



1315 Bough Beeches Boulevard Limited

TRANSPORTATION IMPACT STUDY

**Proposed Residential Development
1315 Bough Beeches Boulevard, City of
Mississauga**

March 2026
25369



LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor
Markham, ON, L3R 9R9 Canada
T | 905 470 0015 F | 905 470 0030
WWW.LEA.CA

March 24, 2026

Reference Number: 25369

Farrah Ward

Vice President, Land Development
Standford Homes
2700 Dufferin Street, Unit 50
Toronto, ON M6B 4J3

Dear Farrah Ward,

**RE: Transportation Impact Study
Proposed Residential Development
1315 Bough Beeches Boulevard, City of Mississauga**

LEA Consulting Ltd. is pleased to present the findings of our Transportation Impact Study for the proposed residential development located at 1315 Bough Beeches Boulevard in the City of Mississauga. This Transportation Impact Study has been prepared for Standford Homes in support of the Zoning By-law Amendment (ZBA) and Site Plan Approval (SPA) applications for the subject site. This report concludes that the traffic associated with the proposed development maintains acceptable conditions for the road network in the surrounding area.

Please do not hesitate to contact the undersigned should you have any additional questions or concerns.

Yours truly,

LEA CONSULTING LTD.

Zara McCormick, M.Eng., P.Eng.
Manager, Transportation Engineering (Western Canada)

Jorge Ordenes, M.Sc., EIT
Project Coordinator

Encl. Transportation Impact Study – Proposed Residential Development – 1315 Bough Beeches, City of Mississauga
(March 2026)

Disclaimer

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1 INTRODUCTION

LEA Consulting Ltd. (LEA) has been retained by 1315 Bough Beeches Boulevard Limited to undertake a Transportation Impact Study (TIS) for the proposed residential development located on a portion of the property at 1315 Bough Beeches (herein referred to as the “subject site”) in the City of Mississauga.

There is currently one high-rise tower located on the property (1315 Bough Beeches Boulevard). The proposed development will be constructed east of the existing building. The site location is illustrated in **Figure 1-1**.

Figure 1-1: Site Location



Source: Google Maps, February 2026

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

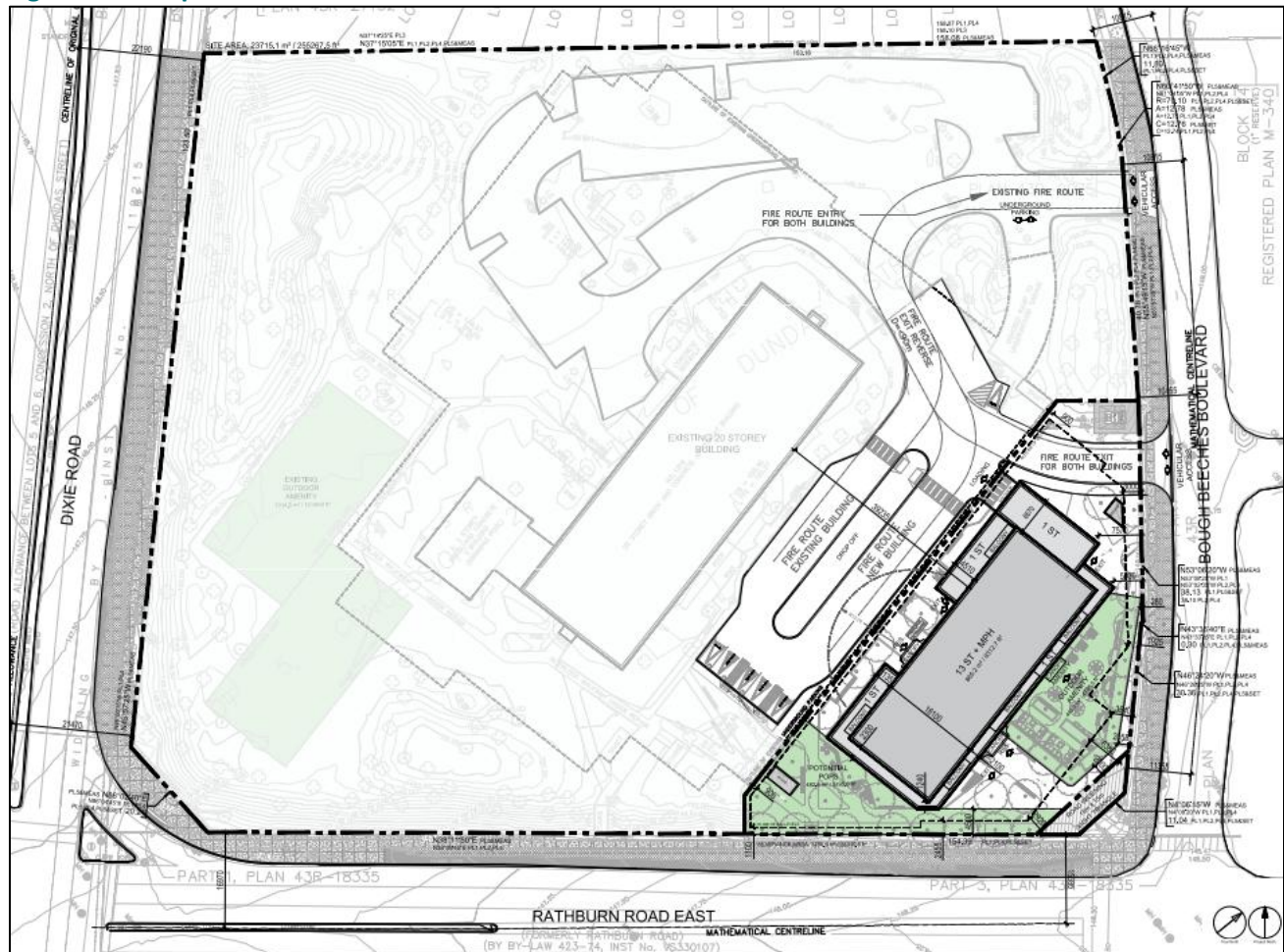
The proposed development consists of one 13 storey tower containing a total of 144 residential units. Parking for the proposed development will be shared with the existing building, provided in a shared surface parking lot and in two (2) new levels of underground parking, accessed via the existing one (1) level underground parking garage accommodating 159 parking spaces. In addition, 95 bicycle parking spaces are proposed to support cycling to/from the proposed development. The proposed site statistics are below in **Table 1-1**.

Table 1-1: Site Statistics

Land Use	Unit Count
Studio	12 units
1-Bedroom	61 units
2-Bedroom	59 units
3-Bedroom	12 units
Total Residential	144 units

Vehicular access to the development is proposed via the two (2) existing full moves site accesses on Bough Beeches Boulevard. **Figure 1-2** illustrates the proposed site plan.

Figure 1-2: Proposed Site Plan



Source: Arcadis, February 2026

2 EXISTING TRAFFIC CONDITIONS

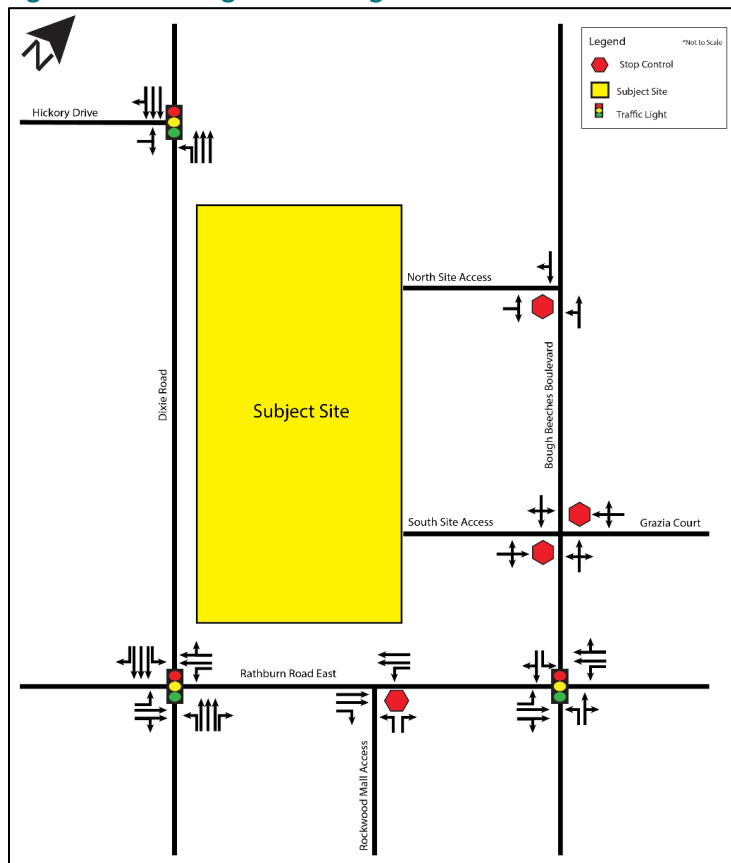
This section identifies and assesses the existing transportation conditions within the study area, including the road, transit, cycling, and pedestrian networks. The study area was determined by assessing the size of the proposed development and its anticipated transportation impact, and through consultation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

- ▶ Bough Beeches Boulevard and Rathburn Road East (Signalized Intersection);
- ▶ Dixie Road and Hickory Drive (Signalized Intersection);
- ▶ Dixie Road and Rathburn Road East (Signalized Intersection);
- ▶ Bough Beeches Boulevard and North Site Access (Unsignalized Intersection);
- ▶ Bough Beeches Boulevard and South Site Access (Unsignalized Intersection);
- ▶ Rathburn Road East and Rockwood Mall Access (Unsignalized Intersection).

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. **Figure 2-1** illustrates the existing lane configuration.

Figure 2-1: Existing Lane Configuration



Dixie Road is a regional arterial road in the general north-south direction that operates with a six-lane cross-section (three lanes per direction) within the study area. Dixie Road operates from Lakeshore Road East to the south to Highway 407 in the north (under City of Mississauga jurisdiction). The roadway operates with a posted speed limit of 60 km/h within the study area.

Rathburn Road East is a collector road that operates in the general east-west direction with a four-lane cross-section (two lanes per direction) within the study area. Rathburn Road East operates from Etobicoke Creek to the east to Hurontario Street in the west. As there is no speed limit posted, the roadway operates with an assumed speed limit of 50 km/h within the study area.

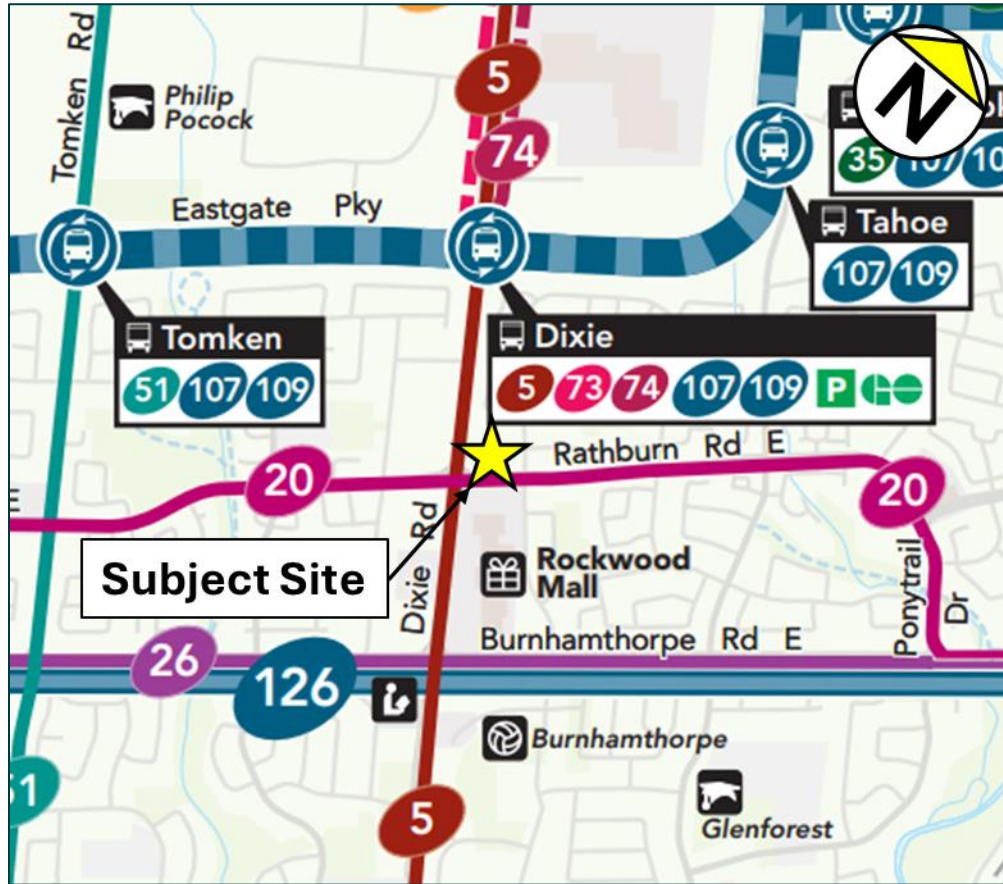
Bough Beeches Boulevard is a minor collector road that operates in a general east-west direction. In the immediate study area, the roadway travels in a north-south direction with a two-lane cross-section (one lane per direction) between Burnhamthorpe Road East and Poltava Crescent, where it continues in an east-west direction and ultimately connects back with Rathburn Road East. As there is no speed limit posted, the roadway operates with an assumed speed limit of 40 km/h within the study area.

Hickory Drive is a minor collector road that generally operated in the east-west direction with a two-lane cross-section (one lane per direction) within the study area. Hickory Drive operates from Rathburn Road East to the south and Willowbank Trail to the north. As there is no speed limit posted, the roadway operates with an assumed speed limit of 40 km/h within the study area.

2.2 TRANSIT NETWORK

The subject site is located in an area serviced by the MiWay transit network. The subject site is within walking distance of bus stops at the Dixie Road and Rathburn Road intersection. The subject site has a WalkScore™ Transit Score of 59/100 – *Good Transit*, indicating that there are a few nearby transportation opportunities. The transit routes servicing the area are illustrated in **Figure 2-2**.

Figure 2-2: Existing Transit Network



Source: MiWay, July 2025

MiWay Route 20 – Rathburn is a bus route that operates in an east-west direction between Kipling Bus Terminal to the City Centre Transit Terminal.

Access Location: Route 20 is accessible at the intersection of Rathburn Road East and Bough Beeches Boulevard and the intersection of Dixie Road and Rathburn Road East which is approximately 100m (equivalent to a one-minute walk) to the subject site.

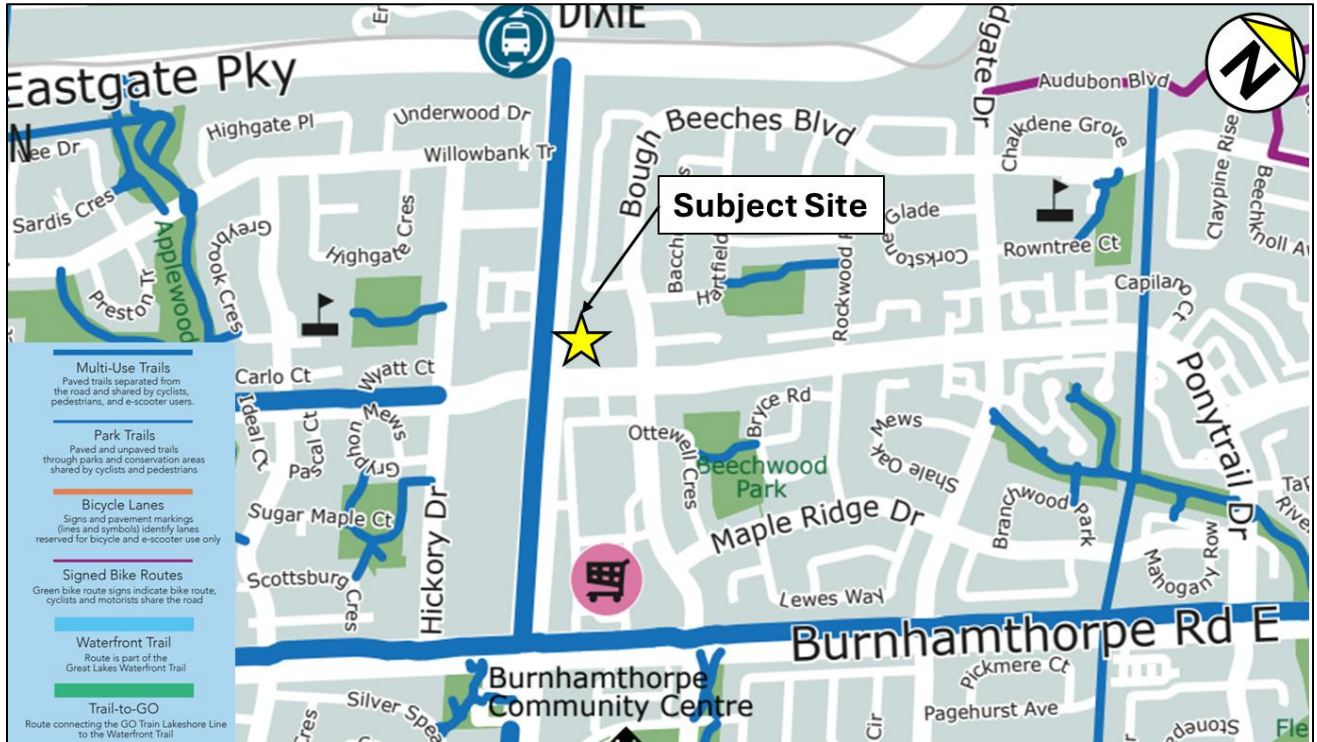
MiWay Route 5 – Dixie is a bus route that operates in a north-south direction between Lorimar Drive/Cardiff Boulevard and the Long Branch GO station.

Access Location: Route 5 is accessible near the intersection of Dixie Road and Rathburn Road East which is approximately 170m (equivalent of a three-minute walk) to 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. The subject site has a WalkScore™ bike score of 60/100 – *Bikeable*, indicating that there is some bike infrastructure available for some trips. The main routes surrounding the proposed development are a multi-use trail running north-south along Dixie and a multi-use trail running east-west along Burnhamthorpe road (which is approximately 600m south of the subject site).

Figure 2-3: Existing Cycling Network



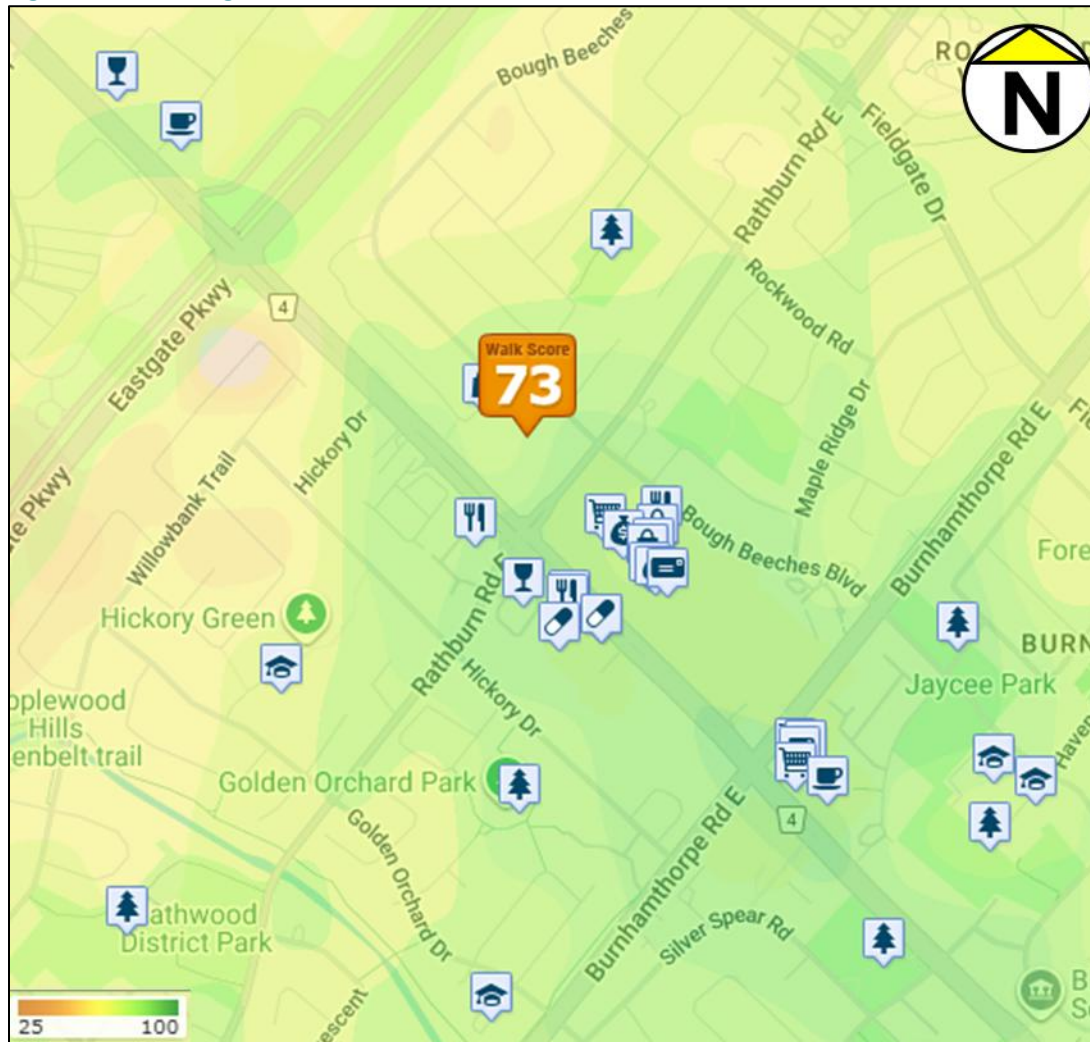
Source: City of Mississauga, July 2025

2.4 PEDESTRIAN NETWORK

In the area immediately surrounding the subject site, the existing pedestrian network consists of sidewalks along both sides of Bough Beeches Boulevard, Rathburn Road East, and Dixie Road. 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 73/100 – *Very Walkable*, an indication that most errands can be accomplished on foot. 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, September 2025

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 Thursday, June 19th, 2025, for the AM and PM peak hours. 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**.

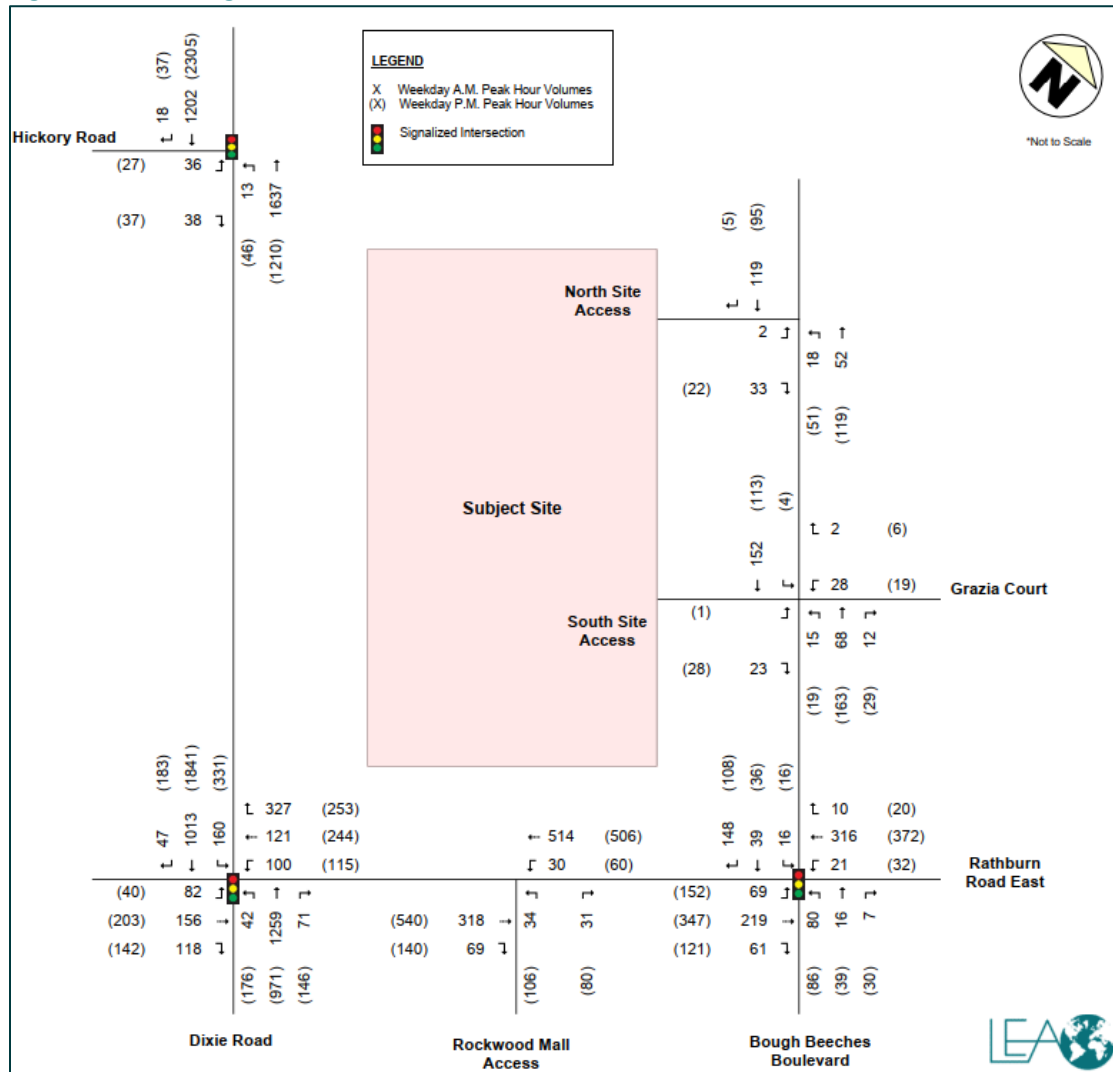
Table 2-1: Data Collection Summary

Intersection	TMC Date	Source
Dixie Road and Hickory Drive	Thursday, June 19 th , 2025	LEA Consulting
Dixie Road and Rathburn Road East		
Rockwood Mall Access and Rathburn Road East		
Bough Beeches Boulevard and Rathburn Road East		
Bough Beeches Boulevard and South Site Access/Grazia Court		
Bough Beeches Boulevard and North Site 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-year horizon from the existing condition year 2025 to 2030. Future background conditions include traffic added to the network from other future developments, and corridor growth. The future background conditions will be used as the baseline for evaluating the impact of the proposed development.

3.1 FUTURE ROAD IMPROVEMENTS

In the future there will be a Comprehensive Corridor Study (CCS) along Dixie Road between Burnhamthorpe Road to Highway 401 West Off-ramp. This study will address traffic improvements in the area, transportation needs and state of good repair (SOGR). The study is currently in the request for proposal stage (RFP) with publication targeted for end of 2025 or early 2026. As there are no further details on the proposed study, no improvements have been incorporated into the analysis.

3.2 GROWTH RATES

Growth rates were provided by the City of Mississauga and Peel Region for Rathburn Road East and Dixie Road and are outlined below in **Table 3-1**. These were applied to the respective through movements for all roads. The correspondence with the City providing the growth rates can be seen in **Appendix C**.

Table 3-1: Corridor Growth Rates

Corridor	2025-2030	
	AM	PM
Rathburn Road East	0.50%	0.50%
Dixie Road	0.50%	0.50%

3.3 BACKGROUND DEVELOPMENTS

Four (4) background developments were identified within the immediate study area in consultation with the City. Background development traffic volumes were extracted from the respective 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**. Please note that the 1470 Williamsport Drive is not expected to have trips that impact the study intersections. Also, the trip generation for 1325 Burnhamthorpe Road East was estimated using ITE. Trips are minimal and not expected to have an impact on the study intersection. As a result these two (2) background developments were not included in the analysis.

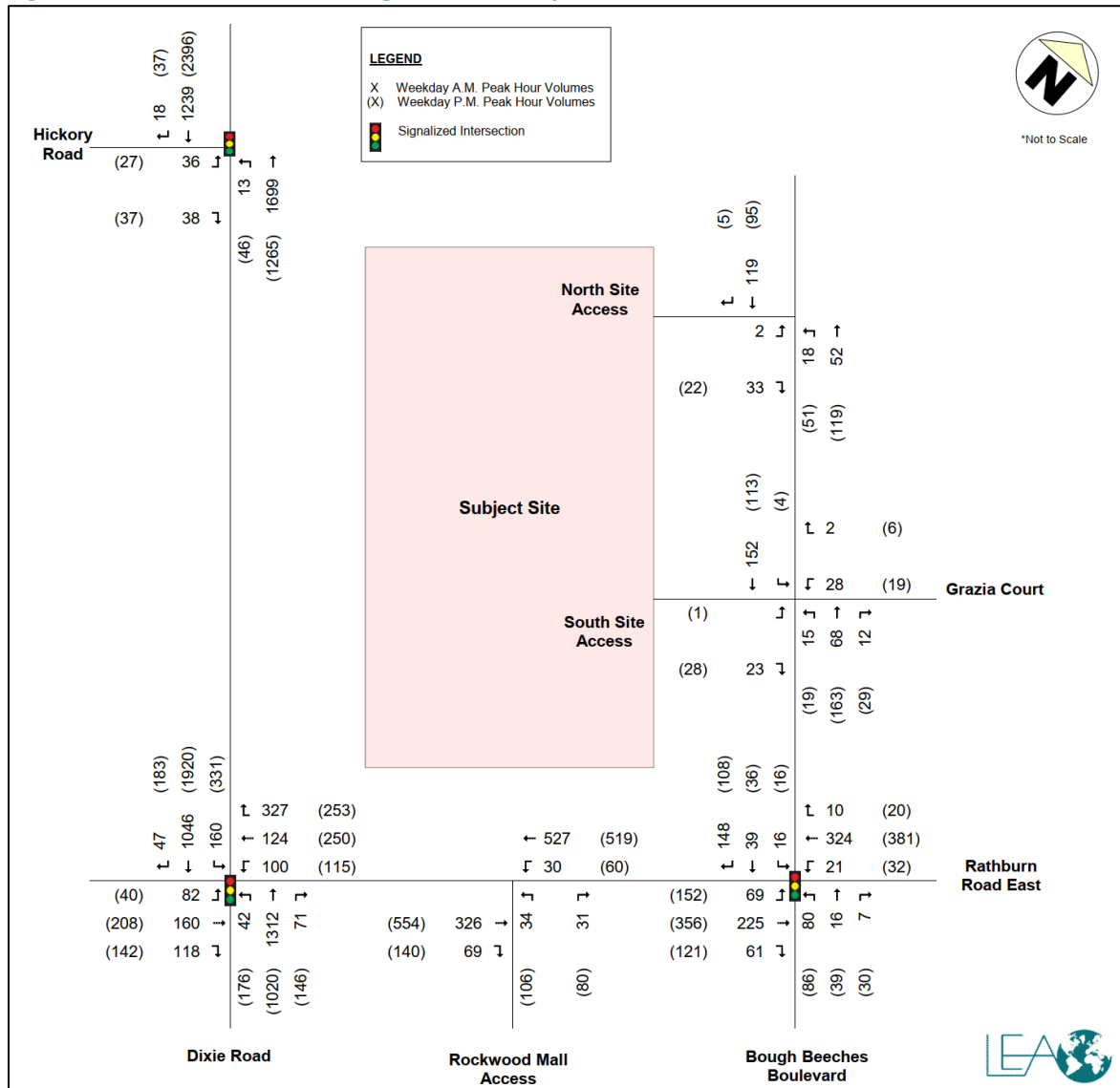
Table 3-2: Summary of Background Developments

Location	Proposed Development	Source of Traffic Volumes
3480 Havenwood Drive & 1485 Williamsport Drive, Mississauga	202 residential units	TIS dated June 2018 (Figure 4-1) LEA Consulting
1315 Silver Spear Road, Mississauga	252 residential units	TIS dated November 2017 nexTrans
1470 Williamsport Drive, Mississauga	283 residential units	TIS dated February 2025 Crozier
1325 Burnhamthorpe Road East, Mississauga	922 m ² of office GFA	-

3.4 FUTURE BACKGROUND TRAFFIC VOLUMES

The background development traffic volumes for the weekday AM and PM peak hours is illustrated in **Figure 3-1**.

Figure 3-1: 2030 Peak Hour Background Development Traffic Volumes



4 SITE-GENERATED TRAFFIC

As mentioned above, the proposed development consists of one tower with a total of 144 residential units. Access to the development is proposed via two (2) unsignalized full moves access onto Bough Beeches Boulevard. 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) 4433, 4435-4436, 4439-4442, and 4448). The existing modal split is summarized in **Table 4-1**. Detailed TTS calculations are provided in **Appendix E**.

Table 4-1: 2022 TTS Modal Split Summary

Travel Mode	Residential
Auto Driver	45%
Auto Passenger	16%
Taxi / Rideshare	0%
Transit	22%
Walk	14%
Cycle	3%
Total	100%

4.2 TRIP GENERATION

Trip generation for the proposed development was estimated using the observed trip generation rates at the existing building located at 1315 Bough Beeches Boulevard. **Table 4-2** summarizes the existing trip generation rates and **Table 4-3** summarizes the trip generation of the development.

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

Location	Survey Date	Occupied Units	Description	Weekday AM Peak			Weekday PM Peak		
				In	Out	Total	In	Out	Total
1315 Bough Beeches Boulevard, Mississauga	Thursday, July 24 th , 2025	261*	Surveyed Trips	33	58	91	75	51	126
			Trip Rates (/unit)	0.13	0.22	0.35	0.29	0.20	0.49

*Please note that at the time of the survey only 261/270 units were occupied.

Table 4-3: Trip Generation – Proposed Residential Use

Land Use	Description	Weekday AM Peak			Weekday PM Peak		
		In	Out	Total	In	Out	Total
Residential (144 units)	Proxy Trip Rate (/unit)	0.13	0.22	0.35	0.29	0.20	0.47
	Site Auto Trips	19	32	51	42	29	71

The proposed development is anticipated to generate a total of 51 two-way auto trips during the AM peak hour (19 inbound, 32 outbound) and 71 two-way auto trips during the PM peak hour (42 inbound, 29 outbound). A breakdown of the trips generated by mode is summarized in **Table 4-4**.

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%	116	196	312	258	178	436
	Auto Driver Trips	45%	52	88	140	116	80	196
	Passenger Trip	16%	19	31	50	41	28	69
	Taxi/Rideshare	0%	0	0	0	0	0	0
	Transit Trips	22%	26	44	70	57	39	96
	Pedestrian trips	14%	16	27	43	36	25	61
	Cycling Trips	3%	3	6	9	8	5	13

4.3 TRIP DISTRIBUTION AND ASSIGNMENT

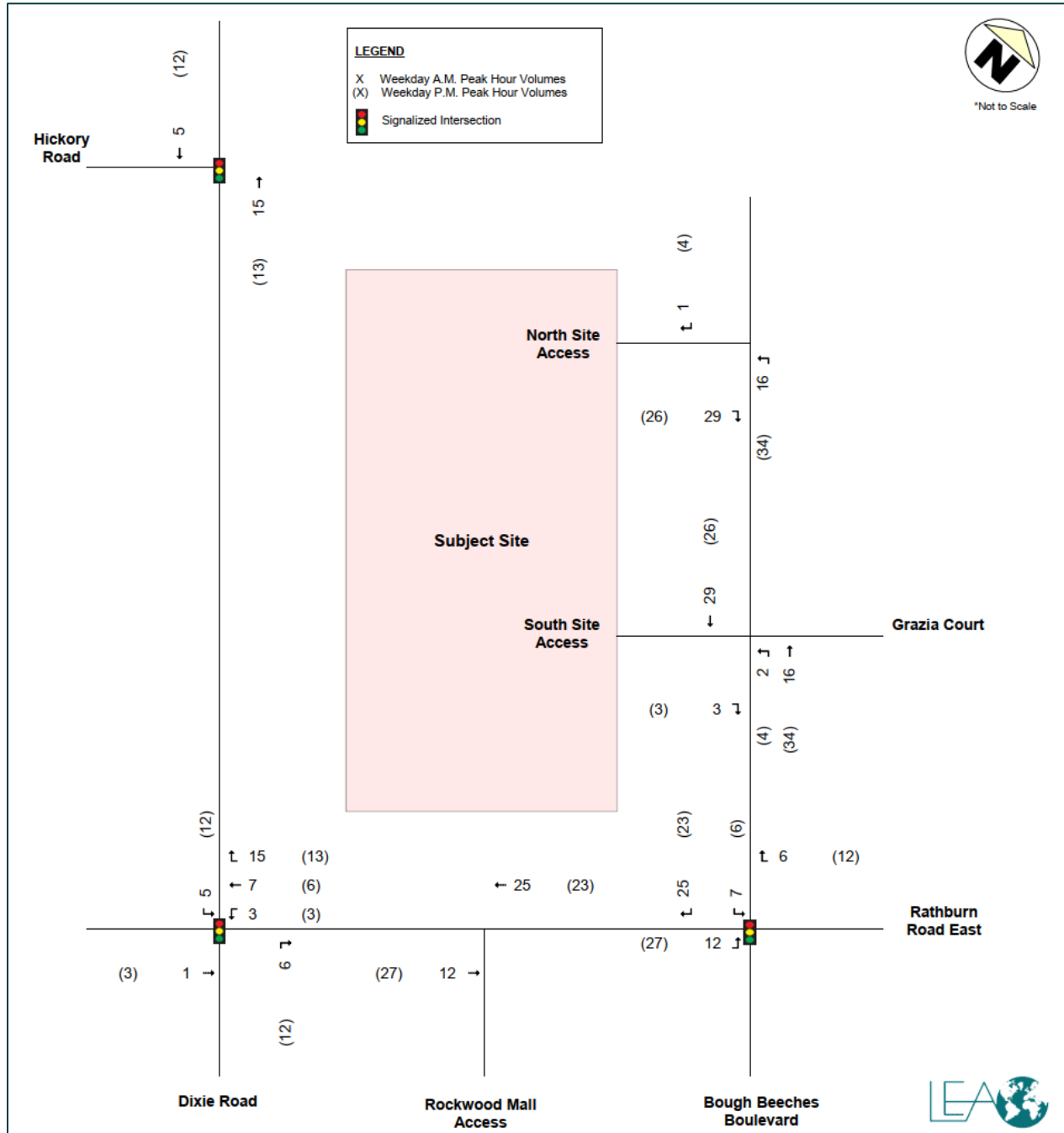
Directional trip distribution of the site traffic was derived using Transportation Tomorrow Survey (TTS) 2022 data. The site traffic was assigned to the road network based on trip patterns in the study area, changes in the future road network, logical routing, and the location and configuration of the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

Table 4-5: General Trip Distribution

Origin/ Destination	Assigned Route	Residential	
		Weekday AM/PM	
		In	Out
North	Bough Beeches and EW Corridors	8%	-
	Dixie Road and EW Corridors	7%	10%
	Rathburn Road East and NS Corridors	6%	20%
South	Dixie Road and EW Corridors	30%	14%
	Rathburn Road East and NS Corridors	2%	5%
	Bough Beeches and EW Corridors	-	0%
East	Dixie Road and EW Corridors	4%	23%
	Rathburn Road East and NS Corridors	22%	1%
West	Dixie Road and EW Corridors	15%	9%
	Rathburn Road East and NS Corridors	6%	17%
Total		100%	100%

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

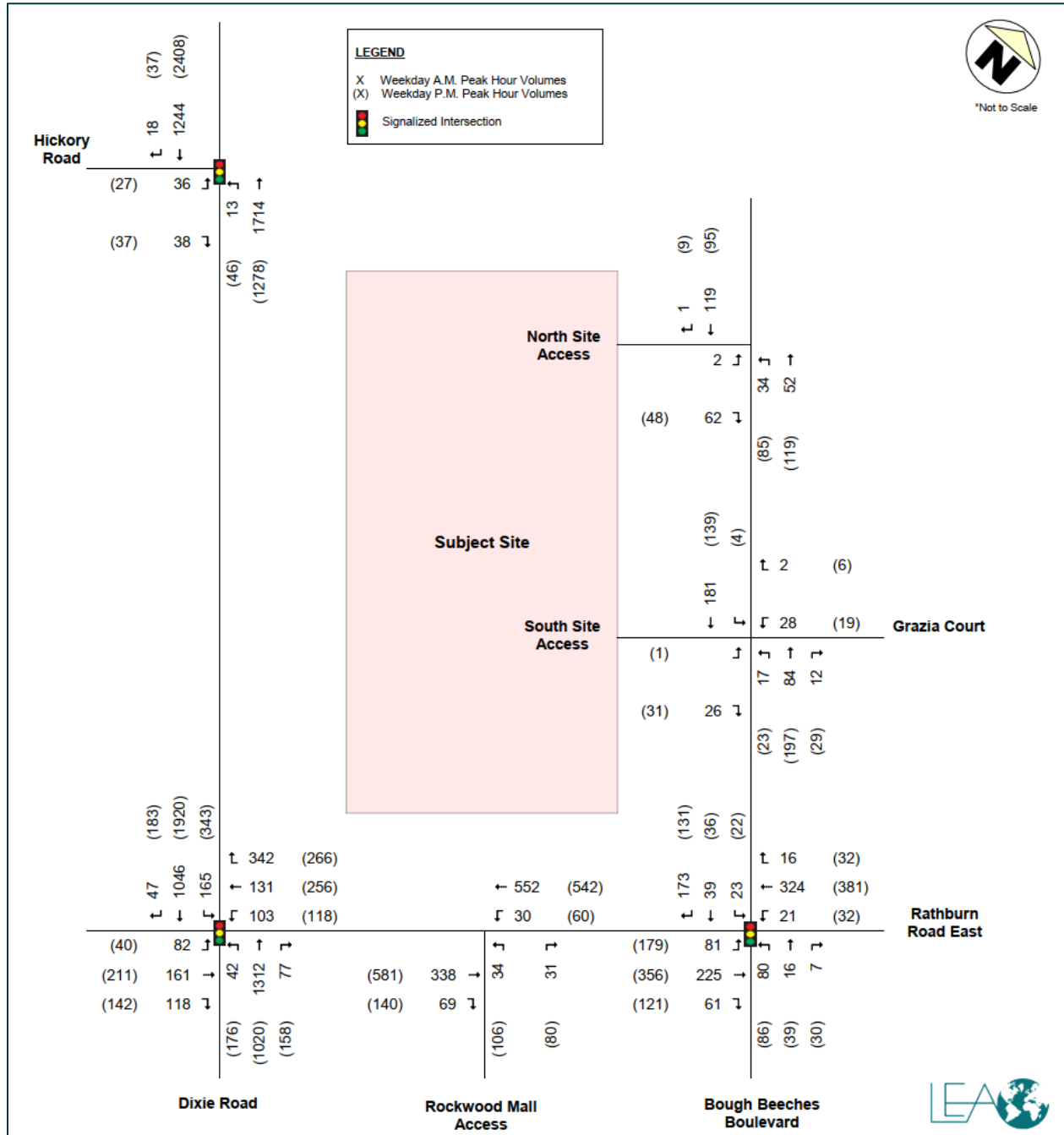
Figure 4-1: Site-Generated Peak Hour Traffic Volumes



5 FUTURE TOTAL TRANSPORTATION CONDITIONS

Future total traffic volumes were estimated by applying the site traffic volumes to the 2030 future background volumes. The future total traffic volumes for the weekday AM and PM peak hours are illustrated in **Figure 5-1**.

Figure 5-1: 2030 Future Total Peak Hour Traffic Volumes



6 INTERSECTION CAPACITY ANALYSIS

The intersection capacity analysis was undertaken using Synchro 12.0, which is based on the Highway Capacity Manual 6th 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 signalized intersections are identified as those with the V/C ratios for overall intersection operations greater than 0.85; critical movements at signalized intersections are identified as those with V/C ratios for individual movements greater than 1.0. At unsignalized intersections, critical movements are identified as those with level-of-service (LOS) 'E' or worse. As Per MTO's guidelines, critical movements of interest for signalized intersections are those with a V/C ratio greater than 0.85 for the overall intersection.

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 SYNCHRO MODEL INPUTS AND ASSUMPTIONS

6.1.1 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.

6.1.2 Future Background and Future Total Synchro Model Inputs

Input parameters from the existing conditions were maintained with the corresponding future background and future total volumes.

6.2 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.

6.2.1 Dixie Road and Hickory Drive

The intersection capacity analysis at Dixie Road and Hickory Drive during the AM and PM peak hours are summarized in **Table 6-1**.

Table 6-1: 2030 Intersection Capacity Analysis – Dixie Road & Hickory Drive

Mvmt	Existing (2025)				Future Background (2030)				Future Total (2030)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	A (7)	-/-	-	-	A (7)	-/-	-	-	A (8)	-/-
EBLR	74	0.50	D (36)	6/18	74	0.50	D (36)	6/18	74	0.50	D (36)	6/18
NBL	13	0.37	D (44)	2/4	13	0.37	D (44)	2/4	13	0.04	A (5)	1/2
NBT	1637	0.49	A (5)	152/169	1699	0.51	A (5)	162/179	1714	0.51	A (5)	149/168
SBTR	1220	0.40	A (7)	26/57	1257	0.41	A (7)	27/59	1262	0.45	B (10)	28/58
PM Peak Hour												
Overall	-	-	B (10)	-/-	-	-	B (11)	-/-	-	-	B (10)	-/-
EBLR	64	0.43	D (36)	4/16	64	0.43	D (36)	4/16	64	0.43	D (36)	4/16
NBL	46	0.48	D (40)	9/17	46	0.48	D (40)	9/16	46	0.21	B (12)	5/14
NBT	1210	0.34	A (4)	90/103	1265	0.35	A (4)	97/110	1278	0.35	A (4)	66/82
SBTR	2342	0.71	B (13)	104/141	2433	0.74	B (14)	112/157	2445	0.75	B (14)	111/137

Existing Conditions: Under existing conditions, the intersection of Dixie Road and Hickory Drive operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th 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 with acceptable increases in V/C ratios and delay. No critical movements have been identified.

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 intersection modifications are recommended.

6.2.2 Dixie Road and Rathburn Road East

The intersection capacity analysis at Dixie Road and Rathburn Road East during the AM and PM peak hours are summarized in **Table 6-2**.

Table 6-2: 2030 Intersection Capacity Analysis – Dixie Road & Rathburn Road East

Mvmt	Existing (2025)				Future Background (2030)				Future Total (2030)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	C (27)	-/-	-	-	C (28)	-/-	-	-	C (28)	-/-
EBL	82	0.21	D (42)	23/42	82	0.21	D (42)	23/42	82	0.22	D (42)	23/43
EBTR	252	0.13	D (37)	25/38	278	0.15	D (37)	29/42	279	0.15	D (37)	29/42
WBL	100	0.28	D (44)	31/52	100	0.29	D (45)	31/52	103	0.30	D (45)	31/53
WBTR	448	0.11	D (36)	54/75	451	0.11	D (36)	55/76	473	0.12	D (37)	57/78
NBL	42	0.18	C (29)	9/19	42	0.18	C (29)	9/19	42	0.18	C (29)	9/19
NBT	1259	0.55	C (29)	117/132	1312	0.58	C (30)	123/139	1312	0.58	C (30)	123/139
NBR	61	0.00	(0)	0/9	71	0.00	(0)	0/9	77	0.00	(0)	0/10
SBL	143	0.61	C (26)	25/33	160	0.69	C (32)	33/48	165	0.71	C (34)	26/61
SBT	1048	0.40	B (19)	75/119	1046	0.40	B (19)	75/114	1046	0.40	B (19)	75/92
SBR	49	0.00	(0)	0/10	47	0.00	(0)	0/9	47	0.00	(0)	0/11
PM Peak Hour												
Overall	-	-	C (31)	-/-	-	-	C (32)	-/-	-	-	C (32)	-/-
EBL	40	0.14	D (49)	11/23	40	0.14	D (50)	11/23	40	0.14	D (50)	11/23
EBTR	344	0.20	D (43)	33/48	350	0.21	D (43)	35/50	353	0.21	D (43)	36/51
WBL	115	0.37	D (54)	34/58	115	0.37	D (54)	34/58	118	0.38	D (55)	32/60
WBTR	497	0.24	D (44)	54/61	503	0.25	D (44)	56/62	522	0.25	D (44)	51/68
NBL	176	0.82	D (47)	41/93	176	0.86	D (54)	45/99	176	0.86	D (54)	45/99
NBT	971	0.39	C (25)	74/86	1020	0.41	C (25)	79/91	1020	0.41	C (25)	79/91
NBR	146	0.00	(0)	0/12	146	0.00	(0)	0/12	158	0.00	(0)	0/13
SBL	330	0.78	C (27)	53/84	331	0.81	C (31)	53/90	343	0.84	C (34)	61/105
SBT	1841	0.68	C (28)	230/256	1920	0.71	C (29)	242/267	1920	0.71	C (29)	254/269
SBR	183	0.00	(0)	11/28	183	0.00	(0)	11/26	183	0.00	(0)	13/26

Existing Conditions: Under existing conditions, the intersection of Dixie Road and Rathburn Road East operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. The 95th percentile queue for the EBL movement slightly exceeds the available storage during the AM peak hour. All other 95th percentile queues can be accommodated by their available storage lanes. 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 new critical movements have been identified.

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 new critical movements have been identified.

6.2.3 Bough Beeches Boulevard and Rathburn Road East

The intersection capacity analysis at Bough Beeches Boulevard and Rathburn Road East during the AM and PM peak hours are summarized in **Table 6-3**.

Table 6-3: 2030 Intersection Capacity Analysis – Bough Beeches Boulevard & Rathburn Road East

Mvmt	Existing (2025)				Future Background (2030)				Future Total (2030)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	B (14)	-/-	-	-	B (15)	-/-	-	-	B (15)	-/-
EBL	69	0.12	A (10)	2/6	69	0.12	B (10)	2/5	81	0.15	B (11)	3/6
EBTR	280	0.15	A (8)	4/8	286	0.16	A (9)	4/7	286	0.16	A (9)	4/7
WBL	21	0.03	A (9)	1/4	21	0.03	A (9)	1/4	21	0.04	A (10)	1/4
WBTR	312	0.16	A (8)	8/16	334	0.17	A (9)	9/18	340	0.18	A (9)	9/18
NBL	76	0.32	C (32)	12/24	80	0.33	C (32)	13/25	80	0.34	C (33)	13/25
NBTR	23	0.06	C (23)	2/8	23	0.06	C (23)	2/8	23	0.05	C (22)	2/8
SBL	16	0.04	C (24)	2/7	16	0.04	C (23)	2/7	23	0.06	C (23)	3/9
SBTR	181	0.49	C (27)	6/23	187	0.50	C (27)	6/23	212	0.54	C (26)	6/24
PM Peak Hour												
Overall	-	-	B (14)	-/-	-	-	B (14)	-/-	-	-	B (15)	-/-
EBL	155	0.31	B (14)	8/18	152	0.30	B (14)	8/17	179	0.37	B (16)	17/30
EBTR	468	0.27	B (10)	11/15	477	0.27	A (10)	10/16	477	0.28	B (10)	15/27
WBL	32	0.07	B (12)	2/6	32	0.07	B (12)	2/6	32	0.07	B (12)	2/6
WBTR	392	0.21	A (10)	11/22	401	0.22	A (10)	12/22	413	0.23	A (10)	12/23
NBL	86	0.31	C (30)	14/27	86	0.31	C (30)	14/26	86	0.32	C (30)	14/26
NBTR	66	0.16	C (23)	6/16	69	0.17	C (23)	6/16	69	0.16	C (22)	6/16
SBL	17	0.05	C (24)	3/8	16	0.04	C (24)	2/7	22	0.06	C (24)	3/9
SBTR	154	0.39	C (25)	6/21	144	0.37	C (25)	6/20	167	0.41	C (25)	6/21

Existing Conditions: Under existing conditions, the intersection of Bough Beeches Boulevard and Rathburn Road East operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th 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 with acceptable increases in V/C ratios and delay. No critical movements have been identified.

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 critical movements have been identified.

6.3 UNSIGNALIZED INTERSECTIONS

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

6.3.1 Rathburn Road East and Rockwood Mall Access

The intersection capacity analysis at Rathburn Road East and Rockwood Mall Access during the AM and PM peak hours are summarized in **Table 6-4**.

Table 6-4: 2030 Intersection Capacity Analysis – Rathburn Road East & Rockwood Mall Access

Mvmt	Existing (2025)				Future Background (2030)				Future Total (2030)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	- (1)	-/0	-	-	- (1)	-/0	-	-	- (1)	-/0
NBL	34	0.11	C (17)	-/3	34	0.12	C (18)	-/3	34	0.12	C (18)	-/3
NBR	31	0.04	A (10)	-/1	31	0.04	A (10)	-/1	31	0.04	A (10)	-/1
EBT	318	-	- (-)	-/0	326	-	- (-)	-/0	338	-	- (-)	-/0
EBR	69	-	- (-)	-/0	69	-	- (-)	-/0	69	-	- (-)	-/0
WBL	30	0.03	A (8)	-/1	30	0.03	A (8)	-/1	30	0.03	A (8)	-/1
WBT	490	-	- (-)	-/0	527	-	- (-)	-/0	552	0.00	(0)	-/0
PM Peak Hour												
Overall	-	-	- (5)	-/0	-	-	- (5)	-/0	-	-	- (5)	-/0
NBL	106	0.62	E (49)	-/25	106	0.63	F (51)	-/25	106	0.67	F (59)	-/28
NBR	80	0.13	B (11)	-/4	80	0.13	B (11)	-/4	80	0.14	B (11)	-/4
EBT	543	-	- (-)	-/0	554	-	- (-)	-/0	581	-	- (-)	-/0
EBR	140	-	- (-)	-/0	140	-	- (-)	-/0	140	-	- (-)	-/0
WBL	61	0.08	A (10)	-/2	60	0.08	A (10)	-/2	60	0.08	A (10)	-/2
WBT	513	-	- (-)	-/0	519	-	- (-)	-/0	542	-	- (-)	-/0

Existing Conditions: Under existing conditions, the intersection of Rockwood Mall Access and Rathburn Road East operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th 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 with acceptable increases in V/C ratios and delay. The increase in delays is minimal compared to the existing conditions and the queues remain similar. The NBL movement is expected to experience LOS F with a slight increase in delay during the PM peak hour. No other constraints are noted.

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 new critical movements have been identified.

6.3.2 Bough Beeches Boulevard and North Site Access

The intersection capacity analysis at Bough Beeches Boulevard and North Site Access during the AM and PM peak hours are summarized in **Table 6-5**.

Table 6-5: 2030 Intersection Capacity Analysis – Bough Beeches Boulevard & North Site Access

Mvmt	Existing (2025)				Future Background (2030)				Future Total (2030)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	- (2)	-/0	-	-	- (2)	-/0	-	-	- (3)	-/0
NBL	18	0.02	A (8)	-/0	18	0.02	A (8)	-/0	34	0.03	A (8)	-/1
NBT	52	0.00	A (0)	-/0	52	0.00	A (0)	-/0	52	0.00	A (0)	-/0
EBLR	35	0.05	A (9)	-/1	35	0.05	A (9)	-/1	64	0.09	A (10)	-/2
SBT	113	0.00	- (-)	-/0	119	0.00	- (-)	-/0	119	0.00	- (-)	-/0
SBR	0	0.00	- (-)	-/0	0	0.00	- (-)	-/0	1	0.00	- (-)	-/0
PM Peak Hour												
Overall	-	-	- (2)	-/0	-	-	- (2)	-/0	-	-	- (3)	-/0
NBL	52	0.04	A (8)	-/1	51	0.04	A (8)	-/1	85	0.07	A (8)	-/0
NBT	118	0.00	A (0)	-/0	119	0.00	A (0)	-/0	119	0.00	A (0)	-
EBLR	22	0.03	A (9)	-/1	22	0.03	A (9)	-/1	48	0.06	A (9)	-/0
SBT	106	0.00	- (-)	-/0	95	0.00	- (-)	-/0	95	0.00	- (-)	-
SBR	5	0.00	- (-)	-/0	5	0.00	- (-)	-/0	9	0.00	- (-)	-

Existing Conditions: Under existing conditions, the intersection of Bough Beeches Boulevard and North Site Access operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th 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 with acceptable increases in V/C ratios and delay. No constraints are noted.

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 critical movements have been identified.

6.3.3 Bough Beeches Boulevard and South Site Access/Grazia Court

The intersection capacity analysis at Bough Beeches Boulevard and South Site Access/Grazia Court during the AM and PM peak hours are summarized in **Table 6-6**.

Table 6-6: 2030 Intersection Capacity Analysis – Bough Beeches Boulevard & South Site Access/Grazia Court

Mvmt	Existing (2025)				Future Background (2030)				Future Total (2030)			
	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)	Vol	V/C	LOS (Delay)	Queues (50/95)
AM Peak Hour												
Overall	-	-	- (2)	-/0	-	-	- (2)	-/0	-	-	- (2)	-/0
NBL	15	0.01	A (8)	-/0	15	0.01	A (8)	-/0	17	0.02	A (8)	-/0
NBT	68	0.00	A (0)	-/0	68	0.00	A (0)	-/0	84	0.00	A (0)	-
NBR	12	0.00	- (-)	-/0	12	0.00	- (-)	-/0	12	0.00	- (-)	-
EBLTR	23	0.03	A (9)	-/1	23	0.03	A (9)	-/1	26	0.04	A (10)	-/1
WBLTR	30	0.06	B (11)	-/1	30	0.06	B (11)	-/1	30	0.06	B (12)	-/1
SBL	0	0.00	A (0)	-/0	0	0.00	A (0)	-/0	0	0.00	A (0)	-
SBT	146	0.00	- (-)	-/0	152	0.00	- (-)	-/0	181	0.00	- (-)	-
SBR	0	0.00	- (-)	-/0	0	0.00	- (-)	-/0	0	0.00	- (-)	-
PM Peak Hour												
Overall	-	-	- (2)	-/0	-	-	- (2)	-/0	-	-	- (2)	-/0
NBL	19	0.02	A (8)	-/0	19	0.02	A (8)	-/0	23	0.02	A (8)	-/1
NBT	163	0.00	A (0)	-/0	163	0.00	A (0)	-/0	197	0.00	A (0)	-/0
NBR	29	0.00	- (-)	-/0	29	0.00	- (-)	-/0	29	0.00	- (-)	-/0
EBLTR	29	0.04	A (9)	-/1	29	0.04	A (9)	-/1	32	0.05	A (9)	-/1
WBLTR	25	0.06	B (12)	-/1	25	0.05	B (12)	-/1	25	0.06	B (13)	-/1
SBL	4	0.00	A (8)	-/0	4	0.00	A (8)	-/0	4	0.00	A (8)	-/0
SBT	124	0.00	A (0)	-/0	113	0.00	A (0)	-/0	139	0.00	A (0)	-/0
SBR	0	0.00	- (-)	-/0	0	0.00	- (-)	-/0	0	0.00	- (-)	-/0

Existing Conditions: Under existing conditions, the intersection of Bough Beeches Boulevard and South Site Access/ Grazia Ct operates well during both weekday peak hours. All movements are operating with residual capacity and acceptable delays. All existing 95th 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 with acceptable increases in V/C ratios and delay. No constraints are noted.

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 critical movements have been identified.

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 if the proposed bicycle parking supply aligns with the City’s latest bicycle parking policy direction. The bicycle parking requirement for the proposed development in relation to the provided supply is detailed below in **Table 7-1**.

Table 7-1: Bicycle Parking Requirements

Land Use	Units	Minimum Bicycle Parking Rate		Minimum Bicycle Parking Spaces	
		Long-Term	Short-Term	Long-Term	Short-Term
Residential	144 Units	0.6	0.05	86	7
Total Required				86	7
Total Proposed				87	8

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 subject site is required to provide a total of 93 bicycle parking spaces consisting of 86 long-term and 7 short-term bicycle parking spaces. The proposed bicycle parking supply consists of 87 long-term and 8 short-term bicycle parking spaces, satisfying the requirement.

The provision of bicycle parking will greatly encourage residents to shift travel behaviour from auto modes of transport to walking, cycling, and public transit. In addition, the proposed bicycle parking supply will further support future cycling infrastructure in the vicinity of the subject site, and the promotion of active transportation.

7.2 VEHICLE PARKING ZONING BY-LAW REQUIREMENTS

The City of Mississauga By-law 0225-2007 has been reviewed to determine if the proposed vehicular parking supply aligns with the City’s latest parking policy direction. The parking requirements for Precinct 3 and proposed supply are summarized in **Table 7-2**.

Table 7-2: Vehicular Parking Requirements - Precinct 3

ZBL 0225-2007				
Land Use	Units	Precinct 3		Proposed Supply
		Minimum Parking Rate	Parking Required	
Residential (Rental Apartment)	144 units	0.9 sp./unit	130 Spaces	144 Spaces
Visitor		0.2 sp./unit	29 Spaces	15 Space
Site Total			159 Spaces	159 Space

In accordance with Precinct 3 rates, the proposed development is required to provide 159 parking spaces, consisting of 130 residential and 29 visitor spaces. The subject site is proposing to supply 159 parking spaces, consisting of 144 residential spaces, and 15 visitor spaces. As the visitor spaces proposed are less than the By-law requirements, a parking justification study was completed and discussed in the sections below.

7.3 VISITOR PARKING JUSTIFICATION

It is understood that parking will be shared across the entire site. To assess the proposed visitor parking demand at the proposed development, parking utilization surveys were conducted at the existing 1315 Bough Beeches Boulevard 20 storey building. Parking utilization surveys were conducted on 10 days in January and February 2026. Surveys were conducted on the following days to capture peak visitor demand:

1. Friday January 23, 2026: 5:00 AM – 11:00 AM & 4:00 PM – 1:00 AM
2. Saturday January 24, 2026: 11:00 AM – 1:00 AM
3. *Sunday January 25, 2026: 11:00 AM – 1:00 AM*
4. *Monday January 26, 2026: 5:00 AM – 11:00 AM & 4:00 PM – 1:00 AM*
5. Friday January 30, 2026: 5:00 AM – 11:00 AM & 4:00 PM – 1:00 AM
6. Saturday January 31, 2026: 11:00 AM – 1:00 AM
7. Sunday February 1, 2026: 11:00 AM – 1:00 AM
8. Monday February 2, 2026: 5:00 AM – 11:00 AM & 4:00 PM – 1:00 AM
9. Sunday February 8, 2026: 11:00 AM – 1:00 AM
10. Friday February 13, 2026: 5:00 AM – 11:00 AM & 4:00 PM – 1:00 AM

It is noted that a snow event was declared on Sunday January 25th and Monday January 26th and as a result does not reflect normal parking demand. The peak observed visitor demand during the weekday and weekend survey periods have been reported for each proxy site shown in **Table 7-3** with detailed survey data provided in **Appendix I**. The visitor demand was calculated based on the 95th percentile from the survey data collected.

Table 7-3: Visitor Proxy Parking Utilization Survey Results

Proxy Site Location	Occupied Units	Total Parking Supply	Parking Supply Rate	95 th Percentile Observed Demand	Parking Demand Rate
1315 Bough Beeches Boulevard	266*	55 spaces	0.21 spaces/unit	27 spaces	0.10 spaces/unit

**Please note that at the time of the survey only 266/270 units were occupied.*

Based on the proxy parking surveys, the highest observed visitor parking demand was on Sunday February 8th at 0.10 spaces/unit. The proxy survey data indicates that the Zoning By-law residential visitor rates exceed the actual parking demand in similar environments.

Residential parking will be provided at 0.9 spaces/unit per the by-law for the existing building and 1.0 spaces/unit will be provided for the proposed development, exceeding the Zoning By-Law requirements. Visitor parking will be provided at 0.2 spaces/unit for the existing building, meeting the by-law requirements and the observed survey visitor rates of 0.1 spaces/unit will be used for the proposed development. The required parking based on the rates observed from the survey and the zoning by-law are shown below in **Table 7-4**.

Table 7-4: Vehicular Parking Requirements – Proposed Rates

Land Use	Total Site Units	Proposed Parking Rate	Proposed Supply
Existing Residential Building	270 Units	0.9 sp./unit	243
Visitor		0.20 sp./unit	54
Proposed Building Residential	144 Units	1.00 sp./unit	144
Proposed Building Visitor		0.10 sp./unit	15
Site Total			456

Based on the utilization data, it is recommended that the development provide visitor parking at 0.10 spaces/unit. The development is proposing 456 parking spaces shared across the entire property consisting of 387 residential spaces and 69 visitor spaces. In addition to the 456 required spaces, there are 51 surplus parking spaces which can be allocated to either building. The proposed supply meets the requirements and is therefore appropriate.

7.4 ACCESSIBLE PARKING ZONING BY-LAW REQUIREMENTS

The City of Mississauga Zoning By-law 0225-2007 provides accessible parking requirements to calculate the required accessible parking supply. For residential uses, the accessible parking supply is calculated using the required number of visitor parking spaces. The by-law requirements and proposed supply are illustrated below in **Table 7-5**.

Table 7-5: Accessible Parking Space Requirement

Land Use	Required Visitor Parking Spaces	Minimum Accessible Parking Rate	Minimum Accessible Parking Spaces
Residential	29 spaces (0.20 sp./unit)	4% of the total	2
Total Required			2
Total Proposed			4

The proposed development is required to provide a minimum of four (2) accessible parking spaces as outlined in the zoning by-law requirements. The requirements are satisfied as the proposed development is providing four (4) accessible parking spaces.

7.5 ELECTRIC VEHICLE PARKING

Electric vehicle parking is required for the site under the current Zoning By-law 0225-2007. The proposed electrical vehicle spaces are outline in **Table 7-6**.

Table 7-6: Zoning By-law 0225-2007 Electric Parking Standards

Use	Required Parking Spaces	Parking Space Requirement		Proposed Supply
		Minimum Rate	Min. Required	
Residential	130	20% of residential parking spaces required	26	26
Visitor	29	10% of visitor parking spaces required	3	

The development is required to provide 26 residential electric parking spaces and 3 visitor electric parking spaces. A total of 26 electrical vehicle spaces have been provided.

Visitor parking spaces are located at-grade within the existing surface parking areas. Providing EV charging infrastructure within these at-grade visitor spaces would require significant electrical servicing upgrades, including the extension of electrical capacity and the installation of new distribution equipment across the surface parking area. These upgrades would result in substantial excavation, disruption to existing site operations, and potential impacts to site drainage, landscaping, and pedestrian circulation.

In contrast, EV charging infrastructure is readily accommodated within the residential parking supply located in the underground parking levels, where electrical servicing and conduit pathways can be efficiently integrated into the building's electrical system.

8 LOADING REVIEW

The City of Mississauga Zoning By-law 0225-2007 was reviewed to determine the loading requirements for the proposed development. The loading requirements and the proposed supply are summarized in **Table 8-1**.

Table 8-1: Loading Requirements

Land Use	Units	City of Mississauga ZBL 0225-2007
		Loading Spaces Required
Residential (>30 units)	144 Units	1
Loading Required		1
Proposed Loading		1 Type "G" Space

According to the City's By-law, one (1) loading spaces is required. One (1) loading spaces are proposed for the subject site. One (1) Type "G" loading space is provided for the development. As such, the loading supply is appropriate for the proposed development.

Swept paths for fire route, loading vehicles and passenger vehicles are provided in **Appendix J**.

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 PEDESTRIAN-BASED STRATEGIES

Building entrances and parkland are to be oriented close to the street with direct connections to the pedestrian network

The proposed development provides internal walkway connections directly from the building's lobby to the external pedestrian network. Internal walkway placement is arranged to ensure connectivity to the utmost extent with the existing pedestrian network to minimize any gaps.

Mixed land uses and walking distance to nearby amenities

The property is situated onto Dixie Road and Rathburn Road East and is within walking distance to a variety of destinations including a grocery store, pharmacy, retail stores, and restaurants which facilitates walking trips.

9.2 CYCLING-BASED STRATEGIES

Provide bicycle parking spaces

The proposed development will provide bicycle parking facilities to support and encourage active transportation, while also taking advantage of the cycling infrastructure surrounding the subject site. The short-term bicycle spaces are located in highly visible and convenient areas close to building entrances, including at-grade for visitors. Long-term bicycle parking is provided in secured and weather-protected bike rooms above grade.

Bicycle parking rates as per City of Mississauga Zoning By-law 0225-2007 consist of the following:

- ▶ Resident: 0.60 spaces per unit
- ▶ Visitor: 0.05 spaces per unit

The proposed development will provide 95 bicycle parking spaces (87 long-term and 8 short-term), which meets the requirement as per City of Mississauga Zoning By-law 0225-2007.

Promote and increase cycling awareness

Information packages will be provided to encourage active transportation. This can include information such as educating residents on the health and environmental benefits of cycling as well as providing maps of the cycling network and available infrastructure in the surrounding area. Identifying safe cycling routes can also facilitate cycling to school and reduce automobile reliance for the younger generation.

9.3 TRANSIT-BASED STRATEGIES

Connection to transit network

The subject site is located in a transit-supportive neighbourhood with existing bus stops located within a short walk. As detailed in **Section 2.2**, the MiWay routes in the immediate area include Routes 20, and 5. The majority of routes operate seven days a week and provide significant north-south and east-west connections to major destinations such as the Mississauga City Centre Transit Terminal, Kipling Bus Terminal and Long Branch GO Station.

PRESTO cards with pre-loaded value to be provided to all tenants

Providing residents with PRESTO passes (waiving the \$4 card purchase fee) will encourage residents to use public transit and experience its benefits. These PRESTO cards to be available pre-loaded in order to provide residents a free trial of transit services. As part of the welcome package, one (1) PRESTO Card with pre-loaded value of \$25 will be provided to encourage new tenants of the building to use the current MiWay and GO Transit services.

9.4 PARKING MANAGEMENT & TRAVEL-BASED STRATEGIES

Provide unbundled parking from residential unit rent

The cost of parking be “unbundled” from the cost of new dwelling units by selling or renting parking spaces separately from the units themselves. The provision of unbundled parking will help to reduce parking demand within the residential component of the proposed development.

New resident information packages

The owner will provide information packages and communications to increase transit awareness and multi-modal transport by encouraging active transportation and different travel demand management programs. Public transit information should be made available to residents, such as MiWay route maps and seven-day schedule timetables for nearby stops. This will increase the likelihood of new residents incorporating alternatives in their travel patterns when residing at the development.

The TDM measures detailed above will enhance the viability of living without regular access to a private vehicle by ensuring that alternative travel methods are readily available and convenient. **Table 9-1** summarizes the recommended TDM measures for the subject site.

Table 9-1: TDM Measures Summary

Item	Description	Impact
Pedestrian-Based Strategies		
Pedestrian + Public Realm Improvements	Retail units, residential lobbies, and parkland can directly be accessed via the internal road network. Landscaping improvements will be provided as indicated on the site plan.	+ Reduces walking distances and maximizes points of connectivity + Landscaping improvements and minimal corridor barriers will support pedestrian activity, safety, and comfort
Cycling-Based Strategies		
Bicycle Parking Spaces	95 bicycle parking spaces are provided (87 long-term and 8 short-term)	+ Creates secure bicycle parking on-site to encourage cycling as a travel mode
Cycling Promotion Strategy	Provide information packages which include health and environmental benefits of cycling along with maps of the available cycling infrastructure in the surrounding area	+ Encourages cycling as a travel mode + Reduces reliance on personal automobiles for day-to-day trips
Transit-Based Strategies		
Access to Local and Regional Transit Improvements	The proposed development's internal road network provides direct connections to existing and future transit stops/stations	+ Encourages travel by existing surface transit including MiWay, GO Transit and TTC service + Opportunity to capitalize on planned transit improvements (e.g., Lakeshore West RER, MiWay Express Service, etc.)
PRESTO Cards	Provide one (1) PRESTO Card with pre-loaded value of \$25 to all new tenants	+ Improves knowledge and financial access to available transit options
Parking Management & Travel-Based Strategies		
Unbundled Parking	Unbundle parking from the cost of new dwelling units	+ Encourages residents to forgo auto ownership and opt for car-free lifestyles
New Resident Information Packages	Provide information packages including different travel demand management programs available along with transit route and schedule information	+ Improves knowledge on available travel demand programs and active/transit options

10 CONCLUSIONS & RECOMMENDATIONS

- ▶ The proposed development consists of a new residential building with a total of 144 residential units. Parking for the proposed development will be shared with the existing building, provided in a shared surface parking lot and in two (2) new levels of underground parking, accessed via the existing one (1) level underground parking garage accommodating 159 parking spaces. In addition, 95 bicycle parking spaces are proposed to support cycling to/from the proposed development. Vehicular access to the development is proposed via the two existing site accesses on Bough Beeches Boulevard
- ▶ The subject site is located in an area well-served by the MiWay Transit network. The subject site is within walking distance of bus stops at the intersection of Dixie Road and Rathburn Road East. The subject site also has excellent access to nearby cycling infrastructure. The existing pedestrian network provides good connections between residential and commercial uses in the area and is supported by pedestrian infrastructure along the site's boundary roadways.
- ▶ The proposed development is expected to generate a total of generate a total of 51 two-way auto trips during the AM peak hour (19 inbound, 32 outbound) and 71 two-way auto trips during the PM peak hour (42 inbound, 29 outbound).
- ▶ This TIS considers a horizon year from existing to the proposed build-out of the site (2030). The intersection capacity analysis was conducted for existing, future background, and future total conditions for each horizon year for the weekday AM and PM peak hours. Under existing and future conditions, all intersections within the study area operate within capacity with V/C ratios less than 1.00 and at an acceptable LOS during all analyzed scenarios.
- ▶ The proposed development is required to provide a total of 159 parking spaces under Zoning By-law 0225-2007. The development is proposing 456 parking spaces shared across the entire property consisting of 387 residential spaces and 69 visitor spaces. In addition to the 456 required spaces, there are 51 surplus parking spaces which can be allocated to either building. The proposed supply meets the requirements and is therefore appropriate.
- ▶ The bicycle parking supply of 87 long-term spaces and 8 short-term spaces meet the bicycle requirements outlined in Zoning By-law 0118-2022.
- ▶ The subject site requires one (1) loading spaces as per the City of Mississauga Zoning By-Law 0225-2007. One 1 Type "G" loading space will be provided. The swept path diagrams reveal that all design vehicles can be adequately accommodated.



APPENDIX A

Terms of Reference

Appendix A

Certification Form

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

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

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

Dated at Markham this 23 day of March, 2026.
(City) (Day) (Month) (Year)

Name: Zara McCormick
Professional Title: Manager, Transportation Engineering (Western Canada)
Signature: ZARA MCCORMICK

Office Contact Information (Please Print)

Address: 625 Cochrane Drive 5th Floor
City/Postal Code: Markham, ON L3R 9R9
Telephone/Extension: (403) 466-1729
E-mail Address: ZMcCormick@lea.ca

Appendix B

APPROVED

By James Emerson at 3:23 pm, Jan 19, 2026

Pre-Study Consultation Checklist

Description	Information	Section Reference
Development Information		
Development Description (land use, size, and number of phases of development)	<ul style="list-style-type: none"> Phase 1: One new 13-storey residential building (144 units and 159 parking spaces), existing 20-storey building will remain Phase 2: Phase 3: 	2.3.6
Transportation Impact Assessment		
Step 1 – Screening		
Type of Application (attach a drawing)	<input type="checkbox"/> Official Plan Amendment <input checked="" type="checkbox"/> Zoning Amendment <input checked="" type="checkbox"/> Site Plan Control Application <input type="checkbox"/> Plan of Subdivision <input type="checkbox"/> Other _____	2.3.5
Screening Criteria	<input checked="" type="checkbox"/> Trip Generation Trigger Satisfied <input type="checkbox"/> Location Trigger Satisfied <input type="checkbox"/> Operational/Safety Trigger Satisfied	2.2.1
Type of Study	<input checked="" type="checkbox"/> Transportation Impact Study <input type="checkbox"/> Access Review <input type="checkbox"/> No Additional Study Required	2.2.1
Step 2 – Scoping		
Study Area (intersections to be analyzed) Note: The Transportation Consultant is responsible to identify any further intersections	<ul style="list-style-type: none"> Bough Beeches Boulevard & North Site Access (Unsignalized) Bough Beeches Boulevard & South Site Access/Grazia Ct (Unsignalized) Bough Beeches Boulevard & Rathburn Road East (Signalized) Dixie Road & Rathburn Road East (Signalized) 	2.3.8

Description	Information	Section Reference
impacted as the study progresses.	<ul style="list-style-type: none"> Dixie Road & Hickory Drive (Signalized) Rockwood Mall Entrance & Rathburn Road East (Unsignalized) 	
Horizon Years	<input checked="" type="checkbox"/> 5 years from date of TIS <input type="checkbox"/> Interim years _____ <input type="checkbox"/> Other _____	2.3.9
Analysis Periods	<input checked="" type="checkbox"/> AM weekday peak hour of adjacent roadway <input checked="" type="checkbox"/> PM weekday peak hour of adjacent roadway <input type="checkbox"/> Saturday peak hour of adjacent roadway <input type="checkbox"/> AM weekday peak hour of development <input type="checkbox"/> PM weekday peak hour of development <input type="checkbox"/> Saturday peak hour of development <input type="checkbox"/> Other _____	2.3.10
Input Parameters and Assumptions (potential deviations)	<ul style="list-style-type: none"> None anticipated. Parameters per City and Region guidelines. 	2.3.13
Existing Transportation Conditions	<input type="checkbox"/> City data sources <input type="checkbox"/> New data collection <input checked="" type="checkbox"/> Other: <u>2025 TMCs collected by LEA</u>	2.3.14
Planned Network Improvements (with timing)	<ul style="list-style-type: none"> No improvements identified. 	2.3.16
Other Planned Developments (per City's Website)	<ul style="list-style-type: none"> 3480 Havenwood Drive & 1485 Williamsport Drive, Mississauga 1315 Silver Spear Road, Mississauga 1470 Williamsport Drive, Mississauga 1325 Burnhamthorpe Road East, Mississauga 	2.3.17
Identification of Mitigation Improvement Measures	<input type="checkbox"/> Neighbourhood Traffic Management Plan <input checked="" type="checkbox"/> Other (<u>To be documented in TIS</u>)	2.3.23
Safety Analysis (any special issues)	<ul style="list-style-type: none"> N/A 	2.3.25
Site Access and Circulation (design vehicles)	<input checked="" type="checkbox"/> Passenger Car (P) <input type="checkbox"/> Light Single Unit Truck (LSU) <input checked="" type="checkbox"/> Medium Single Unit Truck (MSU) <input type="checkbox"/> Heavy Single Unit Truck (HSU) <input checked="" type="checkbox"/> Pumper Fire Truck <input type="checkbox"/> WB-20 Tractor Semi-Trailer Truck <input checked="" type="checkbox"/> Peel Region Waste Collection Truck <input type="checkbox"/> Other _____	2.3.26
Impacts During Construction (any special issues)	<ul style="list-style-type: none"> N/A 	2.3.27

Description	Information	Section Reference
Step 3 – Forecasting		
Growth Rate	<input checked="" type="checkbox"/> Obtained from City/Region <input type="checkbox"/> Historical traffic counts <input type="checkbox"/> Travel demand forecasts <input type="checkbox"/> Proposed Growth Rate	2.3.15
Site Trip Generation	<input type="checkbox"/> ITE Trip Generation Manual <input type="checkbox"/> "First Principles" <input type="checkbox"/> Observed rates for similar developments in area <input checked="" type="checkbox"/> Other (Using observed trips/rates from existing building)	2.3.19
Trip Reductions	<input type="checkbox"/> Internal capture reductions for mixed-use developments <input type="checkbox"/> Pass-by reductions <input checked="" type="checkbox"/> Other (N/A)	2.3.19
Trip Distribution	<input type="checkbox"/> Local traffic patterns <input checked="" type="checkbox"/> TTS <input type="checkbox"/> Travel demand model <input type="checkbox"/> Population and employment distribution <input type="checkbox"/> Market analysis of catchment area <input type="checkbox"/> Other _____	2.3.20
Trip Assignment	<input type="checkbox"/> Local traffic patterns <input type="checkbox"/> Shortest distance <input checked="" type="checkbox"/> Site layout, access design and logical routing <input type="checkbox"/> Existing turning movements <input type="checkbox"/> Other _____	2.3.21
Transportation Demand Management Plan		
Format	<input checked="" type="checkbox"/> Within a TIA Report <input type="checkbox"/> Standalone	3.2.1
Type of Transportation Demand Management Plan	<input checked="" type="checkbox"/> TDM Statement <input type="checkbox"/> TDM Scheme	3.2.2
Pedestrian Circulation Plan		
Format	<input checked="" type="checkbox"/> Within a TIA Report <input type="checkbox"/> Standalone	4.2.1
Additional Comments		
<ul style="list-style-type: none"> - Community Impacts: Any transportation related impacts on the existing community and comments from the public through planning approvals process shall be addressed - Access Review: Ensure that proposed site accesses conform to all TAC standards - Recommendations: Detailed Recommendations regarding on-site/off-site roadway improvements, site access, site circulation, and TDM measures shall be made. - Traffic counts should not be conducted during summer months as per the TIS guidelines. 		

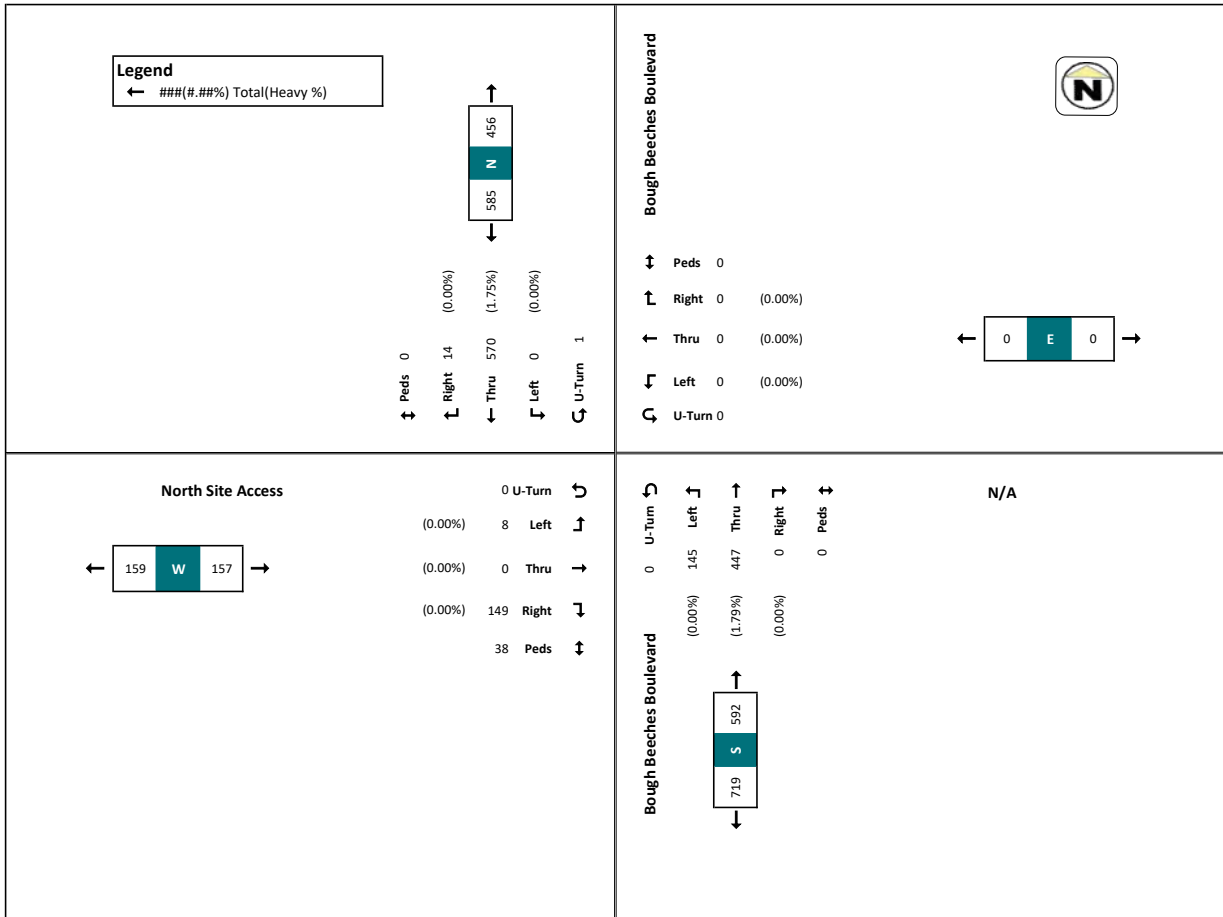


APPENDIX B

Traffic Data & Signal Timing Plans

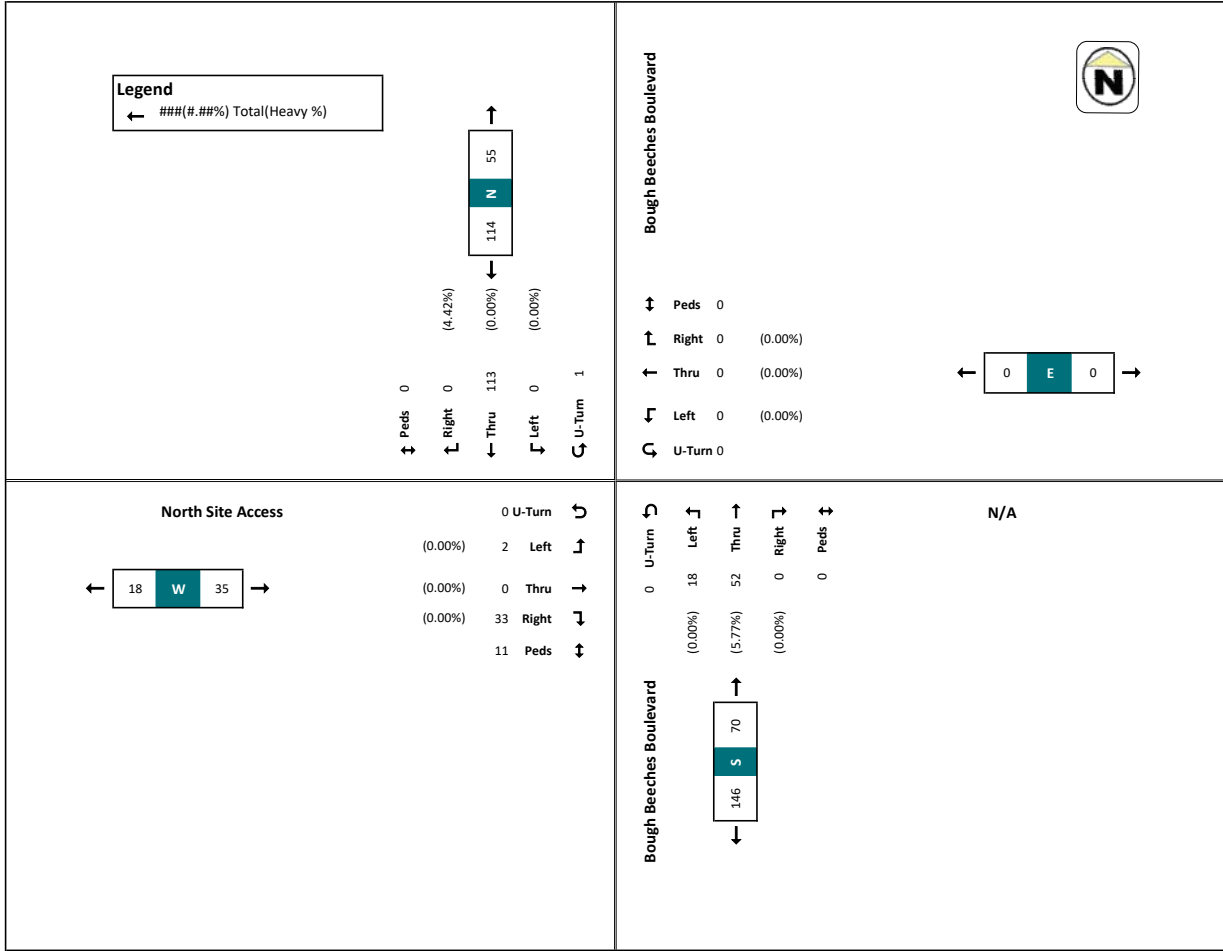
Turning Movement Count - Bough Beeches Boulevard & North Site Access

Start Time	Bough Beeches Boulevard Southbound					N/A Westbound					Bough Beeches Boulevard Northbound					North Site Access Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total	
7:00	0	0	16	0	0	16	0	0	0	0	0	0	0	0	2	3	0	0	5	0	0	12	1	13	34	
7:15	0	0	24	1	0	25	0	0	0	0	0	0	0	0	7	0	0	0	7	0	0	6	2	6	40	
7:30	0	0	27	0	0	27	0	0	0	0	0	0	0	0	1	4	0	0	5	0	0	8	0	8	40	
7:45	0	0	28	1	0	29	0	0	0	0	0	0	0	0	3	14	0	0	17	0	2	13	1	15	61	
Hourly Total	0	0	95	2	0	97	0	0	0	0	0	0	0	8	28	0	0	36	0	3	0	39	4	42	175	
8:00	0	0	33	0	0	33	0	0	0	0	0	0	0	0	4	9	0	0	13	0	0	10	3	10	56	
8:15	0	0	25	0	0	25	0	0	0	0	0	0	0	0	5	11	0	0	16	0	1	4	1	5	46	
8:30	0	0	23	0	0	23	0	0	0	0	0	0	0	0	6	15	0	0	21	0	0	7	6	7	51	
8:45	1	0	32	0	0	33	0	0	0	0	0	0	0	0	3	17	0	0	20	0	1	12	1	13	66	
Hourly Total	1	0	113	0	0	114	0	0	0	0	0	0	0	0	18	52	0	0	70	0	2	33	11	35	219	
9:00	0	0	23	0	0	23	0	0	0	0	0	0	0	0	3	9	0	0	12	0	1	0	4	1	5	40
9:15	0	0	20	0	0	20	0	0	0	0	0	0	0	1	10	0	0	11	0	0	0	5	1	5	36	
9:30	0	0	28	1	0	29	0	0	0	0	0	0	0	0	2	11	0	0	13	0	0	4	1	4	46	
9:45	0	0	12	0	0	12	0	0	0	0	0	0	0	0	1	14	0	0	15	0	0	2	2	2	29	
Hourly Total	0	0	83	1	0	84	0	0	0	0	0	0	0	0	6	44	0	0	50	0	1	0	15	5	16	150
* Break *																										
16:00	0	0	20	0	0	20	0	0	0	0	0	0	0	0	7	21	0	0	28	0	0	5	1	5	53	
16:15	0	0	18	0	0	18	0	0	0	0	0	0	0	0	10	28	0	0	38	0	0	7	3	7	63	
16:30	0	0	28	2	0	30	0	0	0	0	0	0	0	0	6	35	0	0	41	0	1	0	5	0	6	77
16:45	0	0	16	3	0	19	0	0	0	0	0	0	0	0	7	26	0	0	33	0	0	3	3	3	55	
Hourly Total	0	0	82	5	0	87	0	0	0	0	0	0	0	0	30	110	0	0	140	0	1	0	20	7	21	248
17:00	0	0	27	0	0	27	0	0	0	0	0	0	0	0	13	26	0	0	39	0	0	4	0	4	70	
17:15	0	0	31	4	0	35	0	0	0	0	0	0	0	0	15	34	0	0	49	0	0	6	1	6	90	
17:30	0	0	33	1	0	34	0	0	0	0	0	0	0	0	19	33	0	0	43	0	0	4	1	4	81	
17:45	0	0	15	0	0	15	0	0	0	0	0	0	0	0	13	22	0	0	35	0	0	8	3	8	58	
Hourly Total	0	0	106	5	0	111	0	0	0	0	0	0	0	0	51	115	0	0	166	0	0	0	22	5	22	299
18:00	0	0	17	1	0	18	0	0	0	0	0	0	0	0	6	37	0	0	43	0	0	5	2	5	66	
18:15	0	0	35	0	0	35	0	0	0	0	0	0	0	0	14	20	0	0	34	0	0	4	1	4	73	
18:30	0	0	19	0	0	19	0	0	0	0	0	0	0	0	8	18	0	0	26	0	1	0	7	0	8	53
18:45	0	0	20	0	0	20	0	0	0	0	0	0	0	0	4	23	0	0	27	0	0	4	3	4	51	
Hourly Total	0	0	91	1	0	92	0	0	0	0	0	0	0	0	32	98	0	0	130	0	1	0	20	6	21	243
Grand Total	1	0	570	14	0	585	0	0	0	0	0	0	0	0	145	447	0	0	592	0	8	0	149	38	157	1334
Approach %	0.2%	0.0%	97.4%	2.4%	-	-	-	-	-	-	-	-	-	0.0%	24.9%	75.5%	0.0%	-	0.0%	5.1%	0.0%	94.9%	-	11.8%	-	
Total %	0.1%	0.0%	42.7%	1.0%	-	43.9%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	10.9%	33.5%	0.0%	-	44.4%	0.0%	0.6%	0.0%	11.2%	-	11.8%	-
Lights	1	0	560	14	-	575	0	0	0	0	-	0	1	145	439	0	-	585	0	8	0	149	-	157	1317	
% Lights	100.0%	-	98.2%	100.0%	-	98.3%	-	-	-	-	-	-	-	100.0%	98.2%	-	-	98.8%	-	100.0%	-	100.0%	-	100.0%	98.7%	
Buses	0	0	7	0	-	7	-	0	0	0	-	0	0	0	6	0	0	-	6	-	0	0	0	-	0	13
% Buses	-	-	1.2%	0.0%	-	1.2%	-	-	-	-	-	-	-	0.0%	1.3%	-	-	1.0%	-	0.0%	-	0.0%	-	0.0%	1.0%	
Trucks	0	0	3	0	-	3	-	0	0	0	-	0	0	0	2	0	0	-	2	-	0	0	0	-	0	5
% Trucks	-	-	0.5%	-	-	0.5%	-	-	-	-	-	-	-	0.0%	0.4%	-	-	0.3%	-	0.0%	-	0.0%	-	0.0%	0.4%	
Bicycles	-	-	-	-	0	0	-	-	-	0	0	-	0	-	-	-	0	0	-	-	-	-	3	3	3	
Pedestrians	-	-	-	-	0	0	-	-	-	0	0	-	0	-	-	-	0	-	-	-	-	-	38	-	38	



AM Peak Hour - Bough Beeches Boulevard & North Site Access

Start Time	Bough Beeches Boulevard Southbound					N/A Westbound					Bough Beeches Boulevard Northbound					North Site Access Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
8:00	0	0	33	0	0	33	0	0	0	0	0	0	0	4	9	0	0	13	0	0	0	30	3	10	56
8:15	0	0	25	0	0	25	0	0	0	0	0	0	0	5	11	0	0	16	0	1	0	4	1	5	46
8:30	0	0	23	0	0	23	0	0	0	0	0	0	0	6	15	0	0	21	0	0	0	7	6	7	51
8:45	1	0	32	0	0	33	0	0	0	0	0	0	0	3	17	0	0	20	0	1	0	12	1	13	66
Hourly Total	1	0	113	0	0	114	0	0	0	0	0	0	0	18	52	0	0	70	0	2	0	33	11	35	219
Approach %	0.9%	0.0%	99.1%	0.0%	-	52.1%	-	-	-	-	-	-	0.0%	25.7%	74.3%	0.0%	-	32.0%	0.0%	5.7%	0.0%	94.3%	-	-	16.0%
Total %	0.5%	0.0%	51.6%	0.0%	-	52.1%	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	8.2%	23.7%	0.0%	-	32.0%	0.0%	0.9%	0.0%	15.1%	-	-	16.0%
PHF	0.25	0	0.86	0	-	0.86	0	0	0	0	-	-	0	0.75	0.76	0	-	0.83	0	0.5	0	0.69	-	-	0.67
Lights	1	0	108	0	-	109	0	0	0	0	-	-	0	18	49	0	-	67	0	2	0	33	-	-	35
% Lights	100.0%	-	95.6%	-	-	95.6%	-	-	-	-	-	-	100.0%	94.2%	-	-	-	95.7%	-	100.0%	-	100.0%	-	-	100.0%
% Buses	0	0	0	0	-	0	0	0	0	0	-	-	0	0	2	0	-	2	0	0	0	0	-	-	0
% Trucks	0	0	0	0	-	0	0	0	0	0	-	-	0	0	1	0	-	1	0	0	0	0	-	-	0
% Bicycles	0	0	0	0	-	0	0	0	0	0	-	-	0	0	0	0	-	0	0	0	0	0	-	-	0
% Pedestrians	0	0	0	0	-	0	0	0	0	0	-	-	0	0	0	0	-	0	0	0	0	0	-	-	0



PM Peak Hour - Bough Beeches Boulevard & North Site Access

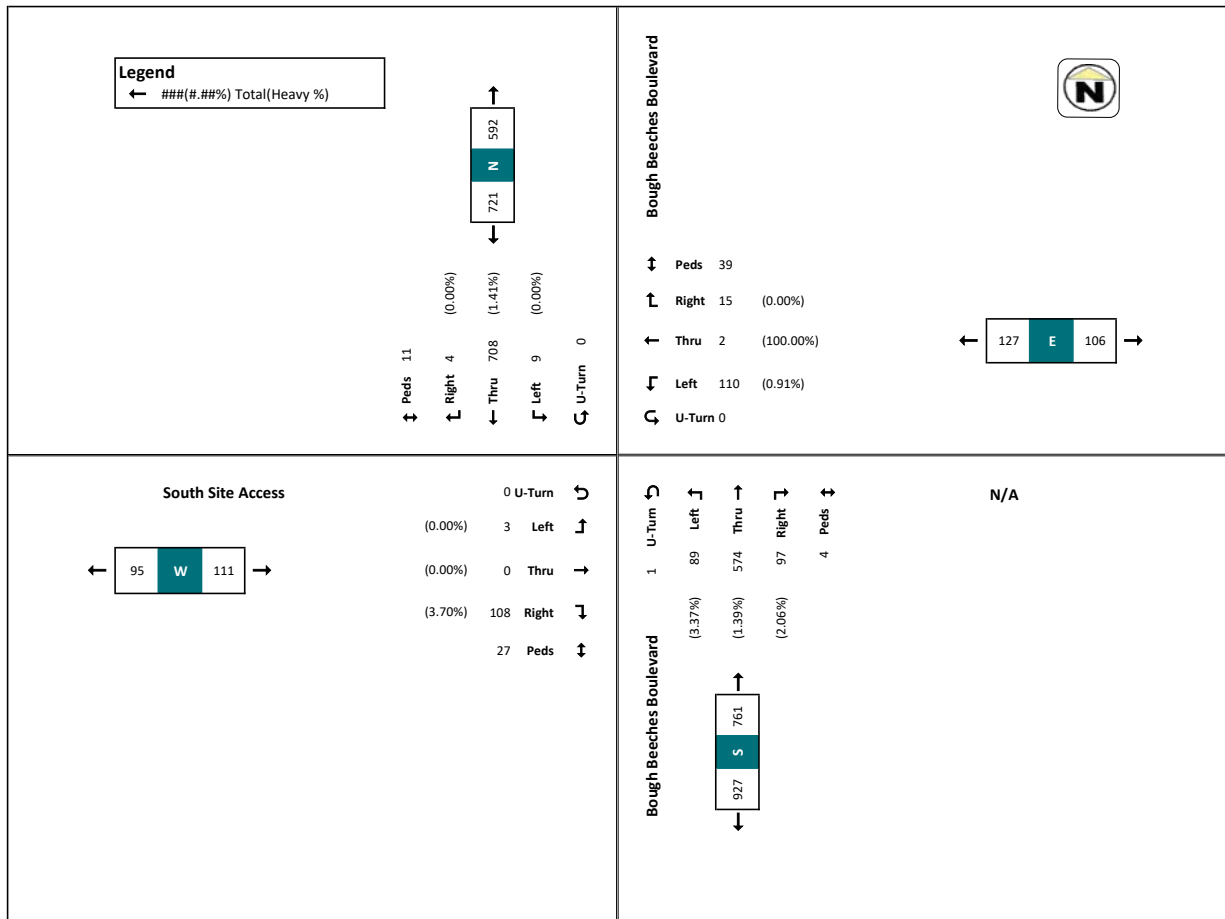
Start Time	Bough Beeches Boulevard Southbound						N/A Westbound						Bough Beeches Boulevard Northbound						North Site Access Eastbound						Grand Total	
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total		
17:00	0	0	27	0	0	27	0	0	0	0	0	0	0	0	13	26	0	0	39	0	0	0	4	0	4	70
17:15	0	0	31	4	0	35	0	0	0	0	0	0	0	0	15	34	0	0	49	0	0	0	6	1	6	90
17:30	0	0	33	1	0	34	0	0	0	0	0	0	0	0	10	32	0	0	43	0	0	0	4	1	4	81
17:45	0	0	15	0	0	15	0	0	0	0	0	0	0	0	13	22	0	0	35	0	0	0	8	3	8	58
Hourly Total	0	0	106	5	0	111	0	0	0	0	0	0	0	0	51	115	0	0	166	0	0	0	22	5	22	299
Approach %	0.0%	0.0%	95.5%	4.5%	-	-	-	-	-	-	-	-	-	0.0%	30.7%	69.3%	0.0%	-	-	0.0%	0.0%	0.0%	100.0%	-	-	-
Total %	0.0%	0.0%	35.5%	1.7%	-	37.1%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	21.3%	52.5%	0.0%	-	55.5%	0.0%	0.0%	0.0%	10.0%	-	7.4%	-	
PHF	0	0	0.8	0.31	-	0.79	0	0	0	0	-	0	0	0.85	0.85	0	-	0.85	0	0	0	0.69	-	0.69	0.83	
Lights	0	0	104	5	-	109	0	0	0	0	-	0	0	0	51	114	0	-	165	0	0	0	22	-	22	296
% Lights	-	-	98.1%	100.0%	-	98.2%	-	-	-	-	-	-	-	100.0%	99.1%	-	-	99.4%	-	-	-	100.0%	-	100.0%	99.0%	
Bus	-	0	5	0	-	5	-	0	0	0	-	0	-	0	0	0	-	0	-	0	0	0	-	0	5	
% Buses	-	-	4.7%	0.0%	-	4.5%	-	-	-	-	-	-	-	0.0%	0.0%	-	-	0.0%	-	-	-	0.0%	-	0.0%	1.7%	
Trucks	-	0	2	0	-	2	-	0	0	0	-	0	-	0	1	0	-	0	-	0	0	0	-	0	3	
% Trucks	-	-	1.9%	0.0%	-	1.8%	-	-	-	-	-	-	-	0.0%	0.9%	-	-	0.6%	-	-	-	0.0%	-	0.0%	1.0%	
Bicycles	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	1	1	1	1	
Pedestrians	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	0	0	0	





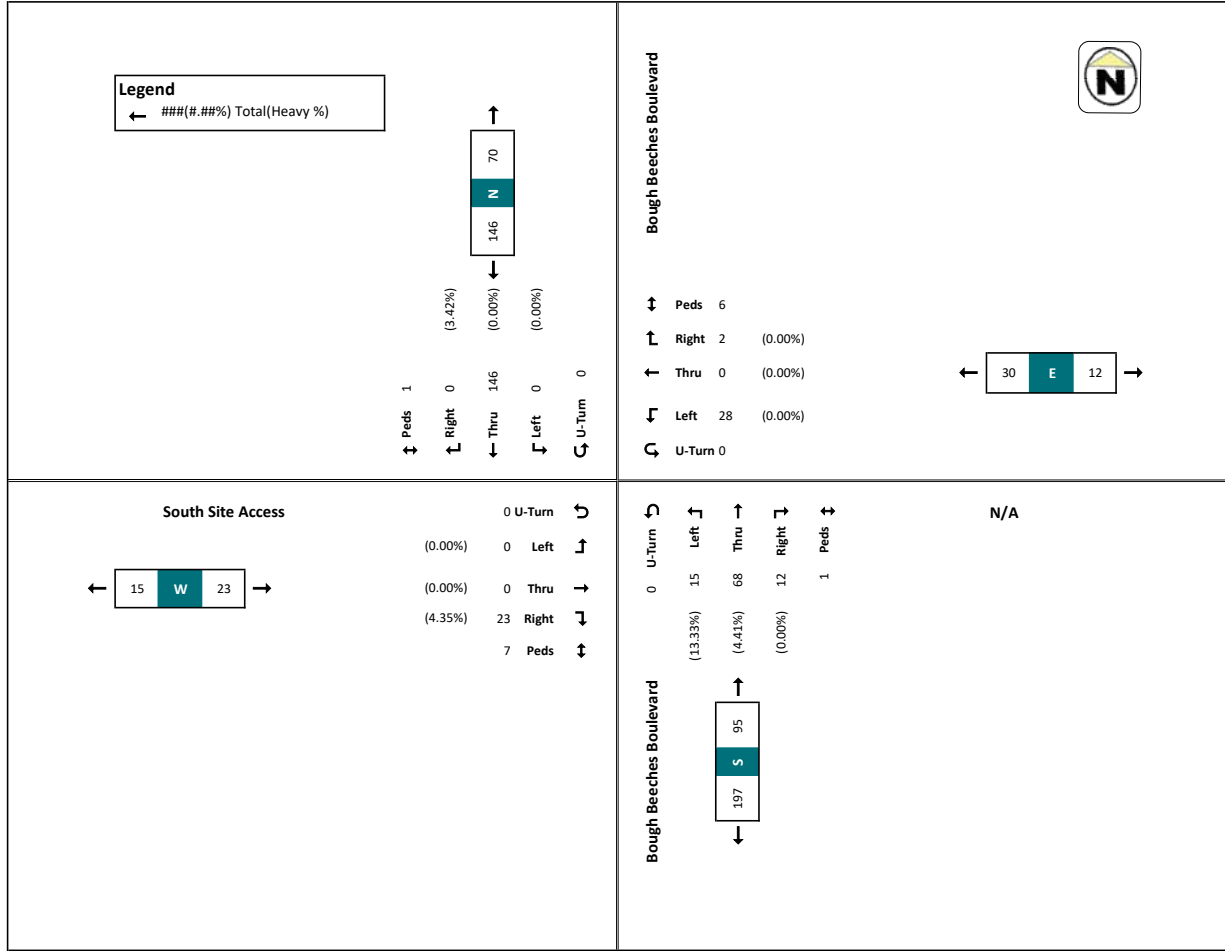
Turning Movement Count - Bough Beeches Boulevard & South Site Access

Start Time	Bough Beeches Boulevard Southbound						N/A Westbound						Bough Beeches Boulevard Northbound						South Site Access Eastbound						Grand Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00	0	0	28	0	1	29	0	7	0	0	2	7	0	2	5	2	1	9	0	0	0	3	2	3	47
7:15	0	0	30	0	0	30	0	6	0	0	2	6	0	0	9	2	0	11	0	0	0	3	2	0	47
7:30	0	0	35	0	3	38	0	2	0	0	1	2	0	1	5	1	0	7	0	0	0	5	0	5	49
7:45	0	0	41	0	0	41	0	5	0	0	3	5	0	5	17	0	0	22	0	0	0	4	2	4	72
Hourly Total	0	0	134	0	4	134	0	20	0	0	8	20	0	8	36	5	1	49	0	0	0	12	6	12	215
8:00	0	0	43	0	1	43	0	8	0	1	3	9	0	7	12	4	0	23	0	0	0	5	2	5	80
8:15	0	0	29	0	0	29	0	5	0	0	2	5	0	3	16	2	0	21	0	0	0	3	0	3	58
8:30	0	0	30	0	0	30	0	8	0	0	1	8	0	3	21	1	1	25	0	0	0	7	4	7	70
8:45	0	0	44	0	0	44	0	7	0	1	0	8	0	2	19	5	0	26	0	0	0	8	1	8	86
Hourly Total	0	0	146	0	1	146	0	28	0	2	6	30	0	15	68	12	1	95	0	0	0	23	7	23	294
9:00	0	0	27	0	0	27	0	2	0	1	1	3	0	2	11	7	0	20	0	0	0	0	1	0	50
9:15	0	0	25	0	0	25	0	3	0	0	1	3	1	1	10	3	0	15	0	0	0	2	1	2	45
9:30	0	0	32	0	1	32	0	2	0	1	0	3	0	4	12	2	0	18	0	0	0	2	1	2	55
9:45	0	0	15	0	0	15	0	4	0	0	0	4	1	1	15	3	0	20	0	0	0	3	0	3	42
Hourly Total	0	0	99	0	1	99	0	11	0	2	2	13	0	8	48	15	0	71	0	0	0	7	3	7	190
* Break *																									
16:00	0	1	24	0	3	25	0	4	0	0	3	4	0	6	28	0	1	34	0	0	0	4	2	4	67
16:15	0	1	24	0	0	25	0	6	1	0	0	7	0	3	37	7	0	47	0	1	0	1	1	2	81
16:30	0	0	31	2	0	33	0	3	0	7	1	5	0	3	39	5	0	47	0	0	0	30	0	10	95
16:45	0	0	19	0	1	19	0	4	0	1	1	5	0	5	31	6	0	42	0	1	0	5	1	6	72
Hourly Total	0	2	98	2	4	102	0	17	1	3	5	21	0	17	135	18	1	170	0	2	0	20	4	22	315
17:00	0	1	30	0	0	31	0	3	0	1	2	4	0	7	38	4	0	49	0	0	0	2	0	2	86
17:15	0	1	36	0	1	37	0	6	0	2	3	8	1	5	46	8	0	60	0	1	0	30	1	11	116
17:30	0	0	37	0	0	37	0	6	0	2	2	6	0	6	43	7	0	56	0	0	0	6	1	6	105
17:45	0	1	22	0	0	23	0	3	0	2	4	5	0	3	33	6	1	42	0	0	0	4	2	4	74
Hourly Total	0	3	125	0	1	128	0	18	0	5	11	23	1	21	160	25	1	207	0	1	0	22	4	23	381
18:00	0	2	20	0	0	22	0	4	0	7	0	6	0	4	41	8	0	53	0	0	0	8	0	8	89
18:15	0	0	39	0	0	39	0	3	0	2	4	4	0	7	33	3	0	43	0	0	0	4	0	4	90
18:30	0	1	24	1	0	26	0	2	1	0	3	3	0	2	26	3	0	31	0	0	0	6	0	6	66
18:45	0	1	23	1	0	25	0	7	0	0	2	7	0	7	27	8	0	42	0	0	0	6	3	6	80
Hourly Total	0	4	106	2	0	112	0	16	1	3	7	20	0	20	127	22	0	169	0	0	0	24	3	24	325
Grand Total	0	9	708	4	11	721	0	110	2	15	39	127	1	89	574	87	4	761	0	3	0	108	27	111	1720
Approach %	0.0%	1.2%	98.2%	0.6%	-	-	0.0%	86.0%	1.6%	11.8%	-	0.1%	11.7%	75.4%	12.7%	-	0.0%	2.7%	0.0%	97.3%	-	6.5%	-	-	-
Total %	0.0%	0.5%	41.2%	0.2%	-	41.9%	0.0%	6.4%	0.1%	0.9%	-	7.4%	0.1%	5.2%	33.4%	5.6%	-	44.2%	0.0%	0.2%	0.0%	6.3%	-	6.5%	-
Lights	0	9	698	4	-	711	0	109	0	15	-	124	3	86	566	95	-	750	0	3	0	104	-	107	1692
% Lights	-	100.0%	98.6%	100.0%	-	98.6%	-	99.1%	0.0%	100.0%	-	97.6%	300.0%	96.6%	98.6%	97.9%	-	98.6%	-	100.0%	-	96.3%	-	96.4%	98.4%
Buses	0	0	7	0	0	7	-	0	0	0	-	0	-	0	6	0	-	9	-	0	0	3	-	3	19
% Buses	-	0.0%	1.0%	0.0%	-	1.0%	-	0.0%	0.0%	0.0%	-	0.0%	-	3.4%	1.0%	0.0%	-	1.2%	-	0.0%	-	2.8%	-	2.7%	1.1%
Trucks	0	0	3	0	-	3	-	1	2	0	-	3	-	0	2	2	-	4	-	0	0	1	-	1	11
% Trucks	-	0.0%	0.4%	-	-	0.4%	-	0.9%	100.0%	0.0%	-	2.4%	-	0.0%	0.3%	2.1%	-	0.5%	-	0.0%	-	0.9%	-	0.9%	0.6%
Bicycles	-	-	-	-	0	0	-	-	-	-	5	5	-	-	-	-	-	1	1	-	-	3	3	9	-
Pedestrians	-	-	-	-	11	-	-	-	-	-	39	-	-	-	-	-	4	-	-	-	-	27	-	81	-



AM Peak Hour - Bough Beeches Boulevard & South Site Access

Start Time	Bough Beeches Boulevard Southbound					N/A Westbound					Bough Beeches Boulevard Northbound					South Site Access Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total	
8:00	0	0	43	0	1	43	0	8	0	1	3	9	0	7	12	4	0	23	0	0	0	5	2	5	30	
8:15	0	0	29	0	0	29	0	5	0	0	2	5	0	3	16	2	0	21	0	0	0	3	0	3	58	
8:30	0	0	30	0	0	30	0	8	0	0	1	8	0	3	21	1	1	25	0	0	0	7	4	7	70	
8:45	0	0	44	0	0	44	0	7	0	1	0	8	0	2	19	5	0	26	0	0	0	8	1	8	86	
Hourly Total	0	0	146	0	1	146	0	28	0	2	6	30	0	15	58	12	1	95	0	0	0	23	7	23	294	
Approach %	0.0%	0.0%	100.0%	0.0%	-	0.0%	93.3%	0.0%	6.7%	-	-	0.0%	15.8%	71.6%	12.6%	-	-	0.0%	0.0%	0.0%	100.0%	-	-	-	-	
Total %	0.0%	0.0%	49.7%	0.0%	-	49.7%	0.0%	9.5%	0.0%	0.7%	-	10.2%	0.0%	5.1%	23.1%	4.1%	-	32.3%	0.0%	0.0%	0.0%	7.8%	-	7.8%	-	
PHF	0	0	0.83	0	-	0.83	0	0.88	0	0.5	-	0.83	0	0.54	0.81	0.6	-	0.91	0	0	0	0.72	-	0.72	0.85	
Lights	0	0	141	0	-	141	0	28	0	2	-	30	0	13	65	12	-	90	0	0	0	22	-	22	283	
% Lights	-	-	96.6%	-	-	96.6%	-	100.0%	-	100.0%	-	100.0%	-	86.7%	95.6%	100.0%	-	84.7%	-	-	-	95.7%	-	-	95.7%	96.3%
% Buses	-	-	0	-	-	0	-	0	-	0	-	0	-	0	0	-	-	0	-	-	-	1	-	-	1	10
% Trucks	-	-	3.4%	-	-	3.4%	-	0.0%	-	0.0%	-	0.0%	-	13.3%	2.9%	0.0%	-	4.2%	-	-	-	4.3%	-	-	4.3%	3.4%
% Pedestrians	-	-	0	-	-	0	-	0	-	0	-	0	-	0	1	0	-	1	-	-	-	0	-	-	0	1
% Bicycles	-	-	0.0%	-	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1.5%	0.0%	-	1.1%	-	-	-	0.0%	-	-	0.0%	0.3%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	6	-	-	-	-	-	0	-	-	-	7	-	-	14	



PM Peak Hour - Bough Beeches Boulevard & South Site Access

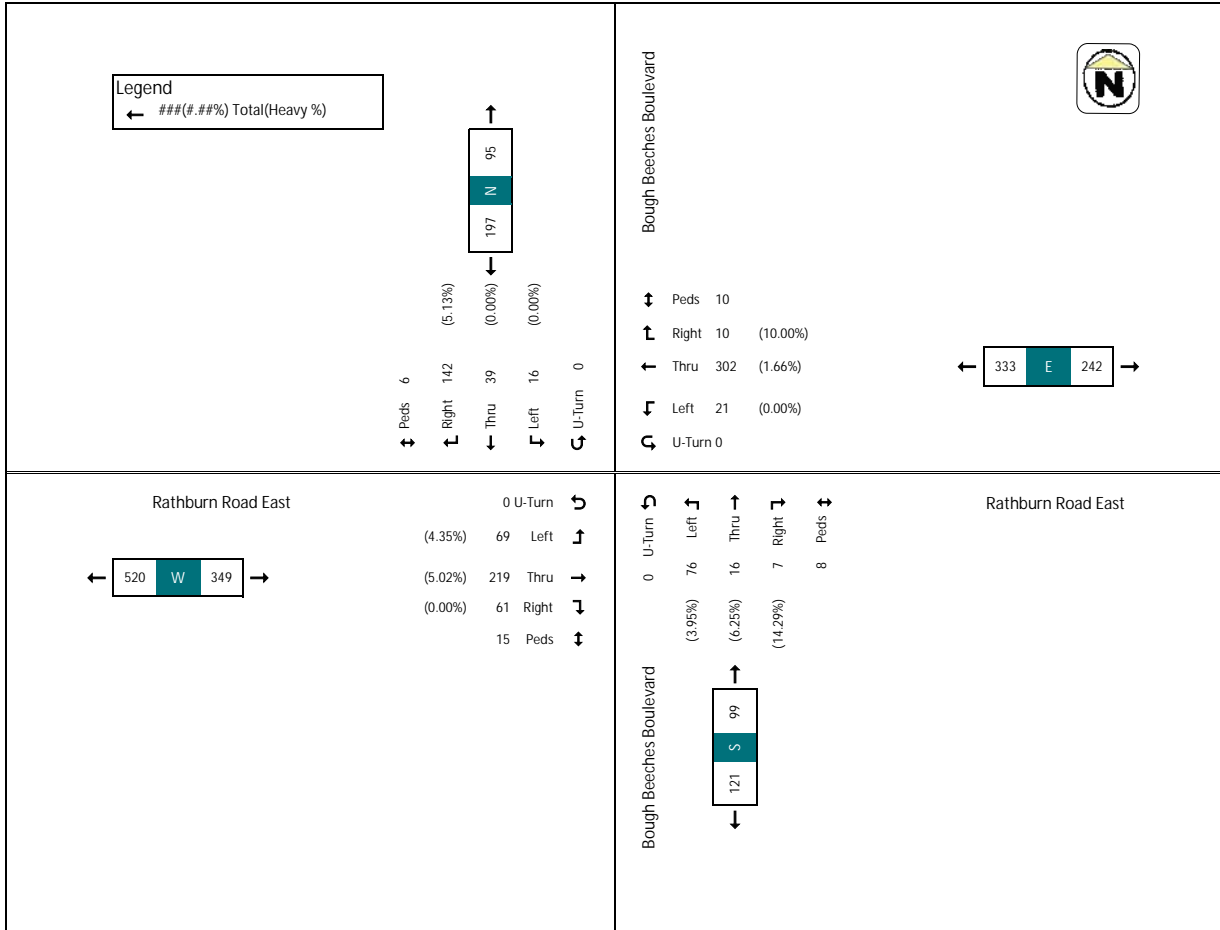
Start Time	Bough Beeches Boulevard Southbound						N/A Westbound						Bough Beeches Boulevard Northbound						South Site Access Eastbound						Grand Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
17:15	0	1	36	0	1	37	0	6	0	2	3	8	1	5	46	8	0	60	0	1	0	10	1	11	116
17:30	0	0	37	0	0	37	0	6	0	0	2	6	0	6	43	7	0	56	0	0	0	6	1	6	105
17:45	0	1	22	0	0	23	0	3	0	2	4	5	0	3	33	6	1	42	0	0	0	4	2	4	74
18:00	0	2	20	0	0	22	0	4	0	2	0	6	0	4	41	8	0	53	0	0	0	8	0	8	89
Hourly Total	0	4	115	0	1	119	0	19	0	6	9	25	1	18	163	29	1	211	0	1	0	28	4	29	384
Approach %	0.0%	3.4%	96.6%	0.0%	-	-	0.0%	76.0%	0.0%	24.0%	-	-	0.5%	8.5%	77.3%	13.7%	-	-	0.0%	3.4%	0.0%	96.6%	-	-	-
Total %	0.0%	1.0%	29.9%	0.0%	-	31.0%	0.0%	6.5%	0.0%	1.6%	-	-	6.5%	0.3%	41.9%	55.4%	9.9%	-	54.9%	0.0%	0.3%	0.0%	9.5%	-	7.6%
PHF	0	0.5	0.78	0	-	0.8	0	0.79	0	0.75	-	-	0.78	0	0.75	0.89	0.91	-	0.88	0	0.25	0	0.17	-	0.66
Lights	0	4	113	0	-	117	0	19	0	6	-	25	1	18	162	29	-	210	0	1	0	28	-	29	381
% Lights	-	100.0%	98.3%	-	-	98.3%	-	100.0%	-	100.0%	-	100.0%	-	100.0%	99.4%	100.0%	-	99.5%	-	100.0%	-	100.0%	-	100.0%	99.2%
Bus	0	0	5	0	-	5	-	0	0	0	-	0	-	0	0	0	-	0	-	0	0	0	-	0	5
% Buses	-	0.0%	4.3%	-	-	4.2%	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1.3%
Trucks	0	0	2	0	-	2	-	0	0	0	-	0	-	0	1	0	-	0	-	0	0	0	-	0	3
% Trucks	-	0.0%	1.7%	-	-	1.7%	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.6%	0.0%	-	0.5%	-	0.0%	-	0.0%	-	0.0%	0.8%
Bicycles	-	-	-	-	0	0	-	-	-	2	2	-	-	-	-	-	0	0	-	-	-	1	1	3	-
Pedestrians	-	-	-	-	1	1	-	-	-	0	0	-	-	-	-	-	1	-	-	-	-	0	0	1	2





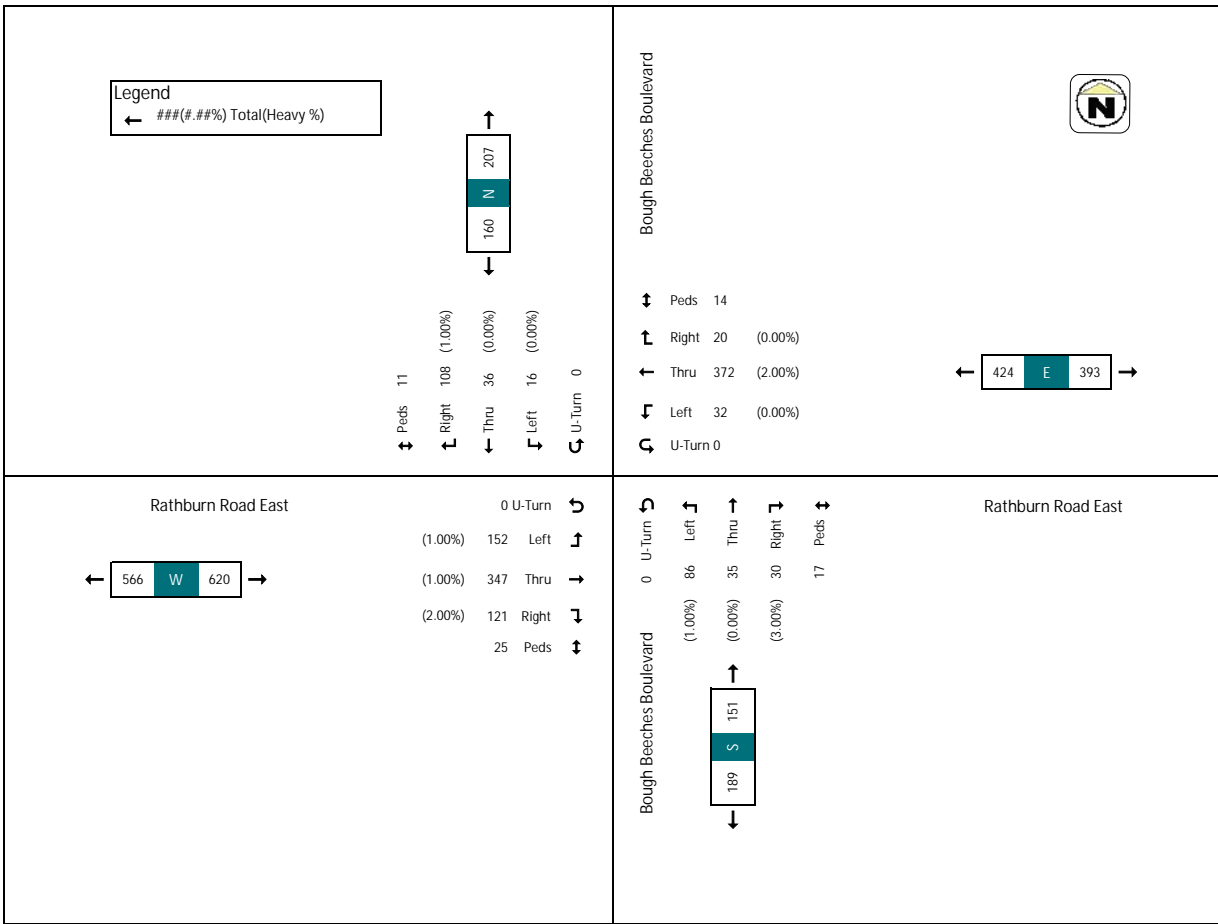
AM Peak Hour - Bough Beeches Boulevard & Rathburn Road East

Start Time	Bough Beeches Boulevard Southbound						Rathburn Road East Westbound						Bough Beeches Boulevard Northbound						Rathburn Road East Eastbound						Grand Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
8:00	0	3	5	47	4	55	0	4	82	5	4	91	0	13	0	3	1	16	0	16	47	13	2	96	258
8:15	0	6	11	24	2	41	0	6	64	4	4	74	0	19	4	3	5	26	0	15	50	16	7	81	222
8:30	0	2	8	34	0	44	0	3	83	0	2	86	0	13	8	0	1	39	0	17	49	12	2	78	247
8:45	0	5	15	37	0	57	0	8	73	1	0	82	0	13	4	1	1	18	0	21	53	20	4	94	251
Hourly Total	0	16	39	142	6	197	0	21	302	10	10	333	0	76	16	7	8	99	0	69	219	61	15	349	978
Approach %	0.0%	8.1%	19.8%	72.1%	0.0%	0.0%	6.3%	90.7%	3.0%	0.0%	76.8%	16.2%	7.1%	0.0%	19.8%	62.8%	17.5%	0.0%	0.0%	7.1%	22.4%	6.2%	5.7%	57.7%	
Total %	0.0%	1.6%	4.0%	14.5%	0.6%	20.1%	0.0%	2.1%	30.9%	1.0%	34.0%	0.0%	10.8%	2.5%	0.7%	0.0%	0.0%	0.0%	0.0%	7.1%	22.4%	6.2%	5.7%	57.7%	
U-Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Left	0.0%	0.6%	1.5%	5.3%	0.0%	1.5%	0.0%	0.3%	1.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Thru	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Right	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peds	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
App. Total	0.0%	1.6%	4.0%	14.5%	0.6%	20.1%	0.0%	2.1%	30.9%	1.0%	34.0%	0.0%	10.8%	2.5%	0.7%	0.0%	0.0%	0.0%	0.0%	7.1%	22.4%	6.2%	5.7%	57.7%	
% Lights	100.0%	94.9%	96.5%	96.4%	100.0%	98.3%	100.0%	98.2%	96.1%	93.8%	85.7%	84.9%	95.7%	95.0%	100.0%	96.0%	96.7%	96.0%	96.7%	96.0%	95.0%	95.0%	96.0%	96.7%	96.7%
% Buses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Trucks	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Bicycles	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



PM Peak Hour - Bough Beeches Boulevard & Rathburn Road East

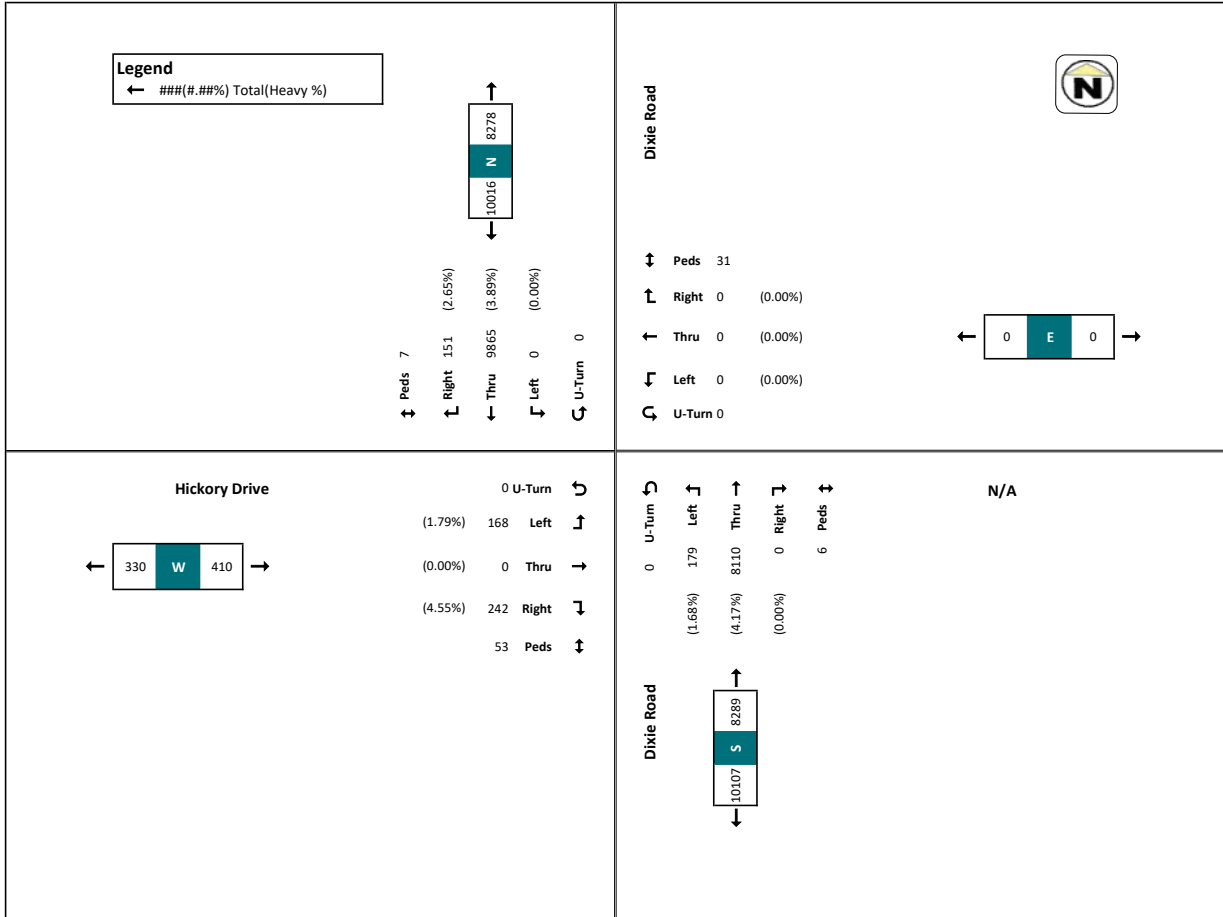
Start Time	Bough Beeches Boulevard Southbound						Rathburn Road East Westbound						Bough Beeches Boulevard Northbound						Rathburn Road East Eastbound						Grand Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
16:45	0	2	5	22	0	29	0	7	87	4	3	98	0	23	2	0	5	33	0	31	89	34	6	154	314
17:00	0	6	9	20	0	35	0	3	90	4	3	97	0	28	15	8	4	51	0	31	68	31	5	130	313
17:15	0	3	10	35	0	48	0	12	86	4	5	112	0	20	11	8	2	39	0	45	94	32	9	171	370
17:30	0	5	12	31	5	48	0	10	99	8	3	117	0	15	0	6	6	28	0	45	96	24	5	165	358
Hourly Total	0	16	36	108	11	160	0	32	372	20	14	424	0	86	35	30	17	151	0	152	347	121	25	620	1355
Approach %	0.0%	10.0%	22.5%	67.5%	-	-	0.0%	7.5%	87.7%	4.7%	-	-	0.0%	57.0%	23.2%	19.9%	-	-	0.0%	24.5%	56.0%	19.5%	-	-	-
Total %	0.0%	1.2%	2.7%	8.0%	-	-	0.0%	3.3%	38.0%	1.5%	-	-	0.0%	8.8%	3.6%	3.1%	-	-	0.0%	15.5%	35.3%	12.4%	-	-	-
PHF	0	0.67	0.75	0.77	-	-	0	0.63	0.94	0.63	-	-	0	0.77	0.58	0.94	-	-	0	0.84	0.9	0.89	-	-	-
% Light	0	16	36	107	-	-	0	32	368	20	-	-	0	86	35	27	-	-	0	151	347	119	-	-	-
% Lights	100.0%	100.0%	99.3%	99.4%	-	-	100.0%	96.4%	100.0%	98.6%	-	-	100.0%	98.8%	100.0%	96.7%	-	-	99.2%	99.8%	98.3%	98.3%	-	-	-
% Buses	0	2	0	0	-	-	0	2	0	0	-	-	0	0	0	0	-	-	0	0	3	0	0	-	-
% Buses	0.0%	5.6%	0.0%	0.0%	-	-	0.0%	0.5%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.9%	0.0%	-	-	-
% Trucks	0	0	0	0	-	-	0	0	0	0	-	-	0	0	0	0	-	-	0	0	0	0	0	-	-
% Trucks	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	-	-	-
% Bicycles	0	0	0	0	-	-	0	0	0	0	-	-	0	0	0	0	-	-	0	0	0	0	0	-	-
% Bicycles	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	-	-	-
Pedestrians	-	-	-	-	11	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	11	-





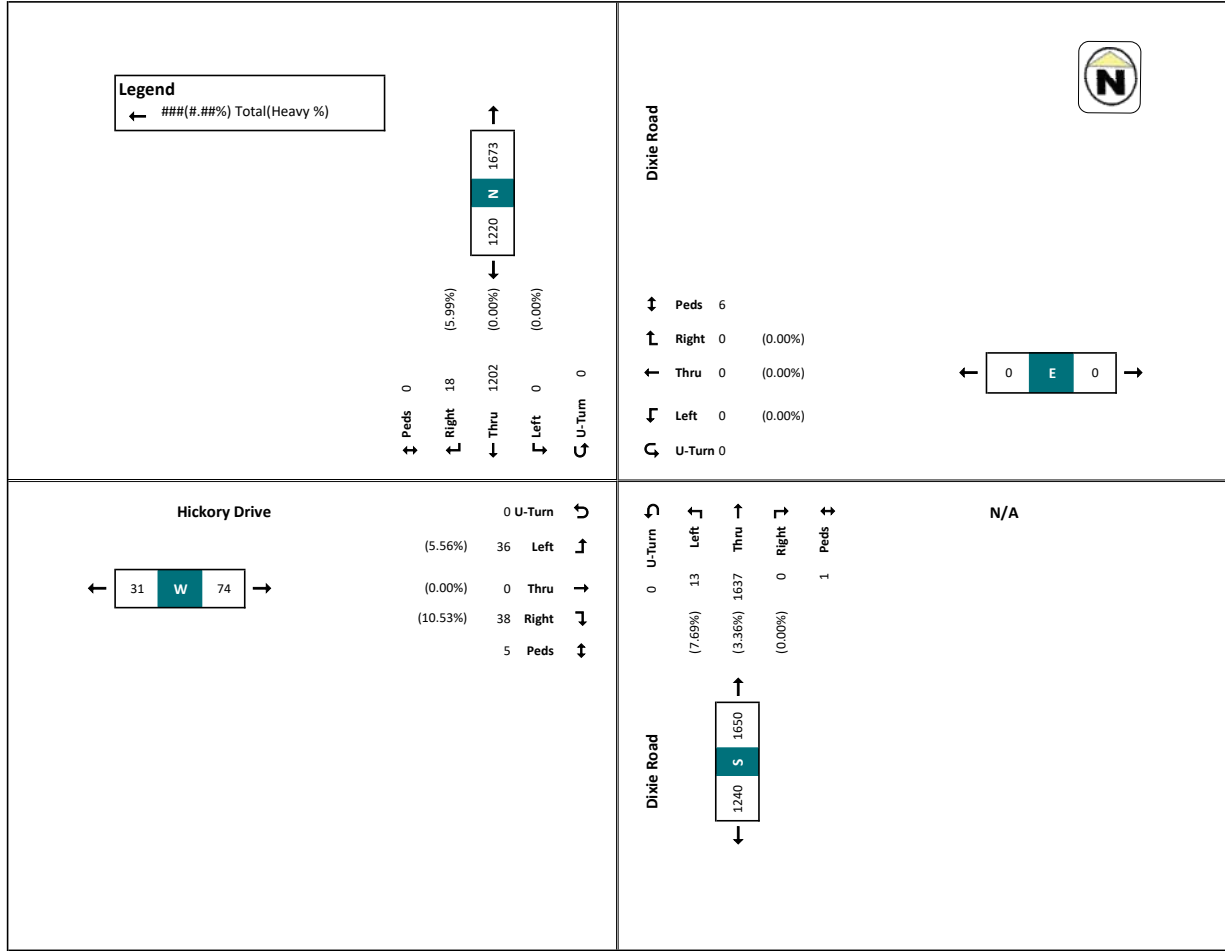
Turning Movement Count - Dixie Road & Hickory Drive

Start Time	Dixie Road Southbound					N/A Westbound					Dixie Road Northbound					Hickory Drive Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds		U-Turn	Left	Thru	Right	Peds
7:00	0	0	235	1	0	236	0	0	0	1	0	0	2	0	1	261	0	9	0	5	1	14	511			
7:15	0	0	260	1	0	261	0	0	0	2	0	0	3	0	0	278	0	8	0	12	0	20	559			
7:30	0	0	250	3	0	253	0	0	0	2	0	0	3	0	0	403	0	9	0	13	1	22	678			
7:45	0	0	331	4	0	335	0	0	0	2	0	0	4	0	0	455	0	9	0	11	1	20	810			
Hourly Total	0	0	1076	9	1	1085	0	0	0	7	0	0	12	0	1	1397	0	35	0	41	3	76	2558			
8:00	0	0	312	7	0	319	0	0	0	2	0	0	2	0	0	379	0	10	0	10	0	20	718			
8:15	0	0	277	3	0	280	0	0	0	2	0	0	5	0	1	399	0	8	0	8	0	16	695			
8:30	0	0	282	4	0	286	0	0	0	0	0	0	2	0	0	417	0	9	0	9	4	18	721			
8:45	0	0	297	8	0	305	0	0	0	0	0	0	10	0	0	399	0	12	0	13	3	25	729			
Hourly Total	0	0	1168	22	0	1190	0	0	0	4	0	0	19	0	1	1594	0	39	0	40	7	79	2363			
9:00	0	0	255	3	0	258	0	0	0	0	0	0	4	0	0	410	0	10	0	10	0	20	688			
9:15	0	0	305	2	0	307	0	0	0	0	0	0	8	0	0	254	0	5	0	6	0	11	572			
9:30	0	0	262	3	0	265	0	0	0	0	0	0	0	0	0	251	0	3	0	8	0	11	527			
9:45	0	0	273	1	0	274	0	0	0	0	0	0	3	0	0	233	0	6	0	13	0	19	636			
Hourly Total	0	0	1053	9	0	1104	0	0	0	0	0	0	15	0	0	1148	0	24	0	37	0	61	2313			
* Break *																										
16:00	0	0	471	17	1	488	0	0	0	4	0	0	11	0	1	323	0	2	0	2	2	4	815			
16:15	0	0	539	8	1	547	0	0	0	2	0	0	12	0	0	327	0	4	0	9	4	13	887			
16:30	0	0	571	5	0	576	0	0	0	2	0	0	9	0	0	311	0	2	0	3	6	5	892			
16:45	0	0	595	3	0	598	0	0	0	2	0	0	19	0	0	309	0	12	0	7	4	19	926			
Hourly Total	0	0	2176	33	2	2209	0	0	0	10	0	0	51	0	1	1270	0	20	0	21	16	41	3520			
17:00	0	0	579	13	0	592	0	0	0	2	0	0	12	0	0	328	0	8	0	6	1	14	934			
17:15	0	0	564	7	0	571	0	0	0	0	0	0	8	0	0	286	0	5	0	16	2	15	872			
17:30	0	0	567	14	0	581	0	0	0	2	0	0	7	0	1	333	0	2	0	34	1	16	930			
17:45	0	0	527	8	0	535	0	0	0	0	0	0	13	0	0	309	0	8	0	21	12	29	873			
Hourly Total	0	0	2237	42	2	2279	0	0	0	2	0	0	40	0	1	1256	0	23	0	51	16	74	3609			
18:00	0	0	474	8	1	482	0	0	0	3	0	0	8	0	0	304	0	8	0	7	1	15	801			
18:15	0	0	405	9	0	414	0	0	0	2	0	0	13	0	1	282	0	5	0	4	3	9	705			
18:30	0	0	341	11	0	352	0	0	0	1	0	0	6	0	0	301	0	3	0	10	3	13	666			
18:45	0	0	358	4	1	362	0	0	0	2	0	0	12	0	1	253	0	2	0	10	4	12	627			
Hourly Total	0	0	1578	32	2	1610	0	0	0	8	0	0	39	0	2	1140	0	18	0	31	11	49	2799			
Grand Total	0	0	9865	151	7	10016	0	0	0	31	0	0	179	0	6	8289	0	168	0	242	53	410	18715			
Approach %	0.0%	0.0%	98.5%	1.5%	-	-	-	-	-	-	-	-	0.0%	1.2%	97.8%	0.0%	-	0.0%	41.0%	0.0%	59.0%	-	2.2%	-		
Total %	0.0%	0.0%	52.7%	0.8%	-	53.5%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	1.0%	43.3%	0.0%	-	44.3%	0.0%	0.9%	0.0%	1.3%	-	2.2%	-	
Lights	0	0	9481	147	-	9628	0	0	0	-	0	0	176	0	-	7948	0	165	0	231	-	396	17922			
% Lights	-	-	96.1%	97.4%	-	96.1%	-	-	-	-	-	-	98.3%	95.8%	-	95.9%	-	98.2%	-	95.5%	-	96.6%	96.0%			
Buses	-	-	0	52	0	52	-	0	0	0	-	0	1	51	0	52	-	0	0	11	-	11	115			
% Buses	-	-	0.5%	0.0%	-	0.5%	-	-	-	-	-	-	0.6%	0.6%	-	0.6%	-	0.0%	-	4.5%	-	2.7%	0.6%			
Trucks	-	-	0	332	4	336	-	0	0	0	-	0	2	287	0	289	-	3	0	0	-	3	628			
% Trucks	-	-	3.4%	-	-	3.4%	-	-	-	-	-	-	1.1%	3.5%	-	3.5%	-	1.8%	-	0.0%	-	0.7%	3.4%			
Bicycles	-	-	-	-	2	2	-	-	-	3	3	-	-	-	-	2	2	-	-	-	-	23	30			
Pedestrians	-	-	-	-	7	-	-	-	-	31	-	-	-	-	-	6	-	-	-	-	-	53	-	97		



AM Peak Hour - Dixie Road & Hickory Drive

Start Time	Dixie Road Southbound					N/A Westbound					Dixie Road Northbound					Hickory Drive Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
7:45	0	0	331	4	0	335	0	0	0	0	2	0	0	4	451	0	0	455	0	9	0	11	1	20	210
8:00	0	0	312	7	0	319	0	0	0	2	0	0	0	2	377	0	0	379	0	10	0	10	0	20	718
8:15	0	0	277	3	0	280	0	0	0	2	0	0	0	5	394	0	1	399	0	8	0	8	0	16	695
8:30	0	0	282	4	0	286	0	0	0	0	0	0	0	2	415	0	0	417	0	9	0	9	4	18	721
Hourly Total	0	0	1202	18	0	1220	0	0	0	0	6	0	0	13	1637	0	1	1650	0	36	0	38	5	74	2944
Approach %	0.0%	0.0%	58.5%	1.5%	-	41.4%	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.8%	99.2%	0.0%	-	0.0%	48.6%	0.0%	0.0%	51.4%	-	-	-
Total %	0.0%	0.0%	40.8%	0.6%	-	41.4%	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.4%	55.6%	0.0%	-	56.0%	0.0%	1.2%	0.0%	1.3%	-	2.5%	-
PHF	0	0	0.91	0.64	-	0.91	0	0	0	0	-	-	0	0.65	0.91	0	-	0.91	0	0.9	0	0.86	-	0.93	0.91
Lights	0	0	1130	18	-	1148	0	0	0	0	-	-	0	12	1582	0	-	1594	0	34	0	34	-	68	2810
% Lights	-	-	94.0%	100.0%	-	94.1%	-	-	-	-	-	-	-	92.3%	96.6%	-	-	96.6%	-	94.4%	-	89.5%	-	91.9%	95.4%
% Buses	-	-	0	10	0	10	-	-	-	-	-	-	-	0	7	0	-	0	-	0	0	4	-	4	21
% Trucks	-	-	0.8%	0.0%	-	0.8%	-	-	-	-	-	-	-	0.0%	0.4%	-	-	0.4%	-	0.0%	-	10.5%	-	5.4%	0.7%
% Pedestrians	-	-	0	62	0	62	-	-	-	-	-	-	-	1	48	0	-	49	-	2	0	0	-	2	113
% Bicycles	-	-	5.2%	0.0%	-	5.1%	-	-	-	-	-	-	7.7%	2.9%	-	-	-	3.0%	-	5.6%	-	0.0%	-	2.7%	3.8%
% Pedestrians	-	-	-	-	0	-	-	-	-	6	-	-	-	-	0	0	-	0	-	-	-	5	-	5	11



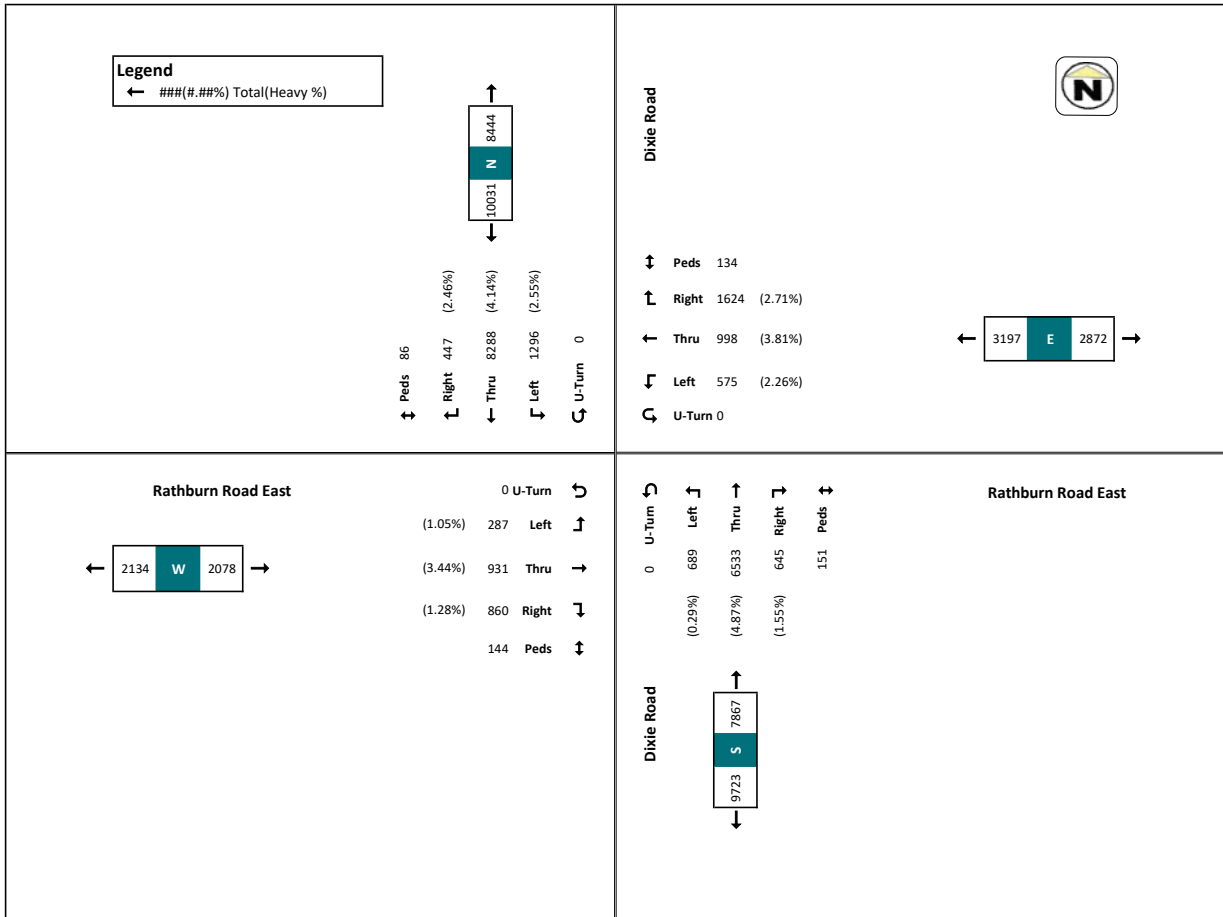
PM Peak Hour - Dixie Road & Hickory Drive

Start Time	Dixie Road Southbound						N/A Westbound						Dixie Road Northbound						Hickory Drive Eastbound						Grand Total	
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total		
16:45	0	0	595	3	0	598	0	0	0	0	2	0	0	0	19	290	0	0	309	0	12	0	7	4	19	926
17:00	0	0	579	13	0	592	0	0	0	0	2	0	0	0	12	216	0	0	228	0	8	0	6	1	14	934
17:15	0	0	564	7	0	571	0	0	0	0	0	0	0	0	8	278	0	0	286	0	5	0	30	2	15	872
17:30	0	0	567	14	2	581	0	0	0	0	0	0	0	0	7	326	0	1	333	0	2	0	14	1	16	930
Hourly Total	0	0	2305	37	2	2342	0	0	0	0	4	0	0	0	46	1210	0	1	1256	0	27	0	37	8	64	3662
Approach %	0.0%	0.0%	98.4%	1.6%	-	-	-	-	-	-	-	-	0.0%	3.7%	96.3%	0.0%	-	-	0.0%	42.2%	0.0%	57.8%	-	-	-	
Total %	0.0%	0.0%	63.9%	1.0%	-	64.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	1.6%	41.1%	0.0%	-	34.3%	0.0%	0.9%	0.0%	1.3%	-	1.7%	-	
PHF	0	0	0.97	0.66	-	0.98	0	0	0	0	-	0	0	0.61	0.93	0	-	0.94	0	0.56	0	0.66	-	0.64	0.98	
Lights	0	0	2262	36	-	2298	0	0	0	0	-	0	0	46	1157	0	-	1203	0	26	0	37	-	63	3564	
% Lights	-	-	98.1%	97.3%	-	98.1%	-	-	-	-	-	-	-	100.0%	95.6%	-	-	95.8%	-	96.3%	-	100.0%	-	98.4%	97.3%	
Bus	0	0	10	0	-	10	0	0	0	0	-	0	0	0	5	0	-	5	0	0	0	0	-	0	15	
% Buses	-	-	0.4%	0.0%	-	0.4%	-	-	-	-	-	-	-	0.0%	0.4%	-	-	0.4%	-	0.0%	-	0.0%	-	0.0%	0.4%	
Trucks	0	0	38	1	-	39	0	0	0	0	-	0	0	0	48	0	-	48	0	1	0	0	-	1	88	
% Trucks	-	-	1.6%	2.7%	-	1.7%	-	-	-	-	-	-	-	0.0%	4.0%	-	-	3.8%	-	3.7%	-	0.0%	-	1.6%	2.4%	
Bicycles	-	-	-	-	2	2	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	6	6	8	
Pedestrians	-	-	-	-	2	2	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	6	6	8	



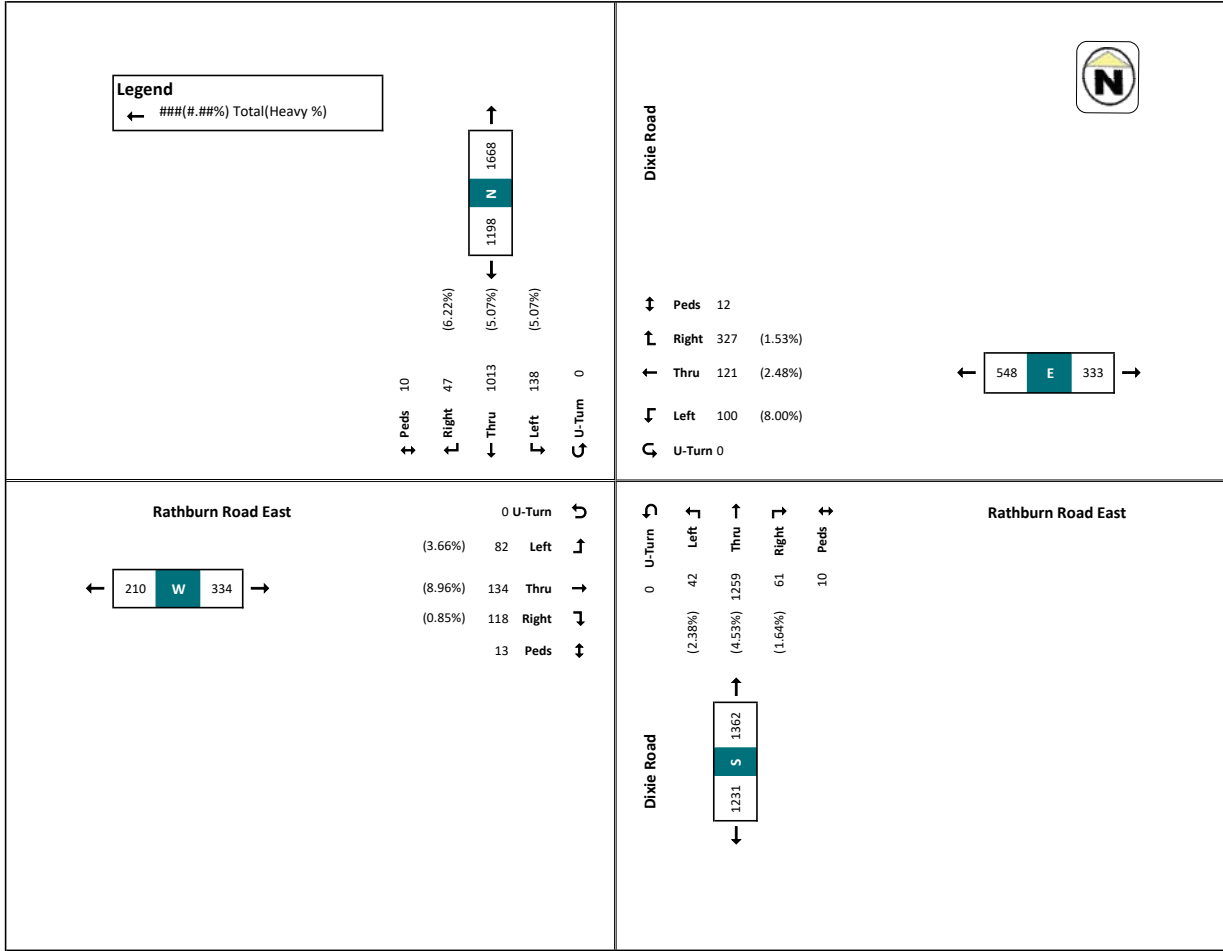
Turning Movement Count - Dixie Road & Rathburn Road East

Start Time	Dixie Road Southbound					Rathburn Road East Westbound					Dixie Road Northbound					Rathburn Road East Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total	
7:00	0	23	225	8	1	256	0	8	7	58	2	73	0	5	203	14	1	222	0	4	9	21	2	34	585	
7:15	0	19	240	7	4	266	0	20	9	49	0	78	0	7	201	11	4	219	0	17	7	20	7	44	607	
7:30	0	16	261	4	4	281	0	16	24	72	2	112	0	15	343	8	0	366	0	13	19	35	3	67	826	
7:45	0	26	299	5	3	330	0	25	31	94	3	150	0	12	345	14	4	371	0	23	28	31	4	82	933	
Hourly Total	0	84	1025	24	12	1133	0	69	71	273	7	413	0	39	1092	47	9	1178	0	57	63	107	16	227	2951	
8:00	0	42	246	15	4	303	0	39	24	83	2	146	0	12	286	18	3	316	0	23	38	24	3	85	850	
8:15	0	39	244	13	1	296	0	16	18	69	5	103	0	12	328	15	1	355	0	10	31	31	1	72	826	
8:30	0	31	224	14	2	269	0	20	48	81	2	149	0	6	300	14	2	320	0	26	37	32	5	95	833	
8:45	0	38	255	9	0	302	0	19	33	74	3	126	0	11	305	17	3	333	0	19	67	45	1	131	892	
Hourly Total	0	150	969	51	7	1170	0	94	123	307	12	524	0	43	1219	64	9	1324	0	78	173	132	10	383	3401	
9:00	0	39	234	11	1	284	0	15	26	69	4	110	0	25	333	19	1	377	0	12	34	28	5	74	845	
9:15	0	39	246	11	4	296	0	20	26	59	1	105	0	10	182	23	5	215	0	6	27	27	8	60	676	
9:30	0	34	205	9	4	248	0	23	27	44	0	94	0	11	204	14	3	229	0	6	27	27	5	60	631	
9:45	0	41	265	5	1	311	0	12	29	53	6	94	0	18	205	28	8	251	0	7	26	34	3	67	723	
Hourly Total	0	153	950	36	10	1139	0	70	108	225	11	403	0	64	924	84	17	1072	0	31	114	116	21	261	2875	
* Break *																										
16:00	0	66	383	23	5	472	0	12	65	55	10	132	0	31	268	33	5	332	0	2	48	39	5	89	1025	
16:15	0	65	461	20	4	546	0	17	45	66	11	129	0	43	299	33	6	345	0	5	43	28	7	76	1095	
16:30	0	70	441	32	1	543	0	39	69	39	9	147	0	57	252	21	8	330	0	13	58	38	3	109	1129	
16:45	0	87	494	31	11	612	0	21	59	67	11	147	0	38	225	32	16	295	0	10	49	37	12	96	1150	
Hourly Total	0	288	1779	106	21	2173	0	89	238	227	41	554	0	169	1014	119	35	1302	0	30	198	142	27	370	4399	
17:00	0	63	478	44	6	585	0	23	51	62	14	136	0	44	258	33	6	335	0	8	47	33	5	88	1144	
17:15	0	97	420	49	8	566	0	34	84	61	4	181	0	52	224	38	10	314	0	11	63	33	7	107	1168	
17:30	0	83	449	59	0	591	0	37	50	61	11	148	0	42	264	43	10	349	0	11	43	39	7	93	1181	
17:45	0	75	435	22	0	532	0	31	56	70	5	157	0	46	241	28	10	315	0	14	38	43	16	95	1099	
Hourly Total	0	318	1782	174	14	2274	0	125	241	256	34	622	0	184	987	142	36	1313	0	44	191	148	35	383	4592	
18:00	0	58	371	9	5	438	0	23	46	62	5	131	0	42	238	47	10	327	0	9	38	44	5	91	987	
18:15	0	64	397	11	4	472	0	21	36	61	7	118	0	34	224	30	8	298	0	6	35	41	11	82	970	
18:30	0	53	267	12	5	332	0	31	42	60	4	133	0	46	216	33	11	295	0	12	34	41	8	87	847	
18:45	0	53	278	10	3	341	0	18	37	56	7	111	0	41	200	37	5	278	0	7	32	28	3	67	797	
Hourly Total	0	228	1313	42	17	1583	0	93	161	239	23	493	0	163	888	147	34	1198	0	34	139	154	27	327	3601	
Grand Total	0	1296	8288	447	86	10031	0	575	998	1624	134	3197	0	689	6533	645	151	7867	0	267	931	860	144	2078	23173	
Approach %	0.0%	12.0%	82.6%	4.5%	-	-	0.0%	18.0%	31.2%	16.8%	-	-	0.0%	8.8%	83.0%	8.2%	-	-	0.0%	13.8%	44.8%	41.4%	-	-	-	
Total %	0.0%	5.6%	35.8%	1.9%	-	43.3%	0.0%	2.5%	4.3%	7.0%	-	13.8%	0.0%	3.0%	28.2%	2.8%	-	33.9%	0.0%	1.2%	4.0%	3.7%	-	9.0%	-	
Lights	-	1263	7945	436	-	9644	-	562	960	1597	-	3119	-	687	6215	635	-	7537	-	284	899	849	-	2032	22332	
% Lights	-	97.5%	95.9%	97.5%	-	96.1%	-	97.7%	96.2%	98.3%	-	97.6%	-	99.7%	95.1%	98.4%	-	95.8%	-	99.0%	96.6%	98.7%	-	97.8%	96.4%	
Buses	-	0	10	53	3	66	-	7	27	7	-	41	-	2	53	1	-	56	-	0	25	3	-	28	191	
% Buses	-	0.8%	0.6%	0.7%	-	0.7%	-	1.2%	2.7%	0.4%	-	1.3%	-	0.3%	0.8%	0.2%	-	0.7%	-	0.0%	2.7%	0.3%	-	1.3%	0.8%	
Trucks	-	23	290	8	-	321	-	6	11	20	-	37	-	0	265	9	-	274	-	3	7	8	-	18	650	
% Trucks	-	1.8%	3.5%	-	-	3.2%	-	1.0%	1.1%	1.2%	-	1.2%	-	0.0%	4.1%	1.4%	-	3.5%	-	1.0%	0.8%	0.9%	-	0.9%	2.8%	
Bicycles	-	-	-	-	6	6	-	-	-	-	-	12	-	-	-	-	-	2	-	-	-	-	-	13	13	33
Pedestrians	-	-	-	-	86	86	-	-	-	-	-	134	-	-	-	-	-	151	-	-	-	-	-	144	-	515



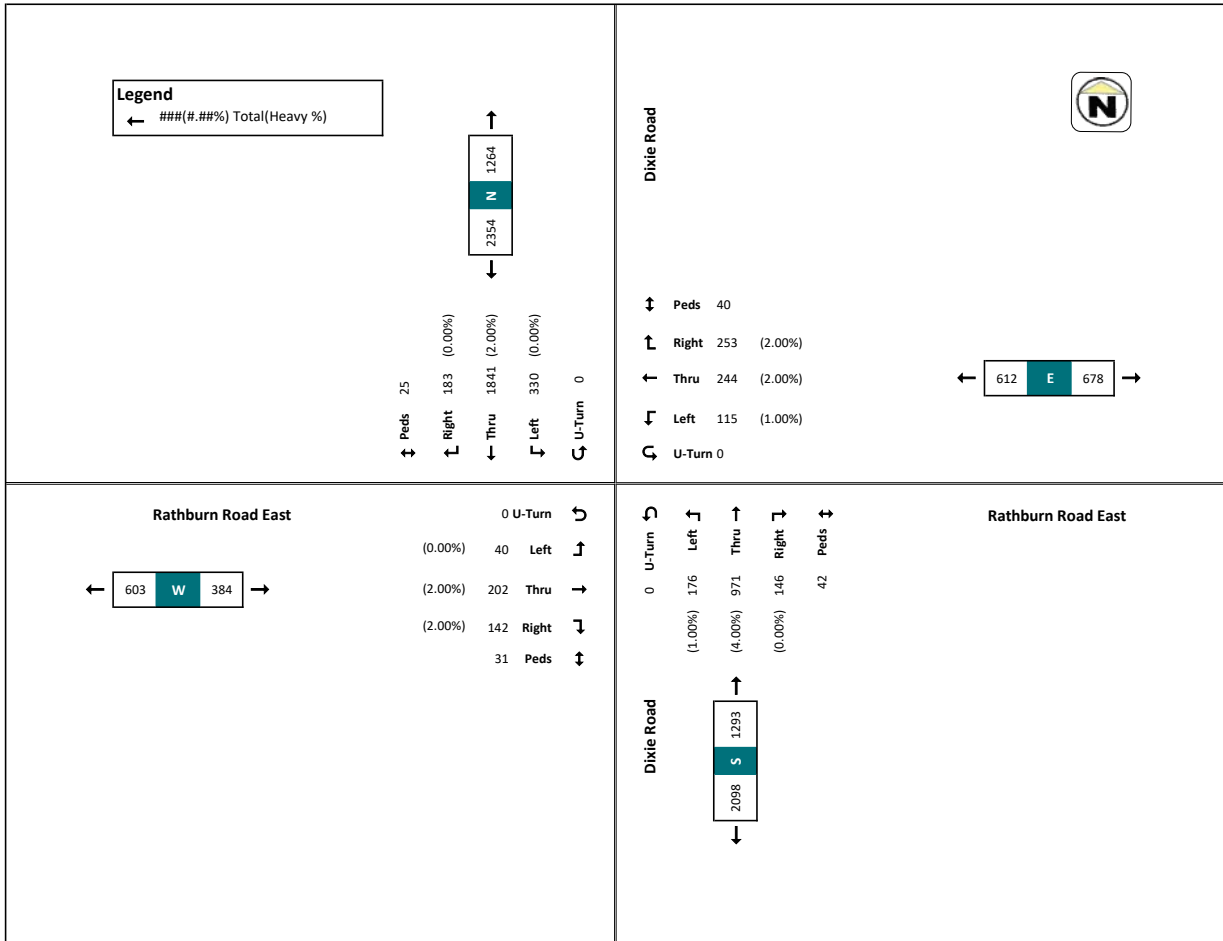
AM Peak Hour - Dixie Road & Rathburn Road East

Start Time	Dixie Road Southbound					Rathburn Road East Westbound					Dixie Road Northbound					Rathburn Road East Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
7:45	0	26	299	5	3	330	0	25	31	94	3	150	0	12	345	14	4	371	0	23	28	31	4	82	933
8:00	0	42	246	15	4	303	0	39	24	83	2	146	0	12	286	18	3	316	0	23	38	24	3	85	850
8:15	0	39	244	13	1	296	0	16	18	69	5	103	0	12	328	15	1	355	0	10	31	31	1	72	826
8:30	0	31	224	14	2	269	0	20	48	81	2	149	0	6	300	14	2	320	0	26	37	32	5	95	833
Hourly Total	0	138	1013	47	10	1198	0	100	121	327	12	548	0	42	1259	61	10	1362	0	82	124	116	13	334	3442
Approach %	0.0%	11.5%	84.6%	3.9%	-	34.8%	0.0%	18.2%	22.1%	59.7%	-	15.9%	0.0%	3.1%	92.4%	4.5%	-	39.6%	0.0%	24.6%	40.1%	35.3%	-	-	-
Total %	0.0%	4.0%	29.4%	1.4%	-	34.8%	0.0%	2.9%	3.5%	9.5%	-	15.9%	0.0%	1.2%	36.6%	1.8%	-	39.6%	0.0%	2.4%	3.9%	3.4%	-	9.7%	-
PHF	0	0.82	0.85	0.78	-	0.91	0	0.64	0.63	0.87	-	0.91	0	0.88	0.91	0.85	-	0.92	0	0.79	0.88	0.92	-	0.88	0.92
Lights	0	131	950	46	-	1127	0	92	118	322	-	532	0	41	1202	60	-	1303	0	79	122	117	-	318	3280
% Lights	94.9%	93.8%	97.9%	97.9%	-	94.1%	92.0%	97.5%	98.5%	-	97.1%	-	97.6%	97.6%	95.5%	98.4%	-	95.7%	-	96.3%	91.0%	99.2%	-	95.2%	95.3%
% Buses	-	3	12	1	-	16	-	7	3	1	-	11	-	7	0	0	-	8	-	0	10	1	-	11	46
% Trucks	-	2.2%	1.2%	2.1%	-	1.3%	-	7.0%	2.5%	0.3%	-	2.0%	-	2.4%	0.6%	0.0%	-	0.6%	-	0.0%	7.5%	0.8%	-	3.3%	1.3%
% Pedestrians	-	4	51	0	-	55	-	1	0	4	-	5	-	0	50	1	-	51	-	3	2	0	-	5	116
% Bicycles	-	2.9%	5.0%	0.0%	-	4.6%	-	1.0%	0.0%	1.2%	-	0.9%	-	0.0%	4.0%	1.6%	-	3.7%	-	3.7%	1.5%	0.0%	-	1.5%	3.4%
Pedestrians	-	-	-	-	10	-	-	-	-	12	-	-	-	-	-	-	-	0	-	-	-	-	-	13	35



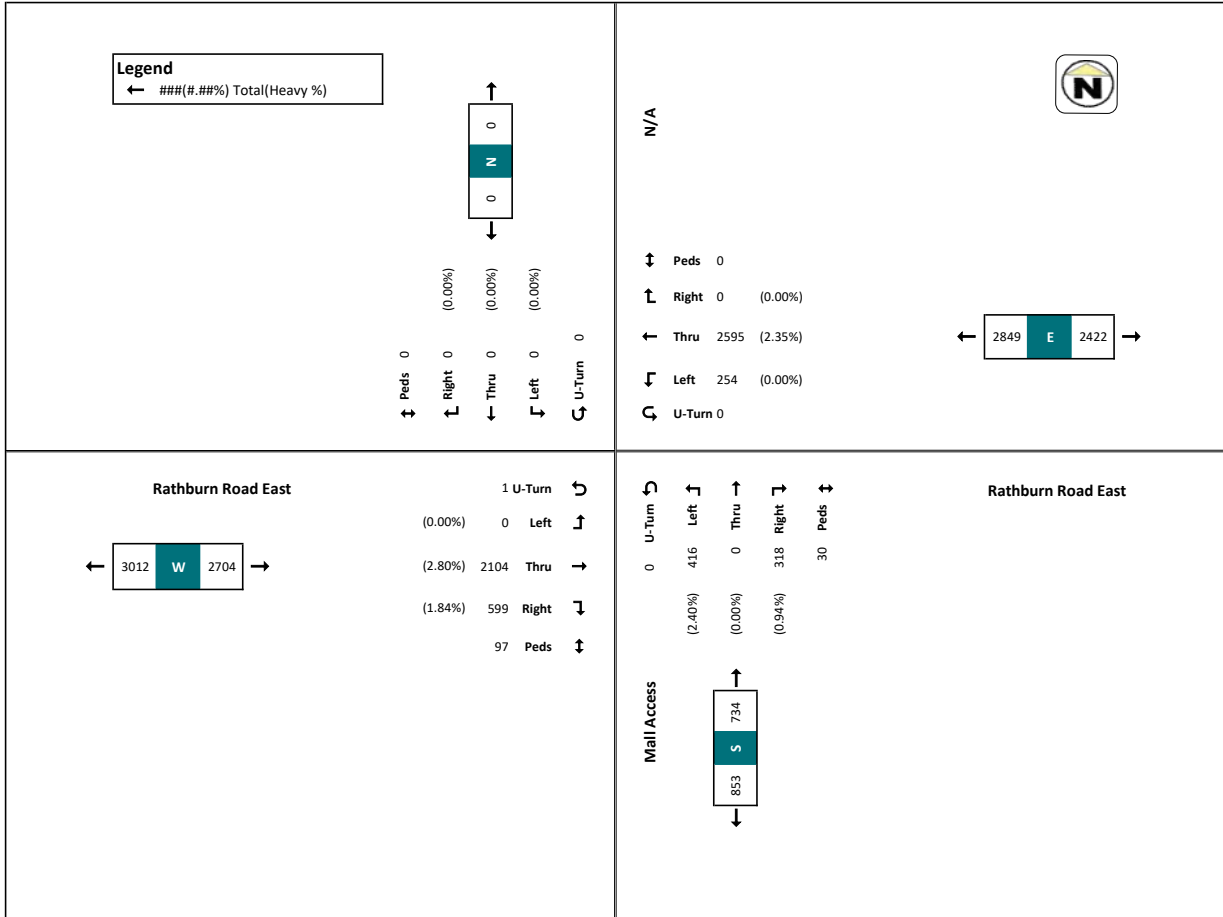
PM Peak Hour - Dixie Road & Rathburn Road East

Start Time	Dixie Road Southbound					Rathburn Road East Westbound					Dixie Road Northbound					Rathburn Road East Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
16:45	0	87	494	31	11	612	0	21	59	67	11	147	0	38	225	32	16	295	0	10	49	37	12	96	1150
17:00	0	63	478	44	8	585	0	23	51	62	14	136	0	44	258	33	6	335	0	8	47	33	5	88	1144
17:15	0	97	420	49	8	566	0	34	84	63	4	181	0	52	224	38	10	314	0	11	63	33	7	107	1168
17:30	0	83	449	59	0	591	0	37	50	61	11	148	0	42	264	43	10	349	0	11	43	39	7	93	1181
Hourly Total	0	330	1841	183	25	2354	0	115	244	253	40	612	0	176	971	146	42	1293	0	40	202	142	31	384	4643
Approach %	0.0%	14.0%	78.2%	7.8%	-	-	0.0%	18.8%	39.9%	41.3%	-	-	0.0%	13.6%	75.1%	11.3%	-	-	0.0%	10.4%	52.6%	37.0%	-	-	-
Total %	0.0%	7.1%	39.7%	3.9%	-	50.7%	0.0%	3.3%	7.1%	5.4%	-	13.2%	0.0%	5.1%	28.2%	4.2%	-	27.8%	0.0%	1.2%	5.9%	4.1%	-	8.3%	-
PHF	0	0.85	0.93	0.78	-	0.96	0	0.78	0.73	0.94	-	0.85	0	0.85	0.92	0.85	-	0.93	0	0.91	0.8	0.91	-	0.9	0.98
Lights	0	330	1795	183	-	2308	0	114	239	249	-	602	0	175	930	146	-	1251	0	40	197	139	-	376	4537
% Lights	-	100.0%	97.5%	100.0%	-	98.0%	-	99.1%	98.0%	98.4%	-	98.4%	-	99.4%	95.8%	100.0%	-	96.8%	-	100.0%	97.5%	97.9%	-	97.9%	97.7%
% Buses	-	0	12	0	-	12	-	0	2	0	-	2	-	1	5	0	-	6	-	0	3	0	-	3	23
% Trucks	-	0	39	0	-	39	-	1	3	4	-	8	-	0	36	0	-	36	-	0	2	3	-	5	88
% Pedestrians	-	0.0%	2.1%	0.0%	-	1.7%	-	0.9%	1.2%	1.6%	-	1.3%	-	0.0%	3.7%	0.0%	-	2.8%	-	0.0%	1.0%	2.1%	-	1.3%	1.9%



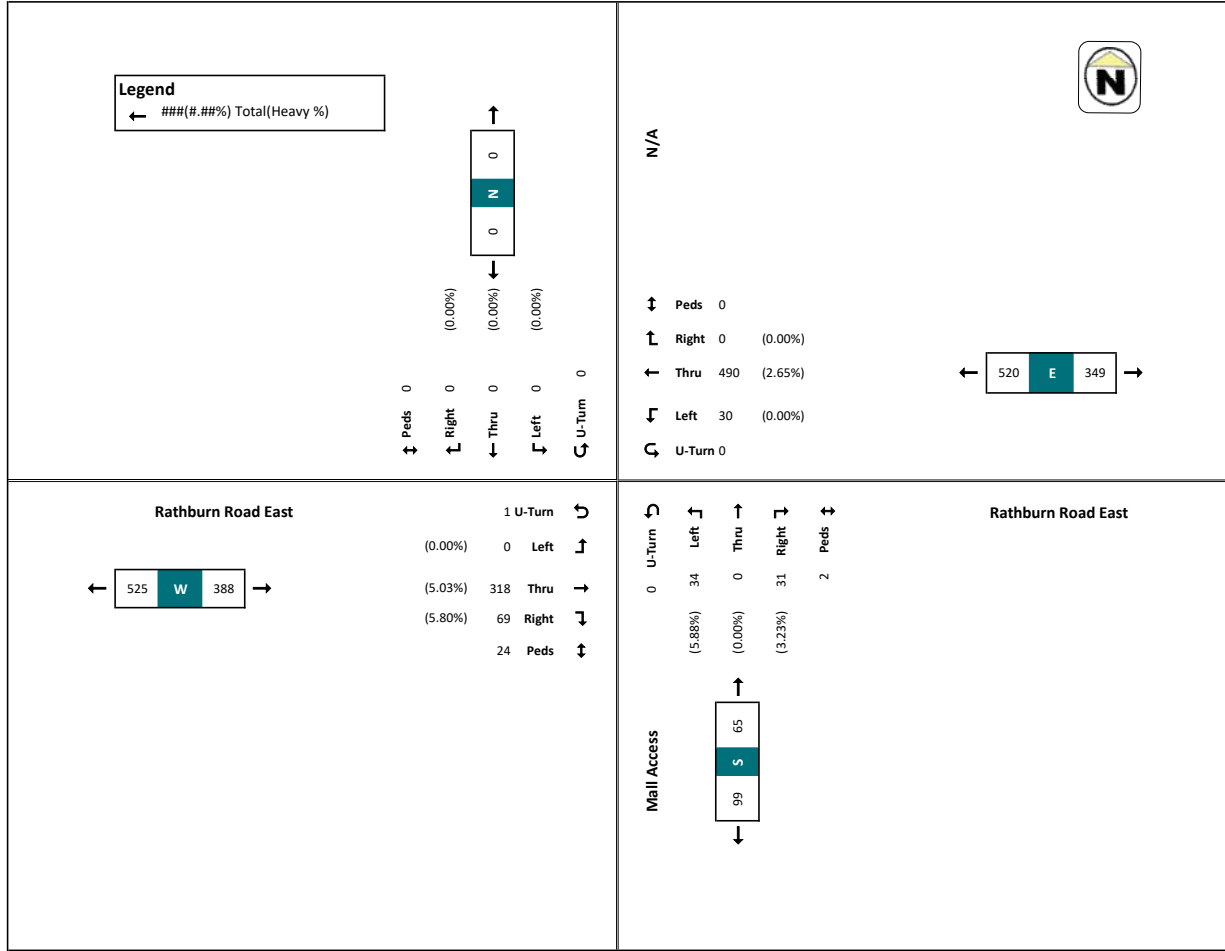
Turning Movement Count - Mall Access & Rathburn Road East

Start Time	N/A Southbound					Rathburn Road East Westbound					Mall Access Northbound					Rathburn Road East Eastbound					Grand Total									
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total					
7:00	0	0	0	0	0	0	0	5	67	0	0	72	0	6	0	4	2	10	0	0	0	0	0	0	0	43	3	1	46	128
7:15	0	0	0	0	0	0	0	2	76	0	0	78	0	2	0	1	2	5	0	0	31	6	4	37	117					
7:30	0	0	0	0	0	0	0	2	109	0	0	111	0	3	0	3	2	6	0	0	34	9	4	43	160					
7:45	0	0	0	0	0	0	0	6	140	0	0	146	0	10	0	3	0	13	0	0	60	8	0	68	227					
Hourly Total	0	0	0	0	0	0	0	15	392	0	0	407	0	21	0	10	5	31	0	0	168	26	9	194	632					
8:00	0	0	0	0	0	0	0	8	141	0	0	149	0	5	0	4	1	9	0	0	93	5	8	98	256					
8:15	0	0	0	0	0	0	0	5	95	0	0	100	0	8	0	7	1	15	0	0	70	15	2	85	200					
8:30	0	0	0	0	0	0	0	5	139	0	0	144	0	10	0	10	0	20	0	0	69	13	10	82	246					
8:45	0	0	0	0	0	0	0	12	115	0	0	127	0	11	0	10	0	21	1	0	86	26	4	113	271					
Hourly Total	0	0	0	0	0	0	0	30	499	0	0	500	0	34	0	31	2	65	1	0	318	69	24	388	973					
9:00	0	0	0	0	0	0	0	7	97	0	0	104	0	13	0	9	1	22	0	0	66	26	2	92	218					
9:15	0	0	0	0	0	0	0	13	89	0	0	102	0	17	0	11	0	28	0	0	69	20	2	89	219					
9:30	0	0	0	0	0	0	0	12	85	0	0	97	0	9	0	18	1	27	0	0	56	19	3	75	199					
9:45	0	0	0	0	0	0	0	8	79	0	0	87	0	15	0	8	3	23	0	0	61	34	9	105	205					
Hourly Total	0	0	0	0	0	0	0	40	350	0	0	390	0	54	0	46	5	100	0	0	252	99	8	351	841					
* Break *																														
16:00	0	0	0	0	0	0	0	16	110	0	0	126	0	22	0	20	1	42	0	0	106	40	6	146	314					
16:15	0	0	0	0	0	0	0	13	96	0	0	109	0	32	0	24	1	56	0	0	106	36	4	142	307					
16:30	0	0	0	0	0	0	0	8	127	0	0	135	0	20	0	15	1	35	0	0	117	32	6	149	319					
16:45	0	0	0	0	0	0	0	13	125	0	0	139	0	21	0	24	3	45	0	0	133	35	5	168	352					
Hourly Total	0	0	0	0	0	0	0	50	459	0	0	509	0	95	0	83	6	178	0	0	462	143	21	605	1292					
17:00	0	0	0	0	0	0	0	15	106	0	0	121	0	30	0	17	3	47	0	0	119	24	3	143	311					
17:15	0	0	0	0	0	0	0	14	156	0	0	170	0	25	0	15	0	40	0	0	152	46	2	198	408					
17:30	0	0	0	0	0	0	0	18	118	0	0	136	0	39	0	24	0	54	0	0	136	35	3	171	361					
17:45	0	0	0	0	0	0	0	9	124	0	0	133	0	34	0	17	4	51	0	0	103	37	4	140	324					
Hourly Total	0	0	0	0	0	0	0	56	504	0	0	560	0	119	0	73	7	192	0	0	510	142	12	652	1404					
18:00	0	0	0	0	0	0	0	15	106	0	0	121	0	25	0	18	0	43	0	0	109	34	7	143	307					
18:15	0	0	0	0	0	0	0	20	101	0	0	121	0	17	0	18	0	35	0	0	103	26	3	129	285					
18:30	0	0	0	0	0	0	0	12	102	0	0	114	0	31	0	19	1	50	0	0	89	31	4	120	284					
18:45	0	0	0	0	0	0	0	16	91	0	0	107	0	20	0	20	4	40	0	0	93	29	9	122	269					
Hourly Total	0	0	0	0	0	0	0	63	400	0	0	463	0	93	0	75	5	168	0	0	394	120	23	514	1145					
Grand Total	0	0	0	0	0	0	0	254	2595	0	0	2849	0	416	0	318	30	734	0	0	2104	599	97	2704	6287					
Approach %	-	-	-	-	-	-	0.0%	8.9%	91.1%	0.0%	-	-	0.0%	56.7%	0.0%	43.3%	-	-	0.0%	0.0%	77.8%	22.2%	-	-	-					
Total %	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	4.0%	41.3%	0.0%	-	45.3%	0.0%	6.6%	0.0%	5.1%	-	11.7%	0.0%	0.0%	33.5%	9.5%	-	43.0%	-					
Lights	0	0	0	0	-	0	0	254	2534	0	-	2788	0	406	0	315	-	721	0	-	2045	588	-	2634	6143					
% Lights	-	-	-	-	-	-	-	100.0%	97.6%	-	-	97.9%	-	97.6%	-	99.1%	-	98.2%	100.0%	-	97.2%	98.2%	-	97.4%	97.7%					
Buses	-	0	0	0	-	0	-	0	38	0	-	38	-	0	0	1	-	1	-	0	33	2	-	35	74					
% Buses	-	-	-	-	-	-	-	0.0%	1.5%	-	-	1.3%	-	0.0%	-	0.3%	-	0.1%	-	-	1.6%	0.3%	-	1.3%	1.2%					
Trucks	-	0	0	0	-	0	-	0	23	0	-	23	-	10	0	2	-	12	-	0	26	9	-	35	70					
% Trucks	-	-	-	-	-	-	-	0.0%	0.9%	-	-	0.8%	-	2.4%	-	0.6%	-	1.6%	-	-	1.2%	1.5%	-	1.3%	1.1%					
Bicycles	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	3	3	-	-	-	-	0	0	3					
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	30	-	-	-	-	-	97	-	127					



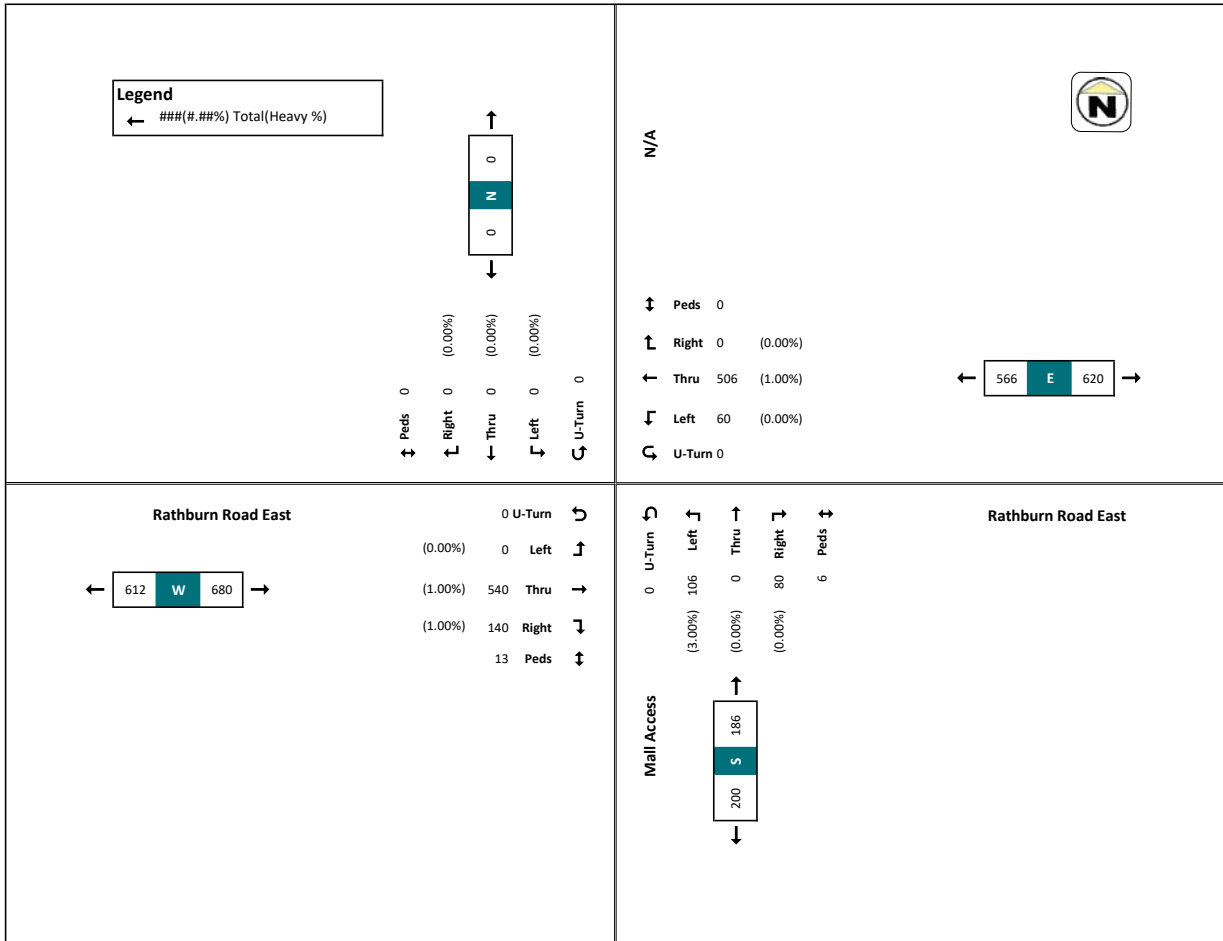
AM Peak Hour - Mall Access & Rathburn Road East

Start Time	N/A					Rathburn Road East Westbound					Mall Access Northbound					Rathburn Road East Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total	
8:00	0	0	0	0	0	0	0	8	141	0	0	149	0	5	0	4	1	9	0	0	93	5	8	98	256	
8:15	0	0	0	0	0	0	0	5	95	0	0	100	0	8	0	7	1	15	0	0	70	15	2	85	300	
8:30	0	0	0	0	0	0	0	5	139	0	0	144	0	10	0	20	0	20	0	0	69	13	10	82	246	
8:45	0	0	0	0	0	0	0	12	115	0	0	127	0	11	0	10	0	21	1	0	86	36	4	123	271	
Hourly Total	0	0	0	0	0	0	0	30	490	0	0	520	0	34	0	31	2	65	1	0	318	69	24	388	973	
Approach %	-	-	-	-	-	-	0.0%	5.8%	94.2%	0.0%	-	0.0%	0.0%	52.3%	0.0%	47.7%	-	0.3%	0.0%	82.0%	17.8%	-	-	39.9%	-	
Total %	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	3.1%	50.4%	0.0%	-	53.4%	0.0%	3.5%	0.0%	3.2%	-	6.7%	0.1%	0.0%	32.7%	7.1%	-	0.9%	0.9	
PHF	0	0	0	0	-	0	0	0.63	0.87	0	-	0.87	0	0.77	0	0.78	-	0.77	0	0.25	0	0.85	0.48	-	0.79	0.9
Lights	0	0	0	0	-	0	0	30	477	0	-	507	0	32	0	30	-	62	1	0	302	65	-	368	937	
% Lights	-	-	-	-	-	-	-	100.0%	97.3%	0	-	97.5%	-	94.1%	-	96.8%	-	95.4%	-	95.0%	94.2%	-	-	94.8%	96.3%	
% Buses	-	-	-	-	-	-	-	0	10	0	-	10	-	0	0	0	-	0	-	0	9	2	-	11	21	
% Trucks	-	-	-	-	-	-	-	0.0%	2.0%	-	-	1.9%	-	0.0%	-	0.0%	-	0.0%	-	-	2.8%	2.9%	-	2.8%	2.2%	
Trucks	-	0	0	0	-	0	-	0	3	0	-	3	-	2	0	1	-	3	-	0	7	2	-	9	15	
% Pedestrians	-	-	-	-	0	0	-	0.0%	0.6%	-	-	0.6%	-	5.9%	-	3.2%	-	4.6%	-	-	2.2%	2.9%	-	2.3%	1.5%	
Bicycles	-	-	-	-	0	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	0	
Pedestrians	-	-	-	-	0	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	24	24	



PM Peak Hour - Mail Access & Rathburn Road East

Start Time	N/A Southbound					Rathburn Road East Westbound					Mail Access Northbound					Rathburn Road East Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
16:45	0	0	0	0	0	0	0	13	126	0	0	139	0	21	0	24	3	45	0	0	133	35	5	168	352
17:00	0	0	0	0	0	0	0	15	106	0	0	121	0	30	0	17	3	47	0	0	119	24	3	143	311
17:15	0	0	0	0	0	0	0	14	156	0	0	170	0	25	0	15	0	40	0	0	152	46	2	198	408
17:30	0	0	0	0	0	0	0	18	118	0	0	136	0	30	0	24	0	54	0	0	136	35	3	171	361
Hourly Total	0	0	0	0	0	0	0	60	506	0	0	566	0	106	0	80	6	186	0	0	540	140	13	680	1432
Approach %	-	-	-	-	-	-	0.0%	10.6%	89.4%	0.0%	-	0.0%	0.0%	57.0%	0.0%	43.0%	-	-	0.0%	0.0%	79.4%	20.6%	-	-	-
Total %	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	6.2%	52.0%	0.0%	-	39.5%	0.0%	10.9%	0.0%	8.2%	-	13.0%	0.0%	0.0%	55.5%	14.4%	-	-	47.5%
PHF	0	0	0	0	-	0	0	0.83	0.83	0	-	0.83	0	0.88	0	0.83	-	0.86	0	0	0.89	0.76	-	-	0.86
Lights	0	0	0	0	-	0	0	60	499	0	-	559	0	103	0	80	-	183	0	0	534	139	-	-	673
% Lights	-	-	-	-	-	-	-	100.0%	98.6%	-	-	98.8%	-	97.2%	-	100.0%	-	98.4%	-	-	98.9%	99.3%	-	-	99.0%
% Buses	-	0	0	0	-	0	-	0	2	0	-	2	-	0	0	0	-	0	-	0	3	0	-	-	3
% Trucks	-	0	0	0	-	0	-	0	5	0	-	5	-	3	0	0	-	3	-	0	3	0	-	-	4
% Pedestrians	-	-	-	-	0	0	-	0.0%	1.0%	-	-	0.9%	-	2.8%	-	1.6%	-	1.6%	-	-	1	1	-	-	2
Bicycles	-	-	-	-	0	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	-	1
U-Turns	-	-	-	-	0	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0



REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	July 24, 2025		Prepared Date	July 29, 2025
Database Rev	iNet		Completed By	WW
Timing Card / Field rev	-		Checked By	NM

Location Dixie Road at Hickory Drive

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s) (Green+Amber+All Red)		
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS
			1	Dixie Road - NBLT Prot Perm			7	0	0
2	Dixie Rd - SB	10	10	15	4	2	43	43	43
3	Not in use	-	-	-	-	-	-	-	-
4	Hickory Dr - WB	10	10	29	4	3.4	27	27	27
5	Not in use	-	-	-	-	-	-	-	-
6	Dixie Rd - NB	10	10	15	4	2	53	53	53
7	Not in use	-	-	-	-	-	-	-	-
8	Hickory Dr - EB	10	10	29	4	3.4	27	27	27

<p>System Control Yes</p> <p>Semi-Actuated Mode Yes</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #e1f5fe;"> <th>TIME (M-F)</th> <th>PEAK</th> <th>CYCLE LENGTH (s)</th> <th>OFFSET (s)</th> </tr> </thead> <tbody> <tr> <td>6:00-9:30</td> <td>AM</td> <td>80</td> <td>79</td> </tr> <tr> <td>9:30-15:00 19:30-0:00</td> <td>OFF</td> <td>80</td> <td>51</td> </tr> <tr style="background-color: #e1f5fe;"> <td>15:00-19:30</td> <td>PM</td> <td>80</td> <td>79</td> </tr> </tbody> </table>	TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)	6:00-9:30	AM	80	79	9:30-15:00 19:30-0:00	OFF	80	51	15:00-19:30	PM	80	79
TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)														
6:00-9:30	AM	80	79														
9:30-15:00 19:30-0:00	OFF	80	51														
15:00-19:30	PM	80	79														

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	July 24, 2025		Prepared Date	July 29, 2025
Database Rev	iNet		Completed By	WW
Timing Card / Field rev	-		Checked By	NM

Location **Dixie Road at Rathburn Road East**

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s) (Green+Amber+All Red)		
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS
			1	Dixie Road - NBLT Prot Perm			7	0	0
2	Dixie Rd - SB	10	10	31	4	3.3	99	102	91
3	Not in use	-	-	-	-	-	-	-	-
4	Rathburn Rd - WB	10	10	25	4	2.6	61	58	53
5	Dixie Rd - SBLT Prot Perm	7	0	0	3	0	13	0	19
6	Dixie Rd - NB	10	10	31	4	3.3	86	102	88
7	Not in use	-	-	-	-	-	-	-	-
8	Rathbrun Rd - EB	10	10	25	4	2.6	61	58	53

<p>System Control Yes</p> <p>Semi-Actuated Mode Yes</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>TIME (M-F)</th> <th>PEAK</th> <th>CYCLE LENGTH (s)</th> <th>OFFSET (s)</th> </tr> </thead> <tbody> <tr style="background-color: #e1f5fe;"> <td>6:00-9:30</td> <td>AM</td> <td>160</td> <td>98</td> </tr> <tr> <td>19:30-0:00</td> <td>OFF</td> <td>160</td> <td>26</td> </tr> <tr style="background-color: #e1f5fe;"> <td>15:00-19:30</td> <td>PM</td> <td>160</td> <td>94</td> </tr> </tbody> </table>	TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)	6:00-9:30	AM	160	98	19:30-0:00	OFF	160	26	15:00-19:30	PM	160	94
TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)														
6:00-9:30	AM	160	98														
19:30-0:00	OFF	160	26														
15:00-19:30	PM	160	94														

Location	Rathburn Road E @ Bough Beeches Boulevard
Phase 1	
Phase 2	Rathburn Road E - EB
Phase 3	
Phase 4	Bough Beeches Boulevard - NB
Phase 5	
Phase 6	Rathburn Road E - WB
Phase 7	
Phase 8	Bough Beeches Boulevard - SB

Insight		RATHBURN ROAD E @ Bough Beeches Boulevard							
Phase - Parameter 1-16	Units	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Phase Descriptor*	String	"E8"	"E8"	"N8"	"N8"	"N8"	"N8"	"N8"	"E8"
Walk	Sec	0	10	0	10	0	10	0	10
Red Clear	Sec	0	13	0	19	0	13	0	19
Min Green	Sec	0	3.0	0	10	0	10	0	10
Passage	Sec	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0
Maximum 1	Sec	0	13	0	30	0	13	0	30
Maximum 2	Sec	0	13	0	30	0	13	0	30
Yellow Change	Sec	3.0	3.5	3.0	3.0	3.0	3.5	3.0	3.0
Red Clearance	Sec	0.0	3.0	0.0	5.0	0.0	3.0	0.0	5.0
Red Revert	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	Sec	0	0	0	0	0	0	0	0
Time Before Reduction	Sec	0	0	0	0	0	0	0	0
Cars Before Reduction	Veh	0	0	0	0	0	0	0	0
Time To Reduce	Sec	0	0	0	0	0	0	0	0
Reduce By	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dynamic Max Limit	Sec	0	0	0	0	0	0	0	0
Dynamic Max Step	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
[P2] Start Up	Enum	other	redClear	other	phaseNoOn	other	redClear	other	phaseNoOn
[P2] Options	Bit		0:Enabled Phase 1:Automatic Flash Entry Phase 2:Automatic Flash Exit Phase 3:NonActuated 1 7:Max Vehicle Recall 8:Prog. Recall 10:Dual Entry Phase 13:Actuated Rest In Walk		0:Enabled Phase 5:Non Lock Detector Memory 10:Dual Entry Phase		0:Enabled Phase 1:Automatic Flash Entry Phase 2:Automatic Flash Exit Phase 3:NonActuated 1 7:Max Vehicle Recall 8:Prog. Recall 10:Dual Entry Phase 13:Actuated Rest In Walk		0:Enabled Phase 5:Non Lock Detector Memory 10:Dual Entry Phase
[P2] Ring	Ring	0	1	0	1	0	2	0	2
[P2] Concurrency	Phase ()	0	(6,13,9,15,11)	0	(8)	0	(2,13,9,15,11)	0	(4)
Phase - Parameter 1-16	Units	Phase 9	Phase 10	Phase 11	Phase 12	Phase 13	Phase 14	Phase 15	Phase 16
Phase Descriptor*	String	"P12 - Bike CLAP"	"P14 - Bike CLAP"	"P16 - Bike CLAP"	"P18 - Bike CLAP"	"P12 - Bike COM1"	"P14 - Bike COM1"	"P16 - Bike COM1"	"P18 - Bike COM1"
Walk	Sec	0	0	0	0	0	0	0	0
Red Clear	Sec	0	0	0	0	0	0	0	0
Min Green	Sec	5	0	5	0	1	0	0	0
Passage	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum 1	Sec	13	0	13	0	0	0	0	0
Maximum 2	Sec	13	0	13	0	0	0	0	0
Yellow Change	Sec	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	Sec	4.0	0.0	4.0	0.0	1.0	0.0	0.0	0.0
Red Revert	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Initial	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	Sec	0	0	0	0	0	0	0	0
Time Before Reduction	Sec	0	0	0	0	0	0	0	0
Cars Before Reduction	Veh	0	0	0	0	0	0	0	0
Time To Reduce	Sec	0	0	0	0	0	0	0	0
Reduce By	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dynamic Max Limit	Sec	0	0	0	0	0	0	0	0
Dynamic Max Step	Sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
[P2] Start Up	Enum	phaseNoOn	other	phaseNoOn	other	phaseNoOn	other	phaseNoOn	other
[P2] Options	Bit	0:Enabled Phase 5:Non Lock Detector Memory		0:Enabled Phase 5:Non Lock Detector Memory		0:Enabled Phase 5:Non Lock Detector Memory		0:Enabled Phase 5:Non Lock Detector Memory	
[P2] Ring	Ring ()	3	0	4	0	3	0	4	0
[P2] Concurrency	Phase ()	(2,6,15,11)	0	(2,6,13,9)	0	(2,6,15,11)	0	(2,6,13,9)	0
Coordination - Pattern 1-32	Units	1	2	3	4	5	6	7	8
Cycle Time	Sec	80	0	80	0	0	0	0	0
Offset	Sec	27	0	35	0	0	0	0	0
Split	Split	1	0	3	0	0	0	0	0
Sequence	Sequence	1	0	1	0	0	0	0	0
Phase Parameter Table*	Number	1	1	1	1	1	1	1	1
Coord Phase Reference Point*	Enum	green	green	green	green	green	green	green	green
Coord Mode*	Enum	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive
Coordination - Splits	Units	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Split 1 - Mode	Enum	none	none	none	none	none	none	none	none
Split 1 - Time	Sec	0	37	0	43	0	37	0	43
Split 1 - Coord	Enum	False	True	False	False	False	True	False	False
Split 1 - Coord Phase Options*	Bit		0: Reference Point				0: Reference Point		
Split 2 - Mode	Enum	none	none	none	none	none	none	none	none
Split 2 - Time	Sec	0	0	0	0	0	0	0	0
Split 2 - Coord	Enum	False	True	False	False	False	True	False	False
Split 2 - Coord Phase Options*	Bit		0: Reference Point				0: Reference Point		
Split 3 - Mode	Enum	none	none	none	none	none	none	none	none
Split 3 - Time	Sec	0	37	0	43	0	37	0	43
Split 3 - Coord	Enum	False	True	False	False	False	True	False	False
Split 3 - Coord Phase Options*	Bit		0: Reference Point				0: Reference Point		
Time Base - Schedule 1-16	Units	1	2	3	4	5	6	7	8
Month	Bit	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	J-----	-F-----	-A-----	-M-----	-J-----
Day of Week	Bit	-MTWTF--	S-----	---S-	---T-	---M---	---F-	---M---	---T---
Day of Month	Bit	123456789012345678	123456789012345678	123456789012345678	1-----	-----7	-----8	-----9	-----1
Day Plan	Number	1	3	2	3	3	3	3	3
Time Base - Schedule 1-16	Units	9	10	11	12	13	14	15	16
Month	Bit	---A---	---S---	---O---	---D---	---D---	---O---	---S---	-----
Day of Week	Bit	-M-----	-M-----	---T---	---T---	---F-	---W---	---T---	SMTWTFS
Day of Month	Bit	-----1	-----3	-----5	-----6	-----6	-----4	-----0	-----
Day Plan	Number	3	3	3	3	3	3	3	0
Time Base - Day Plans	Units	Evt 1	Evt 2	Evt 3	Evt 4	Evt 5	Evt 6		
Plan 1 Hour	Hour	0	6	9	15	19	3		
Plan 1 Minute	Min	0	0	30	0	30	0		
Plan 1 Action	Number	8	1	8	3	8	7		
Plan 2 Hour	Hour	0	3	0	0	0	0		
Plan 2 Minute	Min	0	0	0	0	0	0		
Plan 2 Action	Number	8	7	0	0	0	0		
Plan 3 Hour	Hour	0	3	0	0	0	0		
Plan 3 Minute	Min	0	0	0	0	0	0		
Plan 3 Action	Number	8	7	0	0	0	0		
Time Base - Action 1-32	Units	1	2	3	4	5	6	7	8
Pattern	Enum	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Free	Free
Act. Functions	Enum								
Spec. Functions	Bit								



APPENDIX C

Growth Rates

Date: July 4, 2025
Requestor: Ashvika Mathivannan, LEA Consulting Ltd.
Request Type: Growth Rate Data Request
Location: Dixie Road at Rathburn Road East

Ashvika Mathivannan,

See below the forecasted compound annual growth rate values for Dixie Road at Rathburn Road East.

2011 to 2021	2021 to 2031	2031 to 2041
0.5%	0.5%	0.5%

Please note that these growth rates do not account for the accelerated population and employment targets set out by Bill 23 and are estimated using several sources including socioeconomic data and results from the Region of Peel's Travel Demand Forecasting Model. It is important to exercise professional judgment when using these values.

If you require further assistance, please contact me at transportationplanningdata@peelregion.ca

Regards,

Shuvangkor Shusmoy Roy

Transportation Data & Modelling Advisor,
Transportation Policy & Modelling
Transportation Division | Public Works | Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor



RE: 1315 Bough Beeches Boulevard, Mississauga: Corridor Growth Request

From Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Date Mon 2025-07-14 6:43 AM
To Ashvika Mathivannan <amathivannan@lea.ca>
Cc Keanna Tacay-Clarke <KTacay-Clarke@lea.ca>

External Sender

Good morning Ashvika,

Hope you had a great weekend!

Below are the recommended growth rates to be used for Rathburn Road, these rates are compounded annually from existing to 2030.

Rathburn Road

	Compounded Annual Growth from Existing to 2030	
	EB	WB
AM Peak	0.5%	0.5%
PM Peak	0.5%	0.5%

Regards,



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

[City of Mississauga](#) | Transportation and Works Department,
Infrastructure Planning and Engineering Services Division

From: Ashvika Mathivannan <amathivannan@lea.ca>
Sent: Monday, July 7, 2025 9:49 AM
To: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Cc: Keanna Tacay-Clarke <KTacay-Clarke@lea.ca>
Subject: [EXTERNAL] Re: 1315 Bough Beeches Boulevard, Mississauga: Corridor Growth Request

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hello Tyler.

I hope you had a great weekend. I just wanted to let you know that we have recieved the comments on the ToR.

Kind Regards,

Ashvika Mathivannan

Transportation Analyst Assistant

T: 905-470-0015 E: amathivannan@lea.ca W: www.LEA.ca

LEA Consulting Ltd.

From: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Sent: July 3, 2025 12:20 PM
To: Ashvika Mathivannan <amathivannan@lea.ca>
Subject: RE: 1315 Bough Beeches Boulevard, Mississauga: Corridor Growth Request

External Sender

Hi Ashvika,

Let me know when you have received comments back and I will provide the rates to you.

Regards,



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

[City of Mississauga](http://www.mississauga.ca) | Transportation and Works Department,
Infrastructure Planning and Engineering Services Division

From: Ashvika Mathivannan <amathivannan@lea.ca>
Sent: Thursday, July 3, 2025 11:49 AM
To: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Cc: Keanna Tacay-Clarke <KTacay-Clarke@lea.ca>
Subject: [EXTERNAL] Re: 1315 Bough Beeches Boulevard, Mississauga: Corridor Growth Request

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hello Tyler,

The growth rates for Rathburn Road will be fine. The Terms of Reference has been submitted, but comments have not been received yet. Thank you for the help!

Regards,

Ashvika Mathivannan

Transportation Analyst Assistant

T: 905-470-0015 E: amathivannan@lea.ca W: www.LEA.ca

LEA Consulting Ltd.

From: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Sent: July 3, 2025 8:26 AM
To: Ashvika Mathivannan <amathivannan@lea.ca>
Subject: RE: 1315 Bough Beeches Boulevard, Mississauga: Corridor Growth Request

External Sender

Good morning Ashvika,

Thank you for your email.

We typically provide growth rates for major collectors and arterials only. Accordingly, I can provide rates for Rathburn Road. Since Dixie Road is a regional road, you will need to contact the Region for the corresponding rates.

Could you please confirm whether a Terms of Reference (ToR) has been submitted and if comments have been received?

Best regards,



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

[City of Mississauga](http://CityofMississauga.ca) | Transportation and Works Department,
Infrastructure Planning and Engineering Services Division

From: Ashvika Mathivannan <amathivannan@lea.ca>
Sent: Wednesday, July 2, 2025 4:14 PM
To: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Cc: Keanna Tacay-Clarke <KTacay-Clarke@lea.ca>
Subject: [EXTERNAL] 1315 Bough Beeches Boulevard, Mississauga: Corridor Growth Request

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hello Tyler,

I hope you're doing well.

I'm working on a TIS at the municipal address of 1315 Bough Beeches Boulevard, Mississauga. I was looking to get the corridor growth along Bough Beeches Boulevard, Rathburn Road East, Dixie Road, and Hickory Drive.

The study intersections are as follows:

- Bough Beeches Boulevard & North Site Access
- Bough Beeches Boulevard & South Site Access/ Grazia Ct
- Bough Beeches Boulevard & Rathburn Road East
- Dixie Road & Rathburn Road East
- Dixie Road & Hickory Drive
- Rockwood Mall Entrance & Rathburn Road East

The background development that will be included in the study are:

- 3480 Havenwood Drive and 1485 Williamsport Drive

It will be a horizon of 2030.

Thank you,

Ashvika Mathivannan

Transportation Analyst Assistant

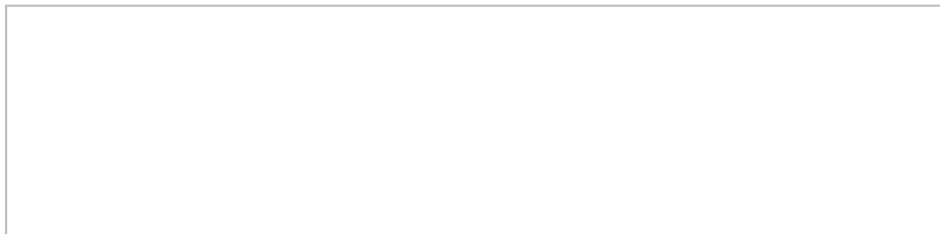
LEA Consulting Ltd.

40 University Avenue, Suite 503 | Toronto, ON | M5J 1T1

T: 905-470-0015 E: amathivannan@lea.ca W: www.LEA.ca



Certificates & Accolades



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APPENDIX D

Background Developments

4.0 SITE TRAFFIC

The development proposal is to construct an 8-storey residential building to provide an additional 10,577.4 m² of gross floor area (GFA). Trip rates and site generated trips were derived from the information contained in the *Trip Generation Manual, 9th Edition* published by the Institute of Transportation Engineers (ITE) for “Residential Condominium/Townhouse” (LUC 230). The trip generation summary is provided in **Appendix E** and shown in **Table 4.1**.

Table 4.1 – Site Traffic Trip Generation (Based on ITE)

ITE Land Use	Parameter	Morning Peak Hour			Afternoon Peak Hour		
		In	Out	Total	In	Out	Total
Residential Condominium/Townhouse (LUC 230) 159 units	Gross New Trips	13	62	75	88	43	131
	Trip Rate	0.08	0.39	0.47	0.55	0.27	0.82
	Non-Auto (25%)	3	16	19	22	11	33
Total	New Trips	10	46	56	66	32	98
	New Rate	0.06	0.29	0.35	0.42	0.20	0.62

Based on the information contained in the 2011 Transportation Tomorrow Survey (TTS), a non-auto modal split for the subject area is approximately 25%. As shown in **Table 4.1**, the proposed development is anticipated to generate 56 two-way trips (10 inbound and 46 outbound) during the AM peak hours and 98 two-way trips (66 inbound and 32 outbound) during the PM peak hours.

Furthermore, based on the existing site traffic trends, the Apartment Building is generating a trip rate of 0.34 trips per occupied unit during the AM peak hours and 0.49 trips per occupied unit during the PM peak hours. Therefore, the ITE rate applied to this land use is conservative. **Table 4.2** shows the existing site traffic and trip rates for the AM and PM peak hours.

Table 4.2 – Existing Site Traffic Trip Generation

Land Use	Parameter	Morning Peak Hour			Afternoon Peak Hour		
		In	Out	Total	In	Out	Total
Apartment Building 93 units	Total Trips	10	22	32	29	17	46
	Trip Rate	0.11	0.24	0.34	0.31	0.18	0.49

The assumptions for the trip distribution rates are based on the information extracted from the 2011 Transportation Tomorrow Survey (TTS) and existing traffic patterns and routes that drivers would likely take to access the subject site and engineering judgement based on ease of site access. As a result, site trip distribution is summarized for the inbound and outbound site traffic movements during the morning and afternoon peak hours in **Table 4.3** with the trip assignment illustrated in **Figure 4-2**.

Table 4.3 – Site Traffic Trip Distribution

Direction	Via	AM Peak Hour		PM Peak Hour	
		Inbound	Outbound	Inbound	Outbound
North	Dixie Road	20%	20%	20%	20%
South	Dixie Road	35%	35%	35%	35%
East	Burnhamthorpe Road East	15%	15%	15%	15%
West	Burnhamthorpe Road East	30%	30%	30%	30%
Total		100%	100%	100%	100%

Site Stats

Land Use	EXACT (June 18, 2025)			ROUNDED		
	Res Units	sq. m. GFA	sq. ft. GFA	Res Units	sq. m. GFA	sq. ft. GFA
	Proposed					
Residential (High-Rise)	-	-	-	0	-	-
Residential (Mid-Rise)	-	-	-	0	-	-
Residential (Low-Rise)	-	-	-	0	-	-
Retail	-	-	0	-	-	0
Office	-	922	9,924	-	-	10,000

Proposed Land Use

Office 10,000 ft²

ITE LUC 710 - General Office Building

Weekday, ___ Peak Hour of Adjacent Street Traffic: General Urban/Suburban

Average Rates

ITE Person Trips

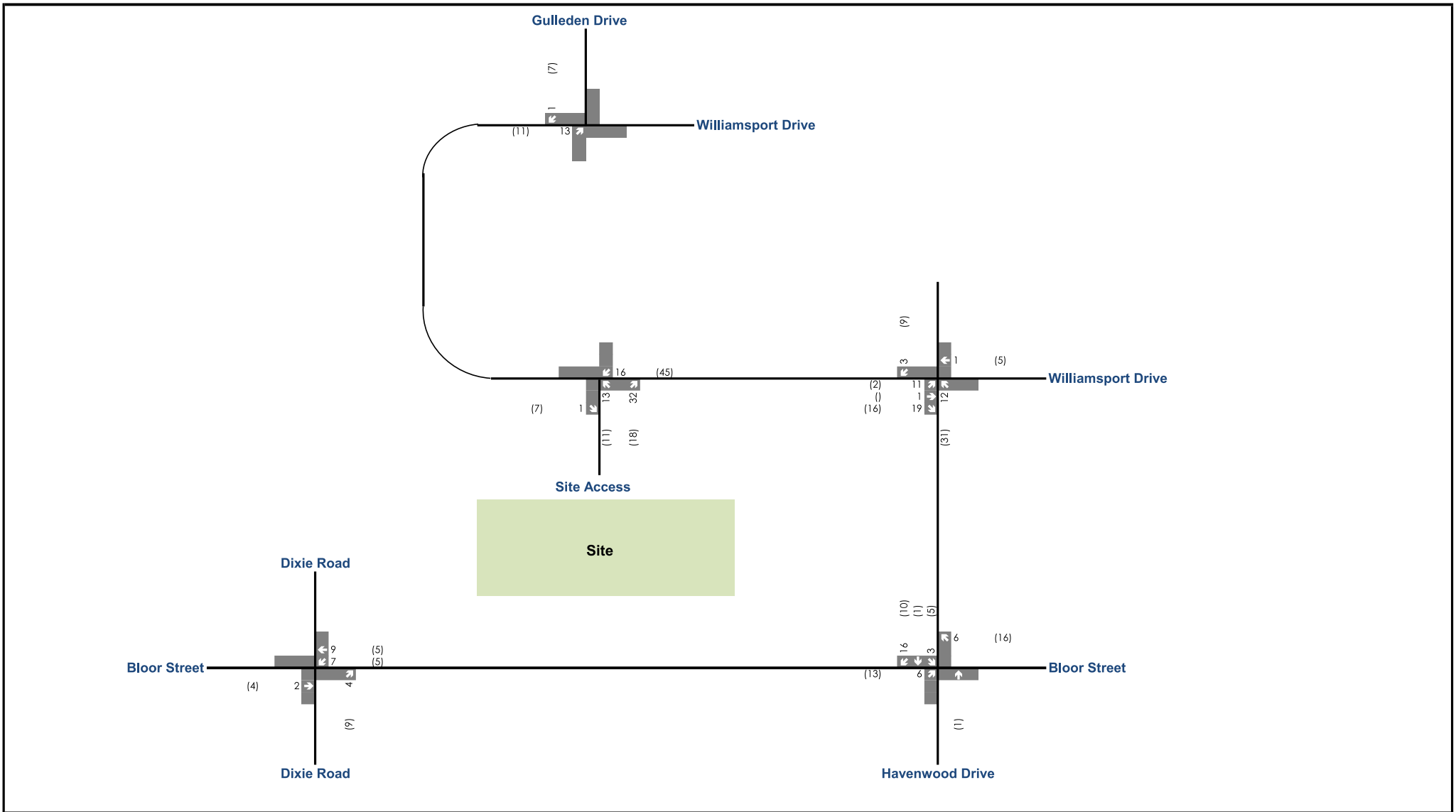
Local Mode Split

Link to Data: [Link](#)

Mode	Residential
Auto Driver	45%
Auto Passenger	16%
Taxi/Rideshare	0%
Transit	22%
Walk	14%
Cycle	3%
Total	100%
Non-auto mode share:	55%

ITE Trip Gen

ITE LUC 710 - General Office Building	In	Out	Total	In	Out	Total
ITE Distribution (Person)	87%	13%	100%	15%	85%	100%
ITE Trip Rates	1.26	0.19	1.45	0.23	1.28	1.50
ITE Person Trips	13	2	15	2	13	15
Auto Split	100%	100%		100%	100%	
Avg Veh Occupancy	1.00	1.00		1.00	1.00	
<i>Comparison to Person Trips</i>	13	2	15	2	13	15
Interaction Trip Reduction	0	0	0	0	0	0
Total External Person Trips	13	2	15	2	13	15
External Auto Driver Trips	6	1	7	1	6	7
Proposed Office - External Auto Trips	6	1	7	1	6	7
Passby Percentage	0%	0%		0%	0%	
Passby Trips	0	0	0	0	0	0
Average Passby Trips	0	0	0	0	0	0
Proposed Office - Primary External Auto Trips	6	1	7	1	6	7



Legend
 xx A.M. Peak Hour Traffic Volumes
 (xx) P.M. Peak Hour Traffic Volumes

1470 Williamsport Drive

Site Generated Trips



Figure 10
 Project No. 2719-7179
 Date: 02/04/2025
 Analyst: AD

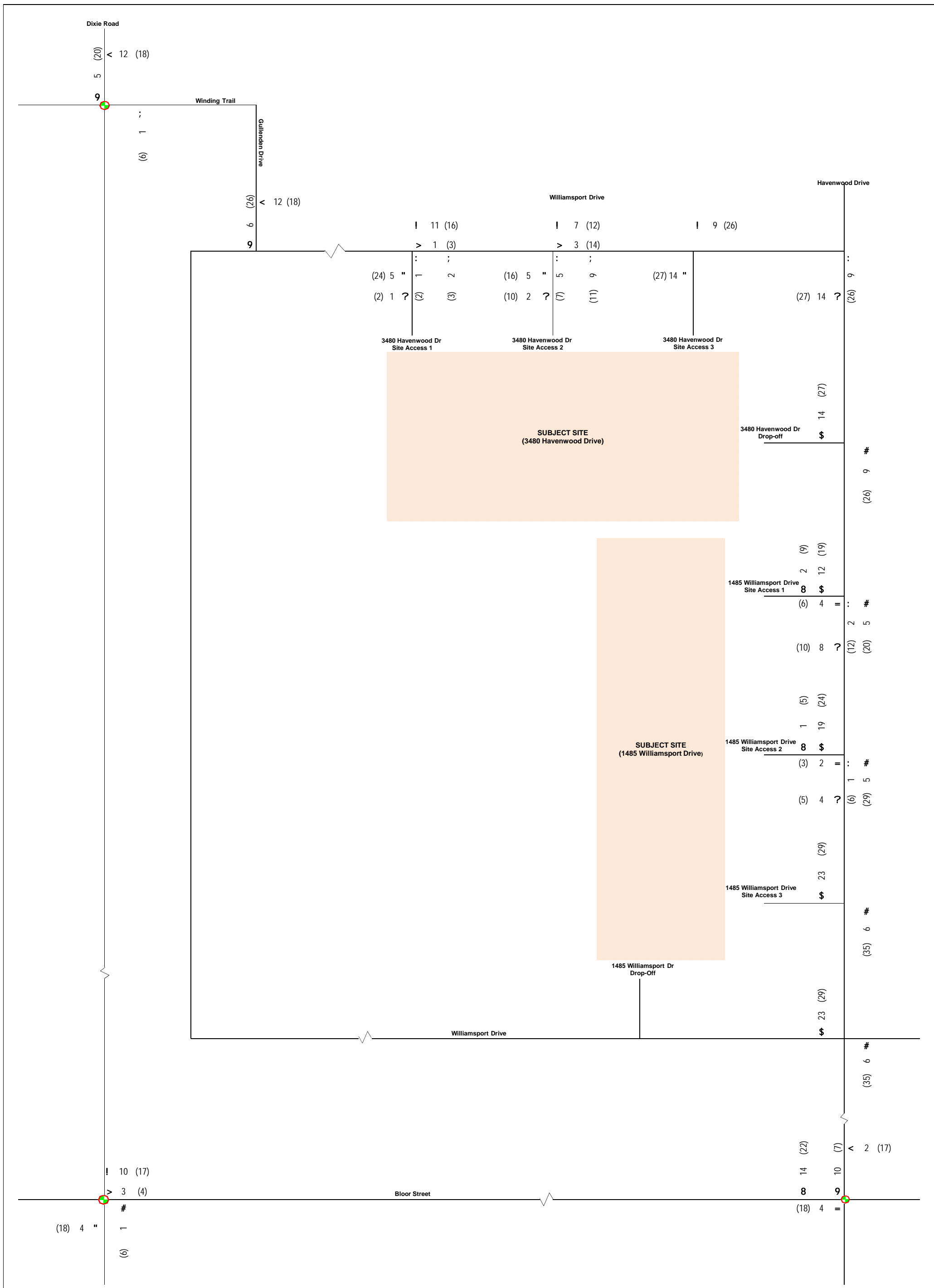


FIGURE 4-1
 FUTURE TOTAL (2023)
 LEA Consulting Ltd.



LEGEND

XX (XX)	WEEKDAY AM (PM) PEAK HOUR TRAFFIC VOLUMES
●	SIGNALIZED INTERSECTION





APPENDIX E

Existing TTS Data

Trip Gen Summary

Location: 1315 Bough Beeches Boulevard, Mississauga

Date: July 24th, 2025

Occupancy Parking	273
--------------------------	-----

Peak Hour	Auto			
	In	Out	In	Out
AM	33	58	0.12	0.21
PM	75	51	0.27	0.19

1 Bough Beeches Blvd & N Site Access	1	NBL	LEA Consulting 2025-06-19 (Thurs) AM Peak 8:00 AM - 9:00 AM PM Peak 5:15 PM - 6:15 PM	18	51
	2	NBT		52	115
	3	NBR		0	0
	4	SBL		1	0
	5	SBT		113	106
	6	SBR		0	5
	7	EBL		2	0
	8	EBT		0	0
	9	EBR		33	22
	10	WBL		0	0
	11	WBT		0	0
	12	WBR		0	0
2 Bough Beeches Blvd & S Site Access/ Garzia Ct	13	NBL	LEA Consulting 2025-06-19 (Thurs) AM Peak 8:00 AM - 9:00 AM PM Peak 5:15 PM - 6:15 PM	15	19
	14	NBT		68	163
	15	NBR		12	29
	16	SBL		0	4
	17	SBT		146	115
	18	SBR		0	0
	19	EBL		0	1
	20	EBT		0	0
	21	EBR		23	28
	22	WBL		28	19
	23	WBT		0	0
	24	WBR		2	6

Mode Split for Residential Trips

Thu Jun 19 2025 11:06:57 GMT-0400 (Eastern Daylight Time) - Run Time: 3295ms

Cross Tabulation Query Form - Trip - 2022

Row: Type of dwelling unit - dwell_type

Column: Primary travel mode of trip - mode_prime

Filters:

(2022 TTS zone of household - tts22_hhld In 4433, 4439, 4435, 4440, 4441, 4442, 4436, 4448

and

Trip purpose - trip_purp In 1, 2)

Trip 2022

Table:

	Transit excluding GO rail	Cycle	Auto driver	E-scooter	GO rail only	Joint GO rail and local transit	Auto passenger	School bus	Taxi passenger	Paid rideshare	Walk
House	906	106	3335	19	69	27	1120	477	0	0	670
Apartment	1619	461	4556	0	11	0	1668	462	76	0	1435
Townhouse	343	41	727	0	4	4	301	327	0	0	407
SUM	2868	608	8618	19	84	31	3089	1266	76	0	2512
										GRAND SUM	19171

Mode	%
Auto Driver	45%
Auto Passenger	16%
Paid Rideshare/Taxi	0%
Transit	22%
Pedestrian	14%
Cycling	3%
Total	100%

Thu Jun 26 2025 13:36:20 GMT-0400 (Eastern Daylight Time) - Run Time: 3656ms

Pull for Mississauga only
 Thu Jun 26 2025 13:43:54 GMT-0400 (Eastern Daylight Time) - Run Time: 5304ms

Cross Tabulation Query Form - Trip - 2022

Cross Tabulation Query Form - Trip - 2022

Row: Planning district of origin - pd_or
 Column: 2022 TTS zone of destination - tts22_dest

Row: 2022 TTS zone of origin - tts22_orig
 Column: 2022 TTS zone of destination - tts22_dest

Filters:
 (2022 TTS zone of destination - tts22_dest in 4433, 4439, 4435, 4440, 4441, 4442, 4443, 4436, 4448
 and
 Start time of trip - start_time in 1500-1900
 and
 2022 Trip purpose of destination - purp_dest2022 in 80
 and
 Primary travel mode of trip - mode_prime in D, M, P, T, U)

Filters:
 (2022 TTS zone of destination - tts22_dest in 4433, 4439, 4435, 4440, 4441, 4442, 4443, 4436, 4448
 and
 Start time of trip - start_time in 1500-1900
 and
 2022 Trip purpose of destination - purp_dest2022 in 80
 and
 Primary travel mode of trip - mode_prime in D, M, P, T, U
 and
 Planning district of origin - pd_orig in 36.)

Trip 2022
 Table:

Origin	Destination								Trips from Origin	Trip Distribution					Trip Assignment				Assignment
	4433	4435	4436	4439	4440	4441	4442	4448		Distribution	Direction From	From East	From West	From North	From South	Assignment	Assignment		
PD 1 of Toronto	0	0	45	0	0	0	12	31	88	1%	E	1%				Gardiner, QEW	NB Dixie, EB Rathburn, NB Bough Beeches		
PD 2 of Toronto	131	0	0	0	0	0	0	4	135	2%	E	1%				Gardiner, QEW	NB Dixie, EB Rathburn, NB Bough Beeches		
PD 3 of Toronto	0	29	0	0	0	4	0	0	33	0%	E	1%				Gardiner, QEW	NB Dixie, EB Rathburn, NB Bough Beeches		
PD 4 of Toronto	23	0	0	25	0	0	0	0	145	2%	E	2%				Gardiner, QEW	NB Dixie, EB Rathburn, NB Bough Beeches		
PD 7 of Toronto	51	25	42	24	0	0	0	0	142	2%	E	2%				Gardiner, QEW	NB Dixie, EB Rathburn, NB Bough Beeches		
PD 8 of Toronto	163	125	254	44	22	24	26	55	713	20%	E	0%				427	NB Dixie, EB Rathburn, NB Bough Beeches		
PD 9 of Toronto	31	0	0	0	0	0	0	43	74	1%	N			1%		427	NB Dixie, EB Rathburn, NB Bough Beeches		
PD 10 of Toronto	0	64	26	0	0	0	0	65	155	2%	E	2%				401, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
PD 11 of Toronto	21	0	0	37	0	0	0	8	29	0%	E	0%				401, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
PD 13 of Toronto	12	0	0	0	0	0	0	0	12	0%	E	0%				401, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
PD 14 of Toronto	9	0	0	0	0	0	0	0	9	0%	E	0%				401, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
PD 16 of Toronto	0	0	0	0	0	0	0	0	9	0%	E	0%				401, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
Pickering	0	9	0	0	0	0	0	0	9	0%	N					407, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
Richmond Hill	0	0	24	0	0	0	0	0	24	0%	N					407, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
Whitchurch-Stouffville	0	0	23	0	0	0	0	0	23	0%	N					404, 401, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
Markham	27	0	0	0	0	0	0	0	27	0%	N					407, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
Vaughan	47	23	30	0	0	0	0	0	100	1%	N		1%			404, 401, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
Caledon	0	11	14	0	30	0	0	0	55	1%	W					407, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
Brampton	23	0	6	0	0	0	0	19	57	1%	W					410	SB Dixie, EB Rathburn, NB Bough Beeches		
Oakville	0	26	52	0	0	0	0	35	113	2%	S		1%			QEW, 403	SB Dixie, EB Rathburn, NB Bough Beeches		
Waterloo	0	0	0	0	0	0	0	10	10	0%	W			2%		401, 403	SB Dixie, EB Rathburn, NB Bough Beeches		
Orangeville	44	0	0	0	0	0	0	0	44	0%	E			1%		410, 403	SB Dixie, EB Rathburn, NB Bough Beeches		
Peterborough	0	10	0	0	0	0	0	0	10	0%	E					407, 410, 403	SB Dixie, EB Rathburn, NB Bough Beeches		
External	0	0	64	0	0	0	0	0	64	1%	E					407, 401, 427	NB Dixie, EB Rathburn, NB Bough Beeches		
4355	49	0	0	0	0	0	0	0	49	1%	S					QEW	NB Dixie, EB Rathburn, NB Bough Beeches		
4356	0	0	0	22	0	0	0	0	22	0%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4358	0	89	0	0	0	0	0	0	89	4%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4359	0	0	76	0	0	0	0	0	76	1%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4360	24	42	24	0	0	0	0	29	119	2%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4368	0	0	15	0	0	0	0	0	15	0%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4372	0	0	0	0	0	0	0	23	23	0%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4376	0	16	0	0	0	0	0	0	16	0%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4378	64	0	0	0	0	0	0	0	64	1%	W					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4388	15	0	0	0	0	0	0	0	15	0%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4401	0	0	0	36	0	0	0	0	36	1%	S					-	403	SB Dixie, EB Rathburn, NB Bough Beeches	
4406	0	0	13	0	0	0	0	0	13	0%	S					-	403	SB Dixie, EB Rathburn, NB Bough Beeches	
4418	0	0	53	0	0	0	0	0	53	1%	S					-	QEW	NB Dixie, EB Rathburn, NB Bough Beeches	
4430	0	6	0	0	0	0	0	90	96	1%	S					-	403	SB Dixie, EB Rathburn, NB Bough Beeches	
4432	0	0	0	0	0	0	0	5	5	0%	W					-	EB Rathburn, NB Bough Beeches		
4433	246	0	0	0	26	0	0	7	279	4%	W					-	EB Rathburn, NB Bough Beeches		
4434	17	0	0	0	0	0	0	0	17	0%	W					-	SB Dixie, EB Rathburn, NB Bough Beeches		
4436	0	28	129	24	0	0	0	0	191	3%	E	3%				-	WB Rathburn, NB Bough Beeches		
4437	27	73	12	0	0	0	0	4	116	2%	N			2%		-	WB Rathburn, NB Bough Beeches		
4440	12	44	0	89	93	0	0	14	252	4%	S			4%		-	NB Dixie, EB Rathburn, NB Bough Beeches		
4441	0	0	7	0	0	0	0	0	7	0%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4444	0	26	0	0	0	0	0	0	26	0%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4445	0	0	0	0	26	0	0	0	26	0%	N			0%		-	SB Bough Beeches		
4446	121	0	0	0	0	0	0	0	121	1%	W		2%			-	SB Bough Beeches		
4447	3	0	0	0	0	0	0	0	3	0%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4448	14	18	0	0	0	0	0	64	96	1%	S					-	EB Rathburn, NB Bough Beeches		
4449	0	19	0	0	0	0	0	0	19	0%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4450	0	0	68	0	0	0	0	0	68	1%	E	1%				-	WB Rathburn, NB Bough Beeches		
4451	0	0	0	0	0	0	0	84	84	1%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4455	0	13	26	0	0	0	0	0	39	0%	S					-	EB Rathburn, NB Bough Beeches		
4467	0	0	0	0	36	0	0	24	60	1%	W		1%			-	EB Rathburn, NB Bough Beeches		
4468	0	0	62	0	0	0	0	0	62	1%	W		1%			-	SB Dixie, EB Rathburn, NB Bough Beeches		
4476	13	0	0	0	0	0	0	87	100	1%	S					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4487	0	30	0	0	0	0	0	0	30	0%	W			0%		-	EB Rathburn, NB Bough Beeches		
4488	0	0	0	0	0	0	0	4	4	0%	W					-	EB Rathburn, NB Bough Beeches		
4491	17	0	0	0	0	0	0	0	17	0%	W					-	NB Dixie, EB Rathburn, NB Bough Beeches		
4498	0	0	7	0	0	0	0	0	7	0%	W			0%		-	SB Dixie, EB Rathburn, NB Bough Beeches		
4501	0	0	20	0	0	0	0	0	20	0%	N			0%		-	SB Dixie, EB Rathburn, NB Bough Beeches		
4503	0	0	23	0	0	0	0	0	23	0%	N			0%		-	SB Bough Beeches		
4504	0	0	0	18	0	0	0	0	18	0%	N			0%		-	SB Dixie, EB Rathburn, NB Bough Beeches		
4506	0	0	53	0	0	0	0	0	53	1%	N					-	SB Bough Beeches		
4507	0	0	0	0	0	0	0	16	16	0%	N			0%		-	SB Dixie, EB Rathburn, NB Bough Beeches		
4511	0	58	14	0	0	0	0	87	159	2%	N			2%		-	SB Dixie, EB Rathburn, NB Bough Beeches		
4513	0	0	0	0	0	0	0	9	9	0%	N					-	SB Dixie, EB Rathburn, NB Bough Beeches		
4517	0	0	0	0	0	0	0	9	9	0%	N					-	WB Rathburn, NB Bough Beeches		
4520	0	0	74	0	0	0	0	0	74	1%	W					-	401	SB Dixie, EB Rathburn, NB Bough Beeches	
4528	0	0	109	0	0	0	0	0	109	2%	W					-	SB Dixie, EB Rathburn, NB Bough Beeches		
4530	0	0	49	0	0	0	0	0	49	1%	W					-	SB Dixie, EB Rathburn, NB Bough Beeches		
4532	0	0	15	0	0	0	0	0	15	0%	N			0%		-	427	WB Rathburn, NB Bough Beeches	
4533	21	41	0	0	0	0	0	0	72	1%	N			1%		-	SB Bough Beeches		
4534	0	0	0	0	0	0	0	4	4	0%	N					-	427	WB Rathburn, NB Bough Beeches	
4535	0	0	7	0	56	0	0	0	63	1%	N			1%		-	SB Bough Beeches		
4539	0	0	9	0	0	0	0	0	9	0%	N					-	SB Bough Beeches		
4540	0	0	80	0	0	0	0	115	195	3%	N			3%		-	SB Bough Beeches		
4542	27	15	0	0	0	0	0	0	42	1%	N			1%		-	SB Dixie, EB Rathburn, NB Bough Beeches		
4546	0	16	0	0	0	0	0	0	16	0%	W			0%		-	SB Dixie, EB Rathburn, NB Bough Beeches		
4554	0	0	0	0	56	0	0	0	56	1%	N			1%		-	SB Dixie, EB Rathburn, NB Bough Beeches		
4558	0	0	53	0	0	0	0	0	53	1%	N			1%		-	SB Dixie, EB Rathburn, NB Bough Beeches		



APPENDIX F

Existing Intersection Capacity Analysis

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	P	
Traffic Vol, veh/h	2	33	18	52	113	0
Future Vol, veh/h	2	33	18	52	113	0
Conflicting Peds, #/hr	0	0	11	0	0	11
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	6	4	0
Mvmt Flow	2	40	22	63	136	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	254	147	147	0	-	0
Stage 1	147	-	-	-	-	-
Stage 2	107	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	739	905	1447	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	715	898	1436	-	-	-
Mov Cap-2 Maneuver	715	-	-	-	-	-
Stage 1	864	-	-	-	-	-
Stage 2	915	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.3	1.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1436	-	885	-	-
HCM Lane V/C Ratio	0.015	-	0.048	-	-
HCM Control Delay (s/veh)	7.5	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0.2	-	-

HCM 6th TWSC
 2: Bough Beeches Blvd & S Site Access/Grazia Ct

Existing (2025)
 AM Peak Hour

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+			+			+	
Traffic Vol, veh/h	0	0	23	28	0	2	15	68	12	0	146	0
Future Vol, veh/h	0	0	23	28	0	2	15	68	12	0	146	0
Conflicting Peds, #/hr	1	0	1	1	0	1	7	0	6	6	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	4	0	0	0	13	4	0	0	3	0
Mvmt Flow	0	0	27	33	0	2	18	80	14	0	172	0

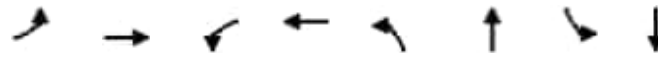
Major/Minor	Minor2		Minor1			Major1		Major2				
Conflicting Flow All	304	315	180	316	308	94	179	0	0	100	0	0
Stage 1	179	179	-	129	129	-	-	-	-	-	-	-
Stage 2	125	136	-	187	179	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.24	7.1	6.5	6.2	4.23	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.336	3.5	4	3.3	2.317	-	-	2.2	-	-
Pot Cap-1 Maneuver	652	604	858	641	609	968	1333	-	-	1505	-	-
Stage 1	827	755	-	880	793	-	-	-	-	-	-	-
Stage 2	884	788	-	819	755	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	640	590	853	611	594	963	1326	-	-	1498	-	-
Mov Cap-2 Maneuver	640	590	-	611	594	-	-	-	-	-	-	-
Stage 1	811	751	-	863	778	-	-	-	-	-	-	-
Stage 2	869	773	-	792	751	-	-	-	-	-	-	-

Approach	EB		WB			NB		SB		
HCM Control Delay, s/v	9.4		11.1			1.2		0		
HCM LOS	A		B							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1326	-	-	853	626	1498	-	-
HCM Lane V/C Ratio	0.013	-	-	0.032	0.056	-	-	-
HCM Control Delay (s/veh)	7.8	0	-	9.4	11.1	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q (veh)	0	-	-	0.1	0.2	0	-	-

Queues
3: Bough Beeches Blvd & Rathburn Rd E

Existing (2025)
AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	69	219	21	302	76	16	16	39
Future Volume (vph)	69	219	21	302	76	16	16	39
Lane Group Flow (vph)	73	295	22	329	80	24	17	190
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	29.5	29.5	29.5	29.5	37.0	37.0	37.0	37.0
Total Split (s)	37.0	37.0	37.0	37.0	43.0	43.0	43.0	43.0
Total Split (%)	46.3%	46.3%	46.3%	46.3%	53.8%	53.8%	53.8%	53.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.0	3.0	3.0	3.0
All-Red Time (s)	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	8.0	8.0	8.0	8.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	53.1	53.1	53.1	53.1	12.4	12.4	12.4	12.4
Actuated g/C Ratio	0.66	0.66	0.66	0.66	0.16	0.16	0.16	0.16
v/c Ratio	0.12	0.13	0.03	0.14	0.48	0.09	0.08	0.52
Control Delay (s/veh)	4.1	2.8	5.8	5.5	39.9	22.2	28.1	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.1	2.8	5.8	5.5	39.9	22.2	28.1	13.9
LOS	A	A	A	A	D	C	C	B
Approach Delay (s/veh)		3.0		5.5		35.8		15.0
Approach LOS		A		A		D		B
Queue Length 50th (m)	2.3	3.5	1.0	8.2	12.1	2.4	2.4	5.9
Queue Length 95th (m)	m5.6	7.7	4.1	16.3	23.9	8.3	7.4	22.6
Internal Link Dist (m)		65.1		84.3		120.2		58.6
Turn Bay Length (m)	33.0		40.0		27.0		11.0	
Base Capacity (vph)	621	2204	666	2302	471	724	570	766
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.13	0.03	0.14	0.17	0.03	0.03	0.25

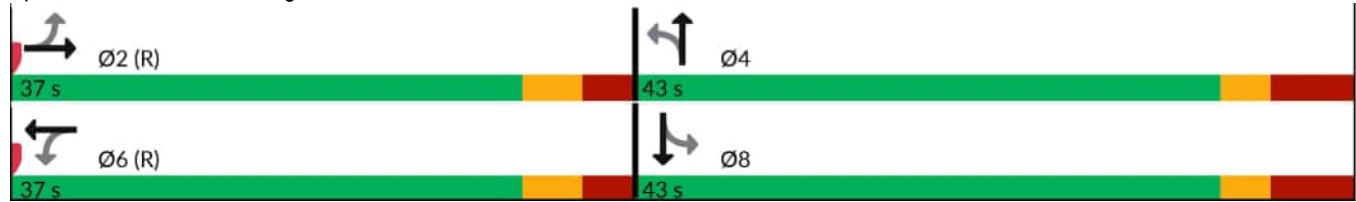
Intersection Summary	
Cycle Length:	80
Actuated Cycle Length:	80
Offset:	27 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	70
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.52
Intersection Signal Delay (s/veh):	9.6
Intersection LOS:	A
Intersection Capacity Utilization:	76.8%
ICU Level of Service:	D
Analysis Period (min):	15

3: Bough Beeches Blvd & Rathburn Rd E

AM Peak Hour






















m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Bough Beeches Blvd & Rathburn Rd E



HCM 6th Signalized Intersection Summary
 3: Bough Beeches Blvd & Rathburn Rd E

Existing (2025)
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	219	61	21	302	10	76	16	7	16	39	142
Future Volume (veh/h)	69	219	61	21	302	10	76	16	7	16	39	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1826	1824	1824	1870	1682	1767	1811	1625	1824	1826	1767
Adj Flow Rate, veh/h	73	231	64	22	318	11	80	17	7	17	41	149
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	5	0	0	2	10	4	6	14	0	5	4
Cap, veh/h	613	1540	417	649	2001	69	250	299	123	404	84	305
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	989	2694	729	1053	3501	121	1115	1212	499	1329	340	1236
Grp Volume(v), veh/h	73	147	148	22	161	168	80	0	24	17	0	190
Grp Sat Flow(s),veh/h/ln	989	1735	1689	1053	1777	1845	1115	0	1710	1329	0	1576
Q Serve(g_s), s	3.0	3.2	3.3	0.8	3.4	3.4	5.3	0.0	0.9	0.8	0.0	8.3
Cycle Q Clear(g_c), s	6.4	3.2	3.3	4.1	3.4	3.4	13.5	0.0	0.9	1.6	0.0	8.3
Prop In Lane	1.00		0.43	1.00		0.07	1.00		0.29	1.00		0.78
Lane Grp Cap(c), veh/h	613	992	965	649	1016	1054	250	0	423	404	0	389
V/C Ratio(X)	0.12	0.15	0.15	0.03	0.16	0.16	0.32	0.00	0.06	0.04	0.00	0.49
Avail Cap(c_a), veh/h	613	992	965	649	1016	1054	463	0	748	657	0	690
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.6	8.0	8.0	9.0	8.1	8.1	31.6	0.0	23.0	23.6	0.0	25.8
Incr Delay (d2), s/veh	0.4	0.3	0.3	0.1	0.3	0.3	0.7	0.0	0.1	0.0	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.0	0.1	0.1	0.9	0.0	0.2	0.1	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.0	8.3	8.4	9.1	8.4	8.4	32.3	0.0	23.1	23.7	0.0	26.7
LnGrp LOS	A	A	A	A	A	A	C		C	C		C
Approach Vol, veh/h		368			351			104				207
Approach Delay, s/veh		8.7			8.4			30.2				26.5
Approach LOS		A			A			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		52.2		27.8		52.2		27.8				
Change Period (Y+Rc), s		6.5		8.0		6.5		8.0				
Max Green Setting (Gmax), s		30.5		35.0		30.5		35.0				
Max Q Clear Time (g_c+I1), s		8.4		15.5		6.1		10.3				
Green Ext Time (p_c), s		2.6		0.5		2.5		1.6				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				14.3								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	1.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Vol, veh/h	318	69	30	490	34	31
Future Vol, veh/h	318	69	30	490	34	31
Conflicting Peds, #/hr	0	2	2	0	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	22	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	5	6	0	3	6	3
Mvmt Flow	353	77	33	544	38	34

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	432	0	717
Stage 1	-	-	-	-	355
Stage 2	-	-	-	-	362
Critical Hdwy	-	-	4.1	-	6.92
Critical Hdwy Stg 1	-	-	-	-	5.92
Critical Hdwy Stg 2	-	-	-	-	5.92
Follow-up Hdwy	-	-	2.2	-	3.56
Pot Cap-1 Maneuver	-	-	1138	-	356
Stage 1	-	-	-	-	669
Stage 2	-	-	-	-	663
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1136	-	339
Mov Cap-2 Maneuver	-	-	-	-	339
Stage 1	-	-	-	-	668
Stage 2	-	-	-	-	632

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.5	13.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	339	829	-	-	1136	-
HCM Lane V/C Ratio	0.111	0.042	-	-	0.029	-
HCM Control Delay (s/veh)	16.9	9.5	-	-	8.3	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q (veh)	0.4	0.1	-	-	0.1	-

Queues
5: Dixie Road & Rathburn Rd E

Existing (2025)
AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	82	134	100	121	42	1259	61	143	1048	49
Future Volume (vph)	82	134	100	121	42	1259	61	143	1048	49
Lane Group Flow (vph)	89	274	109	487	46	1368	66	155	1139	53
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8		4		6		5	2	
Permitted Phases	8		4		6		6	2		2
Detector Phase	8	8	4	4	6	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	41.6	41.6	41.6	41.6	48.3	48.3	48.3	11.5	48.3	48.3
Total Split (s)	61.0	61.0	61.0	61.0	86.0	86.0	86.0	13.0	99.0	99.0
Total Split (%)	38.1%	38.1%	38.1%	38.1%	53.8%	53.8%	53.8%	8.1%	61.9%	61.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.6	2.6	2.6	2.6	3.3	3.3	3.3	0.0	3.3	3.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	7.3	7.3	7.3	3.0	7.3	7.3
Lead/Lag					Lag	Lag	Lag	Lead		
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	C-Max	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	54.4	54.4	54.4	54.4	78.9	78.9	78.9	96.0	91.7	91.7
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.49	0.49	0.49	0.60	0.57	0.57
v/c Ratio	0.41	0.25	0.36	0.43	0.23	0.57	0.09	0.73	0.41	0.06
Control Delay (s/veh)	47.5	28.3	49.9	35.3	27.1	29.8	4.7	44.5	20.5	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.5	28.3	49.9	35.3	27.1	29.8	4.7	44.5	20.5	6.1
LOS	D	C	D	D	C	C	A	D	C	A
Approach Delay (s/veh)		33.0		38.0		28.6			22.7	
Approach LOS		C		D		C			C	
Queue Length 50th (m)	22.9	25.2	30.5	53.7	8.7	116.5	0.0	25.0	75.4	0.0
Queue Length 95th (m)	42.2	37.7	52.0	74.7	19.0	131.6	8.7	#33.3	118.5	9.6
Internal Link Dist (m)		145.2		95.0		286.2			319.0	
Turn Bay Length (m)	37.0		73.0		107.0		90.0	112.0		140.0
Base Capacity (vph)	218	1106	307	1134	201	2407	741	213	2773	846
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.25	0.36	0.43	0.23	0.57	0.09	0.73	0.41	0.06

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 98 (61%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay (s/veh): 28.4	Intersection LOS: C
Intersection Capacity Utilization 103.2%	ICU Level of Service G
Analysis Period (min) 15	

Queues

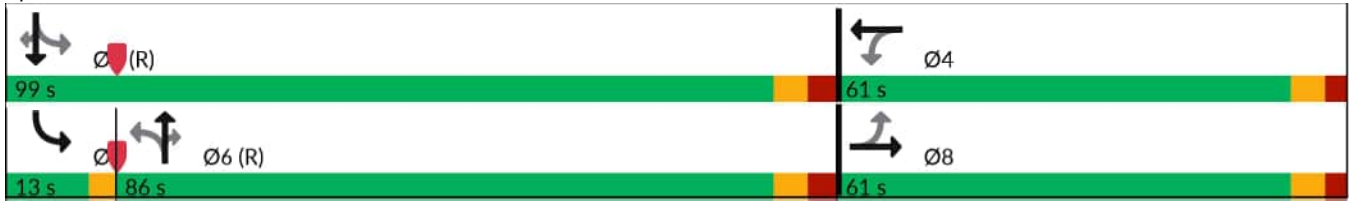
5: Dixie Road & Rathburn Rd E

Existing (2025)

AM Peak Hour

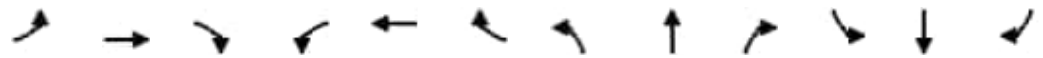
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Dixie Road & Rathburn Rd E



HCM 6th Signalized Intersection Summary
 5: Dixie Road & Rathburn Rd E

Existing (2025)
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘		↗	↗↘↙	↗	↗	↗↘↙	↗
Traffic Volume (veh/h)	82	134	118	100	121	327	42	1259	61	143	1048	49
Future Volume (veh/h)	82	134	118	100	121	327	42	1259	61	143	1048	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1767	1810	1710	1870	1796	1796	1826	1796	1753	1811	1796
Adj Flow Rate, veh/h	89	146	0	109	132	0	46	1368	0	155	1139	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	9	1	8	2	2	2	5	2	5	6	2
Cap, veh/h	416	1141		395	1208		256	2479		255	2834	
Arrive On Green	0.34	0.34	0.00	0.34	0.34	0.00	0.50	0.50	0.00	0.06	0.57	0.00
Sat Flow, veh/h	1181	3445	0	1128	3647	0	474	4985	1522	1669	4944	1522
Grp Volume(v), veh/h	89	146	0	109	132	0	46	1368	0	155	1139	0
Grp Sat Flow(s),veh/h/ln	1181	1678	0	1128	1777	0	474	1662	1522	1669	1648	1522
Q Serve(g_s), s	8.9	4.8	0.0	11.8	4.1	0.0	9.5	30.4	0.0	7.1	20.4	0.0
Cycle Q Clear(g_c), s	13.0	4.8	0.0	16.6	4.1	0.0	17.9	30.4	0.0	7.1	20.4	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	416	1141		395	1208		256	2479		255	2834	
V/C Ratio(X)	0.21	0.13		0.28	0.11		0.18	0.55		0.61	0.40	
Avail Cap(c_a), veh/h	416	1141		395	1208		256	2479		264	2834	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	36.4	0.0	42.2	36.2	0.0	27.3	27.9	0.0	22.2	18.9	0.0
Incr Delay (d2), s/veh	1.2	0.2	0.0	1.7	0.2	0.0	1.5	0.9	0.0	3.8	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.5	0.0	2.6	1.3	0.0	0.8	7.2	0.0	1.6	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.8	36.7	0.0	43.9	36.4	0.0	28.8	28.8	0.0	26.0	19.4	0.0
LnGrp LOS	D	D		D	D		C	C		C	B	
Approach Vol, veh/h		235			241			1414			1294	
Approach Delay, s/veh		38.6			39.8			28.8			20.2	
Approach LOS		D			D			C			C	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		99.0		61.0	12.1	86.9		61.0				
Change Period (Y+Rc), s		7.3		6.6	3.0	7.3		6.6				
Max Green Setting (Gmax), s		91.7		54.4	10.0	78.7		54.4				
Max Q Clear Time (g_c+I1), s		22.4		18.6	9.1	32.4		15.0				
Green Ext Time (p_c), s		13.7		1.7	0.0	18.2		1.7				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	26.8
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Queues
7: Dixie Road & Hickory Drive

Existing (2025)
AM Peak Hour



Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	36	13	1637	1202
Future Volume (vph)	36	13	1637	1202
Lane Group Flow (vph)	82	14	1799	1341
Turn Type	Prot	Prot	NA	NA
Protected Phases	8	1	6	2
Permitted Phases				
Detector Phase	8	1	6	2
Switch Phase				
Minimum Initial (s)	10.0	7.0	10.0	10.0
Minimum Split (s)	46.4	10.0	31.0	31.0
Total Split (s)	27.0	10.0	53.0	43.0
Total Split (%)	33.8%	12.5%	66.3%	53.8%
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	3.4	0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	3.0	6.0	6.0
Lead/Lag		Lead		Lag
Lead-Lag Optimize?				
Recall Mode	None	None	C-Max	C-Max
Act Effct Green (s)	10.4	7.1	60.9	58.8
Actuated g/C Ratio	0.13	0.09	0.76	0.74
v/c Ratio	0.36	0.10	0.47	0.38
Control Delay (s/veh)	22.9	26.6	13.3	6.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.9	26.6	13.3	6.2
LOS	C	C	B	A
Approach Delay (s/veh)	22.9		13.4	6.2
Approach LOS	C		B	A
Queue Length 50th (m)	5.9	2.1	152.4	26.1
Queue Length 95th (m)	18.4	m4.0	168.7	56.7
Internal Link Dist (m)	166.6		319.0	244.6
Turn Bay Length (m)		100.0		
Base Capacity (vph)	392	139	3791	3549
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.21	0.10	0.47	0.38

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 79 (99%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay (s/veh): 10.6	Intersection LOS: B
Intersection Capacity Utilization 51.9%	ICU Level of Service A
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Dixie Road & Hickory Drive



HCM 6th Signalized Intersection Summary
 7: Dixie Road & Hickory Drive

Existing (2025)
 AM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑↑↑	↑↑↑	
Traffic Volume (veh/h)	36	38	13	1637	1202	18
Future Volume (veh/h)	36	38	13	1637	1202	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1739	1668	1710	1856	1811	1824
Adj Flow Rate, veh/h	40	42	14	1799	1321	20
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	11	8	3	6	0
Cap, veh/h	79	83	38	3676	3335	50
Arrive On Green	0.11	0.11	0.02	0.73	0.66	0.66
Sat Flow, veh/h	744	781	1629	5233	5180	76
Grp Volume(v), veh/h	83	0	14	1799	868	473
Grp Sat Flow(s),veh/h/ln	1544	0	1629	1689	1648	1797
Q Serve(g_s), s	4.1	0.0	0.7	12.1	9.6	9.6
Cycle Q Clear(g_c), s	4.1	0.0	0.7	12.1	9.6	9.6
Prop In Lane	0.48	0.51	1.00			0.04
Lane Grp Cap(c), veh/h	165	0	38	3676	2191	1195
V/C Ratio(X)	0.50	0.00	0.37	0.49	0.40	0.40
Avail Cap(c_a), veh/h	378	0	143	3676	2191	1195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	38.5	4.7	6.1	6.1
Incr Delay (d2), s/veh	2.4	0.0	5.8	0.5	0.5	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.2	0.2	0.2	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	36.1	0.0	44.3	5.1	6.6	7.1
LnGrp LOS	D		D	A	A	A
Approach Vol, veh/h	83			1813	1341	
Approach Delay, s/veh	36.1			5.4	6.8	
Approach LOS	D			A	A	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	4.9	59.2			64.1	15.9
Change Period (Y+Rc), s	3.0	6.0			6.0	7.4
Max Green Setting (Gmax), s	7.0	37.0			47.0	19.6
Max Q Clear Time (g_c+I1), s	2.7	11.6			14.1	6.1
Green Ext Time (p_c), s	0.0	12.2			20.7	0.2

Intersection Summary						
HCM 6th Ctrl Delay, s/veh			6.8			
HCM 6th LOS			A			

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th TWSC
 1: Bough Beeches Blvd & N Site Access

Existing (2025)
 PM Peak Hour

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	P	
Traffic Vol, veh/h	0	22	52	118	106	5
Future Vol, veh/h	0	22	52	118	106	5
Conflicting Peds, #/hr	0	0	5	0	0	5
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	1	2	0
Mvmt Flow	0	27	63	142	128	6

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	404	136	139	0	-	0
Stage 1	136	-	-	-	-	-
Stage 2	268	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	606	918	1457	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	782	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	573	915	1452	-	-	-
Mov Cap-2 Maneuver	573	-	-	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	779	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.1	2.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1452	-	915	-	-
HCM Lane V/C Ratio	0.043	-	0.029	-	-
HCM Control Delay (s/veh)	7.6	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0.1	-	0.1	-	-

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+			+			+	
Traffic Vol, veh/h	1	0	28	19	0	6	19	163	29	4	124	0
Future Vol, veh/h	1	0	28	19	0	6	19	163	29	4	124	0
Conflicting Peds, #/hr	1	0	1	1	0	1	4	0	9	9	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	2	0
Mvmt Flow	1	0	34	23	0	7	23	196	35	5	149	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	427	449	154	446	432	224	153	0	0	240	0	0
Stage 1	163	163	-	269	269	-	-	-	-	-	-	-
Stage 2	264	286	-	177	163	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	541	508	897	526	519	820	1440	-	-	1339	-	-
Stage 1	844	767	-	741	690	-	-	-	-	-	-	-
Stage 2	746	679	-	829	767	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	525	492	894	494	502	814	1436	-	-	1330	-	-
Mov Cap-2 Maneuver	525	492	-	494	502	-	-	-	-	-	-	-
Stage 1	826	762	-	722	673	-	-	-	-	-	-	-
Stage 2	726	662	-	794	762	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	9.3		12		0.7		0.2	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1436	-	-	873	545	1330	-	-
HCM Lane V/C Ratio	0.016	-	-	0.04	0.055	0.004	-	-
HCM Control Delay (s/veh)	7.5	0	-	9.3	12	7.7	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q (veh)	0	-	-	0.1	0.2	0	-	-

Queues
3: Bough Beeches Blvd & Rathburn Rd E

Existing (2025)
PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	155	347	32	372	86	36	17	38
Future Volume (vph)	155	347	32	372	86	36	17	38
Lane Group Flow (vph)	168	509	35	426	93	72	18	167
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	29.5	29.5	29.5	29.5	37.0	37.0	37.0	37.0
Total Split (s)	37.0	37.0	37.0	37.0	43.0	43.0	43.0	43.0
Total Split (%)	46.3%	46.3%	46.3%	46.3%	53.8%	53.8%	53.8%	53.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.0	3.0	3.0	3.0
All-Red Time (s)	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	8.0	8.0	8.0	8.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	52.6	52.6	52.6	52.6	12.9	12.9	12.9	12.9
Actuated g/C Ratio	0.66	0.66	0.66	0.66	0.16	0.16	0.16	0.16
v/c Ratio	0.29	0.23	0.07	0.19	0.51	0.24	0.09	0.46
Control Delay (s/veh)	6.1	3.7	6.3	5.9	40.1	19.1	27.5	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.1	3.7	6.3	5.9	40.1	19.1	27.5	13.4
LOS	A	A	A	A	D	B	C	B
Approach Delay (s/veh)		4.3		6.0		30.9		14.7
Approach LOS		A		A		C		B
Queue Length 50th (m)	8.4	10.6	1.7	11.4	14.0	5.5	2.5	5.8
Queue Length 95th (m)	m17.7	m15.4	6.0	21.7	26.5	15.5	7.7	21.0
Internal Link Dist (m)		65.1		84.3		120.2		58.6
Turn Bay Length (m)	33.0		40.0		27.0		11.0	
Base Capacity (vph)	575	2222	534	2282	491	764	545	776
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.23	0.07	0.19	0.19	0.09	0.03	0.22

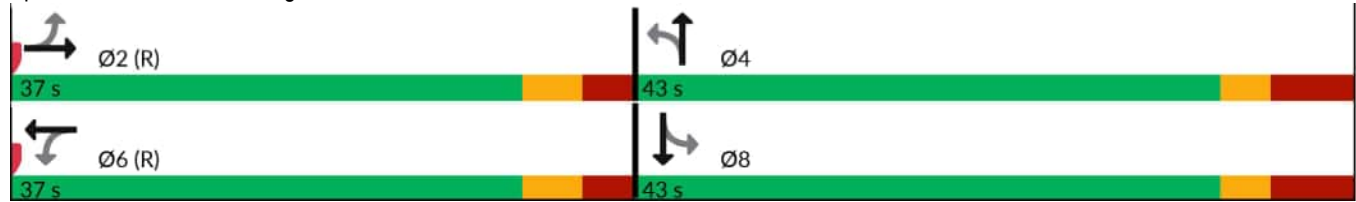
Intersection Summary	
Cycle Length:	80
Actuated Cycle Length:	80
Offset:	35 (44%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	70
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.51
Intersection Signal Delay (s/veh):	9.1
Intersection LOS:	A
Intersection Capacity Utilization:	78.7%
ICU Level of Service:	D
Analysis Period (min):	15

3: Bough Beeches Blvd & Rathburn Rd E

PM Peak Hour





















m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Bough Beeches Blvd & Rathburn Rd E



HCM 6th Signalized Intersection Summary
 3: Bough Beeches Blvd & Rathburn Rd E

Existing (2025)
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	347	121	32	372	20	86	36	30	17	38	116
Future Volume (veh/h)	155	347	121	32	372	20	86	36	30	17	38	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.98	0.98		0.96	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1810	1885	1796	1824	1870	1824	1810	1900	1781	1824	1900	1810
Adj Flow Rate, veh/h	168	377	132	35	404	22	93	39	33	18	41	126
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	0	2	0	1	0	3	0	0	1
Cap, veh/h	545	1429	492	500	1893	103	300	248	210	386	106	325
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	924	2586	891	864	3424	186	1157	931	788	1264	397	1221
Grp Volume(v), veh/h	168	259	250	35	209	217	93	0	72	18	0	167
Grp Sat Flow(s),veh/h/ln	924	1791	1686	864	1777	1833	1157	0	1718	1264	0	1618
Q Serve(g_s), s	9.0	6.1	6.2	1.8	4.8	4.8	5.7	0.0	2.6	0.9	0.0	6.8
Cycle Q Clear(g_c), s	13.8	6.1	6.2	8.0	4.8	4.8	12.5	0.0	2.6	3.5	0.0	6.8
Prop In Lane	1.00		0.53	1.00		0.10	1.00		0.46	1.00		0.75
Lane Grp Cap(c), veh/h	545	990	932	500	982	1013	300	0	457	386	0	431
V/C Ratio(X)	0.31	0.26	0.27	0.07	0.21	0.21	0.31	0.00	0.16	0.05	0.00	0.39
Avail Cap(c_a), veh/h	545	990	932	500	982	1013	498	0	752	603	0	708
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.6	9.4	9.4	11.5	9.1	9.1	29.1	0.0	22.5	23.8	0.0	24.0
Incr Delay (d2), s/veh	1.5	0.6	0.7	0.3	0.5	0.5	0.6	0.0	0.2	0.0	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	0.2	0.1	0.1	0.1	0.9	0.0	0.6	0.1	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.1	10.0	10.1	11.8	9.6	9.6	29.7	0.0	22.6	23.9	0.0	24.6
LnGrp LOS	B	B	B	B	A	A	C		C	C		C
Approach Vol, veh/h		677			461			165				185
Approach Delay, s/veh		11.0			9.7			26.6				24.5
Approach LOS		B			A			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.7		29.3		50.7		29.3				
Change Period (Y+Rc), s		6.5		8.0		6.5		8.0				
Max Green Setting (Gmax), s		30.5		35.0		30.5		35.0				
Max Q Clear Time (g_c+I1), s		15.8		14.5		10.0		8.8				
Green Ext Time (p_c), s		4.3		0.9		3.2		1.4				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				14.0								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	4.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Vol, veh/h	543	140	61	513	106	80
Future Vol, veh/h	543	140	61	513	106	80
Conflicting Peds, #/hr	0	6	6	0	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	22	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	0	1	3	0
Mvmt Flow	617	159	69	583	120	91

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	782	0	1066
Stage 1	-	-	-	-	623
Stage 2	-	-	-	-	443
Critical Hdwy	-	-	4.1	-	6.86
Critical Hdwy Stg 1	-	-	-	-	5.86
Critical Hdwy Stg 2	-	-	-	-	5.86
Follow-up Hdwy	-	-	2.2	-	3.53
Pot Cap-1 Maneuver	-	-	845	-	216
Stage 1	-	-	-	-	494
Stage 2	-	-	-	-	611
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	841	-	195
Mov Cap-2 Maneuver	-	-	-	-	195
Stage 1	-	-	-	-	492
Stage 2	-	-	-	-	555

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1	32.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	195	684	-	-	841	-
HCM Lane V/C Ratio	0.618	0.133	-	-	0.082	-
HCM Control Delay (s/veh)	49.4	11.1	-	-	9.7	-
HCM Lane LOS	E	B	-	-	A	-
HCM 95th %tile Q (veh)	3.5	0.5	-	-	0.3	-

Queues
5: Dixie Road & Rathburn Rd E

Existing (2025)
PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	40	202	115	244	176	971	146	330	1841	183
Future Volume (vph)	40	202	115	244	176	971	146	330	1841	183
Lane Group Flow (vph)	41	351	117	507	180	991	149	337	1879	187
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		8		4	1	6		5	2	
Permitted Phases	8		4		6		6	2		2
Detector Phase	8	8	4	4	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	41.6	41.6	41.6	41.6	11.5	48.3	48.3	11.5	48.3	48.3
Total Split (s)	53.0	53.0	53.0	53.0	16.0	88.0	88.0	19.0	91.0	91.0
Total Split (%)	33.1%	33.1%	33.1%	33.1%	10.0%	55.0%	55.0%	11.9%	56.9%	56.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.6	2.6	2.6	2.6	0.0	3.3	3.3	0.0	3.3	3.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	3.0	7.3	7.3	3.0	7.3	7.3
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	46.4	46.4	46.4	46.4	98.0	80.7	80.7	104.0	83.7	83.7
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.61	0.50	0.50	0.65	0.52	0.52
v/c Ratio	0.24	0.35	0.51	0.49	0.95	0.40	0.19	0.88	0.71	0.22
Control Delay (s/veh)	48.3	31.0	56.4	32.1	92.5	25.2	3.4	44.5	40.1	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.3	31.0	56.4	32.1	92.5	25.2	3.4	44.5	40.1	8.9
LOS	D	C	E	C	F	C	A	D	D	A
Approach Delay (s/veh)		32.8		36.7		31.9			38.3	
Approach LOS		C		D		C			D	
Queue Length 50th (m)	10.6	32.9	34.2	53.9	41.4	74.0	0.0	52.5	230.2	10.7
Queue Length 95th (m)	22.8	48.1	58.4	61.1	#93.4	85.8	12.2	#83.9	256.4	27.6
Internal Link Dist (m)		145.2		95.0		286.2			319.0	
Turn Bay Length (m)	37.0		73.0		107.0		90.0	112.0		140.0
Base Capacity (vph)	168	1002	230	1034	190	2487	790	385	2630	839
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.35	0.51	0.49	0.95	0.40	0.19	0.88	0.71	0.22

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 94 (59%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 35.8	Intersection LOS: D
Intersection Capacity Utilization 110.4%	ICU Level of Service H
Analysis Period (min) 15	

Queues

Existing (2025)

5: Dixie Road & Rathburn Rd E

PM Peak Hour

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























Queue shown is maximum after two cycles.

Splits and Phases: 5: Dixie Road & Rathburn Rd E



HCM 6th Signalized Intersection Summary
 5: Dixie Road & Rathburn Rd E

Existing (2025)
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	202	142	115	244	253	176	971	146	330	1841	183
Future Volume (veh/h)	40	202	142	115	244	253	176	971	146	330	1841	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		1.00	0.97		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1824	1870	1796	1810	1870	1796	1810	1841	1824	1824	1870	1824
Adj Flow Rate, veh/h	41	206	0	117	249	0	180	991	0	337	1879	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	1	2	2	1	4	0	0	2	0
Cap, veh/h	299	1031		318	1031		219	2535		430	2759	
Arrive On Green	0.29	0.29	0.00	0.29	0.29	0.00	0.06	0.50	0.00	0.10	0.54	0.00
Sat Flow, veh/h	1075	3647	0	1106	3647	0	1724	5025	1546	1737	5106	1546
Grp Volume(v), veh/h	41	206	0	117	249	0	180	991	0	337	1879	0
Grp Sat Flow(s),veh/h/ln	1075	1777	0	1106	1777	0	1724	1675	1546	1737	1702	1546
Q Serve(g_s), s	4.8	7.0	0.0	14.3	8.6	0.0	8.1	19.5	0.0	14.8	42.8	0.0
Cycle Q Clear(g_c), s	13.4	7.0	0.0	21.3	8.6	0.0	8.1	19.5	0.0	14.8	42.8	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	1031		318	1031		219	2535		430	2759	
V/C Ratio(X)	0.14	0.20		0.37	0.24		0.82	0.39		0.78	0.68	
Avail Cap(c_a), veh/h	299	1031		318	1031		249	2535		430	2759	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.5	42.8	0.0	50.8	43.4	0.0	29.2	24.5	0.0	18.3	26.7	0.0
Incr Delay (d2), s/veh	1.0	0.4	0.0	3.3	0.6	0.0	17.5	0.5	0.0	9.1	1.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.4	0.0	3.3	2.9	0.0	2.7	4.5	0.0	3.5	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.4	43.2	0.0	54.1	43.9	0.0	46.8	24.9	0.0	27.4	28.1	0.0
LnGrp LOS	D	D		D	D		D	C		C	C	
Approach Vol, veh/h		247			366			1171			2216	
Approach Delay, s/veh		44.3			47.2			28.3			28.0	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.2	93.8		53.0	19.0	88.0		53.0				
Change Period (Y+Rc), s	3.0	7.3		6.6	3.0	7.3		6.6				
Max Green Setting (Gmax), s	13.0	83.7		46.4	16.0	80.7		46.4				
Max Q Clear Time (g_c+I1), s	10.1	44.8		23.3	16.8	21.5		15.4				
Green Ext Time (p_c), s	0.2	24.1		2.6	0.0	10.9		1.9				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh				30.8								
HCM 6th LOS				C								

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Queues
7: Dixie Road & Hickory Drive

Existing (2025)
PM Peak Hour



Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	27	46	1210	2305
Future Volume (vph)	27	46	1210	2305
Lane Group Flow (vph)	66	47	1235	2390
Turn Type	Prot	Prot	NA	NA
Protected Phases	8	1	6	2
Permitted Phases				
Detector Phase	8	1	6	2
Switch Phase				
Minimum Initial (s)	10.0	7.0	10.0	10.0
Minimum Split (s)	46.4	10.0	31.0	31.0
Total Split (s)	27.0	10.0	53.0	43.0
Total Split (%)	33.8%	12.5%	66.3%	53.8%
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	3.4	0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	3.0	6.0	6.0
Lead/Lag		Lead		Lag
Lead-Lag Optimize?				
Recall Mode	None	None	C-Max	C-Max
Act Effct Green (s)	10.1	8.1	61.2	54.1
Actuated g/C Ratio	0.13	0.10	0.77	0.68
v/c Ratio	0.29	0.27	0.33	0.70
Control Delay (s/veh)	20.7	27.0	12.1	13.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.7	27.0	12.1	13.3
LOS	C	C	B	B
Approach Delay (s/veh)	20.7		12.6	13.3
Approach LOS	C		B	B
Queue Length 50th (m)	4.1	8.9	90.4	104.0
Queue Length 95th (m)	15.5	16.5	102.9	140.5
Internal Link Dist (m)	166.6		319.0	244.6
Turn Bay Length (m)		100.0		
Base Capacity (vph)	410	171	3773	3391
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.27	0.33	0.70

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 79 (99%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay (s/veh): 13.2	Intersection LOS: B
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: Dixie Road & Hickory Drive



HCM 6th Signalized Intersection Summary
7: Dixie Road & Hickory Drive

Existing (2025)
PM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑↑↑	↑↑↑	
Traffic Volume (veh/h)	27	37	46	1210	2305	37
Future Volume (veh/h)	27	37	46	1210	2305	37
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.97	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1824	1824	1841	1870	1781
Adj Flow Rate, veh/h	28	38	47	1235	2352	38
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	0	0	4	2	3
Cap, veh/h	65	88	99	3680	3301	53
Arrive On Green	0.10	0.10	0.06	0.73	0.64	0.64
Sat Flow, veh/h	647	878	1737	5191	5342	83
Grp Volume(v), veh/h	67	0	47	1235	1546	844
Grp Sat Flow(s),veh/h/ln	1548	0	1737	1675	1702	1853
Q Serve(g_s), s	3.3	0.0	2.1	7.0	24.1	24.2
Cycle Q Clear(g_c), s	3.3	0.0	2.1	7.0	24.1	24.2
Prop In Lane	0.42	0.57	1.00			0.05
Lane Grp Cap(c), veh/h	155	0	99	3680	2172	1182
V/C Ratio(X)	0.43	0.00	0.48	0.34	0.71	0.71
Avail Cap(c_a), veh/h	379	0	152	3680	2172	1182
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	0.0	36.6	3.8	9.6	9.6
Incr Delay (d2), s/veh	1.9	0.0	3.5	0.2	2.0	3.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.6	0.1	0.6	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	35.8	0.0	40.1	4.0	11.6	13.3
LnGrp LOS	D		D	A	B	B
Approach Vol, veh/h	67			1282	2390	
Approach Delay, s/veh	35.8			5.4	12.2	
Approach LOS	D			A	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.5	57.1			64.6	15.4
Change Period (Y+Rc), s	3.0	6.0			6.0	7.4
Max Green Setting (Gmax), s	7.0	37.0			47.0	19.6
Max Q Clear Time (g_c+I1), s	4.1	26.2			9.0	5.3
Green Ext Time (p_c), s	0.0	9.8			13.6	0.2

Intersection Summary						
HCM 6th Ctrl Delay, s/veh			10.3			
HCM 6th LOS			B			

Notes

User approved pedestrian interval to be less than phase max green.



APPENDIX G

Future Background Intersection Capacity Analysis

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	P	
Traffic Vol, veh/h	2	33	18	52	119	0
Future Vol, veh/h	2	33	18	52	119	0
Conflicting Peds, #/hr	0	0	11	0	0	11
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	6	4	0
Mvmt Flow	2	40	22	63	143	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	261	154	154	0	-	0
Stage 1	154	-	-	-	-	-
Stage 2	107	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	732	897	1439	-	-	-
Stage 1	879	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	709	890	1428	-	-	-
Mov Cap-2 Maneuver	709	-	-	-	-	-
Stage 1	858	-	-	-	-	-
Stage 2	915	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.3	1.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1428	-	877	-	-
HCM Lane V/C Ratio	0.015	-	0.048	-	-
HCM Control Delay (s/veh)	7.6	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0.2	-	-

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+			+			+	
Traffic Vol, veh/h	0	0	23	28	0	2	15	68	12	0	152	0
Future Vol, veh/h	0	0	23	28	0	2	15	68	12	0	152	0
Conflicting Peds, #/hr	1	0	1	1	0	1	7	0	6	6	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	4	0	0	0	13	4	0	0	3	0
Mvmt Flow	0	0	27	33	0	2	18	80	14	0	179	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	311	322	187	323	315	94	186	0	0	100	0	0
Stage 1	186	186	-	129	129	-	-	-	-	-	-	-
Stage 2	125	136	-	194	186	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.24	7.1	6.5	6.2	4.23	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.336	3.5	4	3.3	2.317	-	-	2.2	-	-
Pot Cap-1 Maneuver	645	599	850	634	604	968	1325	-	-	1505	-	-
Stage 1	820	750	-	880	793	-	-	-	-	-	-	-
Stage 2	884	788	-	812	750	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	633	585	845	604	590	963	1318	-	-	1498	-	-
Mov Cap-2 Maneuver	633	585	-	604	590	-	-	-	-	-	-	-
Stage 1	804	746	-	863	778	-	-	-	-	-	-	-
Stage 2	869	773	-	785	746	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.4	11.2	1.2	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1318	-	-	845	619	1498	-	-
HCM Lane V/C Ratio	0.013	-	-	0.032	0.057	-	-	-
HCM Control Delay (s/veh)	7.8	0	-	9.4	11.2	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q (veh)	0	-	-	0.1	0.2	0	-	-

Queues
3: Bough Beeches Blvd & Rathburn Rd E

Future Background (2030)
AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	69	225	21	324	80	16	16	39
Future Volume (vph)	69	225	21	324	80	16	16	39
Lane Group Flow (vph)	73	301	22	352	84	24	17	197
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	29.5	29.5	29.5	29.5	37.0	37.0	37.0	37.0
Total Split (s)	37.0	37.0	37.0	37.0	43.0	43.0	43.0	43.0
Total Split (%)	46.3%	46.3%	46.3%	46.3%	53.8%	53.8%	53.8%	53.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.0	3.0	3.0	3.0
All-Red Time (s)	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	8.0	8.0	8.0	8.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	52.8	52.8	52.8	52.8	12.7	12.7	12.7	12.7
Actuated g/C Ratio	0.66	0.66	0.66	0.66	0.16	0.16	0.16	0.16
v/c Ratio	0.12	0.14	0.03	0.15	0.51	0.09	0.08	0.52
Control Delay (s/veh)	3.9	2.6	6.0	5.7	41.0	21.9	27.6	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.9	2.6	6.0	5.7	41.0	21.9	27.6	13.5
LOS	A	A	A	A	D	C	C	B
Approach Delay (s/veh)		2.9		5.7		36.8		14.6
Approach LOS		A		A		D		B
Queue Length 50th (m)	2.2	3.5	1.0	9.0	12.7	2.4	2.4	5.8
Queue Length 95th (m)	m4.8	m6.7	4.2	17.8	24.9	8.2	7.3	22.7
Internal Link Dist (m)		65.1		84.3		120.2		58.6
Turn Bay Length (m)	33.0		40.0		27.0		11.0	
Base Capacity (vph)	605	2196	659	2292	458	724	570	769
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.14	0.03	0.15	0.18	0.03	0.03	0.26

Intersection Summary

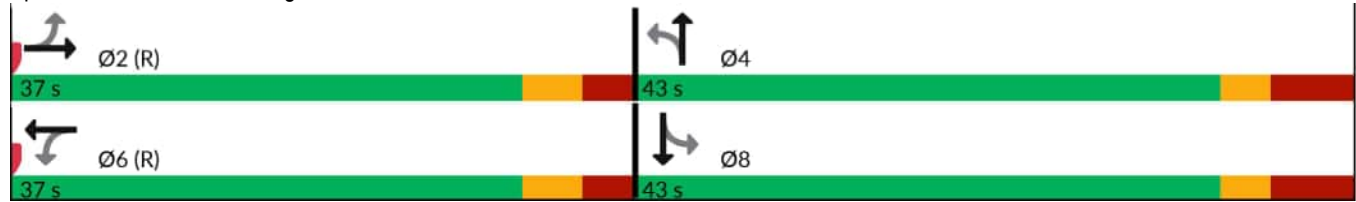
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 27 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay (s/veh): 9.6	Intersection LOS: A
Intersection Capacity Utilization 77.0%	ICU Level of Service D
Analysis Period (min) 15	

3: Bough Beeches Blvd & Rathburn Rd E

AM Peak Hour






















m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Bough Beeches Blvd & Rathburn Rd E



HCM 6th Signalized Intersection Summary
3: Bough Beeches Blvd & Rathburn Rd E

Future Background (2030)
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	225	61	21	324	10	80	16	7	16	39	148
Future Volume (veh/h)	69	225	61	21	324	10	80	16	7	16	39	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1826	1824	1824	1870	1682	1767	1811	1625	1824	1826	1767
Adj Flow Rate, veh/h	73	237	64	22	341	11	84	17	7	17	41	156
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	5	0	0	2	10	4	6	14	0	5	4
Cap, veh/h	593	1534	405	638	1987	64	252	306	126	412	83	315
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	969	2710	715	1047	3510	113	1108	1212	499	1330	328	1247
Grp Volume(v), veh/h	73	150	151	22	172	180	84	0	24	17	0	197
Grp Sat Flow(s),veh/h/ln	969	1735	1691	1047	1777	1846	1108	0	1711	1330	0	1575
Q Serve(g_s), s	3.1	3.3	3.4	0.8	3.7	3.7	5.6	0.0	0.9	0.8	0.0	8.5
Cycle Q Clear(g_c), s	6.9	3.3	3.4	4.2	3.7	3.7	14.2	0.0	0.9	1.6	0.0	8.5
Prop In Lane	1.00		0.42	1.00		0.06	1.00		0.29	1.00		0.79
Lane Grp Cap(c), veh/h	593	982	957	638	1006	1045	252	0	432	412	0	398
V/C Ratio(X)	0.12	0.15	0.16	0.03	0.17	0.17	0.33	0.00	0.06	0.04	0.00	0.50
Avail Cap(c_a), veh/h	593	982	957	638	1006	1045	456	0	748	658	0	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.0	8.2	8.3	9.3	8.3	8.3	31.6	0.0	22.7	23.3	0.0	25.5
Incr Delay (d2), s/veh	0.4	0.3	0.4	0.1	0.4	0.4	0.8	0.0	0.1	0.0	0.0	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.0	0.1	0.1	0.9	0.0	0.2	0.1	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.4	8.6	8.6	9.4	8.7	8.7	32.4	0.0	22.7	23.3	0.0	26.5
LnGrp LOS	B	A	A	A	A	A	C		C	C		C
Approach Vol, veh/h		374			374			108				214
Approach Delay, s/veh		9.0			8.7			30.2				26.2
Approach LOS		A			A			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		51.8		28.2		51.8		28.2				
Change Period (Y+Rc), s		6.5		8.0		6.5		8.0				
Max Green Setting (Gmax), s		30.5		35.0		30.5		35.0				
Max Q Clear Time (g_c+I1), s		8.9		16.2		6.2		10.5				
Green Ext Time (p_c), s		2.6		0.5		2.6		1.7				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				14.5								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	1.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Vol, veh/h	326	69	30	527	34	31
Future Vol, veh/h	326	69	30	527	34	31
Conflicting Peds, #/hr	0	2	2	0	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	22	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	5	6	0	3	6	3
Mvmt Flow	362	77	33	586	38	34

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	441	0	747	183
Stage 1	-	-	-	-	364	-
Stage 2	-	-	-	-	383	-
Critical Hdwy	-	-	4.1	-	6.92	6.96
Critical Hdwy Stg 1	-	-	-	-	5.92	-
Critical Hdwy Stg 2	-	-	-	-	5.92	-
Follow-up Hdwy	-	-	2.2	-	3.56	3.33
Pot Cap-1 Maneuver	-	-	1130	-	340	825
Stage 1	-	-	-	-	662	-
Stage 2	-	-	-	-	647	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1128	-	324	824
Mov Cap-2 Maneuver	-	-	-	-	324	-
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	617	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.4	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	324	824	-	-	1128	-
HCM Lane V/C Ratio	0.117	0.042	-	-	0.03	-
HCM Control Delay (s/veh)	17.6	9.6	-	-	8.3	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q (veh)	0.4	0.1	-	-	0.1	-

Queues
5: Dixie Road & Rathburn Rd E

Future Background (2030)
AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	82	160	100	124	42	1312	71	160	1046	47
Future Volume (vph)	82	160	100	124	42	1312	71	160	1046	47
Lane Group Flow (vph)	89	302	109	490	46	1426	77	174	1137	51
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8		4		6		5	2	
Permitted Phases	8		4		6		6	2		2
Detector Phase	8	8	4	4	6	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	41.6	41.6	41.6	41.6	48.3	48.3	48.3	11.5	48.3	48.3
Total Split (s)	61.0	61.0	61.0	61.0	86.0	86.0	86.0	13.0	99.0	99.0
Total Split (%)	38.1%	38.1%	38.1%	38.1%	53.8%	53.8%	53.8%	8.1%	61.9%	61.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.6	2.6	2.6	2.6	3.3	3.3	3.3	0.0	3.3	3.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	7.3	7.3	7.3	3.0	7.3	7.3
Lead/Lag					Lag	Lag	Lag	Lead		
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	C-Max	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	54.4	54.4	54.4	54.4	78.7	78.7	78.7	96.0	91.7	91.7
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.49	0.49	0.49	0.60	0.57	0.57
v/c Ratio	0.41	0.27	0.37	0.43	0.23	0.59	0.10	0.86	0.41	0.06
Control Delay (s/veh)	47.6	29.4	50.5	35.3	27.1	30.5	4.4	63.0	20.5	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.6	29.4	50.5	35.3	27.1	30.5	4.4	63.0	20.5	6.1
LOS	D	C	D	D	C	C	A	E	C	A
Approach Delay (s/veh)		33.5		38.1		29.1			25.4	
Approach LOS		C		D		C			C	
Queue Length 50th (m)	22.9	29.0	30.9	55.1	8.7	123.4	0.0	33.1	75.4	0.0
Queue Length 95th (m)	42.3	42.2	52.2	76.2	19.0	139.1	9.4	#47.7	113.9	9.4
Internal Link Dist (m)		145.2		95.0		286.2			319.0	
Turn Bay Length (m)	37.0		73.0		107.0		90.0	112.0		140.0
Base Capacity (vph)	217	1111	293	1131	202	2402	746	202	2773	845
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.27	0.37	0.43	0.23	0.59	0.10	0.86	0.41	0.06

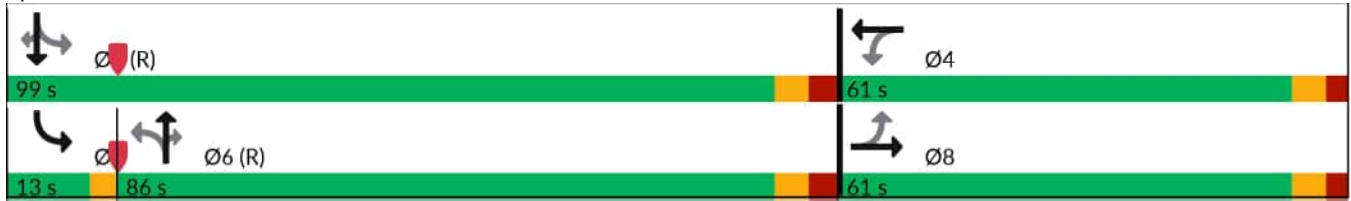
Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 98 (61%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 29.6	Intersection LOS: C
Intersection Capacity Utilization 103.2%	ICU Level of Service G
Analysis Period (min) 15	

5: Dixie Road & Rathburn Rd E























95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Dixie Road & Rathburn Rd E



HCM 6th Signalized Intersection Summary
5: Dixie Road & Rathburn Rd E

Future Background (2030)
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	160	118	100	124	327	42	1312	71	160	1046	47
Future Volume (veh/h)	82	160	118	100	124	327	42	1312	71	160	1046	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1767	1810	1710	1870	1796	1796	1826	1796	1753	1811	1796
Adj Flow Rate, veh/h	89	174	0	109	135	0	46	1426	0	174	1137	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	9	1	8	2	2	2	5	2	5	6	2
Cap, veh/h	415	1141		379	1208		256	2452		251	2834	
Arrive On Green	0.34	0.34	0.00	0.34	0.34	0.00	0.49	0.49	0.00	0.06	0.57	0.00
Sat Flow, veh/h	1177	3445	0	1100	3647	0	474	4985	1522	1669	4944	1522
Grp Volume(v), veh/h	89	174	0	109	135	0	46	1426	0	174	1137	0
Grp Sat Flow(s),veh/h/ln	1177	1678	0	1100	1777	0	474	1662	1522	1669	1648	1522
Q Serve(g_s), s	9.0	5.8	0.0	12.2	4.2	0.0	9.5	32.6	0.0	8.1	20.4	0.0
Cycle Q Clear(g_c), s	13.1	5.8	0.0	18.0	4.2	0.0	16.9	32.6	0.0	8.1	20.4	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	415	1141		379	1208		256	2452		251	2834	
V/C Ratio(X)	0.21	0.15		0.29	0.11		0.18	0.58		0.69	0.40	
Avail Cap(c_a), veh/h	415	1141		379	1208		256	2452		251	2834	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	36.8	0.0	43.0	36.2	0.0	27.2	28.9	0.0	24.1	18.9	0.0
Incr Delay (d2), s/veh	1.2	0.3	0.0	1.9	0.2	0.0	1.5	1.0	0.0	8.0	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.8	0.0	2.7	1.3	0.0	0.8	7.8	0.0	2.1	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.9	37.0	0.0	44.9	36.4	0.0	28.8	29.9	0.0	32.1	19.4	0.0
LnGrp LOS	D	D		D	D		C	C		C	B	
Approach Vol, veh/h		263			244			1472			1311	
Approach Delay, s/veh		38.7			40.2			29.9			21.1	
Approach LOS		D			D			C			C	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		99.0		61.0	13.0	86.0		61.0				
Change Period (Y+Rc), s		7.3		6.6	3.0	7.3		6.6				
Max Green Setting (Gmax), s		91.7		54.4	10.0	78.7		54.4				
Max Q Clear Time (g_c+I1), s		22.4		20.0	10.1	34.6		15.1				
Green Ext Time (p_c), s		13.7		1.8	0.0	19.0		2.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				27.8								
HCM 6th LOS				C								
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Queues
7: Dixie Road & Hickory Drive

Future Background (2030)
AM Peak Hour



Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	36	13	1699	1239
Future Volume (vph)	36	13	1699	1239
Lane Group Flow (vph)	82	14	1867	1382
Turn Type	Prot	Prot	NA	NA
Protected Phases	8	1	6	2
Permitted Phases				
Detector Phase	8	1	6	2
Switch Phase				
Minimum Initial (s)	10.0	7.0	10.0	10.0
Minimum Split (s)	46.4	10.0	31.0	31.0
Total Split (s)	27.0	10.0	53.0	43.0
Total Split (%)	33.8%	12.5%	66.3%	53.8%
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	3.4	0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	3.0	6.0	6.0
Lead/Lag		Lead		Lag
Lead-Lag Optimize?				
Recall Mode	None	None	C-Max	C-Max
Act Effct Green (s)	10.4	7.1	60.9	58.8
Actuated g/C Ratio	0.13	0.09	0.76	0.74
v/c Ratio	0.36	0.10	0.49	0.39
Control Delay (s/veh)	22.9	27.5	13.5	6.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.9	27.5	13.5	6.3
LOS	C	C	B	A
Approach Delay (s/veh)	22.9		13.6	6.3
Approach LOS	C		B	A
Queue Length 50th (m)	5.9	2.1	162.1	27.3
Queue Length 95th (m)	18.4	m4.0	178.9	59.0
Internal Link Dist (m)	166.6		319.0	244.6
Turn Bay Length (m)		100.0		
Base Capacity (vph)	392	139	3791	3549
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.21	0.10	0.49	0.39

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 79 (99%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay (s/veh): 10.8	Intersection LOS: B
Intersection Capacity Utilization 53.1%	ICU Level of Service A
Analysis Period (min) 15	

7: Dixie Road & Hickory Drive

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Dixie Road & Hickory Drive



HCM 6th Signalized Intersection Summary
 7: Dixie Road & Hickory Drive

Future Background (2030)
 AM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑↑↑	↑↑↑	
Traffic Volume (veh/h)	36	38	13	1699	1239	18
Future Volume (veh/h)	36	38	13	1699	1239	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1739	1668	1710	1856	1811	1824
Adj Flow Rate, veh/h	40	42	14	1867	1362	20
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	11	8	3	6	0
Cap, veh/h	79	83	38	3676	3337	49
Arrive On Green	0.11	0.11	0.02	0.73	0.66	0.66
Sat Flow, veh/h	744	781	1629	5233	5183	74
Grp Volume(v), veh/h	83	0	14	1867	894	488
Grp Sat Flow(s),veh/h/ln	1544	0	1629	1689	1648	1797
Q Serve(g_s), s	4.1	0.0	0.7	12.8	10.0	10.0
Cycle Q Clear(g_c), s	4.1	0.0	0.7	12.8	10.0	10.0
Prop In Lane	0.48	0.51	1.00			0.04
Lane Grp Cap(c), veh/h	165	0	38	3676	2191	1195
V/C Ratio(X)	0.50	0.00	0.37	0.51	0.41	0.41
Avail Cap(c_a), veh/h	378	0	143	3676	2191	1195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	38.5	4.8	6.2	6.2
Incr Delay (d2), s/veh	2.4	0.0	5.8	0.5	0.6	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.2	0.2	0.2	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	36.1	0.0	44.3	5.3	6.7	7.2
LnGrp LOS	D		D	A	A	A
Approach Vol, veh/h	83			1881	1382	
Approach Delay, s/veh	36.1			5.6	6.9	
Approach LOS	D			A	A	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	4.9	59.2			64.1	15.9
Change Period (Y+Rc), s	3.0	6.0			6.0	7.4
Max Green Setting (Gmax), s	7.0	37.0			47.0	19.6
Max Q Clear Time (g_c+I1), s	2.7	12.0			14.8	6.1
Green Ext Time (p_c), s	0.0	12.5			21.2	0.2

Intersection Summary

HCM 6th Ctrl Delay, s/veh			6.9			
HCM 6th LOS			A			

Notes

User approved pedestrian interval to be less than phase max green.

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	4	
Traffic Vol, veh/h	0	22	51	119	95	5
Future Vol, veh/h	0	22	51	119	95	5
Conflicting Peds, #/hr	0	0	5	0	0	5
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	1	2	0
Mvmt Flow	0	27	61	143	114	6

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	387	122	125	0	-	0
Stage 1	122	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	620	935	1474	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	784	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	587	932	1469	-	-	-
Mov Cap-2 Maneuver	587	-	-	-	-	-
Stage 1	864	-	-	-	-	-
Stage 2	781	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9	2.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1469	-	932	-	-
HCM Lane V/C Ratio	0.042	-	0.028	-	-
HCM Control Delay (s/veh)	7.6	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0.1	-	0.1	-	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+			+			+	
Traffic Vol, veh/h	1	0	28	19	0	6	19	163	29	4	113	0
Future Vol, veh/h	1	0	28	19	0	6	19	163	29	4	113	0
Conflicting Peds, #/hr	1	0	1	1	0	1	4	0	9	9	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	2	0
Mvmt Flow	1	0	34	23	0	7	23	196	35	5	136	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	414	436	141	433	419	224	140	0	0	240	0	0
Stage 1	150	150	-	269	269	-	-	-	-	-	-	-
Stage 2	264	286	-	164	150	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	552	517	912	537	528	820	1456	-	-	1339	-	-
Stage 1	857	777	-	741	690	-	-	-	-	-	-	-
Stage 2	746	679	-	843	777	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	536	500	908	504	511	814	1451	-	-	1330	-	-
Mov Cap-2 Maneuver	536	500	-	504	511	-	-	-	-	-	-	-
Stage 1	839	772	-	722	673	-	-	-	-	-	-	-
Stage 2	726	662	-	808	772	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.2	11.9	0.7	0.3
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1451	-	-	887	555	1330	-	-
HCM Lane V/C Ratio	0.016	-	-	0.039	0.054	0.004	-	-
HCM Control Delay (s/veh)	7.5	0	-	9.2	11.9	7.7	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q (veh)	0	-	-	0.1	0.2	0	-	-

Queues
3: Bough Beeches Blvd & Rathburn Rd E

Future Background (2030)
PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	152	356	32	381	86	39	16	36
Future Volume (vph)	152	356	32	381	86	39	16	36
Lane Group Flow (vph)	165	519	35	436	93	75	17	156
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	29.5	29.5	29.5	29.5	37.0	37.0	37.0	37.0
Total Split (s)	37.0	37.0	37.0	37.0	43.0	43.0	43.0	43.0
Total Split (%)	46.3%	46.3%	46.3%	46.3%	53.8%	53.8%	53.8%	53.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.0	3.0	3.0	3.0
All-Red Time (s)	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	8.0	8.0	8.0	8.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	52.6	52.6	52.6	52.6	12.9	12.9	12.9	12.9
Actuated g/C Ratio	0.66	0.66	0.66	0.66	0.16	0.16	0.16	0.16
v/c Ratio	0.29	0.23	0.07	0.19	0.51	0.25	0.09	0.44
Control Delay (s/veh)	6.0	3.7	6.3	5.9	39.9	19.6	27.5	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.0	3.7	6.3	5.9	39.9	19.6	27.5	13.3
LOS	A	A	A	A	D	B	C	B
Approach Delay (s/veh)		4.2		6.0		30.9		14.7
Approach LOS		A		A		C		B
Queue Length 50th (m)	7.8	10.3	1.7	11.6	14.0	5.9	2.4	5.5
Queue Length 95th (m)	m17.4	m15.6	6.0	22.1	26.4	16.2	7.3	20.3
Internal Link Dist (m)		65.1		84.3		120.2		58.6
Turn Bay Length (m)	33.0		40.0		27.0		11.0	
Base Capacity (vph)	570	2227	529	2285	497	768	543	771
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.23	0.07	0.19	0.19	0.10	0.03	0.20

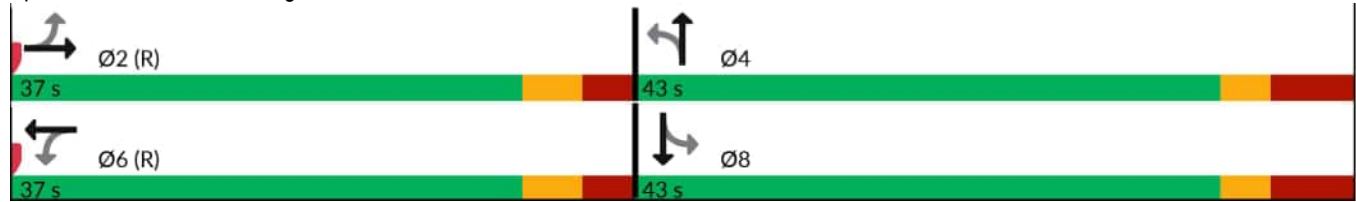
Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 35 (44%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay (s/veh): 9.0	Intersection LOS: A
Intersection Capacity Utilization 78.2%	ICU Level of Service D
Analysis Period (min) 15	

3: Bough Beeches Blvd & Rathburn Rd E





















m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Bough Beeches Blvd & Rathburn Rd E



HCM 6th Signalized Intersection Summary
3: Bough Beeches Blvd & Rathburn Rd E

Future Background (2030)
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	356	121	32	381	20	86	39	30	16	36	108
Future Volume (veh/h)	152	356	121	32	381	20	86	39	30	16	36	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.98	0.98		0.96	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1810	1885	1796	1824	1870	1824	1810	1900	1781	1824	1900	1810
Adj Flow Rate, veh/h	165	387	132	35	414	22	93	42	33	17	39	117
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	0	2	0	1	0	3	0	0	1
Cap, veh/h	543	1449	487	499	1908	101	305	253	199	379	106	319
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	916	2606	875	856	3429	182	1168	966	759	1261	405	1214
Grp Volume(v), veh/h	165	264	255	35	214	222	93	0	75	17	0	156
Grp Sat Flow(s),veh/h/ln	916	1791	1690	856	1777	1834	1168	0	1725	1261	0	1619
Q Serve(g_s), s	8.9	6.1	6.3	1.8	4.9	4.9	5.7	0.0	2.7	0.8	0.0	6.3
Cycle Q Clear(g_c), s	13.8	6.1	6.3	8.1	4.9	4.9	11.9	0.0	2.7	3.5	0.0	6.3
Prop In Lane	1.00		0.52	1.00		0.10	1.00		0.44	1.00		0.75
Lane Grp Cap(c), veh/h	543	996	940	499	988	1020	305	0	453	379	0	425
V/C Ratio(X)	0.30	0.27	0.27	0.07	0.22	0.22	0.31	0.00	0.17	0.04	0.00	0.37
Avail Cap(c_a), veh/h	543	996	940	499	988	1020	509	0	754	599	0	708
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	9.2	9.3	11.4	9.0	9.0	29.0	0.0	22.7	24.1	0.0	24.1
Incr Delay (d2), s/veh	1.4	0.7	0.7	0.3	0.5	0.5	0.6	0.0	0.2	0.0	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.2	0.1	0.1	0.1	0.9	0.0	0.6	0.1	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.9	9.9	10.0	11.7	9.5	9.5	29.5	0.0	22.9	24.2	0.0	24.6
LnGrp LOS	B	A	A	B	A	A	C		C	C		C
Approach Vol, veh/h		684			471			168				173
Approach Delay, s/veh		10.9			9.6			26.6				24.6
Approach LOS		B			A			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		51.0		29.0		51.0		29.0				
Change Period (Y+Rc), s		6.5		8.0		6.5		8.0				
Max Green Setting (Gmax), s		30.5		35.0		30.5		35.0				
Max Q Clear Time (g_c+I1), s		15.8		13.9		10.1		8.3				
Green Ext Time (p_c), s		4.4		1.0		3.3		1.3				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				13.8								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	4.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Vol, veh/h	554	140	60	519	106	80
Future Vol, veh/h	554	140	60	519	106	80
Conflicting Peds, #/hr	0	6	6	0	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	22	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	0	1	3	0
Mvmt Flow	630	159	68	590	120	91

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	795	0	1080
Stage 1	-	-	-	-	636
Stage 2	-	-	-	-	444
Critical Hdwy	-	-	4.1	-	6.86
Critical Hdwy Stg 1	-	-	-	-	5.86
Critical Hdwy Stg 2	-	-	-	-	5.86
Follow-up Hdwy	-	-	2.2	-	3.53
Pot Cap-1 Maneuver	-	-	835	-	211
Stage 1	-	-	-	-	487
Stage 2	-	-	-	-	611
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	831	-	191
Mov Cap-2 Maneuver	-	-	-	-	191
Stage 1	-	-	-	-	485
Stage 2	-	-	-	-	555

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1	34.1
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	191	678	-	-	831	-
HCM Lane V/C Ratio	0.631	0.134	-	-	0.082	-
HCM Control Delay (s/veh)	51.4	11.1	-	-	9.7	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q (veh)	3.6	0.5	-	-	0.3	-

Queues

Future Background (2030)

5: Dixie Road & Rathburn Rd E

PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	40	208	115	250	176	1020	146	331	1920	183
Future Volume (vph)	40	208	115	250	176	1020	146	331	1920	183
Lane Group Flow (vph)	41	357	117	513	180	1041	149	338	1959	187
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		8		4	1	6		5	2	
Permitted Phases	8		4		6		6	2		2
Detector Phase	8	8	4	4	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	41.6	41.6	41.6	41.6	11.5	48.3	48.3	11.5	48.3	48.3
Total Split (s)	53.0	53.0	53.0	53.0	16.0	88.0	88.0	19.0	91.0	91.0
Total Split (%)	33.1%	33.1%	33.1%	33.1%	10.0%	55.0%	55.0%	11.9%	56.9%	56.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.6	2.6	2.6	2.6	0.0	3.3	3.3	0.0	3.3	3.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	3.0	7.3	7.3	3.0	7.3	7.3
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	46.4	46.4	46.4	46.4	98.0	80.7	80.7	104.0	83.7	83.7
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.61	0.50	0.50	0.65	0.52	0.52
v/c Ratio	0.25	0.36	0.52	0.50	0.99	0.42	0.19	0.91	0.74	0.22
Control Delay (s/veh)	48.4	32.0	56.7	33.0	108.1	25.6	3.4	49.9	41.3	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.4	32.0	56.7	33.0	108.1	25.6	3.4	49.9	41.3	8.9
LOS	D	C	E	C	F	C	A	D	D	A
Approach Delay (s/veh)		33.7		37.4		34.0			40.0	
Approach LOS		C		D		C			D	
Queue Length 50th (m)	10.6	34.5	34.4	55.8	44.6	78.7	0.0	53.2	241.6	11.0
Queue Length 95th (m)	22.9	50.0	58.2	62.4	#99.1	90.9	12.2	#89.9	266.7	m26.2
Internal Link Dist (m)		145.2		95.0		286.2			319.0	
Turn Bay Length (m)	37.0		73.0		107.0		90.0	112.0		140.0
Base Capacity (vph)	167	1000	227	1030	182	2487	790	370	2630	839
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.36	0.52	0.50	0.99	0.42	0.19	0.91	0.74	0.22

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 94 (59%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 37.5	Intersection LOS: D
Intersection Capacity Utilization 110.4%	ICU Level of Service H
Analysis Period (min) 15	

Queues

5: Dixie Road & Rathburn Rd E

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

Queue shown is maximum after two cycles.























m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Dixie Road & Rathburn Rd E



HCM 6th Signalized Intersection Summary
5: Dixie Road & Rathburn Rd E

Future Background (2030)
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	208	142	115	250	253	176	1020	146	331	1920	183
Future Volume (veh/h)	40	208	142	115	250	253	176	1020	146	331	1920	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		1.00	0.97		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1824	1870	1796	1810	1870	1796	1810	1841	1824	1824	1870	1824
Adj Flow Rate, veh/h	41	212	0	117	255	0	180	1041	0	338	1959	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	1	2	2	1	4	0	0	2	0
Cap, veh/h	296	1031		315	1031		210	2535		416	2759	
Arrive On Green	0.29	0.29	0.00	0.29	0.29	0.00	0.06	0.50	0.00	0.10	0.54	0.00
Sat Flow, veh/h	1070	3647	0	1101	3647	0	1724	5025	1546	1737	5106	1546
Grp Volume(v), veh/h	41	212	0	117	255	0	180	1041	0	338	1959	0
Grp Sat Flow(s),veh/h/ln	1070	1777	0	1101	1777	0	1724	1675	1546	1737	1702	1546
Q Serve(g_s), s	4.9	7.2	0.0	14.4	8.8	0.0	8.1	20.7	0.0	14.8	45.8	0.0
Cycle Q Clear(g_c), s	13.7	7.2	0.0	21.6	8.8	0.0	8.1	20.7	0.0	14.8	45.8	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	296	1031		315	1031		210	2535		416	2759	
V/C Ratio(X)	0.14	0.21		0.37	0.25		0.86	0.41		0.81	0.71	
Avail Cap(c_a), veh/h	296	1031		315	1031		240	2535		416	2759	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.7	42.9	0.0	51.0	43.4	0.0	30.8	24.8	0.0	19.1	27.4	0.0
Incr Delay (d2), s/veh	1.0	0.5	0.0	3.3	0.6	0.0	22.8	0.5	0.0	11.6	1.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.4	0.0	3.3	3.0	0.0	2.9	4.8	0.0	3.7	10.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.6	43.3	0.0	54.4	44.0	0.0	53.5	25.3	0.0	30.6	29.0	0.0
LnGrp LOS	D	D		D	D		D	C		C	C	
Approach Vol, veh/h		253			372			1221			2297	
Approach Delay, s/veh		44.4			47.3			29.4			29.2	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.2	93.8		53.0	19.0	88.0		53.0				
Change Period (Y+Rc), s	3.0	7.3		6.6	3.0	7.3		6.6				
Max Green Setting (Gmax), s	13.0	83.7		46.4	16.0	80.7		46.4				
Max Q Clear Time (g_c+I1), s	10.1	47.8		23.6	16.8	22.7		15.7				
Green Ext Time (p_c), s	0.2	24.1		2.6	0.0	11.7		1.9				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			31.8									
HCM 6th LOS			C									
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Queues
7: Dixie Road & Hickory Drive

Future Background (2030)
PM Peak Hour



Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	27	46	1265	2396
Future Volume (vph)	27	46	1265	2396
Lane Group Flow (vph)	66	47	1291	2483
Turn Type	Prot	Prot	NA	NA
Protected Phases	8	1	6	2
Permitted Phases				
Detector Phase	8	1	6	2
Switch Phase				
Minimum Initial (s)	10.0	7.0	10.0	10.0
Minimum Split (s)	46.4	10.0	31.0	31.0
Total Split (s)	27.0	10.0	53.0	43.0
Total Split (%)	33.8%	12.5%	66.3%	53.8%
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	3.4	0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	3.0	6.0	6.0
Lead/Lag		Lead		Lag
Lead-Lag Optimize?				
Recall Mode	None	None	C-Max	C-Max
Act Effct Green (s)	10.1	8.1	61.2	54.1
Actuated g/C Ratio	0.13	0.10	0.77	0.68
v/c Ratio	0.29	0.27	0.34	0.73
Control Delay (s/veh)	20.7	26.8	12.3	14.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.7	26.8	12.3	14.0
LOS	C	C	B	B
Approach Delay (s/veh)	20.7		12.8	14.0
Approach LOS	C		B	B
Queue Length 50th (m)	4.1	8.9	97.0	111.9
Queue Length 95th (m)	15.5	15.6	110.1	#157.3
Internal Link Dist (m)	166.6		319.0	244.6
Turn Bay Length (m)		100.0		
Base Capacity (vph)	410	171	3773	3391
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.27	0.34	0.73

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 79 (99%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay (s/veh): 13.7	Intersection LOS: B
Intersection Capacity Utilization 67.4%	ICU Level of Service C
Analysis Period (min) 15	

7: Dixie Road & Hickory Drive

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Dixie Road & Hickory Drive



HCM 6th Signalized Intersection Summary
 7: Dixie Road & Hickory Drive

Future Background (2030)
 PM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑↑↑	↑↑↑	
Traffic Volume (veh/h)	27	37	46	1265	2396	37
Future Volume (veh/h)	27	37	46	1265	2396	37
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.97	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1824	1824	1841	1870	1781
Adj Flow Rate, veh/h	28	38	47	1291	2445	38
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	0	0	4	2	3
Cap, veh/h	65	88	99	3680	3304	51
Arrive On Green	0.10	0.10	0.06	0.73	0.64	0.64
Sat Flow, veh/h	647	878	1737	5191	5345	80
Grp Volume(v), veh/h	67	0	47	1291	1605	878
Grp Sat Flow(s),veh/h/ln	1548	0	1737	1675	1702	1853
Q Serve(g_s), s	3.3	0.0	2.1	7.4	25.8	26.1
Cycle Q Clear(g_c), s	3.3	0.0	2.1	7.4	25.8	26.1
Prop In Lane	0.42	0.57	1.00			0.04
Lane Grp Cap(c), veh/h	155	0	99	3680	2172	1183
V/C Ratio(X)	0.43	0.00	0.48	0.35	0.74	0.74
Avail Cap(c_a), veh/h	379	0	152	3680	2172	1183
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	0.0	36.6	3.9	9.9	9.9
Incr Delay (d2), s/veh	1.9	0.0	3.5	0.3	2.3	4.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.6	0.1	0.7	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	35.8	0.0	40.1	4.1	12.2	14.2
LnGrp LOS	D		D	A	B	B
Approach Vol, veh/h	67			1338	2483	
Approach Delay, s/veh	35.8			5.4	12.9	
Approach LOS	D			A	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.5	57.1			64.6	15.4
Change Period (Y+Rc), s	3.0	6.0			6.0	7.4
Max Green Setting (Gmax), s	7.0	37.0			47.0	19.6
Max Q Clear Time (g_c+I1), s	4.1	28.1			9.4	5.3
Green Ext Time (p_c), s	0.0	8.4			14.4	0.2

Intersection Summary						
HCM 6th Ctrl Delay, s/veh			10.7			
HCM 6th LOS			B			

Notes

User approved pedestrian interval to be less than phase max green.



APPENDIX H

Future Total Intersection Capacity Analysis

HCM 6th TWSC
 1: Bough Beeches Blvd & N Site Access

Future Total (2030)
 AM Peak Hour

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	P	
Traffic Vol, veh/h	2	62	34	52	119	1
Future Vol, veh/h	2	62	34	52	119	1
Conflicting Peds, #/hr	0	0	11	0	0	11
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	6	4	0
Mvmt Flow	2	75	41	63	143	1

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	300	155	155	0	-	0
Stage 1	155	-	-	-	-	-
Stage 2	145	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	696	896	1438	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	887	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	665	889	1427	-	-	-
Mov Cap-2 Maneuver	665	-	-	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	880	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.5	3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1427	-	880	-	-
HCM Lane V/C Ratio	0.029	-	0.088	-	-
HCM Control Delay (s/veh)	7.6	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0.1	-	0.3	-	-

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+			+			+	
Traffic Vol, veh/h	0	0	26	28	0	2	17	84	12	0	181	0
Future Vol, veh/h	0	0	26	28	0	2	17	84	12	0	181	0
Conflicting Peds, #/hr	1	0	1	1	0	1	7	0	6	6	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	4	0	0	0	11	3	0	0	3	0
Mvmt Flow	0	0	31	33	0	2	20	99	14	0	213	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	368	379	221	382	372	113	220	0	0	119	0	0
Stage 1	220	220	-	152	152	-	-	-	-	-	-	-
Stage 2	148	159	-	230	220	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.24	7.1	6.5	6.2	4.21	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.336	3.5	4	3.3	2.299	-	-	2.2	-	-
Pot Cap-1 Maneuver	592	556	814	580	561	945	1298	-	-	1482	-	-
Stage 1	787	725	-	855	775	-	-	-	-	-	-	-
Stage 2	859	770	-	777	725	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	579	541	809	548	546	940	1291	-	-	1475	-	-
Mov Cap-2 Maneuver	579	541	-	548	546	-	-	-	-	-	-	-
Stage 1	770	721	-	836	758	-	-	-	-	-	-	-
Stage 2	842	753	-	747	721	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.6	11.8	1.2	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1291	-	-	809	564	1475	-	-
HCM Lane V/C Ratio	0.015	-	-	0.038	0.063	-	-	-
HCM Control Delay (s/veh)	7.8	0	-	9.6	11.8	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q (veh)	0	-	-	0.1	0.2	0	-	-

Queues

Future Total (2030)

3: Bough Beeches Blvd & Rathburn Rd E

AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	225	21	324	80	16	23	39
Future Volume (vph)	81	225	21	324	80	16	23	39
Lane Group Flow (vph)	85	301	22	358	84	24	24	223
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	29.5	29.5	29.5	29.5	37.0	37.0	37.0	37.0
Total Split (s)	37.0	37.0	37.0	37.0	43.0	43.0	43.0	43.0
Total Split (%)	46.3%	46.3%	46.3%	46.3%	53.8%	53.8%	53.8%	53.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.0	3.0	3.0	3.0
All-Red Time (s)	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	8.0	8.0	8.0	8.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	52.4	52.4	52.4	52.4	13.1	13.1	13.1	13.1
Actuated g/C Ratio	0.66	0.66	0.66	0.66	0.16	0.16	0.16	0.16
v/c Ratio	0.14	0.14	0.03	0.16	0.55	0.09	0.11	0.55
Control Delay (s/veh)	4.2	2.8	6.2	5.9	44.0	21.3	27.7	12.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.2	2.8	6.2	5.9	44.0	21.3	27.7	12.8
LOS	A	A	A	A	D	C	C	B
Approach Delay (s/veh)		3.1		5.9		39.0		14.2
Approach LOS		A		A		D		B
Queue Length 50th (m)	2.8	3.9	1.0	9.4	12.7	2.4	3.4	5.8
Queue Length 95th (m)	m5.7	m7.0	4.3	18.6	25.1	8.1	9.1	23.4
Internal Link Dist (m)		65.1		84.3		120.2		58.6
Turn Bay Length (m)	33.0		40.0		27.0		11.0	
Base Capacity (vph)	603	2180	654	2272	406	724	570	786
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.14	0.03	0.16	0.21	0.03	0.04	0.28

Intersection Summary	
Cycle Length:	80
Actuated Cycle Length:	80
Offset:	27 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	70
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.55
Intersection Signal Delay (s/veh):	10.0
Intersection LOS:	A
Intersection Capacity Utilization:	78.0%
ICU Level of Service:	D
Analysis Period (min):	15

Queues

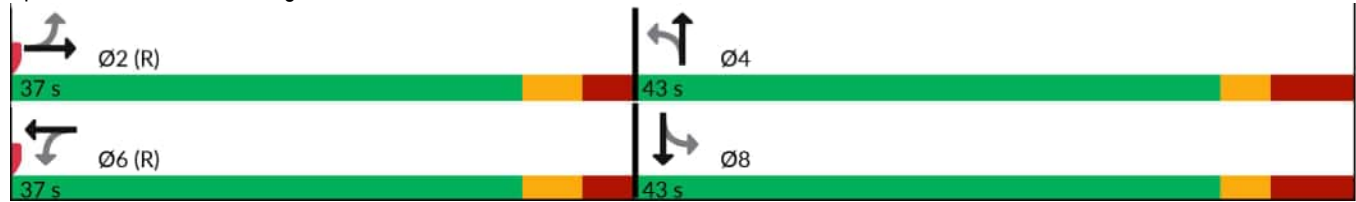
3: Bough Beeches Blvd & Rathburn Rd E

Future Total (2030)

AM Peak Hour

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Bough Beeches Blvd & Rathburn Rd E



HCM 6th Signalized Intersection Summary
 3: Bough Beeches Blvd & Rathburn Rd E

Future Total (2030)
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘		↗	↘		↗	↘	
Traffic Volume (veh/h)	81	225	61	21	324	16	80	16	7	23	39	173
Future Volume (veh/h)	81	225	61	21	324	16	80	16	7	23	39	173
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.99		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1826	1824	1824	1870	1739	1767	1811	1625	1824	1826	1781
Adj Flow Rate, veh/h	85	237	64	22	341	17	84	17	7	24	41	182
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	5	0	0	2	6	4	6	14	0	5	3
Cap, veh/h	580	1502	396	624	1906	95	245	321	132	428	76	339
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	971	2710	715	1047	3440	171	1083	1212	499	1331	289	1281
Grp Volume(v), veh/h	85	150	151	22	175	183	84	0	24	24	0	223
Grp Sat Flow(s),veh/h/ln	971	1735	1691	1047	1777	1834	1083	0	1711	1331	0	1569
Q Serve(g_s), s	3.8	3.4	3.5	0.8	3.9	3.9	5.8	0.0	0.8	1.1	0.0	9.7
Cycle Q Clear(g_c), s	7.7	3.4	3.5	4.3	3.9	3.9	15.5	0.0	0.8	1.9	0.0	9.7
Prop In Lane	1.00		0.42	1.00		0.09	1.00		0.29	1.00		0.82
Lane Grp Cap(c), veh/h	580	961	937	624	985	1016	245	0	453	428	0	415
V/C Ratio(X)	0.15	0.16	0.16	0.04	0.18	0.18	0.34	0.00	0.05	0.06	0.00	0.54
Avail Cap(c_a), veh/h	580	961	937	624	985	1016	432	0	749	658	0	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.7	8.7	8.7	9.8	8.8	8.8	31.9	0.0	21.9	22.7	0.0	25.2
Incr Delay (d2), s/veh	0.5	0.3	0.4	0.1	0.4	0.4	0.8	0.0	0.0	0.1	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.0	0.1	0.1	0.9	0.0	0.2	0.2	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.3	9.0	9.1	9.9	9.2	9.2	32.7	0.0	22.0	22.7	0.0	26.3
LnGrp LOS	B	A	A	A	A	A	C		C	C		C
Approach Vol, veh/h		386			380			108				247
Approach Delay, s/veh		9.6			9.3			30.3				25.9
Approach LOS		A			A			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.8		29.2		50.8		29.2				
Change Period (Y+Rc), s		6.5		8.0		6.5		8.0				
Max Green Setting (Gmax), s		30.5		35.0		30.5		35.0				
Max Q Clear Time (g_c+I1), s		9.7		17.5		6.3		11.7				
Green Ext Time (p_c), s		2.6		0.5		2.7		1.9				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				15.1								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	1.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Vol, veh/h	338	69	30	552	34	31
Future Vol, veh/h	338	69	30	552	34	31
Conflicting Peds, #/hr	0	2	2	0	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	22	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	5	6	0	3	6	3
Mvmt Flow	376	77	33	613	38	34

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	455	0	775 190
Stage 1	-	-	-	-	378 -
Stage 2	-	-	-	-	397 -
Critical Hdwy	-	-	4.1	-	6.92 6.96
Critical Hdwy Stg 1	-	-	-	-	5.92 -
Critical Hdwy Stg 2	-	-	-	-	5.92 -
Follow-up Hdwy	-	-	2.2	-	3.56 3.33
Pot Cap-1 Maneuver	-	-	1116	-	326 816
Stage 1	-	-	-	-	651 -
Stage 2	-	-	-	-	636 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1114	-	310 815
Mov Cap-2 Maneuver	-	-	-	-	310 -
Stage 1	-	-	-	-	650 -
Stage 2	-	-	-	-	605 -

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.4	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	310	815	-	-	1114	-
HCM Lane V/C Ratio	0.122	0.042	-	-	0.03	-
HCM Control Delay (s/veh)	18.2	9.6	-	-	8.3	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q (veh)	0.4	0.1	-	-	0.1	-

Queues

Future Total (2030)

5: Dixie Road & Rathburn Rd E

AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	82	161	103	131	42	1312	77	165	1046	47
Future Volume (vph)	82	161	103	131	42	1312	77	165	1046	47
Lane Group Flow (vph)	89	303	112	514	46	1426	84	179	1137	51
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		8		4		6		5	2	
Permitted Phases	8		4		6		6	2		2
Detector Phase	8	8	4	4	6	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	41.6	41.6	41.6	41.6	48.3	48.3	48.3	10.0	48.3	48.3
Total Split (s)	61.0	61.0	61.0	61.0	86.0	86.0	86.0	13.0	99.0	99.0
Total Split (%)	38.1%	38.1%	38.1%	38.1%	53.8%	53.8%	53.8%	8.1%	61.9%	61.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.6	2.6	2.6	2.6	3.3	3.3	3.3	0.0	3.3	3.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	7.3	7.3	7.3	3.0	7.3	7.3
Lead/Lag					Lag	Lag	Lag	Lead		
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	C-Max	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	54.4	54.4	54.4	54.4	78.7	78.7	78.7	96.0	91.7	91.7
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.49	0.49	0.49	0.60	0.57	0.57
v/c Ratio	0.43	0.27	0.38	0.45	0.23	0.59	0.11	0.89	0.41	0.06
Control Delay (s/veh)	48.7	29.4	47.0	32.6	27.1	30.5	4.3	68.2	21.1	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.7	29.4	47.0	32.6	27.1	30.5	4.3	68.2	21.1	7.3
LOS	D	C	D	C	C	C	A	E	C	A
Approach Delay (s/veh)		33.8		35.2		28.9			26.8	
Approach LOS		C		D		C			C	
Queue Length 50th (m)	23.1	29.1	30.7	56.7	8.7	123.4	0.0	25.9	75.4	0.0
Queue Length 95th (m)	42.8	42.3	52.8	78.1	19.0	139.1	9.8	#60.5	91.9	11.3
Internal Link Dist (m)		145.2		95.0		286.2			319.0	
Turn Bay Length (m)	37.0		73.0		107.0		90.0	112.0		140.0
Base Capacity (vph)	207	1112	292	1131	202	2402	749	202	2773	845
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.27	0.38	0.45	0.23	0.59	0.11	0.89	0.41	0.06

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 12 (8%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay (s/veh): 29.7	Intersection LOS: C
Intersection Capacity Utilization 103.2%	ICU Level of Service G
Analysis Period (min) 15	

Queues

Future Total (2030)

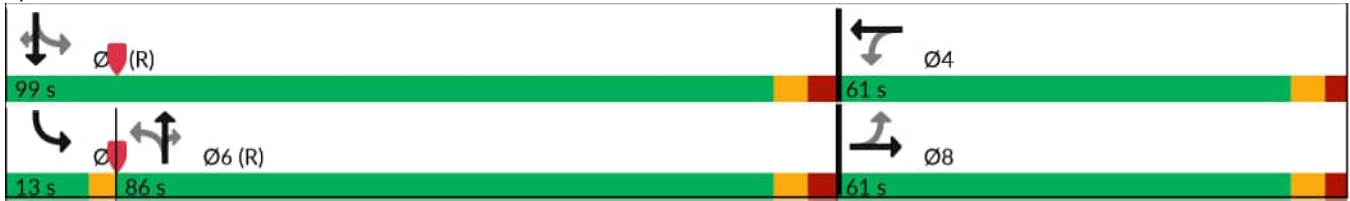
5: Dixie Road & Rathburn Rd E

AM Peak Hour

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























Queue shown is maximum after two cycles.

Splits and Phases: 5: Dixie Road & Rathburn Rd E



HCM 6th Signalized Intersection Summary
 5: Dixie Road & Rathburn Rd E

Future Total (2030)
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	161	118	103	131	342	42	1312	77	165	1046	47
Future Volume (veh/h)	82	161	118	103	131	342	42	1312	77	165	1046	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1767	1810	1710	1870	1796	1796	1826	1796	1753	1811	1796
Adj Flow Rate, veh/h	89	175	0	112	142	0	46	1426	0	179	1137	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	9	1	8	2	2	2	5	2	5	6	2
Cap, veh/h	411	1141		379	1208		256	2452		251	2834	
Arrive On Green	0.34	0.34	0.00	0.34	0.34	0.00	0.49	0.49	0.00	0.06	0.57	0.00
Sat Flow, veh/h	1170	3445	0	1099	3647	0	474	4985	1522	1669	4944	1522
Grp Volume(v), veh/h	89	175	0	112	142	0	46	1426	0	179	1137	0
Grp Sat Flow(s),veh/h/ln	1170	1678	0	1099	1777	0	474	1662	1522	1669	1648	1522
Q Serve(g_s), s	9.1	5.8	0.0	12.6	4.4	0.0	9.5	32.6	0.0	8.3	20.4	0.0
Cycle Q Clear(g_c), s	13.5	5.8	0.0	18.4	4.4	0.0	16.9	32.6	0.0	8.3	20.4	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	411	1141		379	1208		256	2452		251	2834	
V/C Ratio(X)	0.22	0.15		0.30	0.12		0.18	0.58		0.71	0.40	
Avail Cap(c_a), veh/h	411	1141		379	1208		256	2452		251	2834	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.9	36.8	0.0	43.2	36.3	0.0	27.2	28.9	0.0	24.4	18.9	0.0
Incr Delay (d2), s/veh	1.2	0.3	0.0	2.0	0.2	0.0	1.5	1.0	0.0	9.2	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.8	0.0	2.8	1.4	0.0	0.8	7.8	0.0	2.2	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.1	37.1	0.0	45.2	36.5	0.0	28.8	29.9	0.0	33.6	19.4	0.0
LnGrp LOS	D	D		D	D		C	C		C	B	
Approach Vol, veh/h		264			254			1472			1316	
Approach Delay, s/veh		38.8			40.3			29.9			21.3	
Approach LOS		D			D			C			C	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		99.0		61.0	13.0	86.0		61.0				
Change Period (Y+Rc), s		7.3		6.6	3.0	7.3		6.6				
Max Green Setting (Gmax), s		91.7		54.4	10.0	78.7		54.4				
Max Q Clear Time (g_c+I1), s		22.4		20.4	10.3	34.6		15.5				
Green Ext Time (p_c), s		13.7		1.8	0.0	19.0		2.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				28.0								
HCM 6th LOS				C								
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Queues

Future Total (2030)

7: Dixie Road & Hickory Drive

AM Peak Hour



Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	36	13	1714	1244
Future Volume (vph)	36	13	1714	1244
Lane Group Flow (vph)	82	14	1884	1387
Turn Type	Prot	pm+pt	NA	NA
Protected Phases	8	1	6	2
Permitted Phases		6		
Detector Phase	8	1	6	2
Switch Phase				
Minimum Initial (s)	10.0	7.0	10.0	10.0
Minimum Split (s)	46.4	10.0	31.0	31.0
Total Split (s)	27.0	10.0	53.0	43.0
Total Split (%)	33.8%	12.5%	66.3%	53.8%
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	3.4	0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	3.0	6.0	6.0
Lead/Lag		Lead		Lag
Lead-Lag Optimize?				
Recall Mode	None	None	C-Max	C-Max
Act Effct Green (s)	10.4	62.7	60.9	58.9
Actuated g/C Ratio	0.13	0.78	0.76	0.74
v/c Ratio	0.36	0.04	0.50	0.39
Control Delay (s/veh)	22.9	5.8	14.4	6.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.9	5.8	14.4	6.2
LOS	C	A	B	A
Approach Delay (s/veh)	22.9		14.3	6.2
Approach LOS	C		B	A
Queue Length 50th (m)	5.9	1.2	148.7	27.5
Queue Length 95th (m)	18.4	m2.2	168.0	57.9
Internal Link Dist (m)	166.6		319.0	244.6
Turn Bay Length (m)		100.0		
Base Capacity (vph)	392	318	3791	3557
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.21	0.04	0.50	0.39

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay (s/veh): 11.2

Intersection LOS: B

Intersection Capacity Utilization 53.4%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Dixie Road & Hickory Drive



HCM 6th Signalized Intersection Summary
 7: Dixie Road & Hickory Drive

Future Total (2030)
 AM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑↑↑	↑↑↑	
Traffic Volume (veh/h)	36	38	13	1714	1244	18
Future Volume (veh/h)	36	38	13	1714	1244	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1739	1668	1710	1856	1811	1824
Adj Flow Rate, veh/h	40	42	14	1884	1367	20
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	6	11	8	3	6	0
Cap, veh/h	79	83	393	3676	3016	44
Arrive On Green	0.11	0.11	0.09	0.73	0.60	0.60
Sat Flow, veh/h	744	781	1629	5233	5183	73
Grp Volume(v), veh/h	83	0	14	1884	898	489
Grp Sat Flow(s),veh/h/ln	1544	0	1629	1689	1648	1797
Q Serve(g_s), s	4.1	0.0	0.2	13.0	12.0	12.0
Cycle Q Clear(g_c), s	4.1	0.0	0.2	13.0	12.0	12.0
Prop In Lane	0.48	0.51	1.00			0.04
Lane Grp Cap(c), veh/h	165	0	393	3676	1980	1080
V/C Ratio(X)	0.50	0.00	0.04	0.51	0.45	0.45
Avail Cap(c_a), veh/h	378	0	393	3676	1980	1080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	4.6	4.8	8.8	8.8
Incr Delay (d2), s/veh	2.4	0.0	0.0	0.5	0.8	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.2	0.2	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	36.1	0.0	4.6	5.3	9.5	10.1
LnGrp LOS	D		A	A	A	B
Approach Vol, veh/h	83			1898	1387	
Approach Delay, s/veh	36.1			5.3	9.7	
Approach LOS	D			A	A	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.0	54.1			64.1	15.9
Change Period (Y+Rc), s	3.0	6.0			6.0	7.4
Max Green Setting (Gmax), s	7.0	37.0			47.0	19.6
Max Q Clear Time (g_c+I1), s	2.2	14.0			15.0	6.1
Green Ext Time (p_c), s	0.0	12.0			21.4	0.2

Intersection Summary

HCM 6th Ctrl Delay, s/veh			7.9			
HCM 6th LOS			A			

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th TWSC
 1: Bough Beeches Blvd & N Site Access

Future Total (2030)
 PM Peak Hour

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			1	1	
Traffic Vol, veh/h	0	48	85	119	95	9
Future Vol, veh/h	0	48	85	119	95	9
Conflicting Peds, #/hr	0	0	5	0	0	5
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	1	2	0
Mvmt Flow	0	58	102	143	114	11

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	472	125	130	0	0
Stage 1	125	-	-	-	-
Stage 2	347	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	554	931	1468	-	-
Stage 1	906	-	-	-	-
Stage 2	720	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	508	928	1463	-	-
Mov Cap-2 Maneuver	508	-	-	-	-
Stage 1	834	-	-	-	-
Stage 2	717	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.1	3.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1463	-	928	-	-
HCM Lane V/C Ratio	0.07	-	0.062	-	-
HCM Control Delay (s/veh)	7.6	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0.2	-	0.2	-	-

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+			+			+			+	
Traffic Vol, veh/h	1	0	31	19	0	6	23	197	29	4	139	0
Future Vol, veh/h	1	0	31	19	0	6	23	197	29	4	139	0
Conflicting Peds, #/hr	1	0	1	1	0	1	4	0	9	9	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	2	0
Mvmt Flow	1	0	37	23	0	7	28	237	35	5	167	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	496	518	172	517	501	265	171	0	0	281	0	0
Stage 1	181	181	-	320	320	-	-	-	-	-	-	-
Stage 2	315	337	-	197	181	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	487	465	877	472	475	779	1418	-	-	1293	-	-
Stage 1	825	754	-	696	656	-	-	-	-	-	-	-
Stage 2	700	645	-	809	754	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	471	448	874	439	457	773	1414	-	-	1284	-	-
Mov Cap-2 Maneuver	471	448	-	439	457	-	-	-	-	-	-	-
Stage 1	804	749	-	675	636	-	-	-	-	-	-	-
Stage 2	677	626	-	771	749	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.4	12.8	0.7	0.2
HCM LOS	A	B		

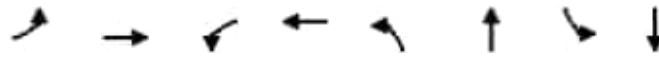
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1414	-	-	851	490	1284	-	-
HCM Lane V/C Ratio	0.02	-	-	0.045	0.061	0.004	-	-
HCM Control Delay (s/veh)	7.6	0	-	9.4	12.8	7.8	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q (veh)	0.1	-	-	0.1	0.2	0	-	-

Queues

Future Total (2030)

3: Bough Beeches Blvd & Rathburn Rd E

PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	179	356	32	381	86	39	22	36
Future Volume (vph)	179	356	32	381	86	39	22	36
Lane Group Flow (vph)	195	519	35	449	93	75	24	181
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	29.5	29.5	29.5	29.5	37.0	37.0	37.0	37.0
Total Split (s)	37.0	37.0	37.0	37.0	43.0	43.0	43.0	43.0
Total Split (%)	46.3%	46.3%	46.3%	46.3%	53.8%	53.8%	53.8%	53.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.0	3.0	3.0	3.0
All-Red Time (s)	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	8.0	8.0	8.0	8.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	52.5	52.5	52.5	52.5	13.0	13.0	13.0	13.0
Actuated g/C Ratio	0.66	0.66	0.66	0.66	0.16	0.16	0.16	0.16
v/c Ratio	0.35	0.23	0.07	0.20	0.52	0.25	0.12	0.48
Control Delay (s/veh)	8.1	4.8	6.4	6.0	40.2	19.4	28.1	12.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.1	4.8	6.4	6.0	40.2	19.4	28.1	12.8
LOS	A	A	A	A	D	B	C	B
Approach Delay (s/veh)		5.7		6.0		30.9		14.6
Approach LOS		A		A		C		B
Queue Length 50th (m)	16.8	14.5	1.7	12.0	14.0	5.9	3.4	5.5
Queue Length 95th (m)	m30.0	m27.2	6.1	22.8	26.4	16.1	9.2	21.1
Internal Link Dist (m)		65.1		84.3		120.2		58.6
Turn Bay Length (m)	33.0		40.0		27.0		11.0	
Base Capacity (vph)	561	2221	528	2270	486	768	543	780
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.23	0.07	0.20	0.19	0.10	0.04	0.23

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 35 (44%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay (s/veh): 9.6	Intersection LOS: A
Intersection Capacity Utilization 80.4%	ICU Level of Service D
Analysis Period (min) 15	

Queues

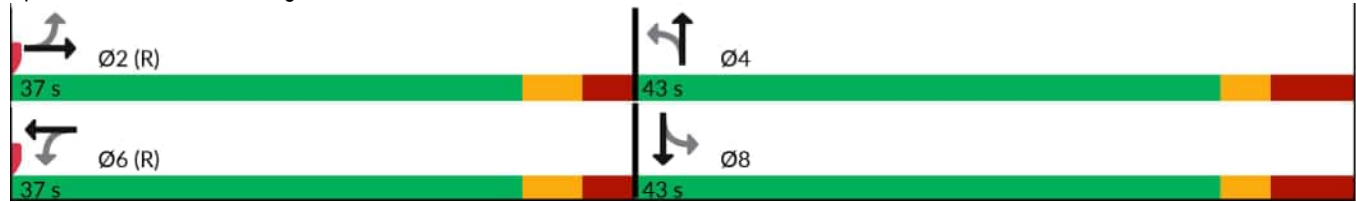
3: Bough Beeches Blvd & Rathburn Rd E

Future Total (2030)

PM Peak Hour






















m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Bough Beeches Blvd & Rathburn Rd E



HCM 6th Signalized Intersection Summary
 3: Bough Beeches Blvd & Rathburn Rd E

Future Total (2030)
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	356	121	32	381	32	86	39	30	22	36	131
Future Volume (veh/h)	179	356	121	32	381	32	86	39	30	22	36	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.98	0.98		0.96	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1810	1885	1796	1824	1870	1824	1810	1900	1781	1824	1900	1810
Adj Flow Rate, veh/h	195	387	132	35	414	35	93	42	33	24	39	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	0	2	0	1	0	3	0	0	1
Cap, veh/h	527	1426	479	490	1814	153	295	262	206	391	94	343
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	905	2605	875	856	3313	279	1143	966	759	1262	347	1263
Grp Volume(v), veh/h	195	264	255	35	221	228	93	0	75	24	0	181
Grp Sat Flow(s),veh/h/ln	905	1791	1689	856	1777	1815	1143	0	1725	1262	0	1610
Q Serve(g_s), s	11.4	6.3	6.4	1.8	5.1	5.2	5.8	0.0	2.6	1.2	0.0	7.4
Cycle Q Clear(g_c), s	16.6	6.3	6.4	8.3	5.1	5.2	13.2	0.0	2.6	3.8	0.0	7.4
Prop In Lane	1.00		0.52	1.00		0.15	1.00		0.44	1.00		0.78
Lane Grp Cap(c), veh/h	527	980	925	490	973	994	295	0	468	391	0	437
V/C Ratio(X)	0.37	0.27	0.28	0.07	0.23	0.23	0.32	0.00	0.16	0.06	0.00	0.41
Avail Cap(c_a), veh/h	527	980	925	490	973	994	485	0	755	600	0	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	9.6	9.6	11.8	9.4	9.4	29.3	0.0	22.2	23.7	0.0	23.9
Incr Delay (d2), s/veh	2.0	0.7	0.7	0.3	0.5	0.5	0.6	0.0	0.2	0.1	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.2	0.2	0.1	0.1	0.1	1.0	0.0	0.6	0.2	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.7	10.3	10.4	12.1	9.9	9.9	30.0	0.0	22.4	23.7	0.0	24.6
LnGrp LOS	B	B	B	B	A	A	C		C	C		C
Approach Vol, veh/h		714			484			168				205
Approach Delay, s/veh		11.8			10.1			26.6				24.5
Approach LOS		B			B			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.3		29.7		50.3		29.7				
Change Period (Y+Rc), s		6.5		8.0		6.5		8.0				
Max Green Setting (Gmax), s		30.5		35.0		30.5		35.0				
Max Q Clear Time (g_c+I1), s		18.6		15.2		10.3		9.4				
Green Ext Time (p_c), s		4.1		0.9		3.4		1.6				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh				14.5								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	5.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Vol, veh/h	581	140	60	542	106	80
Future Vol, veh/h	581	140	60	542	106	80
Conflicting Peds, #/hr	0	6	6	0	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	22	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	0	1	3	0
Mvmt Flow	660	159	68	616	120	91

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	825	0	1123
Stage 1	-	-	-	-	666
Stage 2	-	-	-	-	457
Critical Hdwy	-	-	4.1	-	6.86
Critical Hdwy Stg 1	-	-	-	-	5.86
Critical Hdwy Stg 2	-	-	-	-	5.86
Follow-up Hdwy	-	-	2.2	-	3.53
Pot Cap-1 Maneuver	-	-	814	-	198
Stage 1	-	-	-	-	470
Stage 2	-	-	-	-	601
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	811	-	179
Mov Cap-2 Maneuver	-	-	-	-	179
Stage 1	-	-	-	-	468
Stage 2	-	-	-	-	545

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1	38.4
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	179	663	-	-	811	-
HCM Lane V/C Ratio	0.673	0.137	-	-	0.084	-
HCM Control Delay (s/veh)	58.8	11.3	-	-	9.8	-
HCM Lane LOS	F	B	-	-	A	-
HCM 95th %tile Q (veh)	4	0.5	-	-	0.3	-

Queues

Future Total (2030)

5: Dixie Road & Rathburn Rd E

PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	40	211	118	256	176	1020	158	343	1920	183
Future Volume (vph)	40	211	118	256	176	1020	158	343	1920	183
Lane Group Flow (vph)	41	360	120	532	180	1041	161	350	1959	187
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		8		4	1	6		5	2	
Permitted Phases	8		4		6		6	2		2
Detector Phase	8	8	4	4	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	41.6	41.6	41.6	41.6	11.5	48.3	48.3	11.5	48.3	48.3
Total Split (s)	53.0	53.0	53.0	53.0	16.0	88.0	88.0	19.0	91.0	91.0
Total Split (%)	33.1%	33.1%	33.1%	33.1%	10.0%	55.0%	55.0%	11.9%	56.9%	56.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.6	2.6	2.6	2.6	0.0	3.3	3.3	0.0	3.3	3.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.6	6.6	6.6	6.6	3.0	7.3	7.3	3.0	7.3	7.3
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	46.4	46.4	46.4	46.4	98.0	80.7	80.7	104.0	83.7	83.7
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.61	0.50	0.50	0.65	0.52	0.52
v/c Ratio	0.26	0.36	0.53	0.52	0.99	0.42	0.20	0.95	0.74	0.22
Control Delay (s/veh)	49.1	32.6	56.3	32.3	108.1	25.6	3.4	56.1	41.2	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.1	32.6	56.3	32.3	108.1	25.6	3.4	56.1	41.2	9.4
LOS	D	C	E	C	F	C	A	E	D	A
Approach Delay (s/veh)		34.2		36.7		33.7			40.9	
Approach LOS		C		D		C			D	
Queue Length 50th (m)	10.6	35.5	31.9	50.8	44.6	78.7	0.0	61.3	253.9	12.7
Queue Length 95th (m)	23.1	51.0	59.8	68.2	#99.1	90.9	12.5	#105.3	268.6	m26.2
Internal Link Dist (m)		145.2		95.0		286.2			319.0	
Turn Bay Length (m)	37.0		73.0		107.0		90.0	112.0		140.0
Base Capacity (vph)	159	1000	226	1032	182	2487	796	370	2630	839
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.36	0.53	0.52	0.99	0.42	0.20	0.95	0.74	0.22

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 6 (4%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 37.8	Intersection LOS: D
Intersection Capacity Utilization 111.1%	ICU Level of Service H
Analysis Period (min) 15	

Queues

Future Total (2030)

5: Dixie Road & Rathburn Rd E

PM Peak Hour

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

Queue shown is maximum after two cycles.























m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Dixie Road & Rathburn Rd E



HCM 6th Signalized Intersection Summary
5: Dixie Road & Rathburn Rd E

Future Total (2030)
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	211	142	118	256	266	176	1020	158	343	1920	183
Future Volume (veh/h)	40	211	142	118	256	266	176	1020	158	343	1920	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		1.00	0.97		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1824	1870	1796	1810	1870	1796	1810	1841	1824	1824	1870	1824
Adj Flow Rate, veh/h	41	215	0	120	261	0	180	1041	0	350	1959	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	1	2	2	1	4	0	0	2	0
Cap, veh/h	294	1031		313	1031		210	2535		416	2759	
Arrive On Green	0.29	0.29	0.00	0.29	0.29	0.00	0.06	0.50	0.00	0.10	0.54	0.00
Sat Flow, veh/h	1064	3647	0	1098	3647	0	1724	5025	1546	1737	5106	1546
Grp Volume(v), veh/h	41	215	0	120	261	0	180	1041	0	350	1959	0
Grp Sat Flow(s),veh/h/ln	1064	1777	0	1098	1777	0	1724	1675	1546	1737	1702	1546
Q Serve(g_s), s	4.9	7.3	0.0	14.8	9.0	0.0	8.1	20.7	0.0	15.5	45.8	0.0
Cycle Q Clear(g_c), s	13.9	7.3	0.0	22.2	9.0	0.0	8.1	20.7	0.0	15.5	45.8	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	1031		313	1031		210	2535		416	2759	
V/C Ratio(X)	0.14	0.21		0.38	0.25		0.86	0.41		0.84	0.71	
Avail Cap(c_a), veh/h	294	1031		313	1031		240	2535		416	2759	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.9	42.9	0.0	51.3	43.5	0.0	30.8	24.8	0.0	19.5	27.4	0.0
Incr Delay (d2), s/veh	1.0	0.5	0.0	3.5	0.6	0.0	22.8	0.5	0.0	14.3	1.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.5	0.0	3.4	3.0	0.0	2.9	4.8	0.0	4.1	10.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.8	43.4	0.0	54.8	44.1	0.0	53.5	25.3	0.0	33.8	29.0	0.0
LnGrp LOS	D	D		D	D		D	C		C	C	
Approach Vol, veh/h		256			381			1221			2309	
Approach Delay, s/veh		44.4			47.5			29.4			29.7	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.2	93.8		53.0	19.0	88.0		53.0				
Change Period (Y+Rc), s	3.0	7.3		6.6	3.0	7.3		6.6				
Max Green Setting (Gmax), s	13.0	83.7		46.4	16.0	80.7		46.4				
Max Q Clear Time (g_c+I1), s	10.1	47.8		24.2	17.5	22.7		15.9				
Green Ext Time (p_c), s	0.2	24.1		2.7	0.0	11.7		2.0				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	32.2
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Queues

Future Total (2030)

7: Dixie Road & Hickory Drive

PM Peak Hour



Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	27	46	1278	2408
Future Volume (vph)	27	46	1278	2408
Lane Group Flow (vph)	66	47	1304	2495
Turn Type	Prot	pm+pt	NA	NA
Protected Phases	8	1	6	2
Permitted Phases		6		
Detector Phase	8	1	6	2
Switch Phase				
Minimum Initial (s)	10.0	7.0	10.0	10.0
Minimum Split (s)	46.4	10.0	31.0	31.0
Total Split (s)	27.0	10.0	53.0	43.0
Total Split (%)	33.8%	12.5%	66.3%	53.8%
Yellow Time (s)	4.0	3.0	4.0	4.0
All-Red Time (s)	3.4	0.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	3.0	6.0	6.0
Lead/Lag		Lead		Lag
Lead-Lag Optimize?				
Recall Mode	None	None	C-Max	C-Max
Act Effct Green (s)	10.1	63.0	61.2	55.2
Actuated g/C Ratio	0.13	0.79	0.77	0.69
v/c Ratio	0.29	0.20	0.35	0.72
Control Delay (s/veh)	20.7	10.0	9.6	12.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.7	10.0	9.6	12.5
LOS	C	A	A	B
Approach Delay (s/veh)	20.7		9.6	12.5
Approach LOS	C		A	B
Queue Length 50th (m)	4.1	5.2	65.9	110.6
Queue Length 95th (m)	15.5	13.7	82.2	136.7
Internal Link Dist (m)	166.6		319.0	244.6
Turn Bay Length (m)		100.0		
Base Capacity (vph)	410	239	3773	3461
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.20	0.35	0.72

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 79 (99%), Referenced to phase 2:SBT and 6:NBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay (s/veh): 11.6	Intersection LOS: B
Intersection Capacity Utilization 67.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: Dixie Road & Hickory Drive



HCM 6th Signalized Intersection Summary
 7: Dixie Road & Hickory Drive

Future Total (2030)
 PM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑↑↑	↑↑↑	
Traffic Volume (veh/h)	27	37	46	1278	2408	37
Future Volume (veh/h)	27	37	46	1278	2408	37
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.97	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1824	1824	1841	1870	1781
Adj Flow Rate, veh/h	28	38	47	1304	2457	38
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	0	0	4	2	3
Cap, veh/h	65	88	228	3680	3304	51
Arrive On Green	0.10	0.10	0.06	0.73	0.64	0.64
Sat Flow, veh/h	647	878	1737	5191	5346	80
Grp Volume(v), veh/h	67	0	47	1304	1613	882
Grp Sat Flow(s),veh/h/ln	1548	0	1737	1675	1702	1853
Q Serve(g_s), s	3.3	0.0	0.6	7.5	26.1	26.3
Cycle Q Clear(g_c), s	3.3	0.0	0.6	7.5	26.1	26.3
Prop In Lane	0.42	0.57	1.00			0.04
Lane Grp Cap(c), veh/h	155	0	228	3680	2172	1183
V/C Ratio(X)	0.43	0.00	0.21	0.35	0.74	0.75
Avail Cap(c_a), veh/h	379	0	282	3680	2172	1183
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	0.0	11.1	3.9	10.0	10.0
Incr Delay (d2), s/veh	1.9	0.0	0.4	0.3	2.3	4.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.1	0.7	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	35.8	0.0	11.5	4.1	12.3	14.3
LnGrp LOS	D		B	A	B	B
Approach Vol, veh/h	67			1351	2495	
Approach Delay, s/veh	35.8			4.4	13.0	
Approach LOS	D			A	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.5	57.1			64.6	15.4
Change Period (Y+Rc), s	3.0	6.0			6.0	7.4
Max Green Setting (Gmax), s	7.0	37.0			47.0	19.6
Max Q Clear Time (g_c+I1), s	2.6	28.3			9.5	5.3
Green Ext Time (p_c), s	0.0	8.2			14.6	0.2

Intersection Summary						
HCM 6th Ctrl Delay, s/veh			10.4			
HCM 6th LOS			B			

Notes
 User approved pedestrian interval to be less than phase max green.



APPENDIX I

Parking Justification Study

Amelia Crichton

From: Paulina Armacinski <Paulina.Armacinski@mississauga.ca> on behalf of Parkingstudy Review <Parkingstudy.Review@mississauga.ca>
Sent: February 6, 2026 4:33 PM
To: Amelia Crichton; Parkingstudy Review
Cc: Zara McCormick; Jorge Ordenes
Subject: RE: [EXTERNAL] RE: Parking Study Terms of Reference - 1315 Bough Beeches Boulevard, Mississauga

External Sender

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hi Amelia,

Seeing how today has already passed, staff could accept surveying on Sunday February 8th 2026, and Friday February 13th, 2026.

Thank you,
Paulina

From: Amelia Crichton <ACrichton@lea.ca>
Sent: Friday, February 6, 2026 3:58 PM
To: Parkingstudy Review <Parkingstudy.Review@mississauga.ca>
Cc: Zara McCormick <ZMcCormick@lea.ca>; Jorge Ordenes <jordenes@lea.ca>
Subject: RE: [EXTERNAL] RE: Parking Study Terms of Reference - 1315 Bough Beeches Boulevard, Mississauga

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Hi Paulina,

As noted in the below tables, Friday and Sunday are the busiest observed days during the January 30th – February 2nd period for the visitor parking.

Will the City accept a survey Sunday February 8th 2026, and Friday February 13th, 2026?

Thanks again,

Amelia Crichton

Intermediate Planner

T: 905-470-0015 ext. 388 E: acrichton@lea.ca W: www.LEA.ca

LEA Consulting Ltd.

From: Paulina Armacinski <Paulina.Armacinski@mississauga.ca> On Behalf Of Parkingstudy Review
Sent: February 6, 2026 3:43 PM
To: Amelia Crichton <ACrichton@lea.ca>
Cc: Zara McCormick <ZMcCormick@lea.ca>; Jorge Ordenes <jordenes@lea.ca>; Parkingstudy Review <Parkingstudy.Review@mississauga.ca>
Subject: RE: [EXTERNAL] RE: Parking Study Terms of Reference - 1315 Bough Beeches Boulevard, Mississauga

External Sender

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hi Amelia,

We would require 2 survey dates on the days that demands were the highest as per data obtained from the January 30th-February 2nd surveying.

Thank you,
Paulina

From: Amelia Crichton <ACrichton@lea.ca>
Sent: Friday, February 6, 2026 3:03 PM
To: Parkingstudy Review <Parkingstudy.Review@mississauga.ca>
Cc: Zara McCormick <ZMcCormick@lea.ca>; Jorge Ordenes <jordenes@lea.ca>
Subject: RE: [EXTERNAL] RE: Parking Study Terms of Reference - 1315 Bough Beeches Boulevard, Mississauga

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Hi Paulina,

Thank you for your response. We have reviewed both survey weekends (January 23–26 and January 30–February 2) and summarized the findings below:

- **Residential Parking:** Peak demand occurred during January 23–26, with a maximum observed of 336 vehicles on Saturday, January 24, 2026. Demand during the second weekend was slightly lower and generally consistent, confirming that peak residential demand was captured. Residential parking is primarily driven by overnight vehicle ownership rather than travel activity, so the snowstorm would not have misrepresented typical conditions.
- **Visitor Parking:** Maximum observed visitor demand was 22 vehicles on Friday, January 30, 2025. Notably, Monday, January 26 (snowstorm), had higher visitor demand than the corresponding Monday during the second survey weekend.
- **Conclusion:** Since no residential variance is requested and visitor parking results are generally consistent over the two weeks, we recommend avoiding two additional survey days.

Details provided below:

	Residential			Visitor			Combined		
	Supply	Max. Observed	95th Percentile	Supply	Max. Observed	95th Percentile	Supply	Max. Observed	95th Percentile
Friday January 23, 2026	375	323	320	55	12	11	430	335	331
Saturday January 24, 2026		336	334		20	19		356	353
Sunday January 25, 2026		327	327		13	13		340	340
Monday January 26, 2026		321	315		17	15		338	330
Friday January 30, 2026		299	287		22	19		321	306
Saturday January 31, 2026		287	283		17	16		304	299
Sunday February 1, 2026		299	297		21	20		320	317
Monday February 2, 2026		303	297		11	11		314	308
Overall Highest Demand		336	334		22	20		356	353

Before proceeding further, we wanted to confirm whether the City is agreeable to accepting the previously collected January 23–26 and January 30–February 2 survey dates.

We appreciate your review and look forward to your guidance.

Thanks,

Amelia Crichton

Intermediate Planner

T: 905-470-0015 ext. 388 E: acrichton@lea.ca W: www.LEA.ca

LEA Consulting Ltd.

From: Paulina Armacinski <Paulina.Armacinski@mississauga.ca> On Behalf Of Parkingstudy Review
 Sent: February 5, 2026 9:04 AM
 To: Amelia Crichton <ACrichton@lea.ca>
 Cc: Zara McCormick <ZMcCormick@lea.ca>; Jorge Ordenes <jordenes@lea.ca>; Parkingstudy Review <Parkingstudy.Review@mississauga.ca>
 Subject: RE: [EXTERNAL] RE: Parking Study Terms of Reference - 1315 Bough Beeches Boulevard, Mississauga

External Sender

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Hi Amelia,

Given the snowstorm the other weekend which impacted Sunday, January 25th and Monday, January 26th, the data collected on those dates would not be accurate. You can include the results obtained from Friday, January 23rd – 26th as supplementary data in the finalized PUS. Although, we would need more surveying conducted to compensate for the weather impacts of that weekend.

Please survey the two busiest days that were observed from last weekend’s surveying (January 30th – February 2nd) this weekend (February 6th – 9th) following the same surveying parameters i.e.:

- Friday, February 6th, 2026: 5AM – 11AM & 4PM – 1AM
- Saturday, February 7th, 2026: 11AM – 1AM
- Sunday, February 8th, 2026: 11AM – 1AM
- Monday, February 9th, 2026: 5AM – 11AM & 4PM – 12AM

Kindly respond back to inform staff of the two busiest dates that were observed whilst surveying last weekend and to confirm that surveying of those days will be undertaken this weekend. As per the City's Parking Terms of Reference (ToR) surveying must be conducted on two consecutive weeks.

Thank you,
Paulina

From: Amelia Crichton <ACrichton@lea.ca>
Sent: Friday, January 30, 2026 12:12 PM
To: Parkingstudy Review <Parkingstudy.Review@mississauga.ca>
Cc: Zara McCormick <ZMcCormick@lea.ca>; Jorge Ordenes <jordenes@lea.ca>
Subject: RE: [EXTERNAL] RE: Parking Study Terms of Reference - 1315 Bough Beeches Boulevard, Mississauga

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Hi Paulina,

We have proceeded with counts last weekend during the following times, as the client is eager to submit in the coming weeks:

- Friday January 23rd: 5AM – 11AM & 4PM – 1AM
- Saturday January 24th: 11AM – 1AM
- Sunday January 25th: 11AM – 1AM
- Monday January 26th: 5AM – 11AM & 4PM – 12AM

Given the snow event on Sunday, we intend to survey all four days again this weekend (ie. Friday January 30 through Monday February 2nd) for a total of eight (8) survey days.

Regarding the obstructed spaces, there are currently two (2) obstructed spaces which has been noted in our survey.

We appreciate the time you are taking to review the survey parameters, and we've followed the previously approved methodology provided last summer.

Thanks,

Amelia Crichton

Intermediate Planner

T: 905-470-0015 ext. 388 E: acrichton@lea.ca W: www.LEA.ca

LEA Consulting Ltd.

From: Paulina Armacinski <Paulina.Armacinski@mississauga.ca> On Behalf Of Parkingstudy Review
Sent: January 29, 2026 4:30 PM
To: Amelia Crichton <ACrichton@lea.ca>

Cc: Zara McCormick <ZMcCormick@lea.ca>; Jorge Ordenes <jordenes@lea.ca>; Parkingstudy Review <Parkingstudy.Review@mississauga.ca>
Subject: RE: [EXTERNAL] RE: Parking Study Terms of Reference - 1315 Bough Beeches Boulevard, Mississauga

External Sender

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Hi Amelia,

Thank you for the clarifications, below. Staff are still looking over the details. We appreciate your patience.

Additional clarifications: are any parking spaces currently obstructed on-site (i.e. snow banks, garbage bins...etc.)?

We look forward to hearing back from you. We will advise further upon hearing back from you.

Thank you,
Paulina

From: Amelia Crichton <ACrichton@lea.ca>
Sent: Thursday, January 22, 2026 4:21 PM
To: Parkingstudy Review <Parkingstudy.Review@mississauga.ca>
Cc: Zara McCormick <ZMcCormick@lea.ca>; Jorge Ordenes <jordenes@lea.ca>
Subject: RE: [EXTERNAL] RE: Parking Study Terms of Reference - 1315 Bough Beeches Boulevard, Mississauga

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hi Paulina,

Kindly see my answers in [green](#) below.

Thanks,

Amelia Crichton

Intermediate Planner

T: 905-470-0015 ext. 388 E: acrichton@lea.ca W: www.LEA.ca

LEA Consulting Ltd.

From: Paulina Armacinski <Paulina.Armacinski@mississauga.ca> On Behalf Of Parkingstudy Review
Sent: January 22, 2026 11:26 AM
To: Amelia Crichton <ACrichton@lea.ca>
Cc: Zara McCormick <ZMcCormick@lea.ca>; Jorge Ordenes <jordenes@lea.ca>; Parkingstudy Review

External Sender

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Good morning Amelia,

Thank you for your e-mail and patience as staff reviewed your inquiry.

Before we are able to approve any surveying parameters for the application, we would need a better understanding about how the proposal for the site has changed.

Please provide staff with background as to why the existing site is being proposed for surveying and how comparable it is to what is being proposed on-site? Also, may you elaborate on the reason behind the proposal changing?

1315 Bough Beeches Boulevard Proposed Future Operations/Uses:

- What are the current uses on site? Residential rental
- Are any existing uses remaining on-site? If yes, please elaborate. The existing residential building will remain operational on site.
- What are the proposed uses?

INITIAL PROPOSAL (2025)		
• Tenant(s) / Use(s) Existing	• Tenant(s) / Use(s) Remaining / Unaltered	• Tenant(s) / Use(s) Proposed
- Existing 20 storey building containing 270 rental residential units	- No changes to existing building expected	- Two (2) proposed towers, consisting of 216 residential rental units and 184 residential rental units

Note: Please revise this table as required to relay appropriate/actual information.

REVISED PROPOSAL (2026)		
• Tenant(s) / Use(s) Existing	• Tenant(s) / Use(s) Remaining / Unaltered	• Tenant(s) / Use(s) Proposed
- Existing 20 storey building containing 270 rental residential units	- No changes to existing building expected	- One (1) 14-storey building containing 144 residential rental units

Note: Please revise this table as required to relay appropriate/actual information.

1315 Bough Beeches Boulevard Current Operations/Uses (answer for each of these sites):

- Who are the tenant(s) and what are their use(s)? (If other than residential). *The current use on site is residential rental.*
- Are there any vacant unit(s)? *It is understood there 261 occupied units, i.e. 12 vacant units*
- How many number of existing parking spaces are there on-site currently? *There are a total of 422 existing parking spaces, a total of 56 will be removed with the construction of the new development.*
- How are the existing number of parking spaces managed on-site (i.e. are they first come first serve, or designated per use by signage...etc.)? *The visitor parking spaces are signed at grade, and the tenant parking spaces are numbered at grade. It is understood that all underground parking spaces are dedicated to residents.*

Proposal vs. Proxy Sites for consideration

- How do uses and operations differ between the proposal on the subject site (1315 Bough Beeches Boulevard) and proposed surveying site (1315 Bough Beeches Boulevard)? *The proposed use at 1315 Bough Beeches Blvd is residential which is the same as the existing use at 1315 Bough Beeches Boulevard.*
- Please fill in the chart below and add to it/revise to include all the necessary information so that staff can understand how the sites differ/compare?

INITIAL PROPOSAL (2025)						
	1315 Bough Beeches Boulevard Precinct 3:					
Zoning By-Law 0225- 2007	Current Uses (Remaining on-site)	Proposed Uses (Additions on-site)	Units	Required Parking Ratio	Required Spaces	Proposed Spaces
	Residential	-	270	-	-	300 spaces will be retained for the existing building: 273 residential spaces 27 visitor spaces
	-	Residential	Tower A: 216 Units Tower B: 184 Units	0.9 sp./unit 0.2 sp./unit	360 residential 80 visitor	390 residential 41 visitor
	Total Required				440	731 spaces on-site total, shared between existing and proposed building
	Surplus/Deficit					Proposed development deficient by 39 visitor spaces

Note: Please revise this table as required in order to relay appropriate/actual information.

REVISED PROPOSAL (2026)

1315 Bough Beeches Boulevard Precinct 3:							
Zoning By-Law 0225- 2007	Current Uses (Remaining on-site)	Proposed Uses (Additions on-site)	Units	Required Parking Ratio	Required Spaces	Proposed Spaces	
	Residential	-	270	-	-	298 spaces will be retained for the existing building: 271 residential spaces 27 visitor spaces	
	-	Residential	144	0.9 sp./unit 0.2 sp./unit	130 residential 29 visitor	144 residential (1 sp./unit) 15 visitor (0.1 sp./unit)	
	Total Required					159	457 spaces on-site total, shared between existing and proposed building
	Surplus/Deficit					Proposed development meeting overall requirement, deficient by 14 visitor spaces only.	

Note: Please revise this table as required in order to relay appropriate/actual information.

Please be advised, once staff receive a response with answers to our above questions, we will need time to review. Staff reserve the right to inquire about any other additional questions should we feel we need further clarifications. Please note, surveying will not be able to commence until staff provide approval of satisfactory surveying parameters.

We look forward to hearing back from you with answers to our above questions so that we can work towards approving satisfactory surveying parameters.

Also, staff advise LEA Consulting Ltd. to thoroughly review the City's [Parking Terms of Reference \(ToR\)](#). Please hold off surveying until staff provide an approval on parameters.

Thank you,
Paulina

From: Amelia Crichton <ACrichton@lea.ca>
 Sent: Tuesday, January 20, 2026 12:10 PM
 To: Parkingstudy Review <Parkingstudy.Review@mississauga.ca>; Paulina Armacinski <Paulina.Armacinski@mississauga.ca>
 Cc: Zara McCormick <ZMcCormick@lea.ca>; Jorge Ordenes <jordenes@lea.ca>
 Subject: RE: [EXTERNAL] RE: Parking Study Terms of Reference - 1315 Bough Beeches Boulevard, Mississauga

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hello Paulina,

I am following up on the below. Please let me know if you have any concerns with our new study parameters.

Best,

Amelia Crichton

Intermediate Planner

T: 905-470-0015 ext. 388 E: acrichton@lea.ca W: www.LEA.ca

LEA Consulting Ltd.

From: Amelia Crichton

Sent: January 14, 2026 2:03 PM

To: 'Parkingstudy Review' <Parkingstudy.Review@mississauga.ca>; 'Paulina.Armacinski@mississauga.ca' <Paulina.Armacinski@mississauga.ca>

Cc: Zara McCormick <ZMcCormick@lea.ca>; Jorge Ordenes <jordenes@lea.ca>

Subject: RE: [EXTERNAL] RE: Parking Study Terms of Reference - 1315 Bough Beeches Boulevard, Mississauga

Hello Paulina,

Since the previous correspondence, the development proposal for 1315 Bough Beeches Boulevard has changed. As such, we wish to re-confirm the terms of reference for the parking study.

Attached is the latest site plan for the development. The latest parking stats are provided below:

ZBL 0225-2007 - Vehicle Parking				
Land Use	Units	Precinct 3		Proposed Supply
		Minimum Parking Rate	Parking Required	
Residential (Rental Apartment)	144 Units	0.9 sp/unit	130	144 (1 sp./unit)
Visitor		0.2 sp/unit	29	15 (0.1 sp./unit)
Total			159	159

The proposed development is seeking relief from the visitor parking requirement. As such, LEA proposes the following surveying parameters to be conducted at the subject site of 1315 Bough Beeches Boulevard, Mississauga:

- Friday January 23rd: 5AM – 11AM & 4PM – 1AM
- Saturday January 24th: 11AM – 1AM
- Sunday January 25th: 11AM – 1AM
- Monday January 26th: 5AM – 11AM & 4PM – 12AM

Between January 30th through February 2nd, surveys will be repeated within the same above outlined parameters on the 2 busiest days observed from the 1st week of surveying.

Given that we are only justifying the visitor parking supply, are six (6) days of survey necessary?

In the event that the surveying days change, we will respond back and confirm alternative consecutive surveying weeks, ensuring they are not impacted by a holiday.

We look forward to hearing back from you.

Thank you,

Amelia Crichton

Intermediate Planner

PARKING UTILIZATION SURVEY

Location: 1315 Bough Beeches Blvd, Mississauga

Survey Date: Friday January 23, 2026

TIME	Surface		Total
	Visitors	Accessible	
Supply	53	2	55
5:00	10	0	10
5:30	9	0	9
6:00	9	0	9
6:30	8	0	8
7:00	8	0	8
7:30	9	0	9
8:00	6	0	6
8:30	6	0	6
9:00	5	0	5
9:30	6	0	6
10:00	5	0	5
10:30	6	0	6
11:00	7	0	7
11:30			
12:00			
12:30			
13:00			
13:30			
14:00			
14:30			
15:00			
15:30			
16:00	6	0	6
16:30	5	0	5
17:00	4	0	4
17:30	7	0	7
18:00	8	0	8
18:30	8	0	8
19:00	5	0	5
19:30	8	0	8
20:00	12	0	12
21:00	9	0	9
21:30	10	0	10
22:00	10	0	10
22:30	11	0	11
23:00	10	0	10
23:30	11	0	11
0:00	11	0	11
0:30	11	0	11
1:00	11	0	11
Notes:			12
			11

Survey Date: Saturday January 24, 2026

TIME	Surface		Total
	Visitors	Accessible	
Supply	53	2	55
5:00			
5:30			
6:00			
6:30			
7:00			
7:30			
8:00			
8:30			
9:00			
9:30			
10:00			
10:30			
11:00	9	0	9
11:30	7	0	7
12:00	9	0	9
12:30	9	0	9
13:00	11	0	11
13:30	9	0	9
14:00	8	0	8
14:30	10	0	10
15:00	12	0	12
15:30	11	0	11
16:00	12	1	13
16:30	16	1	17
17:00	15	1	16
17:30	11	1	12
18:00	9	1	10
18:30	18	0	18
19:00	16	0	16
19:30	12	0	12
20:00	18	1	19
21:00	18	1	19
21:30	16	1	17
22:00	15	0	15
22:30	16	0	16
23:00	10	0	10
23:30	10	0	10
0:00	10	0	10
0:30	10	0	10
1:00	9	0	9
Notes:			20
			19

Survey Date: Sunday January 25, 2026

TIME	Surface		Total
	Visitors	Accessible	
Supply	53	2	55
5:00			
5:30			
6:00			
6:30			
7:00			
7:30			
8:00			
8:30			
9:00			
9:30			
10:00			
10:30			
11:00	8	0	8
11:30	9	0	9
12:00	10	0	10
12:30	9	0	9
13:00	9	0	9
13:30	9	0	9
14:00	8	0	8
14:30	8	0	8
15:00	7	0	7
15:30	8	0	8
16:00	8	0	8
16:30	8	0	8
17:00	9	0	9
17:30	8	0	8
18:00	11	0	11
18:30	12	0	12
19:00	11	0	11
19:30	12	0	12
20:00	11	0	11
20:30	13	0	13
21:00	13	0	13
21:30	13	0	13
22:00	11	0	11
22:30	11	0	11
23:00	11	0	11
23:30	11	0	11
0:00	11	0	11
0:30	11	0	11
1:00	11	0	11
Notes:	Severe snow storm day		13
			13

Survey Date: Monday January 26, 2026

TIME	Surface		Total
	Visitors	Accessible	
Supply	53	2	55
5:00	12	0	12
5:30	12	0	12
6:00	11	0	11
6:30	7	0	7
7:00	7	0	7
7:30	7	0	7
8:00	8	0	8
8:30	9	0	9
9:00	9	0	9
9:30	7	0	7
10:00	7	0	7
10:30	6	0	6
11:00	8	0	8
11:30			
12:00			
12:30			
13:00			
13:30			
14:00			
14:30			
15:00			
15:30			
16:00	10	0	10
16:30	10	0	10
17:00	8	0	8
17:30	8	0	8
18:00	7	0	7
18:30	8	0	8
19:00	9	0	9
19:30	8	0	8
20:00	9	0	9
20:30	11	0	11
21:00	10	0	10
21:30	10	0	10
22:00	13	0	13
22:30	13	0	13
23:00	12	0	12
23:30	14	0	14
0:00	14	0	14
0:30	16	0	16
1:00	17	0	17
Notes:	School buses cancelled		17
			15

Survey Date: Friday January 30, 2026

TIME	Surface		Total
	Visitors	Accessible	
Supply	53	2	55
5:00	12	0	12
5:30	12	0	12
6:00	11	0	11
6:30	10	0	10
7:00	11	0	11
7:30	9	0	9
8:00	8	0	8
8:30	8	0	8
9:00	10	0	10
9:30	8	0	8
10:00	8	0	8
10:30	9	0	9
11:00	8	0	8
11:30			
12:00			
12:30			
13:00			
13:30			
14:00			
14:30			
15:00			
15:30			
16:00	5	0	5
16:30	7	0	7
17:00	10	0	10
17:30	11	0	22
18:00	12	1	13
18:30	11	1	12
19:00	10	0	10
19:30	9	0	9
20:00	15	1	16
20:30	17	2	19
21:00	17	2	19
21:30	16	2	18
22:00	14	2	16
22:30	14	2	16
23:00	16	2	18
23:30	15	2	17
0:00	13	2	15
0:30	13	2	15
1:00	12	2	14
Notes:			22
			19

Survey Date: Saturday January 31, 2026

TIME	Surface		Total
	Visitors	Accessible	
Supply	53	2	55
5:00			
5:30			
6:00			
6:30			
7:00			
7:30			
8:00			
8:30			
9:00			
9:30			
10:00			
10:30			
11:00	7	1	8
11:30	6	1	7
12:00	5	1	6
12:30	6	1	7
13:00	7	2	9
13:30	8	2	10
14:00	8	2	10
14:30	8	2	10
15:00	7	2	9
15:30	9	2	11
16:00	11	1	12
16:30	9	2	11
17:00	9	1	10
17:30	8	1	9
18:00	7	1	8
18:30	8	1	9
19:00	9	1	10
19:30	13	1	14
20:00	14	1	15
20:30	15	1	16
21:00	13	1	14
21:30	16	1	17
22:00	11	1	12
22:30	11	1	12
23:00	11	1	12
23:30	9	1	10
0:00	8	1	9
0:30	8	1	9
1:00	8	1	9
Notes:			17
			16

Survey Date: Sunday February 1, 2026

TIME	Surface		Total
	Visitors	Accessible	
Supply	53	2	55
5:00			
5:30			
6:00			
6:30			
7:00			
7:30			
8:00			
8:30			
9:00			
9:30			
10:00			
10:30			
11:00	9	0	9
11:30	7	0	7
12:00	7	0	7
12:30	6	0	6
13:00	9	0	9
13:30	9	1	10
14:00	11	1	12
14:30	12	2	14
15:00	14	2	16
15:30	14	2	16
16:00	15	1	16
16:30	20	1	21
17:00	19	1	20
17:30	14	1	15
18:00	18	1	19
18:30	9	1	10
19:00	10	0	10
19:30	7	0	7
20:00	9	0	9
20:30	11	0	11
21:00	11	0	11
21:30	13	0	13
22:00	10	0	10
22:30	10	0	10
23:00	7	0	7
23:30	9	0	9
0:00	7	0	7
0:30	7	0	7
1:00	7	0	7
Notes:			21
			20

Survey Date: Monday February 2, 2026

TIME	Surface		Total
	Visitors	Accessible	Visitors
Supply	53	2	55
5:00	6	0	6
5:30	5	0	5
6:00	4	0	4
6:30	4	0	4
7:00	4	0	4
7:30	4	0	4
8:00	4	0	4
8:30	5	0	5
9:00	4	0	4
9:30	4	0	4
10:00	5	0	5
10:30	3	0	3
11:00	4	0	4
11:30			
12:00			
12:30			
13:00			
13:30			
14:00			
14:30			
15:00			
15:30			
16:00	6	0	6
16:30	6	0	6
17:00	6	0	6
17:30	8	0	8
18:00	9	0	9
18:30	11	0	11
19:00	11	0	11
19:30	11	0	11
20:00	10	0	10
20:30	7	0	7
21:00	11	0	11
21:30	9	0	9
22:00	10	0	10
22:30	10	0	10
23:00	9	0	9
23:30	9	0	9
0:00	9	0	9
0:30	9	0	9
1:00	8	0	8
Notes:			11
			11

Survey Date: Sunday February 8, 2026

TIME	Surface		Total
	Visitors	Accessible	Visitors
Supply	53	2	55
5:00			
5:30			
6:00			
6:30			
7:00			
7:30			
8:00			
8:30			
9:00			
9:30			
10:00			
10:30			
11:00	14	0	14
11:30	14	0	14
12:00	15	0	15
12:30	15	1	16
13:00	14	1	15
13:30	17	1	18
14:00	12	1	13
14:30	14	1	15
15:00	13	1	14
15:30	15	1	16
16:00	17	1	18
16:30	18	1	19
17:00	19	1	20
17:30	18	2	20
18:00	23	2	25
18:30	24	2	26
19:00	22	1	23
19:30	25	1	26
20:00	26	1	27
20:30	29	2	31
21:00	23	1	24
21:30	17	1	18
22:00	16	1	17
22:30	15	2	17
23:00	13	1	14
23:30	12	1	13
0:00	13	1	14
0:30	12	1	13
1:00	12	1	13
Notes:			31
			27

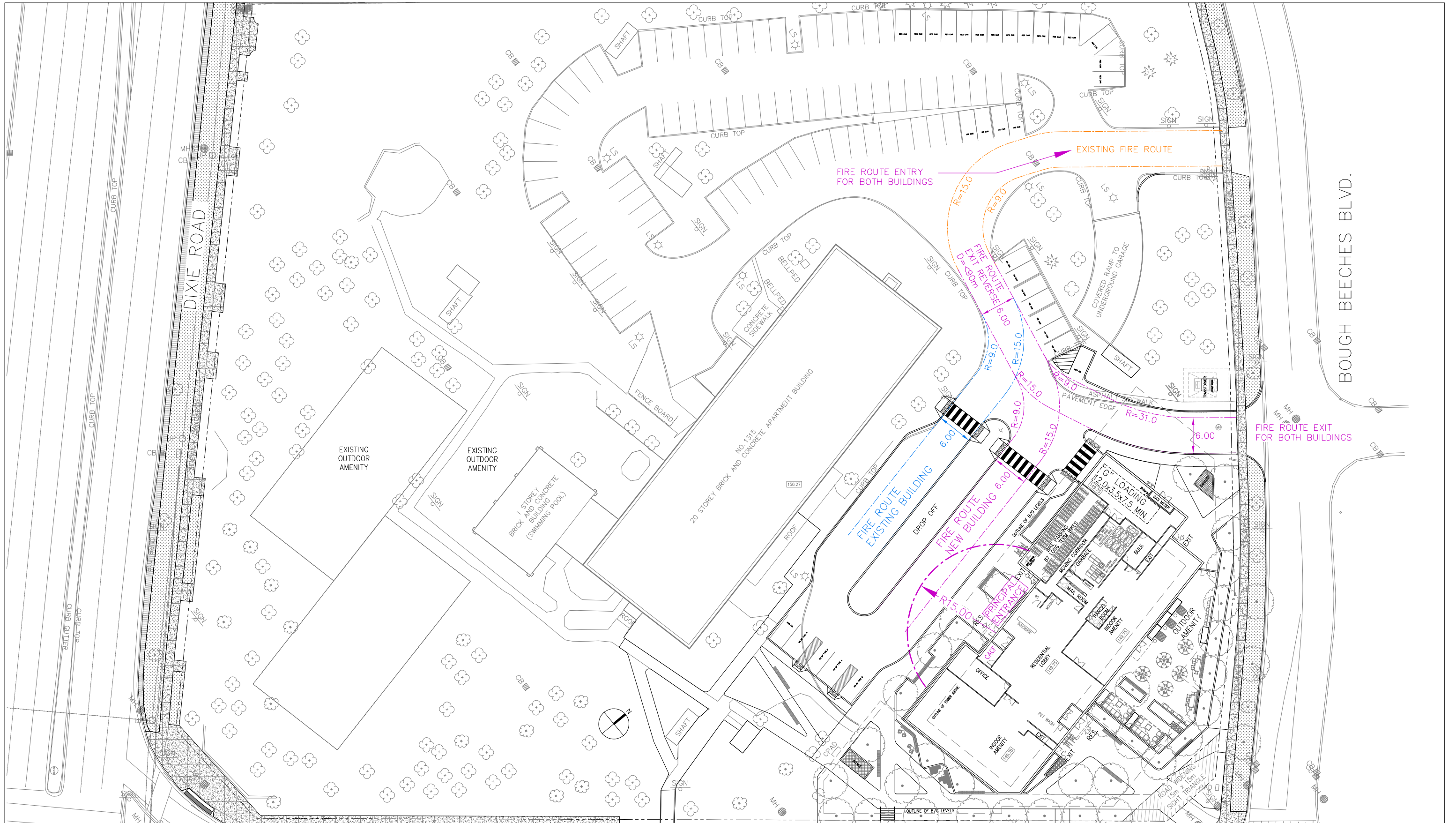
Friday February 13, 2026

TIME	Surface		Total
	Visitors	Accessible	Visitors
Supply	53	2	55
5:00	13	1	14
5:30	12	1	13
6:00	11	0	11
6:30	12	0	12
7:00	10	0	10
7:30	9	0	9
8:00	9	0	9
8:30	8	0	8
9:00	8	0	8
9:30	8	0	8
10:00	8	0	8
10:30	8	0	8
11:00	8	0	8
11:30			
12:00			
12:30			
13:00			
13:30			
14:00			
14:30			
15:00			
15:30			
16:00	4	0	4
16:30	5	0	5
17:00	6	0	6
17:30	9	0	9
18:00	7	0	7
18:30	5	0	5
19:00	12	1	13
19:30	14	1	15
20:00	14	1	15
20:30	11	1	12
21:00	9	0	9
21:30	8	0	8
22:00	9	0	9
22:30	9	0	9
23:00	9	0	9
23:30	9	0	9
0:00	9	0	9
0:30	12	0	12
1:00	15	0	15
Notes:			15
			15

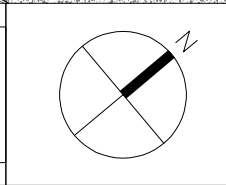


APPENDIX J

Swept Path Analysis



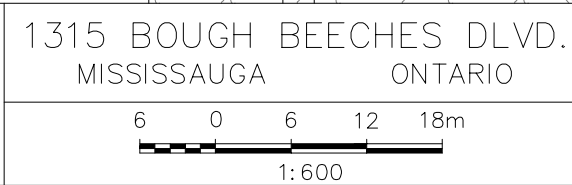
LEA Consulting Ltd.
 Consulting Engineers
 and Planners
 www.LEA.ca

Project No.
 25369

Date
 MAR. 12, 2026

1315 BOUGH BEECHES DLVD.
 MISSISSAUGA ONTARIO



GROUND FLOOR
 FIRE ROUTE REVIEW

Drawing No.
 SK-1

SIGHT LINE NOTES:

1. PER TRAFFIC OPERATIONS REGULATIONS, THE VEHICLE SITS BEHIND THE 'STOP BAR' WHILE WAITING FOR THE PROPER GAP TO MAKE THE TURN (SIGHT LINES 'A')
2. THOUGH, PER TAC, THE DRIVER'S EYE IS LOCATED AT 4.4m FROM THE STREET EDGE OF PAVEMENT (E/P). THE CAR IS 2.0m FROM THE STREET E/P (SIGHT LINES 'B')
3. THE SOUTH AND NORTH SIGHT LINES 'A' PASS THROUGH THE PROPERTY LINE AND THE EXISTING LOW BERM BUT CLEAR THE ON-SITE TREES
4. THE SOUTH AND NORTH SIGHT LINES 'B' CLEAR THE PROPERTY LINE AND THE EXISTING LOW BERM
5. THE ON-STREET PARKED CAR SIT WITHIN BOTH NORTH SIGHT LINES TRIANGLES SCENARIOS. THE DRIVER CAN DETECT THE ONCOMING CARS WHEN THEY ARE NORTH OF POLTAVA CRSC. INTERSECTION, WHICH IS AN ENHANCEMENT
6. THE EXISTING BOULEVARD TREES FALL WITHIN ALL SIGHT LINES TRIANGLES SCENARIOS. THESE SHOULD NOT BE CONSIDERED AS 'OBSTACLE'. THE DRIVER CAN OBSERVE THE INCOMING CARS THROUGH THE GAPS BETWEEN THE TREE TRUNKS. SUBJECT TO THE CITY'S APPROVAL. THIS IS SIMILAR TO EXISTING CONDITIONS OBSERVED AT NUMEROUS EXISTING INTERSECTIONS AROUND THE DIFFERENT MUNICIPALITIES
7. FINALLY, THIS IS AN EXISTING SITE ACCESS. IT IS EXPECTED THAT THE ABOVE CONCERNS ARE CONSIDERED ACCEPTABLE

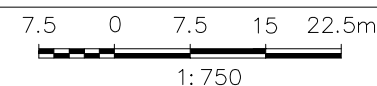
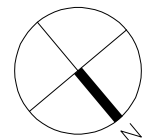
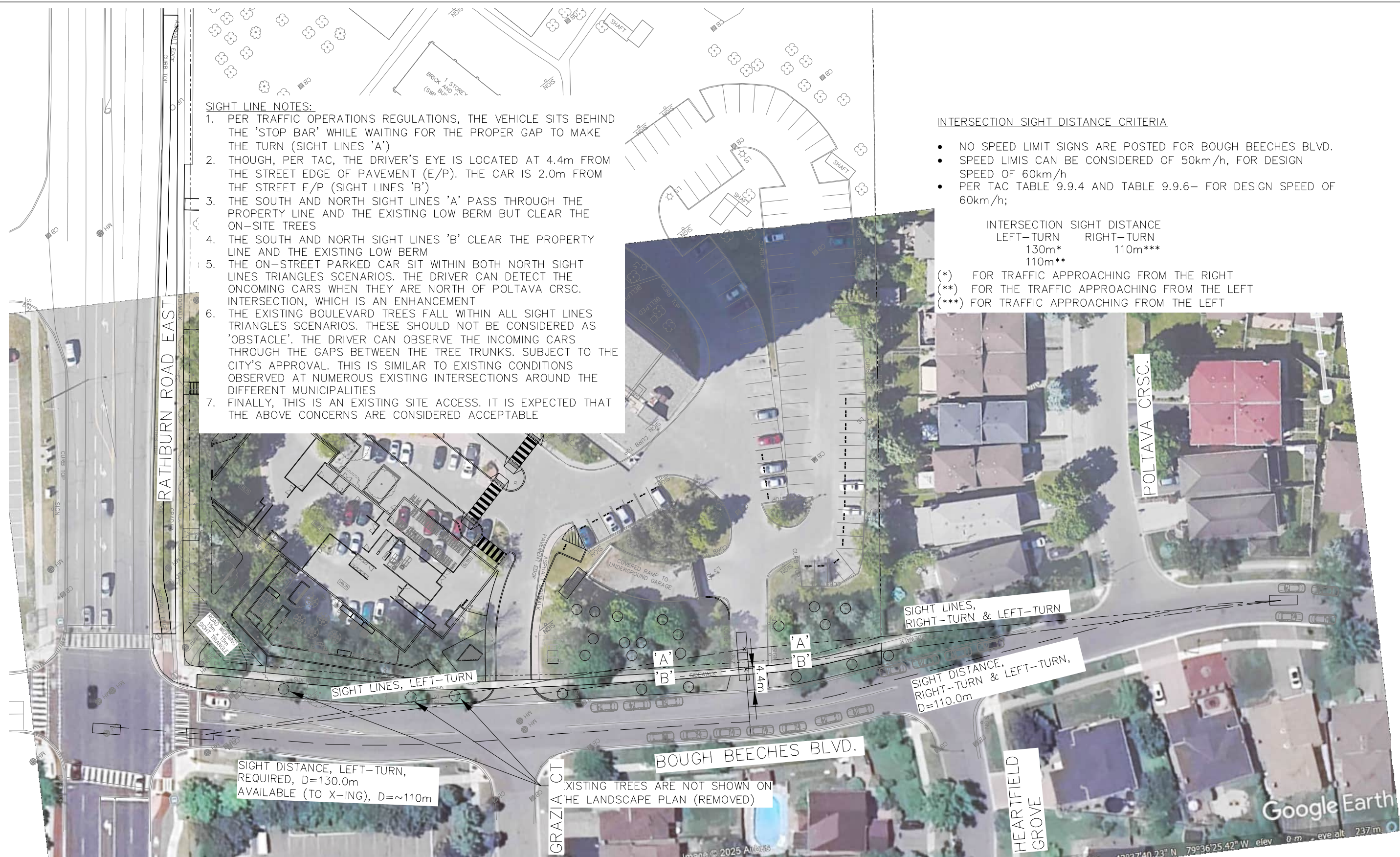
INTERSECTION SIGHT DISTANCE CRITERIA

- NO SPEED LIMIT SIGNS ARE POSTED FOR BOUGH BEECHES BLVD.
- SPEED LIMITS CAN BE CONSIDERED OF 50km/h, FOR DESIGN SPEED OF 60km/h
- PER TAC TABLE 9.9.4 AND TABLE 9.9.6- FOR DESIGN SPEED OF 60km/h;

INTERSECTION SIGHT DISTANCE

LEFT-TURN	RIGHT-TURN
130m*	110m***
110m**	

- (*) FOR TRAFFIC APPROACHING FROM THE RIGHT
- (**) FOR THE TRAFFIC APPROACHING FROM THE LEFT
- (***) FOR TRAFFIC APPROACHING FROM THE LEFT



SIGHT LINE NOTES:

1. PER TRAFFIC OPERATIONS REGULATIONS, THE VEHICLE SITS BEHIND THE 'STOP BAR' WHILE WAITING FOR THE PROPER GAP TO MAKE THE TURN (SIGHT LINES 'A')
2. THOUGH, PER TAC, THE DRIVER'S EYE IS LOCATED AT 4.4m FROM THE STREET EDGE OF PAVEMENT (E/P). THE CAR IS 2.0m FROM THE STREET E/P (SIGHT LINES 'B')
3. THE SOUTH AND NORTH SIGHT LINES 'A' PASS THROUGH THE PROPERTY LINE AND THE EXISTING LOW BERM BUT CLEAR THE ON-SITE TREES TRUNKS
4. THE SOUTH AND NORTH SIGHT LINES 'B' CLEAR THE PROPERTY LINE AND THE EXISTING LOW BERM
5. THE ON-STREET PARKED CAR SIT WITHIN BOTH NORTH SIGHT LINES TRIANGLES SCENARIOS. THE DRIVER CAN DETECT THE ONCOMING CARS WHEN PASSING POLTAVA CRSC. INTERSECTION, WHICH IS AN ENHANCEMENT
6. THE EXISTING BOULEVARD TREES FALL WITHIN ALL SIGHT LINES TRIANGLES SCENARIOS. THESE SHOULD NOT BE CONSIDERED AS 'OBSTACLE'. THE DRIVER CAN OBSERVE THE INCOMING CARS THROUGH THE GAPS BETWEEN THE TREE TRUNKS. SUBJECT TO THE CITY'S APPROVAL. THIS IS SIMILAR TO EXISTING CONDITIONS OBSERVED AT NUMEROUS EXISTING INTERSECTIONS AROUND THE DIFFERENT MUNICIPALITIES
7. FINALLY, THIS IS AN EXISTING SITE ACCESS. IT IS EXPECTED THAT THE ABOVE CONCERNS ARE CONSIDERED ACCEPTABLE

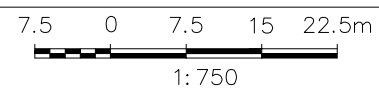
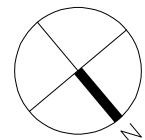
INTERSECTION SIGHT DISTANCE CRITERIA

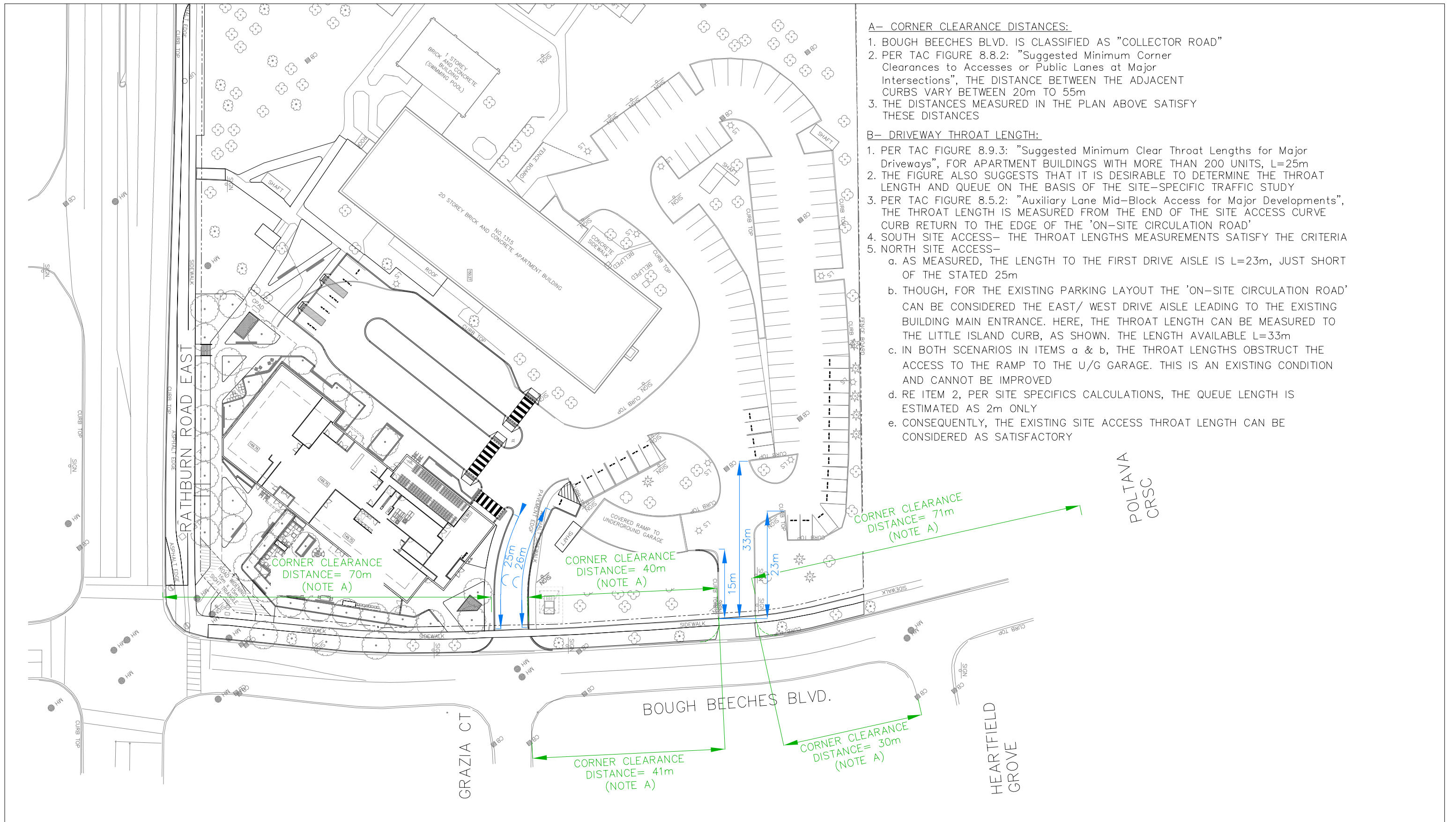
- NO SPEED LIMIT SIGNS ARE POSTED FOR BOUGH BEECHES BLVD.
- SPEED LIMITS CAN BE CONSIDERED OF 50km/h, FOR DESIGN SPEED OF 60km/h
- PER TAC TABLE 9.9.4 AND TABLE 9.9.6- FOR DESIGN SPEED OF 60km/h;

INTERSECTION SIGHT DISTANCE

LEFT-TURN	RIGHT-TURN
130m*	110m***
110m**	

- (*) FOR TRAFFIC APPROACHING FROM THE RIGHT
- (**) FOR THE TRAFFIC APPROACHING FROM THE LEFT
- (***) FOR TRAFFIC APPROACHING FROM THE LEFT





A- CORNER CLEARANCE DISTANCES:

1. BOUGH BEECHES BLVD. IS CLASSIFIED AS "COLLECTOR ROAD"
2. PER TAC FIGURE 8.8.2: "Suggested Minimum Corner Clearances to Accesses or Public Lanes at Major Intersections", THE DISTANCE BETWEEN THE ADJACENT CURBS VARY BETWEEN 20m TO 55m
3. THE DISTANCES MEASURED IN THE PLAN ABOVE SATISFY THESE DISTANCES

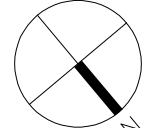
B- DRIVEWAY THROAT LENGTH:

1. PER TAC FIGURE 8.9.3: "Suggested Minimum Clear Throat Lengths for Major Driveways", FOR APARTMENT BUILDINGS WITH MORE THAN 200 UNITS, L=25m
2. THE FIGURE ALSO SUGGESTS THAT IT IS DESIRABLE TO DETERMINE THE THROAT LENGTH AND QUEUE ON THE BASIS OF THE SITE-SPECIFIC TRAFFIC STUDY
3. PER TAC FIGURE 8.5.2: "Auxiliary Lane Mid-Block Access for Major Developments", THE THROAT LENGTH IS MEASURED FROM THE END OF THE SITE ACCESS CURVE CURB RETURN TO THE EDGE OF THE 'ON-SITE CIRCULATION ROAD'
4. SOUTH SITE ACCESS- THE THROAT LENGTHS MEASUREMENTS SATISFY THE CRITERIA
5. NORTH SITE ACCESS-
 - a. AS MEASURED, THE LENGTH TO THE FIRST DRIVE AISLE IS L=23m, JUST SHORT OF THE STATED 25m
 - b. THOUGH, FOR THE EXISTING PARKING LAYOUT THE 'ON-SITE CIRCULATION ROAD' CAN BE CONSIDERED THE EAST/ WEST DRIVE AISLE LEADING TO THE EXISTING BUILDING MAIN ENTRANCE. HERE, THE THROAT LENGTH CAN BE MEASURED TO THE LITTLE ISLAND CURB, AS SHOWN. THE LENGTH AVAILABLE L=33m
 - c. IN BOTH SCENARIOS IN ITEMS a & b, THE THROAT LENGTHS OBSTRUCT THE ACCESS TO THE RAMP TO THE U/G GARAGE. THIS IS AN EXISTING CONDITION AND CANNOT BE IMPROVED
 - d. RE ITEM 2, PER SITE SPECIFICS CALCULATIONS, THE QUEUE LENGTH IS ESTIMATED AS 2m ONLY
 - e. CONSEQUENTLY, THE EXISTING SITE ACCESS THROAT LENGTH CAN BE CONSIDERED AS SATISFACTORY

POLTAVA CRSC

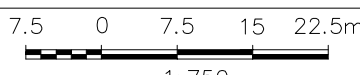
HEARTFIELD GROVE

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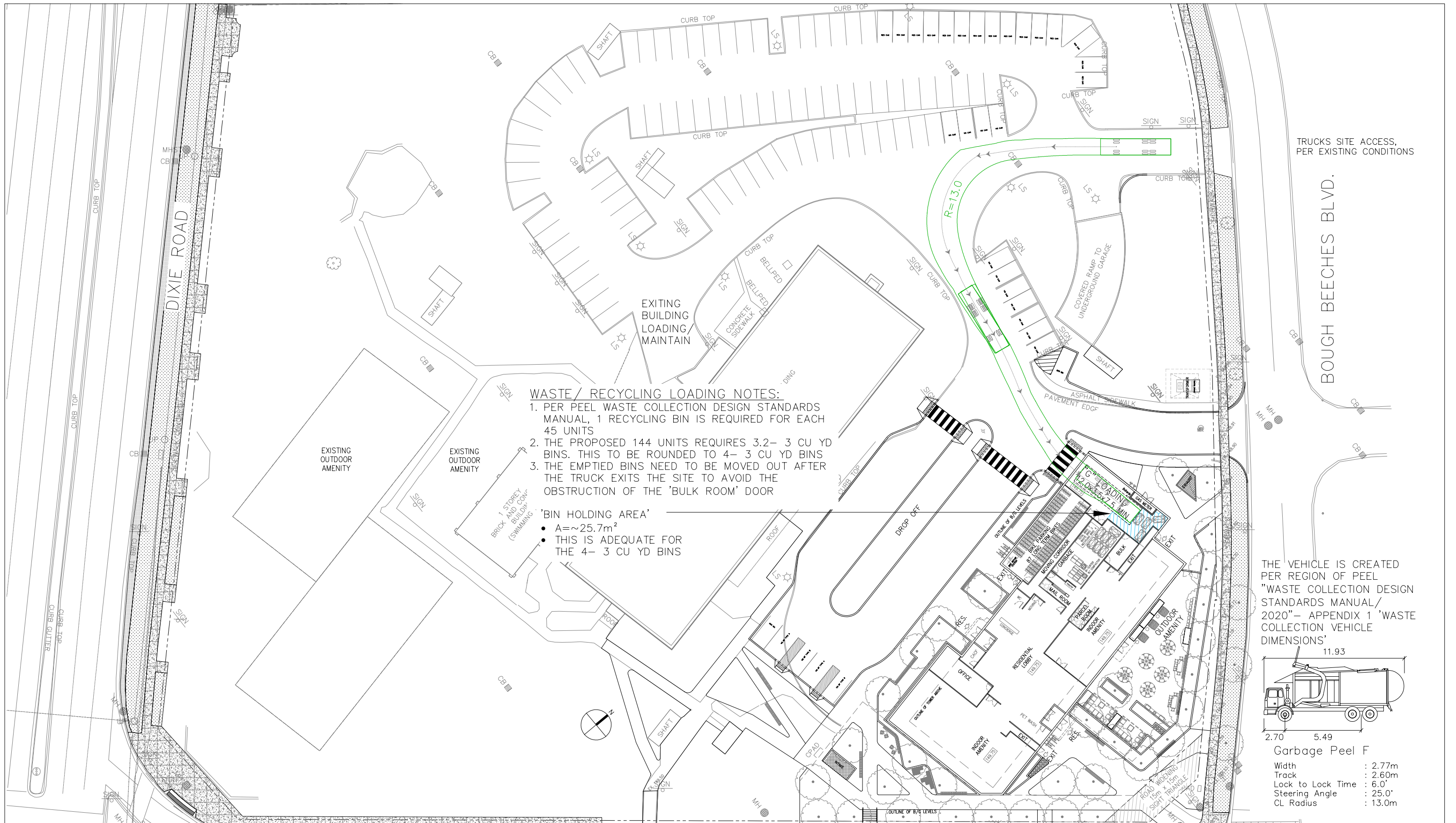
Project No. 25369
 Date MAR. 09, 2026

1315 BOUGH BEECHES DLVD.
 MISSISSAUGA ONTARIO



EXISTING SITE ACCESSES
 CORNER CLEARANCE DISTANCES/
 DRIVEWAY THROAT LENGTH REVIEW

Drawing No. SK-4



WASTE / RECYCLING LOADING NOTES:

1. PER PEEL WASTE COLLECTION DESIGN STANDARDS MANUAL, 1 RECYCLING BIN IS REQUIRED FOR EACH 45 UNITS
2. THE PROPOSED 144 UNITS REQUIRES 3.2- 3 CU YD BINS. THIS TO BE ROUNDED TO 4- 3 CU YD BINS
3. THE EMPTIED BINS NEED TO BE MOVED OUT AFTER THE TRUCK EXITS THE SITE TO AVOID THE OBSTRUCTION OF THE 'BULK ROOM' DOOR

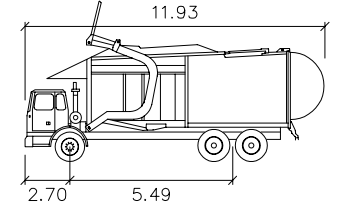
'BIN HOLDING AREA'

- A ≈ 25.7m²
- THIS IS ADEQUATE FOR THE 4- 3 CU YD BINS

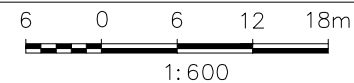
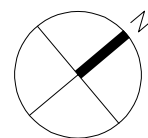
TRUCKS SITE ACCESS, PER EXISTING CONDITIONS

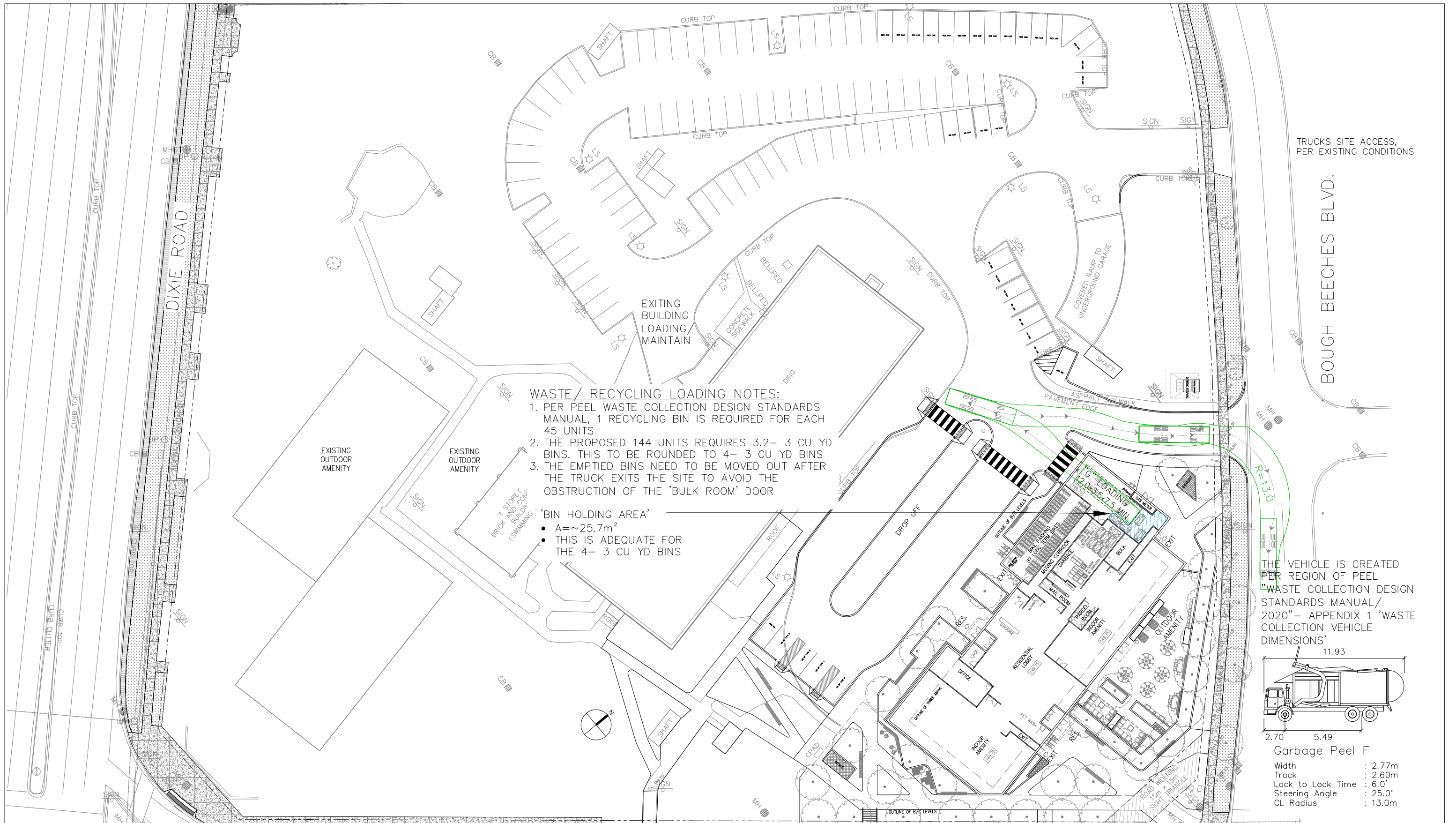
BOUGH BEECHES BLVD.

THE VEHICLE IS CREATED PER REGION OF PEEL "WASTE COLLECTION DESIGN STANDARDS MANUAL/ 2020"- APPENDIX 1 'WASTE COLLECTION VEHICLE DIMENSIONS'



Garbage Peel F	
Width	: 2.77m
Track	: 2.60m
Lock to Lock Time	: 6.0"
Steering Angle	: 25.0°
CL Radius	: 13.0m





WASTE / RECYCLING LOADING NOTES:

1. PER PEEL WASTE COLLECTION DESIGN STANDARDS MANUAL, 1 RECYCLING BIN IS REQUIRED FOR EACH 45 UNITS
2. THE PROPOSED 144 UNITS REQUIRES 3.2- 3 CU YD BINS. THIS TO BE ROUNDED TO 4- 3 CU YD BINS
3. THE EMPTIED BINS NEED TO BE MOVED OUT AFTER THE TRUCK EXITS THE SITE TO AVOID THE OBSTRUCTION OF THE 'BULK ROOM' DOOR

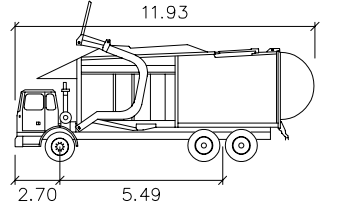
'BIN HOLDING AREA'

- A ~ 25.7m²
- THIS IS ADEQUATE FOR THE 4- 3 CU YD BINS

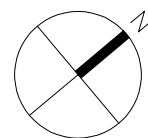
TRUCKS SITE ACCESS, PER EXISTING CONDITIONS

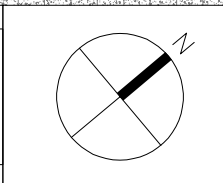
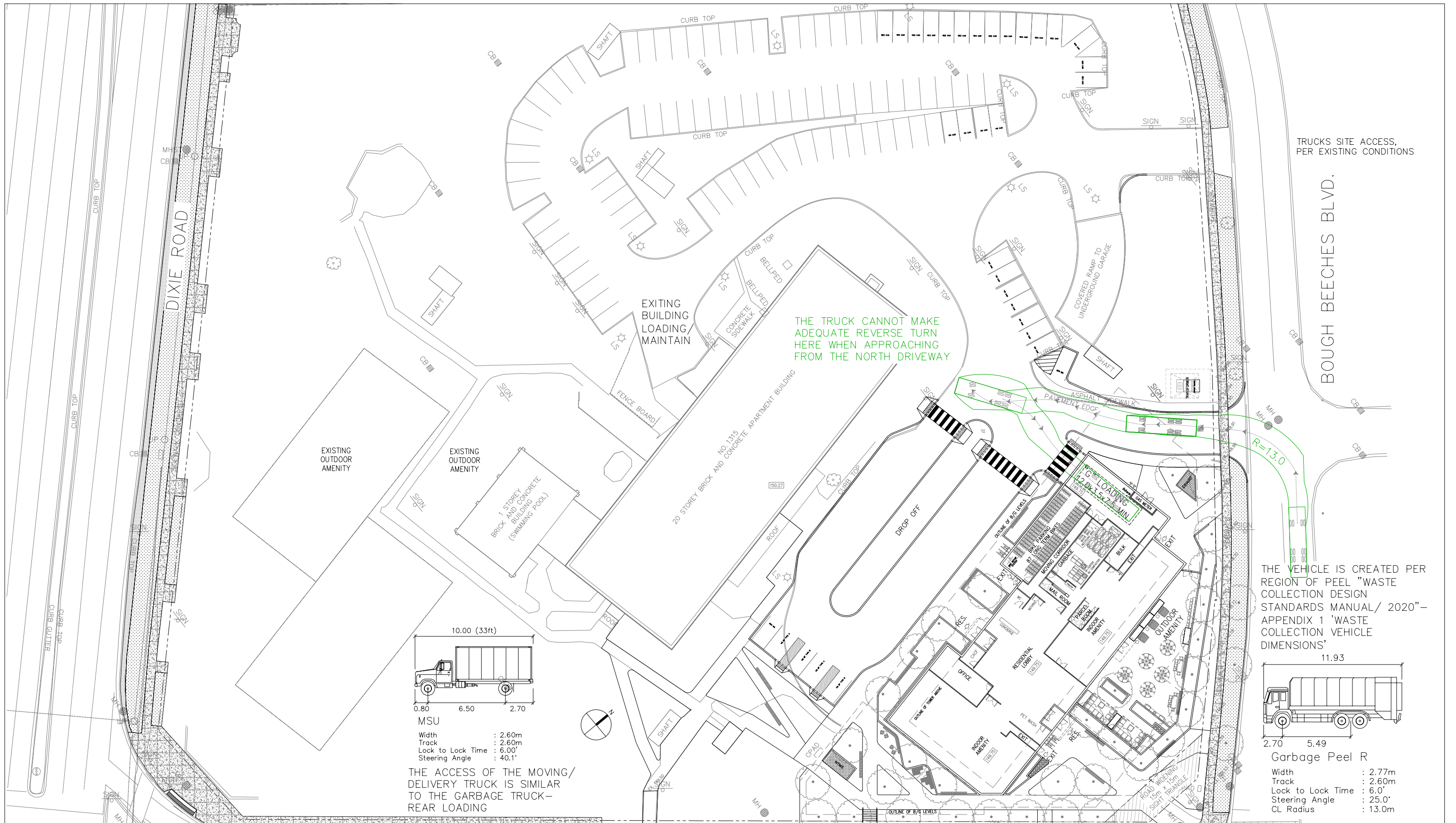
BOUGH BEECHES BLVD.

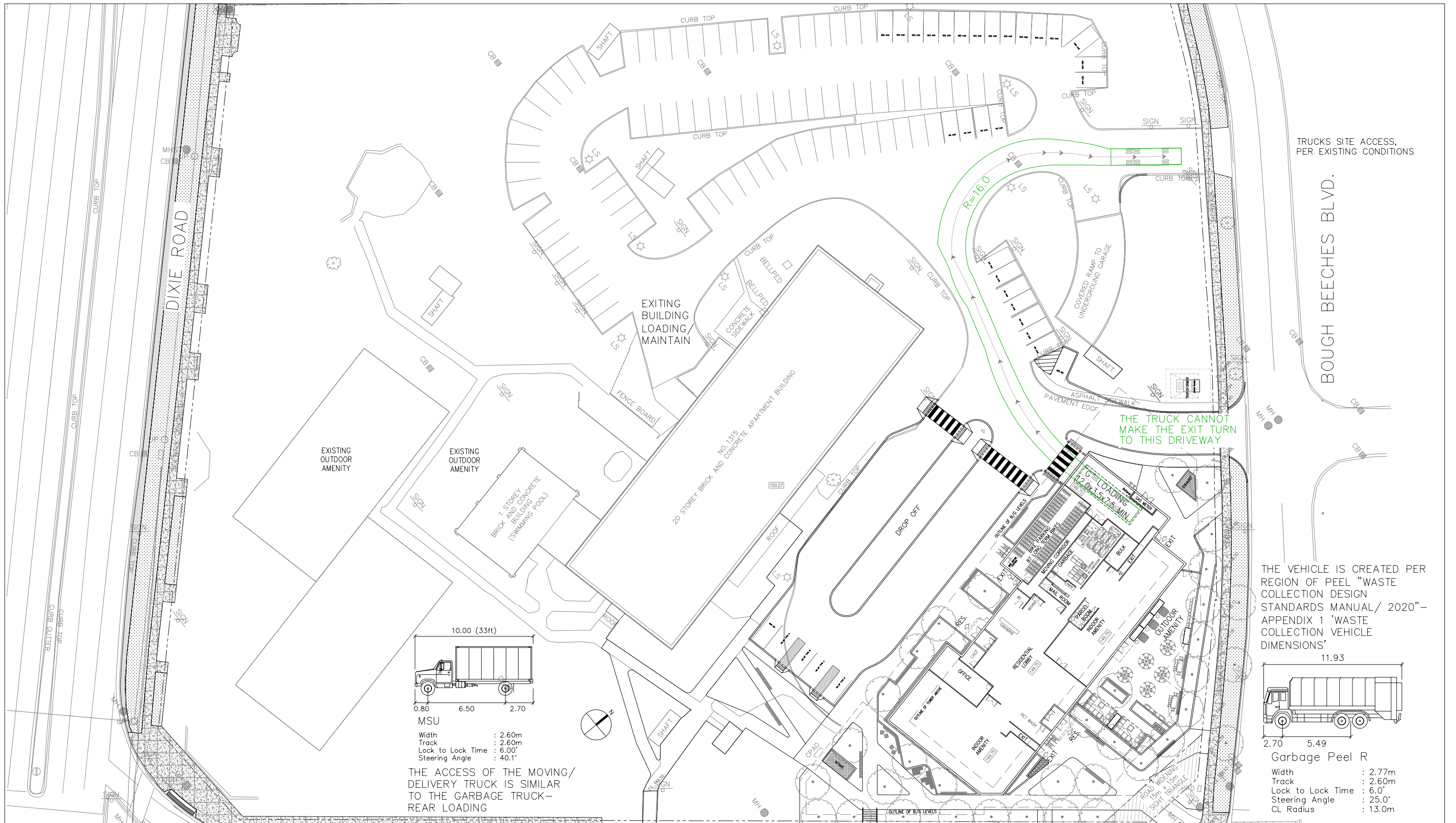
THE VEHICLE IS CREATED PER REGION OF PEEL "WASTE COLLECTION DESIGN STANDARDS MANUAL/ 2020"- APPENDIX 1 'WASTE COLLECTION VEHICLE DIMENSIONS'



Garbage Peel F
 Width : 2.77m
 Track : 2.60m
 Lock to Lock Time : 6.0"
 Steering Angle : 25.0"
 CL Radius : 13.0m





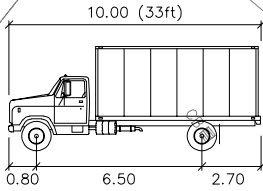


TRUCKS SITE ACCESS, PER EXISTING CONDITIONS

BOUGH BEECHES BLVD.

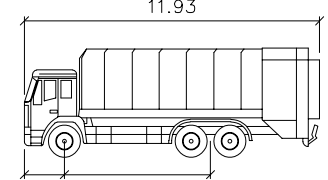
THE TRUCK CANNOT MAKE THE EXIT TURN TO THIS DRIVEWAY

THE VEHICLE IS CREATED PER REGION OF PEEL "WASTE COLLECTION DESIGN STANDARDS MANUAL/ 2020"- APPENDIX 1 'WASTE COLLECTION VEHICLE DIMENSIONS'



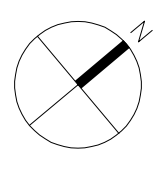
MSU
 Width : 2.60m
 Track : 2.60m
 Lock to Lock Time : 6.00'
 Steering Angle : 40.1°

THE ACCESS OF THE MOVING/ DELIVERY TRUCK IS SIMILAR TO THE GARBAGE TRUCK- REAR LOADING



Garbage Peel R
 Width : 2.77m
 Track : 2.60m
 Lock to Lock Time : 6.0'
 Steering Angle : 25.0°
 CL Radius : 13.0m

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Project No. 25369
 Date MAR. 12, 2026

1315 BOUGH BEECHES DLVD.
 MISSISSAUGA ONTARIO

1:600

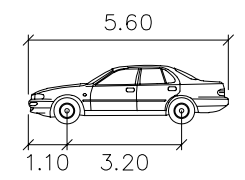
GROUND FLOOR- LOADING AREA
 REGION GARBAGE TRUCK- REAR
 EXIT PATH

Drawing No. P4



BOUGH BEECHES BLVD.

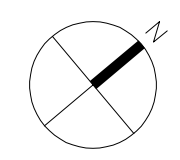
- PASSENGER CARS GOING IN OPPOSITE DIRECTIONS HAVE MINOR PATH OVERLAPS
- THE DRIVERS CAN OBSERVE EACH OTHER
- ONE OF THE CARS CAN WAIT TO GIVE-WAY TO THE OTHER TO PASS
- CONVEX MIRRORS SHOULD IMPROVE ON SIGHT LINES



P	
Width	: 2.00m
Track	: 2.00m
Lock to Lock Time	: 6.00'
Steering Angle	: 36.21°

RATHBURN ROAD EAST

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MAR. 12, 2026

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1: 400

PARKING LEVEL P1
 PASSENGER CAR PATHS

Drawing No.
P11