69	0.25	D (51)	20/34	
WBR	78	0.35	D (52)	0/15	99	0.45	D (53)	0/17	117	0.52	D (54)	0/18	
NBL	74	0.55	D (49)	12/51	74	0.60	E (57)	22/53	74	0.60	E (58)	23/54	
NBTR	1393	0.52	B (19)	13/112	1469	0.54	C (20)	14/38	1487	0.55	C (20)	15/80	
SBL	111	0.47	B (15)	10/21	113	0.50	B (16)	11/26	120	0.54	B (17)	11/30	
SBT	1706	0.58	B (14)	96/131	1789	0.61	B (15)	104/142	1796	0.61	B (15)	104/143	
SBR	291	0.00	(0)	12/30	291	0.00	(0)	13/31	291	0.00	(0)	13/32	
PM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
EBL	236	0.90	F (88)	68/109	236	0.89	F (83)	68/109	236	0.86	E (77)	68/109	
EBT	146	0.40	D (49)	41/61	146	0.39	D (48)	41/61	146	0.37	D (47)	41/61	
EBR	80	0.27	D (47)	0/14	80	0.26	D (46)	0/14	80	0.25	D (45)	0/14	
WBL	59	0.33	E (58)	18/33	59	0.32	E (57)	18/33	59	0.30	E (56)	18/33	
WBT	45	0.20	E (55)	13/25	47	0.19	D (54)	14/26	47	0.18	D (53)	14/26	
WBR	85	0.47	E (59)	0/17	99	0.52	E (59)	0/18	115	0.57	E (59)	0/19	
NBL	112	0.32	B (10)	6/14	112	0.34	B (12)	6/16	112	0.35	B (13)	6/15	
NBTR	1746	0.58	B (19)	50/59	1834	0.63	C (22)	52/69	1850	0.65	C (24)	53/71	
SBL	178	0.76	C (28)	28/56	215	0.90	D (54)	46/76	225	0.91	E (60)	48/79	
SBT	1101	0.37	B (14)	55/76	1164	0.39	B (15)	59/83	1174	0.40	B (15)	59/84	

Table 6-4: Intersection Capacity Analysis – Erin Mills Parkway & Lincoln Green Way/Sheridan Park Drive (2040)

AM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
EBL	194	0.71	E (59)	54/74	194	0.74	E (61)	54/74	194	0.74	E (62)	54/74	
EBT	99	0.24	D (43)	27/41	99	0.24	D (43)	27/41	99	0.24	D (43)	27/41	
EBR	139	0.42	D (46)	25/44	139	0.42	D (45)	25/44	139	0.42	D (45)	25/44	
WBL	110	0.53	E (56)	34/54	110	0.52	E (56)	34/54	110	0.52	E (56)	34/54	
WBT	61	0.22	D (50)	18/31	74	0.27	D (51)	22/36	74	0.27	D (51)	22/36	
WBR	78	0.35	D (52)	0/15	99	0.45	D (53)	0/17	117	0.52	D (54)	0/18	
NBL	74	0.55	D (49)	12/51	74	0.63	E (63)	26/48	74	0.63	E (64)	26/49	
NBTR	1393	0.52	B (19)	13/112	1505	0.56	C (20)	14/61	1523	0.56	C (21)	15/103	
SBL	111	0.47	B (15)	10/21	113	0.51	B (17)	11/28	120	0.55	B (18)	11/32	
SBT	1706	0.58	B (14)	96/131	1834	0.62	B (15)	108/148	1841	0.62	B (15)	109/149	
SBR	291	0.00	(0)	12/30	291	0.00	(0)	13/32	291	0.00	(0)	13/32	
PM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
EBL	236	0.90	F (88)	68/109	236	0.89	F (84)	68/109	236	0.86	E (78)	68/109	
EBT	146	0.40	D (49)	41/61	146	0.39	D (48)	41/61	146	0.37	D (47)	41/61	
EBR	80	0.27	D (47)	0/14	80	0.26	D (46)	0/14	80	0.25	D (45)	0/14	
WBL	59	0.33	E (58)	18/33	59	0.32	E (57)	18/33	59	0.30	E (56)	18/33	
WBT	45	0.20	E (55)	13/25	48	0.20	D (54)	14/27	48	0.19	D (53)	14/27	
WBR	85	0.47	E (59)	0/17	99	0.52	E (59)	0/18	115	0.57	E (58)	0/19	
NBL	112	0.32	B (10)	6/14	112	0.35	B (12)	6/15	112	0.36	B (13)	6/13	
NBTR	1746	0.58	B (19)	50/59	1878	0.65	C (22)	53/74	1894	0.67	C (25)	54/76	
SBL	178	0.76	C (28)	28/56	215	0.90	E (57)	46/76	225	0.91	E (63)	48/79	
SBT	1101	0.37	B (14)	55/76	1193	0.40	B (15)	61/86	1203	0.41	B (15)	61/87	

**Existing Conditions:** Under existing conditions, the intersection of Erin Mills Parkway and Lincoln Green Way/ Sheridan Park Drive operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. Most existing 95<sup>th</sup> percentile queues can be accommodated by their available storage lanes. During the AM peak hour, the 95<sup>th</sup> percentile queue for the eastbound right movement exceeds the existing storage. During both peak hours, the 50<sup>th</sup> and 95<sup>th</sup> percentile queues for the eastbound left movement also exceed the available storage capacity. No other critical movements have been identified.

**Future Background Conditions:** Under future background conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. Under 2030, 2035 and 2040 conditions, the southbound left movement is expected to operate with a v/c that is slightly over 0.85. Delays and queues for the southbound left movement are minimal. Under 2035 and 2040 conditions, the 95<sup>th</sup> percentile queue for the southbound right movement are expected to exceed their available storage. It is recommended that the City/Region consider extending the existing eastbound left, eastbound right, and southbound left turn lanes if deemed necessary based on future traffic growth.

**Future Total Conditions:** Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. No additional intersection modifications are recommended.

#### 6.4.2 Erin Mills Parkway & Fowler Drive/Leanne Boulevard

The intersection capacity analysis at Erin Mills Parkway and Fowler Drive/Leanne Boulevard during the AM and PM peak hours are summarized in **Table 6-5**, **Table 6-6**, and **Table 6-7**.

Table 6-5: Intersection Capacity Analysis – Erin Mill Parkway & Fowler Drive/Leanne Boulevard (2030)

AM	Existing (2025)				Future Background (2030)				Future Total (2030)			
	Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)
EBL	42	0.15	D (47)	11/21	41	0.15	D (46)	10/19	41	0.15	D (46)	10/19
EBT	44	0.10	D (41)	11/21	46	0.10	D (40)	11/21	47	0.10	D (39)	11/21
EBR	64	0.19	D (42)	0/12	64	0.18	D (41)	0/12	64	0.18	D (40)	0/12
WBL	187	0.60	D (52)	54/77	205	0.64	D (53)	59/82	224	0.68	D (54)	65/90
WBT	108	0.25	D (42)	28/43	115	0.26	D (42)	30/44	115	0.25	D (41)	29/44
WBR	71	0.20	D (42)	0/13	85	0.24	D (42)	0/13	103	0.28	D (41)	0/15
NBL	56	0.27	B (16)	4/11	56	0.29	B (18)	5/12	56	0.29	B (18)	5/12
NBT	1415	0.51	B (18)	78/113	1444	0.52	B (19)	85/123	1444	0.53	B (20)	89/125
NBR	116	0.14	B (14)	2/13	124	0.15	B (15)	3/14	133	0.17	B (15)	3/15
SBL	55	0.24	B (14)	4/9	56	0.25	B (14)	4/9	63	0.29	B (15)	5/12
SBT	1763	0.63	C (21)	73/96	1810	0.65	C (22)	78/103	1810	0.66	C (23)	81/104
SBR	160	0.00	(0)	7/17	161	0.00	(0)	7/19	161	0.00	(0)	7/19
PM	Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
EBL	88	0.28	D (43)	24/38	88	0.27	D (43)	24/38	88	0.27	D (42)	23/38
EBT	210	0.43	D (42)	61/80	223	0.45	D (42)	63/84	225	0.44	D (41)	62/85
EBR	69	0.18	D (39)	0/12	69	0.18	D (38)	0/12	69	0.17	D (37)	0/12
WBL	135	0.64	E (60)	42/69	146	0.69	E (64)	46/78	163	0.74	E (68)	50/88
WBT	64	0.13	D (38)	17/28	66	0.13	D (38)	17/28	66	0.13	D (37)	16/28
WBR	58	0.16	D (39)	0/12	67	0.18	D (38)	0/12	83	0.21	D (38)	0/13
NBL	128	0.45	B (16)	11/24	128	0.47	B (17)	12/25	128	0.48	B (17)	13/25
NBT	1639	0.63	C (23)	106/156	1686	0.66	C (24)	119/163	1686	0.67	C (25)	128/163
NBR	216	0.28	B (18)	8/27	239	0.32	B (19)	10/31	251	0.34	B (20)	12/32
SBL	88	0.48	C (21)	5/28	91	0.51	C (24)	7/31	101	0.58	C (27)	12/36
SBT	1177	0.45	B (20)	37/45	1207	0.47	C (21)	38/46	1207	0.48	C (22)	38/46
SBR	59	0.00	(0)	0/2	59	0.00	(0)	0/2	59	0.00	(0)	0/2

Table 6-6: Intersection Capacity Analysis – Erin Mills Parkway & Fowler Drive/Leanne Boulevard (2035)

AM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
EBL	42	0.15	D (47)	11/21	41	0.15	D (47)	10/19	41	0.15	D (46)	10/19	
EBT	44	0.10	D (41)	11/21	47	0.10	D (40)	12/21	48	0.10	D (39)	12/21	
EBR	64	0.19	D (42)	0/12	64	0.18	D (41)	0/12	64	0.18	D (40)	0/12	
WBL	187	0.60	D (52)	54/77	205	0.64	D (53)	59/82	224	0.68	D (54)	65/90	
WBT	108	0.25	D (42)	28/43	124	0.28	D (42)	32/47	124	0.27	D (41)	31/47	
WBR	71	0.20	D (42)	0/13	85	0.24	D (42)	0/13	103	0.28	D (41)	0/15	
NBL	56	0.27	B (16)	4/11	56	0.29	B (18)	5/12	56	0.30	B (19)	5/12	
NBT	1415	0.51	B (18)	78/113	1481	0.54	B (19)	88/127	1481	0.55	C (20)	92/129	
NBR	116	0.14	B (14)	2/13	124	0.15	B (15)	3/15	133	0.17	B (15)	3/16	
SBL	55	0.24	B (14)	4/9	56	0.26	B (15)	4/10	63	0.29	B (15)	5/12	
SBT	1763	0.63	C (21)	73/96	1856	0.67	C (22)	80/109	1856	0.68	C (23)	83/109	
SBR	160	0.00	(0)	7/17	161	0.00	(0)	8/20	161	0.00	(0)	8/20	
PM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
EBL	88	0.28	D (43)	24/38	88	0.27	D (42)	23/38	88	0.27	D (42)	22/38	
EBT	210	0.43	D (42)	61/80	240	0.48	D (42)	67/90	242	0.47	D (41)	65/91	
EBR	69	0.18	D (39)	0/12	69	0.17	D (38)	0/12	69	0.17	D (37)	0/12	
WBL	135	0.64	E (60)	42/69	146	0.71	E (67)	46/82	163	0.78	E (73)	50/91	
WBT	64	0.13	D (38)	17/28	68	0.13	D (37)	17/29	68	0.13	D (37)	16/29	
WBR	58	0.16	D (39)	0/12	67	0.17	D (38)	0/12	83	0.21	D (38)	0/13	
NBL	128	0.45	B (16)	11/24	128	0.48	B (17)	13/25	128	0.49	B (18)	14/25	
NBT	1639	0.63	C (23)	106/156	1728	0.68	C (25)	129/169	1728	0.69	C (26)	141/169	
NBR	216	0.28	B (18)	8/27	239	0.32	B (19)	11/31	251	0.34	B (20)	13/33	
SBL	88	0.48	C (21)	5/28	91	0.53	C (26)	10/33	101	0.59	C (28)	15/39	
SBT	1177	0.45	B (20)	37/45	1237	0.49	C (21)	39/47	1237	0.49	C (22)	40/47	
SBR	59	0.00	(0)	0/2	59	0.00	(0)	0/2	59	0.00	(0)	0/2	

Table 6-7: Intersection Capacity Analysis – Erin Mills Parkway & Fowler Drive/Leanne Boulevard (2040)

AM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
EBL	42	0.15	D (47)	11/21	41	0.16	D (47)	10/19	41	0.15	D (47)	10/19	
EBT	44	0.10	D (41)	11/21	48	0.10	D (40)	12/21	49	0.11	D (39)	12/22	
EBR	64	0.19	D (42)	0/12	64	0.18	D (41)	0/12	64	0.18	D (40)	0/12	
WBL	187	0.60	D (52)	54/77	205	0.64	D (53)	59/82	224	0.68	D (54)	65/90	
WBT	108	0.25	D (42)	28/43	134	0.30	D (42)	35/50	134	0.29	D (41)	34/50	
WBR	71	0.20	D (42)	0/13	85	0.24	D (42)	0/13	103	0.28	D (41)	0/15	
NBL	56	0.27	B (16)	4/11	56	0.30	B (19)	5/12	56	0.31	B (20)	5/13	
NBT	1415	0.51	B (18)	78/113	1519	0.55	B (20)	91/132	1519	0.56	C (21)	96/134	
NBR	116	0.14	B (14)	2/13	124	0.15	B (15)	3/15	133	0.17	B (15)	4/16	
SBL	55	0.24	B (14)	4/9	56	0.27	B (15)	4/10	63	0.30	B (16)	5/13	
SBT	1763	0.63	C (21)	73/96	1903	0.69	C (23)	83/114	1903	0.69	C (23)	86/115	
SBR	160	0.00	(0)	7/17	161	0.00	(0)	8/21	161	0.00	(0)	8/22	
PM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
EBL	88	0.28	D (43)	24/38	88	0.27	D (42)	23/38	88	0.27	D (42)	22/38	
EBT	210	0.43	D (42)	61/80	258	0.50	D (42)	71/97	260	0.51	D (42)	69/99	
EBR	69	0.18	D (39)	0/12	69	0.17	D (37)	0/12	69	0.17	D (37)	0/12	
WBL	135	0.64	E (60)	42/69	146	0.74	E (71)	45/85	163	0.82	F (82)	49/95	
WBT	64	0.13	D (38)	17/28	70	0.14	D (37)	17/29	70	0.14	D (37)	16/29	
WBR	58	0.16	D (39)	0/12	67	0.17	D (37)	0/12	83	0.21	D (38)	0/13	
NBL	128	0.45	B (16)	11/24	128	0.50	B (18)	14/25	128	0.50	B (18)	15/25	
NBT	1639	0.63	C (23)	106/156	1771	0.70	C (26)	140/176	1771	0.70	C (26)	154/176	
NBR	216	0.28	B (18)	8/27	239	0.32	B (20)	12/32	251	0.34	B (20)	14/34	
SBL	88	0.48	C (21)	5/28	91	0.54	C (27)	12/35	101	0.60	C (29)	17/40	
SBT	1177	0.45	B (20)	37/45	1268	0.51	C (22)	40/47	1268	0.51	C (22)	41/47	
SBR	59	0.00	(0)	0/2	59	0.00	(0)	0/2	59	0.00	(0)	0/2	

**Existing Conditions:** Under existing conditions, the intersection of Erin Mills Parkway and Fowler Drive/Leanne Boulevard operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays, although it is noted that the westbound left experiences LOS E during the PM peak hour. Most existing 95<sup>th</sup> percentile queues can be accommodated by their available storage lanes. The 50<sup>th</sup> and 95<sup>th</sup> percentile queues for the westbound left movement exceed their available storage during the AM peak hour. Similarly, the 95<sup>th</sup> percentile queue for the westbound left movement exceeds the existing storage during the PM peak hour. No other critical movements have been identified.

**Future Background Conditions:** Under future background conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. No major constraints are noted. It is recommended that the City monitor intersection operations and consider extending the westbound left turn to the adjacent intersection with Roche Court; alternatively, the lane can be reconfigured to have the westbound left continue as the through lane given that queues and traffic are higher for the westbound left when compared to the through or right turn movements.

**Future Total Conditions:** Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with most movements operating similar to future background conditions. The westbound left is marginally deemed critical during the PM peak hour by the 2040 horizon, but is expected to maintain capacity. No additional intersection modifications are recommended.

## 6.5 UNSIGNALIZED INTERSECTIONS

The results for the studied unsignalized intersections under each traffic scenario during the weekday AM and PM peak hours are summarized below.

### 6.5.1 Fowler Drive & Roche Court/Sheridan Centre Access

The intersection capacity analysis at Fowler Drive and Roche Court/Sheridan Centre Access during the AM and PM peak hours are summarized in **Table 6-8**, **Table 6-9**, and **Table 6-10**.

Table 6-8: Intersection Capacity Analysis - Fowler Drive & Roche Road/Sheridan Centre Access (2030)

AM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLTR	204	0.34	B (11)	-/2	204	0.35	B (12)	-/2	204	0.36	B (12)	-/2	
EBLTR	215	0.34	B (11)	-/2	227	0.37	B (11)	-/2	244	0.40	B (12)	-/2	
WBLTR	184	0.33	B (12)	-/1	224	0.41	B (13)	-/2	262	0.48	B (15)	-/3	
SBLTR	105	0.17	A (10)	-/1	105	0.18	A (10)	-/1	105	0.19	B (10)	-/1	
PM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLTR	123	0.23	B (11)	-/1	123	0.24	B (11)	-/1	123	0.24	B (12)	-/1	
EBLTR	514	0.76	C (22)	-/7	561	0.84	D (29)	-/10	585	0.89	E (36)	-/12	
WBLTR	178	0.29	B (11)	-/1	201	0.34	B (11)	-/2	235	0.40	B (12)	-/2	
SBLTR	109	0.19	B (10)	-/1	109	0.20	B (11)	-/1	109	0.21	B (11)	-/1	

Table 6-9: Intersection Capacity Analysis - Fowler Drive & Roche Road/Sheridan Centre Access (2035)

AM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLTR	204	0.34	B (11)	-/2	204	0.35	B (12)	-/2	204	0.37	B (12)	-/2	
EBLTR	215	0.34	B (11)	-/2	229	0.37	B (11)	-/2	246	0.41	B (12)	-/2	
WBLTR	184	0.33	B (12)	-/1	236	0.43	B (13)	-/2	274	0.50	B (15)	-/3	
SBLTR	105	0.17	A (10)	-/1	105	0.18	A (10)	-/1	105	0.19	B (10)	-/1	
PM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLTR	123	0.23	B (11)	-/1	123	0.24	B (11)	-/1	123	0.25	B (12)	-/1	
EBLTR	514	0.76	C (22)	-/7	591	0.89	E (35)	-/11	615	0.94	E (45)	-/14	
WBLTR	178	0.29	B (11)	-/1	204	0.35	B (12)	-/2	238	0.41	B (13)	-/2	
SBLTR	109	0.19	B (10)	-/1	109	0.21	B (11)	-/1	109	0.21	B (11)	-/1	

Table 6-10: Intersection Capacity Analysis - Fowler Drive & Roche Road/Sheridan Centre Access (2040)

AM	Existing (2025)				Future Background (2040)				Future Total (2040)			
	Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)
NBLTR	204	0.34	B (11)	-/2	204	0.36	B (12)	-/2	204	0.37	B (13)	-/2
EBLTR	215	0.34	B (11)	-/2	232	0.38	B (12)	-/2	249	0.42	B (12)	-/2
WBLTR	184	0.33	B (12)	-/1	248	0.45	B (14)	-/2	286	0.53	C (16)	-/3
SBLTR	105	0.17	A (10)	-/1	105	0.19	B (10)	-/1	105	0.19	B (11)	-/1
PM	Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
NBLTR	123	0.23	B (11)	-/1	123	0.24	B (12)	-/1	123	0.25	B (12)	-/1
EBLTR	514	0.76	C (22)	-/7	623	0.94	E (44)	-/14	647	1.00	F (57)	-/16
WBLTR	178	0.29	B (11)	-/1	207	0.36	B (12)	-/2	241	0.42	B (13)	-/2
SBLTR	109	0.19	B (10)	-/1	109	0.21	B (11)	-/1	109	0.22	B (12)	-/1

**Existing Condition:** Under existing conditions, the intersection of Roche Court/Sheridan Centre Access and Fowler Drive operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95<sup>th</sup> percentile queues can be accommodated by their available storage lanes. No critical movements have been identified.

**Future Background Conditions:** Under future background conditions, the intersection is expected to generally operate similar to existing conditions, although a reduction in capacity and increased delays are expected for the eastbound movement due to background traffic growth.

**Future Total Conditions:** Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with most movements operating similar to future background conditions. Under 2040 conditions, the eastbound movement is expected to operate near capacity during the PM peak hour. It is noted that background traffic growth is expected to add 109 vehicles to this movement (by 2040), compared to the 24 site vehicles that are expected to be added. Given the conservative study assumptions with respect to background traffic growth, it is reasonable to conclude that intersection operations will generally remain similar to existing conditions and no intersection modifications are recommended. A signalization warrant was completed under future total 2040 conditions; conditions were not met for signalization. Supporting calculations are provided in **Appendix I**.

### 6.5.2 Roche Court & 1970 Fowler Drive Access

The intersection capacity analysis at Roche Court and 1970 Fowler Drive Access during the AM and PM peak hours are summarized in **Table 6-11**, **Table 6-12**, and **Table 6-13**.

Table 6-11: Intersection Capacity Analysis – Roche Court & 1970 Fowler Drive Access (2030)

AM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBT	179	0.00	(0)	-/0	179	0.00	(0)	-/0	179	0.00	(0)	-/0	
NBR	3	0.00	(0)	-/0	3	0.00	(0)	-/0	3	0.00	(0)	-/0	
WBLR	25	0.04	A (10)	-/0	25	0.04	A (10)	-/0	25	0.04	A (10)	-/0	
SBL	10	0.01	A (8)	-/0	10	0.01	A (8)	-/0	10	0.01	A (8)	-/0	
SBT	88	0.00	A (0)	-/0	88	0.00	A (0)	-/0	88	0.00	A (0)	-/0	
PM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBT	106	0.00	(0)	-/0	106	0.00	(0)	-/0	106	0.00	(0)	-/0	
NBR	5	0.00	(0)	-/0	5	0.00	(0)	-/0	5	0.00	(0)	-/0	
WBLR	19	0.03	A (9)	-/0	19	0.03	A (9)	-/0	19	0.03	A (9)	-/0	
SBL	19	0.02	A (8)	-/0	19	0.02	A (8)	-/0	19	0.02	A (8)	-/0	
SBT	144	0.00	A (0)	-/0	144	0.00	A (0)	-/0	144	0.00	A (0)	-/0	

Table 6-12: Intersection Capacity Analysis – Roche Court & 1970 Fowler Drive Access (2035)

AM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBT	179	0.00	(0)	-/0	179	0.00	(0)	-/0	179	0.00	(0)	-/0	
NBR	3	0.00	(0)	-/0	3	0.00	(0)	-/0	3	0.00	(0)	-/0	
WBLR	25	0.04	A (10)	-/0	25	0.04	A (10)	-/0	25	0.04	A (10)	-/0	
SBL	10	0.01	A (8)	-/0	10	0.01	A (8)	-/0	10	0.01	A (8)	-/0	
SBT	88	0.00	A (0)	-/0	88	0.00	A (0)	-/0	88	0.00	A (0)	-/0	
PM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBT	106	0.00	(0)	-/0	106	0.00	(0)	-/0	106	0.00	(0)	-/0	
NBR	5	0.00	(0)	-/0	5	0.00	(0)	-/0	5	0.00	(0)	-/0	
WBLR	19	0.03	A (9)	-/0	19	0.03	A (9)	-/0	19	0.03	A (9)	-/0	
SBL	19	0.02	A (8)	-/0	19	0.02	A (8)	-/0	19	0.02	A (8)	-/0	
SBT	144	0.00	A (0)	-/0	144	0.00	A (0)	-/0	144	0.00	A (0)	-/0	

Table 6-13: Intersection Capacity Analysis – Roche Court & 1970 Fowler Drive Access (2040)

AM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBT	179	0.00	(0)	-/0	179	0.00	(0)	-/0	179	0.00	(0)	-/0	
NBR	3	0.00	(0)	-/0	3	0.00	(0)	-/0	3	0.00	(0)	-/0	
WBLR	25	0.04	A (10)	-/0	25	0.04	A (10)	-/0	25	0.04	A (10)	-/0	
SBL	10	0.01	A (8)	-/0	10	0.01	A (8)	-/0	10	0.01	A (8)	-/0	
SBT	88	0.00	A (0)	-/0	88	0.00	A (0)	-/0	88	0.00	A (0)	-/0	
PM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBT	106	0.00	(0)	-/0	106	0.00	(0)	-/0	106	0.00	(0)	-/0	
NBR	5	0.00	(0)	-/0	5	0.00	(0)	-/0	5	0.00	(0)	-/0	
WBLR	19	0.03	A (9)	-/0	19	0.03	A (9)	-/0	19	0.03	A (9)	-/0	
SBL	19	0.02	A (8)	-/0	19	0.02	A (8)	-/0	19	0.02	A (8)	-/0	
SBT	144	0.00	A (0)	-/0	144	0.00	A (0)	-/0	144	0.00	A (0)	-/0	

**Existing Condition:** Under existing conditions, the intersection of Roche Court and 1970 Fowler Drive Access operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95<sup>th</sup> percentile queues can be accommodated by their available storage lanes. No critical movements have been identified.

**Future Conditions:** Under future conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. No major constraints are noted.

### 6.5.3 Fowler Drive & 1970 Fowler Drive West Access

The intersection capacity analysis at Fowler Drive and 1970 Fowler Drive West Access during the AM and PM peak hours are summarized in **Table 6-14**, **Table 6-15**, and **Table 6-16**.

Table 6-14: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive West Access (2030)

AM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	1	0.00	A (10)	-/0	1	0.00	B (11)	-/0	1	0.00	B (12)	-/0	
WBL	2	0.00	A (7)	-/0	2	0.00	A (8)	-/0	2	0.00	A (8)	-/0	
WBT	183	0.00	A (0)	-/0	225	0.00	A (0)	-/0	263	0.00	A (0)	-/0	
EBT	-				157	0.00	(0)	-/0	174	0.00	(0)	-/0	
EBR	-				8	0.00	(0)	-/0	8	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	1	0.00	A (8)	-/0	1	0.00	B (12)	-/0	1	0.00	B (12)	-/0	
WBL	1	0.00	A (7)	-/0	1	0.00	A (9)	-/0	1	0.00	A (9)	-/0	
WBT	178	0.00	A (0)	-/0	202	0.00	A (0)	-/0	236	0.00	A (0)	-/0	
EBT	-				464	0.00	(0)	-/0	488	0.00	(0)	-/0	
EBR	-				7	0.00	(0)	-/0	7	0.00	(0)	-/0	

Table 6-15: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive West Access (2035)

AM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	1	0.00	A (10)	-/0	1	0.00	B (11)	-/0	1	0.00	B (12)	-/0	
WBL	2	0.00	A (7)	-/0	2	0.00	A (8)	-/0	2	0.00	A (8)	-/0	
WBT	183	0.00	A (0)	-/0	240	0.00	A (0)	-/0	278	0.00	A (0)	-/0	
EBT	-				161	0.00	(0)	-/0	178	0.00	(0)	-/0	
EBR	-				8	0.00	(0)	-/0	8	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	1	0.00	A (8)	-/0	1	0.00	B (12)	-/0	1	0.00	B (13)	-/0	
WBL	1	0.00	A (7)	-/0	1	0.00	A (9)	-/0	522	0.00	(0)	-/0	
WBT	178	0.00	A (0)	-/0	207	0.00	A (0)	-/0	241	0.00	A (0)	-/0	
EBT	-				498	0.00	(0)	-/0	522	0.00	(0)	-/0	
EBR	-				7	0.00	(0)	-/0	7	0.00	(0)	-/0	

Table 6-16: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive West Access (2040)

AM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	1	0.00	A (10)	-/0	1	0.00	B (11)	-/0	1	0.00	B (12)	-/0	
WBL	2	0.00	A (7)	-/0	2	0.00	A (8)	-/0	2	0.00	A (8)	-/0	
WBT	183	0.00	A (0)	-/0	256	0.00	A (0)	-/0	294	0.00	A (0)	-/0	
EBT	-				165	0.00	(0)	-/0	182	0.00	(0)	-/0	
EBR	-				8	0.00	(0)	-/0	8	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	1	0.00	A (8)	-/0	1	0.00	B (13)	-/0	1	0.00	B (13)	-/0	
WBL	1	0.00	A (7)	-/0	1	0.00	A (9)	-/0	1	0.00	A (9)	-/0	
WBT	178	0.00	A (0)	-/0	212	0.00	A (0)	-/0	246	0.00	A (0)	-/0	
EBT	-				534	0.00	(0)	-/0	558	0.00	(0)	-/0	
EBR	-				7	0.00	(0)	-/0	7	0.00	(0)	-/0	

**Existing Condition:** Under existing conditions, the intersection of 1970 Fowler Drive West Access and Fowler Drive operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95<sup>th</sup> percentile queues can be accommodated by their available storage lanes. No critical movements have been identified.

**Future Conditions:** Under future conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. No major constraints are noted.

#### 6.5.4 Fowler Drive & 1970 Fowler Drive East Access

The intersection capacity analysis at Fowler Drive and 1970 Fowler Drive East Access during the AM and PM peak hours are summarized in **Table 6-17**, **Table 6-18**, and **Table 6-19**.

Table 6-17: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive East Access (2030)

AM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	8	0.01	B (10)	-/0	8	0.01	B (11)	-/0	8	0.01	B (11)	-/0	
EBT	143	0.00	(0)	-/0	157	0.00	(0)	-/0	174	0.00	(0)	-/0	
WBT	181	0.00	(0)	-/0	223	0.00	(0)	-/0	261	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	16	0.06	C (16)	-/0	16	0.06	C (18)	-/0	16	0.07	C (19)	-/0	
EBT	416	0.00	(0)	-/0	465	0.00	(0)	-/0	489	0.00	(0)	-/0	
WBT	167	0.00	(0)	-/0	191	0.00	(0)	-/0	225	0.00	(0)	-/0	

Table 6-18: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive East Access (2035)

AM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	8	0.01	B (10)	-/0	8	0.01	B (11)	-/0	8	0.01	B (11)	-/0	
EBT	143	0.00	(0)	-/0	161	0.00	(0)	-/0	178	0.00	(0)	-/0	
WBT	181	0.00	(0)	-/0	238	0.00	(0)	-/0	276	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	16	0.06	C (16)	-/0	16	0.07	C (18)	-/0	16	0.07	C (20)	-/0	
EBT	416	0.00	(0)	-/0	499	0.00	(0)	-/0	523	0.00	(0)	-/0	
WBT	167	0.00	(0)	-/0	195	0.00	(0)	-/0	229	0.00	(0)	-/0	

Table 6-19: Intersection Capacity Analysis – Fowler Drive & 1970 Fowler Drive East Access (2040)

AM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	8	0.01	B (10)	-/0	8	0.01	B (11)	-/0	8	0.01	B (11)	-/0	
EBT	143	0.00	(0)	-/0	165	0.00	(0)	-/0	182	0.00	(0)	-/0	
WBT	181	0.00	(0)	-/0	254	0.00	(0)	-/0	292	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	16	0.06	C (16)	-/0	16	0.07	C (20)	-/0	16	0.08	C (21)	-/0	
EBT	416	0.00	(0)	-/0	535	0.00	(0)	-/0	559	0.00	(0)	-/0	
WBT	167	0.00	(0)	-/0	199	0.00	(0)	-/0	233	0.00	(0)	-/0	

**Existing Condition:** Under existing conditions, the intersection of 1970 Fowler Drive East Access and Fowler Drive operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95<sup>th</sup> percentile queues can be accommodated by their available storage lanes. No critical movements have been identified.

**Future Conditions:** Under future conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. No major constraints are noted.

### 6.5.5 Fowler Drive & 1980 Fowler Drive West Access

The intersection capacity analysis at Fowler Drive and 1980 Fowler Drive West Access during the AM and PM peak hours are summarized in **Table 6-20**, **Table 6-21**, and **Table 6-22**.

Table 6-20: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive West Access (2030)

AM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	28	0.04	B (10)	-/0	28	0.05	B (10)	-/0	28	0.05	B (11)	-/0	
EBT	141	0.00	(0)	-/0	155	0.00	(0)	-/0	172	0.00	(0)	-/0	
EBR	6	0.00	(0)	-/0	6	0.00	(0)	-/0	6	0.00	(0)	-/0	
WBT	168	0.00	(0)	-/0	210	0.00	(0)	-/0	248	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	12	0.03	B (13)	-/0	12	0.04	B (14)	-/0	12	0.04	B (15)	-/0	
EBT	408	0.00	(0)	-/0	457	0.00	(0)	-/0	481	0.00	(0)	-/0	
EBR	12	0.00	(0)	-/0	12	0.00	(0)	-/0	12	0.00	(0)	-/0	
WBT	159	0.00	(0)	-/0	183	0.00	(0)	-/0	217	0.00	(0)	-/0	

Table 6-21: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive West Access (2035)

AM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	28	0.04	B (10)	-/0	28	0.05	B (11)	-/0	28	0.05	B (11)	-/0	
EBT	141	0.00	(0)	-/0	159	0.00	(0)	-/0	176	0.00	(0)	-/0	
EBR	6	0.00	(0)	-/0	6	0.00	(0)	-/0	6	0.00	(0)	-/0	
WBT	168	0.00	(0)	-/0	224	0.00	(0)	-/0	262	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	12	0.03	B (13)	-/0	12	0.04	B (15)	-/0	12	0.04	C (16)	-/0	
EBT	408	0.00	(0)	-/0	490	0.00	(0)	-/0	514	0.00	(0)	-/0	
EBR	12	0.00	(0)	-/0	12	0.00	(0)	-/0	12	0.00	(0)	-/0	
WBT	159	0.00	(0)	-/0	187	0.00	(0)	-/0	221	0.00	(0)	-/0	

Table 6-22: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive West Access (2040)

AM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	28	0.04	B (10)	-/0	28	0.05	B (11)	-/0	28	0.05	B (11)	-/0	
EBT	141	0.00	(0)	-/0	163	0.00	(0)	-/0	180	0.00	(0)	-/0	
EBR	6	0.00	(0)	-/0	6	0.00	(0)	-/0	6	0.00	(0)	-/0	
WBT	168	0.00	(0)	-/0	239	0.00	(0)	-/0	277	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	12	0.03	B (13)	-/0	12	0.04	C (15)	-/0	12	0.04	C (16)	-/0	
EBT	408	0.00	(0)	-/0	526	0.00	(0)	-/0	550	0.00	(0)	-/0	
EBR	12	0.00	(0)	-/0	12	0.00	(0)	-/0	12	0.00	(0)	-/0	
WBT	159	0.00	(0)	-/0	191	0.00	(0)	-/0	225	0.00	(0)	-/0	

**Existing Condition:** Under existing conditions, the intersection of 1980 Fowler Drive West Access and Fowler Drive operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95<sup>th</sup> percentile queues can be accommodated by their available storage lanes. No critical movements have been identified.

**Future Conditions:** Under future conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. No major constraints are noted.

### 6.5.6 Fowler Drive & 1980 Fowler Drive East Access

The intersection capacity analysis at Fowler Drive and 1980 Fowler Drive East Access during the AM and PM peak hours are summarized in **Table 6-23**, **Table 6-24**, and **Table 6-25**.

Table 6-23: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive East Access (2030)

AM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	5	0.01	A (10)	-/0	5	0.01	A (10)	-/0	5	0.01	B (10)	-/0	
EBT	156	0.00	(0)	-/0	170	0.00	(0)	-/0	187	0.00	(0)	-/0	
WBT	167	0.00	(0)	-/0	209	0.00	(0)	-/0	247	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	11	0.03	B (13)	-/0	11	0.03	B (14)	-/0	11	0.03	B (15)	-/0	
EBT	412	0.00	(0)	-/0	461	0.00	(0)	-/0	485	0.00	(0)	-/0	
WBT	152	0.00	(0)	-/0	176	0.00	(0)	-/0	210	0.00	(0)	-/0	

Table 6-24: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive East Access (2035)

AM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	5	0.01	A (10)	-/0	5	0.01	B (10)	-/0	5	0.01	B (10)	-/0	
EBT	156	0.00	(0)	-/0	174	0.00	(0)	-/0	191	0.00	(0)	-/0	
WBT	167	0.00	(0)	-/0	223	0.00	(0)	-/0	261	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	11	0.03	B (13)	-/0	11	0.03	B (14)	-/0	11	0.04	C (15)	-/0	
EBT	412	0.00	(0)	-/0	494	0.00	(0)	-/0	518	0.00	(0)	-/0	
WBT	152	0.00	(0)	-/0	180	0.00	(0)	-/0	214	0.00	(0)	-/0	

Table 6-25: Intersection Capacity Analysis – Fowler Drive & 1980 Fowler Drive East Access (2040)

AM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	5	0.01	A (10)	-/0	5	0.01	B (10)	-/0	5	0.01	B (10)	-/0	
EBT	156	0.00	(0)	-/0	178	0.00	(0)	-/0	195	0.00	(0)	-/0	
WBT	167	0.00	(0)	-/0	238	0.00	(0)	-/0	276	0.00	(0)	-/0	
PM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBLR	11	0.03	B (13)	-/0	11	0.04	C (15)	-/0	11	0.04	C (16)	-/0	
EBT	412	0.00	(0)	-/0	530	0.00	(0)	-/0	554	0.00	(0)	-/0	
WBT	152	0.00	(0)	-/0	184	0.00	(0)	-/0	218	0.00	(0)	-/0	

**Existing Condition:** Under existing conditions, the intersection of 1980 Fowler Drive East Access and Fowler Drive operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95<sup>th</sup> percentile queues can be accommodated by their available storage lanes. No critical movements have been identified.

**Future Conditions:** Under future conditions, the intersection is expected to generally operate similar to existing conditions with acceptable increases in V/C ratios and delay. No major constraints are noted.

### 6.5.7 Fowler Drive & North Sheridan Way/Sheridan Centre Access

The intersection capacity analysis at Fowler Drive and 1980 Fowler Drive East Access during the AM and PM peak hours are summarized in **Table 6-26**, **Table 6-27**, and **Table 6-28**.

Table 6-26: Intersection Capacity Analysis – Fowler Drive & North Sheridan Way/Sheridan Centre Access (2030)

AM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBL	85	0.16	A (10)	-/1	101	0.20	B (11)	-/1	139	0.28	B (12)	-/1	
NBTR	79	0.12	A (8)	-/0	93	0.15	A (9)	-/1	111	0.18	A (9)	-/1	
EBLTR	160	0.24	A (9)	-/1	187	0.30	B (11)	-/1	204	0.34	B (11)	-/2	
WBLTR	201	0.29	A (10)	-/1	236	0.37	B (11)	-/2	245	0.40	B (12)	-/2	
SBL	2	0.00	A (9)	-/0	23	0.05	A (10)	-/0	23	0.05	A (10)	-/0	
SBTR	12	0.02	A (9)	-/0	47	0.09	A (10)	-/0	47	0.09	A (10)	-/0	
PM		Existing (2025)				Future Background (2030)				Future Total (2030)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBL	77	0.18	B (11)	-/1	84	0.20	B (13)	-/1	118	0.30	B (14)	-/1	
NBTR	65	0.12	A (10)	-/0	73	0.15	B (10)	-/1	89	0.19	B (11)	-/1	
EBLTR	416	0.69	C (19)	-/6	473	0.84	D (32)	-/9	497	0.94	E (50)	-/13	
WBLTR	278	0.47	B (13)	-/3	327	0.59	C (17)	-/4	340	0.66	C (20)	-/5	
SBL	11	0.03	B (10)	-/0	24	0.06	B (11)	-/0	24	0.06	B (12)	-/0	
SBTR	18	0.04	A (10)	-/0	39	0.09	B (10)	-/0	39	0.09	B (11)	-/0	

Table 6-27: Intersection Capacity Analysis – Fowler Drive & North Sheridan Way/Sheridan Centre Access (2035)

AM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBL	85	0.16	A (10)	-/1	112	0.22	B (11)	-/1	150	0.30	B (12)	-/1	
NBTR	79	0.12	A (8)	-/0	102	0.16	A (9)	-/1	120	0.20	A (10)	-/1	
EBLTR	160	0.24	A (9)	-/1	199	0.32	B (11)	-/1	216	0.37	B (12)	-/2	
WBLTR	201	0.29	A (10)	-/1	255	0.41	B (12)	-/2	264	0.44	B (13)	-/2	
SBL	2	0.00	A (9)	-/0	23	0.05	A (10)	-/0	23	0.05	B (10)	-/0	
SBTR	12	0.02	A (9)	-/0	47	0.09	A (10)	-/0	47	0.10	B (10)	-/0	
PM		Existing (2025)				Future Background (2035)				Future Total (2035)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBL	77	0.18	B (11)	-/1	97	0.25	B (14)	-/1	131	0.34	C (15)	-/1	
NBTR	65	0.12	A (10)	-/0	85	0.19	B (11)	-/1	101	0.23	B (12)	-/1	
EBLTR	416	0.69	C (19)	-/6	525	0.98	F (59)	-/15	549	1.07	F (81)	-/18	
WBLTR	278	0.47	B (13)	-/3	358	0.69	C (22)	-/5	371	0.75	C (25)	-/6	
SBL	11	0.03	B (10)	-/0	24	0.07	B (12)	-/0	24	0.07	B (12)	-/0	
SBTR	18	0.04	A (10)	-/0	39	0.09	B (11)	-/0	39	0.10	B (12)	-/0	

Table 6-28: Intersection Capacity Analysis – Fowler Drive & North Sheridan Way/Sheridan Centre Access (2040)

AM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBL	85	0.16	A (10)	-/1	124	0.25	B (12)	-/1	162	0.34	B (13)	-/2	
NBTR	79	0.12	A (8)	-/0	112	0.19	A (9)	-/1	130	0.22	A (10)	-/1	
EBLTR	160	0.24	A (9)	-/1	212	0.35	B (12)	-/2	229	0.40	B (13)	-/2	
WBLTR	201	0.29	A (10)	-/1	276	0.45	B (13)	-/2	285	0.49	B (14)	-/3	
SBL	2	0.00	A (9)	-/0	23	0.05	A (10)	-/0	23	0.05	B (10)	-/0	
SBTR	12	0.02	A (9)	-/0	47	0.09	B (10)	-/0	47	0.10	B (10)	-/0	
PM		Existing (2025)				Future Background (2040)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	
NBL	77	0.18	B (11)	-/1	110	0.29	B (15)	-/1	144	0.40	C (17)	-/2	
NBTR	65	0.12	A (10)	-/0	96	0.22	B (12)	-/1	112	0.26	B (13)	-/1	
EBLTR	416	0.69	C (19)	-/6	583	1.11	F (100)	-/21	607	1.22	F (140)	-/26	
WBLTR	278	0.47	B (13)	-/3	393	0.79	D (27)	-/7	406	0.86	D (34)	-/8	
SBL	11	0.03	B (10)	-/0	24	0.07	B (12)	-/0	24	0.07	B (13)	-/0	
SBTR	18	0.04	A (10)	-/0	39	0.10	B (12)	-/0	39	0.10	B (12)	-/0	

**Existing Condition:** Under existing conditions, the intersection of North Sheridan Way/Sheridan Centre Access and Fowler Drive operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95<sup>th</sup> percentile queues can be accommodated by their available storage lanes. No critical movements have been identified.

**Future Background Conditions:** Under future background conditions, this intersection is expected to experience a reduction in intersection capacity and increased delay due to background traffic growth. By the 2035 and 2040 horizons, this is expected to result in the eastbound movement operating above capacity during the PM peak hour and experiencing higher delays. To address these predicted constraints, a sensitivity analysis has been undertaken and is described in **Section 6.6**.

**Future Total Conditions:** Under future total conditions, the addition of site traffic is expected to have an acceptable impact on intersection operations, with all movements operating similar to future background conditions. Intersection operations in the sensitivity analysis scenario are described in **Section 6.6**. A signalization warrant was completed under future total 2040 conditions; conditions were not met for signalization. Supporting calculations are provided in **Appendix I**.

### 6.5.8 Site Access & North Sheridan Way

The capacity analyses for the unsignalized site access under future total conditions are summarized **Table 6-29**.

Table 6-29: Intersection Capacity Analysis – Site Access & North Sheridan Way

AM	Future Total (2030)				Future Total (2035)				Future Total (2040)			
	Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)
NBT	195	0.00	(0)	-/0	215	0.00	(0)	-/0	237	0.00	(0)	-/0
EBLR	57	0.11	B (12)	-/0	57	0.12	B (13)	-/0	57	0.13	B (13)	-/0
SBT	226	0.00	(0)	-/0	249	0.00	(0)	-/0	275	0.00	(0)	-/0
SBR	26	0.00	(0)	-/0	26	0.00	(0)	-/0	26	0.00	(0)	-/0
PM	Future Total (2030)				Future Total (2035)				Future Total (2040)			
Mvmt	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
NBT	157	0.00	(0)	-/0	183	0.00	(0)	-/0	207	0.00	(0)	-/0
EBLR	51	0.16	C (17)	-/1	51	0.18	C (19)	-/1	51	0.21	C (23)	-/1
SBT	568	0.00	(0)	-/0	643	0.00	(0)	-/0	727	0.00	(0)	-/0
SBR	37	0.00	(0)	-/0	37	0.00	(0)	-/0	37	0.00	(0)	-/0

The unsignalized site access is expected to operate with available capacity and acceptable delays during the weekday peak hours. No intersection modifications are recommended.

## 6.6 SENSITIVITY ANALYSIS

A sensitivity analysis was conducted at the intersection of Fowler Drive and North Sheridan Way/Sheridan Centre Access to determine the potential benefit of adding a dedicated eastbound right turn lane. The analysis considered the addition of this turn lane under future background conditions in the 2035 and 2040 horizons, and assumed it would have a 35m storage bay.

**Table 6-30** summarizes the capacity analysis results for Fowler Drive and North Sheridan Way/Sheridan Centre Access. Detailed capacity analysis results are provided in **Appendix J**.

Table 6-30: 2035 Sensitivity Analysis – Fowler Drive & North Sheridan Way/Sheridan Centre Access

PM	Future Background			Future Background Sensitivity			Future Total			Future Total Sensitivity		
	Mvmt	Vol	V/C	LOS (Delay)	Vol	V/C	LOS (Delay)	Vol	V/C	LOS (Delay)	Vol	V/C
2035												
NBL	97	0.25	B (14)	97	0.24	B (13)	131	0.34	C (15)	131	0.34	B (15)
NBTR	85	0.19	B (11)	85	0.18	B (11)	101	0.23	B (12)	101	0.22	B (12)
EBLT	-	-	- (-)	143	0.32	B (13)	-	-	- (-)	143	0.33	B (14)
EBLTR	525	0.98	F (59)	-	-	- (-)	549	1.07	F (81)	-	-	- (-)
EBR	-	-	- (-)	382	0.65	C (18)	-	-	- (-)	406	0.74	C (24)
WBLTR	358	0.69	C (22)	358	0.72	C (24)	371	0.75	C (25)	371	0.78	D (31)
SBL	24	0.07	B (12)	24	0.06	B (12)	24	0.07	B (12)	24	0.07	B (12)
SBTR	39	0.09	B (11)	39	0.09	B (11)	39	0.10	B (12)	39	0.09	B (11)
2040												
NBL	110	0.29	B (15)	110	0.28	B (14)	144	0.40	C (17)	144	0.38	C (16)
NBTR	96	0.22	B (12)	96	0.21	B (12)	112	0.26	B (13)	112	0.25	B (12)



EBLT	-	-	- (-)	151	0.35	B (14)	-	-	- (-)	151	0.36	B (15)
EBLTR	<b>583</b>	<b>1.11</b>	<b>F (100)</b>	-	-	- (-)	<b>607</b>	<b>1.22</b>	<b>F (140)</b>	-	-	- (-)
EBR	-	-	- (-)	432	0.78	D (26)	-	-	- (-)	456	0.86	E (37)
WBLTR	393	0.79	D (27)	393	0.82	D (33)	406	0.86	D (34)	406	0.89	E (45)
SBL	24	0.07	B (12)	24	0.07	B (12)	24	0.07	B (13)	24	0.07	B (13)
SBTR	39	0.10	B (12)	39	0.09	B (11)	39	0.10	B (12)	39	0.10	B (12)

Based on the sensitivity analysis results, it is recommended that a dedicated eastbound right turn lane be implemented at this location by the City if background traffic growth is realized by the 2035 planning horizon.

## 6.7 CONCLUSIONS

The analysis results indicate that the proposed development is expected to have an acceptable impact on road operations in the surrounding area, with a couple of intersections experiencing some constraints due to background traffic conditions. Signal timing optimization is recommended at the intersection of Erin Mills Parkway and Lincoln Green Way under the 2035 and 2040 horizons to accommodate forecasted background traffic growth.

In addition, a sensitivity analysis was completed for the intersection of Fowler Drive and North Sheridan Way/Sheridan Centre Access. Based on these findings, it is recommended that the City implement an eastbound right turn lane by 2035 if background traffic growth is realized.

## 7 PARKING REVIEW

This section reviews the bicycle and vehicular parking standards based on the applicable requirements for the subject site.

### 7.1 BICYCLE PARKING ZONING BY-LAW REQUIREMENTS

The City of Mississauga By-law 0225-2007 as amended by By-law 0118-2022 has been reviewed to determine the required bicycle parking supply. The by-law requirements and proposed bicycle parking supply are detailed in **Table 7-1**.

Table 7-1: Zoning By-law Bicycle Parking Requirements

Land Use	Units/GFA		Minimum Bicycle Parking Rate		Minimum Bicycle Parking Spaces	
			Long-Term	Short-Term	Long-Term	Short-Term
Residential	285	Units	0.6	0.05	171	15
<b>Total Required</b>					<b>171</b>	<b>15</b>
<b>Total Proposed</b>					<b>171</b>	<b>15</b>

*Note: (1) – For the calculation of required residential parking and bicycle parking spaces, the rate or ratio shall be calculated for each component, then rounded. Fractions of less than 0.5 shall be rounded down to the nearest whole number. Fractions equal to or greater than 0.5 shall be rounded up to the nearest whole number.*

The proposed development is required to provide a total of 186 bicycle parking spaces, consisting of 171 long-term and 15 short-term bicycle parking spaces. The proposed bicycle parking supply will satisfy this requirement.

The provision of on-site bicycle parking will help encourage future residents to shift their travel behaviour and utilize the available cycling infrastructure in the surrounding area, as described in **Section 2.3**.

## 7.2 VEHICLE PARKING ZONING BY-LAW REQUIREMENTS

The City of Mississauga By-law 0225-2007 has been reviewed to determine the required vehicle parking supply; the site is located in Precinct 3. The by-law requirements and proposed vehicle parking supply are detailed in **Table 7-2**.

Table 7-2: Zoning By-law Vehicular Parking Requirements - Precinct 3

ZBL 0225-2007				
Land Use	Units / GFA	Precinct 3		Proposed Supply
		Minimum Parking Rate	Parking Required	
Residential/Rental Apartment	285 units	0.90 sp./unit	257	243
		0.20 sp./unit	57	29
Site Total		314	272	

The proposed development is required to provide a total of 314 vehicle parking spaces, consisting of 257 residential and 57 visitor parking spaces. The proposed vehicle parking supply consists of 243 residential (0.85 sp./unit) and 57 visitor (0.10 sp./unit) parking spaces, resulting in a minor deficiency of 42 residential spaces.

A supporting justification for the proposed vehicle parking supply is provided below in **Section 7.3**.

## 7.3 VEHICLE PARKING JUSTIFICATION

### 7.3.1 Policy Review

The following planning policies and documents were reviewed to establish an understanding of the current planning and transportation objective applicable to the subject site:

- ▶ Provincial Policy Statement (2024)
- ▶ City of Mississauga Official Plan (2025)

Based on a review of the above-noted planning policies it is noted that the proposed development is subject to important planning goals speaking to avoiding an oversupply of vehicle parking. Key planning policies and goals applicable or comparable to the site are summarized below.

#### 7.3.1.1 Provincial Planning Statement, 2024

The *Provincial Planning Statement* (PPS 2024) is a streamlined province-wide land use policy framework that replaces both the *Provincial Policy Statement* (2020) and *A Place to Grow: Growth Plan for the Greater Golden Horseshoe* (2019). The new PPS provides policy direction on matters of provincial interest related to land use planning and development. Some of the key changes introduced through the PPS 2024 are changes to growth targets, settlement area expansions, strategic growth areas and major transit station areas, intensification, municipal comprehensive reviews, employment land conversions, and protection of employment uses amongst other changes.

Chapter 2 of the PPS 2024 outlines the direction for building homes, sustaining strong and competitive communities and includes guidance on the achievement of **creating complete communities by accommodating an appropriate range and mix of land uses, housing options, transportation options with multi modal access**, employment, public service facilities and other institutional uses. Section 2.9 of the PPS

2024 states that planning authorities shall plan to reduce greenhouse gas emissions and prepare for the impacts of a changing climate through approaches that support the achievement of compact, transit-supportive and complete communities and promote green infrastructure, low impact development and active transportation. Sections 3.2 and 3.3 provide policy direction on transportation systems and transportation infrastructure corridors to ensure the safe, energy efficient movement of people and goods.

To support an efficient multi-modal transportation network, the parking supply on a site should be designed with careful attention to the needs of the site, taking into account the multi modal transportation connectivity, auto ownership trends, and transportation needs of the area. An oversupply of parking where it is not needed should be avoided. The proposed development will be able to take advantage of the planned transportation context to support future residents' transportation needs while encouraging the use of sustainable travel modes.

In the past, an abundance of residential parking has increased automobile ownership rates and has resulted in traffic congestion and climate change. A reduced parking supply for new residential developments aligns with the goals of the PPS 2024 as residents will be required to utilize a variety of transportation modes instead of relying entirely on vehicles.

#### *7.3.1.2 City of Mississauga Official Plan*

The City's Official Plan sets out a framework for how the municipality will grow by the year 2031. The Official Plan provides policies on protecting the Natural Heritage System and directing growth to support urban form and a strong public transportation system.

One of the key directions of the Official Plan is to transform the City of Mississauga into a transit-oriented city, where "people can get around without a vehicle, and where transit will directly influence and shape the form of the City." To support this objective, policies in the Official Plan speak to prioritizing sustainable transportation networks while guiding high-density development in locations supported by existing and planned higher-order transit. Section 8.4 addresses parking specifically and recognizes it as a tool to help influence travel behaviour and choice of transportation modes. Specifically, Policy 8.4.3 states that "Consideration will be given to reducing off-street parking requirements for developments to reflect levels of vehicle ownership and usage, and as a means of encouraging the greater use of transit, cycling and walking...".

By proposing a reduced a residential parking supply, the proposed redevelopment is supportive of the City's Official Plan growth approach as it plans to leverage its location in proximity to the existing MiWay transit routes. The proposed development will encourage future residents to forego vehicles ownership and use alternative modes of transportation.

### 7.3.2 Proxy Parking Utilization Data

To assess vehicle parking demand associated with the existing on-site apartment buildings located at 1970 and 1980 Fowler Drive, parking utilization surveys were conducted over a five (5) day period in accordance with the City's Parking Study Guidelines. Surveys were conducted on the following dates/times to capture and summarize peak residential and visitor vehicle parking demand:

- ▶ Friday May 23<sup>rd</sup>, 2025: 6:00 PM – 3:00 AM
- ▶ Saturday May 24<sup>th</sup>, 2025: 12:00 PM – 3:00 AM
- ▶ Monday May 26<sup>th</sup>, 2025: 6:00 PM – 1:00 AM
- ▶ Friday May 30<sup>th</sup>, 2025: 6:00 PM – 3:00 AM
- ▶ Monday June 2<sup>nd</sup>, 2025: 6:00 PM – 1:00 AM

The peak observed residential and visitor demand during the weekday and weekend survey periods are noted in **Table 7-3**; detailed survey data is provided in **Appendix K**.

Table 7-3: Parking Utilization Survey Results – 1970 & 1980 Fowler Drive

Type of Demand	Date	Peak Time Period	Unit Count	Peak Parking Demand	Peak Parking Demand Rate	Parking Lot Utilization Rate
<b>1970 Fowler Drive</b>						
Residential	Monday May 26 <sup>th</sup> , 2025	11:00 pm – 1:00 am	166	119	0.72	72%
Visitor	Friday May 30 <sup>th</sup> , 2025	9:00 pm		14	0.08	8.0%
<b>1980 Fowler Drive</b>						
Residential	Monday May 26 <sup>th</sup> , 2025	1:00 am	166	159	0.96	96%
Visitor	Saturday May 24 <sup>th</sup> , 2025	10:00 pm		10	0.06	6%
<b>Total Parking Rates</b>						
Residential	-	-	332 Units	278	0.84	84%
Visitor				24	0.07	7%

Existing residential parking was assessed to capture typical weekday and weekend demand. For 1970 Fowler Drive, demand for residential parking peaked at 119 spaces or 0.72 spaces per unit. Visitor demand peaked 14 spaces or 0.08 spaces per unit. For 1980 Fowler Drive, demand for residential parking peaked at 159 spaces or 0.96 spaces per unit. Visitor demand peaked 10 spaces or 0.06 spaces per unit. Residential peak demand for both buildings occurred on Monday May 26<sup>th</sup> at 1:00 am. Visitor demand peaked on different days for each building but occurred during the weekend evening period.

The proposed development will include 243 residential parking spaces and 29 visitor parking spaces, which corresponds to a rate of 0.85 and 0.10 per unit respectively. The proposed residential parking supply is consistent with the average parking demand observed at the two adjacent residential apartment buildings (0.84 spaces per unit). The proposed visitor supply exceeds observed demand (0.07 spaces per unit). Given the observed overall parking demand at the existing apartment buildings (0.91 spaces per unit), the proposed overall parking supply of 0.95 spaces per unit should be considered appropriate and sufficient to accommodate anticipated demand.



### 7.3.3 Efficacy of TDM Measures

The proposed development will include several Traffic Demand Management (TDM) measures to reduce vehicle usage and encourage people to engage in more sustainable methods of travel. TDM measures such as the on-site active transportation infrastructure, pre-loaded Presto cards, and unbundled parking will help reduce demand for vehicle parking and support the use of sustainable travel alternatives. Further details are provided in **Section 9**.

### 7.3.4 Conclusions

The proposed development will provide 228 residential (0.80 sp./unit) and 57 visitor (0.20 sp./unit) vehicle parking spaces, resulting in an overall parking provision of 1.0 space per unit. The proposed residential vehicle parking supply is deficient by 29 spaces relative to the governing by-law requirements.

Provincial and municipal policy direction supports a reduced vehicle parking supply to help promote the use of alternative modes of transportation and enable transit-oriented development. Given the observed parking demand at the adjacent residential apartment buildings, in conjunction with the planned TDM measures, the proposed vehicle parking supply should be considered appropriate and represents a reasonable deviation from the governing by-law requirements.

## 7.4 ACCESSIBLE PARKING ZONING BY-LAW REQUIREMENTS

The City of Mississauga Zoning By-law 0225-2007 provides accessible vehicle parking requirements; for residential uses, the accessible parking supply is calculated using the required visitor parking supply. The by-law requirements and proposed supply are illustrated below in **Table 7-4**.

Table 7-4: Zoning By-law Accessible Parking Space Requirements

Land Use	Required Visitor Parking Spaces		Minimum Accessible Visitor Parking Rate	Minimum Accessible Visitor Parking Spaces
Residential	57	Spaces	4% of the total	3
		Total Required		3
		Total Proposed		3

The proposed development is required to provide a minimum of three (3) accessible visitor parking spaces as outlined in the zoning by-law requirements, and there is no minimum required accessible space for residential parking. The proposed development will satisfy this requirement and provide 3 accessible spaces.



## 8 LOADING REVIEW

The City of Mississauga Zoning By-law 0225-2007 has been reviewed to determine the required loading supply. The by-law requirements and proposed loading supply are detailed in **Table 8-1**.

Table 8-1: Zoning By-law Loading Requirements

Land Use	Units/GFA	City of Mississauga ZBL 0225-2007	
		Loading Spaces Required	
Residential (>30 units)	285	Units	1
		Loading Required	1
Proposed Loading		2 (1 Type "G" and 1 Type "C")	

The proposed development is required to provide one (1) loading space. The proposed development will provide two (2) loading spaces, one (1) Type G and one (1) Type C, satisfying the by-law requirement.

Swept path diagrams demonstrating vehicular and loading functionality are provided in **Appendix L**.

## 9 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) typically consists of a number of strategies to achieve a more efficient transportation network by influencing travel behaviour. Effective TDM measures can reduce vehicle usage and encourage people to engage in more sustainable methods of travel. In addition to the active transportation and transit routes in the area, which are discussed in detail under **Section 2**, there are several opportunities to incorporate TDM measures that support alternative modes of transportation. The recommendations should enhance non-single-occupant vehicle trips for the future residents of the proposed development.

### 9.1 CYCLING-BASED STRATEGIES

#### **Provision of Bicycle Parking**

The proposed development will provide bicycle parking spaces to support and encourage active transportation. 15 short-term bicycle parking spaces will be provided in storage rooms for visitors with access via an elevator. In addition, 171 long-term bicycle parking spaces will be provided in secure, weather protected bicycle storage rooms.

#### **Provision of Bicycle Repair Facilities**

A significant barrier for some people considering cycling as their day-to-day mode of travel is repair and maintenance. Providing a bicycle repair stand, tools, and basic information on-site will alleviate the stress of technical issues and promote cycling as a long-term travel method for tenants.

#### **Promote and Increase Cycling Awareness**

Information packages will be made available to residents of the proposed development, to help encourage active transportation and increase awareness of different travel alternatives. The package will include information regarding the environmental and health benefits of cycling, rules of the road, and maps which display active transportation infrastructure available in the surrounding area.



## 9.2 PEDESTRIAN-BASED STRATEGIES

### On-Site Pedestrian Infrastructure and Connection to the Public Network

The proposed development's pedestrian entrance will connect to North Sheridan Way, providing convenient access for pedestrians, transit users, and cyclists. A covered vestibule will provide shelter for residents and visitors and the development will include pedestrian-scale lighting in areas where pedestrian circulation will occur to support walking to/from the site.

## 9.3 TRANSIT-BASED STRATEGIES

### Connection to Transit Networks

The proposed development will be well served by local transit services available in the surrounding area, as discussed in **Section 2.2**. The availability of nearby surface bus routes will encourage future residents and visitors of the site to use public transit.

### Pre-Loaded Presto Cards

The applicant will provide a Presto card to each unit of the proposed development at building occupancy, pre-loaded with a monthly pass (value of \$156). This will help reduce the financial barriers restricting usage of the available transit infrastructure. Residents will be able to learn how to make use of transit in their daily lives and will have a reduced reliance on automobiles as a mode of transportation.

### Transit Information Packages

For residents to take complete advantage of the local transit services, transit information packages will be distributed to residents to increase transit awareness. The information packages will contain public transit information such as route maps and timetables.

## 9.4 PARKING-BASED STRATEGIES

### Limited Provision of Residential Vehicle Parking

The proposed development will include a limited but appropriate supply of residential parking (0.80 space/unit), ensuring that many residents who choose to reside at the site are compatible with a lifestyle centred on the use of transit and active transportation. This measure will help reduce the generation of SOV trips by the future development, as approximately 20% of future residents will not have access to a personal vehicle.

### Unbundled Parking

Selling parking spaces separately from each residential unit can lead to lower rates of vehicle ownership and can be used as a selling feature in an area well-served by transit and/or cycling infrastructure. The proposed development will unbundle the cost of parking from new dwelling units to support zero-car households and further reduce parking demand associated with the proposed development.

The TDM measures detailed above will enhance the viability of living without regular access to a private vehicle by supporting the use of alternative travel modes such as transit and active transportation. **Table 9-1** summarizes the recommended TDM measures for the proposed development.

Table 9-1: TDM Measures Summary

Recommended TDM Measure	Quantity	Unit Cost	Total Cost
<b>Pedestrian-Based Strategies</b>			
On-Site Pedestrian Infrastructure and Connection to the Public Network	N/A	Included in Site Plan	Included in Site Plan
<b>Cycling-Based Strategies</b>			
Provision of Bicycle Parking Facilities	186 spaces	Included in Site Plan	Included in Site Plan
Provision of Bicycle Repair Facilities	1 repair station	\$2,500	\$2,500
Promote and Increase Cycling Awareness	285 units	~\$2.00 per unit	\$570
<b>Transit-Based Strategies</b>			
Connection to Transit Networks	N/A	Existing Condition	Existing Condition
Pre-Loaded Presto Cards	285 units	\$156 per unit	\$44,460
Transit Information Packages	285 units	~\$2.00 per unit	\$570
<b>Parking-Based Strategies</b>			
Limited Provision of Residential Vehicle Parking (0.80 spaces per unit)	N/A	Included in Site Plan	Included in Site Plan
Unbundled Parking	N/A	Included in Site Plan	Included in Site Plan
<b>Total</b>	-	-	<b>\$48,100</b>

## 10 CONCLUSIONS & RECOMMENDATIONS

- ▶ **Background:** LEA has been retained by IMH 1970 & 1980 Fowler Drive Ltd. to undertake a Transportation Impact Study for the proposed residential development located at 1970 & 1980 Fowler Drive in the City of Mississauga.

The proposed development consists of one (1) 24-storey building containing 285 residential units. Four (4) levels of underground parking are proposed, accommodating 272 vehicle parking spaces. In addition, 186 bicycle parking spaces are proposed to support cycling to/from the proposed development.

- ▶ **Existing Transportation Context:** The subject site is located in an area well-serviced by the MiWay transit network. The subject site is within walking distance of bus stops at the Erin Mills Parkway & Fowler Drive intersection as well as along Fowler Drive. The site is located in a neighbourhood with some access to nearby cycling infrastructure, including a multi-use trail on Erin Mills Parkway and a bike lane on Fifth Line West. The existing pedestrian network provides good connections between the residential and commercial uses in the area as well as nearby MiWay transit stops.
- ▶ **Site Trip Generation:** The proposed development is predicted to generate a total of 83 two-way auto trips during the AM peak hour (26 inbound, 57 outbound) and 88 two-way auto trips during the PM peak hour (37 inbound, 51 outbound).
- ▶ **Analysis Results:** The analysis results indicate that the proposed development is expected to have an acceptable impact on road operations in the surrounding area, with a couple of intersections experiencing some constraints due to background traffic conditions. Signal timing optimization is recommended at the intersection of Erin Mills Parkway and Lincoln Green Way under the 2035 and 2040 horizons to accommodate forecasted background traffic growth.

In addition, a sensitivity analysis was completed for the intersection of Fowler Drive and North Sheridan Way/Sheridan Centre Access. Based on these findings, it is recommended that the City implement an eastbound right turn lane by 2035 if background traffic growth is realized.

- ▶ **Vehicle Parking:** The proposed development is required to provide a total of 314 vehicle parking spaces, consisting of 257 residential and 57 visitor parking spaces. The proposed vehicle parking supply consists of 243 residential (0.85 sp./unit) and 29 visitor (0.10 sp./unit) parking spaces, resulting in a deficiency of 42 residential spaces.

A supporting justification for the proposed vehicle parking supply is provided in **Section 7.3**.

- ▶ **Bicycle Parking:** The proposed development is required to provide a total of 186 bicycle parking spaces, consisting of 171 long-term and 15 short-term bicycle parking spaces. The proposed bicycle parking supply will satisfy this requirement.
- ▶ **Loading Supply:** The proposed development is required to provide one (1) loading space. The proposed development will provide two (2) loading spaces, one (1) Type G and one (1) Type C, satisfying the by-law requirement.