

**Land and Building Experts**  
**Traffic Impact Study and**  
**AutoTURN Swept Path Assessment**  
**Proposed Multi – Detached Residential Houses**  
**Development – Update**  
**Fairview Road W., City of Mississauga**

**Prepared by:** Traffic+ Engineering Ltd.  
**Prepared for:** Land and Building Experts

December 22, 2023

## Date

December 22, 2023

## Our Reference:

2023-0010

## Client

Land and Building Experts

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## Re: Traffic Impact Study

**Proposed Multi – Detached Residential Houses Development – Update  
120 Fairview Road W., City of Mississauga**

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## EXECUTIVE SUMMARY

### Content

Land and Building Experts is re-submitting this Traffic Impact Study to reflect the updated site plan in support of a Zoning Application related to the proposed new redesigned residential development of a mostly empty site located along Fairview Road West in the City of Mississauga, Ontario. The site is approximately situated in the southwest quadrant of the intersection of Fairview Road West and Sir Antonio Drive.

The proposed development will consist of 8 detached residential houses which will be built on a mostly vacant land with a total surface area of approximately 3,328 m<sup>2</sup> (35,822.30 ft<sup>2</sup>).

The purpose of this study is to determine the traffic impacts of the proposed development on the surrounding road network and to identify any improvements necessary to accommodate this added traffic, if necessary. Additionally, the study assesses the maneuverability of a fire truck at the access driveway as well as around the site.

### Findings

The key conclusions and findings of the review are outlined herein:

- **Development:**

The proposed redesigned development will consist of 8 detached residential houses which will be built on a mostly vacant land with a total surface area of approximately 3,328 m<sup>2</sup> (35,822.30 ft<sup>2</sup>).

## ▪ Existing Traffic Operations:

The unsignalized intersection of Fairview Road West and Sir Antonio Drive is performing very satisfactorily on an overall basis, which corresponds to levels of service B during both the A.M. and the P.M. peak hours, with volume/capacity ratios well below capacity at all approaches.

## ▪ Future Background and Future Total Traffic Operations:

After lengthy discussions with City of Mississauga staff, it was agreed that the future background and future total traffic assessments are not needed due to the small size and scope of the proposed development. It is, therefore, agreed to only determine the future trip generation of the proposed development.

## ▪ Trip Generation:

Based on the ITE Trip Generation Manual (11<sup>th</sup> Edition) for the following land uses:

- Land Use Category 210: Single-Family Detached Housing

During AM peak the total trip generation expected from the development is equal to 4 trips (In: 1 vehicle and Out: 3 vehicles). During PM peak, the expected total trip generation is 6 vehicles (In: 4 vehicles and Out: 2 vehicles)

## ▪ Intersection Sight Distance:

Field sight distances were measured from the approximate site access driveway location. The following was found:

- access (looking West) along Fairview Road West is equal to approximately 152 metres, whereas the minimum required sight distance is 140 metres, and
- the sight distance on the right of the access (looking East) along Fairview Road West is found to equal to approximately 355 metres, whereas the minimum required sight distance is 140 metres.

Hence, the field sight distances exceed the minimum required sight distances and the proposed location of site access driveway is adequate.

## ▪ Swept Path Assessments for Garbage Truck

Based on the swept path assessments undertaken along the proposed alleyway to service two (2) single detached houses, it can be concluded that the garbage truck can maneuver without any impediments to service the garbage bins.

In summary, the proposed development is anticipated to have a very minimal impact on traffic operations within the study area.

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

Yours truly,



Mr. Nabil Ghariani, P.Eng., PTOE, M.S.C.E.  
President and CEO

## Table of Contents

<b>1.0 Introduction</b> .....	8
1.1 Study Overview .....	8
1.2 Study Area and Proposed Site Plan.....	8
<b>2.0 Existing Conditions</b> .....	11
2.1 Existing Road Network within the Study Area .....	11
2.2 Existing Transit Operations.....	11
2.3 Active Transportation.....	14
2.4 Existing Traffic Volumes .....	17
2.5 Existing Traffic Operations.....	17
<b>3.0 Future Background and Future Total Traffic Conditions</b> .....	20
<b>4.0 Proposed Development</b> .....	20
4.1 Site Characteristics.....	20
4.2 Site Access.....	20
4.3 Trip Generation.....	20
<b>5.0 Intersection Sight Distance</b> .....	21
<b>6.0 Swept Path Assessments for Garbage Truck</b> .....	28
<b>7.0 Findings and Conclusions</b> .....	33
<b>Figures</b>	
<b>Figure 1:</b> Approximate Site Location .....	9
<b>Figure 2:</b> Existing Lane Configurations and Traffic Controls.....	10
<b>Figure 3:</b> Site Plan .....	12
<b>Figure 4:</b> City of Mississauga – Road Classification .....	13
<b>Figure 5A:</b> Mississauga Transit – MiWay – Route#2 and Route# 53.....	15
<b>Figure 5B:</b> GO Bus Transit – Route 21 .....	16
<b>Figure 6:</b> Existing Traffic Volumes – AM and PM Peak Hour.....	18
<b>Figure 7:</b> Turning Movement Sight Distance Requirements .....	24
<b>Figure 8:</b> Intersection Sight Distances.....	25
<b>Figure 9:</b> Intersection Sight Distances.....	26
<b>Figure 10:</b> Field Pictures .....	27
<b>Figure 11:</b> Rear Loading Garbage – Truck Dimenisons/Turning Radii .....	29
<b>Figure 12:</b> Swept Path Assessment – Rear Load Garbage Truck .....	30
<b>Figure 13:</b> Swept Path Assessment – Rear Load Garbage Truck .....	31

**Figure 14:** Swept Path Assessment – Rear Load Garbage Truck ..... 32

## Tables

**Table 1:** Traffic Count Data & Sources ..... 17

**Table 2:** Existing Peak Hour Traffic Operations ..... 19

**Table 3:** Estimated Trip Generation Rates ..... 21

## Appendices

**Appendix A:** Site Plan - Updated

**Appendix B:** Existing Traffic Operations – Synchro Output

**Appendix C:** City of Mississauga Appendix A – Certification Form

## 1.0 Introduction

### 1.1 Study Overview

Traffic+ Engineering Ltd. was retained by Land and Building Experts to undertake a Traffic Impact Study in support of a proposed multi-detached residential development to be located in the City of Mississauga.

The purpose of this study is to determine the impacts of the additional traffic generated from the proposed development on the surrounding road network and the improvements, if necessary, to accommodate this future traffic. The scope of the study includes determination of the current traffic and site conditions in the vicinity of the development, estimation of trip generation of the proposed multi-detached residential houses to demonstrate that the future generated traffic from the development will have minimal impacts on traffic operations at Fairview Road West and Sir Antonio Drive intersection. Additionally, this study assesses sightline distances at the access driveway of the houses located along Fairview Road West by using TAC guideline.

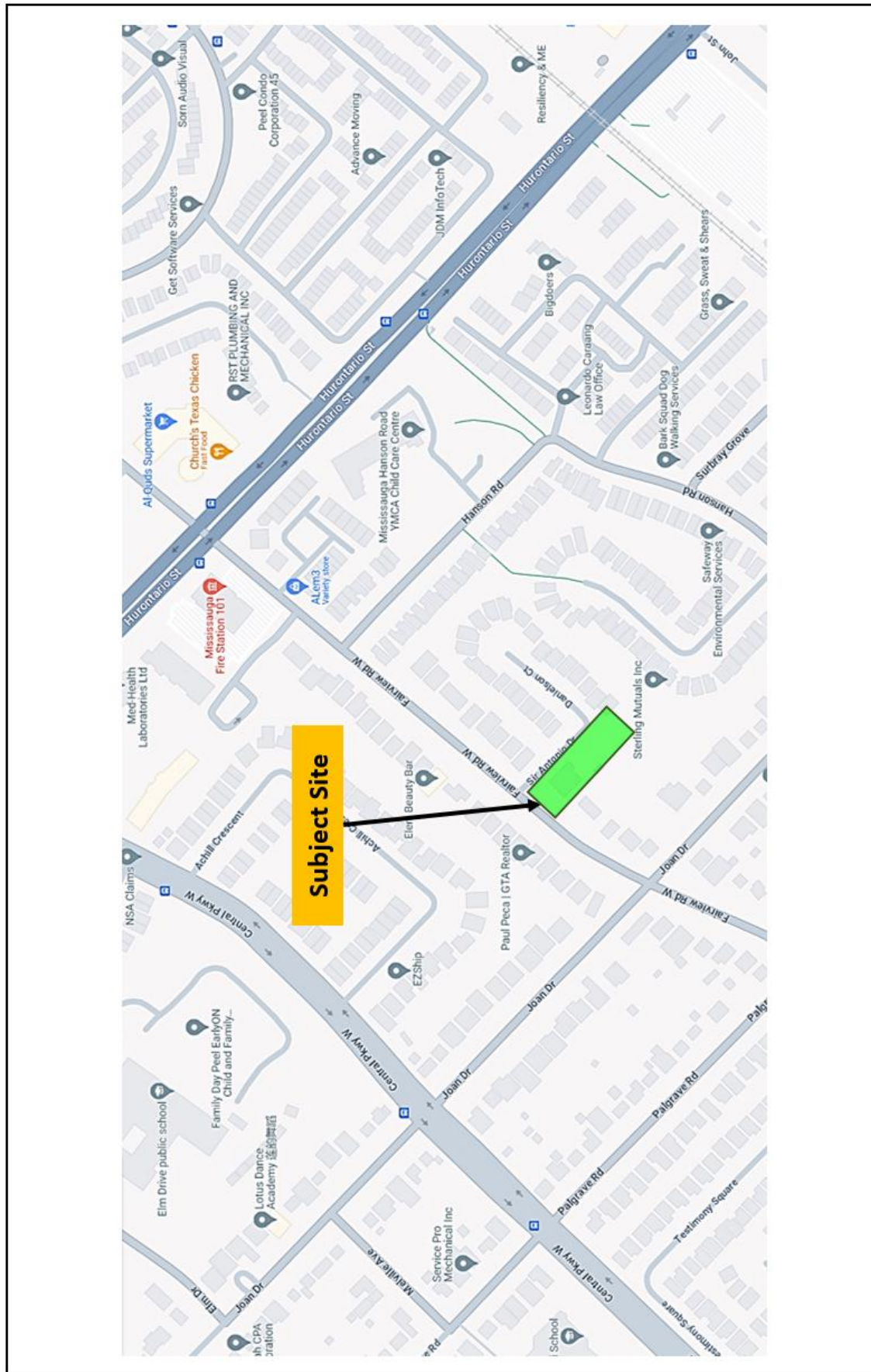
A new residential development is proposed along Fairview Road West located west of Hurontario Street in the City of Mississauga. The proposed redesigned development will consist of 8 detached residential houses which will be built on a mostly vacant land with a total surface area of approximately 3,328 m<sup>2</sup> (35,822.30 ft<sup>2</sup>).

### 1.2 Study Area and Proposed Site Plan

The approximate location of the subject site is illustrated in **Figure 1**. The community surrounding the subject site is mostly low density residential neighbourhoods comprised of single detached homes. Based on the pre-consultation meeting with staff from the City of Mississauga, the following intersection have been identified as intersection that should be assessed in this traffic impact study:

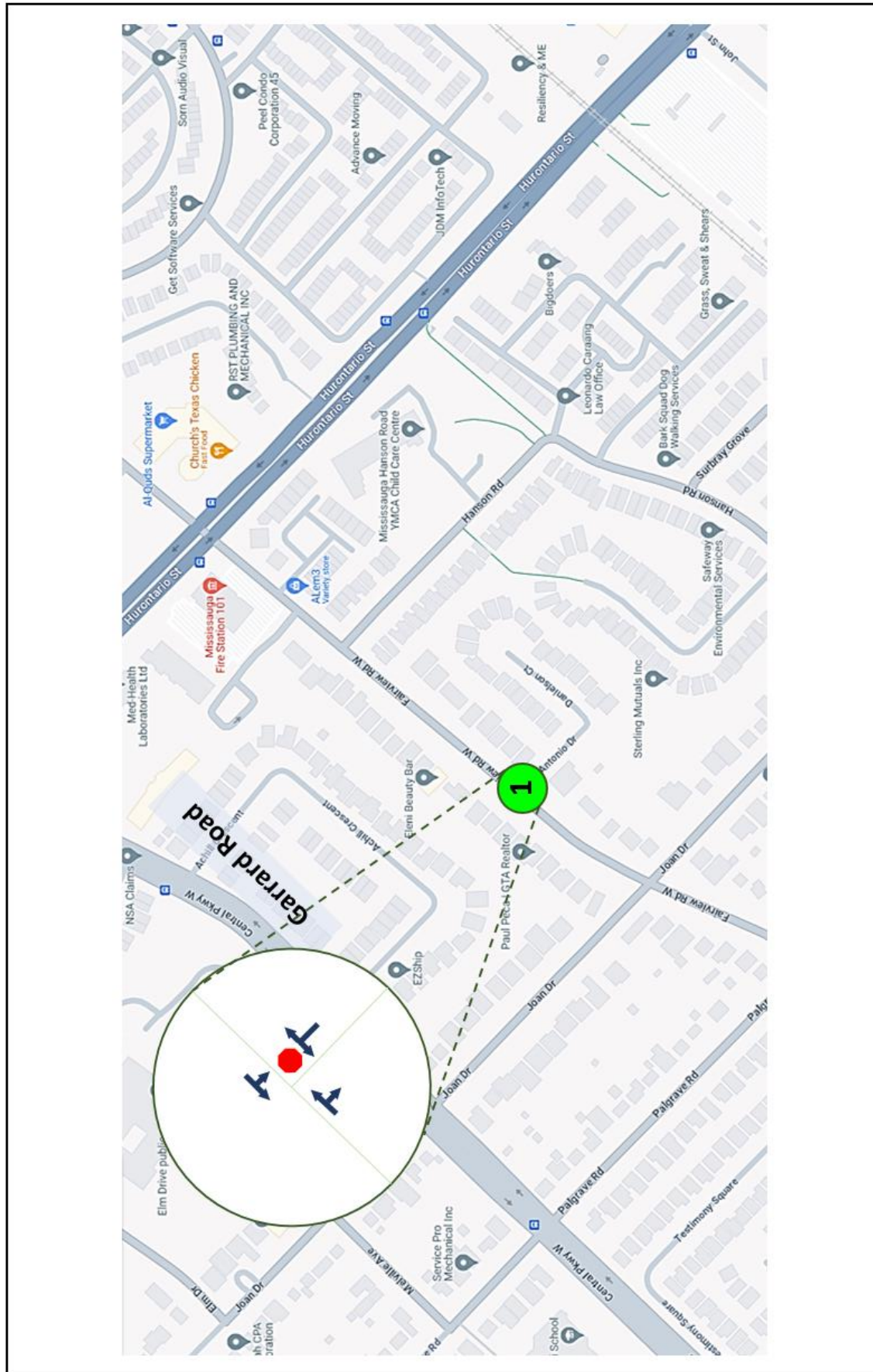
- Fairview Road West and Sir Antonio Drive (Unsignalised),

**Figure 2** illustrates the existing lane configurations and traffic controls at the study area intersection.



**Figure 1:**  
Approximate Site Location





**Figure 2:**  
Existing Lane Configurations and Traffic Controls

## 2.0 Existing Conditions

The subject property land is currently mostly vacant where there is currently a single detached house that is unoccupied with a direct access onto Fairview Road West. Based on the updated “Site Plan” prepared by Land & Building Experts, dated December 15, 2023, as shown in **Figure 3**, the proposed redesigned development will consist of 8 detached residential houses. There will be no dedicated site access as each single house will have its own access driveway. Six (6) of the single detached houses will have their access driveways along Sir Antonio Drive, and two (2) single detached houses will have their access driveways along Fairview Road West.

**Appendix A** includes the full redesigned site plan.

### 2.1 Existing Road Network within the Study Area

The main roadways in the vicinity of the subject site that are considered to assessing the traffic impacts of the proposed development are described as follows:

- **Fairview Road West:** is an east-west minor collector road as per the City of Mississauga road classification map. It has two (2) lanes with continuous sidewalks on both sides of Fairview Road West within the vicinity of the development and on-street parking is permitted and trucks are prohibited drive along this corridor. The posted speed limit is 40 km/h in the vicinity of the proposed development.
- **Sir Antonio Drive:** is a north-south local road with a cul-de-sac. It has two (2) lanes with no dedicated left turn lanes at the intersection with Fairview Road West. On-street parking is permitted at next to each residential house. There is no posted speed limit, but it can be assumed to equal to 25 km/h in the vicinity of the proposed development.

**Figure 4** shows road classification map from the City of Mississauga.

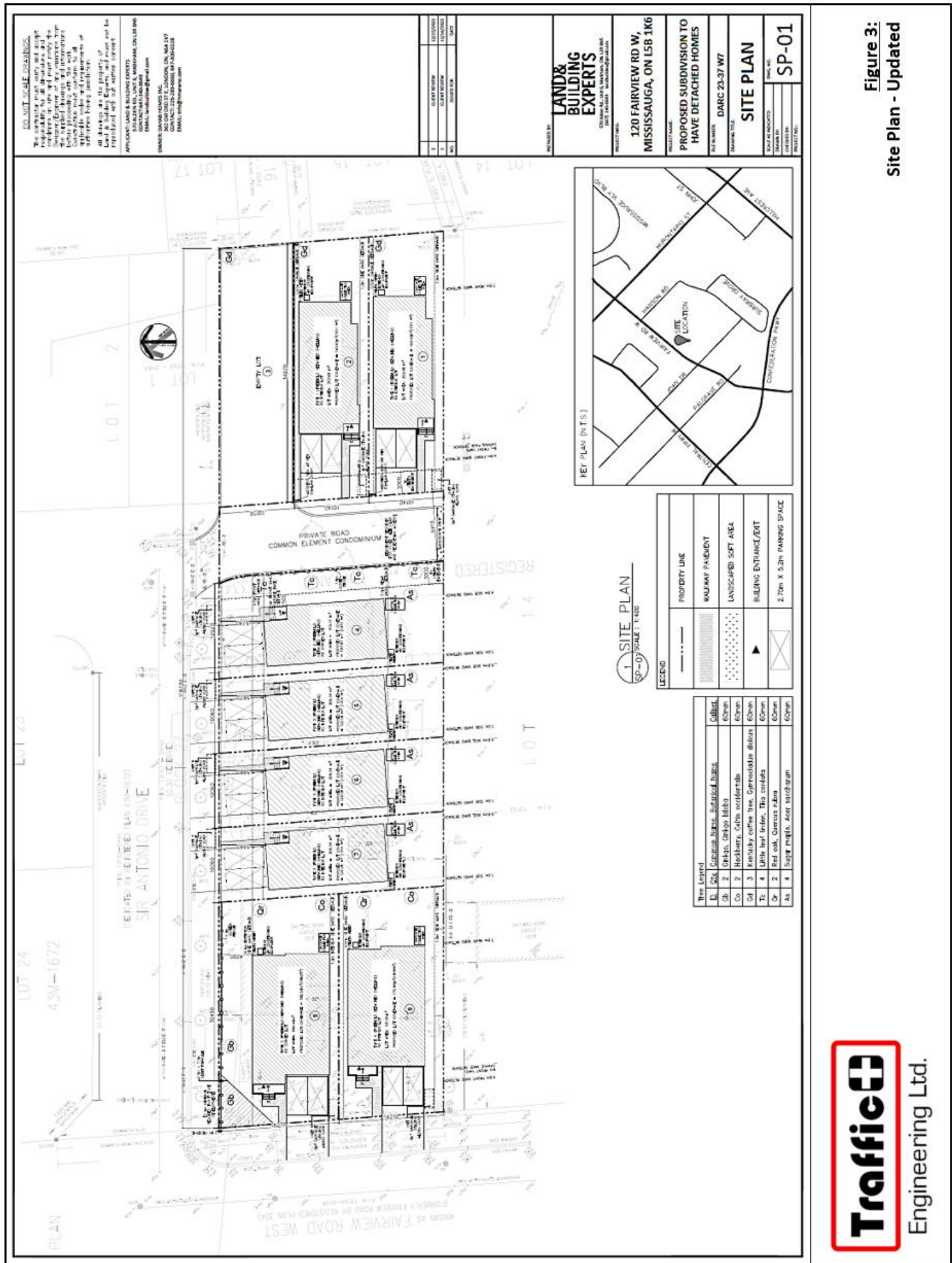
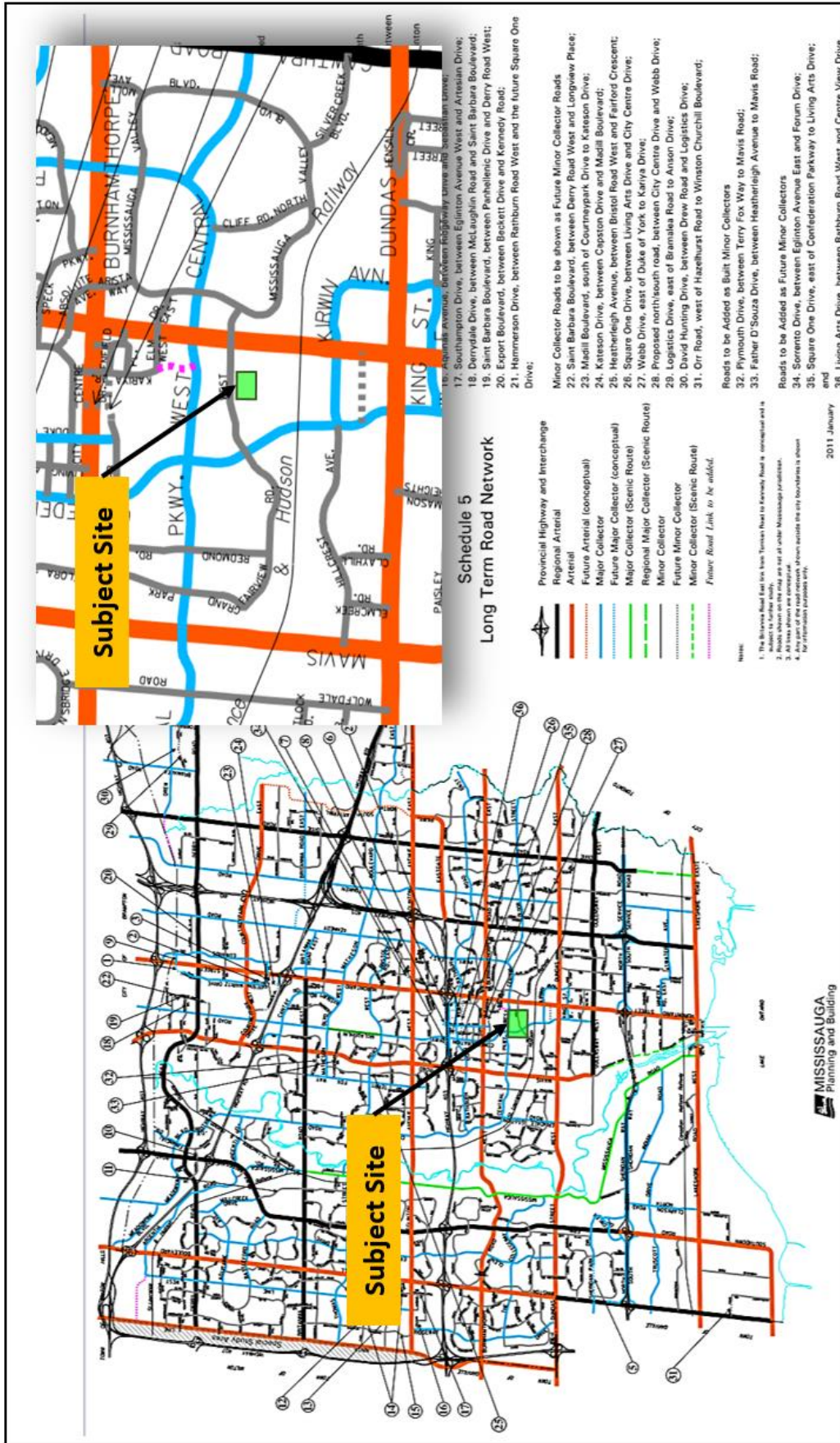


Figure 3: Site Plan - Updated



**Figure 4:**  
City of Mississauga – Road Classification

## 2.2 Existing Transit Operations

The proposed development is within an area that is currently well serviced by transit located along Hurontario Street. There are currently numerous local and express transit services provided by MiWay, the Mississauga Transit, as well as GO transit buses, which operate in the immediate vicinity of the development. MiWay routes are illustrated in **Figure 5A** and GO Bus Transit in **Figure 5B**. Each transit route is described as follows:

**Route# 2 – Hurontario:** Is a local bus that runs from Lakeshore Road East in the south to Rathburn Road West in the north. This route runs mainly along Hurontario Street with a stop near the subject site that is located within walking distance at Hurontario Street and Fairview Road West. This route operates on 5 – minute headways throughout business day and runs from 5:33 AM to 1:10 AM on weekdays. On Saturday this route operates on 10 – minute headway and runs from 7:40 AM to 1:10 AM. On Sunday this route operates on 10 – minute headway and runs from 7:40 AM to 1:00 AM.

**Route# 53 – Kennedy:** Is a local bus that runs from Lakeshore Road East in the south to Rathburn Road West in the north. This route runs mainly along Hurontario Street with a stop near the subject site that is located within walking distance at Hurontario Street and Fairview Road West. This route operates on 5 – minute headways throughout business day and runs from 5:33 AM to 1:10 AM on weekdays. On Saturday this route operates on 10 – minute headway and runs from 7:40 AM to 1:10 AM. On Sunday this route operates on 10 – minute headway and runs from 7:40 AM to 1:00 AM.

**GO Bus# 21:** GO Transit also operates an intercity service from Milton bus terminal to Union Station bus Terminal in the City of Toronto. This route operates on 15 – minute headways throughout the business day and runs from 3:20 AM to 02:40 PM on weekdays. On Saturday and Sunday this route operates on 60 – minute headway and runs from 4:35 AM to 03:35 PM.

**Route# 53**



**Route# 2**



**Figure 5A:**  
Mississauga Transit – MiWay – Route# 2 and Route# 53



Figure 5B:  
GO Bus Transit – Route# 21

## 2.3 Active Transportation

There are currently no dedicated on-street bike lanes, but given that Fairview Road West is a low speed corridor it is safe to ride along this road. It should be noted that Hurontario Street, which is classified as arterial, has a dedicated bike lanes on both side of the road. Additionally, there are continuous sidewalks on each side of Fairview Road West that is encouraging residents to walk to nearby bus stops located along Hurontario Street and exercising. Based on field observation during the site visit, it was noticed that residents from different age groups are walking and cycling to get to their destinations during peak hours.

Given that the proposed development consists of single detached houses, there is no need to provide bike racks as each resident can park its own bicycles on its property. Also, the houses are within walking distance from Fairview Road West sidewalks.

## Future Cycling Corridors

City of Mississauga is currently working in expanding it cycling corridors to encourage residents to use other modes of transportation to reduce Single Occupancy Vehicles and traffic congestion along major corridors.

## 2.4 Existing Traffic Volumes

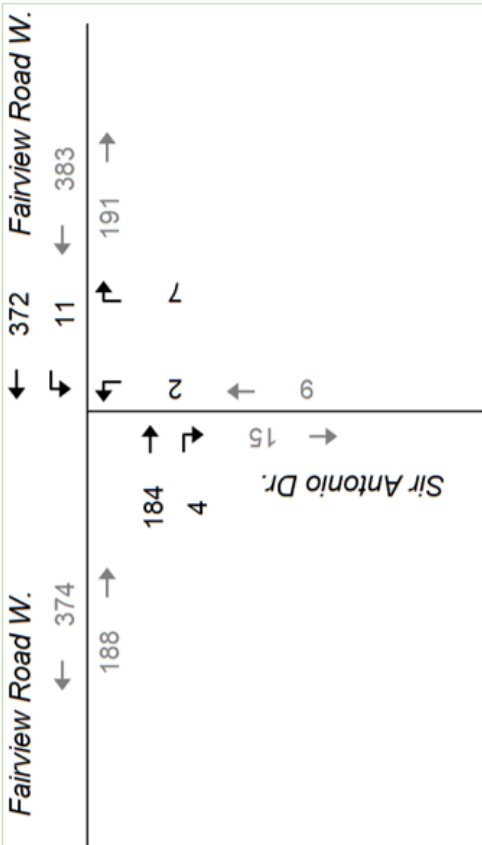
The existing traffic volumes on the adjacent road network were determined through peak hour turning movement counts undertaken by Traffic+ Engineering Ltd. The traffic count for the intersections in the study area are summarized in **Table 1**. The obtained traffic counts were counted in May 2023. The existing traffic volumes are illustrated in **Figure 6**.

**Table 1: Traffic Count Data & Sources**

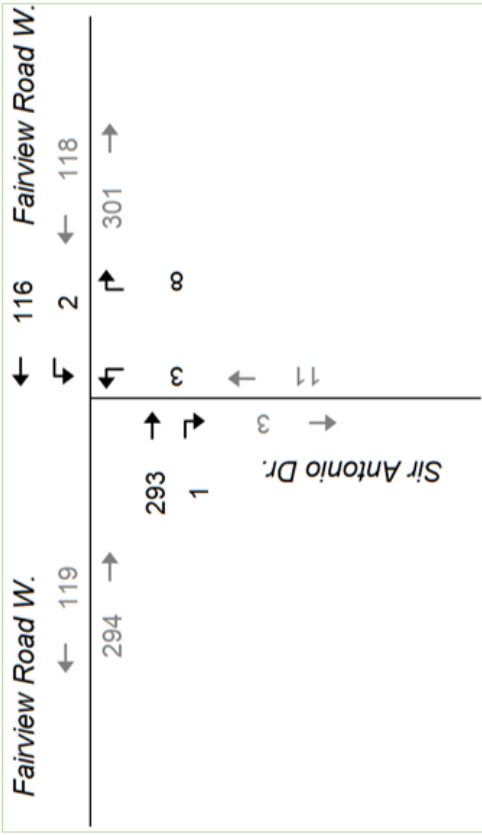
Intersection Number	Intersection Description	Count Date	Source
1	Fairview Road West and Sir Antonio Drive	May 2023	Traffic+ Engineering Ltd.



**PM Peak**



**AM Peak**



**Figure 6:**  
Existing Traffic Volumes – AM and PM Peak Hours

## 2.5 Existing Traffic Operations

The existing intersection operations were analyzed on the basis of the existing roadway A.M. and P.M. peak hour traffic volumes. The operations of the intersection in the study area was evaluated using the existing lane geometric configurations, traffic controls and the existing weekday A.M. and P.M. peak hour traffic volumes. The analysis was undertaken by using Synchro Traffic Software 9.1, which incorporates analysis of intersection capacity based on the approach outlined in the Highway Capacity Manual (HCM), Transportation Research Board.

Intersection level of service (LOS) is a recognized method of quantifying the efficiency of traffic flow at intersections. It is based on the delay experienced by individual vehicles executing the various movements. The highest possible rating is LOS A, under which the average total delay is equal or less than 10 seconds per vehicle. When the average delay exceeds 80 seconds at signalized intersections (50 seconds at unsignalized intersections), the movement is classified as LOS F and remedial measures are usually implemented, if they are feasible. The intersection analysis considered three separate measures of performance:

- The level of service (LOS) for each turning movement,
- The volume to capacity (v/c) ratio for each turning movement, and
- The 95<sup>th</sup> percentile queue length, obtained from Synchro output

The existing intersection operations are summarized in **Table 2** indicating the existing levels of service, volume to capacity ratios (v/c) and 95<sup>th</sup> percentile queues experienced within the study area, for the AM and PM peak hours.

**Table 2: Existing Peak Hour Traffic Operations**

Analysis Period	Intersection	Control Type	MOE	Directions / Movements / Approaches																Overall
				Eastbound				Westbound				Northbound				Southbound				
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
AM Peak Hour	Fairview Rd. W. and Sir Antonio Dr.	Unsignalized	LOS		A	A	A	A	A		A	B		B	B				A	
			Delay		0.0	0.0	0.0	0.0	0.1		0.1	10.4		10.4	10.4				0.3	
			V/C		0.19	0.19		0.0	0.0			0.02			0.02					0.19
			95th Queue		0.0	0.0		0.0	0.0			0.4			0.4					
PM Peak Hour	Fairview Rd. W. and Sir Antonio Dr.	Unsignalized	LOS		A	A	A	A	A		A	B		B	B				A	
			Delay		0.0	0.0	0.0	0.1	0.3		0.3	10.1		10.1	10.1				0.4	
			V/C		0.12	0.12		0.01	0.01		0.01	0.01			0.01					0.12
			95th Queue		0.0	0.0		0.2	0.2			0.3			0.3					

Based on the above criteria and the results summarised in **Table 2**, it can be deduced from the table that the unsignalized intersection of Fairview Road West and Sir Antonio Drive is performing very satisfactorily on an overall basis, which corresponds to levels of service B during

both the A.M. and the P.M. peak hours, with volume/capacity ratios well below capacity at all approaches.

Detailed Synchro 9.1 output is provided in **Appendix B**.

### 3.0 Future Background and Future Total Traffic Conditions

After lengthy discussions with City of Mississauga staff, it was agreed that the future background and future total traffic assessments are not needed due to the small size and scope of the proposed development. It is, therefore, agreed to only determine the future trip generation of the proposed development.

## 4.0 Proposed Development

### 4.1 Site Characteristics

The proposed redesigned residential development will consist of 8 detached residential houses which will be built on a mostly vacant land with a total surface area of approximately 3,328 m<sup>2</sup> (35,822.30 ft<sup>2</sup>).

Currently, the majority of the site is an empty field with the exception of a house located along Fairview Road West. It should be noted that the proposed development will replace the existing residential house.

### 4.2 Site Access

Given that the proposed residential development consists of multiple single detached houses, each house will have its own access driveway to its garage.

### 4.3 Trip Generation

As noted, the proposed redesigned development will consist of 8 detached residential houses which will be built on a mostly vacant land with a total surface area of approximately 3,328 m<sup>2</sup> (35,822.30 ft<sup>2</sup>).

The trip generation related to the proposed development was estimated using the trip generation rates provided in the ITE Trip Generation Manual (11<sup>th</sup> Edition) for the following land uses:

- Land Use Category 210: Single-Family Detached Housing

Adjustments to reflect the local modal split characteristics were not used. **Table 3** provides the trip generation for the proposed residential components.

Trip generation found in **Table 3** only estimates trips for 6 houses as they are located along Sir Antonio Drive and they impact the intersection of Fairview Road West and Sir Antonio Drive. The other 2 houses are directly located along Fairview Road West.

**Table 3: Estimated Trip Generation Rates**

	# of Units	AM - Average Rate	IN	OUT	IN Trips	OUT Trips
Single-Family Detached Housing (LU 210)	6	0.70	0.26	0.74	1	3

	# of Units	PM - Average Rate	IN	OUT	IN Trips	OUT Trips
Single-Family Detached Housing (LU 210)	6	0.94	0.63	0.37	4	2

## 5.0 Intersection Sight Distance

There are two sight distance assessments that have to be undertaken in order to conclude that the available sight distance at an intersection be deemed to be adequate, which are as follows:

- A test for vehicles that are required to depart an intersection safely; and
- A test to determine if the conditions of an approaching vehicle and driver on the side street can adequately see oncoming traffic as it approaches the intersection.

The various tests require a driver’s eye height of 1.05 m above the pavement surface and an object height of 1.2 m, representing the assumed top of an approaching vehicle which is unlike the Decision Sight Distance which requires an object height of 0.45 m.

### Departing Vehicles

According to the Transportation Association of Canada (TAC) and the Ministry of Transportation of Ontario (MTO), the requirements for sight distances and sight triangles for signalized intersections are the same as those applied for stop controlled intersections. According to TAC:

*“Since the intersecting traffic flows at signalized intersections move at separate times, theoretically, sight distance considering the cross-street traffic is not a requirement. However, due to numerous potential operating conditions associated with signalized intersections, the stop control sight distance is provided as a minimum. The signal operation conditions that support this practice include: signal malfunction, violation of the signal, right-turns permitted on red, and the use of the flashing red/yellow mode.”*

Based on the requirements outlined for stop controlled intersections, there are three components to be assessed:

- Crossing Sight Distance;
- Left-turn Sight Distance; and
- Right-turn Sight Distance

However in this study, the assessment will only be undertaken for the Left-turn Sight Distance and Right-turn Sight Distance as the configuration of the proposed intersection is a three legged intersection.

**Figure 7** illustrates the components of stop control sight distance. The left turn sight distance requirement is based on the time required to start from a stopped position, clear the near side traffic stream and accelerate to normal operating speed without interfering with through traffic. The right-turn sight distance requirement is based on the time to start from a stopped position and accelerate to normal operating speed without interfering with through traffic travelling in the same direction. In this case, the governing condition is the distance required for either turning left, or turning right to access the main street from the side street.

The governing safe sight distance for turning movements at an intersection is the distance *“required for a left-turning vehicle to attain the assumed operating speed of the highway before being overtaken by an approaching vehicle travelling in the same direction at the design speed”* (as stated in the *“Geometric Design Standards for Ontario Highways, MTO, Section E.3.2.3.2, Page E3-5”*).

For a design speed of 50 km/h, the safe sight distance requirement for turning movements onto a main road from a side road is as follows:

- **Left-turn Sight Distances:** vehicles turning left from a minor road to the main road must have a minimum sight distance of 110 metres for vehicles approaching from the right, and a minimum of 180 metres for vehicles approaching from the left
- **Right-turn Sight Distances:** vehicles turning right from minor road to the main road must have a minimum sight distance of 140 metres for vehicles approaching from the left

The chart used to determine these distances is taken from the Geometric Design Standards Manual, and it is illustrated in **Figure 8**.

The TAC Manual provides a chart for vehicles turning left onto a two-lane roadway, illustrated in **Figure 9**. Based on the chart, it can be deduced that the minimum sight distance for a vehicle turning left onto a four-lane roadway is 100 metres.

Comparing MTO Geometric Design Standard Manual and TAC Manual, it can be deduced that the MTO’s sight distance of 140 metres is conservative and will be used to assess the sight distance at the access driveway of the proposed detached house located along Fairview Road West.

## Field Investigation

A field investigation conducted in May 2023 where sight distances were measured from the approximate site access driveway location. It was found that the sight distance on the left of the

access (looking West) along Fairview Road West is equal to approximately 152 metres, whereas the minimum required sight distance is 140 metres, and the sight distance on the right of the access (looking East) along Fairview Road West is found to equal to approximately 355 metres, whereas the minimum required sight distance is 140 metres. Hence, the field sight distances exceed the minimum required sight distances and the proposed location of the access driveway is adequate.

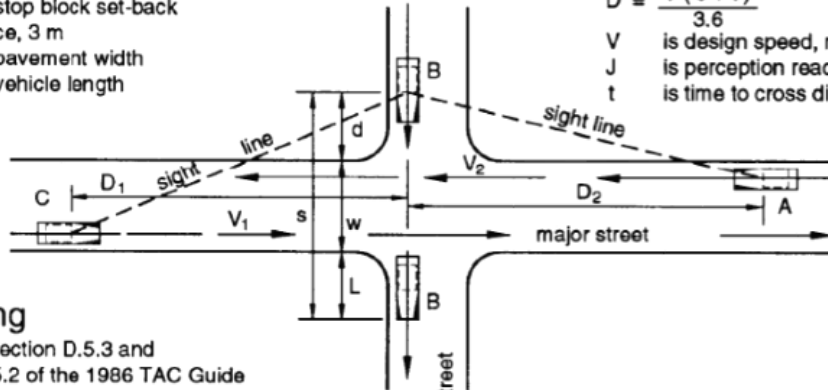
**Figure 10** shows the photos taken during the field investigation.

**Figure 7:**  
**Turning Movement Sight Distance requirements**  
Source: MTO Geometric Design Standards

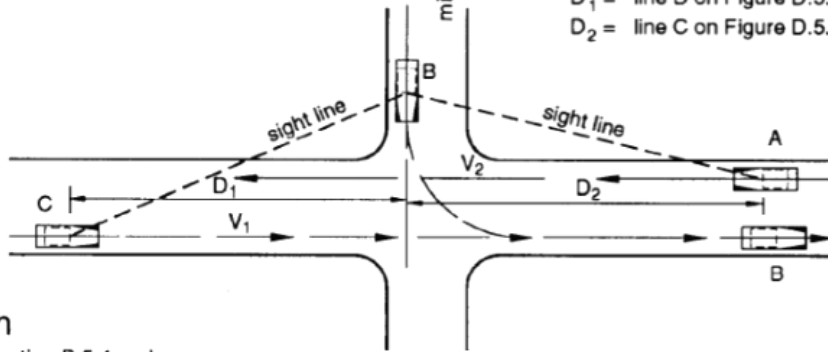
$s = d + w + L$

- s is the distance travelled to cross the major street
- d is the stop block set-back distance, 3 m
- w is the pavement width
- L is the vehicle length

- D is the sight distance required (stopping sight distance min.)
- V is the design speed
- $D = \frac{V(J+t)}{3.6}$
- V is design speed, major street
- J is perception reaction time, 2 s
- t is time to cross distance, s

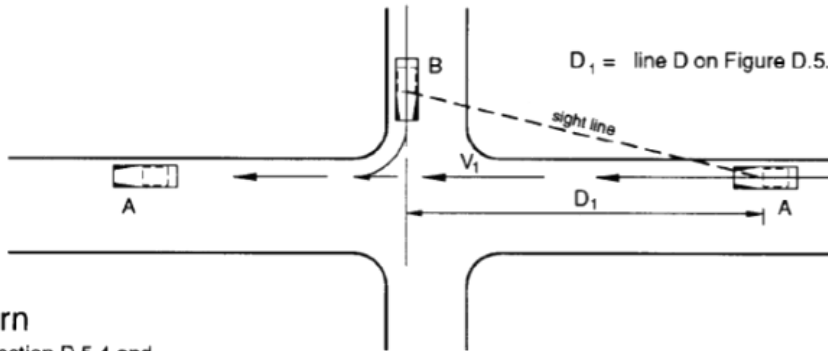


**a. crossing**  
Refer to Section D.5.3 and Figure D.5.2 of the 1986 TAC Guide



$D_1$  = line D on Figure D.5.4  
 $D_2$  = line C on Figure D.5.4

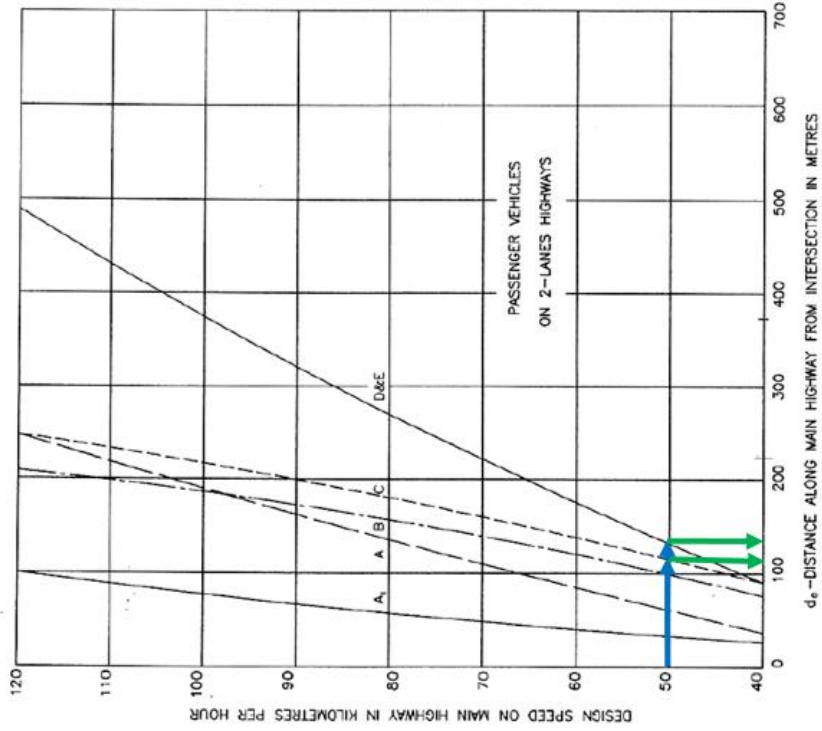
**b. left turn**  
Refer to Section D.5.4 and Figure D.5.4 of the 1986 TAC Guide



$D_1$  = line D on Figure D.5.4

**c. right turn**  
Refer to Section D.5.4 and Figure D.5.4 of the 1986 TAC Guide

- A - Minimum Stopping Sight Distance, Table E3-1.
- A1 - Distance travelled in 3 s, Table E3-2.
- B - Safe Sight Distance for P vehicle, crossing 2-lane highway from stop.
- C - Safe Sight Distance for P vehicle, turning left into 2-lane highway and attain assumed operating speed before being overtaken by P vehicle approaching in same direction at design speed.
- D - Safe Sight Distance for P vehicle to turn left into 2-lane highway and attain assumed operating speed before being overtaken by P vehicle approaching in same direction at design speed.
- E - Safe Sight Distance for P vehicle to turn right into 2-lane highway and attain assumed operating speed before being overtaken by P vehicle approaching in same direction at design speed.

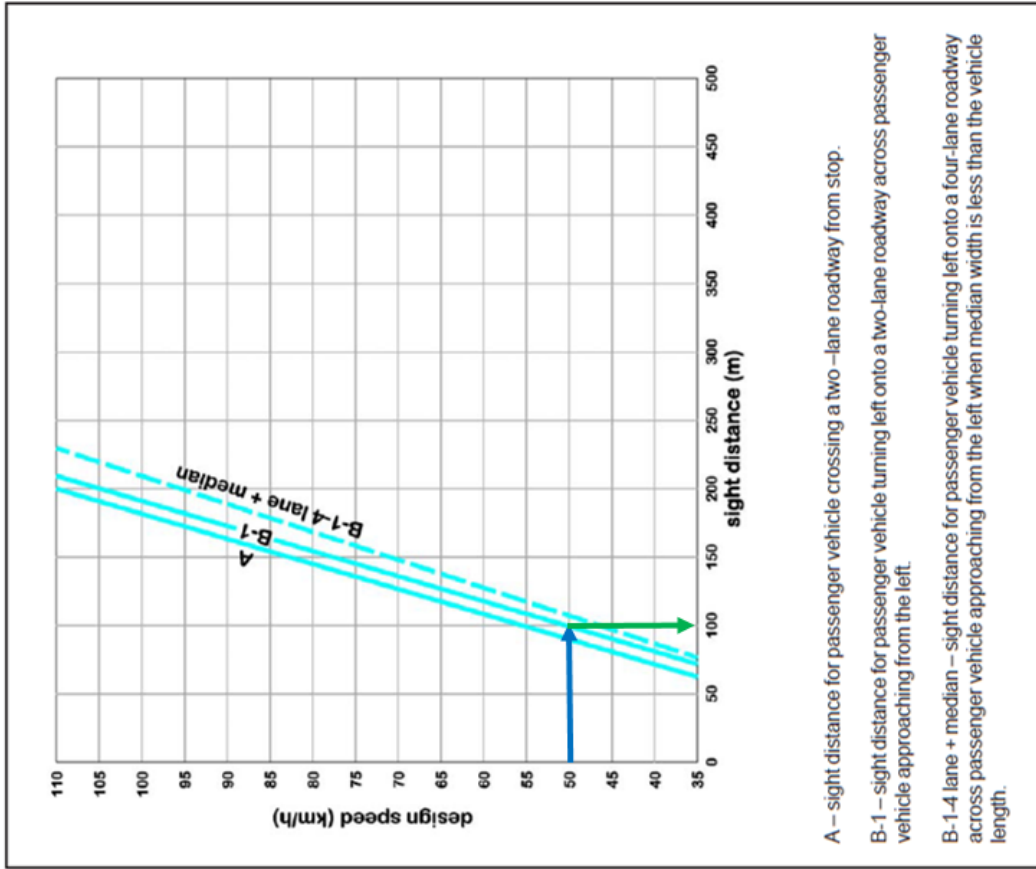


## Intersection Sight Distances

**Figure 8:**  
**Intersection Sight Distances**  
Source: MTO Geometric Design Standards



**Figure 2.3.3.4a Sight Distance for Crossing Movements and Vehicles Turning Left across Passenger Vehicle approaching from the Left**



**Figure 9:**  
**Intersection Sight Distances**  
(December 2011 Updates)

Source: TAC - Geometric Design Guide for Canadian Roads (December 2011 Updates)



**Figure 10:**  
Field Pictures

Looking  
Towards West

Looking  
Towards East

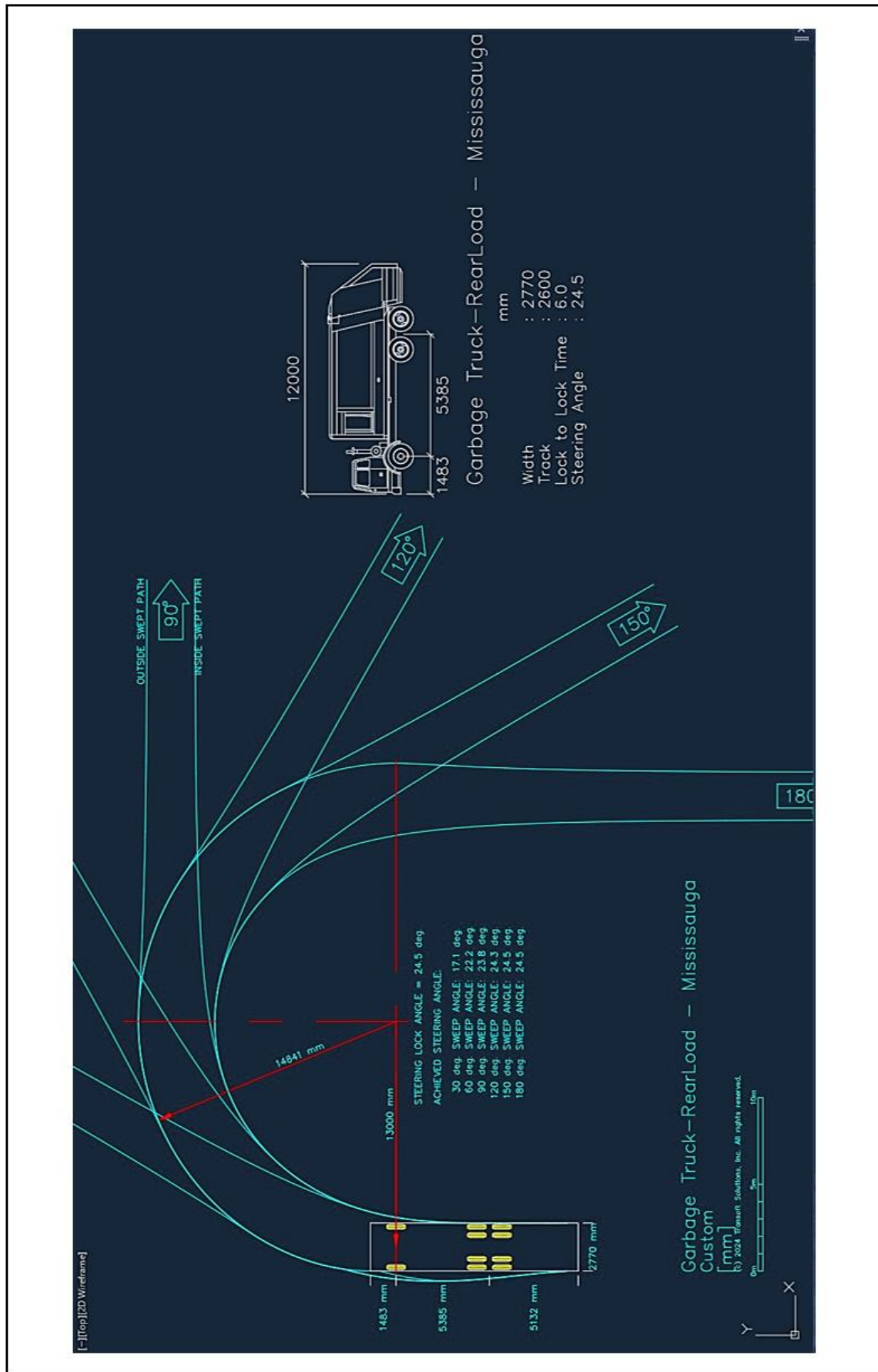
## 6.0 Swept Path Assessments for Garbage Truck

Given that the proposed multi-detached residential houses are located along Fairview Road West and Sir Antonio Drive, it is expected that these houses will have their garbage collected on curbside.

However, based on discussions with City staff, the two houses located on the alleyway, it was instructed that the garbage truck must use the empty lot located by the access (please refer to the site plan) to reverse onto the alleyway to process residential garbage bins. Detailed garbage truck swept path assessments were undertaken to demonstrate that the garbage truck can make maneuvers without encroaching any property.

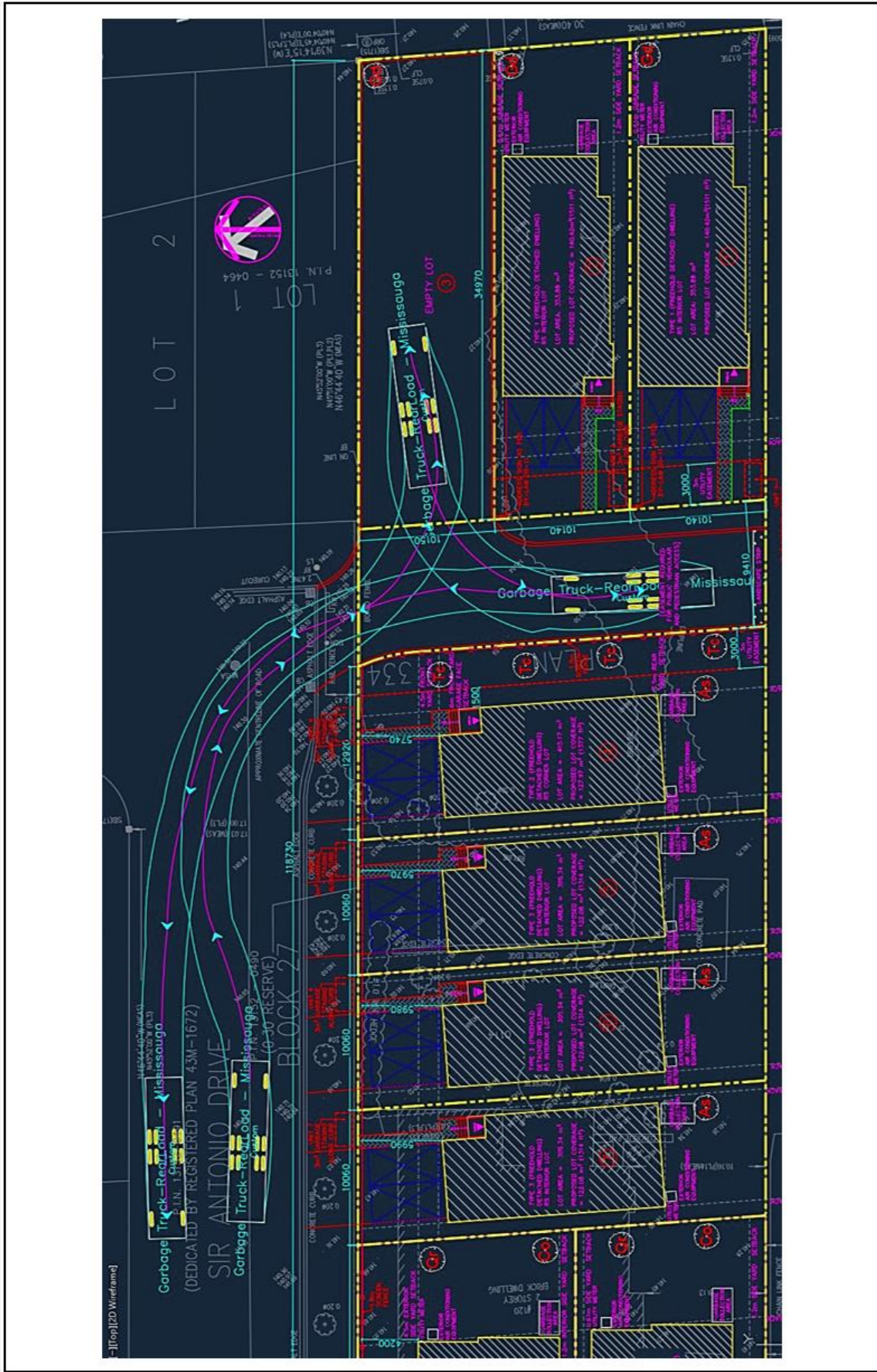
It was indicated by City staff that the typical garbage truck must have a minimum of 13.0 metres turning radius from the centreline. **Figure 11** illustrates the rear loading garbage truck based on City of Mississauga turning radii and dimensions specifications.

Based on the AutoTURN assessments, found in **Figure 12** to **Figure 14**, it can be concluded that the proposed site layout can accommodate the garbage collections along the alleyway.

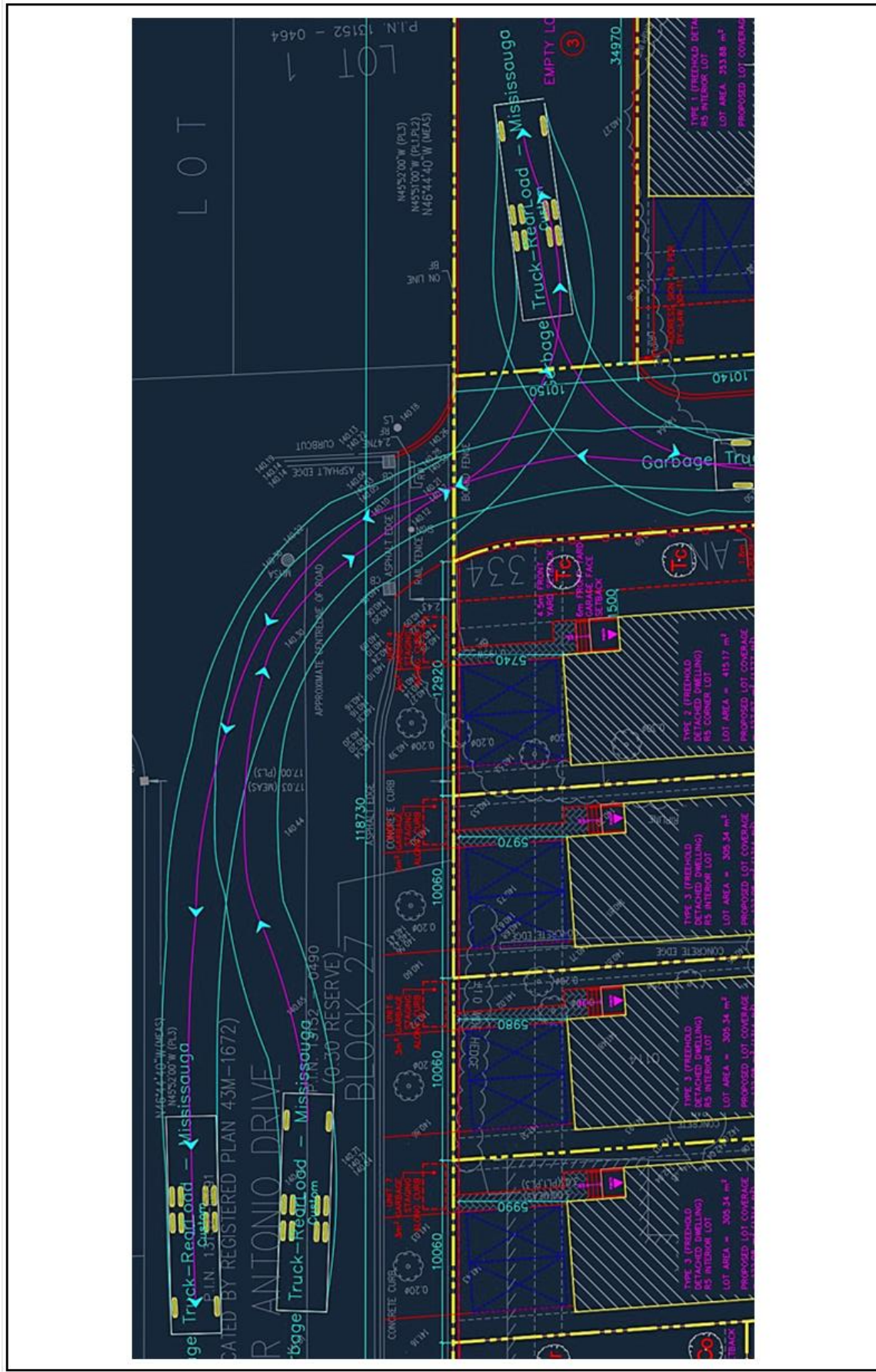


**Figure 11:**  
Rear Loading Garbage Truck - [City of Mississauga] - Truck Dimensions and Turning Radii (NTS)

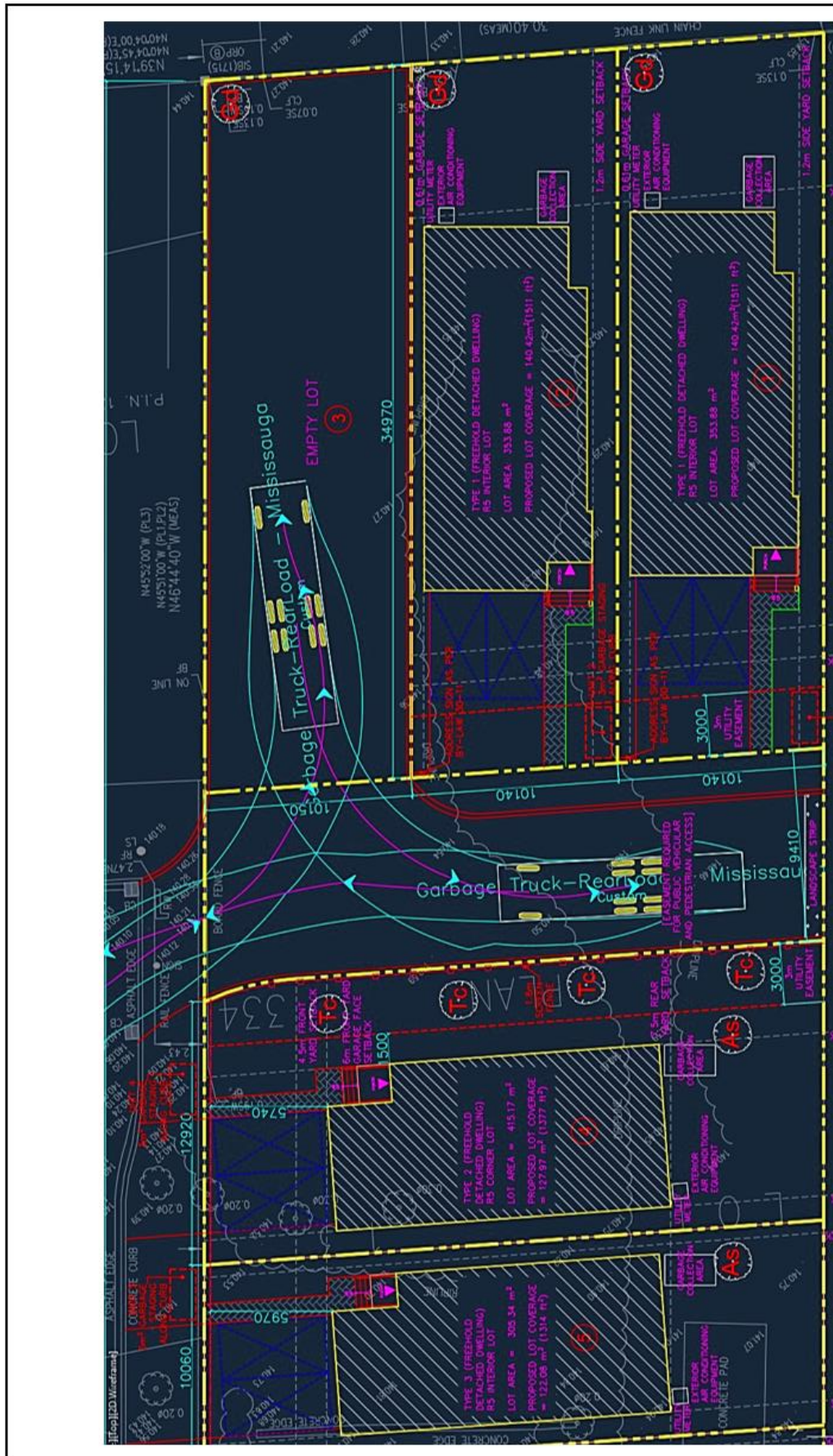
Rear Loading Garbage Truck - [City of Mississauga] - Truck Dimensions and Turning Radii (NTS)



**Figure 12:**  
Swept Path Assessment – Rear Load Garbage Truck



**Figure 13:**  
Swept Path Assessment – Rear Load Garbage Truck



**Figure 14:**  
Swept Path Assessment – Rear Load Garbage Truck

## 7.0 Findings and Conclusions

The findings and conclusions of our study are as follows:

### ▪ **Development:**

The proposed redesigned residential development will consist of 8 detached residential houses which will be built on a mostly vacant land with a total surface area of approximately 3,328 m<sup>2</sup> (35,822.30 ft<sup>2</sup>).

### ▪ **Existing Traffic Operations:**

The unsignalized intersection of Fairview Road West and Sir Antonio Drive. is performing very satisfactorily on an overall basis, which corresponds to levels of service B during both the A.M. and the P.M. peak hours, with volume/capacity ratios well below capacity at all approaches.

### ▪ **Future Background and Future Total Traffic Operations:**

After lengthy discussions with City of Mississauga staff, it was agreed that the future background and future total traffic assessments are not needed due to the small size and scope of the proposed development. It is, therefore, agreed to only determine the future trip generation of the proposed development.

### ▪ **Trip Generation:**

Based on the ITE Trip Generation Manual (11<sup>th</sup> Edition) for the following land uses:

- Land Use Category 210: Single-Family Detached Housing

During AM peak the total trip generation expected from the development is equal to 4 trips (In; 1 vehicle and Out: 3 vehicles). During PM peak, the expected total trip generation is 6 vehicles (In: 4 vehicles and Out: 2 vehicles)

### ▪ **Intersection Sight Distance:**

Field sight distances were measured from the approximate site access driveway location. The following was found:

- access (looking West) along Fairview Road West is equal to approximately 152 metres, whereas the minimum required sight distance is 140 metres, and
- the sight distance on the right of the access (looking East) along Fairview Road West is found to equal to approximately 355 metres, whereas the minimum required sight distance is 140 metres.

Hence, the field sight distances exceed the minimum required sight distances and the proposed location of site access driveway is adequate.



- **Swept Path Assessments for Garbage Truck**

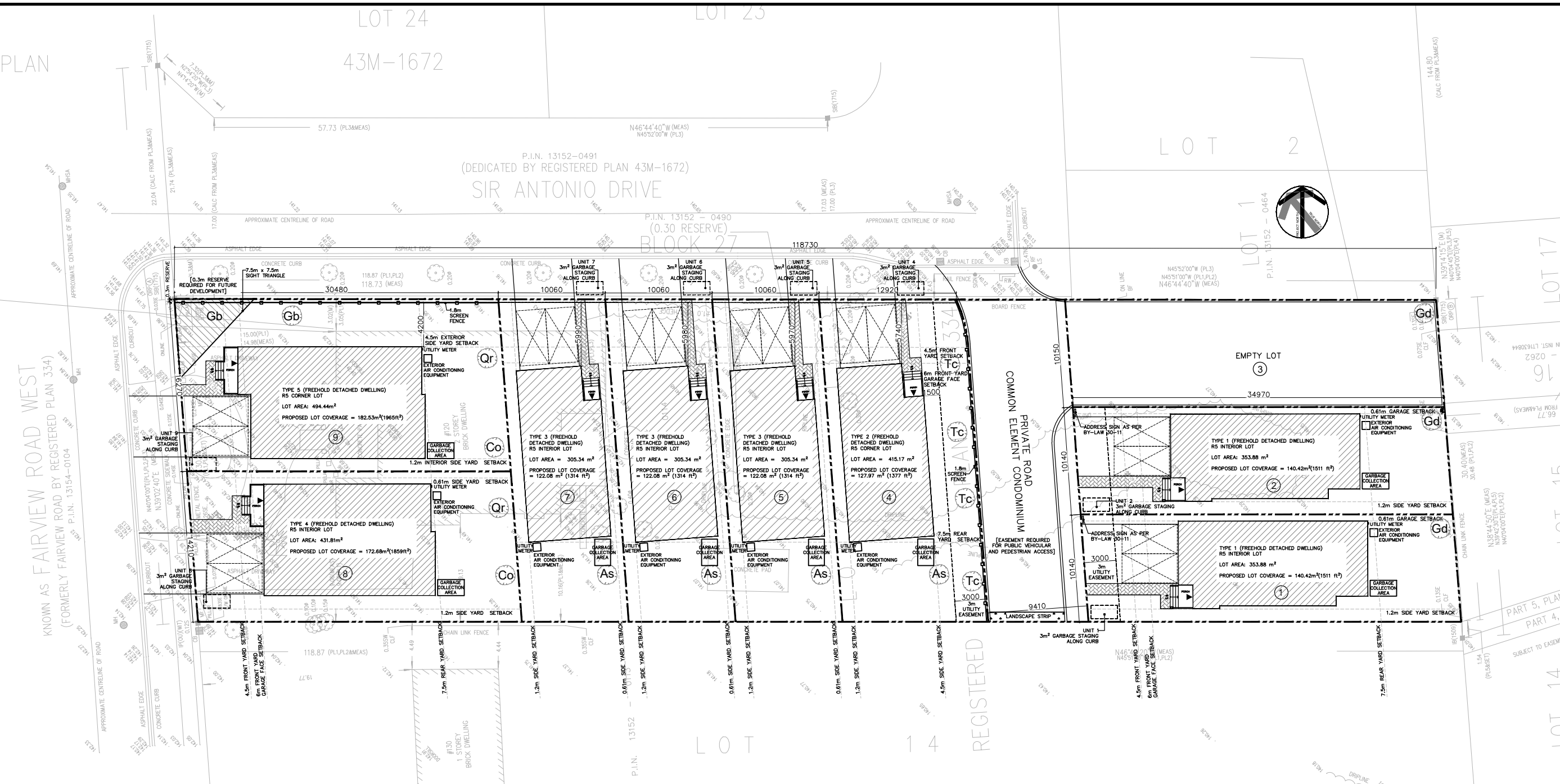
Based on the swept path assessments undertaken along the proposed alleyway to service two (2) single detached houses, it can be concluded that the garbage truck can maneuver without any impediments to service the garbage bins.

In summary, the proposed development is anticipated to have a very minimal impact on traffic operations within the study area.

# APPENDIX A

**Site Plan – Updated**

PLAN



KNOWN AS FAIRVIEW ROAD WEST  
(FORMERLY FAIRVIEW ROAD BY REGISTERED PLAN 334)  
P.I.N. 13154-0104

P.I.N. 13152-0491  
(DEDICATED BY REGISTERED PLAN 43M-1672)  
SIR ANTONIO DRIVE

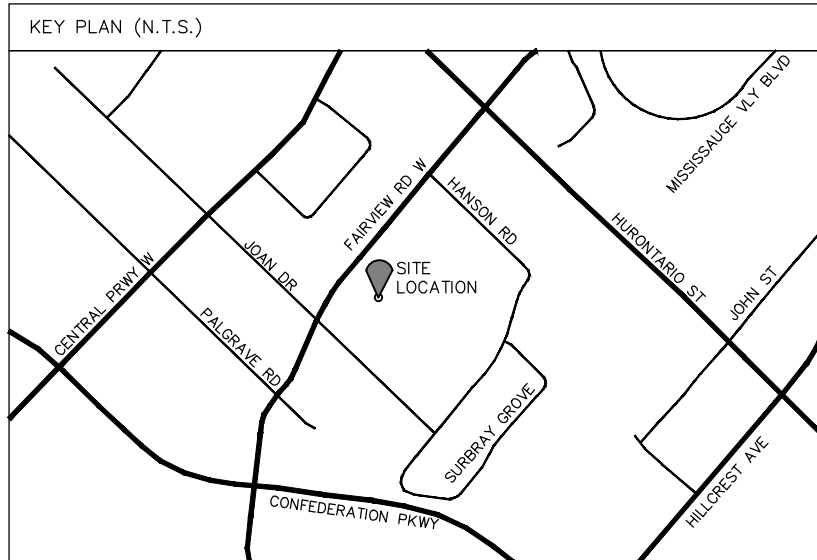
P.I.N. 13152-0490  
(0.30 RESERVE)  
BLOCK 27

REGISTERED

1 SITE PLAN  
SP-01 SCALE: 1:400

Tree Legend			
ID	Qty	Common Name, Botanical Name	Caliper
Gb	2	Ginkgo, Ginkgo biloba	60mm
Co	2	Hackberry, Celtis occidentalis	60mm
Gd	3	Kentucky coffee tree, Gymnocladus dioicus	60mm
Tc	4	Little leaf linden, Tilia cordata	60mm
Qr	2	Red oak, Quercus rubra	60mm
As	4	Sugar maple, Acer saccharum	60mm

LEGEND	
	PROPERTY LINE
	WALKWAY PAVEMENT
	LANDSCAPED SOFT AREA
	BUILDING ENTRANCE/EXIT
	2.75m X 5.2m PARKING SPACE



**DO NOT SCALE DRAWINGS.**  
The contractor must verify and accept responsibility for all dimensions and conditions on site and must notify the Designer/Engineer of any variations from the supplied drawings and informations before proceeding with the work. Construction must conform to all applicable codes and requirements of authorities having jurisdiction.

All drawings are the property of Land & Building Experts, and must not be reproduced without written consent.

APPLICANT: LAND & BUILDING EXPERTS  
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OWNER: DAHAB HOMES INC.  
362 OXFORD ST E, LONDON, ON, N6A 1V7  
CONTACT: 226-289-6660, 647-300-0228  
EMAIL: info@hmareno.com

NO.	ISSUED FOR	DATE
2	CLIENT REVIEW	12/15/2023
1	CLIENT REVIEW	11/14/2023

PREPARED BY:  
**LAND & BUILDING EXPERTS**  
570 Alden Rd., Unit 6, Markham, ON, L3R 8N5  
(647) 340-8649 landbuildexp@gmail.com

PROJECT INFO:  
**120 FAIRVIEW RD W,  
MISSISSAUGA, ON L5B 1K6**

PROJECT NAME:  
**PROPOSED SUBDIVISION TO  
HAVE DETACHED HOMES**

FILE NUMBER:  
**DARC 23-37 W7**

DRAWING TITLE:  
**SITE PLAN**

SCALE AS INDICATED  
DRAWN BY:  
CHECKED BY:  
PROJECT NO.:  
**SP-01**

# APPENDIX B

## Existing Traffic Operations – Synchro Output

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	293	1	2	116	3	8
Future Vol, veh/h	293	1	2	116	3	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	318	1	2	126	3	9

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	319	0	449
Stage 1	-	-	-	-	319
Stage 2	-	-	-	-	130
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1241	-	568
Stage 1	-	-	-	-	737
Stage 2	-	-	-	-	896
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1241	-	567
Mov Cap-2 Maneuver	-	-	-	-	567
Stage 1	-	-	-	-	737
Stage 2	-	-	-	-	894

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	672	-	-	1241	-
HCM Lane V/C Ratio	0.018	-	-	0.002	-
HCM Control Delay (s)	10.5	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	184	4	11	372	2	7
Future Vol, veh/h	184	4	11	372	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	200	4	12	404	2	8

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	204	0	630
Stage 1	-	-	-	-	202
Stage 2	-	-	-	-	428
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1368	-	446
Stage 1	-	-	-	-	832
Stage 2	-	-	-	-	657
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1368	-	441
Mov Cap-2 Maneuver	-	-	-	-	441
Stage 1	-	-	-	-	832
Stage 2	-	-	-	-	650

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	699	-	-	1368	-
HCM Lane V/C Ratio	0.014	-	-	0.009	-
HCM Control Delay (s)	10.2	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

# APPENDIX C

## City of Mississauga Appendix A – Certification Form

# Appendix A

## Certification Form

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


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

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

Dated at City of Toronto this 15 day of August, 2023.  
(City)

Name: Nabil Ghariani

Professional Title: P.Eng.

Signature: 

### Office Contact Information (Please Print)

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City/Postal Code: M2J 1Z4

Telephone/Extension: (514) 891-3972

E-mail Address: Nabil@TrafficPlus.ca