4103 Palladium Way

Traffic Impact Study

Better Life Development

27 November 2024

The Power of Commitment

Project name		4103 Palladium Way					
Document title		Traffic Impact Study					
Project number		12569474					
File name		4103 Palladium Way TIS_Nov2024 Final.docx					
Status Code	**Revision**	**Author**	**Reviewer**		**Approved for issue**		
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Executive Summary

GHD Limited is pleased to provide the following Traffic Impact Study for a proposed retirement home located on lands municipally known as 4103 Palladium Way in the City of Burlington.

This report is an update to the previously completed Traffic Impact Study for the subject site which included additional land uses. The first phase of the development is approved and currently under construction and consists of a Long-Term Care Facility with 256 beds and commercial land uses. The second phase of the development is approved for a 6-storey retirement home with 115 units. This study has been updated to reflect an updated site plan that includes an increase in the number of retirement home dwelling units from 115 to 147 units, in addition to completing updated turning movement counts at all study intersections.

This report determines the site related traffic and subsequent traffic related impacts on the adjacent road network and site driveways during the weekday a.m. and p.m. peak hours. These impacts are based on the projected future background traffic and road network conditions derived for a 2029 future planning horizon year.

Based on the approved Terms of Reference for the study, the following intersections were included in the study area:

Existing

- Highway 407 off-ramps at Dundas Street
- Highway 407 off-ramps at Appleby Line
- Palladium Way and Walkers Line
- Appleby Line and Palladium Way

Future

- Palladium Way and Proposed Site Access

A site plan has been prepared that consists of a five-storey long-term care facility (approved) and an eight-storey retirement home (revised proposal) with the following breakdown:

- Long Term Care Facility – 256 Beds
- Retirement Home – 147 Dwelling Units
- Medical Office – 142 m^2 of GFA
- Pharmacy/Retail – 92.9 m^2 GFA
- Office – 465 m^2 of GFA

Access to the subject site will remain unchanged from the previously approved plan and includes a new unsignalized full-moves access on Palladium Way.

Based on ITE Trip Generation rates, the subject site is expected to generate a total of 71 two-way vehicle trips during the a.m. peak hour consisting of 52 inbound and 19 outbound trips. During the p.m. peak hour, it is expected to generate 91 new two-way vehicle trips consisting of 33 inbound and 58 outbound trips.

Under existing traffic conditions, all intersections are operating at acceptable v/c ratios and levels of service during the a.m. peak and p.m. peak hours.

Under the 2029 future background conditions, with the addition of corridor growth and background development traffic, all intersections are operating at acceptable v/c ratios and levels of service during the a.m. peak and p.m. peak hours.

Under the 2029 future total conditions, with the addition of site traffic from the proposed development, all intersections are reported to continue to operate with acceptable v/c ratios and levels of service during the a.m. peak and p.m. peak hours.

Application of the City of Burlington Zoning By-Law 2020 parking rates to the subject site results in a requirement of a minimum of 244 parking spaces, including 10 barrier free spaces, 2 bicycle parking spaces, and 2 loading spaces.

The subject site provides a total of 236 vehicle parking spaces, including 10 barrier free spaces, 2 bicycle parking spaces, and 2 loading spaces. The provision of 236 spaces represents a shortfall of 8 spaces from the 244 parking spaces required under the City's By-law.

Proxy surveys were conducted at two long-term care and retirement home facilities located in the City of Mississauga and the City of Burlington. Observations of peak parking demand at these proxy sites indicate that a reduced parking supply of 0.53 spaces per unit would be adequate to meet the needs of the retirement home at the subject site.

TDM measures are proposed for the subject site to encourage residents to explore various modes of transportation in order to reduce their dependency on single occupancy vehicle trips. These measures include bicycle parking and education material.

GHD assessed the site circulation for emergency vehicles, WB-15 trucks, waste collection vehicle, and passenger vehicle and confirmed no issues with the site circulation.

The traffic study confirms that the revised proposal for the retirement home can be accommodated within the existing and planned road network without significant negative effects on traffic flow, capacity, or safety.

We trust that this satisfies your requirements, but do not hesitate to contact the undersigned if you have any questions.

Sincerely,

GHD



Rafael Andrenacci, B.Eng
Transportation Planner



William Maria, P. Eng.
Transportation Planning Lead

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1. Introduction

1.1 Retainer and Objective

GHD was retained to prepare a Traffic Impact Study (TIS) for the proposed development located at 4103 Palladium Way in the City of Burlington. Although a previous TIS was completed and approved for this site, this updated study addresses an increase in the proposed unit count for the retirement home, while retaining the approved long-term care facility.

The site location is illustrated in **Figure 1**.

The purpose of this study is to:

- Establish baseline traffic conditions for the study area in 2024 and determine future background operating conditions for a future planning horizon in 2029.
- Determine the traffic volumes anticipated to be generated by the proposed development during the weekday a.m. and p.m. peak hours; to assess the impact of this traffic on the study intersections and if needed, to recommend improvements to accommodate the forecasted traffic volumes.
- Review vehicle circulation for delivery, waste collection and fire trucks; and
- Assess the proposed access on Palladium Way.



Figure 1 Site Location

1.2 Study Team

The GHD team involved in the preparation of the study are:

- William Maria, P. Eng., Transportation Planning Lead
- Rafael Andrenacci, B.Eng., Transportation Planner

2. Site Characteristics

2.1 Study Area

As per the previously agreed Terms of Reference for the study attached in **Appendix A**, the following intersections were included in the study area:

Existing

- Highway 407 off-ramps at Dundas Street
- Highway 407 off-ramps at Appleby Line
- Palladium Way and Walkers Line
- Appleby Line and Palladium Way

Future

- Palladium Way and Proposed Site Access

2.2 Proposed Development Content

The proposed site plan is shown in **Figure 2** and provided in **Appendix B** and consists of a five storey long term care facility and an eight-storey retirement home, which consists of the following units:

- Long Term Care Facility – 256 Beds
- Retirement Home – 147 Dwelling Units
- Medical Office – 142 m^2 of GFA
- Pharmacy/Retail – 92.9 m^2 GFA
- Office – 465 m^2 of GFA

Access to the subject site is proposed via the previously approved new unsignalized full moves access on Palladium Way. There is no change to the total number of parking spaces provided at grade or underground proposed.

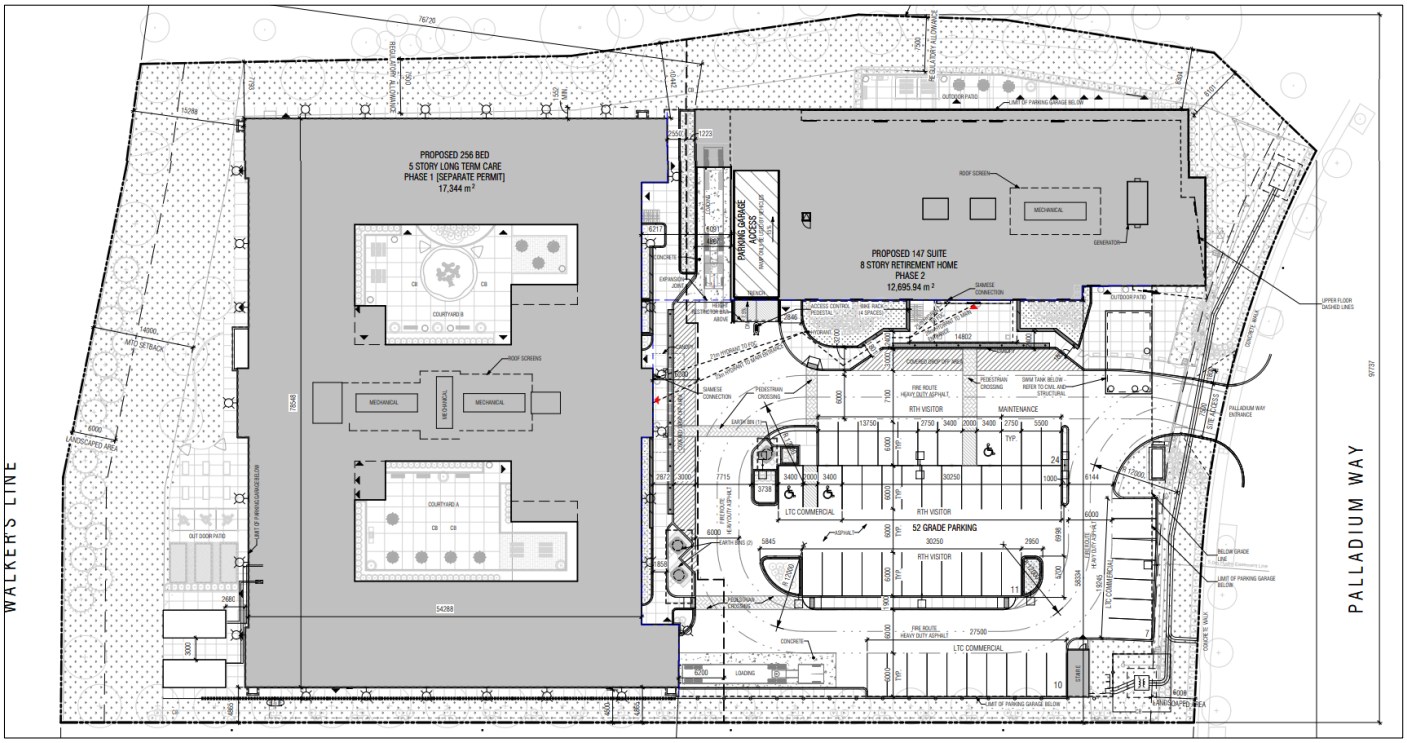


Figure 2 Site Plan

3. Existing Conditions

3.1 Existing Road Network

Highway 407 is a Class 1A – Freeway under the jurisdiction of the Ministry of Transportation (MTO). Within the study area, eastbound and westbound signalized off-ramp are provided at Dundas Street and at Appleby Line. At Dundas Street, both off-ramps include a right-turn, shared right/left-turn lane, and a left-turn lane. At Appleby Line, the eastbound off-ramp includes a left-turn lane and a shared through/left-turn/right-turn lane and the westbound off-ramp includes a right-turn and a left-turn lane.

Palladium Way is an east/west industrial connector road under the jurisdiction of the City of Burlington. Within the study area it has a 3-lane cross-section (including a two-way left-turn lane in the centre median across the site's frontage) with a posted speed limit of 60 km/h. Its intersection with Appleby Line is signalized with auxiliary left-turn lanes in the eastbound and westbound directions. Its intersection with Walkers Line is unsignalized with the stop-control only provided along the Palladium Way approaches and auxiliary left-turn lanes in the eastbound and westbound directions.

Walkers Line is a north/south urban avenue under the jurisdiction of the City of Burlington. Within the study area it has a 2-lane cross-section north of Palladium Way and is widened to a 4-lane cross-section upon its approach to Palladium Way and a posted speed limit of 60 km/h. Its intersection with Palladium Way is unsignalized with the stop-control only provided along the Palladium Way approaches and auxiliary left-turn lanes in the northbound and southbound directions. Its intersection with Dundas Street is signalized with auxiliary left-turn lanes provided in the northbound and southbound directions while an auxiliary right-turn lane is only provided in the southbound direction.

Appleby Line is a north/south major arterial road under the jurisdiction of Halton Region. Within the study area it has a 4-lane cross-section north of Palladium Way and is widened to a 6-lane cross-section upon its approach to

Palladium Way. The posted speed limit along Appleby Line is 70 km/h north of Palladium Way and is reduced to 60 km/h south of it.

Dundas Street is an east/west major arterial road under the jurisdiction of Halton Region. Within the study area it has four-lane cross-section and a posted speed limit of 60 km/h east of Palladium Way and increased to 80 km/h west of it. Its intersection with Walkers Line is signalized with auxiliary right-turn and left-turn lanes provided in both the eastbound and westbound directions. Its off-ramps with Highway 407 are both signalized.

3.2 Pedestrian and Bicycle Facilities

Within the study area, pedestrian infrastructure such as sidewalks or multi-use paths are provided along both sides of all study area roads with the following exceptions:

- Along the north side of Palladium Way between Dundas Street and Walkers Line
- Along the north side of Dundas Street from Walkers Line towards the west and along the south side of Dundas Street west of Palladium Way
- Along both sides of Appleby Line generally north of Palladium Way
- Along the Highway 407 off-ramps

Cycling infrastructure is provided within the study area as follows:

Bike lanes:

- Along both sides of Walkers Line south of Palladium Way
- Along both side of Palladium Way between Walkers Line and Appleby Line
- Along both sides of Appleby Line south of Palladium Way

Multi-use trail:

- Along both sides of Dundas Street generally between Appleby Line and Walkers Line

3.3 Transit Services

Burlington Transit currently operates the following transit routes within or near the study area:

Route 2 (**Brant/Guelph**) generally operates along Dundas Street and Bryant Street to the west of the study area. The route operates between the Highway 407 Carpool lot and the Burlington GO Station.

Route 3 (**Brant/Guelph**) generally operates along Dundas Street, Guelph Line and Lakeshore Road southwest of the study area. The route operates between the Highway 407 Carpool lot and the Burlington Transit Downtown Terminal.

Route 6 (**Headon**) generally operates along Headon Forest Drive, Mainway, and Fairview Street south of the study. The route operates between the Highway 407 Carpool lot and the Burlington GO Station.

Route 11 (**Sutton-Alton**) generally operates along Dundas Street, Thomas Alton Boulevard, Sutton Drive, Upper Middle Road, and Appleby Line between the Highway 407 Carpool lot and the Appleby GO Station.

Route 12 (**Upper Middle**) generally operates along Appleby Line, Upper Middle Road, Mount Forest Drive, and Brant Street between the SmartCentres Burlington North and the Burlington GO Station.

Route 48 (**Millcroft**) generally operates along a series of roadways between the Haber Community Centre and Corpis Christi Secondary School. The route only operates one trip in each direction during the a.m. and p.m. peak hours.

3.4 Existing Traffic Data

GHD completed updated turning movement counts at all existing study intersections. The most recent turning movement count data available is summarized in **Table 1** below and is provided in **Appendix C** along with signal timing cards.

Table 1 Traffic Data Source

Intersection	Date	Source
Highway 407 Off-ramps at Dundas Street	September 17th, 2024	Ontario Traffic Inc.
Highway 407 Off-ramps at Appleby Line	March 1st, 2023	Spectrum Traffic Data Inc.
Palladium Way and Walkers Line	September 17th, 2024	Ontario Traffic Inc.
Appleby Line and Palladium Way	September 17th, 2024	Ontario Traffic Inc.

The traffic counts completed for the two Highway 407 Off-Ramps were completed in March 2023. In order to project the volumes to a baseline 2024 volume, GHD grew the volumes using the 2% per annum growth rate based on the future growth discussed in **Section 4.2**.

The baseline 2024 traffic volumes for the a.m. and p.m. peak hours are summarized in **Figure 3** below with the full turning movement counts provided in **Appendix C.**

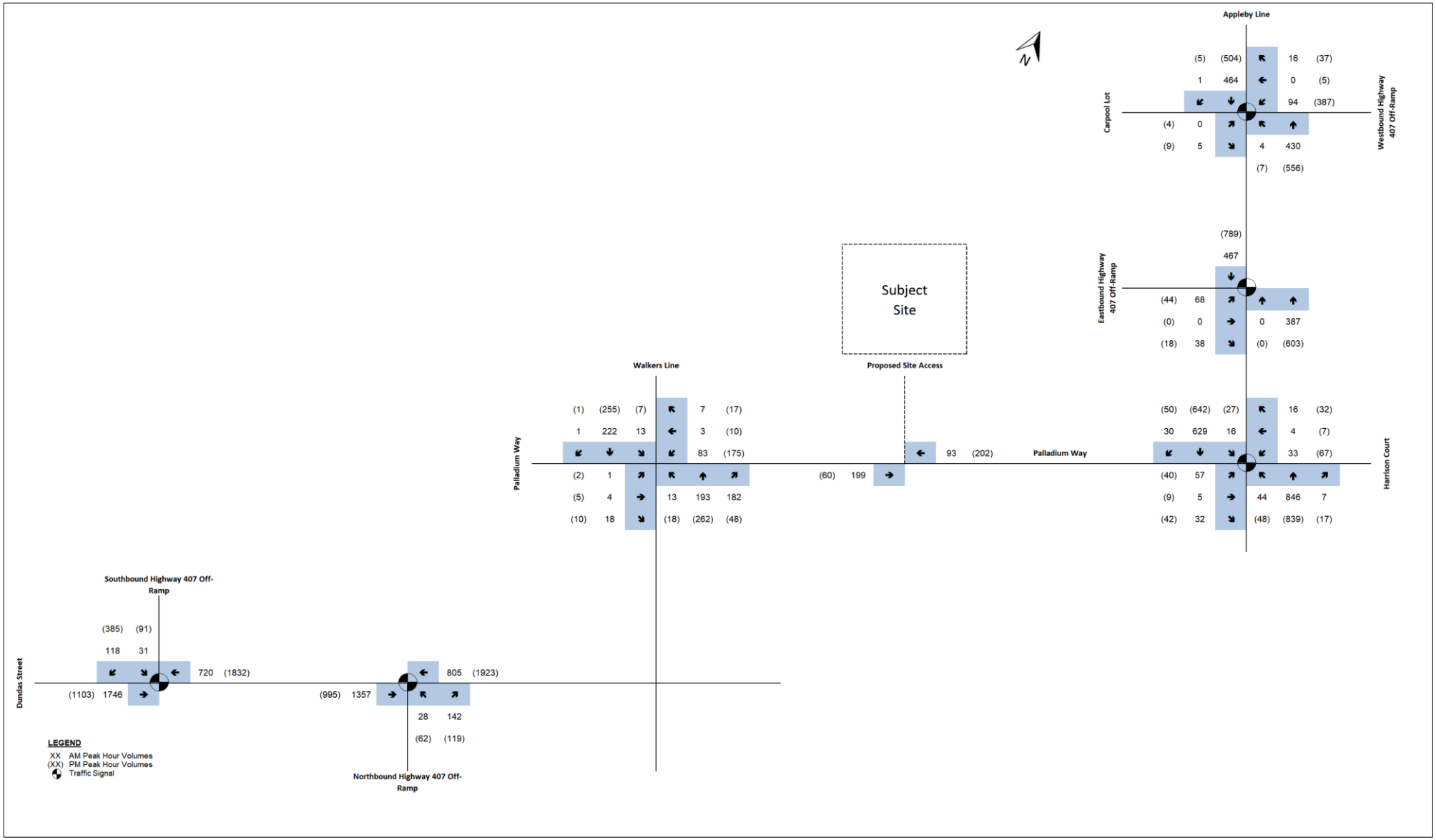


Figure 3 Baseline 2024 Traffic Volumes

4. Future Conditions

4.1 Study Horizon Year

A future horizon year of 2029 was selected for the analysis of future traffic conditions, corresponding to a period of five years from the date of the TIS. The selected horizon year is generally consistent with the Region's TIS Guidelines and the previously completed and approved Traffic Impact Study.

4.2 Corridor Growth

The growth rates used to project the 2029 traffic volumes are consistent with the previously approved Traffic Impact Study and consists of a 2% per annum growth rate applied to all movements along Regional and City roads.

4.3 Background Development Traffic

Consistent with the previously completed Traffic Impact Study, the following background developments were included in the analysis with supporting traffic data provided in **Appendix D**:

4853 Thomas Alton, TIS report by Paradigm Transportation Limited., dated September 2016

- A 691-unit residential development consisting of mix of townhouses and high – rise condominium units. It is expected to generate a total of 220 trips in the a.m. peak period and 253 trips in the p.m. peak period.

Block 23 20M – 4853 Palladium Way, TIS report by Paradigm Transportation Limited, dated June 2016

- Approximately 263,700 square feet of GFA of employment uses on a 5.22-hectare site. The development is expected to generate 172 trips in the a.m. peak hour and 200 trips in the p.m. peak period.

4721 Palladium Way, TIS report by Paradigm Transportation Limited, dated September 2017.

- An Islamic place of worship with a small office component. The development is expected to generate 66 trips in the a.m. peak hour and 117 trips in the p.m. peak period.

The total background development traffic from the background developments is summarized in **Figure 4** with the relevant excerpts provided in **Appendix D**.

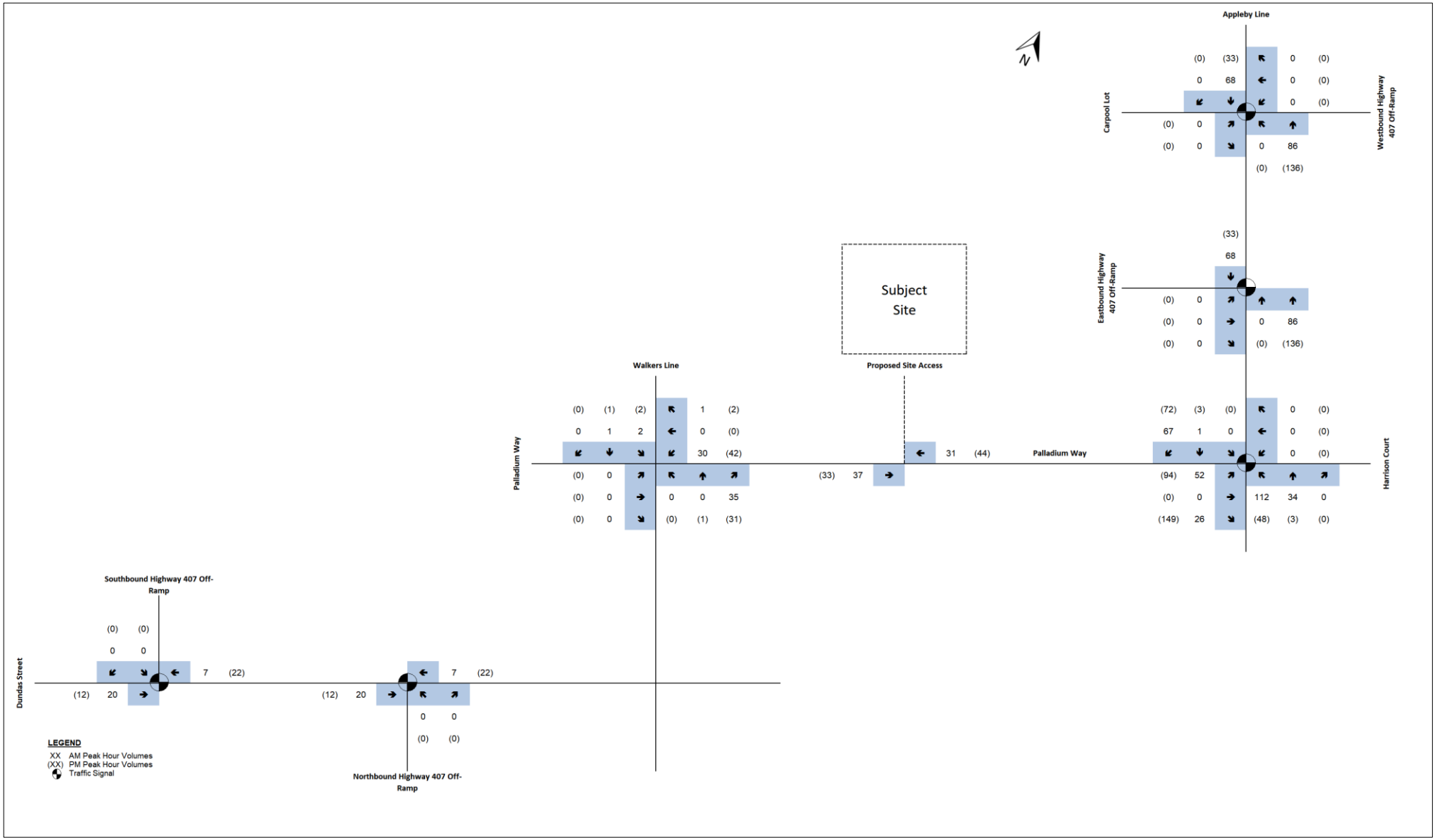


Figure 4 Total Background Development Traffic

4.4 Future Background Traffic Volumes

The background traffic volumes for the 2029 horizon year were derived by applying the 2% per annum growth rates to the study area roads and the total background development traffic from **Figure 4**. The resulting 2029 future background traffic volumes are summarized in **Figure 5**.

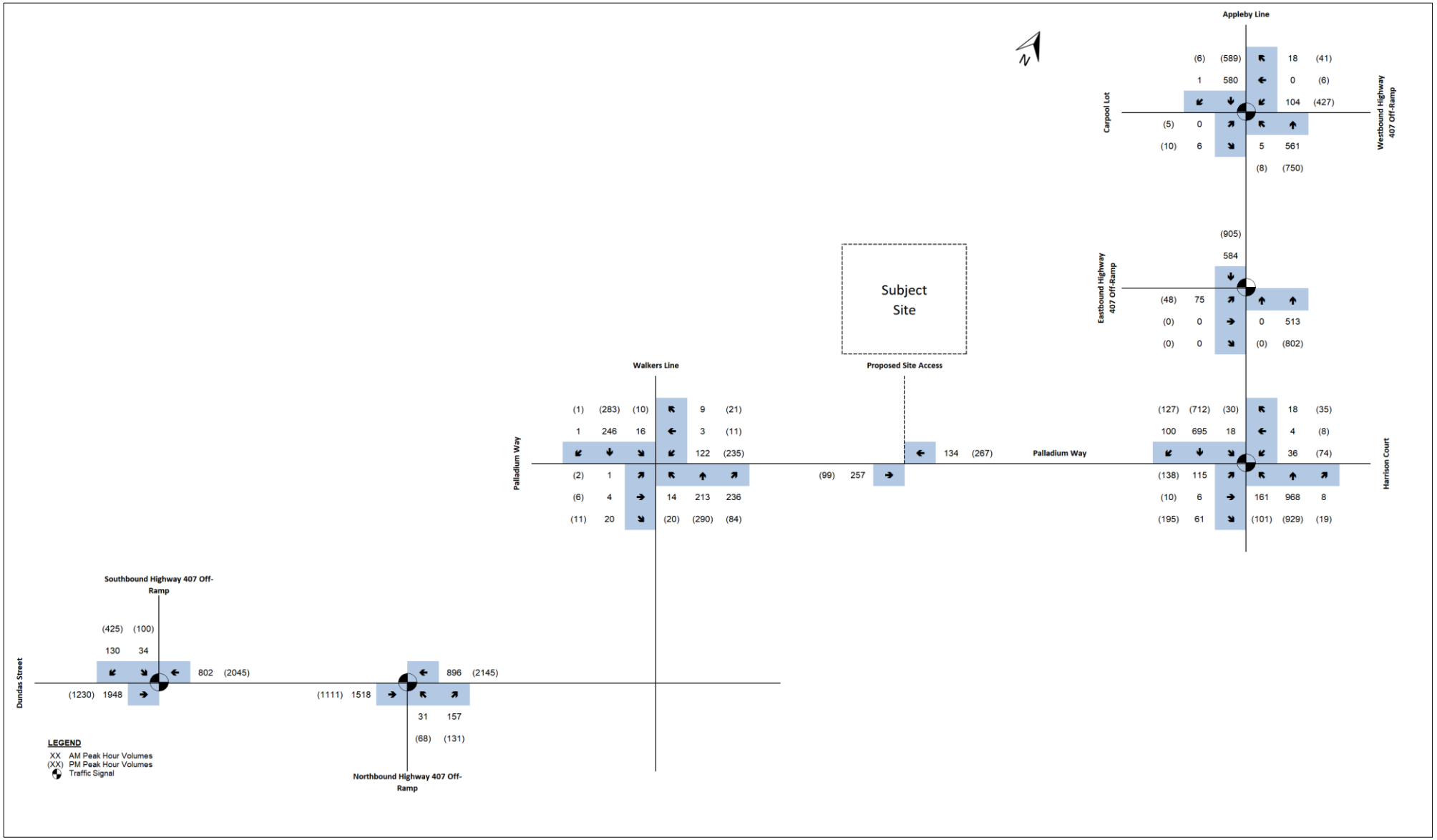


Figure 5 2029 Future Background Traffic Volumes

5. Site Generated Traffic

5.1 Site Trip Generation

The proposed development including the approved Phase 1 consists of a five-storey long term care facility and a revised eight-storey retirement home, with the following unit breakdown:

- Long Term Care Facility – 256 Beds
- Retirement Home – 147 Dwelling Units
- Medical Office –142 m^2 of GFA
- Pharmacy/Retail –92.9 m^2 GFA
- Office – 465 m^2 of GFA

Updated site traffic generated by the proposed development for the weekday a.m. and p.m. peak hours was estimated by applying the trip rates for the following Land Use Codes (LUC):

- Long Term Care Facility - LUC 620 (Nursing Homes)
- Retirement Home - LUC 253 (Congregate Care Facility)
- Medical Office - LUC 729 (Medical - Dental Office Building)
- Pharmacy/Retail – LUC 880 (Pharmacy/Drugstore Without Drive- Through)
- Office – LUC 710

Table 2 summarizes the estimated trip generation for the subject site.

Table 2 Total Site Trip Generation

Land Use	Units/ GFA	Parameters	Weekday AM Peak Hour			Weekday PM Peak Hour		
			In	Out	Total	In	Out	Total
Congregate Care Facility (LUC 253)	147 Units	Trip Rate	0.054	0.034	0.088	0.088	0.089	0.177
		Trip %	58%	42%	-	49%	51%	-
		Gross Trips	8	5	13	13	13	26
Nursing Homes (LUC 620)	256 beds	Trip Rate	0.102	0.039	0.141	0.047	0.094	0.141
		Trip %	72%	28%	-	33%	67%	-
		Gross Trips	26	10	36	12	24	36
Medical - Dental Office Building (LUC 729)	1,528.48 ft^2	Trip Rate	3.721	0.654	3.925	1.308	2.617	3.925
		Trip %	79%	21%	-	30%	70%	-
		Gross Trips	5	1	6	2	4	6
Pharmacy/Drugstore Without Drive- Through (LUC 880)	999.97 ft^2	Trip Rate	2.00	1.00	3.00	4.000	5.000	9.000
		Trip %	65%	35%	-	49%	51%	-
		Gross Trips	2	1	3	4	5	9

Office (LUC710)	5,005 ft^2	Trip Rate	2.198	0.399	2.597	0.400	2.397	2.797
		Trip %	53%	47%	-	47%	53%	-
		Gross Trips	11	2	13	2	12	14
Total Primary Trips			**52**	**19**	**71**	**33**	**58**	**91**

The proposed development is expected to generate a total of 71 two-way vehicle trips during the a.m. peak hour consisting of 52 inbound and 19 outbound trips. During the p.m. peak hour, it is expected to generate 91 new two-way vehicle trips consisting of 33 inbound and 58 outbound trips.

5.2 Site Traffic Distribution and Assignment

The distribution and assignment of site traffic was based on engineering judgment and the Transportation Tomorrow Survey (2016 TTS). The raw TTS data is provided in **Appendix D**. A review of the TTS data, and the application of engineering judgement in estimating expected route choices, results in the adopted trip distribution as shown in **Table 3.**

Table 3 Site Traffic Distribution

Peak Period	Direction	North (Walkers)	North (Appleby)	South (Walkers)	South (Appleby)	South (407)	East (407)	East (Dundas)	West (Dundas)
AM	Inbound	5%	5%	35%	10%	5%	5%	20%	15%
	Outbound	5%	5%	35%	10%	5%	5%	20%	15%
PM	Inbound	5%	5%	35%	10%	5%	5%	20%	15%
	Outbound	5%	5%	35%	10%	5%	5%	20%	15%

The site generated traffic assignment to the study area road network for the weekday a.m. and p.m. peak hours provided in **Figure 6**.

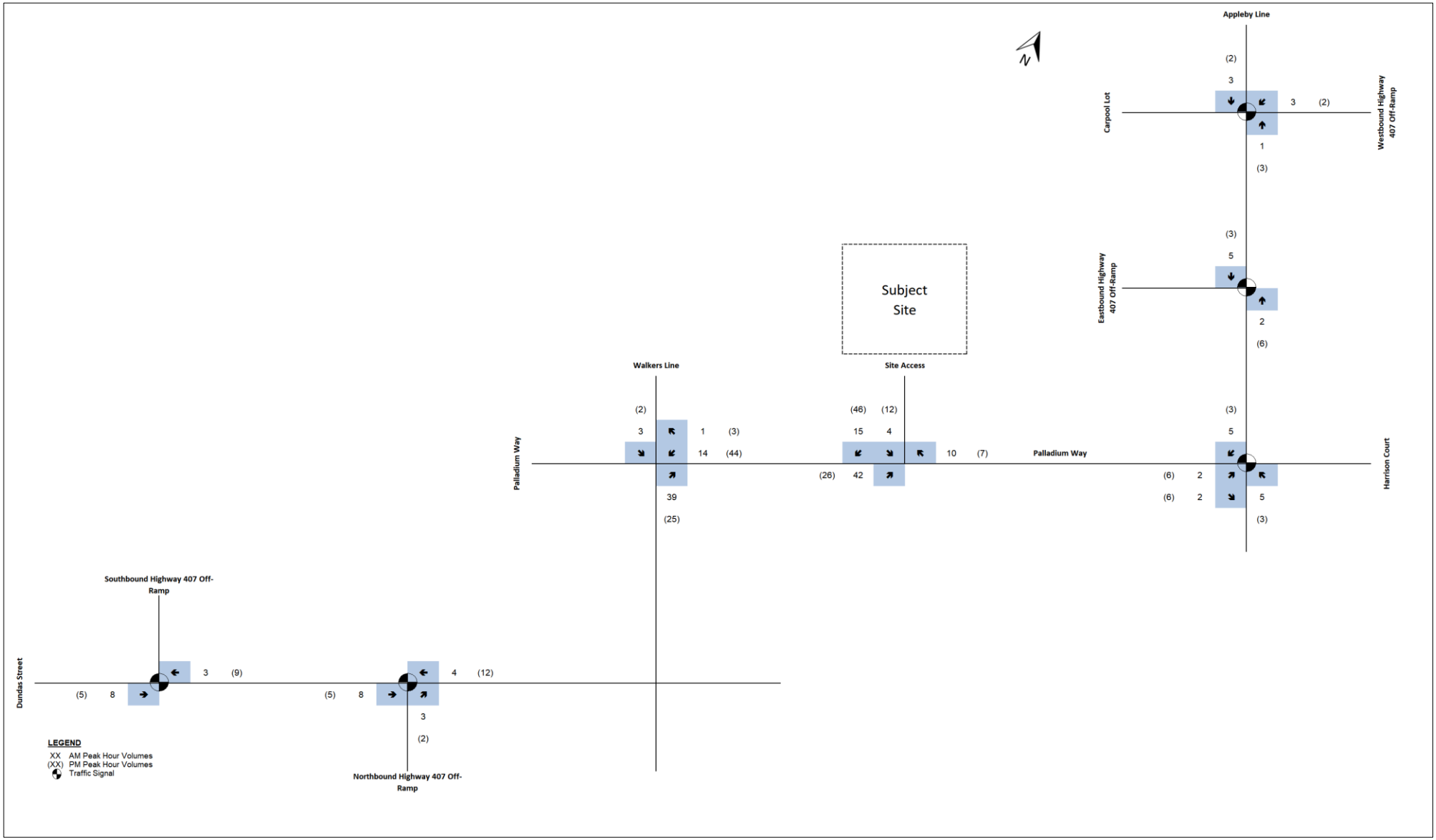


Figure 6 Total Site Trips

6. Future Total Traffic

The future total traffic conditions in the weekday a.m. and p.m. peak hours for the 2029 planning horizon was derived by combining the projected future background traffic with the corresponding estimated site generated traffic. The resulting traffic volumes are presented in **Figure 7** for the 2029 horizon year.

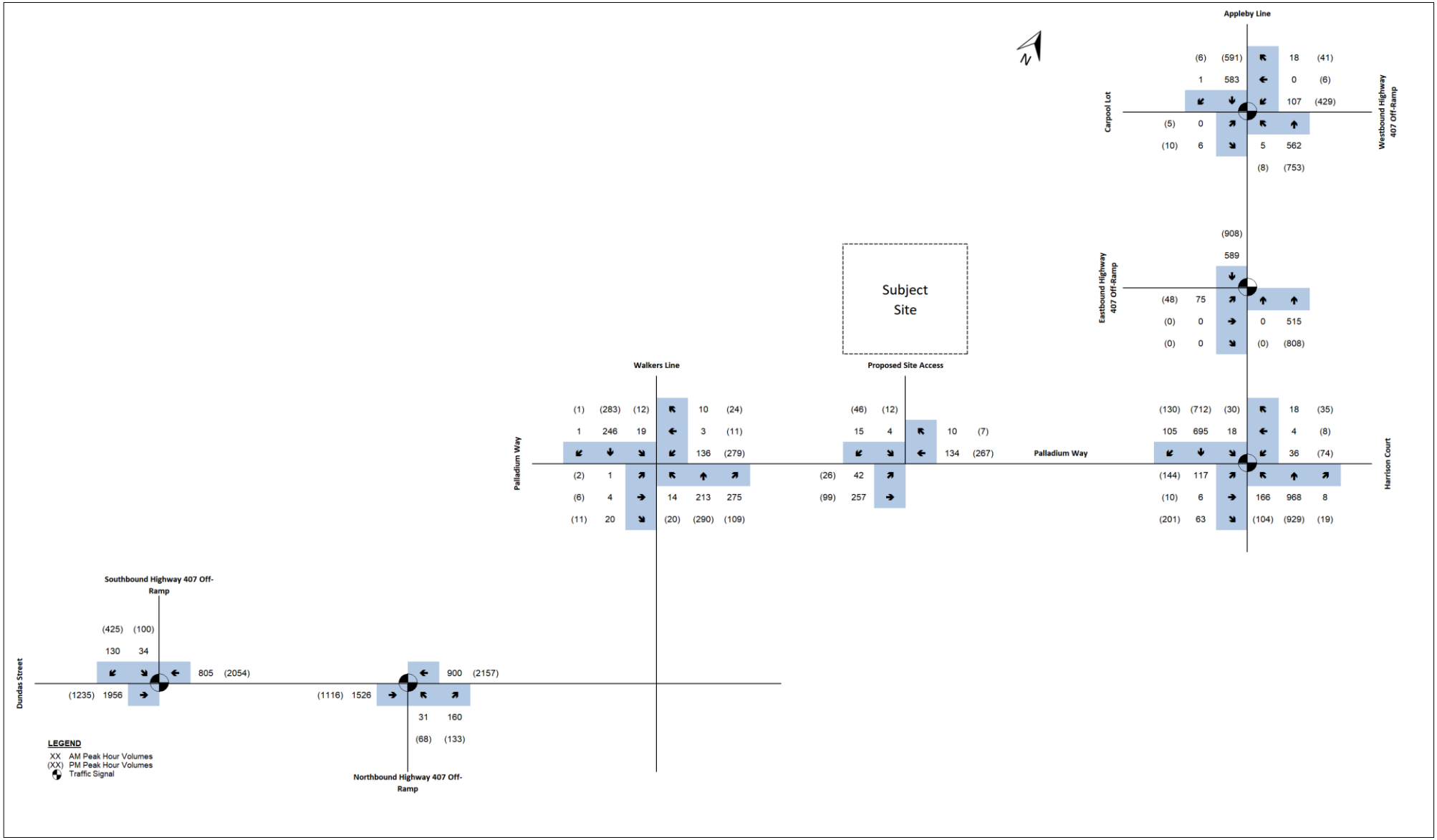


Figure 7 2029 Future Total Traffic Volumes

7. Capacity Analysis

The capacity analysis identifies how well the intersections and driveways are operating. The analysis contained within this report utilized the Highway Capacity Manual (HCM) 2000 procedure within the Synchro Version 11 Software package. The reported intersection volume-to-capacity ratios (v/c) are a measure of the saturation volume for each turning movement, while the levels-of-service (LOS) are a measure of the average delay for each turning movement. Queuing characteristics are reported as the predicted 95th percentile queue for each turning movement. Both pedestrian crossing volumes and heavy vehicle proportions are included in the analyses. The peak hour factors from the counts were used to analyze existing traffic conditions.

Existing peak hour factors were also used for future traffic conditions.

The analysis includes identification and required modifications and improvements (if any) at intersections where the addition of background growth or background growth plus site-generated traffic volumes causes the following:

'Critical' intersections and movements for a signalized intersection include:

- V/C ratios for overall intersections operations increase to 0.85 or above;
- V/C ratios for individual movements increase to 0.95 or above; or
- 95th percentile queue length for individual movements that are projected to, or exceed, the storage length.

'Critical' intersections and movements for an unsignalized intersection include:

- Level of Services (LOS), based on average delay per vehicle, on individual movements exceeds LOS "E",
- Queue length for individual movements exceed the available queue storage.

The following tables summarize the HCM capacity results for the study intersections during the weekday a.m. and p.m. peak hours under existing (2024), future background (2029) and future total (2029) traffic conditions. The detailed calculation sheets are provided in **Appendix F**.

7.1 Dundas Street at Highway 407 Southbound Off-Ramp

Capacity analysis at this intersection during the weekday a.m. and p.m. peak hours for the existing, future background, and future total traffic conditions are summarized in the following table.

Table 4 Capacity analysis of Dundas Street at Highway 407 Southbound Off-Ramp

Scenario	AM Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Existing 2024	Overall: 0.4 (A) 8 EBT = 0.45 (A) 6 WBT = 0.28 (A) 3 SBLR = 0.1 (D) 54 SBR = 0.04 (D) 54	 EBT = 60 m WBT = 20 m SBLR = 15 m SBR = 15 m	Overall: 0.72 (B) 18 EBT = 0.34 (B) 11 WBT = 0.81 (B) 14 SBLR = 0.34 (D) 43 SBR = 0.49 (D) 49	 EBT = 60 m WBT = 65 m SBLR = 45 m SBR = 75 m
Future Background 2029	Overall: 0.44 (A) 8 EBT = 0.5 (A) 6 WBT = 0.31 (A) 4 SBLR = 0.11 (D) 54 SBR = 0.05 (D) 54	 EBT = 70 m WBT = 25 m SBLR = 15 m SBR = 15 m	Overall: 0.8 (C) 21 EBT = 0.38 (B) 12 WBT = 0.9 (C) 20 SBLR = 0.38 (D) 44 SBR = 0.56 (D) 51	 EBT = 65 m WBT = 95 m SBLR = 50 m SBR = 85 m

Future Total 2029	Overall: 0.45 (A) 8 EBT = 0.5 (A) 6 WBT = 0.31 (A) 4 SBLR = 0.11 (D) 54 SBR = 0.05 (D) 54	 EBT = 70 m WBT = 25 m SBLR = 15 m SBR = 15 m	Overall: 0.81 (C) 21 EBT = 0.38 (B) 12 WBT = 0.9 (C) 21 SBLR = 0.38 (D) 44 SBR = 0.56 (D) 51	 EBT = 65 m WBT = 100 m SBLR = 50 m SBR = 85 m

Under existing traffic conditions, the signalized intersection of Highway 407 and the southbound off-ramp operates at satisfactory levels with an overall v/c ratio of 0.40 LOS A during the a.m. peak hour and 0.72 LOS B during the p.m. peak hour.

With the addition of corridor growth and background development traffic for the 2029 future background traffic scenario, the overall reported v/c of the intersection is expected to increase to 0.44 LOS A during the a.m. peak hour and 0.80 LOS C during the p.m. peak hour. The intersection continues to operate without any critical movements during both peak hours.

Under the 2029 future total traffic scenario, with the addition of site generated traffic from the proposed development, the overall v/c ratio is reported to increase marginally to 0.45 LOS A during the a.m. peak hour and to 0.81 LOS C during the p.m. peak hour. The intersection continues to operate without any critical movements during both peak hours.

There are no geometric improvements recommended for the intersection as a result of the proposed development.

7.2 Dundas Street at Highway 407 Northbound Off-Ramp

Capacity analysis for this intersection during the weekday a.m. and p.m. peak hours for the existing, future background, and future total traffic conditions are summarized in the following table.

Table 5 Capacity analysis of Dundas Street at Highway 407 Northbound Off-Ramp

Scenario	AM Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Existing 2024	Overall: 0.45 (B) 18 EBT = 0.7 (B) 18 WBT = 0.29 (B) 16 NBLR = 0.05 (C) 30 NBR = 0.05 (C) 30	 EBT = 55 m WBT = 40 m NBLR = 10 m NBR = 15 m	Overall: 0.46 (B) 20 EBT = 0.52 (B) 13 WBT = 0.69 (C) 22 NBLR = 0.08 (C) 32 NBR = 0.04 (C) 31	 EBT = 45 m WBT = 130 m NBLR = 15 m NBR = 15 m
Future Background 2029	Overall: 0.51 (B) 15 EBT = 0.7 (B) 13 WBT = 0.29 (B) 12 NBLR = 0.08 (D) 36 NBR = 0.09 (D) 37	 EBT = 50 m WBT = 40 m NBLR = 15 m NBR = 20 m	Overall: 0.52 (B) 18 EBT = 0.54 (B) 11 WBT = 0.72 (B) 20 NBLR = 0.1 (D) 36 NBR = 0.05 (D) 35	 EBT = 50 m WBT = 160 m NBLR = 15 m NBR = 15 m
Future Total 2029	Overall: 0.51 (B) 15 EBT = 0.7 (B) 13 WBT = 0.29 (B) 12 NBLR = 0.08 (D) 37 NBR = 0.1 (D) 37	 EBT = 50 m WBT = 40 m NBLR = 15 m NBR = 25 m	Overall: 0.52 (B) 18 EBT = 0.54 (B) 11 WBT = 0.72 (B) 20 NBLR = 0.1 (D) 36 NBR = 0.05 (D) 35	 EBT = 50 m WBT = 160 m NBLR = 15 m NBR = 15 m

Under existing traffic conditions, the signalized intersection of Highway 407 and the northbound off-ramp operates at satisfactory levels with an overall v/c ratio of 0.45 LOS B during the a.m. peak hour and 0.46 LOS B during the p.m. peak hour.

With the addition of corridor growth and background development traffic for the 2029 future background traffic scenario, the overall reported v/c of the intersection is expected to increase to 0.51 LOS B during the a.m. peak hour

and 0.52 LOS B during the p.m. peak hour. The intersection continues to operate without any critical movements during both peak hours.

Under the 2029 future total traffic scenario, with the addition of site generated traffic from the proposed development, the overall v/c ratio is reported to remain at 0.51 LOS B during the a.m. peak hour and 0.51 LOS B during the p.m. peak hour. The intersection continues to operate without any critical movements during both peak hours.

There are no geometric improvements recommended for the intersection as a result of the proposed development.

7.3 Palladium Way at Walkers Line

Capacity analysis for this intersection during the weekday a.m. and p.m. peak hours for the future total traffic conditions are summarized in the following table.

Table 6 Capacity analysis of Palladium Way at Walkers Line

Scenario	AM Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Existing 2024	EBL = 0 (B) 13 EBT = 0.02 (A) 17 EBR = 0.02 (A) 9 WBL = 0.26 (C) 18 WBTR = 0.02 (A) 11 NBL = 0.01 (A) 8 NBTR = 0.18 (A) 0 SBL = 0.01 (A) 8 SBTR = 0.05 (A) 0	EBL = 0 m EBT = 5 m EBR = 5 m WBL = 10 m WBTR = 5 m NBL = 5 m NBTR = 0 m SBL = 5 m SBTR = 0 m	EBL = 0 (B) 13 EBT = 0.01 (A) 14 EBR = 0.01 (A) 9 WBL = 0.41 (C) 19 WBTR = 0.05 (A) 11 NBL = 0.01 (A) 8 NBTR = 0.08 (A) 0 SBL = 0.01 (A) 8 SBTR = 0.05 (A) 0	EBL = 5 m EBT = 5 m EBR = 5 m WBL = 15 m WBTR = 5 m NBL = 5 m NBTR = 0 m SBL = 5 m SBTR = 0 m
Future Background 2029	EBL = 0 (B) 14 EBT = 0.02 (A) 19 EBR = 0.03 (A) 9 WBL = 0.44 (C) 24 WBTR = 0.03 (A) 12 NBL = 0.01 (A) 8 NBTR = 0.22 (A) 0 SBL = 0.02 (A) 9 SBTR = 0.06 (A) 0	EBL = 5 m EBT = 5 m EBR = 5 m WBL = 20 m WBTR = 5 m NBL = 5 m NBTR = 0 m SBL = 5 m SBTR = 0 m	EBL = 0 (B) 14 EBT = 0.01 (A) 16 EBR = 0.01 (A) 9 WBL = 0.61 (D) 28 WBTR = 0.06 (A) 12 NBL = 0.02 (A) 8 NBTR = 0.11 (A) 0 SBL = 0.01 (A) 8 SBTR = 0.06 (A) 0	EBL = 5 m EBT = 5 m EBR = 5 m WBL = 30 m WBTR = 5 m NBL = 5 m NBTR = 0 m SBL = 5 m SBTR = 0 m
Future Total 2029	EBL = 0 (B) 14 EBT = 0.02 (A) 20 EBR = 0.03 (A) 9 WBL = 0.52 (D) 28 WBTR = 0.03 (A) 12 NBL = 0.01 (A) 8 NBTR = 0.25 (A) 0 SBL = 0.02 (A) 9 SBTR = 0.06 (A) 0	EBL = 5 m EBT = 5 m EBR = 5 m WBL = 25 m WBTR = 5 m NBL = 5 m NBTR = 0 m SBL = 5 m SBTR = 0 m	EBL = 0 (B) 14 EBT = 0.02 (A) 16 EBR = 0.01 (A) 9 WBL = 0.75 (E) 38 WBTR = 0.06 (A) 12 NBL = 0.02 (A) 8 NBTR = 0.12 (A) 0 SBL = 0.01 (A) 8 SBTR = 0.06 (A) 0	EBL = 5 m EBT = 5 m EBR = 5 m WBL = 45 m WBTR = 5 m NBL = 5 m NBTR = 0 m SBL = 5 m SBTR = 0 m

Under existing conditions, the unsignalized intersection of Palladium Way at Walkers Line operates at satisfactory levels during both peak hours. The westbound left-turn movement operates with the greatest delays with an 18 second delay during the a.m. peak hour and 19 second delay during the p.m. peak hour. The intersection operates without any critical movements during both peak hours.

With the addition of corridor growth and background development traffic, the intersection is reported to continue to operate at satisfactory levels with the delays in the westbound left-turn movement reported to increase to 24 seconds during the a.m. peak hour and 28 seconds during the p.m. peak hour. The intersection continues to operate without any critical movements during both peak hours.

Under the 2029 future total traffic scenario, with the addition of site generated traffic from the proposed development, the intersection is reported to continue to operate at satisfactory levels with the delays in the westbound left-turn movement increasing by 4 seconds to 28 seconds during the a.m. peak hour and increasing by 10 seconds to 38 seconds during the p.m. peak hour.

There are no further geometric improvements recommended for the intersection as a result of the proposed development.

7.4 Palladium Way at Appleby Line

Capacity analysis for this intersection during the weekday a.m. and p.m. peak hours for the future total traffic conditions are summarized in the following table.

Table 7 Capacity analysis of Palladium Way at Appleby Line

Scenario	AM Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Existing 2024	Overall: 0.29 (B) 13 EBL = 0.47 (D) 54 EBTR = 0.06 (D) 50 WBL = 0.33 (D) 53 WBTR = 0.04 (D) 50 NBL = 0.06 (A) 3 NBTR = 0.22 (A) 3 SBL = 0.06 (B) 16 SBTR = 0.28 (B) 18	 EBL = 30 m EBTR = 15 m WBL = 20 m WBTR = 10 m NBL = 5 m NBTR = 25 m SBL = 10 m SBTR = 45 m	Overall: 0.29 (B) 12 EBL = 0.28 (D) 42 EBTR = 0.08 (D) 40 WBL = 0.48 (D) 44 WBTR = 0.06 (D) 40 NBL = 0.08 (A) 3 NBTR = 0.23 (A) 4 SBL = 0.09 (A) 8 SBTR = 0.26 (B) 13	 EBL = 20 m EBTR = 15 m WBL = 25 m WBTR = 10 m NBL = 5 m NBTR = 25 m SBL = 5 m SBTR = 5 m
Future Background 2029	Overall: 0.37 (B) 15 EBL = 0.66 (E) 58 EBTR = 0.07 (D) 46 WBL = 0.26 (D) 48 WBTR = 0.03 (D) 46 NBL = 0.24 (A) 5 NBTR = 0.27 (A) 4 SBL = 0.08 (B) 16 SBTR = 0.34 (B) 18	 EBL = 45 m EBTR = 15 m WBL = 20 m WBTR = 10 m NBL = 20 m NBTR = 35 m SBL = 10 m SBTR = 50 m	Overall: 0.38 (B) 15 EBL = 0.69 (D) 49 EBTR = 0.17 (D) 37 WBL = 0.63 (D) 50 WBTR = 0.05 (D) 36 NBL = 0.2 (A) 6 NBTR = 0.27 (A) 5 SBL = 0.11 (A) 7 SBTR = 0.31 (B) 13	 EBL = 45 m EBTR = 20 m WBL = 30 m WBTR = 10 m NBL = 15 m NBTR = 35 m SBL = 0 m SBTR = 0 m
Future Total 2029	Overall: 0.37 (B) 15 EBL = 0.66 (E) 58 EBTR = 0.07 (D) 46 WBL = 0.26 (D) 48 WBTR = 0.03 (D) 46 NBL = 0.26 (A) 5 NBTR = 0.27 (A) 4 SBL = 0.08 (B) 16 SBTR = 0.34 (B) 18	 EBL = 45 m EBTR = 15 m WBL = 20 m WBTR = 10 m NBL = 20 m NBTR = 35 m SBL = 10 m SBTR = 50 m	Overall: 0.39 (B) 15 EBL = 0.7 (D) 50 EBTR = 0.17 (D) 37 WBL = 0.64 (D) 51 WBTR = 0.05 (D) 36 NBL = 0.21 (A) 6 NBTR = 0.27 (A) 5 SBL = 0.11 (A) 7 SBTR = 0.32 (B) 13	 EBL = 50 m EBTR = 20 m WBL = 30 m WBTR = 10 m NBL = 15 m NBTR = 35 m SBL = 0 m SBTR = 0 m

Under existing traffic conditions, the signalized intersection of Palladium Way at Appleby Line operates at satisfactory levels with an overall v/c ratio of 0.29 LOS B during both peak hours. The intersection operates without any critical movements during both peak hours.

With the addition of corridor growth and background development traffic for the 2029 future background traffic scenario, the overall reported v/c of the intersection is expected to increase to 0.37 LOS B during the a.m. peak hour and 0.38 LOS B during the p.m. peak hour. The intersection continues to operate without any critical movements during both peak hours.

Under the 2029 future total traffic scenario, with the addition of site generated traffic from the proposed development, the overall v/c ratio is reported to remain at 0.37 LOS B during the a.m. peak hour and increase marginally to 0.39 LOS B during the p.m. peak hour. The intersection continues to operate without any critical movements during both peak hours.

There are no geometric improvements recommended for the intersection as a result of the proposed development.

7.5 Appleby Line at Highway 407 Eastbound Off-Ramp

Capacity analysis for this intersection during the weekday a.m. and p.m. peak hours for the future total traffic conditions are summarized in the following table.

Table 8 Capacity analysis of Appleby Line at Highway 407 Eastbound Off-Ramp

Scenario	AM Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Existing 2024	Overall: 0.23 (A) 7 EBL = 0.4 (D) 37 EBR = 0.03 (D) 36 NBT = 0.16 (A) 3 SBT = 0.2 (A) 3	 EBL = 25 m EBR = 10 m NBT = 15 m SBT = 20 m	Overall: 0.3 (A) 6 EBL = 0.37 (D) 46 EBR = 0.01 (D) 43 NBT = 0.23 (A) 3 SBT = 0.3 (A) 5	 EBL = 20 m EBR = 10 m NBT = 20 m SBT = 50 m
Future Background 2029	Overall: 0.28 (A) 6 EBL = 0.43 (D) 37 EBR = 0 (A) 0 NBT = 0.21 (A) 3 SBT = 0.25 (A) 3	 EBL = 25 m EBR = 0 m NBT = 20 m SBT = 25 m	Overall: 0.35 (A) 5 EBL = 0.4 (D) 46 EBR = 0 (A) 0 NBT = 0.3 (A) 3 SBT = 0.34 (A) 5	 EBL = 20 m EBR = 0 m NBT = 25 m SBT = 55 m
Future Total 2029	Overall: 0.28 (A) 6 EBL = 0.43 (D) 37 EBR = 0 (A) 0 NBT = 0.21 (A) 3 SBT = 0.25 (A) 3	 EBL = 25 m EBR = 0 m NBT = 20 m SBT = 25 m	Overall: 0.35 (A) 5 EBL = 0.4 (D) 46 EBR = 0 (A) 0 NBT = 0.31 (A) 3 SBT = 0.34 (A) 5	 EBL = 20 m EBR = 0 m NBT = 25 m SBT = 55 m

Under existing traffic conditions, the signalized intersection of Highway 407 and the eastbound off-ramp operates at satisfactory levels with an overall v/c ratio of 0.23 LOS A during the a.m. peak hour and 0.30 LOS A during the p.m. peak hour and without any critical movements.

With the addition of corridor growth and background development traffic for the 2029 future background traffic scenario, the overall reported v/c of the intersection is expected to increase to 0.28 LOS AA during the a.m. peak hour and 0.35 LOS A during the p.m. peak hour. The intersection continues to operate without any critical movements during both peak hours.

Under the 2029 future total traffic scenario, with the addition of site generated traffic from the proposed development, the overall v/c ratio is reported to remain at 0.28 LOS A during the a.m. peak hour and 0.35 LOS A during the p.m. peak hour. The intersection continues to operate without any critical movements during both peak hours.

There are no geometric improvements recommended for the intersection as a result of the proposed development.

7.6 Appleby Line at Highway 407 Westbound Off-Ramp/Carpool Lot

Capacity analysis for this intersection during the weekday a.m. and p.m. peak hours for the future total traffic conditions are summarized in the following table.

Table 9 Capacity analysis of Appleby Line at Highway 407 Westbound Off-Ramp/Carpool Lot

Scenario	AM Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Existing 2024	Overall: 0.23 (B) 10 EBTLR = 0 (D) 39 WBL = 0.41 (D) 37 WBTLR = 0.03 (C) 34 NBL = 0.01 (A) 5 NBT = 0.2 (A) 6 SBTR = 0.16 (A) 8	 EBTLR = 0 m WBL = 20 m WBTLR = 0 m NBL = 5 m NBT = 30 m SBTR = 30 m	Overall: 0.39 (C) 21 EBTLR = 0.01 (D) 49 WBL = 0.69 (D) 44 WBTLR = 0.66 (D) 43 NBL = 0.02 (A) 9 NBT = 0.28 (A) 10 SBTR = 0.19 (B) 12	 EBTLR = 0 m WBL = 65 m WBTLR = 60 m NBL = 5 m NBT = 55 m SBTR = 40 m
Future Background 2029	Overall: 0.30 (B) 10 EBTLR = 0 (D) 39 WBL = 0.45 (D) 37 WBTLR = 0.04 (C) 34 NBL = 0.01 (A) 6 NBT = 0.26 (A) 7 SBTR = 0.21 (A) 9	 EBTLR = 0 m WBL = 25 m WBTLR = 0 m NBL = 5 m NBT = 40 m SBTR = 35 m	Overall: 0.48 (C) 21 EBTLR = 0.01 (D) 49 WBL = 0.71 (D) 44 WBTLR = 0.68 (D) 42 NBL = 0.02 (A) 10 NBT = 0.38 (B) 13 SBTR = 0.23 (B) 14	 EBTLR = 0 m WBL = 70 m WBTLR = 65 m NBL = 5 m NBT = 70 m SBTR = 45 m
Future Total 2029	Overall: 0.30 (B) 11 EBTLR = 0 (D) 39 WBL = 0.45 (D) 37 WBTLR = 0.04 (C) 34 NBL = 0.01 (A) 6 NBT = 0.26 (A) 7 SBTR = 0.21 (A) 9	 EBTLR = 0 m WBL = 25 m WBTLR = 0 m NBL = 5 m NBT = 40 m SBTR = 35 m	Overall: 0.49 (C) 21 EBTLR = 0.01 (D) 49 WBL = 0.71 (D) 44 WBTLR = 0.68 (D) 42 NBL = 0.02 (A) 10 NBT = 0.38 (B) 13 SBTR = 0.23 (B) 14	 EBTLR = 0 m WBL = 70 m WBTLR = 65 m NBL = 5 m NBT = 75 m SBTR = 45 m

Under existing traffic conditions, the signalized intersection of Highway 407 and the westbound off-ramp operates at satisfactory levels with an overall v/c ratio of 0.23 LOS B during the a.m. peak hour and 0.39 LOS C during the p.m. peak hour.

With the addition of corridor growth and background development traffic for the 2029 future background traffic scenario, the overall reported v/c of the intersection is expected to increase to 0.30 LOS B during the a.m. peak hour and 0.48 LOS C during the p.m. peak hour. The intersection continues to operate without any critical movements during both peak hours.

Under the 2029 future total traffic scenario, with the addition of site generated traffic from the proposed development, the overall v/c ratio is reported to remain at 0.30 LOS B during the a.m. peak hour and increase marginally to 0.49 LOS C during the p.m. peak hour. The intersection continues to operate without any critical movements during both peak hours.

There are no geometric improvements recommended for the intersection as a result of the proposed development.

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7.7 Palladium Way at Proposed Site Access

Capacity analysis for this intersection during the weekday a.m. and p.m. peak hours for the future total traffic conditions are summarized in the following table.

Table 10 Capacity analysis of Palladium Way at Proposed Site Access

Scenario	AM Peak Hour		PM Peak Hour	
	V/C (LOS) seconds	95th % Que.	V/C (LOS) seconds	95th % Que
Future Total 2029	EBL = 0.03 (A) 8 WBTR = 0.09 (A) 0 SBLR = 0.02 (A) 10	EBL = 5 m WBTR = 0 m SBLR = 5 m	EBL = 0.02 (A) 8 WBTR = 0.18 (A) 0 SBLR = 0.09 (B) 10	EBL = 5 m WBTR = 0 m SBLR = 5 m

Under the 2029 future total traffic scenario, the proposed site access is reported to operate at satisfactory levels during both peak hours. During both peak hours, the site access is reported to operate with a delay of 10 seconds, the eastbound left-turn movement with an 8 second delay, the westbound shared through/right-turn movement with no delay, and both the eastbound left-turn and southbound shared left/right-turn movement (site access) operating with a 95th percentile queue.

8. Site Plan Review

The previously approved Traffic Impact Study for the subject site included an assessment of the access design, turning lane requirements, and a sightline analysis. As no changes to site access are proposed, a reassessment of these components is not required.

Below is a summary of the findings from the previous report assessment.

8.1 Access design

The access width at the property line is approximately 7.5 metres and includes a single inbound and a single outbound lane, with no auxiliary turning lanes on Palladium Way. The findings of the updated Traffic Impact Study confirm that the proposed lane configuration will continue to operate without any operational concerns.

8.2 Access Turning Lane Requirements

Palladium Way has a two-way left-turn lane along the site's frontage, and as a result a left-turn lane warrant is no longer required.

In addition, it is GHD's opinion that a right turn lane is not required on the basis of the expected low turning volumes (10 vehicles during a.m. peak hours and 7 vehicles during p.m. peak hours).

8.3 Sightlines

A sightline assessment was completed for the site access along Palladium Way using criteria contained in the Transportation Association of Canada, Geometric Design Guide for Canadian Roads (TAC manual). The posted speed limit of Palladium Way remains at 60 km/h, therefore an 80 km/h design speed was utilized for our analysis. The Figure 2.3.3.4a in the TAC manual indicates that the minimum stopping sight distance for a design speed of 80 km/h is 140 m. Based on that, the access is considered to have adequate sightlines as per TAC requirements.

9. Parking Review

GHD reviewed the City's current Zoning By-Law parking and loading requirements for the subject site.

9.1 City of Burling Zoning By-law 2020

9.1.1 Vehicular Parking

The current City of Burlington Zoning By-Law 2020 minimum parking requirements are found in Section 2.25, Table 1.2.6. The minimum By-Law requirement for the subject site is as follows:

- Long Term Care Facility
    - 0.35 spaces per bed
- Retirement Home
    - 0.60 spaces per unit for occupants/employees
    - 0.25 spaces per unit for visitors
    - 1 additional space per 50 units for maintenance vehicles
- Medical Office
    - 6 spaces per 100 m^2 of GFA
- Pharmacy
    - 3.5 spaces per 100 m2 of GFA
- Office
    - 3 spaces per 100 m^2 of GFA

The minimum parking required for the subject site is as follows:

- Long Term Care Facility
    - 0.35 spaces per bed x 256 Beds = 90 spaces
- Retirement Home
    - 0.6 spaces per unit x 147 Dwelling Units = 88 spaces, for occupants/employees
    - 0.25 spaces per unit x 147 Dwelling Units = 37 spaces, for visitors
    - 1 additional space per 50 units x 147 Dwelling Units = 3 spaces, for maintenance vehicles
- Medical Office
    - 6 spaces per 100 m^2 x 142 m^2 = 9 spaces
- Pharmacy
    - 3.5 spaces per 100 m^2 x 92.9 m^2 = 3 spaces
- Office
    - 3 spaces per 100 m^2 x 465 m^2 = 14 spaces

In total, the subject site is required to provide a minimum of 244 parking spaces.

9.1.2 Accessible Parking

The minimum requirement for accessible parking spaces can also be found in the City of Burlington Zoning By-Law 2020, Section 2.26 (9), Table 1.2.7. The minimum By-Law requirement accessible parking for the subject site is based on the number of parking spaces required, as follows:

- 5 to 50 spaces: 1 designated accessible parking space
- 51 to 90 spaces: 2 designated accessible parking spaces
- Over 90 spaces 3% of required parking

The minimum number of accessible parking spaces required for the subject site is as follow,

- Number of parking spaces required: 320 visitor spaces
    - 3% of 320 spaces = 10 barrier-free spaces

In total, 10 barrier-free parking spaces are required under the City's current By-Law.

9.1.3 Bicycle Parking

Under the City of Burlington Zoning By-Law 2020, the bicycle parking requirement are found in Section 2.26 (10), Table 1.2.8. The minimum By-Law requirement for bicycle parking for the subject site is as follows:

- Office
    - 2 spaces, plus 1 space per 1,000 m^2 of GFA

The minimum number of bicycle parking spaces required for the subject site is as follows:

- Office
    - 2 spaces, plus 1 space per 1,000 m^2 x 465 m^2 = 2 spaces

9.1.4 Loading Spaces

Under the City of Burlington Zoning By-Law 2020, the loading space requirement is found in Section 2.25.3, and requires at least one off-street loading space to be provided in conjunction with every principal building, including mixed-use buildings, but excluding residential buildings less than 4 storeys high.

The subject site consists of two residential buildings at least 4 storeys high and would each require at least one loading space.

9.2 Proposed Site Parking

The following table summarizes the minimum By-law requirements and the proposed parking/loading supply for the subject site.

Table 11 Parking Requirements and Provisions

Type	Unit Count/GFA	By-Law 2020 Requirement	Provided
Vehicle Parking	• Long Term Care Facility - 256 Beds • Retirement Home - 147 Dwelling Units • Medical Office - 142 m^2 of GFA • Pharmacy/Retail - 92.9 m^2 GFA • Office - 465 m^2 of GFA	A minimum of 244 parking spaces	236 parking spaces
Barrier Free Parking		A minimum of 10 barrier free spaces	10 barrier free spaces
Bicycle Parking		A minimum of 2 bicycle parking spaces	8 bicycle parking spaces
Loading Spaces		2 loading spaces	2 loading spaces

The provision of 236 parking spaces represents a shortfall of 8 parking spaces from the 244 parking spaces required by the City's By-law. A modification is being sought for the subject site to reduce the parking requirement to the resident parking rate for the retirement home only from 0.60 spaces per unit to 0.53 spaces per unit.

10. Parking Justification

10.1 Occupant/Employee Parking Assessment

In support of the proposed modification, GHD has surveyed the parking demand data for two separate long-term care/retirement home facilities. Two sites were surveyed on a Friday evening and a Saturday afternoon at 30-minute intervals as agreed with City staff.

The first site is The Village of Erin Meadows located at 2930 Erin Centre Boulevard in the City of Mississauga. The site consists of a 180-bed long-term care facility and 279-room retirement home/senior apartment with a total of 240 parking spaces located at surface level and within the underground parking garage.

The second site is The Village of Tansley Woods located at 4100 Upper Middle Road in the City of Burlington. The site consists of a 144-bed long-term care facility and 433 room retirement home with a total of 369 parking spaces located at surface level and within the underground parking garage.

The detailed survey records and calculations are included in **Appendix G** with key aspects of the data for each individual site summarized in their respective tables below.

10.1.1 The Village of Erin Meadows (2930 Erin Centre Boulevard)

The Village of Erin Meadows is a facility that consists of three buildings. The site contains a 3-storey 180-bed long-term care facility, a 3-storey retirement home, and a 12-storey retirement home and senior's apartment. The retirement home and senior's apartment consist of a total of 279 dwelling units. A total of 240 spaces are provided, consisting of 149 surface parking spaces and 91 underground spaces.

On the surveyed dates, the parking areas were divided into three areas:

A. The parking area accessed from Erin Centre Boulevard

B. The parking area accessed from Rio Court

C. The underground parking area

The peak parking demand is summarized in the table below

Table 12 **Summary of Peak 30-minute Parking Demand (The Village of Erin Meadows)**

The Village of Erin Meadows		
Area	**Friday, October 4th, 2024**	**Saturday, October 5th, 2024**
A	**48 spaces**	**52 spaces**
B	27 spaces	47 spaces
C	**61 spaces**	**68 spaces**

Based on the site layout, GHD has assumed that all parking occurring in Areas A and C are allocated to the retirement/senior's home component while any parking that occurred in Area B is attributed to the long-term care facility. These assumptions were made based on each use's proximity to the parking areas.

On Friday, October 4th, 2024, Areas A and C had a total peak parking demand of 109 spaces while the peak parking demand increased to 120 spaces on Saturday, October 5th, 2024. Based on a total of 279 dwelling units between the retirement home and senior's apartment, the two uses have a combined peak parking demand of 0.43 spaces per dwelling unit for residents, employees and visitors.

It should be noted that the peak parking demand in the three areas occurred generally at the same time during the Friday survey, while the peak parking demand for each area on Saturday were spread out during the surveyed period and therefore, the recorded demand which is the summary of the peak demand within each area, provides a conservative assessment. When comparing to the total parking demand in Areas A and C at any one time, a peak parking demand of 113 spaces was observed between the two areas (0.41 spaces per unit).

10.1.2 The Village of Tansley Woods (4100 Upper Middle Road)

The Village of Erin Meadows is a facility that consists of three buildings. The site contains a building with a 144-bed long-term care facility, a second building consisting of 167 retirement home beds and 58 seniors' apartments, and a third building consisting of 156 retirement home beds and 52 seniors' apartments. A total of 369 spaces are provided, consisting of 253 surface parking spaces and 116 underground spaces.

On the surveyed dates, the parking areas were divided into three areas:

A. The parking area located generally west of the Upper Middle Road access

B. The parking area located generally east of the Upper Middle Road access and north of the east building

C. The parking area located generally south of the east building

D. The underground parking area

The peak parking demand is summarised in the table below

Table 13 **Summary of Peak 30-minute Parking Demand (*The Village of Tansley Woods*)**

The Village of Tansley Woods		
Area	**Friday, October 4th, 2024**	**Saturday, October 5th, 2024**
A	35 spaces	52 spaces
B	25 spaces	38 spaces
C	36 spaces	40 spaces
D	76 spaces	66 spaces

Based on the site layout, GHD has assumed that all the parking that occurred in Areas A, B, and D are allocated to the retirement/senior's home component while any parking that occurred in Area C is attributed to the long-term care facility. These assumptions were made based on each use's proximity to the parking areas and observed parking use.

On Friday, October 4th, 2024, Areas A, B, and D had a total peak parking demand of 172 spaces while the peak parking demand decreased to 156 spaces on Saturday, October 5th, 2024. Based on a total of 433 dwelling units between the retirement home and seniors' apartments, the two uses have a combined peak parking demand of 0.40 spaces per dwelling unit for residents, employees and visitors.

Similarly to the Village of Erin Meadows, the peak parking demand in Areas A, B, and D generally occurred during the same period on Friday, while the peak demand for each area on Saturday occurred at varying times during a general 1.5-hour period. When observing the total peak parking of Areas A, B, and D at any one-time period, the areas had a peak parking demand of 155 spaces, a reduction of one space compared to the sum of each area's peak parking demand.

10.2 Parking Assessment

GHD has reviewed the proposed reduction in parking for the retirement home component from 0.60 spaces per unit to 0.53 spaces per unit and finds that this adjusted rate will adequately meet the parking needs for the retirement home while satisfying the minimum By-law requirements for all other uses on the site.

This recommendation is supported by proxy surveys conducted at two comparable facilities: The Village of Erin Meadows in Mississauga and The Village of Tansley Woods in Burlington, where observed peak parking demands were 0.43 spaces per unit and 0.40 spaces per unit, respectively.

The surveyed rates, which include both resident/employee and visitor parking, demonstrate that a rate of 0.53 spaces per unit for the subject site's resident and employee needs alone is conservative and will be sufficient for the subject site without negatively impacting parking across the site. By excluding visitor spaces from the target rate, the proposed reduction allows for flexibility, optimizing space for actual demand while maintaining a surplus to cover peak parking demand and unanticipated needs.

Based on the supportive findings from the proxy sites and the conservative nature of the proposed rate, GHD is confident that a rate of 0.53 spaces per unit for the retirement home strikes an effective balance between efficiency and capacity, ensuring that the site will have sufficient parking to meet demand.

11. Travel Demand Management

11.1 Travel Demand Management

Travel Demand Management (TDM) refers to a variety of strategies to reduce congestion, minimize the number of single-occupant vehicles, encourage non-auto modes of travel, and reduce vehicle dependency to create a sustainable transportation system. TDM strategies have multiple benefits including the following:

- Reduced auto-related emissions to improve air quality;
- Decreased traffic congestion to reduce travel time;
- Increased travel options for businesses and commuters;
- Reduced personal transportation costs and energy consumptions; and
- Support Provincial smart growth objectives.

The combined benefits listed above will assist in creating a more active and livable community through improvements to overall active transportation standards for the local businesses and surrounding community.

11.2 Recommended TDM Measures

Table 14 Recommended TDM Strategies

TDM Measure	Responsibility	Cost	Note
Hard Measures			
Pedestrian connections	Applicant	Integrated into the overall development cost	Site plan includes a walkway system providing a connection to the municipal and regional rights-of-way

Bicycle Parking	Applicant	Integrated into the overall development cost. Short term bike parking costs are estimated at $300 per rack that can accommodate 2 bikes. Values to be confirmed through detailed design.	Bicycle parking will be provided matching the requirements of the City's By-law. Short-term bicycle parking will be provided within well-lit and visible areas.
Soft Measures			
Carpool spaces	Applicant	To be determined.	Carpool spaces will be provided near the main entrance, typically the "more attractive spaces".
Membership in Smart Commute	Applicant	To be determined.	Membership in Smart Commute to match employees in the area to commute together
Designated change rooms for staff	Applicant	To be determined.	The staff rooms within each building will contain change areas for staff members that arrive by bicycle to provide them an area to change before and after commuting.

12. Vehicle Swept Path Analysis

GHD undertook a vehicle swept path analysis to assess the site plan circulation for an emergency vehicles, WB-15 trucks, waste collection vehicle, and passenger vehicle within the site. The results of the analysis are provided in **Appendix H** and illustrate that the site can sufficiently accommodate the aforementioned design vehicles with no issues.

13. Conclusion

This report is an update to the previously completed Traffic Impact Study for the subject site. The report has been updated to reflect the updated site plan consisting of an increase to 147 retirement units in addition to conducting updated turning movement counts for all existing study intersections.

Access to the subject site is proposed to continue to be provided via a new unsignalized full-moves access on Palladium Way.

Based on ITE Trip Generation rates, the subject site is expected to generate a total of 71 two-way vehicle trips during the a.m. peak hour consisting of 52 inbound and 19 outbound trips. During the p.m. peak hour, it is expected to generate 91 new two-way vehicle trips consisting of 33 inbound and 58 outbound trips.

Under existing and 2029 future background/total traffic conditions, all intersections are operating and reported to continue to operate at acceptable v/c ratios and levels of service during the a.m. peak and p.m. peak hours.

Application of the City of Burlington Zoning By-Law 2020 parking rates to the subject site results in a requirement of a minimum of 244 parking spaces, including 10 barrier free spaces, 2 bicycle parking spaces, and 2 loading spaces.

The subject site provides a total of 236 vehicle parking spaces, including 10 barrier free spaces, 2 bicycle parking spaces, and 2 loading spaces. Resident parking for the retirement home is proposed to be provided at a rate of 0.53 spaces per unit.

The shortfall of 8 spaces from the 244 parking spaces required will result in a modification being sought to reduce the minimum requirement for occupant/employees parking spaces for the retirement home from 0.60 spaces per unit to 0.53 spaces per unit.

Proxy surveys were conducted over two days which resulted in peak parking demands of 0.43 spaces per unit and 0.40 spaces per unit, respectively, for retirement home/senior apartment uses. Based on the survey data, GHD is of the opinion that a reduced parking supply of 0.53 spaces per unit for the retirement home occupants/employees throughout the site is appropriate.

TDM measures are proposed for the subject site to encourage residents to explore various modes of transportation in order to reduce their dependency on single occupancy vehicle trips.

GHD assessed the site circulation for emergency vehicles, WB-15 trucks, waste collection vehicle, and passenger vehicle and confirmed no issues with the site circulation.

The traffic study confirms that the revised proposal for the retirement home facility can be accommodated within the existing and planned road network without significant negative effects on traffic flow, capacity, or safety.

Appendix A

Terms of Reference

Ameer Al Rijjal

From: Ozimkovic , Danijel <Danijel.Ozimkovic@burlington.ca>
Sent: Tuesday, May 25, 2021 12:45 PM
To: Ameer Al Rijjal; Adam.Huycke@halton.ca; White, Mark J. (MTO)
Cc: Will Maria
Subject: RE: Traffic Impact Study Terms of Reference for Approval 4103 Palladium Way, Burlington

You don't often get email from danijel.ozimkovic@burlington.ca. Learn why this is important

Hi Ameer,
I reviewed the Terms of Reference and on behalf of the City of Burlington, I don't have any concerns.
I would also like to let you know what Roz and Lauren are no longer with the City.
Thanks,
Dan

From: Ameer Al Rijjal <Ameer.AlRijjal@ghd.com>
Sent: Wednesday, May 19, 2021 11:58 AM
To: Minaji, Rosalind <Rosalind.Minaji@burlington.ca>; Vraets, Lauren <Lauren.Vraets@burlington.ca>; Adam.Huycke@halton.ca; White, Mark J. (MTO) <mark.j.white@ontario.ca>; 'Danijel.ozimkovic@burlington.ca'
Cc: Will Maria <William.Maria@ghd.com>
Subject: RE: Traffic Impact Study Terms of Reference for Approval 4103 Palladium Way, Burlington

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Good Morning,

Just following up on the proposed TOR below,

Warm regards,

AMEER AL RIJJAL

From: Ameer Al Rijjal
Sent: Tuesday, May 11, 2021 6:22 PM
To: Minaji, Rosalind <Rosalind.Minaji@burlington.ca>; Vraets, Lauren <Lauren.Vraets@burlington.ca>; Adam.Huycke@halton.ca; Mark.j.white@ontario.ca; 'Danijel.ozimkovic@burlington.ca'
Cc: Will Maria <William.Maria@ghd.com>
Subject: RE: Traffic Impact Study Terms of Reference for Approval 4103 Palladium Way, Burlington

Hello,

GHD is updating our previous TIS for the proposed Long Term Care Facility located at 4103 Palladium Way in Burlington in support of Site Plan Amendment. The previous TIS was completed by GHD and submitted to the Town/Region dated October 2019, however, the site plan was modified to include a 6 story retirement home with 122 beds.

To update our study, we proposed the following scope:

- Keep the same Study Intersections as per previous TOR:
  - Palladium Way and Walkers Line
  - Palladium Way and Appleby Line

    - Palladium Way and both site driveways
- Analyze:
    - Existing Conditions (2021)
    - Future Background five years post build-out (2026)
    - Future total ten years post build-out (2026)
- Background Developments:
    - Include the same background developments as per the pervious TOR and study.
- Corridor growth rate to consistent with 4103 Palladium way report submitted by GHD on October 2019.
- Weekday a.m. and p.m. peak hours to be analyzed
- GHD will grow the 2019 traffic counts conducted for the study area intersections by 2% for 2 years to establish 2021 existing conditions.
- Signal timings plans purchased from the Region/City dated October 2019 will be utilized for this study.
- Trip generation to be based on the ITE Trip Generation Manual (10th Edition)
- No transit modal split reduction
- Trip Distribution is to be based on location of site relative to surrounding road network layout, surrounding land use layout, and access configurations, with detailed justification provided.
- Loading Study/Site Circulation Review
    - Autoturn analysis (loading, garbage)
    - Fire Route
    - Pedestrian circulation and safety review
    - Discussion on internal site vehicular operations
- Complete a sightline assessment for vehicle access on Palladium Way based on TAC guidelines.
- Access Review
    - Geometrics
    - TAC standards
    - AutoTurn analysis
    - Left/Right-turn lane Warrants
- Provide a TDM plan for the site
- Provide detailed recommendations regarding on-site/off-site roadway improvements, site access, and pedestrian & vehicular site circulation

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Ameer Al Rijjal

From: Routledge, Graham (MTO) <Graham.Routledge@ontario.ca>
Sent: Friday, May 21, 2021 10:16 AM
To: Ameer Al Rijjal
Cc: Panza, Mario (MTO)
Subject: FW: Traffic Impact Study Terms of Reference for Approval 4103 Palladium Way, Burlington

You don't often get email from graham.routledge@ontario.ca. Learn why this is important

Hi Ameer,

The proposed modifications do not appear to be of major concern, the TIS should also note any other modifications/changes that have been made since 2019.

The original TIS does not appear to have included the 407 interchanges, in order to be complete, the interchanges should be included.

Please note that the MTO Planner for this file has recently has recently taken on a new position in MTO. Until a new Planner is announced, please circulate future submissions to Mario Panza, and copy me.

Thank you

Graham

From: Ameer Al Rijjal
Sent: Tuesday, May 11, 2021 6:22 PM
To: Minaji, Rosalind <Rosalind.Minaji@burlington.ca>; Vraets, Lauren <Lauren.Vraets@burlington.ca>; Adam.Huycke@halton.ca; Mark.j.white@ontario.ca; 'Danijel.ozimkovic@burlington.ca'
Cc: Will Maria <William.Maria@ghd.com>
Subject: RE: Traffic Impact Study Terms of Reference for Approval 4103 Palladium Way, Burlington

Hello,

GHD is updating our previous TIS for the proposed Long Term Care Facility located at 4103 Palladium Way in Burlington in support of Site Plan Amendment. The previous TIS was completed by GHD and submitted to the Town/Region dated October 2019, however, the site plan was modified to include a 6 story retirement home with 122 beds.

To update our study, we proposed the following scope:

- Keep the same Study Intersections as per previous TOR:
  - Palladium Way and Walkers Line
  - Palladium Way and Appleby Line
  - Palladium Way and both site driveways
- Analyze:
  - Existing Conditions (2021)
  - Future Background five years post build-out (2026)
  - Future total ten years post build-out (2026)
- Background Developments:
  - Include the same background developments as per the pervious TOR and study.

- Corridor growth rate to consistent with 4103 Palladium way report submitted by GHD on October 2019.
- Weekday a.m. and p.m. peak hours to be analyzed
- GHD will grow the 2019 traffic counts conducted for the study area intersections by 2% for 2 years to establish 2021 existing conditions.
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Ameer Al Rijjal

From: Huycke, Adam <Adam.Huycke@halton.ca>
Sent: Thursday, June 3, 2021 10:49 AM
To: Ameer Al Rijjal; Mark.j.white@ontario.ca; 'Danijel.ozimkovic@burlington.ca'
Cc: Will Maria; kyle.plas@burlington.ca; Scattolon, Walter
Subject: RE: Traffic Impact Study Terms of Reference for Approval 4103 Palladium Way, Burlington

Ameer,

We have the following comments on the provided Terms of Reference from GHD, for an update to the 2019 TIS already conducted for 4103 Palladium Way, Burlington which supported a proposed Long Term Care Facility and Revised Site Plan.

NOTE: The Revised Site Plan adds significant additional Beds through a new Retirement Home component, and the LTC Facility Beds count appears to have increased as well from original design.

The previously approved 2019 TIS report by GHD included the following Regional intersections, and this should be maintained in the Updated TIS:

- Walkers Line and Dundas Street (Regional Road 5)
- Palladium Way and Appleby Line (Regional Road 20)

Please continue to use a 2% annual growth rate for traffic volumes for the Regional corridors of Appleby Line and Dundas Street.

Analysis should include (as before):

- Future background at Build-out
- Future total at Build-out

Please obtain latest traffic data for the Regional intersections noted above, in case newer counts were made since 2019.

Please ensure that any data were from traffic surveys conducted no sooner than the 2nd week in September, to allow for non-Summer traffic patterns to resume.

Please note, for the most up to date TIS Guidelines for Halton Region, these can now be found at the following updated web link:
https://www.halton.ca/Repository/Transportation-Impact-Study-Guidelines

The balance of the proposed scope for the TIS Update is acceptable.

Please let us know if you require anything further in this regard.

Sincerely,

Adam

Adam Huycke, MCIP, RPP, CPT
Senior Planner
Planning Services

Legislative & Planning Services
Halton Region
905-825-6000, ext. 7604 | 1-866-442-5866



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From: Ameer Al Rijjal <Ameer.AlRijjal@ghd.com>
Sent: Wednesday, May 19, 2021 11:58 AM
To: Minaji, Rosalind <Rosalind.Minaji@burlington.ca>; Vraets, Lauren <Lauren.Vraets@burlington.ca>; Huycke, Adam <Adam.Huycke@halton.ca>; Mark.j.white@ontario.ca; 'Danijel.ozimkovic@burlington.ca'
Cc: Will Maria <William.Maria@ghd.com>
Subject: RE: Traffic Impact Study Terms of Reference for Approval 4103 Palladium Way, Burlington

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Good Morning,

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Warm regards,

AMEER AL RIJJAL

From: Ameer Al Rijjal
Sent: Tuesday, May 11, 2021 6:22 PM
To: Minaji, Rosalind <Rosalind.Minaji@burlington.ca>; Vraets, Lauren <Lauren.Vraets@burlington.ca>; Adam.Huycke@halton.ca; Mark.j.white@ontario.ca; 'Danijel.ozimkovic@burlington.ca'
Cc: Will Maria <William.Maria@ghd.com>
Subject: RE: Traffic Impact Study Terms of Reference for Approval 4103 Palladium Way, Burlington

Hello,

GHD is updating our previous TIS for the proposed Long Term Care Facility located at 4103 Palladium Way in Burlington in support of Site Plan Amendment. The previous TIS was completed by GHD and submitted to the Town/Region dated October 2019, however, the site plan was modified to include a 6 story retirement home with 122 beds.

To update our study, we proposed the following scope:

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  - Palladium Way and Walkers Line
  - Palladium Way and Appleby Line
  - Palladium Way and both site driveways
- Analyze:
  - Existing Conditions (2021)

    - Future Background five years post build-out (2026)
    - Future total ten years post build-out (2026)
- Background Developments:
    - Include the same background developments as per the pervious TOR and study.
- Corridor growth rate to consistent with 4103 Palladium way report submitted by GHD on October 2019.
- Weekday a.m. and p.m. peak hours to be analyzed
- GHD will grow the 2019 traffic counts conducted for the study area intersections by 2% for 2 years to establish 2021 existing conditions.
- Signal timings plans purchased from the Region/City dated October 2019 will be utilized for this study.
- Trip generation to be based on the ITE Trip Generation Manual (10th Edition)
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- Provide a TDM plan for the site
- Provide detailed recommendations regarding on-site/off-site roadway improvements, site access, and pedestrian & vehicular site circulation

_____
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_____

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Ameer Al Rijjal

From: Scattolon, Walter <Walter.Scattolon@halton.ca>
Sent: Monday, November 22, 2021 11:50 AM
To: Ameer Al Rijjal
Cc: Will Maria; Huycke, Adam
Subject: RE: Traffic Impact Study Terms of Reference for Approval (4103 Palladium Way, Burlington, proposed Long Term Care Facility)
Attachments: Trip Gen.pdf; A101 - SITE PLAN A101_30x42 (1).pdf

Hello Ameer,

Thank you for providing the Trip Generation information.

This trip generation is not that high, especially when you break it down into inbound/outbound, and by trip distribution. With this info, we'd now like to omit Walkers/Dundas signalized intersection from the study scope, and trust this will simplify your analysis for **4103 Palladium Way, Burlington**, proposed Long Term Care Facility.

If you have any concerns, please let me know.

Have a good day,

Walter

From: Ameer Al Rijjal <Ameer.AlRijjal@ghd.com>
Sent: Friday, November 19, 2021 3:37 PM
To: Scattolon, Walter <Walter.Scattolon@halton.ca>
Cc: Will Maria <William.Maria@ghd.com>; Huycke, Adam <Adam.Huycke@halton.ca>
Subject: RE: Traffic Impact Study Terms of Reference for Approval

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Thank you for your reply,

Please find the attached Trip Gen and Site Plan for your reference.

Best,

Ameer Al Rijjal

From: Scattolon, Walter <Walter.Scattolon@halton.ca>
Sent: Friday, November 19, 2021 12:23 PM
To: Ameer Al Rijjal <Ameer.AlRijjal@ghd.com>
Cc: Will Maria <William.Maria@ghd.com>; Huycke, Adam <Adam.Huycke@halton.ca>
Subject: RE: Traffic Impact Study Terms of Reference for Approval

Hello Ameer,

We'd like to ask for the trip generation forecasts of the site during the weekday peak hours before we can respond to your Walkers/Dundas question.

Please let us know (if you have a summary of Trip Gen to share).

As for Dundas Road widening questions on Timing, the scope spans a long distance, and the projects are phased.

Here is information the Dundas projects:

Per the Region's 2021 Capital Budget and Business Plan:
(Dates all subject to change and Council Approved Funding)

PR-2671B Dundas Street - Widening from 4 to 6 lanes from Tremaine Road to Bronte Road (OAK) (Regional Rd 5) – Construction in 2022, currently in Detailed Design in 2021

PR-3200 Dundas Street - Widening from 4 to 6 lanes from Guelph Line to Northampton (BUR) (Regional Road 5) – Construction in 2021, currently in Detailed Design in 2021

PR-2550 Dundas Street - Widening from 4 to 6 lanes from North Hampton to Appleby Line (BUR) (Regional Road 5) – Construction in 2022

PR-3207B Dundas Street - Widening from 4 to 6 lanes from Guelph Line to Halton/Hamilton Boundary, including improvements at Brant Street (BUR) Regional Road 5 – Construction in 2025, with Design in 2021

Per our Capital Works in Progress information (at Oct 1, 2021):

Roads Capital Projects		
PR#	Description	Planned
PR-1834D	Dundas Street - 16-Mile Creek Structures between Lions Valley Park Road and Fourth Line (OAK)	
PR-2550	Dundas Street - Widening from 4 to 6 lanes from North Hampton to Appleby Line (BUR) (Regional	
PR-2671B	Dundas Street - Widening from 4 to 6 lanes from Tremaine Road to Bronte Road (OAK) (Regional Rd	
PR-2672B	Dundas St - Widening from 4 to 6-Lanes (excluding CNR & Bronte Creek Bridges) from Appleby Line	
	Dundas Street - Grade Separation at CNR Crossing between Appleby Line and Tremaine Road (BUR)	
	Dundas Street - Bronte Creek Bridge between Appleby Line and Tremaine Road (BUR) (Regional	
PR-3200	Dundas Street - Widening from 4 to 6 lanes from Guelph Line to Northampton (BUR) (Regional	

Where Pink = Construction stage, Green = Detailed Design stage.

Note: PR-2672B is already in-progress.

Not all timings are matching (Budget vs Project). So please use your judgement.

Thank you,

Walter

Walter Scattolon, BASc (Eng.), PMP
Project Manager I, Transportation Planning Coordination
Infrastructure Planning & Policy
Public Works
Halton Region
905-825-6000, ext. 2687 | 1-866-442-5866

From: Ameer Al Rijjal <Ameer.AlRijjal@ghd.com>
Sent: Wednesday, November 17, 2021 5:51 PM
To: Huycke, Adam <Adam.Huycke@halton.ca>; Will Maria <William.Maria@ghd.com>
Cc: Scattolon, Walter <Walter.Scattolon@halton.ca>; Will Maria <William.Maria@ghd.com>
Subject: RE: Traffic Impact Study Terms of Reference for Approval

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Hi Adam,

In regards to the intersection of Walkers and Dundas, keeping the calibration consistent with the report submitted in 2019, the v/c ratio for existing conditions worsen since the 2019 counts are factored by 2% for 2 years and therefore some movements exceed v/c ratio of 1.0.

Do we push through this and document it the way it appears in synchro, or does further calibration needs to be made?

Also, can you kindly confirm when the widening of Dundas Road and the mitigations presented in chapter 6 (attached) are planned to built.

Best,

Ameer Al Rijjal

From: Huycke, Adam <Adam.Huycke@halton.ca>
Sent: Wednesday, July 24, 2019 3:24 PM
To: Will Maria <William.Maria@ghd.com>; Rosalind.minaji@burlington.ca; Lauren.vraets@burlington.ca; Mark.j.white@ontario.ca; 'Danijel.ozimkovic@burlington.ca'
Cc: Ameer Al Rijjal <Ameer.AlRijjal@ghd.com>; Scattolon, Walter <Walter.Scattolon@halton.ca>
Subject: RE: Traffic Impact Study Terms of Reference for Approval

Good Afternoon William:

Further to your email request , Regional Staff offer the following comments on the provided Terms of Reference from GHD, for a TIS to be conducted for **4103 Palladium Way, Burlington**, proposed Long Term Care Facility:

Please add the following **intersection** to the list to be analyzed in the TIS report:

- Walkers Line and Dundas Street (Regional Road 5)

Please use a **2% annual growth** rate for traffic volumes for the Regional corridors of Appleby Line and Dundas Street.

Please ensure that **traffic data** is also obtained for the **additional intersection**, noted above.

Please ensure that, if required, any traffic surveys are conducted **no sooner than the 2nd week in September**, to allow for non-Summer traffic patterns to resume.

Please note, for the most up to date TIS Guidelines for Halton Region, these can now be found at the following updated web link:
https://www.halton.ca/The-Region/Regional-Planning/Regional-Official-Plan-(ROP)/About-Regional-Official-Plan-(ROP)/Regional-Official-Plan-Guidelines

The balance of the proposed TIS scope is acceptable from a Region of Halton perspective.

Should you have any additional comments or questions on the above, please let me know.

Regards,

Adam

Adam Huycke, MCIP, RPP, CPT
Senior Planner
Planning Services
Legislative & Planning Services
Halton Region
905-825-6000, ext. 7604 | 1-866-442-5866



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From: Will Maria <William.Maria@ghd.com>
Sent: Wednesday, July 17, 2019 5:36 PM
To: Rosalind.minaji@burlington.ca; Lauren.vraets@burlington.ca; Huycke, Adam <Adam.Huycke@halton.ca>; Mark.j.white@ontario.ca; 'Danijel.ozimkovic@burlington.ca'
Cc: Ameer.AlRijjal@ghd.com
Subject: RE: Traffic Impact Study Terms of Reference for Approval

Sorry, sent again with Dan's correct email address, had one issue with an extra comma.

GHD is undertaking a TIS for a proposed Long Term Care Facility with Ancilliary uses located at 4103 Palladium Way in Burlington in support of Zoning Bylaw Amendment.
The proposed development is shown on the attached concept plan and includes a long term care facility with ancilliary daycare, medical offices and pharmacy uses within a five storey building. A total of 144 parking spaces are proposed on a surface parking lot.
Our proposed scope if as follows:

- Follow the City/Region/MTO TIS Guidelines
- Study Intersections:
    - Palladium Way and Walkers Line

    - Palladium Way and Appleby Line
    - Palladium Way and both site driveways
- Analyze:
    - Existing Conditions (2019)
    - Future background at Build-out in 2021
    - Future total at Build-out in 2021
    - Future total five years post build-out (2026)
    - Future total ten years post build-out (2031)
- Background Developments:
    - City Staff to confirm background developments to include in the study and if traffic studies are available for reference of site trip generation and assignment.
- Corridor growth rate to be added to existing traffic volumes. Please advise if a general corridor growth is acceptable to the Region or if detailed growth rates are required based on historic traffic data. If a general corridor growth rate is acceptable please advise on the rate.
- Weekday a.m. and p.m. peak hours to be analyzed
- GHD will confirm with staff if existing traffic data (less than 2 years old) is available at the two existing study intersections. If not please confirm if we have to wait until September to complete any traffic surveys.
- Signal timings plans will be purchased from the Region/City.
- Trip generation to be based on the ITE Trip Generation Manual (10th Edition)
- No transit modal split reduction
- Trip Distribution is to be based on location of site relative to surrounding road network layout, surrounding land use layout, and access configurations, with detailed justification provided.
- Loading Study/Site Circulation Review
    - Autoturn analysis (loading, garbage)
    - Fire Route
    - Pedestrian circulation and safety review
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    - TAC standards
    - AutoTurn analysis
    - Left/Right-turn lane Warrants
- Provide a TDM plan for the site
- Provide detailed recommendations regarding on-site/off-site roadway improvements, site access, and pedestrian & vehicular site circulation

Sincerely,
Will

William C. Maria, P.Eng.
Senior Project Manager

GHD
T: 905 814 4397 | C: 647 229 8541 | V: 881397 | F: 905 890 8499 | E: will.maria@ghd.com
6705 Millcreek Drive Unit 1 Mississauga ON L5N 5M4 | **www.ghd.com**

WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

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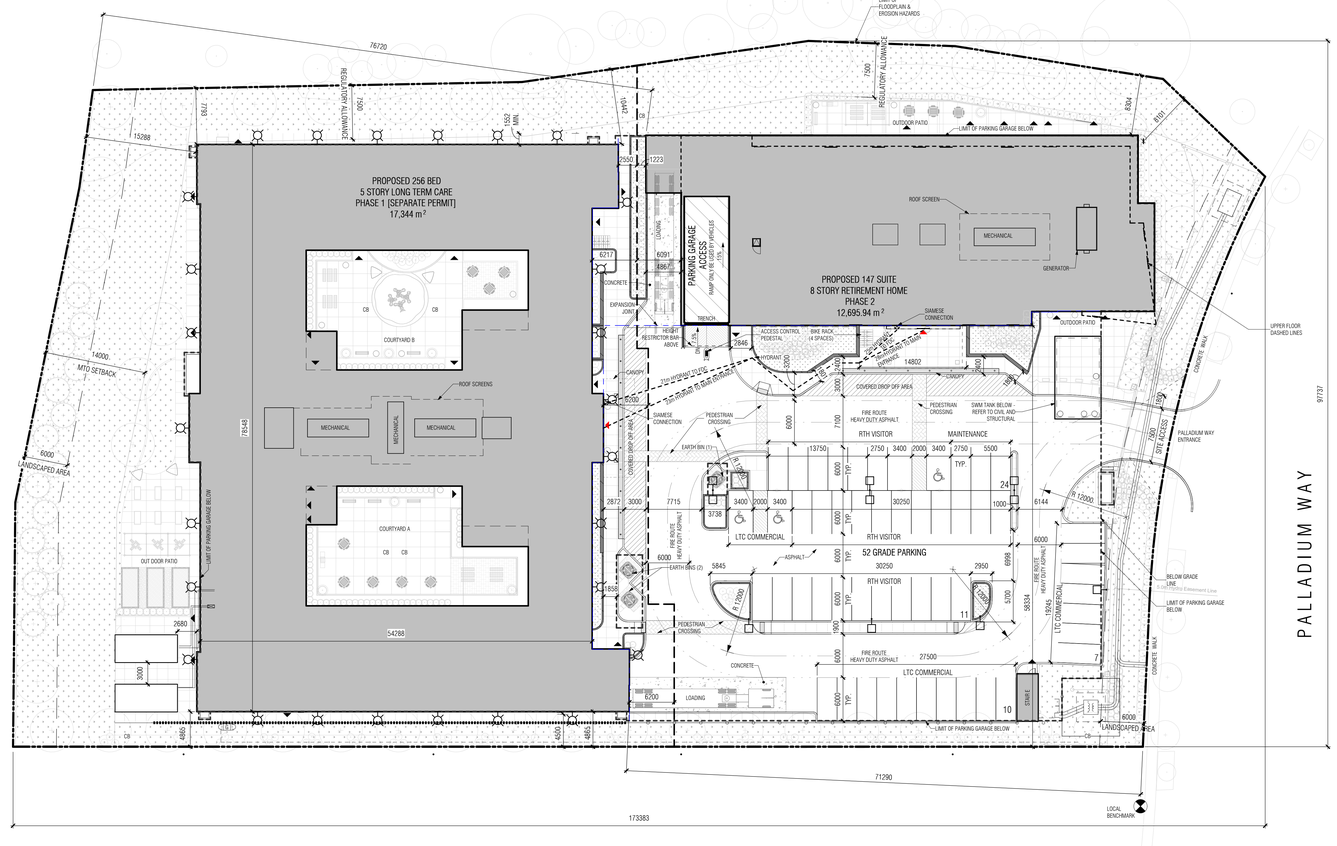
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Appendix B

Site Plan



1 A100 SITE PLAN

1 : 300



2 A100 LOCATION MAP - NTS

1 : 50

SITE STATISTICS

	REQUIREMENTS	PROPOSED	CONFORMS TO MUNICIPAL BY-LAW
ZONING DESIGNATION	BUSINESS CORRIDOR, EMPLOYMENT ZONE, BC1-005	BUSINESS CORRIDOR, EMPLOYMENT ZONE, BC1-XXX	YES
MINIMUM LOT AREA	0.4 ha	OVERALL SITE = 14.833 m² / (1.48 HECTARES)	YES
MINIMUM LOT FRONTAGE	45 m	80.7 m	YES
MINIMUM LOT WIDTH	45 m	97.7 m	YES
MINIMUM LOT DEPTH	N/A	173.4 m	YES
MINIMUM LOT COVERAGE	N/A	35% (USING BUILDING AREA)	YES
BUILDING AREA	N/A	LTC: 3,510 m² RETIREMENT: 1,694.95 m² TOTAL: 5,204.95m²	YES
MAXIMUM GROSS FLOOR AREA	LT: 3,509.76 m² L2-L5: 3,459.68 m² x 4 FLOORS = 13,834.72 m² LTC=17,344.5 m² LT: 1,691.26 m² L2-L5: 1,564.98 m² x 5 FLOORS = 7,824.9 m² RETIREMENT = 9,516.2 m² TOTAL = 26, 860.7 m² F.A.R. 26,861 m² / 14,833 m² = 1.82:1	LT: 3,509.76 m² L2 - L5: 3,458.68 m² x 4 FLOORS = 13,834.72 m² LTC = 17,344.5 m² R1: 1,694.95 m² R2 - R8: 1,571.57 m² x 7 FLOORS = 11,000.99 m² RETIREMENT = 12,695.94 m² TOTAL = 30,040.44 m² F.A.R. 30,040.44 m² / 14,833 m² =2.03	NO
MAXIMUM LOT COVERAGE	N/A	35% (USING BUILDING AREA)	YES
MINIMUM YARD REQUIREMENTS	FRONT YARD (E) = 6m - 9m REAR YARD (W) = 14m SIDE YARD (S) = 4.5m SIDE YARD (N) = 7.5m	LTC FRONT YARD (E) = 71.2m REAR YARD (W) = 15.2m SIDE YARD (S) = 4.8m SIDE YARD (N) = 7.8m RETIREMENT FRONT YARD (E) = 6.8m REAR YARD (W) = 70.7m SIDE YARD (S) = 58.3m SIDE YARD (N) = 8.3m	YES
MAXIMUM BUILDING HEIGHT	LTC: 5 STOREYS RETIREMENT: 6 STOREYS	LTC: 5 STOREYS RETIREMENT: 8 STOREYS	NO
MINIMUM LANDSCAPED OPEN SPACE	25% OF LOT AREA	25% OF LOT AREA	YES
MINIMUM LANDSCAPED BUFFER	6m ABUTTING A STREET GREATER THAN 26m (MAY 2m WALKWAY)	6m ABUTTING A STREET GREATER THAN 26M (ABUTTING PALLADIUM WAY: MAX 2m WALKWAY WITHIN BUFFER	YES
PARKING	MIN SIZE = 2.75m + 6 m 1LTC: 0.35 x 258 BEDS = 90 1RETIREMENT (1.6UNIT = 0.25VISITOR) =0.85 x 147 UNITS = 125 1MAINTENANCE SPACES = 3 1MED. OFFICE (150m²/100) x 6 = 9 1PHARMACY/RETAIL (100m²/100) x 3.5 = 4 1DAYCARE/PRO (705m²/100) x 4 = 29 TOTAL = 260 REQUIRED	MIN SIZE = 2.75m x 6m 52 AT GRADE 184 UNDERGROUND PARKING AT GRADE PARKING - 30 RECD VISITOR SPOTS - 3 MAINTENANCE SPOTS - 19 COMMERCIAL PARKING GARAGE - 164 LTC & RTH RESIDENTS - 20 COMMERCIAL TOTAL 236 SPACES PROVIDED	NO
DESIGNATED BARRIER FREE PARKING SPACES	TYPE A: (3.4m WIDE + 2m ACCESS) MIN 4 REQ'D TYPE B: (2.75m WIDE + 2m ACCESS) MIN 3 REQ'D	4 TYPE A PROVIDED (VAN ACCESSIBLE) 3 TYPE B PROVIDED TOTAL 7 BF SPACES PROVIDED WITH 2000 ACCESS AISLES	YES
MIN. DRIVING LANE WIDTH	6m	6m	YES
MIN. DRIVING LANE WIDTH	6m	6m	YES
MIN. NO OF LOADING SPACES	N/A	2 LOADING SPACES PROVIDED	YES
MIN. NO OF BICYCLE PARKING SPACES	4 SPACES REQ'D	8 SPACES PROVIDED	YES

GENERAL NOTES :

1. ALL WORK INVOLVED IN THE CONSTRUCTION, RELOCATION, REPAIR OF MUNICIPAL SERVICES FOR THE PROJECT SHALL BE TO THE SATISFACTION OF THE DIRECTOR OF PLANNING, PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT.

2. FIRE ROUTE SIGNS AND 3-WAY FIRE HYDRANTS SHALL BE ESTABLISHED TO THE SATISFACTION OF THE CITY FIRE DEPARTMENT AND AT THE EXPENSE OF THE OWNER.

3. MAIN DRIVEWAY DIMENSIONS AT THE PROPERTY LINE BOUNDARIES ARE PLUS OR MINUS 7.5 m UNLESS OTHERWISE STATED.

4. ALL DRIVEWAYS FROM THE PROPERTY LINES FOR THE FIRST 7.5 m SHALL BE WITHIN 5% MAXIMUM GRADE, THEREAFTER, ALL DRIVEWAYS SHALL BE WITHIN 10% MAXIMUM GRADES.

5. THE APPROVAL OF THIS PLAN DOES NOT EXEMPT THE OWNER'S BONDED CONTRACTOR FROM THE REQUIREMENTS TO OBTAIN THE VARIOUS PERMITS/APPROVALS NORMALLY REQUIRED TO COMPLETE A CONSTRUCTION PROJECT, SUCH AS, BUT NOT LIMITED TO THE FOLLOWING: BUILDING PERMIT, SEWER AND WATER PERMITS, ROAD CUT PERMITS, RELOCATION OF SERVICES, APPROACH APPROVAL PERMITS, ENCROACHMENT AGREEMENTS (IF REQUIRED), COMMITTEE OF ADJUSTMENT.

6. ABANDONED ACCESSES MUST BE REMOVED AND THE CURB AND BOULEVARD RESTORED WITH SOD AT THE OWNER'S EXPENSE TO THE SATISFACTION OF THE TRAFFIC AND ENGINEERING SECTION, PUBLIC WORKS DEPARTMENT.

7. FOR VISIBILITY TRIANGLES AT THE VEHICULAR ACCESS POINTS, THE FOLLOWING NOTE TO BE PROVIDED: "5 METRE BY 5 METRE VISIBILITY TRIANGLES IN WHICH THE MAXIMUM HEIGHT OF ANY OBJECTS OR MATURE VEGETATION IS NOT TO EXCEED A HEIGHT OF 0.70 METRES ABOVE THE CORRESPONDING PERPENDICULAR CENTERLINE ELEVATION OF THE ADJACENT STREET."

8. ALL SIGNS SHALL COMPLY TO SIGN BY-LAW No. 10-197

9. ALL FENCES SHALL COMPLY TO FENCE BY-LAW No. 10-142

10. "CAUTION: NOTWITHSTANDING CURRENT SURFACE CONDITIONS, THE PROPERTY HAS BEEN DETERMINED TO BE AN AREA OF ARCHAEOLOGICAL POTENTIAL. ALTHOUGH AN ARCHAEOLOGICAL ASSESSMENT IS NOT REQUIRED BY HALTON REGION, THE PROPONENT IS CAUTIONED THAT DURING DEVELOPMENT ACTIVITIES, SHOULD DEERLY BURIED ARCHAEOLOGICAL MATERIALS BE FOUND ON THE PROPERTY, THE MINISTRY OF HERITAGE, SPORT, TOURISM AND CULTURE INDUSTRIES (MHSTCI) SHOULD BE NOTIFIED IMMEDIATELY (416-314-7143). IN THE EVENT THAT HUMAN REMAINS ARE ENCOUNTERED DURING CONSTRUCTION, THE PROPONENT SHOULD IMMEDIATELY CONTACT BOTH MHSTCI AND THE REGISTRAR OR DEPUTY REGISTRAR OF THE CEMETERIES REGULATION UNIT OF THE MINISTRY OF SMALL BUSINESS AND CONSUMER SERVICES (416-326-8392)."

NOTES:

1. SIDEWALKS SHALL BE A MINIMUM OF 1.5m WIDE THROUGHOUT THE SITE, UNLESS OTHERWISE NOTED.

2. MINIMUM PARKING SPACE SIZE SHALL BE 2.75m X 6m WITH AN AISLE WIDTH OF 6m.

3. FIRE ROUTE SHALL HAVE A MINIMUM CENTERLINE TURNING RADIUS OF 12m

4. ALL PEDESTRIAN SIDEWALKS TO HAVE A SLOPE NO GREATER THAN 5%.

5. SIGN PERMITS ARE REQUIRED FOR ALL SIGNS ON SITE, INCLUDING CONSTRUCTION OR DEVELOPMENT SIGNS.

6. BARRIER-FREE PARKING POST & SIGNAGE TO COMPLY WITH MUNICIPALITY ACCESSIBILITY DESIGN STANDARDS

7. ACCESSIBILITY PAVEMENT MARKING TO COMPLY WITH MUNICIPALITY ACCESSIBILITY DESIGN STANDARDS

8. DURABLE TRAFFIC PAINT TO BE USED FOR ALL PAVEMENT MARKINGS.

9. PROVIDE TACTILE WARNING SURFACE INDICATOR AT CURB, COMPLY WITH MUNICIPALITY ACCESSIBILITY DESIGN STANDARDS. TACTILE WARNING STRIP: 'ALERTCAST CAST-IN-PLACE, DETECTABLE WARNING SYSTEM, COLOUR TBD. TRUNCATED DOME PATTERN, AS PER ADA DESIGN STANDARDS, OR APPROVED EQUAL

10. GAS METER LOCATION, REFER TO MECHANICAL DRAWINGS

11. DIRECTIONAL SIGNAGE REQUIRED.

12. BIKE RACK LOCATIONS, REFER TO LANDSCAPE DRAWINGS

13. BENCH LOCATIONS, REFER TO LANDSCAPE DRAWINGS

14. FIRE ACCESS ROUTE SIGN, GRAPHICS TO COMPLY WITH MUNICIPALITY AND FIRE DEPARTMENT STANDARDS

15. IN-GROUND GARBAGE BINS, REFER TO STRUCTURAL DRAWINGS. COORDINATE INSTALLATION AND CONCRETE PAD

16. STORM WATER, REFER TO CIVIL DRAWINGS

17. TRANSFORMER ON CONCRETE PAD, REFER TO ELECTRICAL DRAWINGS

18. EXTERIOR LIGHT STANDARD, REFER TO ELECTRICAL FOR CONCRETE BASE

19. FOR FUTURE ELECTRIC VEHICLE CHARGING STATION, REFER TO ELECTRICAL DRAWINGS

20. WATERLINE TO BE INSTALLED BEFORE GAS LINE, TO BE COORDINATED BY GC

SITE LEGEND:

SYMBOL	DESCRIPTION
	PROPERTY LINE
	NEW CONTINUOUS CONCRETE CURB
	NEW LANDSCAPE SETBACK
	BUILDING FOOTPRINT
	LANDSCAPING. SEE LANDSCAPING DRAWINGS FOR DETAILS.
	TACTILE WARNING STRIP: 'ALERTCAST CAST-IN-PLACE, DETECTABLE WARNING SYSTEM IN BLACK, TRUNCATED DOME PATTERN, AS PER ADA DESIGN STANDARDS OR APPROVED EQUAL.
	NO-PARKING PAINT
	BF PARKING ACCESS AISLE
	PEDESTRIAN CROSSWALK
	SNOW STORAGE
	PRIMARY BUILDING ACCESS LOCATION
	SECONDARY BUILDING ACCESS LOCATION
B	BOLLARD, SEE LANDSCAPE DRAWINGS FOR DETAILS.
	FIRE ROUTE.
	BICYCLE RACK. SEE LANDSCAPE DRAWINGS FOR DETAILS
	BARRIER FREE ACCESSIBLE PARKING STALL COMPLETE WITH ACCESSIBLE PARKING SIGNAGE AT THE END OF EACH STALL.
	"ONE WAY" SIGNAGE
	"FIRE ROUTE" SIGNAGE.
	AREA DRAIN (AS PER CIVIL)
CB	CATCH BASIN (AS PER CIVIL)
	UNDERSLAB DRAIN (REFER TO STRUCTURAL)
	CONCRETE SLAB SLOPES (REFER TO STRUCTURAL)
	AREA LIGHT - EXTERIOR POLE
	WALL SCONCE - EXTERIOR WALL
	DOWNLIGHT - EXTERIOR RECESSED
	PLANTER / SEATING WALL - SEATING WALL 400MM WIDE / 350MM HIGH - PLANTER WALL 200MM WIDE / 350MM HIGH - PARKING PLANTER WALLS, 200MM WIDE / HEIGHT TO BE COORDINATED WITH GRADING AS REQUIRED BY PLANTING DEPTHS ALL PLANTER WALLS TO BE COORDINATED WITH STRUCTURAL, GRADING AND LANDSCAPING

NO DRAWING DIVISION SHALL BE VIEWED INDEPENDENTLY. CONTRACTOR AND ALL SUB CONTRACTORS TO REVIEW AND BE FAMILIAR WITH ENTIRE DRAWING SET.

REVISIONS

No.	For:	Date:
1	ISSUED FOR COORDINATION	2024.04.10
To: (version)	For:	Date:

Issue Table

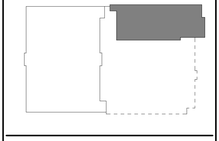
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CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH WORK. DO NOT SCALE DRAWINGS.

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THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSE UNTIL ISSUED FOR CONSTRUCTION BY DESIGN PROFESSIONAL UNDER ISSUE COLUMN.

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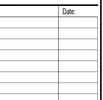
DATE:

ARCHITECT SIGNATURE:

DATE:

Seal:

North Arrow:



Architect:

Owner:

SAM ESPOSTO | ARCHITECT INC.
548 UPPER JAMES ST. HAMILTON, ON. L9C 2Y4
T. 905.383.7500 F. 905.383.5700

Project:

PROPOSED RETIREMENT HOME - BETTER LIFE MAPLE VILLA

4103 PALLADIUM WAY

Drawing Title:

SITE PLAN

DRAWN By:	HN	SCALE:	As indicated
Checked By:	MS	Plot Date:	2023.09.18
Project Date:	2023.09.18		
Project No.	23008		

Drawing No. A100

Sheet version. 1

Appendix C

Traffic Data

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Project #24-389 - GHD

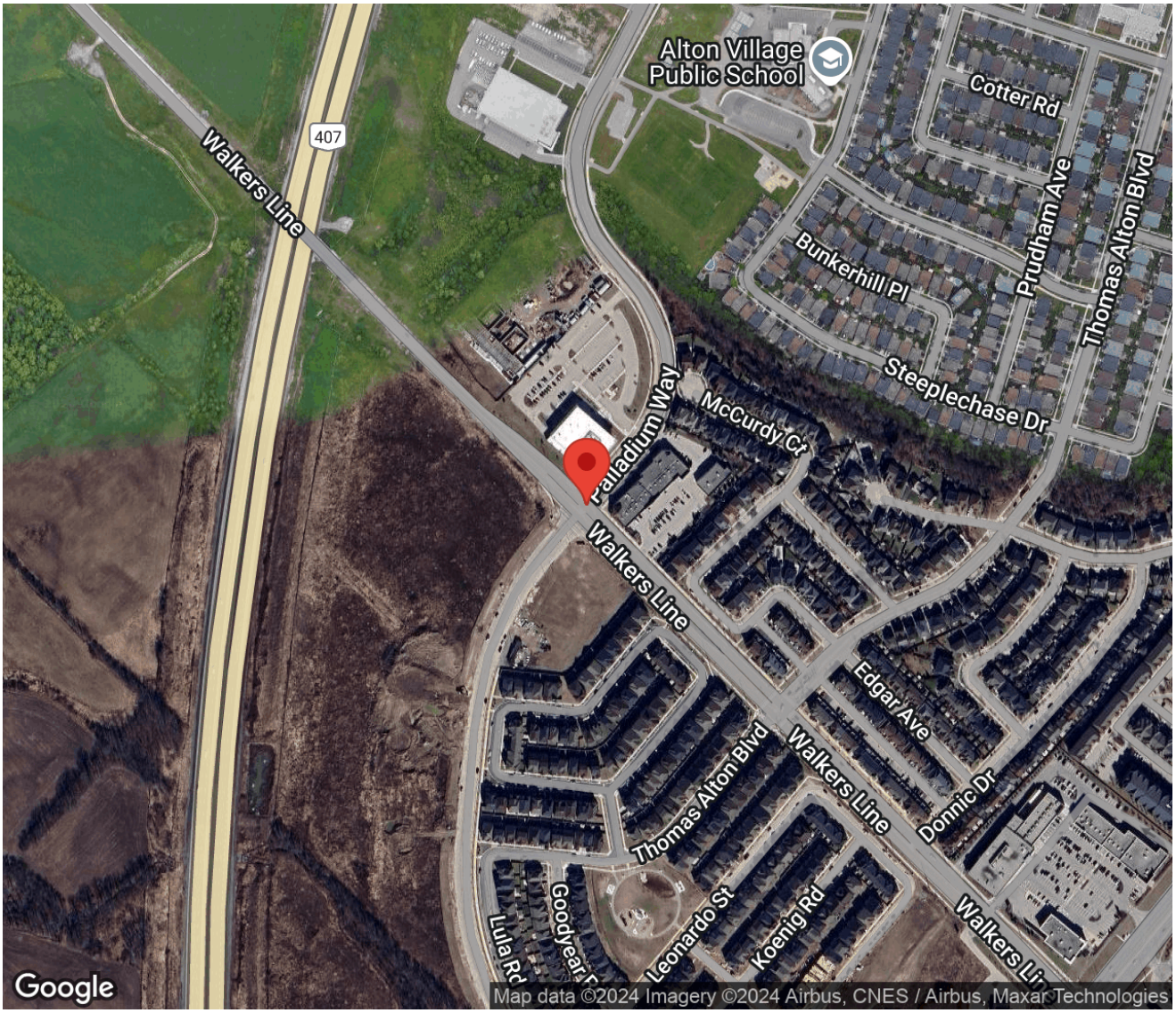
Intersection Count Report

Intersection:	Palladium Way & Walkers Line
Municipality:	Burlington
Count Date:	Tuesday, Sep 17, 2024
Site Code:	2438900002
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-09:00, 16:00-18:00
Weather:	Clear
Comments:	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Map

Intersection:	Palladium Way & Walkers Line
Site Code:	2438900002
Municipality:	Burlington
Count Date:	Sep 17, 2024



Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Summary

Intersection:	Palladium Way & Walkers Line
Site Code:	2438900002
Municipality:	Burlington
Count Date:	Sep 17, 2024

Walkers Line - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	9	136	0	0	145	2	10	209	93	0	312	6	457
08:00 - 09:00	13	222	1	0	236	0	12	193	182	1	388	3	624
BREAK													
16:00 - 17:00	5	258	0	1	264	0	9	238	51	5	303	1	567
17:00 - 18:00	5	241	1	1	248	2	11	234	45	7	297	1	545
GRAND TOTAL	**32**	**857**	**2**	**2**	**893**	**4**	**42**	**874**	**371**	**13**	**1300**	**11**	**2193**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Summary

Intersection:	Palladium Way & Walkers Line
Site Code:	2438900002
Municipality:	Burlington
Count Date:	Sep 17, 2024

Palladium Way - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	31	5	2	0	38	1	0	6	10	0	16	0	54
08:00 - 09:00	83	3	7	0	93	3	1	4	18	0	23	0	116
BREAK													
16:00 - 17:00	160	9	21	0	190	0	0	6	20	1	27	4	217
17:00 - 18:00	173	7	9	0	189	1	2	2	8	0	12	1	201
GRAND TOTAL	**447**	**24**	**39**	**0**	**510**	**5**	**3**	**18**	**56**	**1**	**78**	**5**	**588**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Municipality: Burlington
Count Date: Sep 17, 2024

North Approach - Walkers Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	0	18	0	0	18	0	0	0	0	0	0	0	0	0	0	1
07:15	4	31	0	0	35	0	0	0	0	0	0	0	0	0	0	0
07:30	1	42	0	0	43	0	0	0	0	0	0	0	0	0	0	0
07:45	4	43	0	0	47	0	2	0	0	2	0	0	0	0	0	1
08:00	6	53	1	0	60	0	3	0	0	3	0	0	0	0	0	0
08:15	4	57	0	0	61	0	0	0	0	0	0	0	0	0	0	0
08:30	2	51	0	0	53	0	3	0	0	3	0	0	0	0	0	0
08:45	1	54	0	0	55	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	22	349	1	0	372	0	9	0	0	9	0	0	0	0	0	2

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Municipality: Burlington
Count Date: Sep 17, 2024

North Approach - Walkers Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
16:00	1	61	0	0	62	0	0	0	0	0	0	0	0	0	0	0
16:15	1	72	0	0	73	0	0	0	0	0	0	0	0	0	0	0
16:30	1	65	0	1	67	0	2	0	0	2	0	0	0	0	0	0
16:45	2	58	0	0	60	0	0	0	0	0	0	0	0	0	0	0
17:00	0	69	1	0	70	0	0	0	0	0	0	0	0	0	0	2
17:15	3	61	0	0	64	0	0	0	0	0	0	0	0	0	0	0
17:30	2	58	0	1	61	0	0	0	0	0	0	0	0	0	0	0
17:45	0	53	0	0	53	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	10	497	1	2	510	0	2	0	0	2	0	0	0	0	0	2
GRAND TOTAL	**32**	**846**	**2**	**2**	**882**	**0**	**11**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**4**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Municipality: Burlington
Count Date: Sep 17, 2024

South Approach - Walkers Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	1	39	17	0	57	0	3	2	0	5	0	0	0	0	0	0
07:15	5	46	13	0	64	0	0	0	0	0	0	0	0	0	0	2
07:30	3	54	26	0	83	0	2	0	0	2	0	0	0	0	0	2
07:45	1	65	35	0	101	0	0	0	0	0	0	0	0	0	0	2
08:00	1	60	40	0	101	0	2	0	0	2	0	0	0	0	0	1
08:15	1	37	59	1	98	1	0	0	0	1	0	0	0	0	0	1
08:30	5	43	49	0	97	1	1	0	0	2	0	1	0	0	1	0
08:45	2	49	34	0	85	0	0	0	0	0	1	0	0	0	1	1
SUBTOTAL	19	393	273	1	686	2	8	2	0	12	1	1	0	0	2	9

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Municipality: Burlington
Count Date: Sep 17, 2024

South Approach - Walkers Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
16:00	2	56	14	1	73	0	0	0	0	0	0	0	0	0	0	1
16:15	2	56	16	2	76	0	2	1	0	3	0	0	0	0	0	0
16:30	4	61	8	0	73	0	0	0	0	0	0	0	0	0	0	0
16:45	1	61	12	2	76	0	0	0	0	0	0	2	0	0	2	0
17:00	1	58	12	3	74	0	0	0	0	0	0	2	0	0	2	0
17:15	5	76	16	2	99	0	0	0	0	0	0	2	0	0	2	0
17:30	3	49	9	2	63	0	0	0	0	0	0	0	0	0	0	0
17:45	2	47	8	0	57	0	0	0	0	0	0	0	0	0	0	1
SUBTOTAL	20	464	95	12	591	0	2	1	0	3	0	6	0	0	6	2
GRAND TOTAL	**39**	**857**	**368**	**13**	**1277**	**2**	**10**	**3**	**0**	**15**	**1**	**7**	**0**	**0**	**8**	**11**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Municipality: Burlington
Count Date: Sep 17, 2024

East Approach - Palladium Way

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
07:00	4	0	1	0	5	3	0	0	0	3	0	0	0	0	0	0
07:15	5	2	0	0	7	1	0	0	0	1	0	0	0	0	0	0
07:30	7	1	1	0	9	2	0	0	0	2	0	0	0	0	0	0
07:45	8	2	0	0	10	1	0	0	0	1	0	0	0	0	0	1
08:00	8	1	1	0	10	0	0	0	0	0	0	0	0	0	0	1
08:15	12	0	1	0	13	2	0	0	0	2	0	0	0	0	0	1
08:30	41	0	4	0	45	0	0	0	0	0	0	0	0	0	0	1
08:45	20	2	1	0	23	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	105	8	9	0	122	9	0	0	0	9	0	0	0	0	0	4

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Municipality: Burlington
Count Date: Sep 17, 2024

East Approach - Palladium Way

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
16:00	31	1	8	0	40	0	0	0	0	0	0	0	0	0	0	0
16:15	39	1	4	0	44	1	0	0	0	1	0	0	0	0	0	0
16:30	57	2	7	0	66	0	1	0	0	1	0	0	0	0	0	0
16:45	31	3	2	0	36	0	1	0	0	1	1	0	0	0	1	0
17:00	47	3	6	0	56	1	0	0	0	1	0	0	0	0	0	0
17:15	37	0	2	0	39	1	0	0	0	1	0	0	0	0	0	1
17:30	34	2	0	0	36	1	0	0	0	1	1	0	0	0	1	0
17:45	50	2	1	0	53	0	0	0	0	0	1	0	0	0	1	0
SUBTOTAL	326	14	30	0	370	4	2	0	0	6	3	0	0	0	3	1
GRAND TOTAL	431	22	39	0	492	13	2	0	0	15	3	0	0	0	3	5

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Municipality: Burlington
Count Date: Sep 17, 2024

West Approach - Palladium Way

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
07:00	0	4	3	0	7	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
07:30	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0
07:45	0	1	4	0	5	0	0	0	0	0	0	0	0	0	0	0
08:00	1	1	6	0	8	0	0	0	0	0	0	0	0	0	0	0
08:15	0	1	5	0	6	0	0	0	0	0	0	0	0	0	0	0
08:30	0	1	3	0	4	0	0	1	0	1	0	0	0	0	0	0
08:45	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1	10	27	0	38	0	0	1	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Municipality: Burlington
Count Date: Sep 17, 2024

West Approach - Palladium Way

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
16:00	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	0
16:15	0	1	7	0	8	0	0	0	0	0	0	0	0	0	0	0
16:30	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0
16:45	0	3	3	1	7	0	0	1	0	1	0	0	0	0	0	4
17:00	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	1
17:15	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0
17:30	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0
17:45	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	2	8	27	1	38	0	0	1	0	1	0	0	0	0	0	5
GRAND TOTAL	3	18	54	1	76	0	0	2	0	2	0	0	0	0	0	5

Ontario Traffic Inc.
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Peak Hour Diagram

Specified Period		One Hour Peak	
From:	07:00:00	From:	08:00:00
To:	09:00:00	To:	09:00:00

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Count Date: Sep 17, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Walkers Line runs N/S

North Approach

	Out	In	Total
Cars	229	197	426
Trucks	7	3	10
Bicycles	0	1	1
	236	**201**	**437**

Walkers Line

Bicycles	0	0	0	0
Trucks	0	7	0	0
Cars	1	215	13	0
Totals	**1**	**222**	**13**	**0**

East Approach

	Out	In	Total
Cars	91	199	290
Trucks	2	0	2
Bicycles	0	0	0
	93	**199**	**292**

Palladium Way

Bicycles	Trucks	Cars	Totals
0	0	0	**0**
0	0	1	**1**
0	0	4	**4**
0	1	17	**18**

Peds: 0



Peds: 3

Peds: 3

Palladium Way

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	7	7	0	0
	3	3	0	0
	83	81	2	0

West Approach

	Out	In	Total
Cars	22	13	35
Trucks	1	2	3
Bicycles	0	1	1
	23	**16**	**39**

Walkers Line

Totals	**12**	**193**	**182**	**1**
Cars	9	189	182	1
Trucks	2	3	0	0
Bicycles	1	1	0	0

South Approach

	Out	In	Total
Cars	381	314	695
Trucks	5	10	15
Bicycles	2	0	2
	388	**324**	**712**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Count Date: Sep 17, 2024
Period: 07:00 - 09:00

Peak Hour Data (08:00 - 09:00)

Start Time	North Approach Walkers Line						South Approach Walkers Line						East Approach Palladium Way						West Approach Palladium Way						Total Vehicles
	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	↰	↑	↱	↶	Peds	Total	
08:00	6	56	1	0	0	63	1	62	40	0	1	103	8	1	1	0	1	10	1	1	6	0	0	8	184
08:15	4	57	0	0	0	61	2	37	59	1	1	99	14	0	1	0	1	15	0	1	5	0	0	6	181
08:30	2	54	0	0	0	56	6	45	49	0	0	100	41	0	4	0	1	45	0	1	4	0	0	5	206
08:45	1	55	0	0	0	56	3	49	34	0	1	86	20	2	1	0	0	23	0	1	3	0	0	4	169
Grand Total	**13**	**222**	**1**	**0**	**0**	**236**	**12**	**193**	**182**	**1**	**3**	**388**	**83**	**3**	**7**	**0**	**3**	**93**	**1**	**4**	**18**	**0**	**0**	**23**	**740**
Approach %	5.5	94.1	0.4	0		-	3.1	49.7	46.9	0.3		-	89.2	3.2	7.5	0		-	4.3	17.4	78.3	0		-	
Totals %	1.8	30	0.1	0		31.9	1.6	26.1	24.6	0.1		52.4	11.2	0.4	0.9	0		12.6	0.1	0.5	2.4	0		3.1	
PHF	**0.54**	**0.97**	**0.25**	**0**		**0.94**	**0.5**	**0.78**	**0.77**	**0.25**		**0.94**	**0.51**	**0.38**	**0.44**	**0**		**0.52**	**0.25**	**1**	**0.75**	**0**		**0.72**	**0.9**
Cars	13	215	1	0		229	9	189	182	1		381	81	3	7	0		91	1	4	17	0		22	723
% Cars	100	96.8	100	0		97	75	97.9	100	100		98.2	97.6	100	100	0		97.8	100	100	94.4	0		95.7	97.7
Trucks	0	7	0	0		7	2	3	0	0		5	2	0	0	0		2	0	0	1	0		1	15
% Trucks	0	3.2	0	0		3	16.7	1.6	0	0		1.3	2.4	0	0	0		2.2	0	0	5.6	0		4.3	2
Bicycles	0	0	0	0		0	1	1	0	0		2	0	0	0	0		0	0	0	0	0		0	2
% Bicycles	0	0	0	0		0	8.3	0.5	0	0		0.5	0	0	0	0		0	0	0	0	0		0	0.3
Peds					0	-					3	-					3	-					0	-	6
% Peds					0	-					50	-					50	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	16:00:00	From:	16:30:00
To:	18:00:00	To:	17:30:00

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Count Date: Sep 17, 2024

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Walkers Line runs N/S

North Approach

	Out	In	Total
Cars	261	275	536
Trucks	2	0	2
Bicycles	0	6	6
	263	**281**	**544**

Walkers Line

Bicycles	0	0	0	0
Trucks	0	2	0	0
Cars	1	253	6	1
Totals	**1**	**255**	**6**	**1**

Peds: 2

East Approach

	Out	In	Total
Cars	197	59	256
Trucks	4	0	4
Bicycles	1	0	1
	202	**59**	**261**

Palladium Way

Bicycles	Trucks	Cars	Totals
0	0	1	**1**
0	0	1	**1**
0	0	5	**5**
0	1	9	**10**

Peds: 5

N
W E
S

Peds: 1

Palladium Way

Totals	Cars	Trucks	Bicycles
0	0	0	0
17	17	0	0
10	8	2	0
175	172	2	1

Peds: 0

West Approach

	Out	In	Total
Cars	16	21	37
Trucks	1	2	3
Bicycles	0	0	0
	17	**23**	**40**

Walkers Line

Totals	**11**	**262**	**48**	**7**
Cars	11	256	48	7
Trucks	0	0	0	0
Bicycles	0	6	0	0

South Approach

	Out	In	Total
Cars	322	441	763
Trucks	0	5	5
Bicycles	6	1	7
	328	**447**	**775**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Palladium Way & Walkers Line
Site Code: 2438900002
Count Date: Sep 17, 2024
Period: 16:00 - 18:00

Peak Hour Data (16:30 - 17:30)

Start Time	North Approach Walkers Line						South Approach Walkers Line						East Approach Palladium Way						West Approach Palladium Way						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
16:30	1	67	0	1	0	69	4	61	8	0	0	73	57	3	7	0	0	67	0	2	1	0	0	3	212
16:45	2	58	0	0	0	60	1	63	12	2	0	78	32	4	2	0	0	38	0	3	4	1	4	8	184
17:00	0	69	1	0	2	70	1	60	12	3	0	76	48	3	6	0	0	57	0	0	3	0	1	3	206
17:15	3	61	0	0	0	64	5	78	16	2	0	101	38	0	2	0	1	40	1	0	2	0	0	3	208
Grand Total	**6**	**255**	**1**	**1**	**2**	**263**	**11**	**262**	**48**	**7**	**0**	**328**	**175**	**10**	**17**	**0**	**1**	**202**	**1**	**5**	**10**	**1**	**5**	**17**	**810**
Approach %	2.3	97	0.4	0.4		-	3.4	79.9	14.6	2.1		-	86.6	5	8.4	0		-	5.9	29.4	58.8	5.9		-	
Totals %	0.7	31.5	0.1	0.1		32.5	1.4	32.3	5.9	0.9		40.5	21.6	1.2	2.1	0		24.9	0.1	0.6	1.2	0.1		2.1	
PHF	**0.5**	**0.92**	**0.25**	**0.25**		**0.94**	**0.55**	**0.84**	**0.75**	**0.58**		**0.81**	**0.77**	**0.63**	**0.61**	**0**		**0.75**	**0.25**	**0.42**	**0.63**	**0.25**		**0.53**	**0.96**
Cars	6	253	1	1		261	11	256	48	7		322	172	8	17	0		197	1	5	9	1		16	796
% Cars	100	99.2	100	100		99.2	100	97.7	100	100		98.2	98.3	80	100	0		97.5	100	100	90	100		94.1	98.3
Trucks	0	2	0	0		2	0	0	0	0		0	2	2	0	0		4	0	0	1	0		1	7
% Trucks	0	0.8	0	0		0.8	0	0	0	0		0	1.1	20	0	0		2	0	0	10	0		5.9	0.9
Bicycles	0	0	0	0		0	0	6	0	0		6	1	0	0	0		1	0	0	0	0		0	7
% Bicycles	0	0	0	0		0	0	2.3	0	0		1.8	0.6	0	0	0		0.5	0	0	0	0		0	0.9
Peds					2	-					0	-					1	-					5	-	8
% Peds					25	-					0	-					12.5	-					62.5	-	

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Project #24-389 - GHD

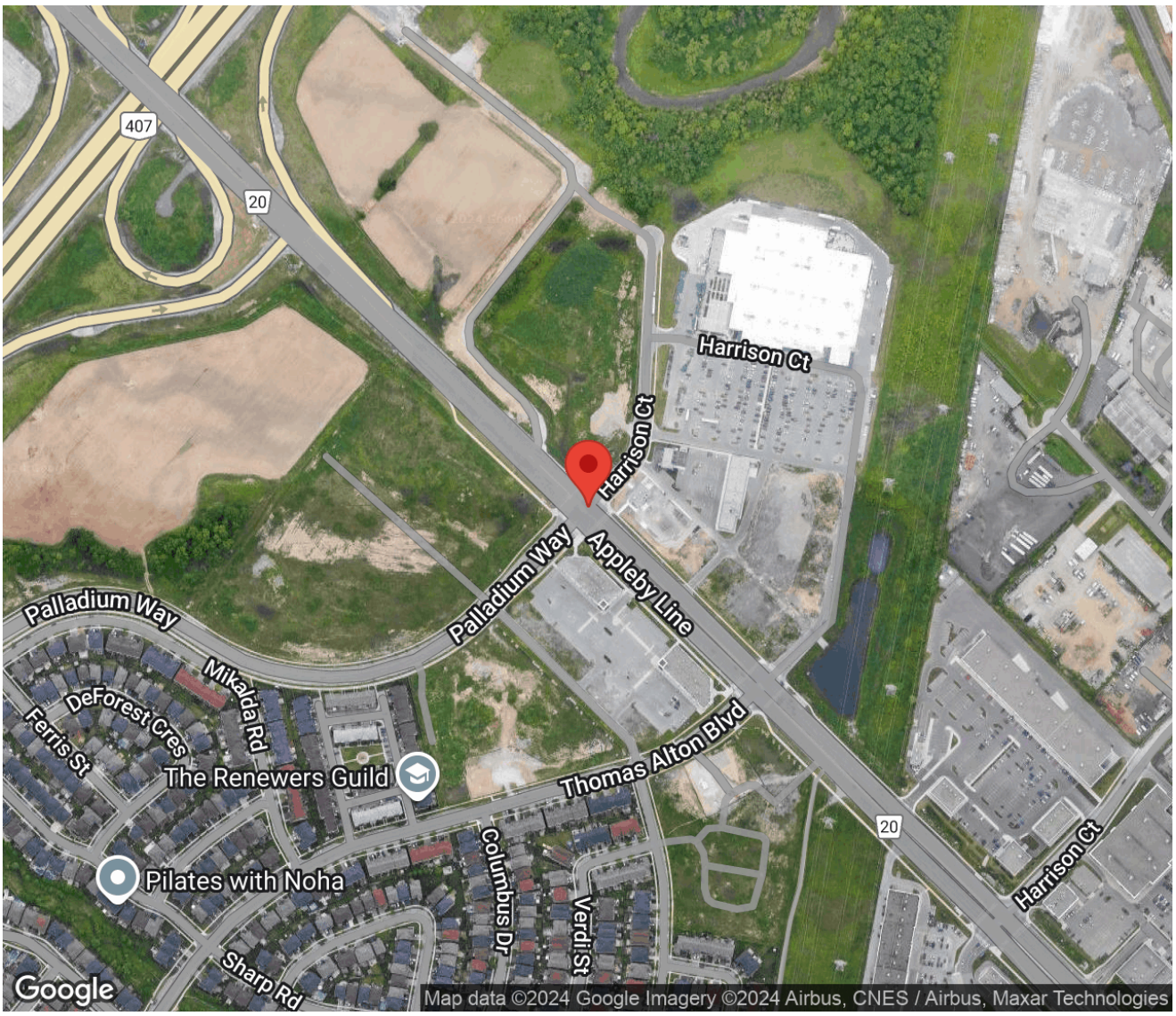
Intersection Count Report

Intersection:	Appleby Line & Palladium Way - Harrison Ct
Municipality:	Burlington
Count Date:	Tuesday, Sep 17, 2024
Site Code:	2438900003
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-09:00, 16:00-18:00
Weather:	Clear
Comments:	

Ontario Traffic Inc.
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Traffic Count Map

Intersection:	Appleby Line & Palladium Way - Harrison Ct
Site Code:	2438900003
Municipality:	Burlington
Count Date:	Sep 17, 2024



Ontario Traffic Inc.
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Traffic Count Summary

Intersection:	Appleby Line & Palladium Way - Harrison Ct
Site Code:	2438900003
Municipality:	Burlington
Count Date:	Sep 17, 2024

Appleby Line - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	**Left**	**Thru**	**Right**	**U-Turn**	**Total**	**Peds**	**Left**	**Thru**	**Right**	**U-Turn**	**Total**	**Peds**	**Total**
07:00 - 08:00	17	423	19	0	459	0	20	738	6	0	764	1	1223
08:00 - 09:00	18	646	36	0	700	0	46	751	9	1	807	0	1507
BREAK													
16:00 - 17:00	21	639	53	1	714	1	43	826	21	3	893	0	1607
17:00 - 18:00	25	580	39	0	644	0	37	818	18	4	877	0	1521
GRAND TOTAL	**81**	**2288**	**147**	**1**	**2517**	**1**	**146**	**3133**	**54**	**8**	**3341**	**1**	**5858**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Summary

Intersection:	Appleby Line & Palladium Way - Harrison Ct
Site Code:	2438900003
Municipality:	Burlington
Count Date:	Sep 17, 2024

Harrison Ct - Traffic Summary

	East Approach Totals						West Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	**Left**	**Thru**	**Right**	**U-Turn**	**Total**	**Peds**	**Left**	**Thru**	**Right**	**U-Turn**	**Total**	**Peds**	**Total**
07:00 - 08:00	17	3	10	0	30	0	51	4	14	0	69	0	99
08:00 - 09:00	27	3	19	0	49	0	57	6	32	0	95	0	144
BREAK													
16:00 - 17:00	69	8	28	1	106	1	42	5	41	0	88	0	194
17:00 - 18:00	62	11	36	0	109	0	37	11	34	0	82	0	191
GRAND TOTAL	**175**	**25**	**93**	**1**	**294**	**1**	**187**	**26**	**121**	**0**	**334**	**0**	**628**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Municipality: Burlington
Count Date: Sep 17, 2024

North Approach - Appleby Line

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
07:00	2	64	0	0	66	0	11	0	0	11	0	0	0	0	0	0
07:15	6	87	4	0	97	0	4	1	0	5	0	0	0	0	0	0
07:30	4	99	9	0	112	1	11	0	0	12	0	0	0	0	0	0
07:45	4	143	3	0	150	0	4	2	0	6	0	0	0	0	0	0
08:00	7	145	6	0	158	0	8	0	0	8	0	0	0	0	0	0
08:15	1	147	7	0	155	0	7	0	0	7	0	0	0	0	0	0
08:30	4	167	11	0	182	0	8	1	0	9	0	0	0	0	0	0
08:45	6	155	11	0	172	0	9	0	0	9	0	0	0	0	0	0
SUBTOTAL	34	1007	51	0	1092	1	62	4	0	67	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Municipality: Burlington
Count Date: Sep 17, 2024

North Approach - Appleby Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
16:00	5	155	11	0	171	0	4	0	0	4	0	0	0	0	0	1
16:15	7	154	19	1	181	0	8	0	0	8	0	0	0	0	0	0
16:30	6	145	14	0	165	0	4	0	0	4	0	0	0	0	0	0
16:45	3	165	8	0	176	0	4	1	0	5	0	0	0	0	0	0
17:00	10	158	8	0	176	0	4	0	0	4	0	0	0	0	0	0
17:15	9	137	8	0	154	0	5	0	0	5	0	0	0	0	0	0
17:30	2	149	7	0	158	0	2	1	0	3	0	0	0	0	0	0
17:45	4	121	14	0	139	0	4	1	0	5	0	0	0	0	0	0
SUBTOTAL	46	1184	89	1	1320	0	35	3	0	38	0	0	0	0	0	1
GRAND TOTAL	80	2191	140	1	2412	1	97	7	0	105	0	0	0	0	0	1

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Municipality: Burlington
Count Date: Sep 17, 2024

South Approach - Appleby Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	2	108	2	0	112	0	15	0	0	15	0	0	0	0	0	1
07:15	3	152	1	0	156	0	12	0	0	12	0	0	0	0	0	0
07:30	8	212	2	0	222	1	8	0	0	9	0	0	0	0	0	0
07:45	6	219	1	0	226	0	12	0	0	12	0	0	0	0	0	0
08:00	12	219	1	0	232	0	12	0	0	12	0	0	0	0	0	0
08:15	8	180	1	0	189	1	14	1	0	16	0	0	0	0	0	0
08:30	17	177	3	0	197	0	13	0	0	13	0	0	0	0	0	0
08:45	7	122	3	1	133	0	14	0	0	14	1	0	0	0	1	0
SUBTOTAL	63	1389	14	1	1467	2	100	1	0	103	1	0	0	0	1	1

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Municipality: Burlington
Count Date: Sep 17, 2024

South Approach - Appleby Line

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
16:00	7	201	4	1	213	1	8	0	0	9	0	0	0	0	0	0
16:15	9	177	6	2	194	0	8	1	0	9	0	0	0	0	0	0
16:30	10	209	6	0	225	1	14	0	0	15	0	0	0	0	0	0
16:45	15	198	4	0	217	0	11	0	0	11	0	0	0	0	0	0
17:00	9	214	0	0	223	1	8	0	0	9	1	0	0	0	1	0
17:15	5	213	5	1	224	0	4	0	0	4	0	1	0	0	1	0
17:30	9	185	9	0	203	0	4	0	0	4	1	0	0	0	1	0
17:45	11	181	4	3	199	0	7	0	0	7	0	1	0	0	1	0
SUBTOTAL	75	1578	38	7	1698	3	64	1	0	68	2	2	0	0	4	0
GRAND TOTAL	**138**	**2967**	**52**	**8**	**3165**	**5**	**164**	**2**	**0**	**171**	**3**	**2**	**0**	**0**	**5**	**1**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Municipality: Burlington
Count Date: Sep 17, 2024

East Approach - Harrison Ct

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
07:00	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
07:15	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0
07:30	3	2	1	0	6	0	0	1	0	1	0	0	0	0	0	0
07:45	12	1	4	0	17	0	0	0	0	0	0	0	0	0	0	0
08:00	5	1	5	0	11	1	0	0	0	1	0	0	0	0	0	0
08:15	7	0	3	0	10	0	0	0	0	0	0	0	0	0	0	0
08:30	8	2	3	0	13	0	0	1	0	1	0	0	0	0	0	0
08:45	6	0	5	0	11	0	0	2	0	2	0	0	0	0	0	0
SUBTOTAL	43	6	25	0	74	1	0	4	0	5	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Municipality: Burlington
Count Date: Sep 17, 2024

East Approach - Harrison Ct

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
16:00	18	3	5	0	26	0	0	1	0	1	0	0	0	0	0	1
16:15	15	1	12	0	28	1	0	0	0	1	0	0	0	0	0	0
16:30	16	2	6	1	25	0	0	0	0	0	0	0	0	0	0	0
16:45	19	2	4	0	25	0	0	0	0	0	0	0	0	0	0	0
17:00	15	2	10	0	27	0	0	0	0	0	0	0	0	0	0	0
17:15	16	4	13	0	33	0	0	1	0	1	0	0	0	0	0	0
17:30	14	2	4	0	20	0	0	0	0	0	0	0	0	0	0	0
17:45	17	3	7	0	27	0	0	1	0	1	0	0	0	0	0	0
SUBTOTAL	130	19	61	1	211	1	0	3	0	4	0	0	0	0	0	1
GRAND TOTAL	**173**	**25**	**86**	**1**	**285**	**2**	**0**	**7**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**1**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Municipality: Burlington
Count Date: Sep 17, 2024

West Approach - Palladium Way

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
07:00	5	2	2	0	9	0	0	0	0	0	0	0	0	0	0	0
07:15	9	0	3	0	12	0	0	1	0	1	0	0	0	0	0	0
07:30	21	0	1	0	22	0	0	0	0	0	0	0	0	0	0	0
07:45	16	2	7	0	25	0	0	0	0	0	0	0	0	0	0	0
08:00	13	0	4	0	17	0	0	0	0	0	0	0	0	0	0	0
08:15	14	0	7	0	21	0	0	0	0	0	0	0	0	0	0	0
08:30	14	3	14	0	31	0	0	0	0	0	0	0	0	0	0	0
08:45	16	3	7	0	26	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	108	10	45	0	163	0	0	1	0	1	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Municipality: Burlington
Count Date: Sep 17, 2024

West Approach - Palladium Way

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
16:00	7	1	9	0	17	2	0	0	0	2	0	0	0	0	0	0
16:15	12	2	17	0	31	1	0	0	0	1	0	0	0	0	0	0
16:30	5	1	10	0	16	1	0	0	0	1	0	0	0	0	0	0
16:45	14	1	5	0	20	0	0	0	0	0	0	0	0	0	0	0
17:00	7	5	10	0	22	0	0	0	0	0	0	0	0	0	0	0
17:15	13	3	8	0	24	0	0	1	0	1	0	0	0	0	0	0
17:30	10	3	7	0	20	0	0	0	0	0	0	0	0	0	0	0
17:45	7	0	8	0	15	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	75	16	74	0	165	4	0	1	0	5	0	0	0	0	0	0
GRAND TOTAL	183	26	119	0	328	4	0	2	0	6	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period
From: 07:00:00
To: 09:00:00

One Hour Peak
From: 07:45:00
To: 08:45:00

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Count Date: Sep 17, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Appleby Line runs N/S

North Approach

	Out	In	Total
Cars	645	867	1512
Trucks	30	52	82
Bicycles	0	0	0
	675	**919**	**1594**

Appleby Line

Bicycles	0	0	0	0
Trucks	3	27	0	0
Cars	27	602	16	0
Totals	**30**	**629**	**16**	**0**

East Approach

	Out	In	Total
Cars	51	27	78
Trucks	2	1	3
Bicycles	0	0	0
	53	**28**	**81**

Peds: 0

Palladium Way

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	U-turn
0	0	57	**57**	Through
0	0	5	**5**	Right
0	0	32	**32**	Left

Peds: 0



Peds: 0

Harrison Ct

	Totals	Cars	Trucks	Bicycles
U-turn	**0**	0	0	0
Through	**16**	15	1	0
Right	**4**	4	0	0
Left	**33**	32	1	0

Peds: 0

West Approach

	Out	In	Total
Cars	94	74	168
Trucks	0	4	4
Bicycles	0	0	0
	94	**78**	**172**

Appleby Line

Totals	**44**	**846**	**7**	**0**
Cars	43	795	6	0
Trucks	1	51	1	0
Bicycles	0	0	0	0

South Approach

	Out	In	Total
Cars	844	666	1510
Trucks	53	28	81
Bicycles	0	0	0
	897	**694**	**1591**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Count Date: Sep 17, 2024
Period: 07:00 - 09:00

Peak Hour Data (07:45 - 08:45)

Start Time	North Approach Appleby Line						South Approach Appleby Line						East Approach Harrison Ct						West Approach Palladium Way						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:45	4	147	5	0	0	156	6	231	1	0	0	238	12	1	4	0	0	17	16	2	7	0	0	25	436
08:00	7	153	6	0	0	166	12	231	1	0	0	244	6	1	5	0	0	12	13	0	4	0	0	17	439
08:15	1	154	7	0	0	162	9	194	2	0	0	205	7	0	3	0	0	10	14	0	7	0	0	21	398
08:30	4	175	12	0	0	191	17	190	3	0	0	210	8	2	4	0	0	14	14	3	14	0	0	31	446
Grand Total	**16**	**629**	**30**	**0**	**0**	**675**	**44**	**846**	**7**	**0**	**0**	**897**	**33**	**4**	**16**	**0**	**0**	**53**	**57**	**5**	**32**	**0**	**0**	**94**	**1719**
Approach %	2.4	93.2	4.4	0		-	4.9	94.3	0.8	0		-	62.3	7.5	30.2	0		-	60.6	5.3	34	0		-	
Totals %	0.9	36.6	1.7	0		39.3	2.6	49.2	0.4	0		52.2	1.9	0.2	0.9	0		3.1	3.3	0.3	1.9	0		5.5	
PHF	**0.57**	**0.9**	**0.63**	**0**		**0.88**	**0.65**	**0.92**	**0.58**	**0**		**0.92**	**0.69**	**0.5**	**0.8**	**0**		**0.78**	**0.89**	**0.42**	**0.57**	**0**		**0.76**	**0.96**
Cars	16	602	27	0		645	43	795	6	0		844	32	4	15	0		51	57	5	32	0		94	1634
% Cars	100	95.7	90	0		95.6	97.7	94	85.7	0		94.1	97	100	93.8	0		96.2	100	100	100	0		100	95.1
Trucks	0	27	3	0		30	1	51	1	0		53	1	0	1	0		2	0	0	0	0		0	85
% Trucks	0	4.3	10	0		4.4	2.3	6	14.3	0		5.9	3	0	6.3	0		3.8	0	0	0	0		0	4.9
Bicycles	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
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:15:00
To: 17:15:00

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Count Date: Sep 17, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Appleby Line runs N/S

North Approach

	Out	In	Total
Cars	698	869	1567
Trucks	21	43	64
Bicycles	0	0	0
	719	**912**	**1631**

Appleby Line

Bicycles	0	0	0	0
Trucks	1	20	0	0
Cars	49	622	26	1
Totals	**50**	**642**	**26**	**1**

East Approach

	Out	In	Total
Cars	105	52	157
Trucks	1	1	2
Bicycles	0	0	0
	106	**53**	**159**

Peds: 0

Palladium Way

			Totals
0	0	0	**0**
0	2	38	**40**
0	0	9	**9**
0	0	42	**42**

Peds: 0



Peds: 0

Harrison Ct

	Totals			
	1	1	0	0
	32	32	0	0
	7	7	0	0
	66	65	1	0

Peds: 0

West Approach

	Out	In	Total
Cars	89	99	188
Trucks	2	3	5
Bicycles	0	1	1
	91	**103**	**194**

Appleby Line

Totals	**46**	**839**	**17**	**2**
Cars	43	798	16	2
Trucks	2	41	1	0
Bicycles	1	0	0	0

South Approach

	Out	In	Total
Cars	859	731	1590
Trucks	44	21	65
Bicycles	1	0	1
	904	**752**	**1656**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Appleby Line & Palladium Way - Harrison Ct
Site Code: 2438900003
Count Date: Sep 17, 2024
Period: 16:00 - 18:00

Peak Hour Data (16:15 - 17:15)

Start Time	North Approach Appleby Line						South Approach Appleby Line						East Approach Harrison Ct						West Approach Palladium Way						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
16:15	7	162	19	1	0	189	9	185	7	2	0	203	16	1	12	0	0	29	13	2	17	0	0	32	453
16:30	6	149	14	0	0	169	11	223	6	0	0	240	16	2	6	1	0	25	6	1	10	0	0	17	451
16:45	3	169	9	0	0	181	15	209	4	0	0	228	19	2	4	0	0	25	14	1	5	0	0	20	454
17:00	10	162	8	0	0	180	11	222	0	0	0	233	15	2	10	0	0	27	7	5	10	0	0	22	462
Grand Total	**26**	**642**	**50**	**1**	**0**	**719**	**46**	**839**	**17**	**2**	**0**	**904**	**66**	**7**	**32**	**1**	**0**	**106**	**40**	**9**	**42**	**0**	**0**	**91**	**1820**
Approach %	3.6	89.3	7	0.1		-	5.1	92.8	1.9	0.2		-	62.3	6.6	30.2	0.9		-	44	9.9	46.2	0		-	
Totals %	1.4	35.3	2.7	0.1		39.5	2.5	46.1	0.9	0.1		49.7	3.6	0.4	1.8	0.1		5.8	2.2	0.5	2.3	0		5	
PHF	**0.65**	**0.95**	**0.66**	**0.25**		**0.95**	**0.77**	**0.94**	**0.61**	**0.25**		**0.94**	**0.87**	**0.88**	**0.67**	**0.25**		**0.91**	**0.71**	**0.45**	**0.62**	**0**		**0.71**	**0.98**
Cars	26	622	49	1		698	43	798	16	2		859	65	7	32	1		105	38	9	42	0		89	1751
% Cars	100	96.9	98	100		97.1	93.5	95.1	94.1	100		95	98.5	100	100	100		99.1	95	100	100	0		97.8	96.2
Trucks	0	20	1	0		21	2	41	1	0		44	1	0	0	0		1	2	0	0	0		2	68
% Trucks	0	3.1	2	0		2.9	4.3	4.9	5.9	0		4.9	1.5	0	0	0		0.9	5	0	0	0		2.2	3.7
Bicycles	0	0	0	0		0	1	0	0	0		1	0	0	0	0		0	0	0	0	0		0	1
% Bicycles	0	0	0	0		0	2.2	0	0	0		0.1	0	0	0	0		0	0	0	0	0		0	0.1
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
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Project #24-389 - GHD

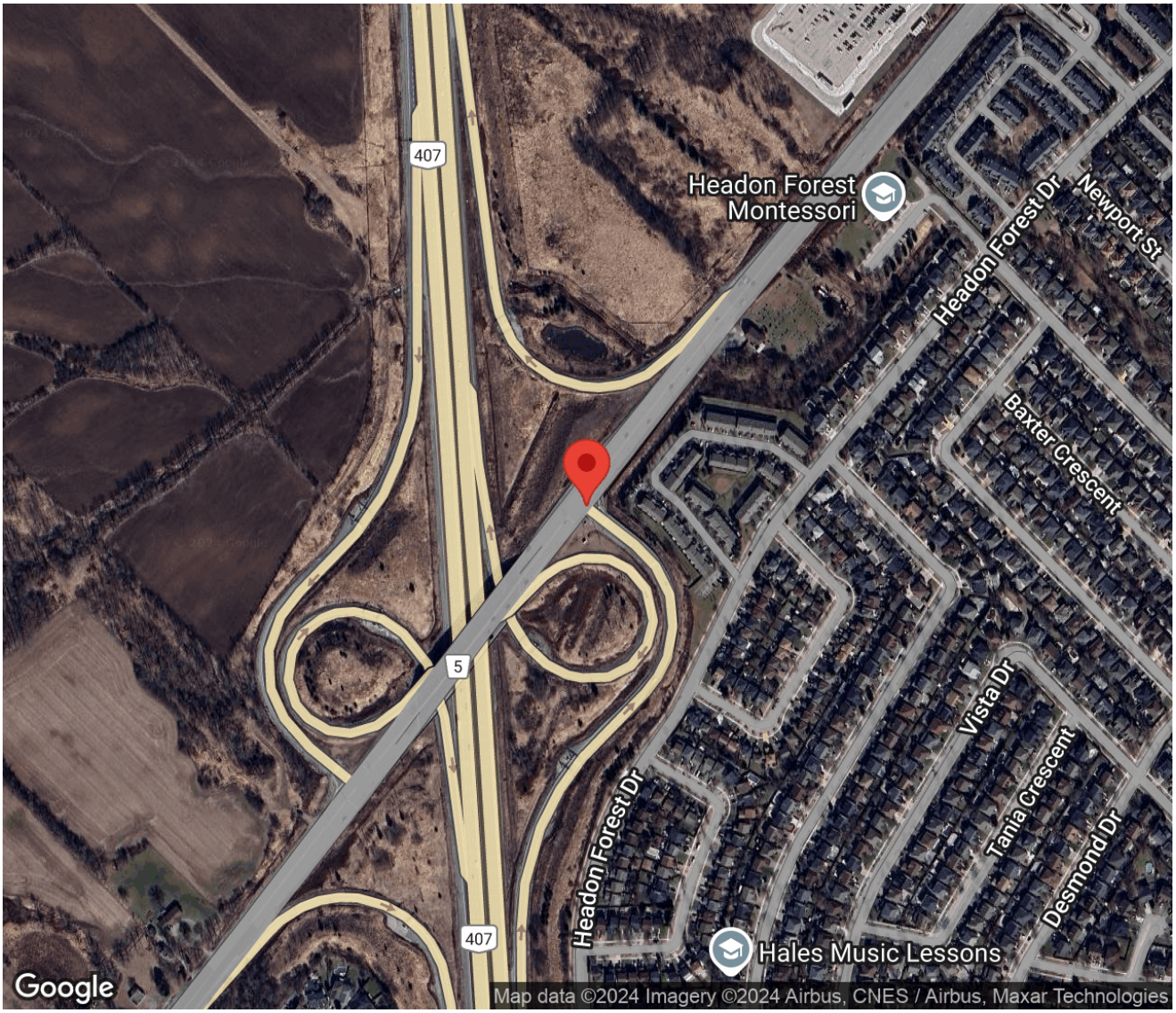
Intersection Count Report

Intersection:	Dundas St & Hwy 407 NB Off-Ramp
Municipality:	Burlington
Count Date:	Tuesday, Sep 17, 2024
Site Code:	2438900004
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-09:00, 16:00-18:00
Weather:	Clear
Comments:	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Map

Intersection:	Dundas St & Hwy 407 NB Off-Ramp
Site Code:	2438900004
Municipality:	Burlington
Count Date:	Sep 17, 2024



Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Summary

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Municipality: Burlington
Count Date: Sep 17, 2024

Hwy 407 NB Off-Ramp - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	0	0	0	0	0	0	25	0	115	0	140	0	140
08:00 - 09:00	0	0	0	0	0	0	31	0	132	0	163	0	163
BREAK													
16:00 - 17:00	0	0	0	0	0	0	59	0	110	0	169	2	169
17:00 - 18:00	0	0	0	0	0	0	38	0	137	0	175	0	175
GRAND TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**153**	**0**	**494**	**0**	**647**	**2**	**647**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Summary

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Municipality: Burlington
Count Date: Sep 17, 2024

Dundas St - Traffic Summary

Hour	East Approach Totals (Includes Cars, Trucks, Bicycles)						West Approach Totals (Includes Cars, Trucks, Bicycles)						Total
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	0	585	0	0	585	0	0	1284	380	0	1664	0	2249
08:00 - 09:00	0	893	0	0	893	0	0	1250	364	0	1614	0	2507
BREAK													
16:00 - 17:00	0	1933	0	0	1933	0	0	900	186	1	1087	0	3020
17:00 - 18:00	0	1800	0	0	1800	0	0	1061	203	0	1264	0	3064
GRAND TOTAL	**0**	**5211**	**0**	**0**	**5211**	**0**	**0**	**4495**	**1133**	**1**	**5629**	**0**	**10840**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Municipality: Burlington
Count Date: Sep 17, 2024

South Approach - Hwy 407 NB Off-Ramp

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	3	0	31	0	34	0	0	2	0	2	0	0	0	0	0	0
07:15	8	0	23	0	31	3	0	3	0	6	0	0	0	0	0	0
07:30	5	0	18	0	23	1	0	3	0	4	0	0	0	0	0	0
07:45	5	0	33	0	38	0	0	2	0	2	0	0	0	0	0	0
08:00	6	0	46	0	52	2	0	1	0	3	0	0	0	0	0	0
08:15	7	0	36	0	43	2	0	3	0	5	0	0	0	0	0	0
08:30	4	0	13	0	17	0	0	2	0	2	0	0	0	0	0	0
08:45	10	0	30	0	40	0	0	1	0	1	0	0	0	0	0	0
SUBTOTAL	48	0	230	0	278	8	0	17	0	25	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Municipality: Burlington
Count Date: Sep 17, 2024

South Approach - Hwy 407 NB Off-Ramp

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	
16:00	9	0	24	0	33	1	0	4	0	5	0	0	0	0	0	0
16:15	17	0	24	0	41	0	0	2	0	2	0	0	0	0	0	0
16:30	17	0	28	0	45	0	0	1	0	1	0	0	0	0	0	2
16:45	14	0	25	0	39	1	0	2	0	3	0	0	0	0	0	0
17:00	13	0	34	0	47	0	0	3	0	3	0	0	0	0	0	0
17:15	12	0	34	0	46	0	0	3	0	3	0	0	0	0	0	0
17:30	10	0	23	0	33	1	0	1	0	2	0	0	0	0	0	0
17:45	2	0	37	0	39	0	0	2	0	2	0	0	0	0	0	0
SUBTOTAL	94	0	229	0	323	3	0	18	0	21	0	0	0	0	0	2
GRAND TOTAL	142	0	459	0	601	11	0	35	0	46	0	0	0	0	0	2

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Municipality: Burlington
Count Date: Sep 17, 2024

East Approach - Dundas St

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
07:00	0	102	0	0	102	0	10	0	0	10	0	0	0	0	0	0
07:15	0	103	0	0	103	0	11	0	0	11	0	0	0	0	0	0
07:30	0	148	0	0	148	0	11	0	0	11	0	0	0	0	0	0
07:45	0	184	0	0	184	0	16	0	0	16	0	0	0	0	0	0
08:00	0	215	0	0	215	0	20	0	0	20	0	0	0	0	0	0
08:15	0	198	0	0	198	0	13	0	0	13	0	0	0	0	0	0
08:30	0	213	0	0	213	0	17	0	0	17	0	0	0	0	0	0
08:45	0	202	0	0	202	0	15	0	0	15	0	0	0	0	0	0
SUBTOTAL	0	1365	0	0	1365	0	113	0	0	113	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Municipality: Burlington
Count Date: Sep 17, 2024

East Approach - Dundas St

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
16:00	0	452	0	0	452	0	23	0	0	23	0	0	0	0	0	0
16:15	0	478	0	0	478	0	11	0	0	11	0	0	0	0	0	0
16:30	0	510	0	0	510	0	12	0	0	12	0	0	0	0	0	0
16:45	0	430	0	0	430	0	17	0	0	17	0	0	0	0	0	0
17:00	0	453	0	0	453	0	12	0	0	12	0	0	0	0	0	0
17:15	0	402	0	0	402	0	8	0	0	8	0	0	0	0	0	0
17:30	0	465	0	0	465	0	11	0	0	11	0	0	0	0	0	0
17:45	0	437	0	0	437	0	12	0	0	12	0	0	0	0	0	0
SUBTOTAL	0	3627	0	0	3627	0	106	0	0	106	0	0	0	0	0	0
GRAND TOTAL	0	4992	0	0	4992	0	219	0	0	219	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Municipality: Burlington
Count Date: Sep 17, 2024

West Approach - Dundas St

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	↰	↑	↱	↩	Total	
07:00	0	247	55	0	302	0	16	7	0	23	0	0	0	0	0	0
07:15	0	330	94	0	424	0	15	7	0	22	0	1	0	0	1	0
07:30	0	330	102	0	432	0	17	5	0	22	0	0	0	0	0	0
07:45	0	308	106	0	414	0	20	4	0	24	0	0	0	0	0	0
08:00	0	315	99	0	414	0	19	6	0	25	0	0	0	0	0	0
08:15	0	329	96	0	425	0	19	2	0	21	0	0	0	0	0	0
08:30	0	267	88	0	355	0	17	2	0	19	0	0	0	0	0	0
08:45	0	272	68	0	340	0	12	3	0	15	0	0	0	0	0	0
SUBTOTAL	0	2398	708	0	3106	0	135	36	0	171	0	1	0	0	1	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Municipality: Burlington
Count Date: Sep 17, 2024

West Approach - Dundas St

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
16:00	0	188	30	0	218	0	8	6	0	14	0	0	0	0	0	0
16:15	0	216	61	0	277	0	10	3	0	13	0	0	0	0	0	0
16:30	0	207	46	0	253	0	16	3	0	19	0	0	0	0	0	0
16:45	0	248	35	1	284	0	7	2	0	9	0	0	0	0	0	0
17:00	0	282	44	0	326	0	9	4	0	13	0	0	0	0	0	0
17:15	0	258	53	0	311	0	6	4	0	10	0	0	0	0	0	0
17:30	0	282	50	0	332	0	7	2	0	9	0	0	0	0	0	0
17:45	0	211	45	0	256	0	6	1	0	7	0	0	0	0	0	0
SUBTOTAL	0	1892	364	1	2257	0	69	25	0	94	0	0	0	0	0	0
GRAND TOTAL	**0**	**4290**	**1072**	**1**	**5363**	**0**	**204**	**61**	**0**	**265**	**0**	**1**	**0**	**0**	**1**	**0**

Peak Hour Diagram

Specified Period
From: 07:00:00
To: 09:00:00

One Hour Peak
From: 07:30:00
To: 08:30:00

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Count Date: Sep 17, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Dundas St runs E/W

East Approach

	Out	In	Total
Cars	745	1415	2160
Trucks	60	84	144
Bicycles	0	0	0
	805	**1499**	**2304**

Peds: 0

Dundas St

			Totals
0	0	0	**0**
0	75	1282	**1357**
0	17	403	**420**

Peds: 0



Peds: 0

Dundas St

	Totals			
	0	0	0	0
	805	745	60	0
	0	0	0	0

West Approach

	Out	In	Total
Cars	1685	768	2453
Trucks	92	65	157
Bicycles	0	0	0
	1777	**833**	**2610**

Peds: 0

Totals	28	142	0
Cars	23	133	0
Trucks	5	9	0
Bicycles	0	0	0

Hwy 407 NB Off-Ramp

South Approach

	Out	In	Total
Cars	156	403	559
Trucks	14	17	31
Bicycles	0	0	0
	170	**420**	**590**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Count Date: Sep 17, 2024
Period: 07:00 - 09:00

Peak Hour Data (07:30 - 08:30)

Start Time	North Approach						South Approach Hwy 407 NB Off-Ramp						East Approach Dundas St						West Approach Dundas St						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:30					0		6		21	0	0	27	0	159		0	0	159		347	107	0	0	454	640
07:45					0		5		35	0	0	40	0	200		0	0	200		328	110	0	0	438	678
08:00					0		8		47	0	0	55	0	235		0	0	235		334	105	0	0	439	729
08:15					0		9		39	0	0	48	0	211		0	0	211		348	98	0	0	446	705
Grand Total					**0**	**0**	**28**		**142**	**0**	**0**	**170**	**0**	**805**		**0**	**0**	**805**		**1357**	**420**	**0**	**0**	**1777**	**2752**
Approach %						-	16.5		83.5	0		-	0	100		0		-		76.4	23.6	0		-	
Totals %						0	1		5.2	0		6.2	0	29.3		0		29.3		49.3	15.3	0		64.6	
PHF						**0**	**0.78**		**0.76**	**0**		**0.77**	**0**	**0.86**		**0**		**0.86**		**0.97**	**0.95**	**0**		**0.98**	**0.94**
Cars						0	23		133	0		156	0	745		0		745		1282	403	0		1685	2586
% Cars						0	82.1		93.7	0		91.8	0	92.5		0		92.5		94.5	96	0		94.8	94
Trucks						0	5		9	0		14	0	60		0		60		75	17	0		92	166
% Trucks						0	17.9		6.3	0		8.2	0	7.5		0		7.5		5.5	4	0		5.2	6
Bicycles						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
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Peak Hour Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:15:00
To: 17:15:00

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Count Date: Sep 17, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Dundas St runs E/W

East Approach

	Out	In	Total
Cars	1871	1064	2935
Trucks	52	50	102
Bicycles	0	0	0
	1923	**1114**	**3037**

Peds: 0

Dundas St

Bicycles	Trucks	Cars	Totals	
0	0	1	**1**	
0	42	953	**995**	
0	12	186	**198**	

Peds: 0



Peds: 0

Dundas St

Totals	Cars	Trucks	Bicycles
0	0	0	0
1923	1871	52	0
0	0	0	0

Peds: 2

West Approach

	Out	In	Total
Cars	1140	1933	3073
Trucks	54	53	107
Bicycles	0	0	0
	1194	**1986**	**3180**

Totals	62	119	0
Cars	61	111	0
Trucks	1	8	0
Bicycles	0	0	0

Hwy 407 NB Off-Ramp

South Approach

	Out	In	Total
Cars	172	186	358
Trucks	9	12	21
Bicycles	0	0	0
	181	**198**	**379**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Dundas St & Hwy 407 NB Off-Ramp
Site Code: 2438900004
Count Date: Sep 17, 2024
Period: 16:00 - 18:00

Peak Hour Data (16:15 - 17:15)

Start Time	North Approach						South Approach Hwy 407 NB Off-Ramp						East Approach Dundas St						West Approach Dundas St						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
16:15					0		17		26	0	0	43	0	489		0	0	489		226	64	0	0	290	822
16:30					0		17		29	0	2	46	0	522		0	0	522		223	49	0	0	272	840
16:45					0		15		27	0	0	42	0	447		0	0	447		255	37	1	0	293	782
17:00					0		13		37	0	0	50	0	465		0	0	465		291	48	0	0	339	854
Grand Total					**0**	**0**	**62**		**119**	**0**	**2**	**181**	**0**	**1923**		**0**	**0**	**1923**		**995**	**198**	**1**	**0**	**1194**	**3298**
Approach %						-	34.3		65.7	0		-	0	100		0		-		83.3	16.6	0.1		-	
Totals %						0	1.9		3.6	0		5.5	0	58.3		0		58.3		30.2	6	0		36.2	
PHF						**0**	**0.91**		**0.8**	**0**		**0.91**	**0**	**0.92**		**0**		**0.92**		**0.85**	**0.77**	**0.25**		**0.88**	**0.97**
Cars						0	61		111	0		172	0	1871		0		1871		953	186	1		1140	3183
% Cars						0	98.4		93.3	0		95	0	97.3		0		97.3		95.8	93.9	100		95.5	96.5
Trucks						0	1		8	0		9	0	52		0		52		42	12	0		54	115
% Trucks						0	1.6		6.7	0		5	0	2.7		0		2.7		4.2	6.1	0		4.5	3.5
Bicycles						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
Peds					0	-					2	-					0	-					0	-	2
% Peds					0	-					100	-					0	-					0	-	

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Project #24-389 - GHD

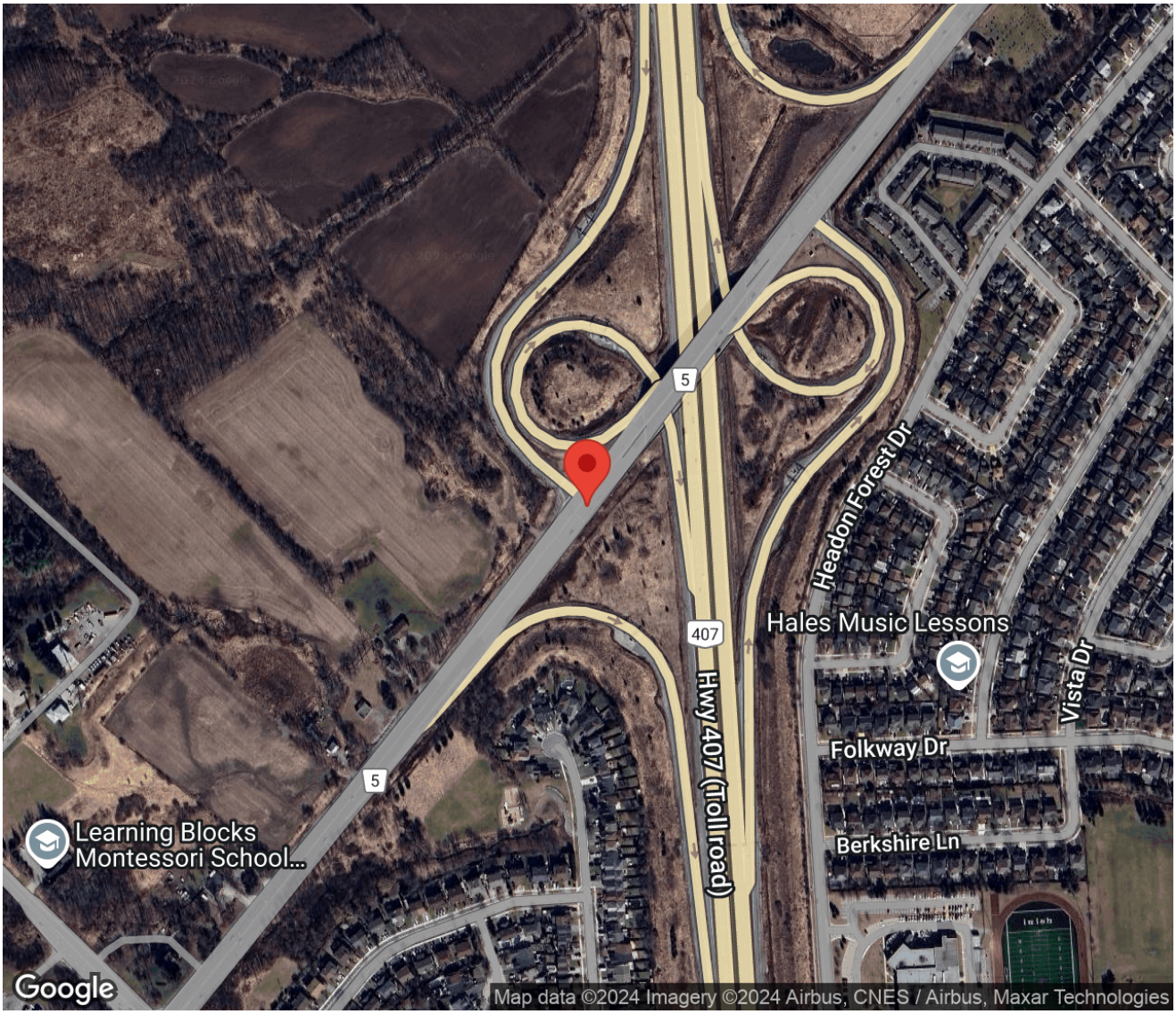
Intersection Count Report

Intersection:	Dundas St & Hwy 407 SB Off-Ramp
Municipality:	Burlington
Count Date:	Tuesday, Sep 17, 2024
Site Code:	2438900005
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-09:00, 16:00-18:00
Weather:	Clear
Comments:	

Ontario Traffic Inc.
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Traffic Count Map

Intersection:	Dundas St & Hwy 407 SB Off-Ramp
Site Code:	2438900005
Municipality:	Burlington
Count Date:	Sep 17, 2024



Ontario Traffic Inc.
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Traffic Count Summary

Intersection:	Dundas St & Hwy 407 SB Off-Ramp
Site Code:	2438900005
Municipality:	Burlington
Count Date:	Sep 17, 2024

Hwy 407 SB Off-Ramp - Traffic Summary

	North Approach Totals						South Approach Totals						
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
Hour	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	Total
07:00 - 08:00	22	0	84	0	106	0	0	0	0	0	0	0	106
08:00 - 09:00	40	0	126	0	166	0	0	0	0	0	0	0	166
BREAK													
16:00 - 17:00	88	0	386	0	474	0	0	0	0	0	0	0	474
17:00 - 18:00	85	0	396	0	481	0	0	0	0	0	0	0	481
GRAND TOTAL	**235**	**0**	**992**	**0**	**1227**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1227**

Ontario Traffic Inc.
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Traffic Count Summary

Intersection: Dundas St & Hwy 407 SB Off-Ramp
Site Code: 2438900005
Municipality: Burlington
Count Date: Sep 17, 2024

Dundas St - Traffic Summary

Hour	East Approach Totals						West Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	0	513	97	0	610	0	0	1642	0	0	1642	0	2252
08:00 - 09:00	0	817	107	0	924	0	0	1574	0	0	1574	0	2498
BREAK													
16:00 - 17:00	0	1867	126	0	1993	0	0	999	0	0	999	0	2992
17:00 - 18:00	0	1698	140	0	1838	0	0	1179	0	0	1179	0	3017
GRAND TOTAL	**0**	**4895**	**470**	**0**	**5365**	**0**	**0**	**5394**	**0**	**0**	**5394**	**0**	**10759**

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Dundas St & Hwy 407 SB Off-Ramp
Site Code: 2438900005
Municipality: Burlington
Count Date: Sep 17, 2024

North Approach - Hwy 407 SB Off-Ramp

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	3	0	10	0	13	1	0	0	0	1	0	0	0	0	0	0
07:15	5	0	17	0	22	1	0	0	0	1	0	0	0	0	0	0
07:30	0	0	26	0	26	2	0	1	0	3	0	0	0	0	0	0
07:45	6	0	28	0	34	4	0	2	0	6	0	0	0	0	0	0
08:00	7	0	31	0	38	1	0	1	0	2	0	0	0	0	0	0
08:15	7	0	29	0	36	4	0	0	0	4	0	0	0	0	0	0
08:30	10	0	32	0	42	3	0	0	0	3	0	0	0	0	0	0
08:45	6	0	33	0	39	2	0	0	0	2	0	0	0	0	0	0
SUBTOTAL	44	0	206	0	250	18	0	4	0	22	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Dundas St & Hwy 407 SB Off-Ramp
Site Code: 2438900005
Municipality: Burlington
Count Date: Sep 17, 2024

North Approach - Hwy 407 SB Off-Ramp

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
16:00	18	0	95	0	113	3	0	2	0	5	0	0	0	0	0	0
16:15	19	0	94	0	113	0	0	0	0	0	0	0	0	0	0	0
16:30	20	0	83	0	103	2	0	2	0	4	0	0	0	0	0	0
16:45	24	0	108	0	132	2	0	2	0	4	0	0	0	0	0	0
17:00	21	0	93	0	114	3	0	3	0	6	0	0	0	0	0	0
17:15	27	0	104	0	131	1	0	3	0	4	0	0	0	0	0	0
17:30	11	0	92	0	103	2	0	1	0	3	0	0	0	0	0	0
17:45	18	0	98	0	116	2	0	2	0	4	0	0	0	0	0	0
SUBTOTAL	158	0	767	0	925	15	0	15	0	30	0	0	0	0	0	0
GRAND TOTAL	202	0	973	0	1175	33	0	19	0	52	0	0	0	0	0	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Dundas St & Hwy 407 SB Off-Ramp
Site Code: 2438900005
Municipality: Burlington
Count Date: Sep 17, 2024

East Approach - Dundas St

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
07:00	0	85	20	0	105	0	8	2	0	10	0	0	0	0	0	0
07:15	0	88	23	0	111	0	13	1	0	14	0	0	0	0	0	0
07:30	0	134	19	0	153	0	8	4	0	12	0	0	0	0	0	0
07:45	0	165	24	0	189	0	12	4	0	16	0	0	0	0	0	0
08:00	0	187	34	0	221	0	19	3	0	22	0	0	0	0	0	0
08:15	0	182	23	0	205	0	13	2	0	15	0	0	0	0	0	0
08:30	0	198	19	0	217	0	12	5	0	17	0	0	0	0	0	0
08:45	0	195	17	0	212	0	11	4	0	15	0	0	0	0	0	0
SUBTOTAL	0	1234	179	0	1413	0	96	25	0	121	0	0	0	0	0	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Dundas St & Hwy 407 SB Off-Ramp
Site Code: 2438900005
Municipality: Burlington
Count Date: Sep 17, 2024

East Approach - Dundas St

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	↰	↑	↱	↶	Total	
16:00	0	445	16	0	461	0	22	2	0	24	0	0	0	0	0	0
16:15	0	469	26	0	495	0	8	3	0	11	0	0	0	0	0	0
16:30	0	485	42	0	527	0	10	2	0	12	0	0	0	0	0	0
16:45	0	413	32	0	445	0	15	3	0	18	0	0	0	0	0	0
17:00	0	421	45	0	466	0	11	1	0	12	0	0	0	0	0	0
17:15	0	384	30	0	414	0	8	0	0	8	0	0	0	0	0	0
17:30	0	439	36	0	475	0	12	0	0	12	0	0	0	0	0	0
17:45	0	414	25	0	439	0	9	3	0	12	0	0	0	0	0	0
SUBTOTAL	0	3470	252	0	3722	0	95	14	0	109	0	0	0	0	0	0
GRAND TOTAL	**0**	**4704**	**431**	**0**	**5135**	**0**	**191**	**39**	**0**	**230**	**0**	**0**	**0**	**0**	**0**	**0**

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Traffic Count Data

Intersection: Dundas St & Hwy 407 SB Off-Ramp
Site Code: 2438900005
Municipality: Burlington
Count Date: Sep 17, 2024

West Approach - Dundas St

Start Time	Cars					Trucks					Bicycles					Total Peds
					Total					Total					Total	
07:00	0	299	0	0	299	0	21	0	0	21	0	0	0	0	0	0
07:15	0	419	0	0	419	0	22	0	0	22	0	1	0	0	1	0
07:30	0	432	0	0	432	0	20	0	0	20	0	0	0	0	0	0
07:45	0	408	0	0	408	0	20	0	0	20	0	0	0	0	0	0
08:00	0	407	0	0	407	0	24	0	0	24	0	0	0	0	0	0
08:15	0	418	0	0	418	0	17	0	0	17	0	0	0	0	0	0
08:30	0	345	0	0	345	0	16	0	0	16	0	0	0	0	0	0
08:45	0	334	0	0	334	0	13	0	0	13	0	0	0	0	0	0
SUBTOTAL	0	3062	0	0	3062	0	153	0	0	153	0	1	0	0	1	0

Ontario Traffic Inc.
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Traffic Count Data

Intersection: Dundas St & Hwy 407 SB Off-Ramp
Site Code: 2438900005
Municipality: Burlington
Count Date: Sep 17, 2024

West Approach - Dundas St

Start Time	Cars					Trucks					Bicycles					Total Peds
	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	↰	↑	↱	↻	Total	
16:00	0	200	0	0	200	0	11	0	0	11	0	0	0	0	0	0
16:15	0	258	0	0	258	0	13	0	0	13	0	0	0	0	0	0
16:30	0	233	0	0	233	0	17	0	0	17	0	0	0	0	0	0
16:45	0	260	0	0	260	0	7	0	0	7	0	0	0	0	0	0
17:00	0	305	0	0	305	0	10	0	0	10	0	0	0	0	0	0
17:15	0	284	0	0	284	0	9	0	0	9	0	0	0	0	0	0
17:30	0	321	0	0	321	0	7	0	0	7	0	0	0	0	0	0
17:45	0	238	0	0	238	0	5	0	0	5	0	0	0	0	0	0
SUBTOTAL	0	2099	0	0	2099	0	79	0	0	79	0	0	0	0	0	0
GRAND TOTAL	0	5161	0	0	5161	0	232	0	0	232	0	1	0	0	1	0

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	07:00:00	From:	07:30:00
To:	09:00:00	To:	08:30:00

Intersection: Dundas St & Hwy 407 SB Off-Ramp
Site Code: 2438900005
Count Date: Sep 17, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Dundas St runs E/W

North Approach

	Out	In	Total
Cars	134	100	234
Trucks	15	13	28
Bicycles	0	0	0
	149	**113**	**262**

Hwy 407 SB Off-Ramp

Bicycles	0	0	0
Trucks	4	11	0
Cars	114	20	0
Totals	**118**	**31**	**0**

East Approach

	Out	In	Total
Cars	768	1685	2453
Trucks	65	92	157
Bicycles	0	0	0
	833	**1777**	**2610**

Dundas St

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	0	0	**0**	
0	81	1665	**1746**	

Peds: 0



Peds: 0

Peds: 0

Dundas St

	Totals	Cars	Trucks	Bicycles
	0	0	0	0
	113	100	13	0
	720	668	52	0

West Approach

	Out	In	Total
Cars	1665	782	2447
Trucks	81	56	137
Bicycles	0	0	0
	1746	**838**	**2584**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Dundas St & Hwy 407 SB Off-Ramp
Site Code: 2438900005
Count Date: Sep 17, 2024
Period: 07:00 - 09:00

Peak Hour Data (07:30 - 08:30)

Start Time	North Approach Hwy 407 SB Off-Ramp						South Approach						East Approach Dundas St						West Approach Dundas St						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
07:30	2		27	0	0	29					0			142	23	0	0	165	0	452		0	0	452	646
07:45	10		30	0	0	40					0			177	28	0	0	205	0	428		0	0	428	673
08:00	8		32	0	0	40					0			206	37	0	0	243	0	431		0	0	431	714
08:15	11		29	0	0	40					0			195	25	0	0	220	0	435		0	0	435	695
Grand Total	**31**		**118**	**0**	**0**	**149**					**0**	**0**		**720**	**113**	**0**	**0**	**833**	**0**	**1746**		**0**	**0**	**1746**	**2728**
Approach %	20.8		79.2	0		-						-		86.4	13.6	0		-	0	100		0		-	
Totals %	1.1		4.3	0		5.5						0		26.4	4.1	0		30.5	0	64		0		64	
PHF	**0.7**		**0.92**	**0**		**0.93**						**0**		**0.87**	**0.76**	**0**		**0.86**	**0**	**0.97**		**0**		**0.97**	**0.96**
Cars	20		114	0		134						0		668	100	0		768	0	1665		0		1665	2567
% Cars	64.5		96.6	0		89.9						0		92.8	88.5	0		92.2	0	95.4		0		95.4	94.1
Trucks	11		4	0		15						0		52	13	0		65	0	81		0		81	161
% Trucks	35.5		3.4	0		10.1						0		7.2	11.5	0		7.8	0	4.6		0		4.6	5.9
Bicycles	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
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Diagram

Specified Period		One Hour Peak	
From:	16:00:00	From:	16:15:00
To:	18:00:00	To:	17:15:00

Intersection: Dundas St & Hwy 407 SB Off-Ramp
Site Code: 2438900005
Count Date: Sep 17, 2024

Weather conditions: Clear

**** Signalized Intersection ****

Major Road: Dundas St runs E/W

North Approach

	Out	In	Total
Cars	462	145	607
Trucks	14	9	23
Bicycles	0	0	0
	476	**154**	**630**

Hwy 407 SB Off-Ramp

Bicycles	0	0	0
Trucks	7	7	0
Cars	378	84	0
Totals	**385**	**91**	**0**

East Approach

	Out	In	Total
Cars	1933	1140	3073
Trucks	53	54	107
Bicycles	0	0	0
	1986	**1194**	**3180**

Dundas St

Bicycles	Trucks	Cars	Totals	
0	0	0	**0**	
0	0	0	**0**	
0	47	1056	**1103**	

Peds: 0



Peds: 0

Peds: 0

Dundas St

Totals	Cars	Trucks	Bicycles
0	0	0	0
154	145	9	0
1832	1788	44	0

West Approach

	Out	In	Total
Cars	1056	2166	3222
Trucks	47	51	98
Bicycles	0	0	0
	1103	**2217**	**3320**

Cars - Trucks - Bicycles

Comments

Ontario Traffic Inc.
Traffic Monitoring • Services & Products

Peak Hour Summary

Intersection: Dundas St & Hwy 407 SB Off-Ramp
Site Code: 2438900005
Count Date: Sep 17, 2024
Period: 16:00 - 18:00

Peak Hour Data (16:15 - 17:15)

Start Time	North Approach Hwy 407 SB Off-Ramp						South Approach						East Approach Dundas St						West Approach Dundas St						Total Vehicles
					Peds	Total					Peds	Total					Peds	Total					Peds	Total	
16:15	19		94	0	0	113					0			477	29	0	0	506	0	271		0	0	271	890
16:30	22		85	0	0	107					0			495	44	0	0	539	0	250		0	0	250	896
16:45	26		110	0	0	136					0			428	35	0	0	463	0	267		0	0	267	866
17:00	24		96	0	0	120					0			432	46	0	0	478	0	315		0	0	315	913
Grand Total	**91**		**385**	**0**	**0**	**476**					**0**	**0**		**1832**	**154**	**0**	**0**	**1986**	**0**	**1103**		**0**	**0**	**1103**	**3565**
Approach %	19.1		80.9	0		-						-		92.2	7.8	0		-	0	100		0		-	
Totals %	2.6		10.8	0		13.4						0		51.4	4.3	0		55.7	0	30.9		0		30.9	
PHF	**0.88**		**0.88**	**0**		**0.88**						**0**		**0.93**	**0.84**	**0**		**0.92**	**0**	**0.88**		**0**		**0.88**	**0.98**
Cars	84		378	0		462						0		1788	145	0		1933	0	1056		0		1056	3451
% Cars	92.3		98.2	0		97.1						0		97.6	94.2	0		97.3	0	95.7		0		95.7	96.8
Trucks	7		7	0		14						0		44	9	0		53	0	47		0		47	114
% Trucks	7.7		1.8	0		2.9						0		2.4	5.8	0		2.7	0	4.3		0		4.3	3.2
Bicycles	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
Peds					0	-					0	-					0	-					0	-	0
% Peds					0	-					0	-					0	-					0	-	

Spectrum

Turning Movement Count
Location Name: APPLEBY LINE & HWY 407 EB OFF RAMP
Date: Wed, Mar 01, 2023 Deployment Lead: Walter Fugaj

GHD
UNIT 1 705 MILLCREEK DRIVE
MISSISSAUGA ONTARIO, L5N 5M4
CANADA

Turning Movement Count (2 . APPLEBY LINE & HWY 407 EB OFF RAMP)

Start Time	N Approach APPLEBY LINE					E Approach HWY 407 EB ON RAMP			S Approach APPLEBY LINE					W Approach HIGHWAY 407 SOUTH RAMP					NW Approach HWY 407 EB ON RAMP			Int. Total (15 min)	Int. Total (1 hr)
	Hard Right N:NW	Thru N:S	UTurn N:N	Peds N:	Approach Total	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	UTurn S:S	Peds S:	Approach Total	Right W:S	Left W:N	UTurn W:W	Peds W:	Approach Total	UTurn NW:NW	Peds NW:	Approach Total		
07:00:00	4	70	0	0	74	0	0	0	41	67	0	0	108	4	8	0	0	12	0	0	0	194	
07:15:00	6	81	0	0	87	0	0	0	61	78	0	0	139	2	16	0	0	18	0	0	0	244	
07:30:00	6	108	0	0	114	0	0	0	90	80	0	0	170	5	22	0	0	27	0	0	0	311	
07:45:00	8	117	0	0	125	0	0	0	84	112	0	0	196	3	21	0	0	24	0	0	0	345	1094
08:00:00	5	110	0	0	115	0	0	0	102	106	0	0	208	12	17	0	0	29	0	0	0	352	1252
08:15:00	7	118	0	0	125	0	0	0	113	76	0	0	189	11	17	0	0	28	0	0	0	342	1350
08:30:00	7	113	0	0	120	0	0	0	96	85	0	0	181	11	12	0	0	23	0	0	0	324	1363
08:45:00	4	140	0	0	144	0	0	0	69	61	0	0	130	7	8	0	0	15	0	0	0	289	1307
BREAK																							
16:00:00	2	174	0	0	176	0	0	0	38	129	0	0	167	4	11	0	0	15	0	0	0	358	
16:15:00	2	194	0	0	196	0	0	0	45	131	0	0	176	5	12	0	0	17	0	0	0	389	
16:30:00	3	175	0	0	178	0	0	0	39	148	0	0	187	9	10	0	0	19	0	0	0	384	
16:45:00	3	202	0	0	205	0	0	0	32	151	1	0	184	2	16	0	0	18	0	0	0	407	1538
17:00:00	3	203	0	0	206	0	0	0	41	161	0	0	202	2	5	0	0	7	0	1	0	415	1595
17:15:00	2	146	0	0	148	0	0	0	27	139	0	0	166	5	12	0	0	17	0	0	0	331	1537
17:30:00	3	155	0	0	158	0	0	0	26	126	0	0	152	6	9	0	0	15	0	0	0	325	1478
17:45:00	3	141	0	0	144	0	0	0	19	118	0	0	137	9	5	0	0	14	0	0	0	295	1366
Grand Total	68	2247	0	0	2315	0	0	0	923	1768	1	0	2692	97	201	0	0	298	0	1	0	**5305**	-
Approach%	2.9%	97.1%	0%		-	0%		-	34.3%	65.7%	0%		-	32.6%	67.4%	0%		-	0%		-	**-**	-
Totals %	1.3%	42.4%	0%		43.6%	0%		0%	17.4%	33.3%	0%		50.7%	1.8%	3.8%	0%		5.6%	0%		0%	**-**	-
Heavy	2	74	0		-	0		-	40	41	0		-	4	7	0		-	0		-	**-**	-
Heavy %	2.9%	3.3%	0%		-	0%		-	4.3%	2.3%	0%		-	4.1%	3.5%	0%		-	0%		-	**-**	-
Bicycles	-	-	-		-	-		-	-	-	-		-	-	-	-		-	-		-	**-**	-
Bicycle %	-	-	-		-	-		-	-	-	-		-	-	-	-		-	-		-	**-**	-

Spectrum

Turning Movement Count
Location Name: APPLEBY LINE & HWY 407 EB OFF RAMP
Date: Wed, Mar 01, 2023 Deployment Lead: Walter Fugaj

GHD
UNIT 1 705 MILLCREEK DRIVE
MISSISSAUGA ONTARIO, L5N 5M4
CANADA

Peak Hour: 07:45 AM - 08:45 AM Weather: Overcast Clouds (-0.81 °C)

Start Time	N Approach APPLEBY LINE					E Approach HWY 407 EB ON RAMP			S Approach APPLEBY LINE					W Approach HIGHWAY 407 SOUTH RAMP					NW Approach HWY 407 EB ON RAMP			Int. Total (15 min)
	Hard Right	Thru	UTurn	Peds	Approach Total	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	UTurn	Peds	Approach Total	
07:45:00	8	117	0	0	125	0	0	0	84	112	0	0	196	3	21	0	0	24	0	0	0	345
08:00:00	5	110	0	0	115	0	0	0	102	106	0	0	208	12	17	0	0	29	0	0	0	352
08:15:00	7	118	0	0	125	0	0	0	113	76	0	0	189	11	17	0	0	28	0	0	0	342
08:30:00	7	113	0	0	120	0	0	0	96	85	0	0	181	11	12	0	0	23	0	0	0	324
Grand Total	27	458	0	0	485	0	0	0	395	379	0	0	774	37	67	0	0	104	0	0	0	**1363**
Approach%	5.6%	94.4%	0%		-	0%		-	51%	49%	0%		-	35.6%	64.4%	0%		-	0%		-	**-**
Totals %	2%	33.6%	0%		35.6%	0%		0%	29%	27.8%	0%		56.8%	2.7%	4.9%	0%		7.6%	0%		0%	**-**
PHF	0.84	0.97	0		0.97	0		0	0.87	0.85	0		0.93	0.77	0.8	0		0.9	0		0	**-**
Heavy	0	14	0		14	0		0	12	16	0		28	2	1	0		3	0		0	**-**
Heavy %	0%	3.1%	0%		2.9%	0%		0%	3%	4.2%	0%		3.6%	5.4%	1.5%	0%		2.9%	0%		0%	**-**
Lights	27	443	0		470	0		0	383	363	0		746	35	66	0		101	0		0	**-**
Lights %	100%	96.7%	0%		96.9%	0%		0%	97%	95.8%	0%		96.4%	94.6%	98.5%	0%		97.1%	0%		0%	**-**
Single-Unit Trucks	0	8	0		8	0		0	8	8	0		16	2	1	0		3	0		0	**-**
Single-Unit Trucks %	0%	1.7%	0%		1.6%	0%		0%	2%	2.1%	0%		2.1%	5.4%	1.5%	0%		2.9%	0%		0%	**-**
Buses	0	1	0		1	0		0	0	2	0		2	0	0	0		0	0		0	**-**
Buses %	0%	0.2%	0%		0.2%	0%		0%	0%	0.5%	0%		0.3%	0%	0%	0%		0%	0%		0%	**-**
Articulated Trucks	0	5	0		5	0		0	4	6	0		10	0	0	0		0	0		0	**-**
Articulated Trucks %	0%	1.1%	0%		1%	0%		0%	1%	1.6%	0%		1.3%	0%	0%	0%		0%	0%		0%	**-**
Bicycles on Road	0	1	0		1	0		0	0	0	0		0	0	0	0		0	0		0	**-**
Bicycles on Road %	0%	0.2%	0%		0.2%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	0%		0%	**-**
Bicycles on Crosswalk	-	-	-	0	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	0%		-	0%		-	-	-	0%		-	-	-	0%		-	0%		**-**

Spectrum

Turning Movement Count
Location Name: APPLEBY LINE & HWY 407 EB OFF RAMP
Date: Wed, Mar 01, 2023 Deployment Lead: Walter Fugaj

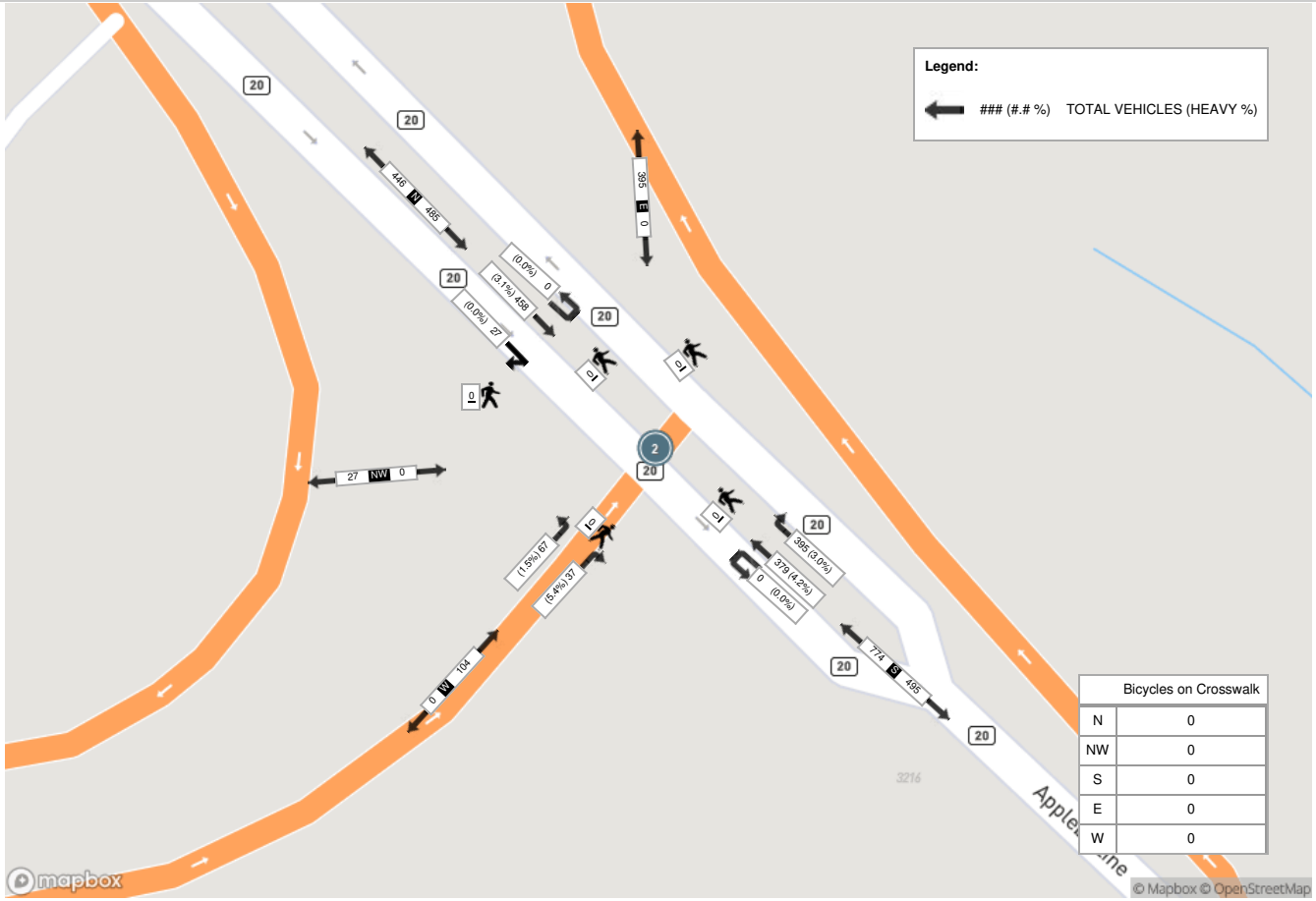
GHD
UNIT 1 705 MILLCREEK DRIVE
MISSISSAUGA ONTARIO, L5N 5M4
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Light Rain (3.45 °C)

Start Time	N Approach APPLEBY LINE					E Approach HWY 407 EB ON RAMP			S Approach APPLEBY LINE					W Approach HIGHWAY 407 SOUTH RAMP					NW Approach HWY 407 EB ON RAMP			Int. Total (15 min)
	Hard Right	Thru	UTurn	Peds	Approach Total	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	UTurn	Peds	Approach Total	
16:15:00	2	194	0	0	196	0	0	0	45	131	0	0	176	5	12	0	0	17	0	0	0	389
16:30:00	3	175	0	0	178	0	0	0	39	148	0	0	187	9	10	0	0	19	0	0	0	384
16:45:00	3	202	0	0	205	0	0	0	32	151	1	0	184	2	16	0	0	18	0	0	0	407
17:00:00	3	203	0	0	206	0	0	0	41	161	0	0	202	2	5	0	0	7	0	1	0	415
Grand Total	11	774	0	0	785	0	0	0	157	591	1	0	749	18	43	0	0	61	0	1	0	**1595**
Approach%	1.4%	98.6%	0%		-	0%		-	21%	78.9%	0.1%		-	29.5%	70.5%	0%		-	0%		-	**-**
Totals %	0.7%	48.5%	0%		49.2%	0%		0%	9.8%	37.1%	0.1%		47%	1.1%	2.7%	0%		3.8%	0%		0%	**-**
PHF	0.92	0.95	0		0.95	0		0	0.87	0.92	0.25		0.93	0.5	0.67	0		0.8	0		0	**-**
Heavy	0	33	0		33	0		0	8	8	0		16	1	3	0		4	0		0	**-**
Heavy %	0%	4.3%	0%		4.2%	0%		0%	5.1%	1.4%	0%		2.1%	5.6%	7%	0%		6.6%	0%		0%	**-**
Lights	11	741	0		752	0		0	149	583	1		733	17	40	0		57	0		0	**-**
Lights %	100%	95.7%	0%		95.8%	0%		0%	94.9%	98.6%	100%		97.9%	94.4%	93%	0%		93.4%	0%		0%	**-**
Single-Unit Trucks	0	20	0		20	0		0	2	4	0		6	1	2	0		3	0		0	**-**
Single-Unit Trucks %	0%	2.6%	0%		2.5%	0%		0%	1.3%	0.7%	0%		0.8%	5.6%	4.7%	0%		4.9%	0%		0%	**-**
Buses	0	2	0		2	0		0	1	1	0		2	0	0	0		0	0		0	**-**
Buses %	0%	0.3%	0%		0.3%	0%		0%	0.6%	0.2%	0%		0.3%	0%	0%	0%		0%	0%		0%	**-**
Articulated Trucks	0	11	0		11	0		0	5	3	0		8	0	1	0		1	0		0	**-**
Articulated Trucks %	0%	1.4%	0%		1.4%	0%		0%	3.2%	0.5%	0%		1.1%	0%	2.3%	0%		1.6%	0%		0%	**-**
Bicycles on Road	0	0	0		0	0		0	0	0	0		0	0	0	0		0	0		0	**-**
Bicycles on Road %	0%	0%	0%		0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	0%		0%	**-**
Bicycles on Crosswalk	-	-	-	0	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	1	-	**-**
Bicycles on Crosswalk%	-	-	-	0%		-	0%		-	-	-	0%		-	-	-	0%		-	100%		**-**

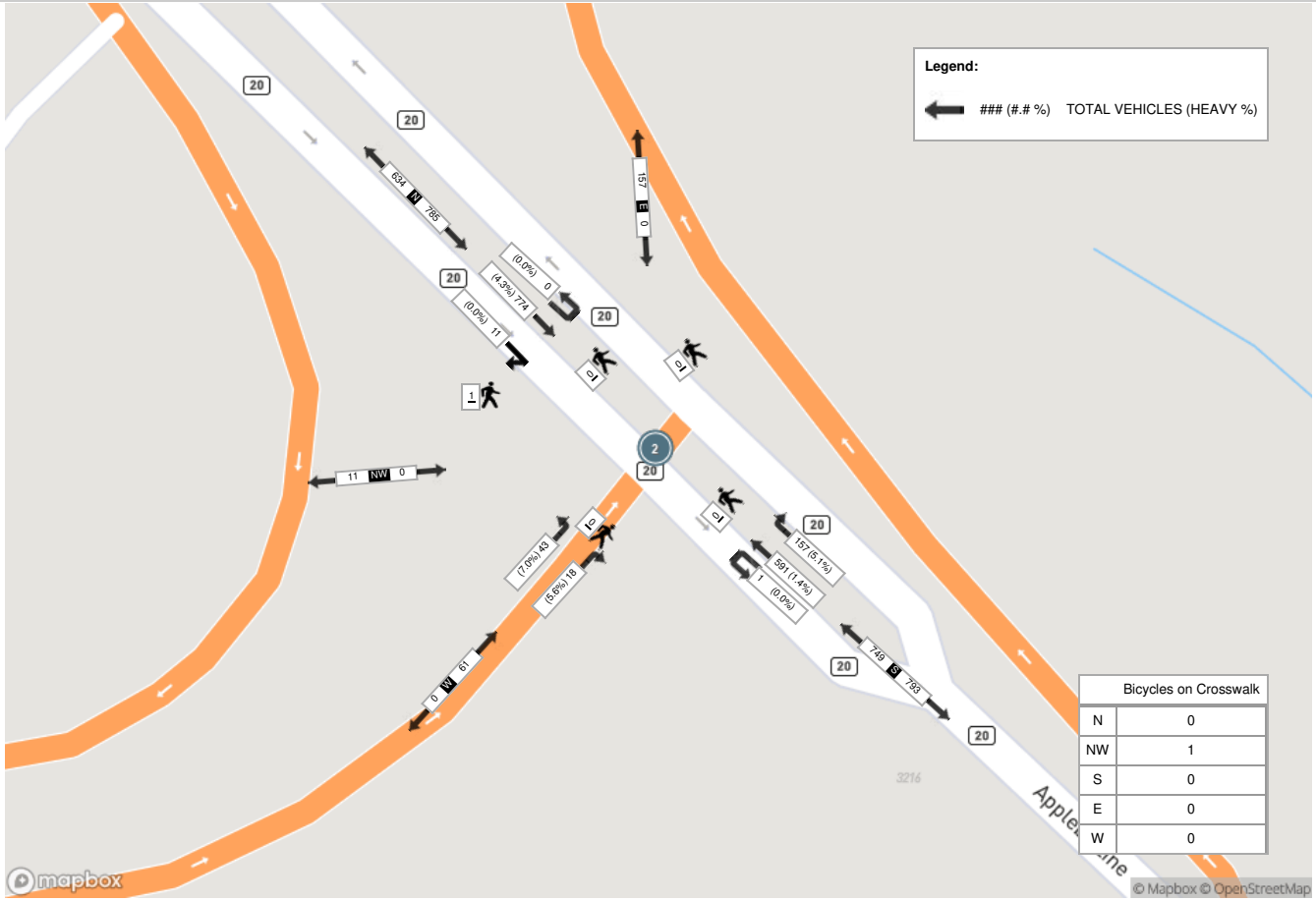
GHD
UNIT 1 705 MILLCREEK DRIVE
MISSISSAUGA ONTARIO, L5N 5M4
CANADA

Peak Hour: 07:45 AM - 08:45 AM **Weather: Overcast Clouds (-0.81 °C)**



	Bicycles on Crosswalk
N	0
NW	0
S	0
E	0
W	0

Peak Hour: 04:15 PM - 05:15 PM **Weather: Light Rain (3.45 °C)**



Spectrum

Turning Movement Count
Location Name: APPLEBY LINE & HWY 407 WB OFF RAMP / CARLOT PARKING
Date: Wed, Mar 01, 2023 Deployment Lead: Walter Fugaj

GHD
UNIT 1 705 MILLCREEK DRIVE
MISSISSAUGA ONTARIO, L5N 5M4
CANADA

Turning Movement Count (3 . APPLEBY LINE & HWY 407 WB OFF RAMP / CARLOT PARKING)

Start Time	N Approach APPLEBY LINE						E Approach HIGHWAY 407 NORTH RAMP							W Approach CAR POOL LOT						SE Approach HWY 407 WB ON RAMP			SW Approach HWY 407 WB ON RAMP			S Approach APPLEBY LINE					Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Bear Right N:SW	Thru N:S	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Bear Left E:SW	Left E:S	UTurn E:E	Peds E:	Approach Total	Hard Right W:SW	Right W:S	Left W:N	UTurn W:W	Peds W:	Approach Total	UTurn SE:SE	Peds SE:	Approach Total	UTurn SW:SW	Peds SW:	Approach Total	Hard Right S:SE	Thru S:N	Left S:W	UTurn S:S	Approach Total		
07:00:00	0	8	65	0	0	73	1	0	0	10	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	4	69	0	0	73	157	
07:15:00	0	8	76	0	0	84	0	1	0	10	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	5	90	2	0	97	192	
07:30:00	0	11	101	0	0	112	2	0	0	15	0	0	17	1	2	0	0	0	3	0	0	0	0	0	0	4	96	1	0	101	233	
07:45:00	1	18	98	0	0	117	4	0	1	21	0	0	26	0	1	0	0	0	1	0	0	0	0	0	0	4	126	2	0	132	276	858
08:00:00	0	17	96	0	0	113	3	0	0	20	0	0	23	1	3	0	0	0	4	0	0	0	0	0	0	7	114	2	0	123	263	964
08:15:00	0	10	96	0	0	106	6	0	0	28	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	4	88	0	0	92	232	1004
08:30:00	0	17	103	0	0	120	3	0	1	21	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	6	94	0	0	100	245	1016
08:45:00	1	13	103	0	0	117	3	0	0	35	0	0	38	0	1	0	0	0	1	0	0	0	0	0	0	3	63	2	0	68	224	964
BREAK																																
16:00:00	0	13	92	0	0	105	10	1	0	71	0	0	82	1	8	0	0	0	9	0	0	0	0	0	0	21	120	2	1	144	340	
16:15:00	1	24	110	0	0	135	13	1	0	85	0	0	99	0	0	0	0	0	0	0	0	0	0	0	0	22	119	0	0	141	375	
16:30:00	1	25	94	0	0	120	4	1	0	92	0	0	97	1	3	1	0	0	5	0	0	0	0	0	0	22	129	1	0	152	374	
16:45:00	1	22	106	0	0	129	9	1	0	95	0	0	105	0	0	0	0	0	0	0	0	0	0	0	0	16	151	1	2	170	404	1493
17:00:00	2	15	98	0	0	115	10	2	1	106	0	0	119	2	3	3	0	1	8	0	0	0	0	1	0	12	146	3	0	161	403	1556
17:15:00	2	13	73	0	0	88	9	1	0	60	0	0	70	1	2	0	0	0	3	0	0	0	0	0	0	21	136	2	0	159	320	1501
17:30:00	0	16	92	0	0	108	5	3	0	68	0	0	76	3	4	3	0	0	10	0	0	0	0	0	0	13	122	2	0	137	331	1458
17:45:00	0	8	69	0	0	77	7	1	0	67	0	0	75	1	4	0	0	0	5	0	0	0	0	0	0	11	108	1	0	120	277	1331
Grand Total	9	238	1472	0	0	1719	89	12	3	804	0	0	908	11	31	7	0	1	49	0	0	0	0	1	0	175	1771	21	3	1970	**4646**	-
Approach%	0.5%	13.8%	85.6%	0%		-	9.8%	1.3%	0.3%	88.5%	0%		-	22.4%	63.3%	14.3%	0%		-	0%		-	0%		-	8.9%	89.9%	1.1%	0.2%	-	**-**	-
Totals %	0.2%	5.1%	31.7%	0%		37%	1.9%	0.3%	0.1%	17.3%	0%		19.5%	0.2%	0.7%	0.2%	0%		1.1%	0%		0%	0%		0%	3.8%	38.1%	0.5%	0.1%	42.4%	**-**	-
Heavy	0	7	44	0		-	1	3	0	30	0		-	3	3	1	0		-	0		-	0		-	7	39	3	0	-	**-**	-
Heavy %	0%	2.9%	3%	0%		-	1.1%	25%	0%	3.7%	0%		-	27.3%	9.7%	14.3%	0%		-	0%		-	0%		-	4%	2.2%	14.3%	0%	-	**-**	-
Bicycles	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-		-	-		-	-		-	-	-	-	-	-	**-**	-
Bicycle %	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-		-	-		-	-		-	-	-	-	-	-	**-**	-

Spectrum

Turning Movement Count
Location Name: APPLEBY LINE & HWY 407 WB OFF RAMP / CARLOT PARKING
Date: Wed, Mar 01, 2023 Deployment Lead: Walter Fugaj

GHD
UNIT 1 705 MILLCREEK DRIVE
MISSISSAUGA ONTARIO, L5N 5M4
CANADA

Peak Hour: 07:45 AM - 08:45 AM Weather: Overcast Clouds (-0.81 °C)

Start Time	N Approach APPLEBY LINE						E Approach HIGHWAY 407 NORTH RAMP							W Approach CAR POOL LOT							SE Approach HWY 407 WB ON RAMP			SW Approach HWY 407 WB ON RAMP			S Approach APPLEBY LINE					Int. Total (15 min)
	Right	Bear Right	Thru	UTurn	Peds	Approach Total	Right	Thru	Bear Left	Left	UTurn	Peds	Approach Total	Hard Right	Right	Left	UTurn	Peds	Approach Total	UTurn	Peds	Approach Total	UTurn	Peds	Approach Total	Hard Right	Thru	Left	UTurn	Approach Total	
07:45:00	1	18	98	0	0	117	4	0	1	21	0	0	26	0	1	0	0	0	1	0	0	0	0	0	0	4	126	2	0	132	276
08:00:00	0	17	96	0	0	113	3	0	0	20	0	0	23	1	3	0	0	0	4	0	0	0	0	0	0	7	114	2	0	123	263
08:15:00	0	10	96	0	0	106	6	0	0	28	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	4	88	0	0	92	232
08:30:00	0	17	103	0	0	120	3	0	1	21	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	6	94	0	0	100	245
Grand Total	1	62	393	0	0	456	16	0	2	90	0	0	108	1	4	0	0	0	5	0	0	0	0	0	0	21	422	4	0	447	**1016**
Approach%	0.2%	13.6%	86.2%	0%		-	14.8%	0%	1.9%	83.3%	0%		-	20%	80%	0%	0%		-	0%		-	0%		-	4.7%	94.4%	0.9%	0%	-	**-**
Totals %	0.1%	6.1%	38.7%	0%		44.9%	1.6%	0%	0.2%	8.9%	0%		10.6%	0.1%	0.4%	0%	0%		0.5%	0%		0%	0%		0%	2.1%	41.5%	0.4%	0%	44%	**-**
PHF	0.25	0.86	0.95	0		0.95	0.67	0	0.5	0.8	0		0.79	0.25	0.33	0	0		0.31	0		0	0		0	0.75	0.84	0.5	0	0.85	**-**
Heavy	0	3	9	0		12	0	0	0	5	0		5	1	0	0	0		1	0		0	0		0	2	14	1	0	17	**-**
Heavy %	0%	4.8%	2.3%	0%		2.6%	0%	0%	0%	5.6%	0%		4.6%	100%	0%	0%	0%		20%	0%		0%	0%		0%	9.5%	3.3%	25%	0%	3.8%	**-**
Lights	1	59	383	0		443	16	0	2	85	0		103	0	4	0	0		4	0		0	0		0	19	408	3	0	430	**-**
Lights %	100%	95.2%	97.5%	0%		97.1%	100%	0%	100%	94.4%	0%		95.4%	0%	100%	0%	0%		80%	0%		0%	0%		0%	90.5%	96.7%	75%	0%	96.2%	**-**
Single-Unit Trucks	0	2	5	0		7	0	0	0	3	0		3	0	0	0	0		0	0		0	0		0	2	7	0	0	9	**-**
Single-Unit Trucks %	0%	3.2%	1.3%	0%		1.5%	0%	0%	0%	3.3%	0%		2.8%	0%	0%	0%	0%		0%	0%		0%	0%		0%	9.5%	1.7%	0%	0%	2%	**-**
Buses	0	0	1	0		1	0	0	0	0	0		0	1	0	0	0		1	0		0	0		0	0	1	1	0	2	**-**
Buses %	0%	0%	0.3%	0%		0.2%	0%	0%	0%	0%	0%		0%	100%	0%	0%	0%		20%	0%		0%	0%		0%	0%	0.2%	25%	0%	0.4%	**-**
Articulated Trucks	0	1	3	0		4	0	0	0	2	0		2	0	0	0	0		0	0		0	0		0	0	6	0	0	6	**-**
Articulated Trucks %	0%	1.6%	0.8%	0%		0.9%	0%	0%	0%	2.2%	0%		1.9%	0%	0%	0%	0%		0%	0%		0%	0%		0%	0%	1.4%	0%	0%	1.3%	**-**
Bicycles on Road	0	0	1	0		1	0	0	0	0	0		0	0	0	0	0		0	0		0	0		0	0	0	0	0	0	**-**
Bicycles on Road %	0%	0%	0.3%	0%		0.2%	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	-	-	-	-	-	-	-	**-**
Pedestrians%	-	-	-	-	0%		-	-	-	-	-	0%		-	-	-	-	0%		-	0%		-	0%		-	-	-	-			**-**

Spectrum

Turning Movement Count
Location Name: APPLEBY LINE & HWY 407 WB OFF RAMP / CARLOT PARKING
Date: Wed, Mar 01, 2023 Deployment Lead: Walter Fugaj

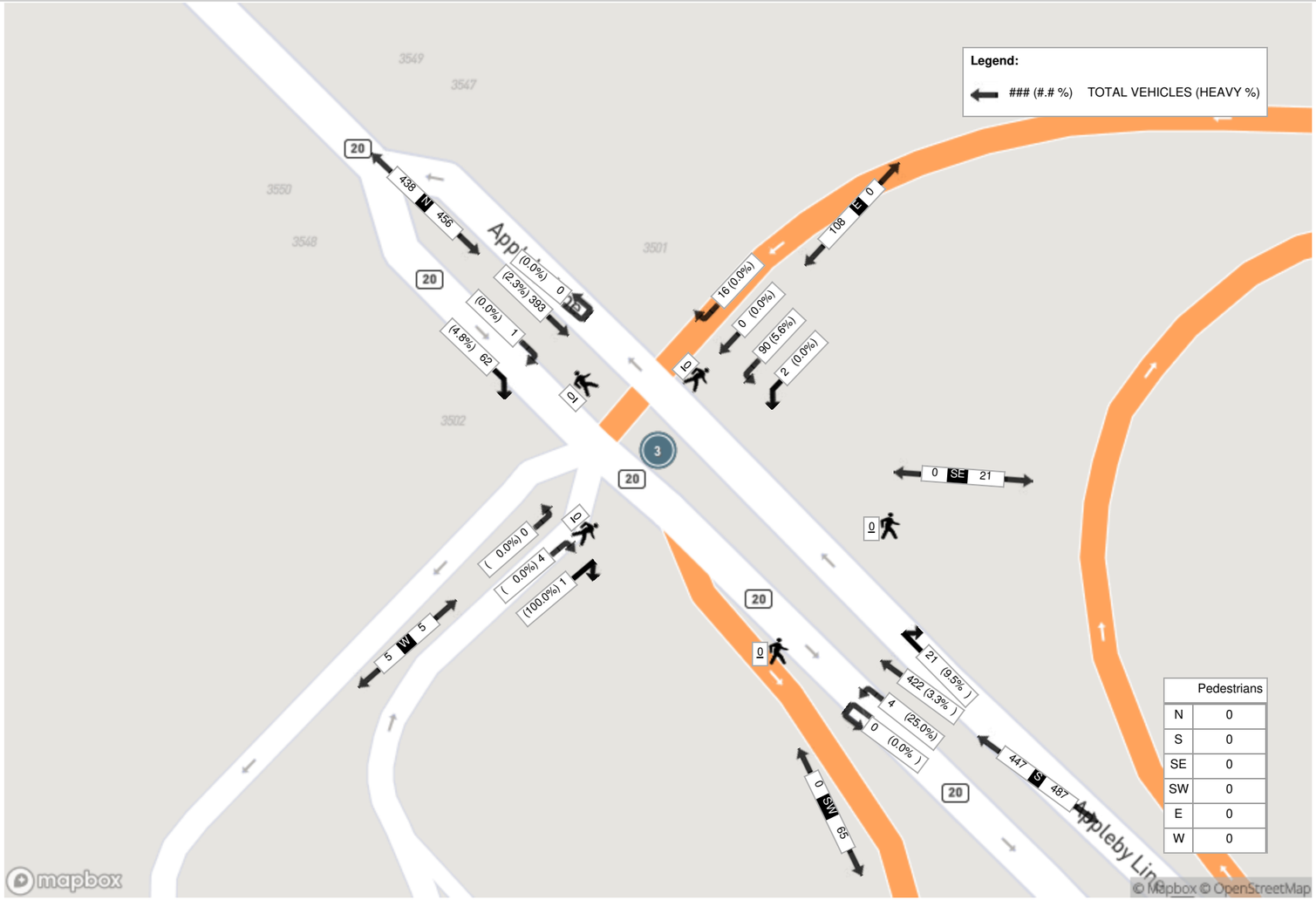
GHD
UNIT 1 705 MILLCREEK DRIVE
MISSISSAUGA ONTARIO, L5N 5M4
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Light Rain (3.45 °C)

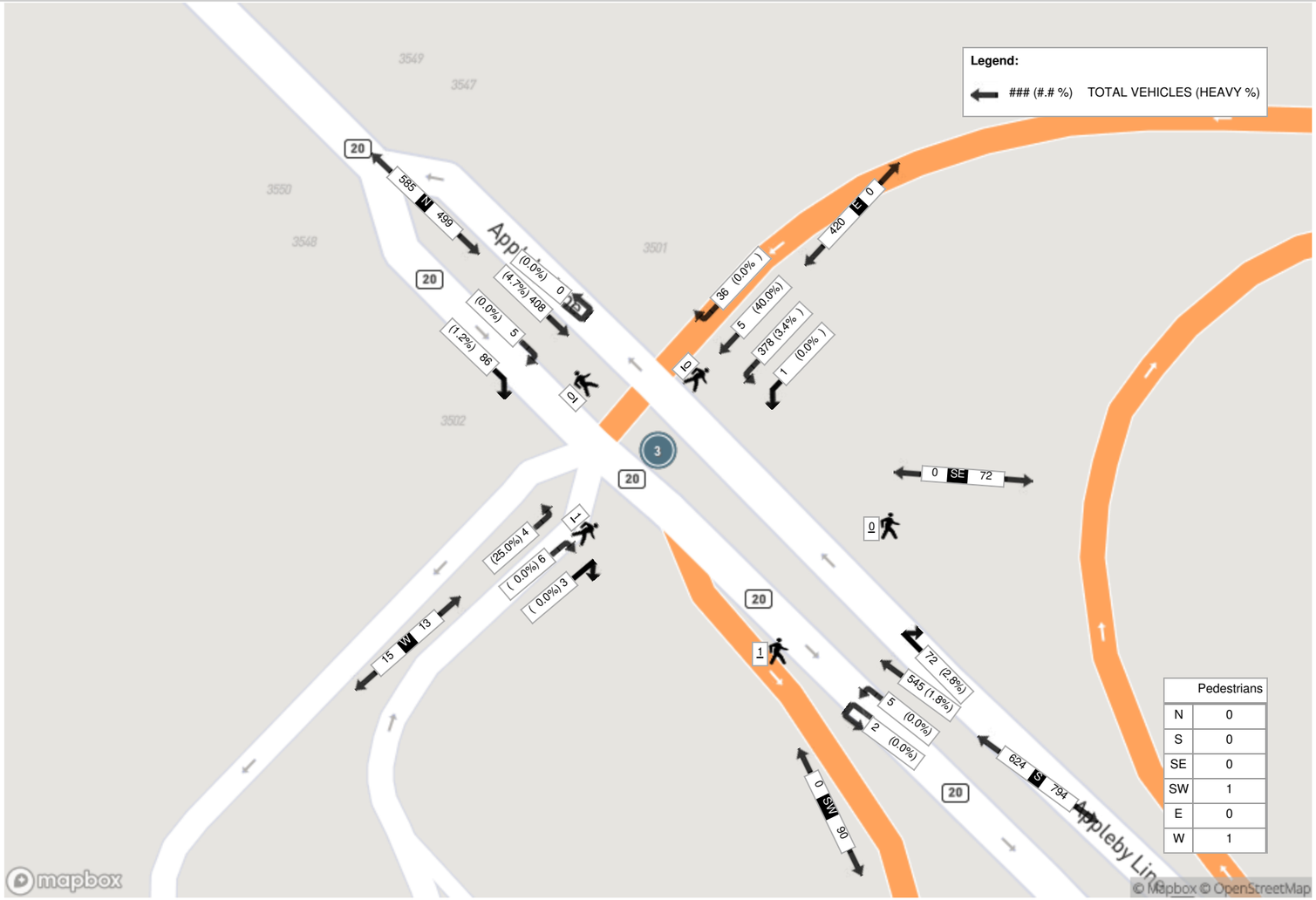
Start Time	N Approach APPLEBY LINE						E Approach HIGHWAY 407 NORTH RAMP							W Approach CAR POOL LOT							SE Approach HWY 407 WB ON RAMP			SW Approach HWY 407 WB ON RAMP			S Approach APPLEBY LINE					Int. Total (15 min)
	Right	Bear Right	Thru	UTurn	Peds	Approach Total	Right	Thru	Bear Left	Left	UTurn	Peds	Approach Total	Hard Right	Right	Left	UTurn	Peds	Approach Total	UTurn	Peds	Approach Total	UTurn	Peds	Approach Total	Hard Right	Thru	Left	UTurn	Approach Total	
16:15:00	1	24	110	0	0	135	13	1	0	85	0	0	99	0	0	0	0	0	0	0	0	0	0	0	0	22	119	0	0	141	375
16:30:00	1	25	94	0	0	120	4	1	0	92	0	0	97	1	3	1	0	0	5	0	0	0	0	0	0	22	129	1	0	152	374
16:45:00	1	22	106	0	0	129	9	1	0	95	0	0	105	0	0	0	0	0	0	0	0	0	0	0	0	16	151	1	2	170	404
17:00:00	2	15	98	0	0	115	10	2	1	106	0	0	119	2	3	3	0	1	8	0	0	0	0	1	0	12	146	3	0	161	403
Grand Total	5	86	408	0	0	499	36	5	1	378	0	0	420	3	6	4	0	1	13	0	0	0	0	1	0	72	545	5	2	624	**1556**
Approach%	1%	17.2%	81.8%	0%		-	8.6%	1.2%	0.2%	90%	0%		-	23.1%	46.2%	30.8%	0%		-	0%		-	0%		-	11.5%	87.3%	0.8%	0.3%	-	-
Totals %	0.3%	5.5%	26.2%	0%		32.1%	2.3%	0.3%	0.1%	24.3%	0%		27%	0.2%	0.4%	0.3%	0%		0.8%	0%		0%	0%		0%	4.6%	35%	0.3%	0.1%	40.1%	-
PHF	0.63	0.86	0.93	0		0.92	0.69	0.63	0.25	0.89	0		0.88	0.38	0.5	0.33	0		0.41	0		0	0		0	0.82	0.9	0.42	0.25	0.92	-
Heavy	0	1	19	0		20	0	2	0	13	0		15	0	0	1	0		1	0		0	0		0	2	10	0	0	12	-
Heavy %	0%	1.2%	4.7%	0%		4%	0%	40%	0%	3.4%	0%		3.6%	0%	0%	25%	0%		7.7%	0%		0%	0%		0%	2.8%	1.8%	0%	0%	1.9%	-
Lights	5	85	389	0		479	36	3	1	365	0		405	3	6	3	0		12	0		0	0		0	70	535	5	2	612	-
Lights %	100%	98.8%	95.3%	0%		96%	100%	60%	100%	96.6%	0%		96.4%	100%	100%	75%	0%		92.3%	0%		0%	0%		0%	97.2%	98.2%	100%	100%	98.1%	-
Single-Unit Trucks	0	0	12	0		12	0	0	0	7	0		7	0	0	0	0		0	0		0	0		0	1	6	0	0	7	-
Single-Unit Trucks %	0%	0%	2.9%	0%		2.4%	0%	0%	0%	1.9%	0%		1.7%	0%	0%	0%	0%		0%	0%		0%	0%		0%	1.4%	1.1%	0%	0%	1.1%	-
Buses	0	0	2	0		2	0	2	0	0	0		2	0	0	1	0		1	0		0	0		0	0	1	0	0	1	-
Buses %	0%	0%	0.5%	0%		0.4%	0%	40%	0%	0%	0%		0.5%	0%	0%	25%	0%		7.7%	0%		0%	0%		0%	0%	0.2%	0%	0%	0.2%	-
Articulated Trucks	0	1	5	0		6	0	0	0	6	0		6	0	0	0	0		0	0		0	0		0	1	3	0	0	4	-
Articulated Trucks %	0%	1.2%	1.2%	0%		1.2%	0%	0%	0%	1.6%	0%		1.4%	0%	0%	0%	0%		0%	0%		0%	0%		0%	1.4%	0.6%	0%	0%	0.6%	-
Bicycles on Road	0	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 on Road %	0%	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	-	-	-	-	-	1	-	-	0	-	-	1	-	-	-	-	-	-	-	**-**
Pedestrians%	-	-	-	-	0%		-	-	-	-	-	0%		-	-	-	-	50%		-	0%		-	50%		-	-	-	-			**-**

GHD
UNIT 1 705 MILLCREEK DRIVE
MISSISSAUGA ONTARIO, L5N 5M4
CANADA

Peak Hour: 07:45 AM - 08:45 AM Weather: Overcast Clouds (-0.81 °C)



Peak Hour: 04:15 PM - 05:15 PM Weather: Light Rain (3.45 °C)



Intersection Name:	TS ID:	Line No:	IP address:
Appleby Ln @ Palladium Way	795	9	172.22.143..2

Controller Make:	Model:
Econolite	ACS/3

Type of Operation: 8 Phase Semi-Actuated

No	Date Y	Date M	Date D	Description	Prepared by
1	2015	7	11	Pan Am Games Tinings Implemnted from July 11 to 19 & 21,21 Aug 4 to 13	MA

*- Start from Main Manu

PHASE DESCRIPTION

Ph1		Ph5	NB LT - Appleby Ln
Ph2	NB - Appleby Ln	Ph6	SB - Appleby Ln
Ph3		Ph7	
Ph4	EB - Palladium Way	Ph8	WB - Harrison Cres

CONFIGURATION (PHASE SEQ): PHASE IN USE/EXCLUSIVE PED (MM) *- 1 - 2

	Phase:	1	2	3	4	5	6	7	8
Phase in Use	:		X		X	X	X		X
Exclusive PED	:								

CONTROLLER TIMING DATA - VEHICLE TIMING * - 2 - 1

Timing Plan: 1	Phase:	1	2	3	4	5	6	7	8
Minimum Green	:		8		8	7	8		8
Walk	:		7		7		7		7
Ped. Clearance	:		19		27		19		27
Vehicle Extension	:		3		3	3	3		3
MAX 1	:		45		30	15	45		30
MAX 2	:		45		30	15	45		30
Yellow Change	:		4		4	3	4		4
Red Clearance	:		2		3	1	2		3

PHASE DATA - VEHICLE AND PEDESTRIAN RECALLS * - 2 - 8

	Phase:	1	2	3	4	5	6	7	8
Lock Detector	:								
Vehicle Recall	:								
Pedestrian Recall	:		X				X		
MAX Recall	:		X				X		
Soft Recall	:								

COORDINATION: COORDINATOR PATTERN, SPLIT PATTERN * - 3 - 2, - 3 - 3

Coordinator Pattern (CP)	Cycle Length	Offset (sec)	Timing Plan	Split Pattern	Phases (sec) 1	2	3	4	5	6	7	8
11	120	104	1	11		78		42	12	66		42
12	100	61	1	12		72		28	19	53		28
13	100	90	1	13		73		27	12	61		27
10	0	0	1	10		0		0	0	0		0

Intersection Name:	TS ID:	Line No:	IP address:
Appleby Ln @ Palladium Way	795	9	172.22.143..2
Controller Make: Econolite	**Model:** ACS/3		

CP # 1, 2, 10	Phase:	1	2	3	4	5	6	7	8
Coord Phase	:		X				X		
Vehicle Recall	:								
Pedestrian Recall *(3-3, 5-2)	:		X				X		
Recall to MAX Time	:								
Phase Omit	:								
Special Function Outputs	:								

Coordinator Pattern #	Prefer.	Phase							
		1	2	3	4	5	6	7	8
	1								
	2								

X - select "." deselect

TIME BASE: ACTION PLAN, DAY PLAN *** - 5 - 2, - 5 - 3, -5 - 4**

Day Plan	Sched. #	Action Plan	Time Period	Pattern	Timing Plan
11	11	11	06:00	11	1
11	11	12	09:00	12	1
11	11	13	16:00	13	1
11	11	12	19:00	12	1
11	11	10	22:00	254	1

Schedule 1 = Day Plan 1
Schedule 2 = Day Plan 2
Schedule 3 = Day Plan 3

Day Plan 1 (Weekday)
Day Plan 2 (Saturday)
Day Plan 3 (Sunday, Holidays)

Action Plan 10 = free (254)

TIME BASE DATA - TIME OF YEAR EVENTS *** - 5 - 5**

Events	Exception Day		MON/ MON	DOW/ DOW	WOM/ Year	Day Plan
New Year's Day	1	Fixed	1	1	0	3
Family Day	2	Float	2	2	3	3
Good Friday	3	Float	4	6	1	3
Victoria Day	4	Float	5	2	3	3
Canada Day	5	Fixed	7	1	0	3
Civic Day	6	Float	8	2	1	3
Labour Day	7	Float	9	2	1	3
Thanksgiving	8	Float	10	2	2	3
Christmas Day	9	Fixed	12	25	0	3

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B		B		B		B							
Sequence 1																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 2																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 3																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 4																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 5																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 6																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 7																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 8																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 9																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 10																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 11																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 12																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 13																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 14																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 15																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 16																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use		X				X		X								
Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Description																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	CDA6
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Timing	**1**		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Phases	**2**	X		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	X		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
	6	.	.	.	.	X		.	.	.	.	.	.	.	.	.	.
	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
	8	.	.	.	.	.	.	X		.	.	.	.	.	.	.	.
	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
Phase	**6**	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
Must	**7**	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
Gap	**8**	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
With	**9**	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
Phase	**10**	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
	Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	.				-	Auto	X		
2	2	V				-	Auto	X		X
3	3	.				-	Auto	X		
4	4	.				-	Auto	X		X
5	5	.				+	Auto	X		
6	6	V				+	Auto	X		X
7	7	.				+	Auto	X		
8	8	V				+	Auto	X		X
9	2	.				-	Auto			
10	4	.				-	Auto			
11	6	.				+	Auto			
12	8	.				+	Auto			
13	1	.				-	Auto	X		
14	2	.				+	Auto	X		X
15	3	.				-	Auto	X		
16	4	.				+	Auto	X		X

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility	X	X						
Detector Rack	X							

Enable TS2/MMU Type Cabinet: No
Enable MMU Extended Status: Yes
Enable SDLC Stop Time: Yes
Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	**Channel 2**

Color Check Enable (MM) 1-4-3

Enable Color Check: No

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green																
Yellow																
Red																

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

City of Burlington

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MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Configuration Communications 1 (SDLC)

Ethernet Port Configuration (MM) 1-5-1

Controller IP:	172.22.234.2
Subnet Mask:	255.255.0.0
Default Gateway IP:	172.22.0.255
Server IP:	192.168.210.120

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec):	0
NTCIP UDP Port:	501
Ethernet Priority:	1
Port 2 Priority (Port C50S for 2070):	4
Port 3A Priority (Port C21S for 2070):	2
Port 3B Priority (Port C22S for 2070):	3

Port Configuration (MM) 1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Protocol	TERMINAL	NTCIP	ECPIP
Enable	No	No	No
Data Rate (BPS)	9600	19.2K	1200
Data, Parity, Stop	8 N 1	8 N 1	8 N 1
Address	0	0	0
Telemetry Response Delay	0.0	0.0	0.9
Duplex - Half or Full	Half	Full	Full
Flow Control	Yes	Yes	Yes
Group Address	0	0	0
Single Flag Enable	Yes	Yes	Yes
RTS to CTS Delay	n/a	n/a	14.0
RTS Turn Off Delay	n/a	n/a	2.0
Dropout Time	10	10	10
Early RTS	n/a	n/a	No
Telemetry Mode	n/a	n/a	FSK
ATCS Railroad	0	n/a	n/a
ATCS Railroad Line	0	n/a	n/a
ATCS Group	0	n/a	n/a
Wayside Device	0	n/a	n/a
ATC Device	0	n/a	n/a
Wayside Subnode	0	n/a	n/a
ATC Subnode	0	n/a	n/a

ECPIP (MM) 1-5-6

Controller Address:	0
Expanded System Detector Address:	0

System Detector Assignment

System Detector	Local Detector

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Configuration Logging / Display

Event Logging (MM) 1-6-1

Critical RFE's (MMU/TF)	Yes	3 Critical Errors Within 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Fault	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preemption Events	Yes	TSP Events	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online / Offline	Yes		

Alarm Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM) 1-7-2

Key Click Enable:	No
Backlight Enable:	Yes
LED Mode:	Auto
Display Mode:	Basic
Screen Format:	Basic
Trans Mode Pop-Up Disable:	No

Sign On (MM) 8-5

Sign On Message Line 1: City Of Burlington
Sign On Message Line 2: 8 Phase Econolite White

Software Modules (MM) 8-7

Application Version: 02.64.00
OS (Boot) Version: 01.14.03

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Logic Processor Page 1

Logic Statement Control (MM) 1-8-1

Logic #	Statement Control
1	E
2	E
3	E
4	E
5	E

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Logic Processor Page 2

Logic Statements (MM) 1-8-2

Logic #: 1

If:

	Assignment	#	State
IF	LP CIB CODE ON		169

Then:

Assignment	#	State
CTR SET TMGPLN A-C	2	On

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Controller Timing Plan (MM) 2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		EB				WB		SB								
Min Green	0	8	0	0	0	8	0	8	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	0	0	7	0	7	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	18	0	0	0	18	0	20	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	0	55	0	0	0	55	0	35	35	35	35	35	35	35	35	35
Max2	0	55	0	0	0	55	0	35	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	4.6	0.0	0.0	0.0	4.6	0.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	0.0	1.9	0.0	0.0	0.0	1.9	0.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		EB				WB		SB								
Min Green	8	8	8	8	8	8	8	8	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	12	0	8	0	12	0	8	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	15	35	15	25	15	35	15	25	35	35	35	35	35	35	35	35
Max2	15	35	15	25	15	35	15	25	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	0.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		EB				WB		SB								
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		EB				WB		SB								
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.0	0.0	5
B02	5	0	7	3.0	0.0	5
C03	5	0	7	3.0	0.0	5
D04	5	0	7	3.0	0.0	5
E05	5	0	7	3.0	0.0	5
F06	5	0	7	3.0	0.0	5
G07	5	0	7	3.0	0.0	5
H08	5	0	7	3.0	0.0	5
I09	5	0	7	3.0	0.0	5
J10	5	0	7	3.0	0.0	5
K11	5	0	7	3.0	0.0	5
L12	5	0	7	3.0	0.0	5
M13	5	0	7	3.0	0.0	5
N14	5	0	7	3.0	0.0	5
O15	5	0	7	3.0	0.0	5
P16	5	0	7	3.0	0.0	5

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Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

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Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	Y
3	.
4	.
5	.
6	Y
7	.
8	.
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
B
C
D

Flash Thru Mon: No
Flash Time: 0
All Red: 0
Power Start Seq: 1
MUTCD Enabled: No
Y->G: n/a

Automatic Flash

Entry
2
6

Exit
2
6

Overlap Exit
A
B
C
D

Flash Thru Mon: No
Exit Flash: W
Minimum Flash: 8
Mimimum Recall: No
Cycle Through Phase: No

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Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guar Passage																
Non-Act I		X				X										
Non-Act II																
Dual Entry																
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk		X				X										
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off Unit Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall		X				X										
Max Recall		X				X										
Soft Recall																
No Rest																
AI Calc																

Plan # 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector									X	X	X	X	X	X	X	X
Vehicle Recall																
Ped Recall		X				X										
Max Recall	X	X	X	X	X	X	X	X								
Soft Recall																
No Rest																
AI Calc																

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Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	PTN
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Float
Offset Reference	Lead	Use Ped Time	No
Ped Recall	No	Ped Reservice	No
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	140	Std (COS)	9	Offsets In	Seconds
Offset Value	48s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Splits (Split Pat 1)	0	116	0	0	0	116	0	24	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	116s	140s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	115	Std (COS)	17	Offsets In	Seconds
Offset Value	51s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Splits (Split Pat 2)	0	89	0	0	0	89	0	26	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	89s	115s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	140	Std (COS)	25	Offsets In	Seconds
Offset Value	57s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Splits (Split Pat 3)	0	98	0	0	0	98	0	42	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	98s	140s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 7

Split Pattern	7	TS2 (Pat-Off)	2-1	Splits In	Seconds
Cycle	140	Std (COS)	81	Offsets In	Seconds
Offset Value	48s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Splits (Split Pat 7)	0	116	0	0	0	116	0	24	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	116s	140s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 8

Split Pattern	8	TS2 (Pat-Off)	2-2	Splits In	Seconds
Cycle	115	Std (COS)	89	Offsets In	Seconds
Offset Value	51s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Splits (Split Pat 8)	0	89	0	0	0	89	0	26	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	89s	115s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 9

Split Pattern	9	TS2 (Pat-Off)	2-3	Splits In	Seconds
Cycle	140	Std (COS)	97	Offsets In	Seconds
Offset Value	57s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	2		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Splits (Split Pat 9)	0	98	0	0	0	98	0	42	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	98s	140s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

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Coordination Split Pattern
Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Split (seconds)	0	116	0	0	0	116	0	24	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	116s	140s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Split (seconds)	0	89	0	0	0	89	0	26	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	89s	115s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Split (seconds)	0	98	0	0	0	98	0	42	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	98s	140s	0s	0s

Split Pattern # 7

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Split (seconds)	0	116	0	0	0	116	0	24	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	116s	140s	0s	0s

Split Pattern # 8

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Split (seconds)	0	89	0	0	0	89	0	26	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	89s	115s	0s	0s

Split Pattern # 9

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB				WB		SB								
Split (seconds)	0	98	0	0	0	98	0	42	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	98s	140s	0s	0s

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Preempt Plan

Preempt Plan (MM) 4-1

Preempt Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases		X				X										
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	0	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	Yes
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	8	8	4.0	2.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	0	0.0	0	4.0	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Preempt Preempt Filtering
Enable Preempt Filtering & TSP/SCP (MM) 4-2

Input	Solid	Pulsing
1	...BYPASSED...	...BYPASSED...
2	...BYPASSED...	...BYPASSED...
3	PREEMPTION 3	PREEMPTION 7
4	PREEMPTION 4	PREEMPTION 8
5	PREEMPTION 5	PREEMPTION 9
6	PREEMPTION 6	PREEMPTION 10
7	...BYPASSED...	...BYPASSED...
8	...BYPASSED...	...BYPASSED...
9	...BYPASSED...	...BYPASSED...
10	...BYPASSED...	...BYPASSED...

City of Burlington

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MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Preempt TSP/SCP Plan and Split

TSP / SCP Plan (MM) 4-3

TSP/SCP Plan	Enable Option	Signal Type	Det Lock	Delay Time	Max Presence	PMT Enables Reservice	No Delay in TSP	Action SF Inhibit	Reservice Cycles	Bus Heading
1	No	Solid	No	0	0	No	False	0	0	NB
2	No	Solid	No	0	0	No	False	0	0	SB
3	No	Solid	No	0	0	No	False	0	0	EB
4	No	Solid	No	0	0	No	False	0	0	WB
5	No	Solid	No	0	0	No	False	0	0	.
6	No	Solid	No	0	0	No	False	0	0	.

Mode: TSP
Free Default Pattern: 120
Headway Allowance: 0

TSP/SCP Plan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

TSP / SCP Split Pattern (MM) 4-4

TSP/SCP Split Pattern	Max Type	Phase															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4	Max Reduction	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255

City of Burlington

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MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Time Base Clock/Calendar
Clock/Calendar Data (MM) 5-1

Manual Action Plan:	0
SYNC Reference Time:	00:00
SYNC Reference:	Reference Time
Day Light Savings:	No
Time Reset Input Set Time:	0:00:00
Standard Time From GMT:	0

City of Burlington

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MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2

Pattern	2	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 7

Pattern	7	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 8

Pattern	8	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 9

Pattern	9	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 10

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1

Event	Action Plan	Start Time
1	1	06:00
2	2	09:00
3	3	15:00
4	2	19:00
5	10	21:30

Day Plan #2

Event	Action Plan	Start Time
1	2	09:00
2	10	21:00

Day Plan #3

Event	Action Plan	Start Time
1	2	09:00
2	10	20:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
							X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 3

Day Plan No.: 3

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Time Base Exceptions
Exception Day Program (MM) 5-5

Excep Day	Float/Fixed	Mon/Mon	DOW/DOM	WOM/Year	Day Plan
1	FIXED	1	1	0	3
2	FLOAT	2	2	3	3
3	FIXED	4	19	0	3
4	FLOAT	5	2	3	3
5	FIXED	7	1	0	3
6	FLOAT	8	2	1	3
7	FLOAT	9	2	1	3
8	FLOAT	10	2	2	3
9	FIXED	12	25	0	3

City of Burlington

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MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
3	8	8	S
4	4		S
5	5		S
7	8	8	S
8	8		S
9	9		S
10	10		S
11	11		S
12	12		S
13	13		S
14	14		S
15	15		S
16	16		S

Vehicle Detector Plan Number - 2

Veh Detector	Assigned Phase	Called Phase	Type

Vehicle Detector Plan Number - 3

Veh Detector	Assigned Phase	Called Phase	Type

Vehicle Detector Plan Number - 4

Veh Detector	Assigned Phase	Called Phase	Type

Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description
1	S-STANDARD	No	
2	S-STANDARD	No	
3	S-STANDARD	No	
4	S-STANDARD	No	
5	S-STANDARD	No	
6	S-STANDARD	No	
7	S-STANDARD	No	
8	S-STANDARD	No	
9	S-STANDARD	No	
10	S-STANDARD	No	
11	S-STANDARD	No	
12	S-STANDARD	No	
13	S-STANDARD	No	
14	S-STANDARD	No	
15	S-STANDARD	No	
16	S-STANDARD	No	
17	S-STANDARD	Yes	
18	S-STANDARD	Yes	
19	S-STANDARD	Yes	
20	S-STANDARD	Yes	
21	S-STANDARD	Yes	
22	S-STANDARD	Yes	
23	S-STANDARD	Yes	
24	S-STANDARD	Yes	

25	S-STANDARD	Yes	
26	S-STANDARD	Yes	
27	S-STANDARD	Yes	
28	S-STANDARD	Yes	
29	S-STANDARD	Yes	
30	S-STANDARD	Yes	
31	S-STANDARD	Yes	
32	S-STANDARD	Yes	
33	S-STANDARD	Yes	
34	S-STANDARD	Yes	
35	S-STANDARD	Yes	
36	S-STANDARD	Yes	
37	S-STANDARD	Yes	
38	S-STANDARD	Yes	
39	S-STANDARD	Yes	
40	S-STANDARD	Yes	
41	S-STANDARD	Yes	
42	S-STANDARD	Yes	
43	S-STANDARD	Yes	
44	S-STANDARD	Yes	
45	S-STANDARD	Yes	
46	S-STANDARD	Yes	
47	S-STANDARD	Yes	
48	S-STANDARD	Yes	
49	S-STANDARD	Yes	
50	S-STANDARD	Yes	
51	S-STANDARD	Yes	
52	S-STANDARD	Yes	
53	S-STANDARD	Yes	
54	S-STANDARD	Yes	
55	S-STANDARD	Yes	
56	S-STANDARD	Yes	
57	S-STANDARD	Yes	
58	S-STANDARD	Yes	
59	S-STANDARD	Yes	
60	S-STANDARD	Yes	
61	S-STANDARD	Yes	
62	S-STANDARD	Yes	
63	S-STANDARD	Yes	
64	S-STANDARD	Yes	

Vehicle Detector Plan Number - 1

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	9	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	11	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	12	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	13	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	14	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	15	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	16	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

19	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay

Vehicle Detector Plan Number - 3

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay

Vehicle Detector Plan Number - 4

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay

Ped Detector Phase Assignment (MM) 6-3

Mode: NTCIP

Called Phase	Detector
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 West Ramp - TS 704 - Econolite Type - ASC/3

Detectors

Detectors - Pg 2

Log - Speed Detector Setup (MM) 6-4

NTCIP Log Period: 60 ECPI Log Period: 0 Length Unit: Inches

Speed Detector	Local Detector	One/Two Detector	Vehicle Length	Trap length	Enable Log
1	0	1	0	0	No
2	0	1	0	0	No
3	0	1	0	0	No
4	0	1	0	0	No
5	0	1	0	0	No
6	0	1	0	0	No
7	0	1	0	0	No
8	0	1	0	0	No
9	0	1	0	0	No
10	0	1	0	0	No
11	0	1	0	0	No
12	0	1	0	0	No
13	0	1	0	0	No
14	0	1	0	0	No
15	0	1	0	0	No
16	0	1	0	0	No

Vehicle Detector Diagnostics (MM) 6-5

Veh Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Pedestrian Detector Diagnostics (MM) 6-6

Ped Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B		B		B		B							
Sequence 1																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 2																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 3																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 4																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 5																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 6																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 7																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 8																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 9																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 10																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 11																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 12																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 13																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 14																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 15																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 16																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use		X		X		X										
Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB		WB										
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Description																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	A8C6
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Timing	**1**		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Phases	**2**	X		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	X		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
	6	.	.	.	.	X		.	.	.	.	.	.	.	.	.	.
	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
	8	.	.	.	.	.	.	X		.	.	.	.	.	.	.	.
	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
Phase	**6**	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
Must	**7**	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
Gap	**8**	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
With	**9**	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
Phase	**10**	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
	Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	.				-	Auto	X		
2	2	V				-	Auto	X		X
3	3	.				-	Auto	X		
4	4	V				-	Auto	X		X
5	5	.				+	Auto	X		
6	6	V				+	Auto	X		X
7	7	.				+	Auto	X		
8	8	.				+	Auto	X		X
9	2	.				-	Auto			
10	4	.				-	Auto			
11	6	.				+	Auto			
12	8	.				+	Auto			
13	1	.				-	Auto	X		
14	2	O				+	Auto	X		X
15	3	O				-	Auto	X		
16	4	O				+	Auto	X		X

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility	X	X						
Detector Rack	X							

Enable TS2/MMU Type Cabinet: No
Enable MMU Extended Status: Yes
Enable SDLC Stop Time: Yes
Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	**Channel 2**

Color Check Enable (MM) 1-4-3

Enable Color Check: No

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green																
Yellow																
Red																

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Configuration Communications 1 (SDLC)

Ethernet Port Configuration (MM) 1-5-1

Controller IP:	172.22.235.2
Subnet Mask:	255.255.0.0
Default Gateway IP:	172.22.0.255
Server IP:	192.168.210.120

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec):	0
NTCIP UDP Port:	501
Ethernet Priority:	1
Port 2 Priority (Port C50S for 2070):	4
Port 3A Priority (Port C21S for 2070):	2
Port 3B Priority (Port C22S for 2070):	3

Port Configuration (MM) 1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Protocol	TERMINAL	NTCIP	ECPIP
Enable	No	No	No
Data Rate (BPS)	9600	19.2K	1200
Data, Parity, Stop	8 N 1	8 N 1	8 N 1
Address	0	0	0
Telemetry Response Delay	0.0	0.0	0.9
Duplex - Half or Full	Half	Full	Full
Flow Control	Yes	Yes	Yes
Group Address	0	0	0
Single Flag Enable	Yes	Yes	Yes
RTS to CTS Delay	n/a	n/a	14.0
RTS Turn Off Delay	n/a	n/a	2.0
Dropout Time	10	10	10
Early RTS	n/a	n/a	No
Telemetry Mode	n/a	n/a	FSK
ATCS Railroad	0	n/a	n/a
ATCS Railroad Line	0	n/a	n/a
ATCS Group	0	n/a	n/a
Wayside Device	0	n/a	n/a
ATC Device	0	n/a	n/a
Wayside Subnode	0	n/a	n/a
ATC Subnode	0	n/a	n/a

ECPIP (MM) 1-5-6

Controller Address:	0
Expanded System Detector Address:	0

System Detector Assignment

System Detector	Local Detector

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Configuration Logging / Display

Event Logging (MM) 1-6-1

Critical RFE's (MMU/TF)	Yes	3 Critical Errors Within 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Fault	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preemption Events	Yes	TSP Events	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online / Offline	Yes		

Alarm Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM) 1-7-2

Key Click Enable:	No
Backlight Enable:	Yes
LED Mode:	Auto
Display Mode:	Basic
Screen Format:	Basic
Trans Mode Pop-Up Disable:	No

Sign On (MM) 8-5

Sign On Message Line 1: City Of Burlington
Sign On Message Line 2: 8 Phase Econolite White

Software Modules (MM) 8-7

Application Version: 02.64.00
OS (Boot) Version: 01.14.03

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Logic Processor Page 1

Logic Statement Control (MM) 1-8-1

Logic #	Statement Control
1	D
2	D
3	D
4	D
5	D

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Logic Processor Page 2

Logic Statements (MM) 1-8-2

Logic #: 1

If:

	Assignment	#	State
IF	LP CIB CODE ON		169

Then:

Assignment	#	State
CTR SET TMGPLN A-C	2	On

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Controller Timing Plan (MM) 2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		EB		NB		WB										
Min Green	8	8	8	8	8	8	8	8	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	0	0	7	0	0	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	18	0	0	0	18	0	0	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	15	55	15	35	15	55	15	35	35	35	35	35	35	35	35	35
Max2	15	55	15	35	15	55	15	35	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.6	4.0	4.0	4.0	4.6	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	0.0	1.8	0.0	2.0	2.0	1.8	0.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		EB		NB		WB										
Min Green	8	8	8	8	8	8	8	8	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	12	0	8	0	12	0	8	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	15	35	15	25	15	35	15	25	35	35	35	35	35	35	35	35
Max2	15	35	15	25	15	35	15	25	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	0.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		EB		NB		WB										
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		EB		NB		WB										
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.0	0.0	5
B02	5	0	7	3.0	0.0	5
C03	5	0	7	3.0	0.0	5
D04	5	0	7	3.0	0.0	5
E05	5	0	7	3.0	0.0	5
F06	5	0	7	3.0	0.0	5
G07	5	0	7	3.0	0.0	5
H08	5	0	7	3.0	0.0	5
I09	5	0	7	3.0	0.0	5
J10	5	0	7	3.0	0.0	5
K11	5	0	7	3.0	0.0	5
L12	5	0	7	3.0	0.0	5
M13	5	0	7	3.0	0.0	5
N14	5	0	7	3.0	0.0	5
O15	5	0	7	3.0	0.0	5
P16	5	0	7	3.0	0.0	5

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Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

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Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	Y
3	.
4	.
5	.
6	Y
7	.
8	.
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
B
C
D

Flash Thru Mon: No
Flash Time: 0
All Red: 0
Power Start Seq: 1
MUTCD Enabled: No
Y->G: n/a

Automatic Flash

Entry
2
6

Exit
2
6

Overlap Exit
A
B
C
D

Flash Thru Mon: No
Exit Flash: W
Minimum Flash: 8
Mimimum Recall: No
Cycle Through Phase: No

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Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guar Passage																
Non-Act I		X				X										
Non-Act II																
Dual Entry		X		X		X		X								
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk		X				X										
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off Unit Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector									X	X	X	X	X	X	X	X
Vehicle Recall																
Ped Recall		X				X										
Max Recall		X				X										
Soft Recall																
No Rest																
AI Calc																

Plan # 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector									X	X	X	X	X	X	X	X
Vehicle Recall																
Ped Recall		X				X										
Max Recall		X		X		X										
Soft Recall																
No Rest																
AI Calc																

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Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	PTN
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Float
Offset Reference	Lead	Use Ped Time	No
Ped Recall	No	Ped Reservice	No
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	140	Std (COS)	9	Offsets In	Seconds
Offset Value	44s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB		WB										
Splits (Split Pat 1)	0	105	0	35	0	105	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	140s	105s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	115	Std (COS)	17	Offsets In	Seconds
Offset Value	60s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB		WB										
Splits (Split Pat 2)	0	82	0	33	0	82	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	115s	82s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	140	Std (COS)	25	Offsets In	Seconds
Offset Value	55s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB		WB										
Splits (Split Pat 3)	0	95	0	45	0	95	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	140s	95s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Coordination Split Pattern
Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB		WB										
Split (seconds)	0	105	0	35	0	105	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	140s	105s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB		WB										
Split (seconds)	0	82	0	33	0	82	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	115s	82s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		EB		NB		WB										
Split (seconds)	0	95	0	45	0	95	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	140s	95s	0s	0s

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Preempt Plan

Preempt Plan (MM) 4-1

Preempt Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing																
Dwell Veh	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases		X				X										
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	0	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Yel	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	8	8	4.0	1.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	8	0.0	30	4.0	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Preempt Preempt Filtering
Enable Preempt Filtering & TSP/SCP (MM) 4-2

Input	Solid	Pulsing
1	...BYPASSED...	...BYPASSED...
2	...BYPASSED...	...BYPASSED...
3	PREEMPTION 3	PREEMPTION 7
4	PREEMPTION 4	PREEMPTION 8
5	PREEMPTION 5	PREEMPTION 9
6	PREEMPTION 6	PREEMPTION 10
7	...BYPASSED...	...BYPASSED...
8	...BYPASSED...	...BYPASSED...
9	...BYPASSED...	...BYPASSED...
10	...BYPASSED...	...BYPASSED...

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Preempt TSP/SCP Plan and Split

TSP / SCP Plan (MM) 4-3

TSP/SCP Plan	Enable Option	Signal Type	Det Lock	Delay Time	Max Presence	PMT Enables Reservice	No Delay in TSP	Action SF Inhibit	Reservice Cycles	Bus Heading
1	No	Solid	No	0	0	No	False	0	0	NB
2	No	Solid	No	0	0	No	False	0	0	SB
3	No	Solid	No	0	0	No	False	0	0	EB
4	No	Solid	No	0	0	No	False	0	0	WB
5	No	Solid	No	0	0	No	False	0	0	.
6	No	Solid	No	0	0	No	False	0	0	.

Mode: TSP
Free Default Pattern: 120
Headway Allowance: 0

TSP/SCP Plan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

TSP / SCP Split Pattern (MM) 4-4

TSP/SCP Split Pattern	Max Type	Phase															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4	Max Reduction	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Time Base Clock/Calendar
Clock/Calendar Data (MM) 5-1

Manual Action Plan:	0
SYNC Reference Time:	00:00
SYNC Reference:	Reference Time
Day Light Savings:	No
Time Reset Input Set Time:	0:00:00
Standard Time From GMT:	0

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2

Pattern	2	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 7

Pattern	7	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 8

Pattern	8	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 9

Pattern	9	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 10

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1

Event	Action Plan	Start Time
1	1	06:00
2	2	09:00
3	3	15:00
4	2	19:00
5	10	21:30

Day Plan #2

Event	Action Plan	Start Time
1	2	09:00
2	10	21:00

Day Plan #3

Event	Action Plan	Start Time
1	2	09:00
2	10	20:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
							X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 3

Day Plan No.: 3

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Time Base Exceptions
Exception Day Program (MM) 5-5

Excep Day	Float/Fixed	Mon/Mon	DOW/DOM	WOM/Year	Day Plan
1	FIXED	1	1	0	3
2	FLOAT	2	2	3	3
3	FIXED	4	19	0	3
4	FLOAT	5	2	3	3
5	FIXED	7	1	0	3
6	FLOAT	8	2	1	3
7	FLOAT	9	2	1	3
8	FLOAT	10	2	2	3
9	FIXED	12	25	0	3

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Assigned Phase	Called Phase	Type
1	1		S
2	2		S
3	4	4	S
4	4		S
5	5		S
6	6		S
7	4	4	S
8	4	4	S
9	9		S
10	10		S
11	11		S
12	12		S
13	13		S
14	14		S
15	15		S
16	16		S

Vehicle Detector Plan Number - 2

Veh Detector	Assigned Phase	Called Phase	Type

Vehicle Detector Plan Number - 3

Veh Detector	Assigned Phase	Called Phase	Type

Vehicle Detector Plan Number - 4

Veh Detector	Assigned Phase	Called Phase	Type

Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description
1	S-STANDARD	No	
2	S-STANDARD	No	
3	S-STANDARD	No	
4	S-STANDARD	No	
5	S-STANDARD	No	
6	S-STANDARD	No	
7	S-STANDARD	No	
8	S-STANDARD	No	
9	S-STANDARD	No	
10	S-STANDARD	No	
11	S-STANDARD	No	
12	S-STANDARD	No	
13	S-STANDARD	No	
14	S-STANDARD	No	
15	S-STANDARD	No	
16	S-STANDARD	No	
17	S-STANDARD	Yes	
18	S-STANDARD	Yes	
19	S-STANDARD	Yes	
20	S-STANDARD	Yes	
21	S-STANDARD	Yes	
22	S-STANDARD	Yes	

23	S-STANDARD	Yes	
24	S-STANDARD	Yes	
25	S-STANDARD	Yes	
26	S-STANDARD	Yes	
27	S-STANDARD	Yes	
28	S-STANDARD	Yes	
29	S-STANDARD	Yes	
30	S-STANDARD	Yes	
31	S-STANDARD	Yes	
32	S-STANDARD	Yes	
33	S-STANDARD	Yes	
34	S-STANDARD	Yes	
35	S-STANDARD	Yes	
36	S-STANDARD	Yes	
37	S-STANDARD	Yes	
38	S-STANDARD	Yes	
39	S-STANDARD	Yes	
40	S-STANDARD	Yes	
41	S-STANDARD	Yes	
42	S-STANDARD	Yes	
43	S-STANDARD	Yes	
44	S-STANDARD	Yes	
45	S-STANDARD	Yes	
46	S-STANDARD	Yes	
47	S-STANDARD	Yes	
48	S-STANDARD	Yes	
49	S-STANDARD	Yes	
50	S-STANDARD	Yes	
51	S-STANDARD	Yes	
52	S-STANDARD	Yes	
53	S-STANDARD	Yes	
54	S-STANDARD	Yes	
55	S-STANDARD	Yes	
56	S-STANDARD	Yes	
57	S-STANDARD	Yes	
58	S-STANDARD	Yes	
59	S-STANDARD	Yes	
60	S-STANDARD	Yes	
61	S-STANDARD	Yes	
62	S-STANDARD	Yes	
63	S-STANDARD	Yes	
64	S-STANDARD	Yes	

Vehicle Detector Plan Number - 1

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	9	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	11	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	12	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	13	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	14	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	15	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	16	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

17	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay

Vehicle Detector Plan Number - 3

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay

Vehicle Detector Plan Number - 4

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay

Ped Detector Phase Assignment (MM) 6-3

Mode: NTCIP

Called Phase	Detector
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Dundas St @ 407 East Ramp - TS 705 - Econolite Type - ASC/3

Detectors

Detectors - Pg 2

Log - Speed Detector Setup (MM) 6-4

NTCIP Log Period: 60 ECPI Log Period: 0 Length Unit: Inches

Speed Detector	Local Detector	One/Two Detector	Vehicle Length	Trap length	Enable Log
1	0	1	0	0	No
2	0	1	0	0	No
3	0	1	0	0	No
4	0	1	0	0	No
5	0	1	0	0	No
6	0	1	0	0	No
7	0	1	0	0	No
8	0	1	0	0	No
9	0	1	0	0	No
10	0	1	0	0	No
11	0	1	0	0	No
12	0	1	0	0	No
13	0	1	0	0	No
14	0	1	0	0	No
15	0	1	0	0	No
16	0	1	0	0	No

Vehicle Detector Diagnostics (MM) 6-5

Veh Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Pedestrian Detector Diagnostics (MM) 6-6

Ped Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	B		B		B		B		B							
Sequence 1																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 2																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 3																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 4																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 5																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 6																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 7																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 8																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 9																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 10																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 11																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 12																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 13																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 14																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 15																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 16																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases In Use		X		X		X										
Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
n/a	Barrier Mode

Phase and Overlap Descriptions

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Description																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	1878
Enable Automatic Backup to Datakey	No

Backup Prevent (MM) 1-1-3

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Timing	**1**		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Phases	**2**	X		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	X		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
	6	.	.	.	.	X		.	.	.	.	.	.	.	.	.	.
	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
	8	.	.	.	.	.	.	X		.	.	.	.	.	.	.	.
	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
Phase	**6**	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
Must	**7**	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
Gap	**8**	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
With	**9**	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
Phase	**10**	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
	Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	V				-	Auto	X		
2	2	V				-	Auto	X		X
3	3	V				-	Auto	X		
4	4	V				-	Auto	X		X
5	5	V				+	Auto	X		
6	6	V				+	Auto	X		X
7	7	V				+	Auto	X		
8	8	V				+	Auto	X		X
9	2	P				-	Auto			
10	4	P				-	Auto			
11	6	P				+	Auto			
12	8	P				+	Auto			
13	1	.				-	Auto	X		
14	2	.				+	Auto	X		X
15	3	.				-	Auto	X		
16	4	.				+	Auto	X		X

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility	X	X						
Detector Rack	X							

Enable TS2/MMU Type Cabinet: No
Enable MMU Extended Status: Yes
Enable SDLC Stop Time: Yes
Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	**Channel 2**

Color Check Enable (MM) 1-4-3

Enable Color Check: No

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green																
Yellow																
Red																

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Configuration Communications 1 (SDLC)

Ethernet Port Configuration (MM) 1-5-1

Controller IP:	172.22.144.2
Subnet Mask:	255.255.0.0
Default Gateway IP:	172.22.0.255
Server IP:	192.168.210.120

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec):	0
NTCIP UDP Port:	501
Ethernet Priority:	1
Port 2 Priority (Port C50S for 2070):	4
Port 3A Priority (Port C21S for 2070):	2
Port 3B Priority (Port C22S for 2070):	3

Port Configuration (MM) 1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Protocol	TERMINAL	NTCIP	ECPIP
Enable	No	No	Yes
Data Rate (BPS)	9600	19.2K	1200
Data, Parity, Stop	8 N 1	8 N 1	8 O 1
Address	0	0	1
Telemetry Response Delay	0.0	0.0	0.9
Duplex - Half or Full	Half	Full	Full
Flow Control	Yes	Yes	Yes
Group Address	0	0	0
Single Flag Enable	Yes	Yes	Yes
RTS to CTS Delay	n/a	n/a	3.0
RTS Turn Off Delay	n/a	n/a	2.0
Dropout Time	10	10	300
Early RTS	n/a	n/a	No
Telemetry Mode	n/a	n/a	FSK
ATCS Railroad	0	n/a	n/a
ATCS Railroad Line	0	n/a	n/a
ATCS Group	0	n/a	n/a
Wayside Device	0	n/a	n/a
ATC Device	0	n/a	n/a
Wayside Subnode	0	n/a	n/a
ATC Subnode	0	n/a	n/a

ECPIP (MM) 1-5-6

Controller Address:	1
Expanded System Detector Address:	0

System Detector Assignment

System Detector	Local Detector

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Configuration Logging / Display

Event Logging (MM) 1-6-1

Critical RFE's (MMU/TF)	Yes	3 Critical Errors Within 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Fault	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preemption Events	Yes	TSP Events	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online / Offline	Yes		

Alarm Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM) 1-7-2

Key Click Enable:	No
Backlight Enable:	Yes
LED Mode:	Auto
Display Mode:	Basic
Screen Format:	Basic
Trans Mode Pop-Up Disable:	No

Sign On (MM) 8-5

Sign On Message Line 1: City Of Burlington
Sign On Message Line 2: 8 Phase Econolite White

Software Modules (MM) 8-7

Application Version: 02.64.00
OS (Boot) Version: 01.14.03

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MOVING TRAFFIC FORWARD

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Logic Processor Page 1
Logic Statement Control (MM) 1-8-1

Logic #	Statement Control

City of Burlington

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MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Logic Processor Page 2

Logic Statements (MM) 1-8-2

Logic #: 1

If:

	Assignment	#	State
IF	LP CIB CODE ON		169

Then:

Assignment	#	State
CTR SET TMGPLN A-C	2	On

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Controller Timing Plan (MM) 2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		NB		EB		SB										
Min Green	0	8	0	8	0	8	0	0	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	0	0	0	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	0.0	3.0	0.0	3.0	0.0	3.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	0	35	0	25	0	35	0	0	35	35	35	35	35	35	35	35
Max2	0	35	0	25	0	35	0	0	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	0.0	5.0	0.0	4.0	0.0	5.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	0.0	2.0	0.0	3.0	0.0	2.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		NB		EB		SB										
Min Green	8	8	8	12	8	8	8	8	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	0	0	0	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	15	35	15	25	15	35	15	25	35	35	35	35	35	35	35	35
Max2	15	35	15	25	15	35	15	25	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	4.0	4.0	5.0	4.0	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	0.0	2.0	0.0	3.0	0.0	2.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		NB		EB		SB										
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	0	0	0	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction		NB		EB		SB										
Min Green	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	0	0	0	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

City of Burlington

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MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	5	0	7	3.0	0.0	5
B02	5	0	7	3.0	0.0	5
C03	5	0	7	3.0	0.0	5
D04	5	0	7	3.0	0.0	5
E05	5	0	7	3.0	0.0	5
F06	5	0	7	3.0	0.0	5
G07	5	0	7	3.0	0.0	5
H08	5	0	7	3.0	0.0	5
I09	5	0	7	3.0	0.0	5
J10	5	0	7	3.0	0.0	5
K11	5	0	7	3.0	0.0	5
L12	5	0	7	3.0	0.0	5
M13	5	0	7	3.0	0.0	5
N14	5	0	7	3.0	0.0	5
O15	5	0	7	3.0	0.0	5
P16	5	0	7	3.0	0.0	5

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Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

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Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	Y
3	.
4	.
5	.
6	Y
7	.
8	.
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
B
C
D

Flash Thru Mon: No
Flash Time: 0
All Red: 0
Power Start Seq: 1
MUTCD Enabled: No
Y->G: n/a

Automatic Flash

Entry
2
6

Exit
2
6

Overlap Exit
A
B
C
D

Flash Thru Mon: No
Exit Flash: W
Minimum Flash: 8
Mimimum Recall: No
Cycle Through Phase: No

City of Burlington

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MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guar Passage																
Non-Act I		X				X										
Non-Act II																
Dual Entry		X		X		X		X								
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk		X				X										
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: Off Unit Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector									X	X	X	X	X	X	X	X
Vehicle Recall																
Ped Recall		X				X										
Max Recall		X				X										
Soft Recall																
No Rest																
AI Calc																

Plan # 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector									X	X	X	X	X	X	X	X
Vehicle Recall																
Ped Recall		X				X										
Max Recall	X	X	X	X	X	X	X	X								
Soft Recall																
No Rest																
AI Calc																

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	PTN
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Float
Offset Reference	Lead	Use Ped Time	No
Ped Recall	No	Ped Reservice	No
Local Zero Override	No	FO Added Ini Green	No
Re-sync Count	0	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	85	Std (COS)	9	Offsets In	Seconds
Offset Value	3s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Splits (Split Pat 1)	0	56	0	29	0	56	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	85s	56s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	85	Std (COS)	17	Offsets In	Seconds
Offset Value	3s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Splits (Split Pat 2)	0	56	0	29	0	56	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	85s	56s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	100	Std (COS)	25	Offsets In	Seconds
Offset Value	85s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Splits (Split Pat 3)	0	70	0	30	0	70	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100s	70s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 4

Split Pattern	4	TS2 (Pat-Off)	1-1	Splits In	Seconds
Cycle	100	Std (COS)	33	Offsets In	Seconds
Offset Value	3s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Splits (Split Pat 4)	0	90	0	10	0	90	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100s	90s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 11

Split Pattern	11	TS2 (Pat-Off)	3-2	Splits In	Seconds
Cycle	120	Std (COS)	137	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Splits (Split Pat 11)	0	97	0	23	0	97	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	120s	97s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 12

Split Pattern	12	TS2 (Pat-Off)	3-3	Splits In	Seconds
Cycle	100	Std (COS)	145	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Splits (Split Pat 12)	0	64	0	36	0	64	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100s	64s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

Coordinator Pattern # 13

Split Pattern	13	TS2 (Pat-Off)	4-1	Splits In	Seconds
Cycle	100	Std (COS)	153	Offsets In	Seconds
Offset Value	0s	Dwell/Add Time	0		
Actuated Coord	No	Timing Plan	1		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Splits (Split Pat 13)	0	68	0	32	0	68	0	0	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	100s	68s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X
Special Funciton Outputs																

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MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Coordination Split Pattern
Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Split (seconds)	0	56	0	29	0	56	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	85s	56s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Split (seconds)	0	56	0	29	0	56	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	85s	56s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Split (seconds)	0	70	0	30	0	70	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100s	70s	0s	0s

Split Pattern # 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Split (seconds)	0	90	0	10	0	90	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100s	90s	0s	0s

Split Pattern # 11

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Split (seconds)	0	97	0	23	0	97	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	120s	97s	0s	0s

Split Pattern # 12

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Split (seconds)	0	64	0	36	0	64	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100s	64s	0s	0s

Split Pattern # 13

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description		NB		EB		SB										
Split (seconds)	0	68	0	32	0	68	0	0	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall		X				X										
Recall to Max. Time																
Omit Phase									X	X	X	X	X	X	X	X

Ring	1	2	3	4
Split Sum	100s	68s	0s	0s

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MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Preempt Plan

Preempt Plan (MM) 4-1

Preempt Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases		X				X										
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	Yes	Interlock Enable	No
Det Lock	Yes	Delay	0	Inhibit	0
Override Flash	Yes	Duration	0	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	8	8	3.0	2.0
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	4.0	1.0
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	0	0.0	20	4.0	1.0

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	Off
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Preempt Preempt Filtering
Enable Preempt Filtering & TSP/SCP (MM) 4-2

Input	Solid	Pulsing
1	...BYPASSED...	...BYPASSED...
2	...BYPASSED...	...BYPASSED...
3	PREEMPTION 3	PREEMPTION 7
4	PREEMPTION 4	PREEMPTION 8
5	PREEMPTION 5	PREEMPTION 9
6	PREEMPTION 6	PREEMPTION 10
7	...BYPASSED...	...BYPASSED...
8	...BYPASSED...	...BYPASSED...
9	...BYPASSED...	...BYPASSED...
10	...BYPASSED...	...BYPASSED...

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MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Preempt TSP/SCP Plan and Split

TSP / SCP Plan (MM) 4-3

TSP/SCP Plan	Enable Option	Signal Type	Det Lock	Delay Time	Max Presence	PMT Enables Reservice	No Delay in TSP	Action SF Inhibit	Reservice Cycles	Bus Heading
1	No	Solid	No	0	0	No	False	0	0	NB
2	No	Solid	No	0	0	No	False	0	0	SB
3	No	Solid	No	0	0	No	False	0	0	EB
4	No	Solid	No	0	0	No	False	0	0	WB
5	No	Solid	No	0	0	No	False	0	0	.
6	No	Solid	No	0	0	No	False	0	0	.

Mode: TSP
Free Default Pattern: 120
Headway Allowance: 100

TSP/SCP Plan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

TSP / SCP Split Pattern (MM) 4-4

TSP/SCP Split Pattern	Max Type	Phase															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4	Max Reduction	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255

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MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Time Base Clock/Calendar
Clock/Calendar Data (MM) 5-1

Manual Action Plan:	0
SYNC Reference Time:	00:00
SYNC Reference:	Reference Time
Day Light Savings:	No
Time Reset Input Set Time:	0:00:00
Standard Time From GMT:	0

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MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1

Pattern	1	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2

Pattern	2	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3

Pattern	3	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 4

Pattern	4	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 10

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 11

Pattern	11	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 12

Pattern	12	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 13

Pattern	13	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall		X				X										
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								
Aux Func (1-3)								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1

Event	Action Plan	Start Time
1	1	06:00
2	2	09:00
3	3	16:00
4	2	19:00
5	10	22:00

Day Plan #2

Event	Action Plan	Start Time
1	10	00:15

Day Plan #3

Event	Action Plan	Start Time
1	10	00:15

Day Plan #11

Event	Action Plan	Start Time
1	11	06:00
2	12	09:00
3	13	16:00
4	12	19:00
5	10	21:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
							X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 3

Day Plan No.: 3

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Time Base Exceptions
Exception Day Program (MM) 5-5

Excep Day	Float/Fixed	Mon/Mon	DOW/DOM	WOM/Year	Day Plan
1	FIXED	1	1	0	3
2	FLOAT	2	2	3	3
3	FIXED	4	19	0	3
4	FLOAT	5	2	3	3
5	FIXED	7	1	0	3
6	FLOAT	8	2	1	3
7	FLOAT	9	2	1	3
8	FLOAT	10	2	2	3
9	FIXED	12	25	0	3

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Assigned Phase	Called Phase	Type
1	4		S
2	2		S
3	3		S
4	4		S
5	5		S
6	6		S
7	7		S
8	8		S
9	9		S
10	10		S
11	11		S
12	12		S
13	13		S
14	14		S
15	15		S
16	16		S

Vehicle Detector Plan Number - 2

Veh Detector	Assigned Phase	Called Phase	Type

Vehicle Detector Plan Number - 3

Veh Detector	Assigned Phase	Called Phase	Type

Vehicle Detector Plan Number - 4

Veh Detector	Assigned Phase	Called Phase	Type

Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description
1	S-STANDARD	No	
2	S-STANDARD	No	
3	S-STANDARD	No	
4	S-STANDARD	No	
5	S-STANDARD	No	
6	S-STANDARD	No	
7	S-STANDARD	No	
8	S-STANDARD	No	
9	S-STANDARD	No	
10	S-STANDARD	No	
11	S-STANDARD	No	
12	S-STANDARD	No	
13	S-STANDARD	No	
14	S-STANDARD	No	
15	S-STANDARD	No	
16	S-STANDARD	No	
17	S-STANDARD	Yes	
18	S-STANDARD	Yes	
19	S-STANDARD	Yes	
20	S-STANDARD	Yes	
21	S-STANDARD	Yes	
22	S-STANDARD	Yes	

23	S-STANDARD	Yes	
24	S-STANDARD	Yes	
25	S-STANDARD	Yes	
26	S-STANDARD	Yes	
27	S-STANDARD	Yes	
28	S-STANDARD	Yes	
29	S-STANDARD	Yes	
30	S-STANDARD	Yes	
31	S-STANDARD	Yes	
32	S-STANDARD	Yes	
33	S-STANDARD	Yes	
34	S-STANDARD	Yes	
35	S-STANDARD	Yes	
36	S-STANDARD	Yes	
37	S-STANDARD	Yes	
38	S-STANDARD	Yes	
39	S-STANDARD	Yes	
40	S-STANDARD	Yes	
41	S-STANDARD	Yes	
42	S-STANDARD	Yes	
43	S-STANDARD	Yes	
44	S-STANDARD	Yes	
45	S-STANDARD	Yes	
46	S-STANDARD	Yes	
47	S-STANDARD	Yes	
48	S-STANDARD	Yes	
49	S-STANDARD	Yes	
50	S-STANDARD	Yes	
51	S-STANDARD	Yes	
52	S-STANDARD	Yes	
53	S-STANDARD	Yes	
54	S-STANDARD	Yes	
55	S-STANDARD	Yes	
56	S-STANDARD	Yes	
57	S-STANDARD	Yes	
58	S-STANDARD	Yes	
59	S-STANDARD	Yes	
60	S-STANDARD	Yes	
61	S-STANDARD	Yes	
62	S-STANDARD	Yes	
63	S-STANDARD	Yes	
64	S-STANDARD	Yes	

Vehicle Detector Plan Number - 1

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	9	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	11	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
12	12	No	Yes	0.0	Passage	0.0	0	No	0	None	Yes	Yes	No
13	13	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	14	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	15	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	16	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

17	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay

Vehicle Detector Plan Number - 3

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay

Vehicle Detector Plan Number - 4

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay

Ped Detector Phase Assignment (MM) 6-3

Mode: NTCIP

Called Phase	Detector
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16

City of Burlington

ECONOLITE

MOVING TRAFFIC FORWARD

Appleby Ln @ 407 South Ramp - TS 796 - Econolite Type - ASC/3

Detectors

Detectors - Pg 2

Log - Speed Detector Setup (MM) 6-4

NTCIP Log Period: 60 ECPI Log Period: 0 Length Unit: Inches

Speed Detector	Local Detector	One/Two Detector	Vehicle Length	Trap length	Enable Log
1	0	1	0	0	No
2	0	1	0	0	No
3	0	1	0	0	No
4	0	1	0	0	No
5	0	1	0	0	No
6	0	1	0	0	No
7	0	1	0	0	No
8	0	1	0	0	No
9	0	1	0	0	No
10	0	1	0	0	No
11	0	1	0	0	No
12	0	1	0	0	No
13	0	1	0	0	No
14	0	1	0	0	No
15	0	1	0	0	No
16	0	1	0	0	No

Vehicle Detector Diagnostics (MM) 6-5

Veh Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Pedestrian Detector Diagnostics (MM) 6-6

Ped Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier

Intersection Name:	TS ID:	Line No:	Model:	IP address:	Controller Make:
Appleby Ln @ 407 North Ramp	797	9	ACS/3	172.22.143.2	Econolite

Type of Operation: 8 Phase Semi-Actuated

*-Start from Main Menu

No	Date			Description	Prepared by
	Y	M	D		MA
4	2019	11	21	Chnaged Split 3	

PHASE DESCRIPTION

Ph1		Ph5	NB LT - Appleby Ln
Ph2	NB - Appleby Ln	Ph6	SB - Appleby Ln
Ph3		Ph7	EB - Car Pool Parking Lot
Ph4		Ph8	WB - 407 North Ramp

PHASE IN USE/EXCLUSIVE PED (MM) *- 1 - 2

Phase:	1	2	3	4	5	6	7	8
Phase in Use		X			X	X	X	X
Exclusive PED								

CONTROLLER TIMING DATA - VEHICLE TIMING * - 2 - 1

Timing Plan: 1

	Phase: 1	2	3	4	5	6	7	8
Minimum Green		8			8	8	8	8
Walk		7				7		8
Ped. Clearance		19				19		12
Pedestrian Carry Over								
Vehicle Extension		3			3	3	3	3
MAX 1		35			15	35	25	25
MAX 2		35			15	35	25	25
Yellow Change		5			3	5	4	4
Red Clearance		2			1	2	3	3
Phase Minimum:	1	34	1	1	13	34	16	28

PHASE DATA - VEHICLE AND PEDESTRIAN RECALLS * - 2 - 8

Phase:	1	2	3	4	5	6	7	8
Lock Detector								
Vehicle Recall								
Pedestrian Recall		X				X		
MAX Recall		X				X		
Min Recall								

COORDINATION: COORDINATOR PATTERN, SPLIT PATTERN *** - 3 - 2, - 3 - 3**

Coordinator Pattern (CP)	Cycle Length	Offset (sec)	Timing Plan	Split Pattern	Phases (sec)							
					1	2	3	4	5	6	7	8
1	85	0	1	1		48			13	35	17	20
2	85	0	1	2		50			13	37	17	18
3	100	0	1	3		33			12	33	19	36
10	0	0	1	10		0			0	0	0	0

TIME BASE: ACTION PLAN, DAY PLAN *** - 5 - 2, - 5 - 3, -5 - 4**

Day Plan	Sched. #	Action Plan	Time Period	Pattern	Timing Plan
1	1	1	06:00	1	1
1	1	2	09:00	2	1
1	1	3	16:00	3	1
1	1	2	19:00	2	1
1	1	10	22:00	254	1
2	2	10	00:15	254	1
3	3	10	00:15	254	1

Schedule 1 = Day Plan 1
Schedule 2 = Day Plan 2
Schedule 3 = Day Plan 3

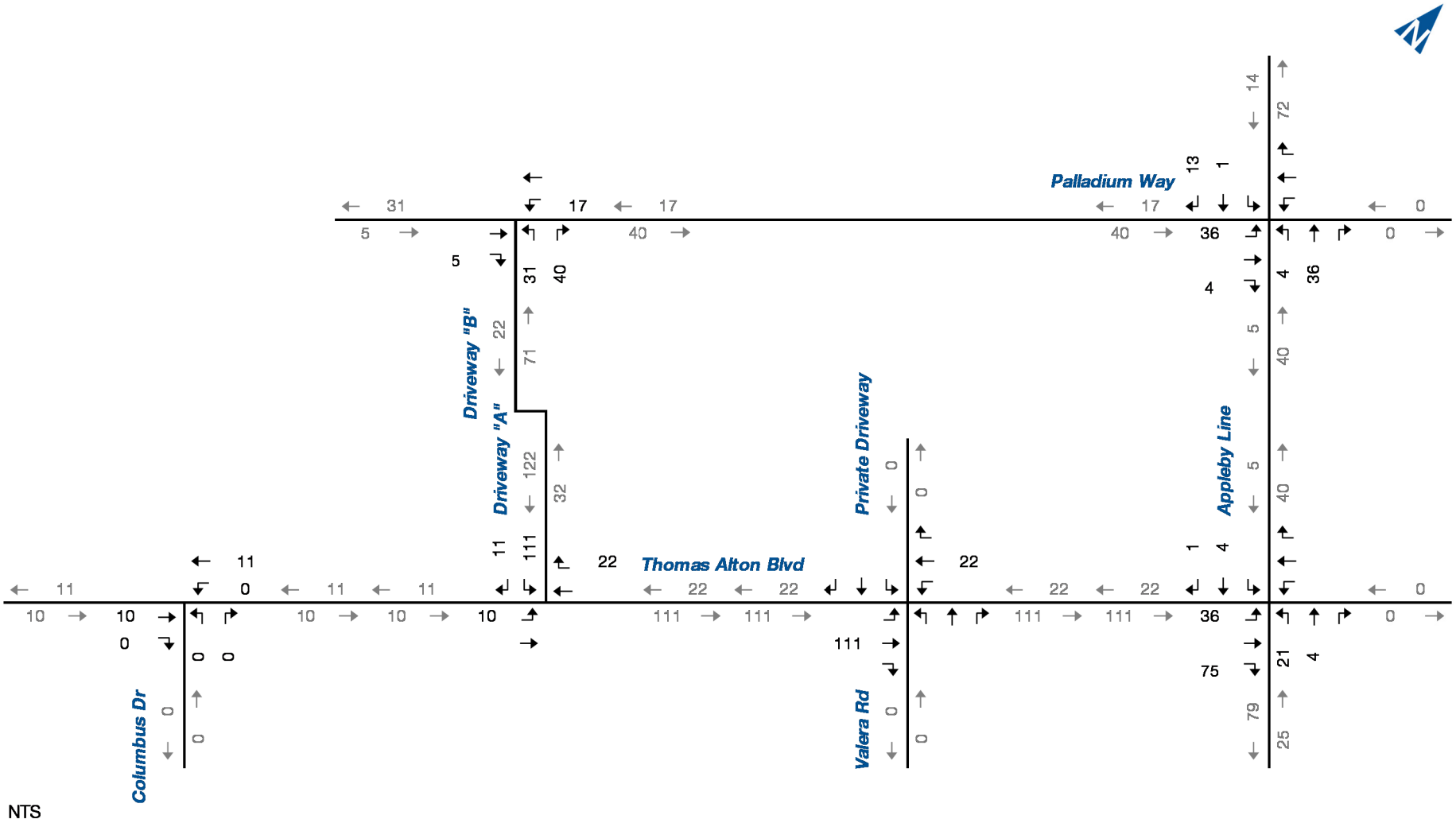
Day Plan 1 (Weekday)
Day Plan 2 (Saturday)
Day Plan 3 (Sunday, Holidays)

Action Plan 10 = free (254)

Special Programming:

Appendix D

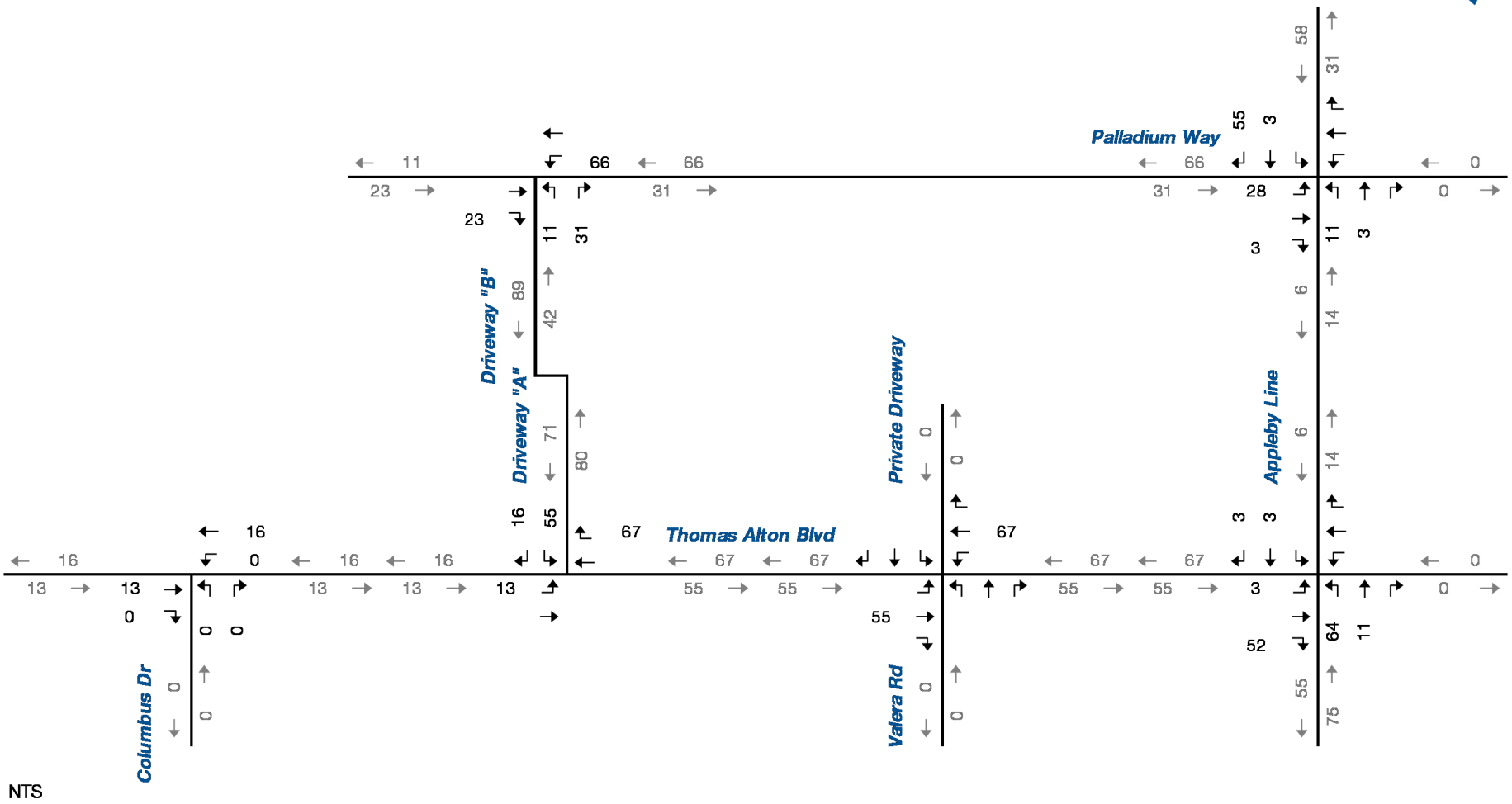
Background Development Excerpts



Estimated Site Generated Traffic – AM Peak Hour

4853 Thomas Alton Blvd, Burlington TRIS. PS & TDM Options
151010S

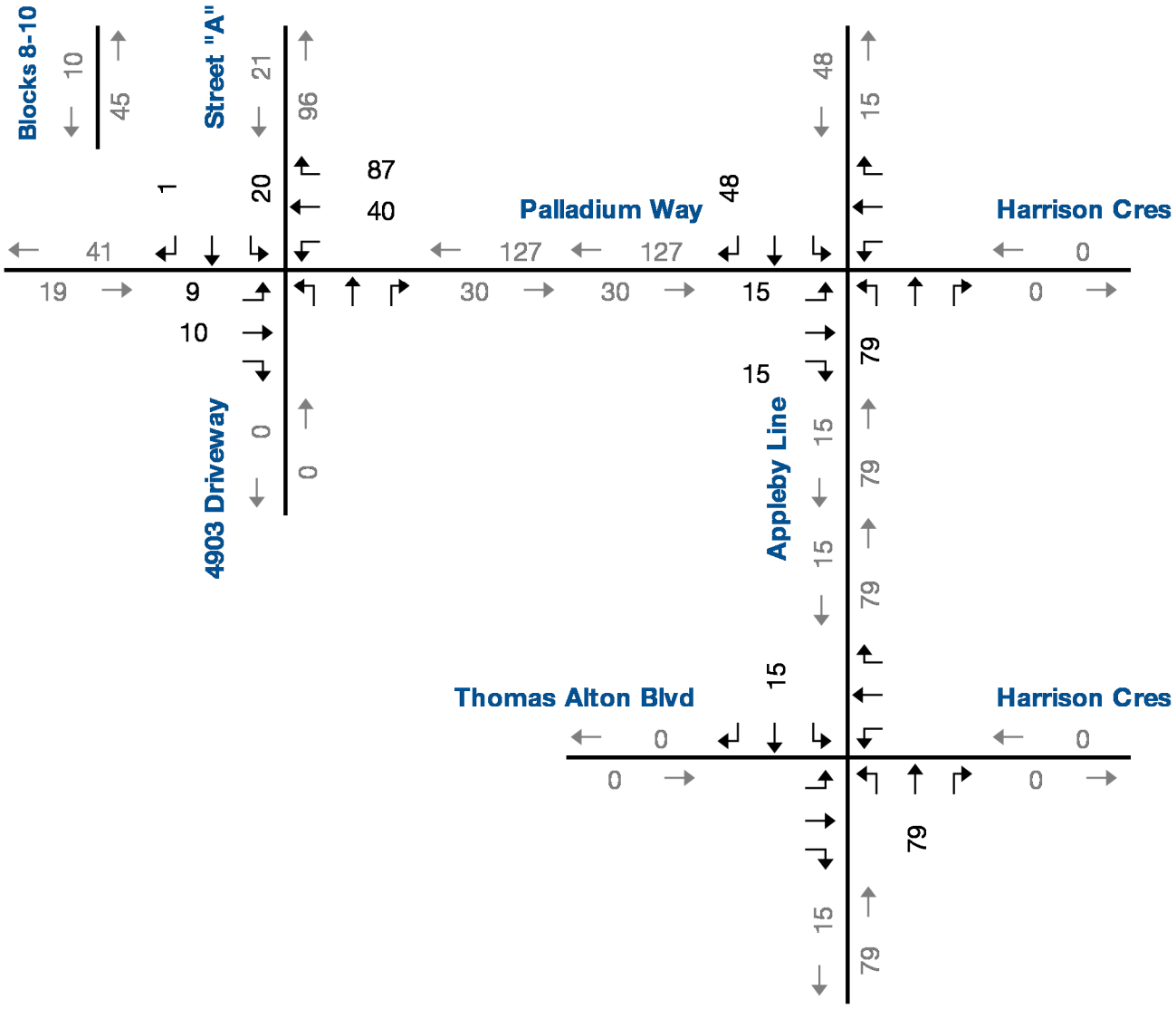
Figure 3.2A



Estimated Site Generated Traffic – PM Peak Hour

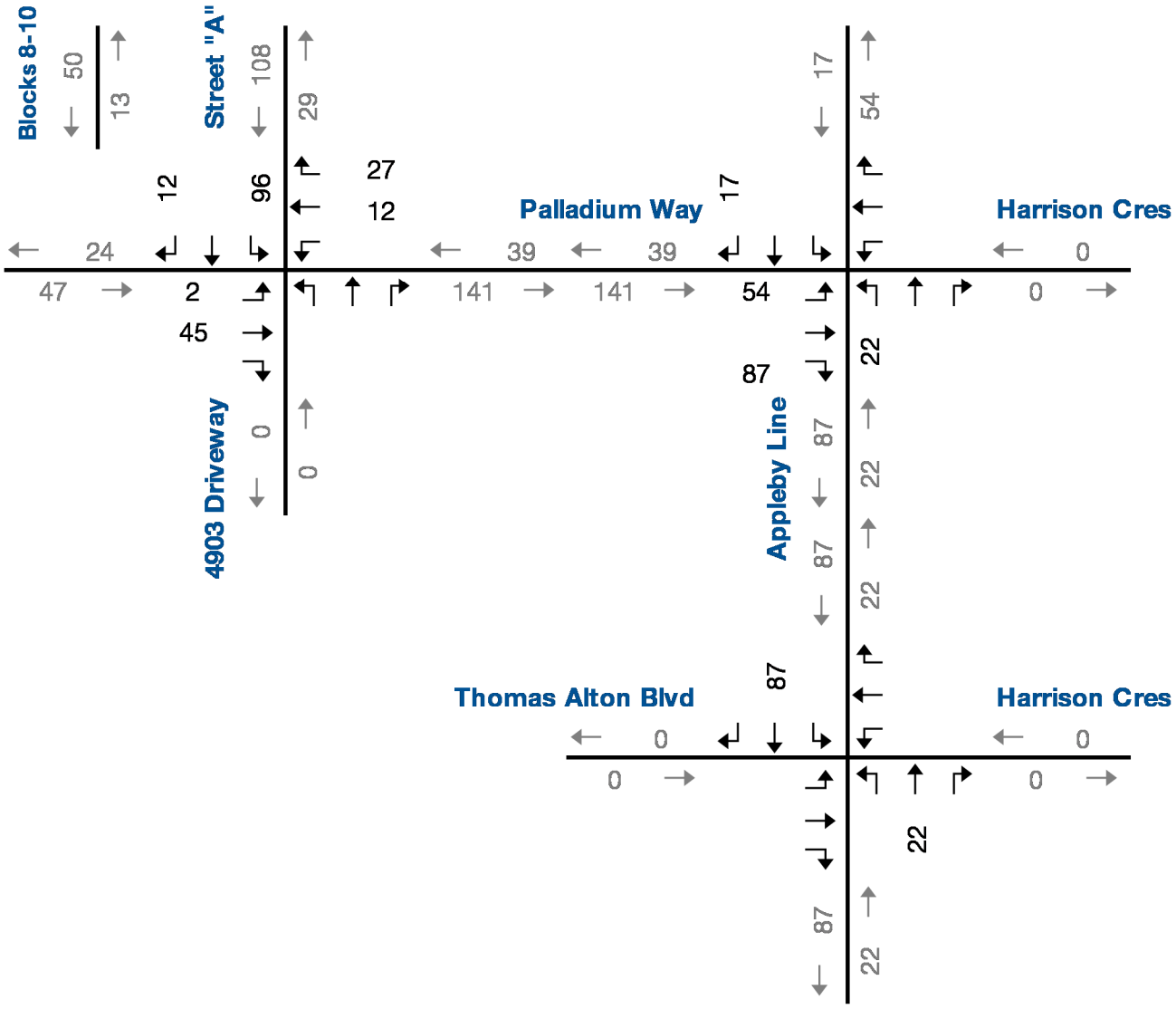
4853 Thomas Alton Blvd, Burlington TRIS. PS & TDM Options
151010S

Figure 3.2B



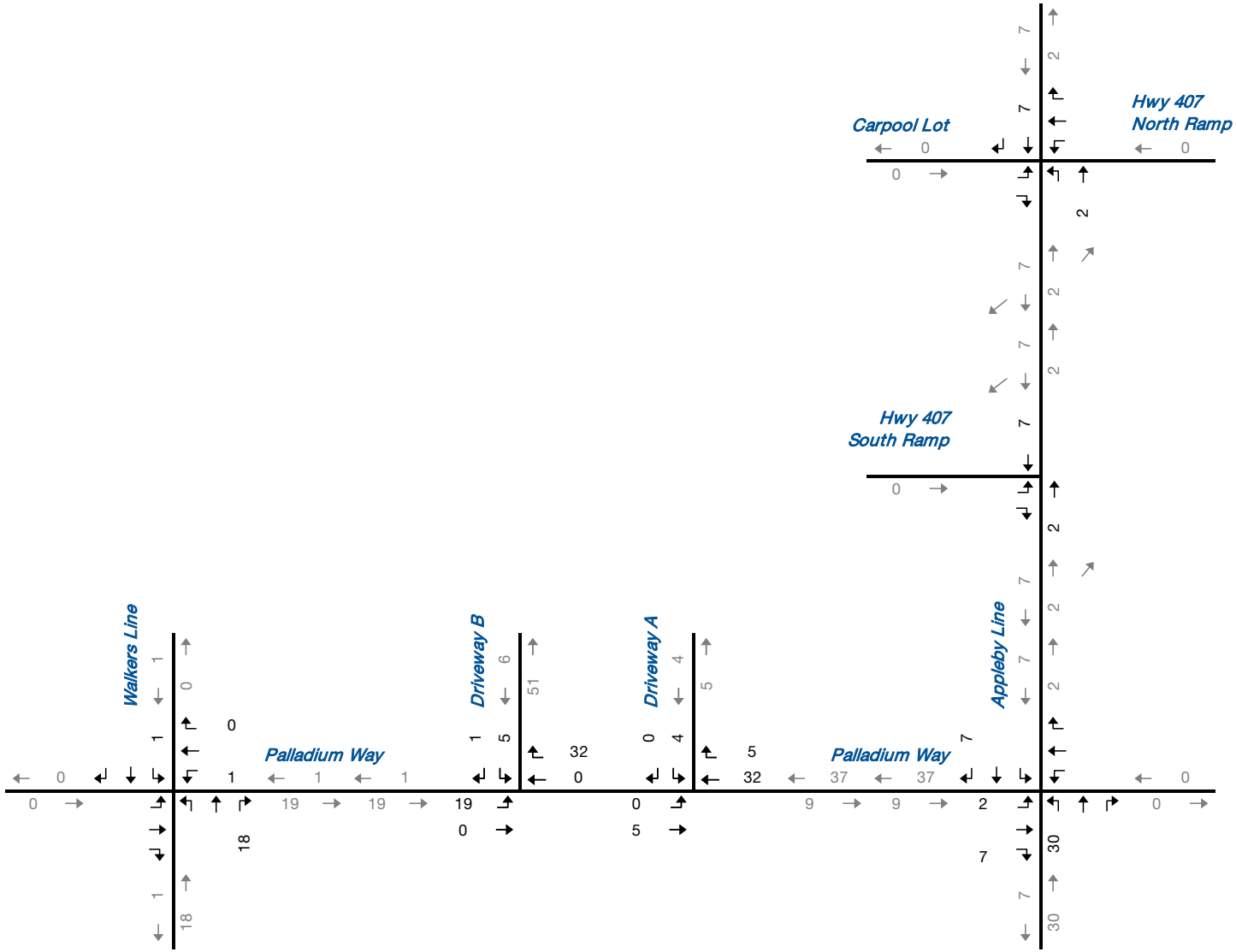
NTS

Estimated Site Generated Traffic – AM Peak Hour



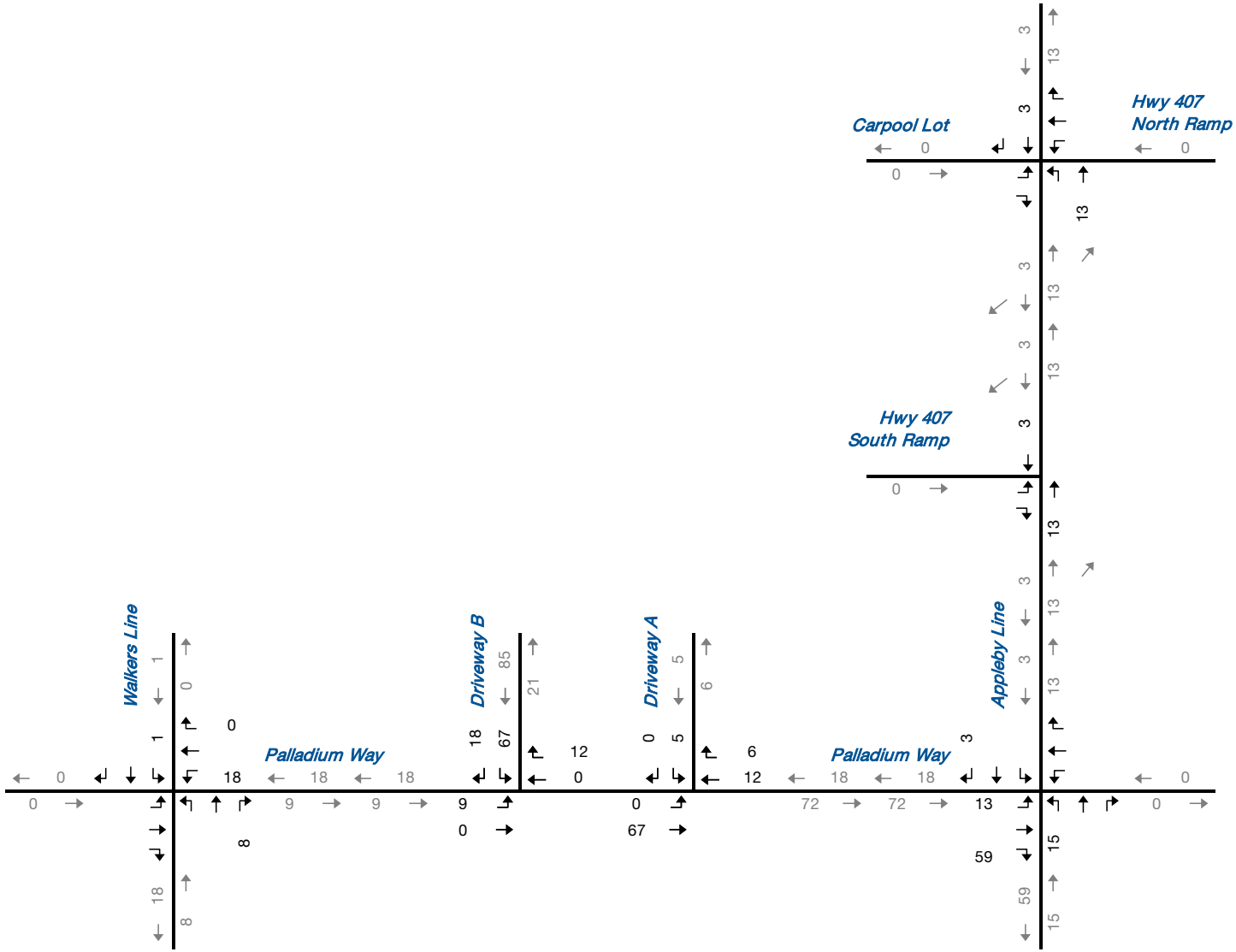
NTS

Estimated Site Generated Traffic – PM Peak Hour



NTS

Estimated Site Generated Traffic Phase 4 – AM Peak Hour



NTS

Estimated Site Generated Traffic Phase 4 – PM Peak Hour

Figure C-1
Background Development at 4853 Thomas Alton Blvd.
GHD Limited

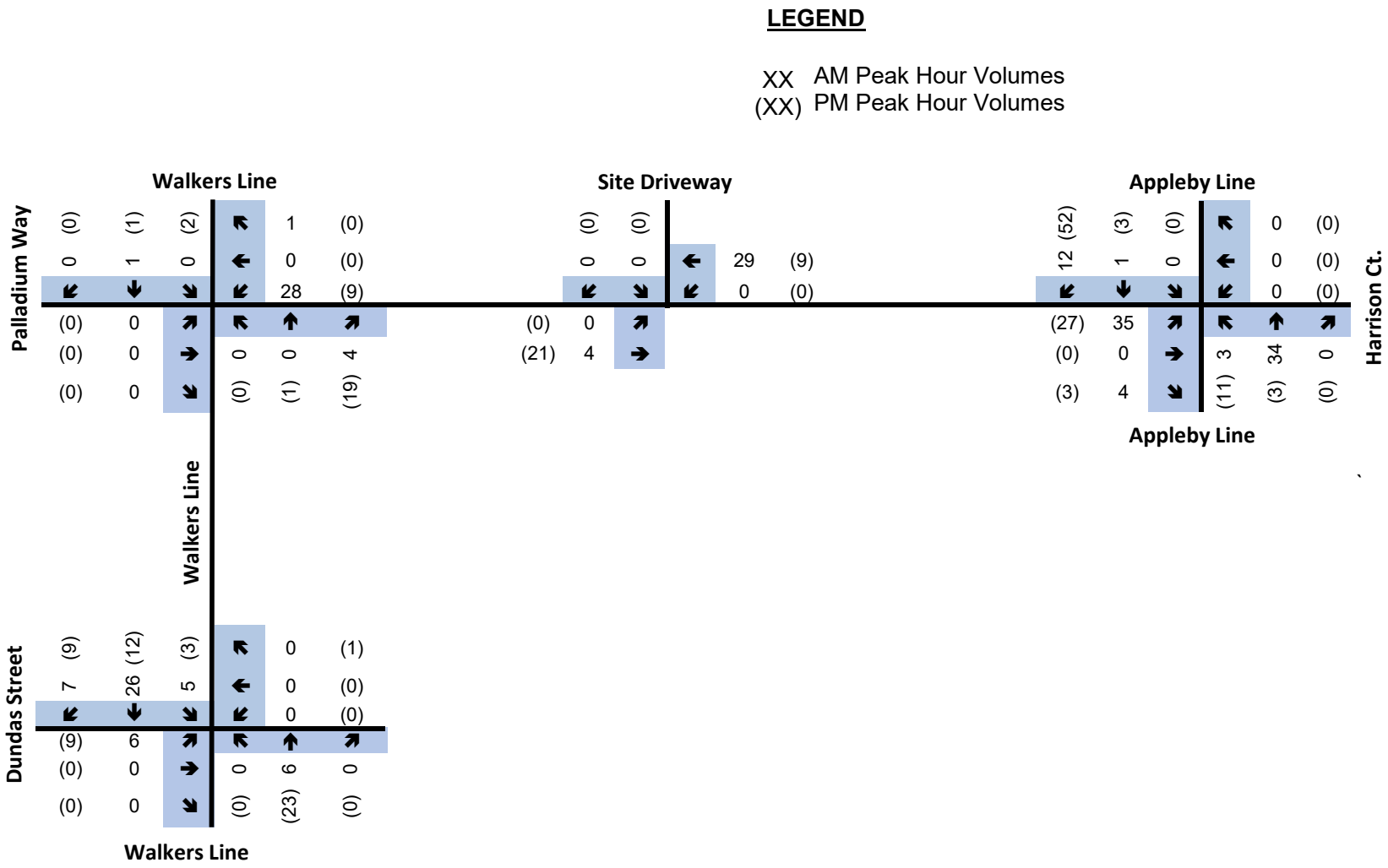


Figure C-2
Background Developement at 4853 Palladium Way
GHD Limited

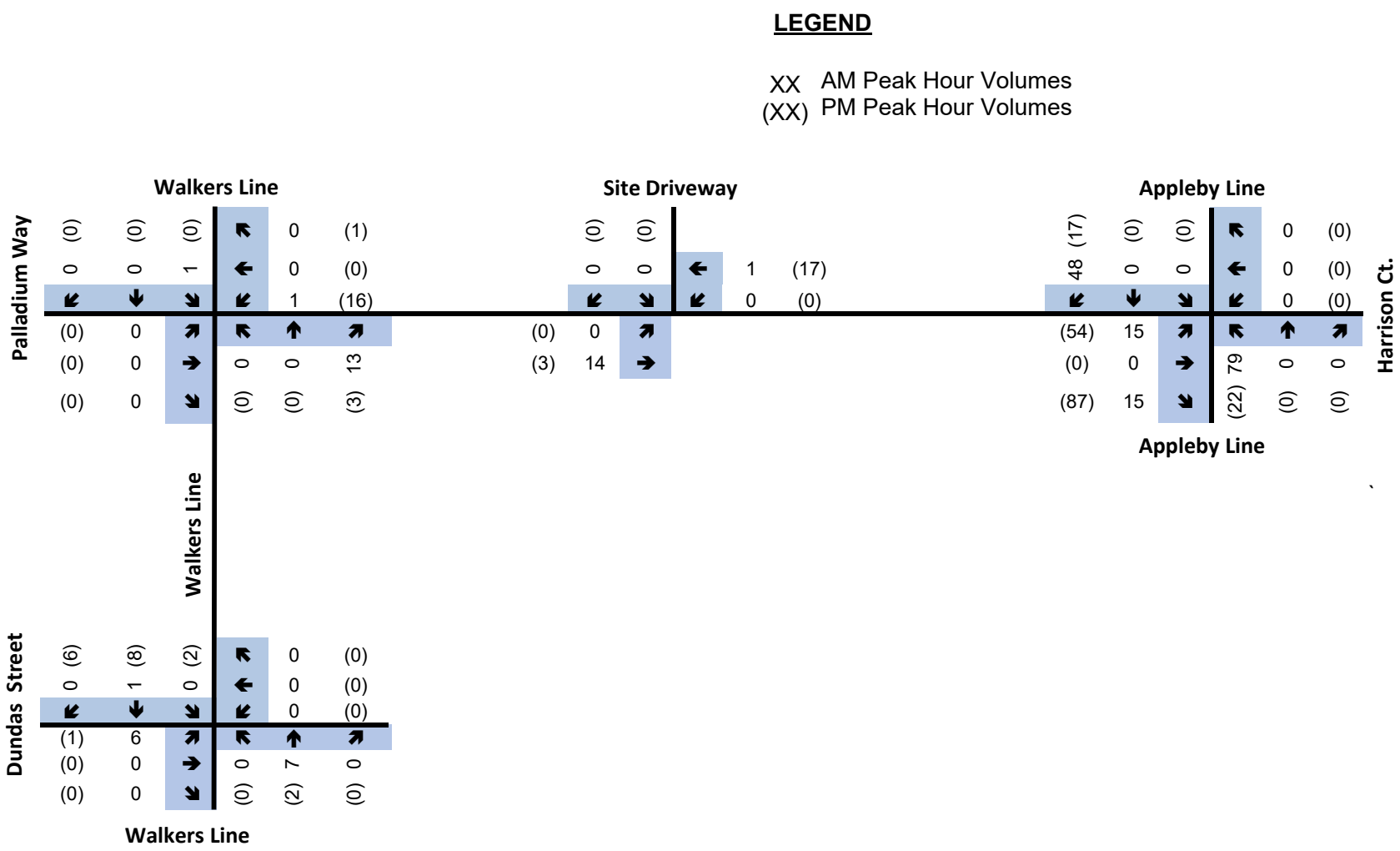
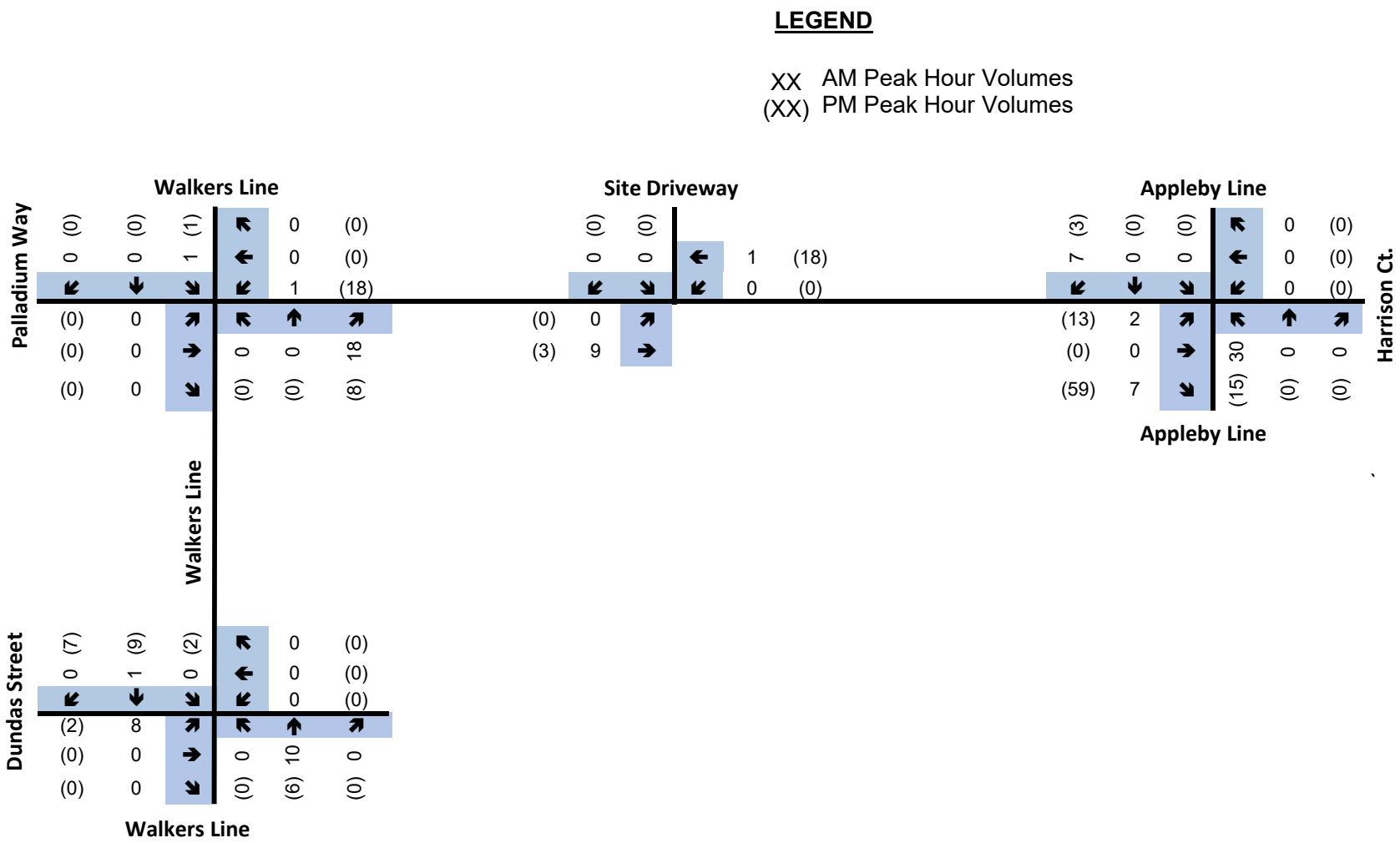


Figure C-3
Background Development at 4721 Palladium Way
GHD Limited



Appendix E

Transportation Tomorrow Survey 2016

Wed Aug 27 2019 12:21:27 GMT-0500 (Eastern Standard Time) - Run Time: 2351ms

Cross Tabulation Query Form - Trip - 2016

Row: 2006 GTA zone of origin
Column: 2006 GTA zone of destination

RowG:
ColG:(1254)
TblG:

Filters:
(Start time of trip - start_time In 600-900
and
Trip purpose of origin - purp_destination In M,O,W,D
and
Primary travel mode of trip - mode_prime In D,m,p,t)

Trip 2016
Table:

		TO									TRIPS (TO)							
,1		North - Walker	North Appleby	South Walker	South Appleby	South - 407	East Dundas	East - 407	West - Dundas	SUM=1?	orth - Walk	orth Apple	South Walke	South Appleby	South - 407	East Dundas	East - 407	West - Dundas
Halton																		
3348	20							1		1	0	0	0	0	0	0	20	0
3604	17							1		1	0	0	0	0	0	0	17	0
3690	23	0.25	0.75							1	6	17	0	0	0	0	0	0
3810	20	0.5	0.5							1	10	10	0	0	0	0	0	0
4059	78			1						1	0	0	78	0	0	0	0	0
4069	15			0.75	0.25					1	0	0	11	4	0	0	0	0
4071	38			0.75	0.25					1	0	0	29	10	0	0	0	0
4074	56			0.5	0.5					1	0	0	28	28	0	0	0	0
4078	20			0.5	0.5					1	0	0	10	10	0	0	0	0
4,079	104				0.25		0.75			1	0	0	0	26	0	78	0	0
4080	13			1						1	0	0	13	0	0	0	0	0
4084	98			1						1	0	0	98	0	0	0	0	0
4089	50								1	1	0	0	0	0	0	0	0	50
4096	14	1								1	14	0	0	0	0	0	0	0
4100	37		1							1	0	37	0	0	0	0	0	0
4127	17						1			1	0	0	0	0	0	17	0	0
4186	27						1			1	0	0	0	0	0	27	0	0
4,189	248			0.25	0.25		0.5			1	0	0	62	62	0	124	0	0
4190	40			1						1	0	0	40	0	0	0	0	0
5032	9			0.25					0.75	1	0	0	2	0	0	0	0	7
5053	81					1				1	0	0	0	0	81	0	0	0
5060	29			0.25					0.75	1	0	0	7	0	0	0	0	22
5061	45			0.25					0.75	1	0	0	11	0	0	0	0	34
5079	19			0.25					0.75	1	0	0	5	0	0	0	0	14
5180	29			0.5					0.5	1	0	0	15	0	0	0	0	15
5232	64			0.25					0.75	1	0	0	16	0	0	0	0	48
5233	16			0.25					0.75	1	0	0	4	0	0	0	0	12
5238	12			0.5					0.5	1	0	0	6	0	0	0	0	6
7311	7	0.75	0.25							1	5	2	0	0	0	0	0	0
8947	31	0.75	0.25							1	23	8	0	0	0	0	0	0
TOTAL	1277									**TOTAL**	58.3	73.8	434.8	139.3	81.0	246.0	37.0	207.0
										TOTAL (ROUNDED)	58	74	435	139	81	246	37	207
										DISTRIBUTION	**5%**	**6%**	**34%**	**11%**	**6%**	**19%**	**3%**	**16%**
										DISTR (ROUNDED TO 5%)	**5%**	**5%**	**35%**	**10%**	**5%**	**20%**	**5%**	**15%**

Wed Aug 27 2019 12:21:27 GMT-0500 (Eastern Standard Time) - Run Time: 2351ms

Cross Tabulation Query Form - Trip - 2016

Row: 2006 GTA zone of origin
Column: 2006 GTA zone of destination

RowG:
ColG:(1254)
TblG:

Filters:
(Start time of trip - start_time In 600-900
and
Trip purpose of origin - purp_destination In M,O,W,D
and
Primary travel mode of trip - mode_prime In D,m,p,t)

Trip 2016
Table:

PM PEAK HOUR INBOUND

Wed Aug 27 2019 12:21:27 GMT-0500 (Eastern Standard Time) - Run Time: 2351ms

Cross Tabulation Query Form - Trip - 2016

Row: 2006 GTA zone of dest
Column: 2006 GTA zone of origin

RowG:
ColG:(1254)
TblG:

Filters:
(Start time of trip - start_time In 600-900
and
Trip purpose of origin - purp_orig In M,O,W,D
and
Primary travel mode of trip - mode_prime In D,m,p,t)

Trip 2011
Table:

			TO									
,1			North - Walker	North Appleby	South Walker	South Appleby	South - 407	East Dundas	East - 407	West - Dundas	SUM=1?	
Halton												
3604	ramp	17							1		1	
3611		20	0.25	0.75							1	
4045		23	0.25	0.75							1	
4059		78			0.5	0.25				0.25	1	
4,079		52				0.25		0.75			1	
4080		78			0.5	0.5					1	
4081		13			0.5	0.5					1	
4082		21			1						1	
4084		239			1						1	
4089		22								1	1	
4162	ramp	27							1		1	
4185		30						1			1	
4186		63						1			1	
4,189		184			0.25	0.25		0.5			1	
5,047		17								1	1	
5032		9								1	1	
5053	ramp	81					1				1	
5060		29			0.25					0.75	1	
5079		19			0.25					0.75	1	
5180		29			0.5					0.5	1	
5230		59								1	1	
8947		31	0.75	0.25							1	
TOTAL		1141									**TOTAL**	
											TOTAL (ROUNDED)	
											DISTRIBUTION	
											DISTR (ROUNDED TO 5%)	

Wed Aug 27 2019 12:21:27 GMT-0500 (Eastern Standard Time) - Run Time: 2351ms

Cross Tabulation Query Form - Trip - 2016

Row: 2006 GTA zone of origin
Column: 2006 GTA zone of destination

RowG:
ColG:(1254)
TblG:

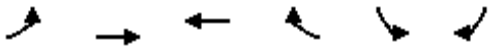
Filters:
(Start time of trip - start_time In 600-900
and
Trip purpose of origin - purp_orig In M,O,W,D
and
Primary travel mode of trip - mode_prime In D,m,p,t)

Trip 2011
Table:

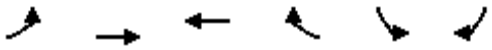
TRIPS (TO)							
orth - Walk	orth Apple	outh Walke	South Appleby	South - 407	East Dundas	East - 407	West - Dundas
0	0	0	0	0	0	17	0
5	15	0	0	0	0	0	0
6	17	0	0	0	0	0	0
0	0	39	20	0	0	0	20
0	0	0	13	0	39	0	0
0	0	39	39	0	0	0	0
0	0	7	7	0	0	0	0
0	0	21	0	0	0	0	0
0	0	239	0	0	0	0	0
0	0	0	0	0	0	0	22
0	0	0	0	0	0	27	0
0	0	0	0	0	30	0	0
0	0	0	0	0	63	0	0
0	0	46	46	0	92	0	0
0	0	0	0	0	0	0	17
0	0	0	0	0	0	0	9
0	0	0	0	81	0	0	0
0	0	7	0	0	0	0	22
0	0	5	0	0	0	0	14
0	0	15	0	0	0	0	15
0	0	0	0	0	0	0	59
23	8	0	0	0	0	0	0
34.0	40.0	417.0	124.0	81.0	224.0	44.0	177.0
34	40	417	124	81	224	44	177
3%	**4%**	**37%**	**11%**	**7%**	**20%**	**4%**	**16%**
5%	**5%**	**35%**	**10%**	**5%**	**20%**	**5%**	**15%**

Appendix F

Synchro Outputs



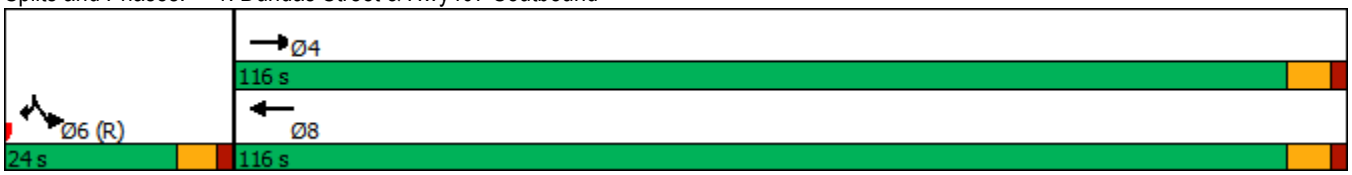
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1746	720	0	31	118
Future Volume (vph)	0	1746	720	0	31	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	0.91
Frt					0.902	0.850
Flt Protected					0.983	
Satd. Flow (prot)	0	5092	3411	0	3027	1415
Flt Permitted					0.983	
Satd. Flow (perm)	0	5092	3411	0	3027	1415
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					60	60
Link Speed (k/h)		50	50		50	
Link Distance (m)		173.3	204.0		140.6	
Travel Time (s)		12.5	14.7		10.1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	3%	7%	2%	17%	5%
Adj. Flow (vph)	0	1782	735	0	32	120
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	0	1782	735	0	92	60
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Detector Phase		4	8		6	6
Switch Phase						

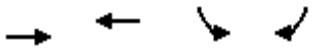


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		8.0	8.0		8.0	8.0
Minimum Split (s)		31.5	31.5		24.0	24.0
Total Split (s)		116.0	116.0		24.0	24.0
Total Split (%)		82.9%	82.9%		17.1%	17.1%
Maximum Green (s)		109.5	109.5		18.0	18.0
Yellow Time (s)		4.6	4.6		4.0	4.0
All-Red Time (s)		1.9	1.9		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		6.5	6.5		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		18.0	18.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		109.5	109.5		18.0	18.0
Actuated g/C Ratio		0.78	0.78		0.13	0.13
v/c Ratio		0.45	0.28		0.21	0.26
Control Delay		5.5	2.7		23.5	15.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		5.5	2.7		23.5	15.6
LOS		A	A		C	B
Approach Delay		5.5	2.7		20.4	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 5.6		Intersection LOS: A	
Intersection Capacity Utilization 54.6%		ICU Level of Service A	
Analysis Period (min) 15			

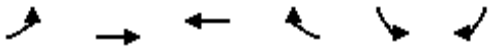
Splits and Phases: 1: Dundas Street & Hwy407 Soutbound





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1782	735	92	60
v/c Ratio	0.45	0.28	0.21	0.26
Control Delay	5.5	2.7	23.5	15.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.5	2.7	23.5	15.6
Queue Length 50th (m)	52.0	8.7	4.0	0.0
Queue Length 95th (m)	58.4	19.7	12.3	14.8
Internal Link Dist (m)	149.3	180.0	116.6	
Turn Bay Length (m)				
Base Capacity (vph)	3982	2667	441	234
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	0.45	0.28	0.21	0.26

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1746	720	0	31	118
Future Volume (vph)	0	1746	720	0	31	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5	6.5		6.0	6.0
Lane Util. Factor		0.91	0.95		0.97	0.91
Frt		1.00	1.00		0.90	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5092	3411		3027	1415
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5092	3411		3027	1415
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1782	735	0	32	120
RTOR Reduction (vph)	0	0	0	0	52	52
Lane Group Flow (vph)	0	1782	735	0	40	8
Heavy Vehicles (%)	2%	3%	7%	2%	17%	5%
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Actuated Green, G (s)		109.5	109.5		18.0	18.0
Effective Green, g (s)		109.5	109.5		18.0	18.0
Actuated g/C Ratio		0.78	0.78		0.13	0.13
Clearance Time (s)		6.5	6.5		6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		3982	2667		389	181
v/s Ratio Prot		c0.35	0.22		c0.01	0.01
v/s Ratio Perm						
v/c Ratio		0.45	0.28		0.10	0.04
Uniform Delay, d1		5.1	4.2		53.9	53.5
Progression Factor		1.00	0.57		1.00	1.00
Incremental Delay, d2		0.4	0.3		0.5	0.4
Delay (s)		5.5	2.7		54.4	53.9
Level of Service		A	A		D	D
Approach Delay (s)		5.5	2.7		54.2	
Approach LOS		A	A		D	

Intersection Summary			
HCM 2000 Control Delay	7.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

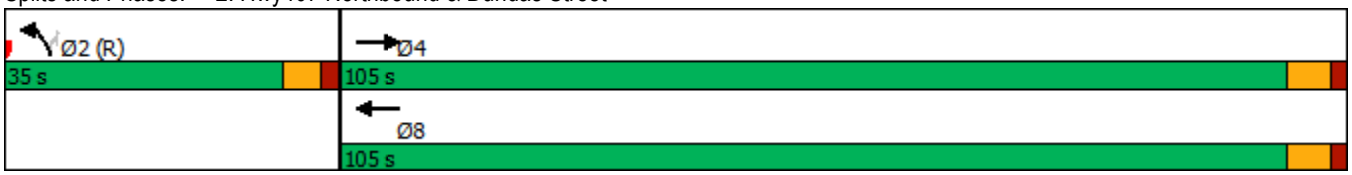


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1357	0	0	805	28	142
Future Volume (vph)	1357	0	0	805	28	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0	50.0		0.0	0.0
Storage Lanes		0	1		2	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.91
Frt					0.893	0.850
Flt Protected					0.986	
Satd. Flow (prot)	3544	0	0	4995	3000	1457
Flt Permitted					0.986	
Satd. Flow (perm)	3544	0	0	4995	3000	1457
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)					73	72
Link Speed (k/h)	50			50	50	
Link Distance (m)	141.9			1154.0	117.1	
Travel Time (s)	10.2			83.1	8.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	2%	2%	5%	28%	2%
Adj. Flow (vph)	1385	0	0	821	29	145
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	1385	0	0	821	102	72
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases						2
Detector Phase	4			8	2	2
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	8.0
Minimum Split (s)	31.5			31.5	24.0	24.0
Total Split (s)	105.0			105.0	35.0	35.0
Total Split (%)	75.0%			75.0%	25.0%	25.0%
Maximum Green (s)	98.5			98.5	29.0	29.0
Yellow Time (s)	4.6			4.6	4.0	4.0
All-Red Time (s)	1.9			1.9	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.5			6.5	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	None			None	C-Max	C-Max
Walk Time (s)	7.0			7.0		
Flash Dont Walk (s)	18.0			18.0		
Pedestrian Calls (#/hr)	0			0		
Act Effct Green (s)	78.4			78.4	49.1	49.1
Actuated g/C Ratio	0.56			0.56	0.35	0.35
v/c Ratio	0.70			0.29	0.09	0.13
Control Delay	18.7			16.0	13.3	8.9
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	18.7			16.0	13.3	8.9
LOS	B			B	B	A
Approach Delay	18.7			16.0	11.5	
Approach LOS	B			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 17.3		Intersection LOS: B	
Intersection Capacity Utilization 54.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Hwy407 Northbound & Dundas Street





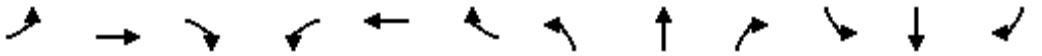
Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1385	821	102	72
v/c Ratio	0.70	0.29	0.09	0.13
Control Delay	18.7	16.0	13.3	8.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	18.7	16.0	13.3	8.9
Queue Length 50th (m)	70.5	42.1	2.7	0.0
Queue Length 95th (m)	55.2	38.0	10.4	13.6
Internal Link Dist (m)	117.9	1130.0	93.1	
Turn Bay Length (m)				
Base Capacity (vph)	2493	3514	1100	558
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	0.56	0.23	0.09	0.13

Intersection Summary



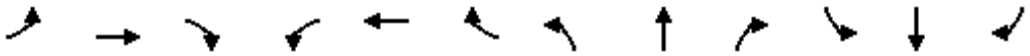
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1357	0	0	805	28	142
Future Volume (vph)	1357	0	0	805	28	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5			6.5	6.0	6.0
Lane Util. Factor	0.95			0.91	0.97	0.91
Frt	1.00			1.00	0.89	0.85
Flt Protected	1.00			1.00	0.99	1.00
Satd. Flow (prot)	3544			4995	2999	1457
Flt Permitted	1.00			1.00	0.99	1.00
Satd. Flow (perm)	3544			4995	2999	1457
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1385	0	0	821	29	145
RTOR Reduction (vph)	0	0	0	0	47	47
Lane Group Flow (vph)	1385	0	0	821	55	25
Heavy Vehicles (%)	3%	2%	2%	5%	28%	2%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	78.4			78.4	49.1	49.1
Effective Green, g (s)	78.4			78.4	49.1	49.1
Actuated g/C Ratio	0.56			0.56	0.35	0.35
Clearance Time (s)	6.5			6.5	6.0	6.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1984			2797	1051	510
v/s Ratio Prot	c0.39			0.16	c0.02	
v/s Ratio Perm						0.02
v/c Ratio	0.70			0.29	0.05	0.05
Uniform Delay, d1	22.3			16.2	30.1	30.0
Progression Factor	0.77			1.00	1.00	1.00
Incremental Delay, d2	1.0			0.1	0.1	0.2
Delay (s)	18.2			16.3	30.2	30.2
Level of Service	B			B	C	C
Approach Delay (s)	18.2			16.3	30.2	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	4	18	83	3	7	13	193	182	13	222	1
Future Volume (vph)	1	4	18	83	3	7	13	193	182	13	222	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		60.0	50.0		0.0	30.0		15.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.896			0.927			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1921	1633	1825	1721	0	1825	3283	0	1825	3507	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1825	1921	1633	1825	1721	0	1825	3283	0	1825	3507	0
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		86.0			162.7			532.8			105.0	
Travel Time (s)		5.2			9.8			32.0			6.3	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	1%	0%	4%	0%
Adj. Flow (vph)	1	5	22	101	4	9	16	235	222	16	271	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	5	22	101	13	0	16	457	0	16	272	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

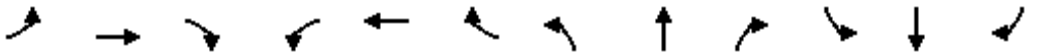
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	4	18	83	3	7	13	193	182	13	222	1
Future Volume (Veh/h)	1	4	18	83	3	7	13	193	182	13	222	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	1	5	22	101	4	9	16	235	222	16	271	1
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	464	792	136	570	682	228	272			457		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	464	792	136	570	682	228	272			457		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	98	74	99	99	99			99		
cM capacity (veh/h)	467	315	894	386	365	780	1303			1114		

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	
Volume Total	1	5	22	101	13	16	157	300	16	181	91	
Volume Left	1	0	0	101	0	16	0	0	16	0	0	
Volume Right	0	0	22	0	9	0	0	222	0	0	1	
cSH	467	315	894	386	578	1303	1700	1700	1114	1700	1700	
Volume to Capacity	0.00	0.02	0.02	0.26	0.02	0.01	0.09	0.18	0.01	0.11	0.05	
Queue Length 95th (m)	0.0	0.4	0.6	7.9	0.5	0.3	0.0	0.0	0.3	0.0	0.0	
Control Delay (s)	12.7	16.6	9.1	17.6	11.4	7.8	0.0	0.0	8.3	0.0	0.0	
Lane LOS	B	C	A	C	B	A			A			
Approach Delay (s)	10.6			16.9		0.3			0.5			
Approach LOS	B			C								

Intersection Summary					
Average Delay	2.7				
Intersection Capacity Utilization	29.1%	ICU Level of Service		A	
Analysis Period (min)	15				



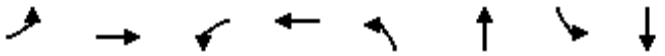
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	5	32	33	4	16	44	846	7	16	629	30
Future Volume (vph)	57	5	32	33	4	16	44	846	7	16	629	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	55.0		0.0	95.0		0.0	70.0		100.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00			1.00				1.00	
Frt		0.869			0.879			0.999			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1593	0	1521	1528	0	1825	5039	0	1706	4965	0
Flt Permitted	0.744			0.732			0.327			0.302		
Satd. Flow (perm)	1429	1593	0	1170	1528	0	627	5039	0	542	4965	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34			17			2			9	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		616.2			251.6			287.9			279.5	
Travel Time (s)		37.0			15.1			14.8			14.4	
Confl. Peds. (#/hr)			2	2			3					3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	4%	20%	0%	13%	0%	4%	0%	7%	5%	0%
Adj. Flow (vph)	61	5	34	35	4	17	47	900	7	17	669	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	61	39	0	35	21	0	47	907	0	17	701	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	41.0	41.0		41.0	41.0		11.0	32.0		32.0	32.0	
Total Split (s)	42.0	42.0		42.0	42.0		12.0	78.0		66.0	66.0	
Total Split (%)	35.0%	35.0%		35.0%	35.0%		10.0%	65.0%		55.0%	55.0%	
Maximum Green (s)	35.0	35.0		35.0	35.0		8.0	72.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	27.0	27.0		27.0	27.0			19.0		19.0	19.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	10.9	10.9		10.9	10.9		98.1	96.1		60.0	60.0	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.82	0.80		0.50	0.50	
v/c Ratio	0.47	0.22		0.33	0.14		0.06	0.22		0.06	0.28	
Control Delay	62.9	21.4		58.4	25.3		2.6	3.2		16.4	17.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	62.9	21.4		58.4	25.3		2.6	3.2		16.4	17.6	
LOS	E	C		E	C		A	A		B	B	
Approach Delay		46.7			46.0			3.2			17.6	
Approach LOS		D			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 12 (10%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 12.5		Intersection LOS: B	
Intersection Capacity Utilization 52.7%		ICU Level of Service A	
Analysis Period (min) 15			

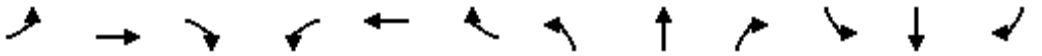
Splits and Phases: 5: Appleby & Palladium Way/Harrison





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	61	39	35	21	47	907	17	701
v/c Ratio	0.47	0.22	0.33	0.14	0.06	0.22	0.06	0.28
Control Delay	62.9	21.4	58.4	25.3	2.6	3.2	16.4	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.9	21.4	58.4	25.3	2.6	3.2	16.4	17.6
Queue Length 50th (m)	13.9	1.1	7.9	0.9	1.6	14.9	2.0	33.5
Queue Length 95th (m)	26.9	11.2	17.7	8.4	4.4	22.8	6.1	42.0
Internal Link Dist (m)		592.2		227.6		263.9		255.5
Turn Bay Length (m)	45.0		55.0		95.0		70.0	
Base Capacity (vph)	416	488	341	457	832	4035	271	2487
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	0.15	0.08	0.10	0.05	0.06	0.22	0.06	0.28

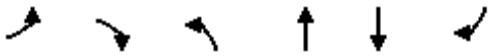
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	5	32	33	4	16	44	846	7	16	629	30
Future Volume (vph)	57	5	32	33	4	16	44	846	7	16	629	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.87		1.00	0.88		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	1594		1518	1527		1824	5039		1706	4965	
Flt Permitted	0.74	1.00		0.73	1.00		0.33	1.00		0.30	1.00	
Satd. Flow (perm)	1429	1594		1169	1527		628	5039		542	4965	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	61	5	34	35	4	17	47	900	7	17	669	32
RTOR Reduction (vph)	0	31	0	0	15	0	0	0	0	0	5	0
Lane Group Flow (vph)	61	8	0	35	6	0	47	907	0	17	697	0
Confl. Peds. (#/hr)			2	2			3					3
Heavy Vehicles (%)	0%	0%	4%	20%	0%	13%	0%	4%	0%	7%	5%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	10.9	10.9		10.9	10.9		96.1	96.1		60.0	60.0	
Effective Green, g (s)	10.9	10.9		10.9	10.9		96.1	96.1		60.0	60.0	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.80	0.80		0.50	0.50	
Clearance Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	129	144		106	138		822	4035		271	2482	
v/s Ratio Prot		0.01			0.00		0.02	c0.18			c0.14	
v/s Ratio Perm	c0.04			0.03			0.03			0.03		
v/c Ratio	0.47	0.06		0.33	0.04		0.06	0.22		0.06	0.28	
Uniform Delay, d1	51.8	49.8		51.1	49.8		2.7	2.9		15.5	17.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.7	0.2		1.8	0.1		0.1	0.1		0.4	0.3	
Delay (s)	54.5	50.0		53.0	49.9		2.9	3.0		15.9	17.7	
Level of Service	D	D		D	D		A	A		B	B	
Approach Delay (s)		52.8			51.8			3.0			17.7	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	68	37	0	386	467	0
Future Volume (vph)	68	37	0	386	467	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1722	1601	0	3544	3510	0
Flt Permitted	0.950					
Satd. Flow (perm)	1722	1601	0	3544	3510	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		41				
Link Speed (k/h)	50			50	70	
Link Distance (m)	146.5			104.0	373.0	
Travel Time (s)	10.5			7.5	19.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	2%	2%	3%	4%	2%
Adj. Flow (vph)	76	41	0	429	519	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	76	41	0	429	519	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	7			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	7	4		2	6	
Switch Phase						
Minimum Initial (s)	5.0	8.0		8.0	8.0	
Minimum Split (s)	9.5	25.0		25.0	25.0	
Total Split (s)	9.5	29.0		56.0	56.0	
Total Split (%)	11.2%	34.1%		65.9%	65.9%	
Maximum Green (s)	5.0	22.0		49.0	49.0	
Yellow Time (s)	3.5	4.0		5.0	5.0	
All-Red Time (s)	1.0	3.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0	
Flash Dont Walk (s)		11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0	
Act Effct Green (s)	9.9	8.4		67.0	67.0	
Actuated g/C Ratio	0.12	0.10		0.79	0.79	
v/c Ratio	0.38	0.21		0.15	0.19	
Control Delay	39.5	14.4		3.2	3.3	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	39.5	14.4		3.2	3.3	
LOS	D	B		A	A	
Approach Delay	30.7			3.2	3.3	
Approach LOS	C			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 6.3		Intersection LOS: A	
Intersection Capacity Utilization 31.2%		ICU Level of Service A	
Analysis Period (min) 15			

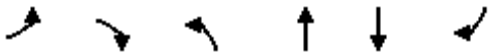
Splits and Phases: 6: Appleby & Hwy407 Eastbound





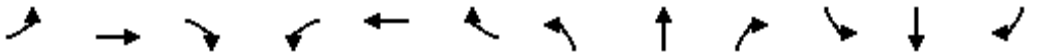
Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	76	41	429	519
v/c Ratio	0.38	0.21	0.15	0.19
Control Delay	39.5	14.4	3.2	3.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	39.5	14.4	3.2	3.3
Queue Length 50th (m)	11.5	0.0	8.6	10.8
Queue Length 95th (m)	23.4	8.8	14.0	17.1
Internal Link Dist (m)	122.5		80.0	349.0
Turn Bay Length (m)				
Base Capacity (vph)	496	444	2793	2766
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	0.15	0.09	0.15	0.19

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	68	37	0	386	467	0
Future Volume (vph)	68	37	0	386	467	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	7.0		7.0	7.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	1722	1601		3544	3510	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	1722	1601		3544	3510	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	41	0	429	519	0
RTOR Reduction (vph)	0	38	0	0	0	0
Lane Group Flow (vph)	76	3	0	429	519	0
Heavy Vehicles (%)	6%	2%	2%	3%	4%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	7			2	6	
Permitted Phases		4				
Actuated Green, G (s)	9.3	6.8		64.2	64.2	
Effective Green, g (s)	9.3	6.8		64.2	64.2	
Actuated g/C Ratio	0.11	0.08		0.76	0.76	
Clearance Time (s)	4.5	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	188	128		2676	2651	
v/s Ratio Prot	c0.04			0.12	c0.15	
v/s Ratio Perm		0.00				
v/c Ratio	0.40	0.03		0.16	0.20	
Uniform Delay, d1	35.3	36.0		2.9	3.0	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.4	0.1		0.1	0.2	
Delay (s)	36.7	36.1		3.0	3.2	
Level of Service	D	D		A	A	
Approach Delay (s)	36.5			3.0	3.2	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	31.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	93	0	16	4	430	0	0	464	1
Future Volume (vph)	0	0	5	93	0	16	4	430	0	0	464	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	80.0		0.0	0.0		0.0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91
Frt		0.865			0.956							
Flt Protected				0.950	0.966		0.950					
Satd. Flow (prot)	0	1629	0	1636	1608	0	1789	3476	0	0	5092	0
Flt Permitted				0.950	0.966		0.431					
Satd. Flow (perm)	0	1629	0	1636	1608	0	812	3476	0	0	5092	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		413			193							
Link Speed (k/h)		50			50			50			70	
Link Distance (m)		127.4			84.3			373.0			64.3	
Travel Time (s)		9.2			6.1			26.9			3.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	2%	5%	2%	2%	3%	2%
Adj. Flow (vph)	0	0	5	96	0	16	4	443	0	0	478	1
Shared Lane Traffic (%)				41%								
Lane Group Flow (vph)	0	5	0	57	55	0	4	443	0	0	479	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2			2	
Detector Template	Left	Thru		Left	Thru		Left	Thru			Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5			30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8			1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							2					
Detector Phase	4	4		8	8		5	2			6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)	15.0	15.0		20.0	20.0		12.0	33.0			33.0	
Total Split (s)	17.0	17.0		20.0	20.0		13.0	48.0			35.0	
Total Split (%)	20.0%	20.0%		23.5%	23.5%		15.3%	56.5%			41.2%	
Maximum Green (s)	10.0	10.0		13.0	13.0		9.0	41.0			28.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	5.0			5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0			2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Recall Mode	None	None		None	None		None	Max			Max	
Walk Time (s)				8.0	8.0			7.0			7.0	
Flash Dont Walk (s)				5.0	5.0			19.0			19.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		8.1		8.8	8.8		51.7	50.2			48.1	
Actuated g/C Ratio		0.11		0.12	0.12		0.73	0.71			0.68	
v/c Ratio		0.01		0.28	0.15		0.01	0.18			0.14	
Control Delay		0.0		32.8	0.9		6.2	6.1			7.9	
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay		0.0		32.8	0.9		6.2	6.1			7.9	
LOS		A		C	A		A	A			A	
Approach Delay					17.1			6.1			7.9	
Approach LOS					B			A			A	

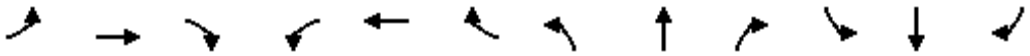
Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 70.8			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay: 8.1		Intersection LOS: A	
Intersection Capacity Utilization 33.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Appleby & Carpool/Hwy407 Westbound



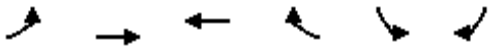
Lane Group	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	5	57	55	4	443	479
v/c Ratio	0.01	0.28	0.15	0.01	0.18	0.14
Control Delay	0.0	32.8	0.9	6.2	6.1	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.0	32.8	0.9	6.2	6.1	7.9
Queue Length 50th (m)	0.0	7.0	0.0	0.2	9.0	6.5
Queue Length 95th (m)	0.0	19.4	0.0	1.5	27.9	26.4
Internal Link Dist (m)	103.4		60.3		349.0	40.3
Turn Bay Length (m)				80.0		
Base Capacity (vph)	586	303	455	718	2465	3460
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.19	0.12	0.01	0.18	0.14

Intersection Summary

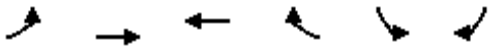


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	93	0	16	4	430	0	0	464	1
Future Volume (vph)	0	0	5	93	0	16	4	430	0	0	464	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95			0.91	
Frt		0.86		1.00	0.96		1.00	1.00			1.00	
Flt Protected		1.00		0.95	0.97		0.95	1.00			1.00	
Satd. Flow (prot)		1629		1636	1608		1789	3476			5090	
Flt Permitted		1.00		0.95	0.97		0.43	1.00			1.00	
Satd. Flow (perm)		1629		1636	1608		813	3476			5090	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	5	96	0	16	4	443	0	0	478	1
RTOR Reduction (vph)	0	5	0	0	50	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	57	5	0	4	443	0	0	479	0
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	2%	5%	2%	2%	3%	2%
Turn Type		NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	
Permitted Phases							2					
Actuated Green, G (s)		1.4		7.0	7.0		51.9	51.9			46.5	
Effective Green, g (s)		1.4		7.0	7.0		51.9	51.9			46.5	
Actuated g/C Ratio		0.02		0.09	0.09		0.64	0.64			0.57	
Clearance Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		28		140	138		535	2218			2911	
v/s Ratio Prot		c0.00		c0.03	0.00		0.00	c0.13			0.09	
v/s Ratio Perm							0.00					
v/c Ratio		0.00		0.41	0.03		0.01	0.20			0.16	
Uniform Delay, d1		39.3		35.2	34.1		5.4	6.1			8.2	
Progression Factor		1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.0		1.9	0.1		0.0	0.2			0.1	
Delay (s)		39.3		37.1	34.2		5.4	6.3			8.3	
Level of Service		D		D	C		A	A			A	
Approach Delay (s)		39.3			35.7			6.3			8.3	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	81.3	Sum of lost time (s)	25.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



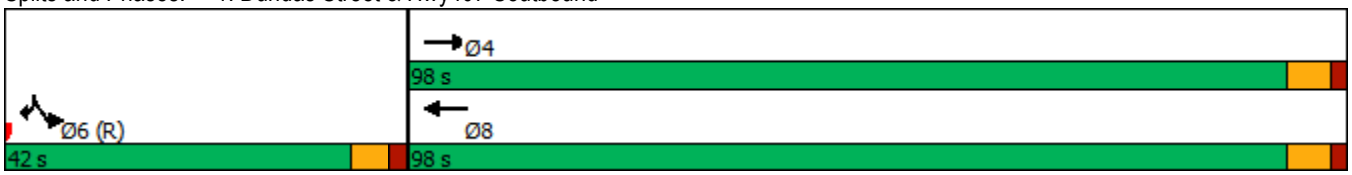
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1103	1832	0	91	385
Future Volume (vph)	0	1103	1832	0	91	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	0.91
Frt					0.898	0.850
Flt Protected					0.984	
Satd. Flow (prot)	0	5092	3579	0	3219	1457
Flt Permitted					0.984	
Satd. Flow (perm)	0	5092	3579	0	3219	1457
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					21	21
Link Speed (k/h)		50	50		50	
Link Distance (m)		173.3	204.0		140.6	
Travel Time (s)		12.5	14.7		10.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	2%	2%	3%	2%
Adj. Flow (vph)	0	1137	1889	0	94	397
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	0	1137	1889	0	293	198
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Detector Phase		4	8		6	6
Switch Phase						

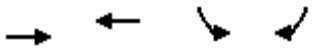


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		8.0	8.0		8.0	8.0
Minimum Split (s)		31.5	31.5		24.0	24.0
Total Split (s)		98.0	98.0		42.0	42.0
Total Split (%)		70.0%	70.0%		30.0%	30.0%
Maximum Green (s)		91.5	91.5		36.0	36.0
Yellow Time (s)		4.6	4.6		4.0	4.0
All-Red Time (s)		1.9	1.9		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		6.5	6.5		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		18.0	18.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		91.5	91.5		36.0	36.0
Actuated g/C Ratio		0.65	0.65		0.26	0.26
v/c Ratio		0.34	0.81		0.35	0.51
Control Delay		11.2	14.4		40.6	44.8
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		11.2	14.4		40.6	44.8
LOS		B	B		D	D
Approach Delay		11.2	14.4		42.3	
Approach LOS		B	B		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 17.3		Intersection LOS: B	
Intersection Capacity Utilization 77.0%		ICU Level of Service D	
Analysis Period (min) 15			

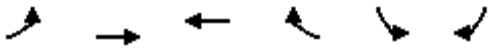
Splits and Phases: 1: Dundas Street & Hwy407 Soutbound





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1137	1889	293	198
v/c Ratio	0.34	0.81	0.35	0.51
Control Delay	11.2	14.4	40.6	44.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	11.2	14.4	40.6	44.8
Queue Length 50th (m)	48.1	71.6	31.7	46.2
Queue Length 95th (m)	56.0	61.7	44.8	73.9
Internal Link Dist (m)	149.3	180.0	116.6	
Turn Bay Length (m)				
Base Capacity (vph)	3327	2339	843	390
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	0.34	0.81	0.35	0.51

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↰↰	↱
Traffic Volume (vph)	0	1103	1832	0	91	385
Future Volume (vph)	0	1103	1832	0	91	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5	6.5		6.0	6.0
Lane Util. Factor		0.91	0.95		0.97	0.91
Frt		1.00	1.00		0.90	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5092	3579		3220	1457
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5092	3579		3220	1457
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1137	1889	0	94	397
RTOR Reduction (vph)	0	0	0	0	16	16
Lane Group Flow (vph)	0	1137	1889	0	277	182
Heavy Vehicles (%)	2%	3%	2%	2%	3%	2%
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Actuated Green, G (s)		91.5	91.5		36.0	36.0
Effective Green, g (s)		91.5	91.5		36.0	36.0
Actuated g/C Ratio		0.65	0.65		0.26	0.26
Clearance Time (s)		6.5	6.5		6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		3327	2339		828	374
v/s Ratio Prot		0.22	c0.53		0.09	c0.13
v/s Ratio Perm						
v/c Ratio		0.34	0.81		0.34	0.49
Uniform Delay, d1		10.8	17.8		42.3	44.2
Progression Factor		1.00	0.65		1.00	1.00
Incremental Delay, d2		0.3	2.5		1.1	4.5
Delay (s)		11.1	14.1		43.4	48.7
Level of Service		B	B		D	D
Approach Delay (s)		11.1	14.1		45.5	
Approach LOS		B	B		D	

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

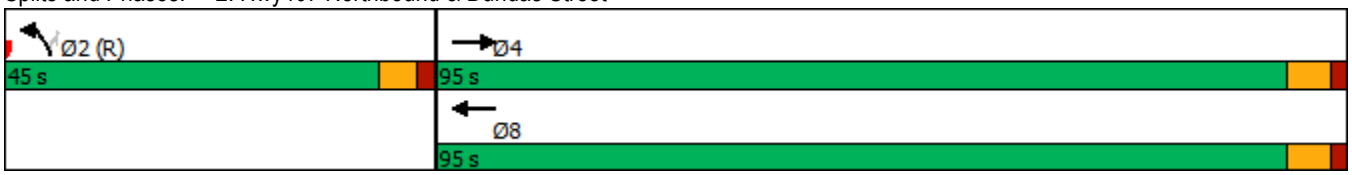


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	995	0	0	1923	62	119
Future Volume (vph)	995	0	0	1923	62	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0	50.0		0.0	0.0
Storage Lanes		0	1		2	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.91
Frt					0.926	0.850
Flt Protected					0.975	
Satd. Flow (prot)	3544	0	0	5142	3085	1429
Flt Permitted					0.975	
Satd. Flow (perm)	3544	0	0	5142	3085	1429
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)					63	62
Link Speed (k/h)	50			50	50	
Link Distance (m)	141.9			1154.0	117.1	
Travel Time (s)	10.2			83.1	8.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	2%	2%	2%	14%	4%
Adj. Flow (vph)	1047	0	0	2024	65	125
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	1047	0	0	2024	128	62
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases						2
Detector Phase	4			8	2	2
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	8.0
Minimum Split (s)	31.5			31.5	24.0	24.0
Total Split (s)	95.0			95.0	45.0	45.0
Total Split (%)	67.9%			67.9%	32.1%	32.1%
Maximum Green (s)	88.5			88.5	39.0	39.0
Yellow Time (s)	4.6			4.6	4.0	4.0
All-Red Time (s)	1.9			1.9	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.5			6.5	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	None			None	C-Max	C-Max
Walk Time (s)	7.0			7.0		
Flash Dont Walk (s)	18.0			18.0		
Pedestrian Calls (#/hr)	0			0		
Act Effct Green (s)	80.1			80.1	47.4	47.4
Actuated g/C Ratio	0.57			0.57	0.34	0.34
v/c Ratio	0.52			0.69	0.12	0.12
Control Delay	13.6			22.2	18.5	9.0
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	13.6			22.2	18.5	9.0
LOS	B			C	B	A
Approach Delay	13.6			22.2	15.4	
Approach LOS	B			C	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 19.0		Intersection LOS: B	
Intersection Capacity Utilization 77.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Hwy407 Northbound & Dundas Street





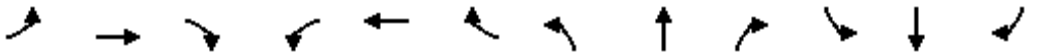
Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1047	2024	128	62
v/c Ratio	0.52	0.69	0.12	0.12
Control Delay	13.6	22.2	18.5	9.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.6	22.2	18.5	9.0
Queue Length 50th (m)	45.9	136.7	6.3	0.0
Queue Length 95th (m)	42.9	130.9	14.7	12.0
Internal Link Dist (m)	117.9	1130.0	93.1	
Turn Bay Length (m)				
Base Capacity (vph)	2240	3250	1086	524
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	0.47	0.62	0.12	0.12

Intersection Summary



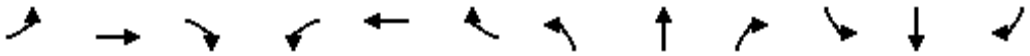
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	995	0	0	1923	62	119
Future Volume (vph)	995	0	0	1923	62	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5			6.5	6.0	6.0
Lane Util. Factor	0.95			0.91	0.97	0.91
Frt	1.00			1.00	0.93	0.85
Flt Protected	1.00			1.00	0.98	1.00
Satd. Flow (prot)	3544			5142	3086	1429
Flt Permitted	1.00			1.00	0.98	1.00
Satd. Flow (perm)	3544			5142	3086	1429
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1047	0	0	2024	65	125
RTOR Reduction (vph)	0	0	0	0	42	41
Lane Group Flow (vph)	1047	0	0	2024	86	21
Heavy Vehicles (%)	3%	2%	2%	2%	14%	4%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	80.1			80.1	47.4	47.4
Effective Green, g (s)	80.1			80.1	47.4	47.4
Actuated g/C Ratio	0.57			0.57	0.34	0.34
Clearance Time (s)	6.5			6.5	6.0	6.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2027			2941	1044	483
v/s Ratio Prot	0.30			c0.39	c0.03	
v/s Ratio Perm						0.01
v/c Ratio	0.52			0.69	0.08	0.04
Uniform Delay, d1	18.2			21.1	31.5	31.1
Progression Factor	0.71			1.00	1.00	1.00
Incremental Delay, d2	0.2			0.7	0.2	0.2
Delay (s)	13.1			21.8	31.7	31.3
Level of Service	B			C	C	C
Approach Delay (s)	13.1			21.8	31.5	
Approach LOS	B			C	C	

Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	5	10	175	10	17	18	262	48	7	255	1
Future Volume (vph)	2	5	10	175	10	17	18	262	48	7	255	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		60.0	50.0		0.0	30.0		15.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850		0.904			0.977			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1921	1633	1825	1737	0	1825	3507	0	1825	3610	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1825	1921	1633	1825	1737	0	1825	3507	0	1825	3610	0
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		86.0			162.7			532.8			105.0	
Travel Time (s)		5.2			9.8			32.0			6.3	
Confl. Peds. (#/hr)	1		1	1		1			3	3		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	2	5	10	180	10	18	19	270	49	7	263	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	5	10	180	28	0	19	319	0	7	264	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

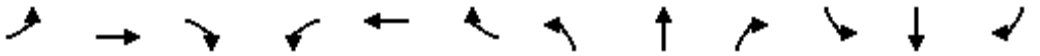
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	5	10	175	10	17	18	262	48	7	255	1
Future Volume (Veh/h)	2	5	10	175	10	17	18	262	48	7	255	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	2	5	10	180	10	18	19	270	49	7	263	1
Pedestrians					3			1			1	
Lane Width (m)					3.7			3.7			3.7	
Walking Speed (m/s)					1.1			1.1			1.1	
Percent Blockage					0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	474	638	133	494	614	164	264			322		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	474	638	133	494	614	164	264			322		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	99	99	59	98	98	99			99		
cM capacity (veh/h)	450	388	897	443	401	855	1312			1246		

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2	5	10	180	28	19	180	139	7	175	89
Volume Left	2	0	0	180	0	19	0	0	7	0	0
Volume Right	0	0	10	0	18	0	0	49	0	0	1
cSH	450	388	897	443	609	1312	1700	1700	1246	1700	1700
Volume to Capacity	0.00	0.01	0.01	0.41	0.05	0.01	0.11	0.08	0.01	0.10	0.05
Queue Length 95th (m)	0.1	0.3	0.3	14.7	1.1	0.3	0.0	0.0	0.1	0.0	0.0
Control Delay (s)	13.0	14.4	9.1	18.6	11.2	7.8	0.0	0.0	7.9	0.0	0.0
Lane LOS	B	B	A	C	B	A			A		
Approach Delay (s)	11.1			17.6		0.4			0.2		
Approach LOS	B			C							

Intersection Summary					
Average Delay	4.9				
Intersection Capacity Utilization	38.0%	ICU Level of Service		A	
Analysis Period (min)	15				



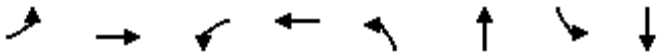
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	9	42	67	7	32	48	839	17	27	642	50
Future Volume (vph)	40	9	42	67	7	32	48	839	17	27	642	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	55.0		0.0	95.0		0.0	70.0		100.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00								
Frt		0.877			0.876			0.997			0.989	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1664	0	1772	1603	0	1825	5128	0	1825	5046	0
Flt Permitted	0.730			0.721			0.324			0.301		
Satd. Flow (perm)	1402	1664	0	1341	1603	0	622	5128	0	578	5046	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			34			6			20	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		616.2			251.6			287.9			279.5	
Travel Time (s)		37.0			15.1			14.8			14.4	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	3%	0%	6%	0%	2%	0%	0%	3%	0%
Adj. Flow (vph)	43	10	45	71	7	34	51	893	18	29	683	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	55	0	71	41	0	51	911	0	29	736	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		11.0	32.0		32.0	32.0	
Total Split (s)	27.0	27.0		27.0	27.0		12.0	73.0		61.0	61.0	
Total Split (%)	27.0%	27.0%		27.0%	27.0%		12.0%	73.0%		61.0%	61.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		8.0	67.0		55.0	55.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		Max	C-Max		C-Max	C-Max	
Walk Time (s)								7.0		7.0	7.0	
Flash Dont Walk (s)								19.0		19.0	19.0	
Pedestrian Calls (#/hr)								0		0	0	
Act Effct Green (s)	11.0	11.0		11.0	11.0		78.0	76.0		55.0	55.0	
Actuated g/C Ratio	0.11	0.11		0.11	0.11		0.78	0.76		0.55	0.55	
v/c Ratio	0.28	0.25		0.48	0.20		0.07	0.23		0.09	0.26	
Control Delay	44.3	17.8		52.0	18.2		3.2	3.9		8.5	13.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	44.3	17.8		52.0	18.2		3.2	3.9		8.5	13.1	
LOS	D	B		D	B		A	A		A	B	
Approach Delay		29.4			39.6			3.8			12.9	
Approach LOS		C			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 12 (12%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 10.8		Intersection LOS: B	
Intersection Capacity Utilization 49.5%		ICU Level of Service A	
Analysis Period (min) 15			

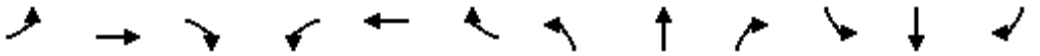
Splits and Phases: 5: Appleby & Palladium Way/Harrison





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	43	55	71	41	51	911	29	736
v/c Ratio	0.28	0.25	0.48	0.20	0.07	0.23	0.09	0.26
Control Delay	44.3	17.8	52.0	18.2	3.2	3.9	8.5	13.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.3	17.8	52.0	18.2	3.2	3.9	8.5	13.1
Queue Length 50th (m)	7.8	1.8	13.2	1.2	1.7	14.9	3.4	39.8
Queue Length 95th (m)	17.3	12.2	25.8	10.4	5.0	23.6	0.8	1.5
Internal Link Dist (m)		592.2		227.6		263.9		255.5
Turn Bay Length (m)	45.0		55.0		95.0		70.0	
Base Capacity (vph)	280	368	268	347	689	3897	317	2784
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	0.15	0.15	0.26	0.12	0.07	0.23	0.09	0.26

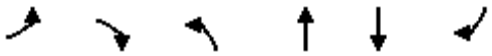
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	9	42	67	7	32	48	839	17	27	642	50
Future Volume (vph)	40	9	42	67	7	32	48	839	17	27	642	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.88		1.00	0.88		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	1661		1763	1602		1825	5129		1825	5047	
Flt Permitted	0.73	1.00		0.72	1.00		0.32	1.00		0.30	1.00	
Satd. Flow (perm)	1403	1661		1338	1602		623	5129		578	5047	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	43	10	45	71	7	34	51	893	18	29	683	53
RTOR Reduction (vph)	0	40	0	0	30	0	0	1	0	0	9	0
Lane Group Flow (vph)	43	15	0	71	11	0	51	910	0	29	727	0
Confl. Peds. (#/hr)			2	2								
Heavy Vehicles (%)	0%	0%	0%	3%	0%	6%	0%	2%	0%	0%	3%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	11.0	11.0		11.0	11.0		76.0	76.0		55.0	55.0	
Effective Green, g (s)	11.0	11.0		11.0	11.0		76.0	76.0		55.0	55.0	
Actuated g/C Ratio	0.11	0.11		0.11	0.11		0.76	0.76		0.55	0.55	
Clearance Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	154	182		147	176		677	3898		317	2775	
v/s Ratio Prot		0.01			0.01		0.01	c0.18			c0.14	
v/s Ratio Perm	0.03			c0.05			0.04			0.05		
v/c Ratio	0.28	0.08		0.48	0.06		0.08	0.23		0.09	0.26	
Uniform Delay, d1	40.9	40.0		41.8	39.9		3.2	3.5		10.7	11.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.72	1.11	
Incremental Delay, d2	1.0	0.2		2.5	0.1		0.2	0.1		0.6	0.2	
Delay (s)	41.9	40.2		44.3	40.0		3.4	3.6		8.2	13.4	
Level of Service	D	D		D	D		A	A		A	B	
Approach Delay (s)		40.9			42.7			3.6			13.2	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	43	18	0	602	789	0
Future Volume (vph)	43	18	0	602	789	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1690	1526	0	3544	3544	0
Flt Permitted	0.950					
Satd. Flow (perm)	1690	1526	0	3544	3544	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		19				
Link Speed (k/h)	50			50	70	
Link Distance (m)	146.5			104.0	373.0	
Travel Time (s)	10.5			7.5	19.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	8%	7%	2%	3%	3%	2%
Adj. Flow (vph)	45	19	0	634	831	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	19	0	634	831	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0		8.0	8.0	
Minimum Split (s)	25.0	25.0		25.0	25.0	
Total Split (s)	32.0	32.0		68.0	68.0	
Total Split (%)	32.0%	32.0%		68.0%	68.0%	
Maximum Green (s)	25.0	25.0		61.0	61.0	
Yellow Time (s)	4.0	4.0		5.0	5.0	
All-Red Time (s)	3.0	3.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	8.9	8.9		81.5	81.5	
Actuated g/C Ratio	0.09	0.09		0.82	0.82	
v/c Ratio	0.30	0.12		0.22	0.29	
Control Delay	47.6	19.4		2.9	5.0	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	47.6	19.4		2.9	5.0	
LOS	D	B		A	A	
Approach Delay	39.3			2.9	5.0	
Approach LOS	D			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 5.6		Intersection LOS: A	
Intersection Capacity Utilization 40.1%		ICU Level of Service A	
Analysis Period (min) 15			

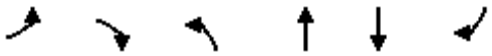
Splits and Phases: 6: Appleby & Hwy407 Eastbound





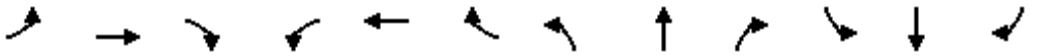
Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	45	19	634	831
v/c Ratio	0.30	0.12	0.22	0.29
Control Delay	47.6	19.4	2.9	5.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	47.6	19.4	2.9	5.0
Queue Length 50th (m)	8.4	0.0	13.0	33.3
Queue Length 95th (m)	18.6	6.7	20.0	47.3
Internal Link Dist (m)	122.5		80.0	349.0
Turn Bay Length (m)				
Base Capacity (vph)	422	395	2889	2889
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	0.11	0.05	0.22	0.29

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	43	18	0	602	789	0
Future Volume (vph)	43	18	0	602	789	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	1690	1526		3544	3544	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	1690	1526		3544	3544	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	45	19	0	634	831	0
RTOR Reduction (vph)	0	18	0	0	0	0
Lane Group Flow (vph)	45	1	0	634	831	0
Heavy Vehicles (%)	8%	7%	2%	3%	3%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	7.3	7.3		78.7	78.7	
Effective Green, g (s)	7.3	7.3		78.7	78.7	
Actuated g/C Ratio	0.07	0.07		0.79	0.79	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	123	111		2789	2789	
v/s Ratio Prot	c0.03			0.18	c0.23	
v/s Ratio Perm		0.00				
v/c Ratio	0.37	0.01		0.23	0.30	
Uniform Delay, d1	44.1	43.0		2.8	3.0	
Progression Factor	1.00	1.00		0.93	1.53	
Incremental Delay, d2	1.8	0.0		0.2	0.3	
Delay (s)	46.0	43.1		2.8	4.8	
Level of Service	D	D		A	A	
Approach Delay (s)	45.1			2.8	4.8	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

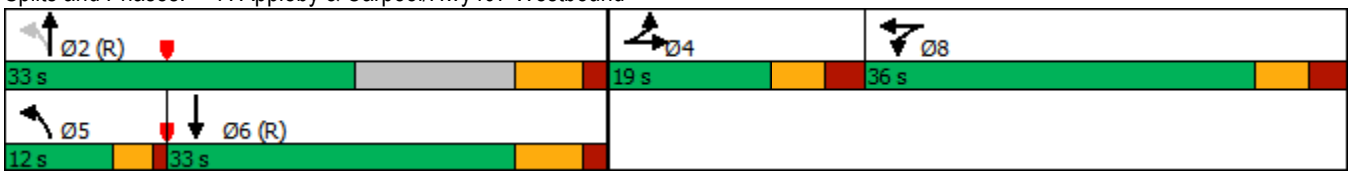


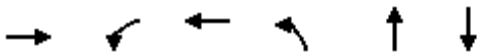
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	9	386	5	36	7	555	0	0	503	5
Future Volume (vph)	4	0	9	386	5	36	7	555	0	0	503	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	80.0		0.0	0.0		0.0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91
Frt		0.907			0.974						0.999	
Flt Protected		0.985		0.950	0.961		0.950					
Satd. Flow (prot)	0	1595	0	1700	1675	0	1560	3544	0	0	5087	0
Flt Permitted		0.985		0.950	0.961		0.416					
Satd. Flow (perm)	0	1595	0	1700	1675	0	683	3544	0	0	5087	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		164			10						1	
Link Speed (k/h)		50			50			50			70	
Link Distance (m)		127.4			84.3			373.0			64.3	
Travel Time (s)		9.2			6.1			26.9			3.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	11%	2%	2%	2%	17%	3%	0%	2%	3%	2%
Adj. Flow (vph)	4	0	9	398	5	37	7	572	0	0	519	5
Shared Lane Traffic (%)				44%								
Lane Group Flow (vph)	0	13	0	223	217	0	7	572	0	0	524	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2			2	
Detector Template	Left	Thru		Left	Thru		Left	Thru			Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5			30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8			1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							2					
Detector Phase	4	4		8	8		5	2			6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)	15.0	15.0		20.0	20.0		12.0	33.0			33.0	
Total Split (s)	19.0	19.0		36.0	36.0		12.0	33.0			33.0	
Total Split (%)	19.0%	19.0%		36.0%	36.0%		12.0%	33.0%			33.0%	
Maximum Green (s)	12.0	12.0		29.0	29.0		8.0	26.0			26.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	5.0			5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0			2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Recall Mode	None	None		None	None		None	C-Max			C-Max	
Walk Time (s)				8.0	8.0			7.0			7.0	
Flash Dont Walk (s)				5.0	5.0			19.0			19.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		8.0		18.9	18.9		67.1	64.1			61.7	
Actuated g/C Ratio		0.08		0.19	0.19		0.67	0.64			0.62	
v/c Ratio		0.05		0.70	0.67		0.01	0.25			0.17	
Control Delay		0.3		48.8	45.4		9.9	9.2			11.3	
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay		0.3		48.8	45.4		9.9	9.2			11.3	
LOS		A		D	D		A	A			B	
Approach Delay		0.3			47.1			9.2			11.3	
Approach LOS		A			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 20.6		Intersection LOS: C	
Intersection Capacity Utilization 45.6%		ICU Level of Service A	
Analysis Period (min) 15			

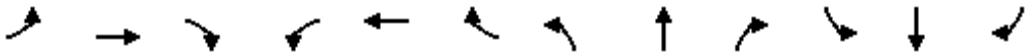
Splits and Phases: 7: Appleby & Carpool/Hwy407 Westbound





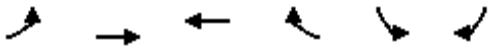
Lane Group	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	13	223	217	7	572	524
v/c Ratio	0.05	0.70	0.67	0.01	0.25	0.17
Control Delay	0.3	48.8	45.4	9.9	9.2	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.3	48.8	45.4	9.9	9.2	11.3
Queue Length 50th (m)	0.0	43.1	39.7	0.4	23.6	11.9
Queue Length 95th (m)	0.0	62.2	58.7	3.3	51.6	36.9
Internal Link Dist (m)	103.4		60.3		349.0	40.3
Turn Bay Length (m)				80.0		
Base Capacity (vph)	335	493	492	528	2273	3141
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.45	0.44	0.01	0.25	0.17

Intersection Summary

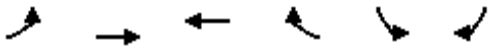


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	9	386	5	36	7	555	0	0	503	5
Future Volume (vph)	4	0	9	386	5	36	7	555	0	0	503	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95			0.91	
Frt		0.91		1.00	0.97		1.00	1.00			1.00	
Flt Protected		0.98		0.95	0.96		0.95	1.00			1.00	
Satd. Flow (prot)		1594		1700	1676		1560	3544			5085	
Flt Permitted		0.98		0.95	0.96		0.42	1.00			1.00	
Satd. Flow (perm)		1594		1700	1676		683	3544			5085	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	4	0	9	398	5	37	7	572	0	0	519	5
RTOR Reduction (vph)	0	13	0	0	8	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	223	209	0	7	572	0	0	524	0
Heavy Vehicles (%)	0%	0%	11%	2%	2%	2%	17%	3%	0%	2%	3%	2%
Turn Type	Split	NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	
Permitted Phases							2					
Actuated Green, G (s)		1.6		18.9	18.9		58.5	58.5			52.9	
Effective Green, g (s)		1.6		18.9	18.9		58.5	58.5			52.9	
Actuated g/C Ratio		0.02		0.19	0.19		0.58	0.58			0.53	
Clearance Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		25		321	316		413	2073			2689	
v/s Ratio Prot		c0.00		c0.13	0.12		0.00	c0.16			0.10	
v/s Ratio Perm							0.01					
v/c Ratio		0.01		0.69	0.66		0.02	0.28			0.19	
Uniform Delay, d1		48.4		37.9	37.6		8.7	10.3			12.4	
Progression Factor		1.00		1.00	1.00		0.99	0.93			1.00	
Incremental Delay, d2		0.1		6.4	5.1		0.0	0.3			0.2	
Delay (s)		48.6		44.2	42.7		8.6	9.9			12.5	
Level of Service		D		D	D		A	A			B	
Approach Delay (s)		48.6			43.5			9.9			12.5	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



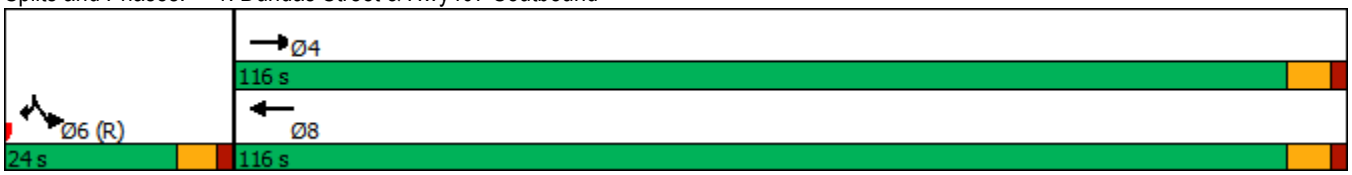
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1947	801	0	34	130
Future Volume (vph)	0	1947	801	0	34	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	0.91
Frt					0.901	0.850
Flt Protected					0.983	
Satd. Flow (prot)	0	5092	3411	0	3025	1415
Flt Permitted					0.983	
Satd. Flow (perm)	0	5092	3411	0	3025	1415
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					67	66
Link Speed (k/h)		50	50		50	
Link Distance (m)		173.3	204.0		140.6	
Travel Time (s)		12.5	14.7		10.1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	3%	7%	2%	17%	5%
Adj. Flow (vph)	0	1987	817	0	35	133
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	0	1987	817	0	102	66
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Detector Phase		4	8		6	6
Switch Phase						

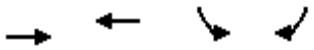


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		8.0	8.0		8.0	8.0
Minimum Split (s)		31.5	31.5		24.0	24.0
Total Split (s)		116.0	116.0		24.0	24.0
Total Split (%)		82.9%	82.9%		17.1%	17.1%
Maximum Green (s)		109.5	109.5		18.0	18.0
Yellow Time (s)		4.6	4.6		4.0	4.0
All-Red Time (s)		1.9	1.9		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		6.5	6.5		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		18.0	18.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		109.5	109.5		18.0	18.0
Actuated g/C Ratio		0.78	0.78		0.13	0.13
v/c Ratio		0.50	0.31		0.23	0.28
Control Delay		6.0	3.6		23.2	15.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		6.0	3.6		23.2	15.3
LOS		A	A		C	B
Approach Delay		6.0	3.6		20.1	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

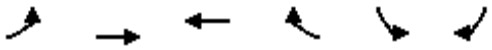
Splits and Phases: 1: Dundas Street & Hwy407 Soutbound





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1987	817	102	66
v/c Ratio	0.50	0.31	0.23	0.28
Control Delay	6.0	3.6	23.2	15.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	6.0	3.6	23.2	15.3
Queue Length 50th (m)	61.8	14.6	4.4	0.0
Queue Length 95th (m)	69.1	25.8	13.0	15.3
Internal Link Dist (m)	149.3	180.0	116.6	
Turn Bay Length (m)				
Base Capacity (vph)	3982	2667	447	239
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	0.50	0.31	0.23	0.28

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1947	801	0	34	130
Future Volume (vph)	0	1947	801	0	34	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5	6.5		6.0	6.0
Lane Util. Factor		0.91	0.95		0.97	0.91
Frt		1.00	1.00		0.90	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5092	3411		3027	1415
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5092	3411		3027	1415
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1987	817	0	35	133
RTOR Reduction (vph)	0	0	0	0	58	58
Lane Group Flow (vph)	0	1987	817	0	44	8
Heavy Vehicles (%)	2%	3%	7%	2%	17%	5%
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Actuated Green, G (s)		109.5	109.5		18.0	18.0
Effective Green, g (s)		109.5	109.5		18.0	18.0
Actuated g/C Ratio		0.78	0.78		0.13	0.13
Clearance Time (s)		6.5	6.5		6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		3982	2667		389	181
v/s Ratio Prot		c0.39	0.24		c0.01	0.01
v/s Ratio Perm						
v/c Ratio		0.50	0.31		0.11	0.05
Uniform Delay, d1		5.4	4.4		53.9	53.5
Progression Factor		1.00	0.75		1.00	1.00
Incremental Delay, d2		0.4	0.3		0.6	0.5
Delay (s)		5.9	3.6		54.5	54.0
Level of Service		A	A		D	D
Approach Delay (s)		5.9	3.6		54.3	
Approach LOS		A	A		D	

Intersection Summary			
HCM 2000 Control Delay	8.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

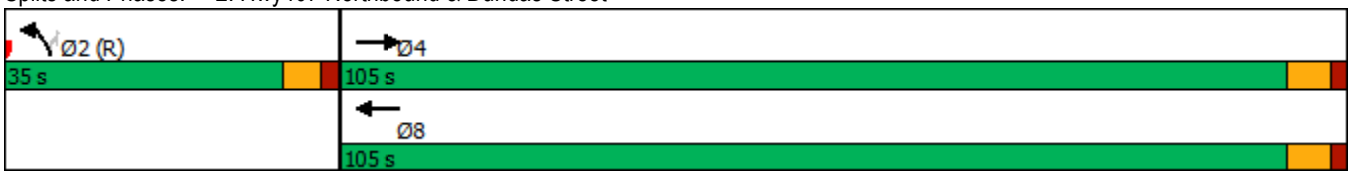


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1518	0	0	895	30	156
Future Volume (vph)	1518	0	0	895	30	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0	50.0		0.0	0.0
Storage Lanes		0	1		2	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.91
Frt					0.892	0.850
Flt Protected					0.986	
Satd. Flow (prot)	3544	0	0	4995	3000	1457
Flt Permitted					0.986	
Satd. Flow (perm)	3544	0	0	4995	3000	1457
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)					57	57
Link Speed (k/h)	50			50	50	
Link Distance (m)	141.9			1154.0	117.1	
Travel Time (s)	10.2			83.1	8.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	2%	2%	5%	28%	2%
Adj. Flow (vph)	1549	0	0	913	31	159
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	1549	0	0	913	111	79
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases						2
Detector Phase	4			8	2	2
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	8.0
Minimum Split (s)	31.5			31.5	24.0	24.0
Total Split (s)	105.0			105.0	35.0	35.0
Total Split (%)	75.0%			75.0%	25.0%	25.0%
Maximum Green (s)	98.5			98.5	29.0	29.0
Yellow Time (s)	4.6			4.6	4.0	4.0
All-Red Time (s)	1.9			1.9	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.5			6.5	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	None			None	C-Max	C-Max
Walk Time (s)	7.0			7.0		
Flash Dont Walk (s)	18.0			18.0		
Pedestrian Calls (#/hr)	0			0		
Act Effct Green (s)	87.0			87.0	40.5	40.5
Actuated g/C Ratio	0.62			0.62	0.29	0.29
v/c Ratio	0.70			0.29	0.12	0.17
Control Delay	13.9			12.2	21.5	17.1
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	13.9			12.2	21.5	17.1
LOS	B			B	C	B
Approach Delay	13.9			12.2	19.7	
Approach LOS	B			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 13.7		Intersection LOS: B	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Hwy407 Northbound & Dundas Street





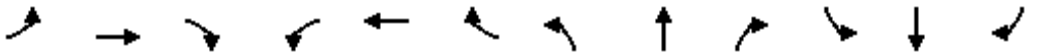
Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1549	913	111	79
v/c Ratio	0.70	0.29	0.12	0.17
Control Delay	13.9	12.2	21.5	17.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.9	12.2	21.5	17.1
Queue Length 50th (m)	62.5	39.7	5.6	4.9
Queue Length 95th (m)	49.3	36.4	14.5	20.9
Internal Link Dist (m)	117.9	1130.0	93.1	
Turn Bay Length (m)				
Base Capacity (vph)	2493	3514	907	462
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	0.62	0.26	0.12	0.17

Intersection Summary



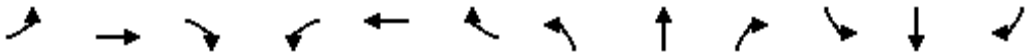
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1518	0	0	895	30	156
Future Volume (vph)	1518	0	0	895	30	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5			6.5	6.0	6.0
Lane Util. Factor	0.95			0.91	0.97	0.91
Frt	1.00			1.00	0.89	0.85
Flt Protected	1.00			1.00	0.99	1.00
Satd. Flow (prot)	3544			4995	3000	1457
Flt Permitted	1.00			1.00	0.99	1.00
Satd. Flow (perm)	3544			4995	3000	1457
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1549	0	0	913	31	159
RTOR Reduction (vph)	0	0	0	0	41	41
Lane Group Flow (vph)	1549	0	0	913	70	38
Heavy Vehicles (%)	3%	2%	2%	5%	28%	2%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	87.0			87.0	40.5	40.5
Effective Green, g (s)	87.0			87.0	40.5	40.5
Actuated g/C Ratio	0.62			0.62	0.29	0.29
Clearance Time (s)	6.5			6.5	6.0	6.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2202			3104	867	421
v/s Ratio Prot	c0.44			0.18	0.02	
v/s Ratio Perm						c0.03
v/c Ratio	0.70			0.29	0.08	0.09
Uniform Delay, d1	17.8			12.3	36.2	36.3
Progression Factor	0.70			1.00	1.00	1.00
Incremental Delay, d2	0.9			0.1	0.2	0.4
Delay (s)	13.4			12.3	36.4	36.7
Level of Service	B			B	D	D
Approach Delay (s)	13.4			12.3	36.5	
Approach LOS	B			B	D	

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	4	19	121	3	8	14	213	235	16	246	1
Future Volume (vph)	1	4	19	121	3	8	14	213	235	16	246	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		60.0	50.0		0.0	30.0		15.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.893			0.921				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1921	1633	1825	1716	0	1825	3267	0	1825	3510	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1825	1921	1633	1825	1716	0	1825	3267	0	1825	3510	0
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		86.0			162.7			532.8			105.0	
Travel Time (s)		5.2			9.8			32.0			6.3	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	1%	0%	4%	0%
Adj. Flow (vph)	1	5	23	148	4	10	17	260	287	20	300	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	5	23	148	14	0	17	547	0	20	301	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

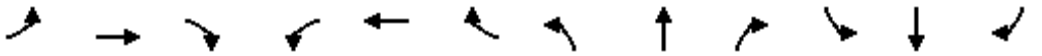
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	4	19	121	3	8	14	213	235	16	246	1
Future Volume (Veh/h)	1	4	19	121	3	8	14	213	235	16	246	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	1	5	23	148	4	10	17	260	287	20	300	1
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	516	922	150	653	778	274	301			547		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	516	922	150	653	778	274	301			547		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	97	56	99	99	99			98		
cM capacity (veh/h)	425	264	875	334	319	730	1272			1033		

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1	5	23	148	14	17	173	374	20	200	101
Volume Left	1	0	0	148	0	17	0	0	20	0	0
Volume Right	0	0	23	0	10	0	0	287	0	0	1
cSH	425	264	875	334	534	1272	1700	1700	1033	1700	1700
Volume to Capacity	0.00	0.02	0.03	0.44	0.03	0.01	0.10	0.22	0.02	0.12	0.06
Queue Length 95th (m)	0.1	0.4	0.6	16.6	0.6	0.3	0.0	0.0	0.5	0.0	0.0
Control Delay (s)	13.5	18.9	9.2	24.1	11.9	7.9	0.0	0.0	8.6	0.0	0.0
Lane LOS	B	C	A	C	B	A			A		
Approach Delay (s)	11.0			23.1		0.2			0.5		
Approach LOS	B			C							

Intersection Summary					
Average Delay	4.1				
Intersection Capacity Utilization	33.5%	ICU Level of Service		A	
Analysis Period (min)	15				



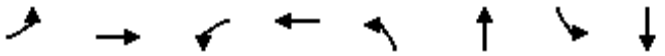
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	5	61	36	4	17	160	968	7	17	695	100
Future Volume (vph)	114	5	61	36	4	17	160	968	7	17	695	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	55.0		0.0	95.0		0.0	70.0		100.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00			1.00				1.00	
Frt		0.861			0.877			0.999			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1574	0	1521	1523	0	1825	5039	0	1706	4913	0
Flt Permitted	0.743			0.711			0.269			0.264		
Satd. Flow (perm)	1427	1574	0	1136	1523	0	516	5039	0	474	4913	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		65			18			1			31	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		616.2			251.6			287.9			279.5	
Travel Time (s)		37.0			15.1			14.8			14.4	
Confl. Peds. (#/hr)			2	2			3					3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	4%	20%	0%	13%	0%	4%	0%	7%	5%	0%
Adj. Flow (vph)	121	5	65	38	4	18	170	1030	7	18	739	106
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	70	0	38	22	0	170	1037	0	18	845	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	41.0	41.0		41.0	41.0		11.0	32.0		32.0	32.0	
Total Split (s)	42.0	42.0		42.0	42.0		12.0	78.0		66.0	66.0	
Total Split (%)	35.0%	35.0%		35.0%	35.0%		10.0%	65.0%		55.0%	55.0%	
Maximum Green (s)	35.0	35.0		35.0	35.0		8.0	72.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	27.0	27.0		27.0	27.0			19.0		19.0	19.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	15.5	15.5		15.5	15.5		93.5	91.5		60.0	60.0	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.78	0.76		0.50	0.50	
v/c Ratio	0.66	0.27		0.26	0.10		0.24	0.27		0.08	0.34	
Control Delay	65.6	14.5		49.3	21.1		4.6	4.8		16.8	17.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	65.6	14.5		49.3	21.1		4.6	4.8		16.8	17.8	
LOS	E	B		D	C		A	A		B	B	
Approach Delay		46.9			39.0			4.8			17.8	
Approach LOS		D			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 12 (10%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 14.0		Intersection LOS: B	
Intersection Capacity Utilization 58.7%		ICU Level of Service B	
Analysis Period (min) 15			

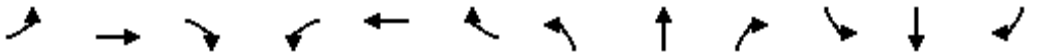
Splits and Phases: 5: Appleby & Palladium Way/Harrison





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	121	70	38	22	170	1037	18	845
v/c Ratio	0.66	0.27	0.26	0.10	0.24	0.27	0.08	0.34
Control Delay	65.6	14.5	49.3	21.1	4.6	4.8	16.8	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.6	14.5	49.3	21.1	4.6	4.8	16.8	17.8
Queue Length 50th (m)	27.5	1.1	8.2	0.8	8.1	22.7	2.1	40.9
Queue Length 95th (m)	44.7	13.4	17.9	8.0	17.1	35.0	6.4	50.3
Internal Link Dist (m)		592.2		227.6		263.9		255.5
Turn Bay Length (m)	45.0		55.0		95.0		70.0	
Base Capacity (vph)	416	505	331	456	701	3841	237	2472
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	0.14	0.11	0.05	0.24	0.27	0.08	0.34

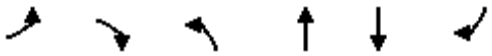
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	5	61	36	4	17	160	968	7	17	695	100
Future Volume (vph)	114	5	61	36	4	17	160	968	7	17	695	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.86		1.00	0.88		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	1573		1518	1523		1824	5039		1706	4914	
Flt Permitted	0.74	1.00		0.71	1.00		0.27	1.00		0.26	1.00	
Satd. Flow (perm)	1427	1573		1137	1523		518	5039		474	4914	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	121	5	65	38	4	18	170	1030	7	18	739	106
RTOR Reduction (vph)	0	57	0	0	16	0	0	0	0	0	16	0
Lane Group Flow (vph)	121	13	0	38	6	0	170	1037	0	18	830	0
Confl. Peds. (#/hr)			2	2			3					3
Heavy Vehicles (%)	0%	0%	4%	20%	0%	13%	0%	4%	0%	7%	5%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	15.5	15.5		15.5	15.5		91.5	91.5		60.0	60.0	
Effective Green, g (s)	15.5	15.5		15.5	15.5		91.5	91.5		60.0	60.0	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.76	0.76		0.50	0.50	
Clearance Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	184	203		146	196		694	3842		237	2457	
v/s Ratio Prot		0.01			0.00		0.06	c0.21			c0.17	
v/s Ratio Perm	c0.08			0.03			0.13			0.04		
v/c Ratio	0.66	0.07		0.26	0.03		0.24	0.27		0.08	0.34	
Uniform Delay, d1	49.7	45.9		47.1	45.7		4.4	4.3		15.6	18.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.2	0.1		1.0	0.1		0.8	0.2		0.6	0.4	
Delay (s)	57.9	46.0		48.0	45.8		5.2	4.4		16.2	18.4	
Level of Service	E	D		D	D		A	A		B	B	
Approach Delay (s)		53.6			47.2			4.5			18.4	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	75	0	0	512	583	0
Future Volume (vph)	75	0	0	512	583	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1722	1883	0	3544	3510	0
Flt Permitted	0.950					
Satd. Flow (perm)	1722	1883	0	3544	3510	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (k/h)	50			50	70	
Link Distance (m)	146.5			104.0	373.0	
Travel Time (s)	10.5			7.5	19.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	2%	2%	3%	4%	2%
Adj. Flow (vph)	83	0	0	569	648	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	83	0	0	569	648	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	7			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	7	4		2	6	
Switch Phase						
Minimum Initial (s)	5.0	8.0		8.0	8.0	
Minimum Split (s)	9.5	25.0		25.0	25.0	
Total Split (s)	9.5	29.0		56.0	56.0	
Total Split (%)	11.2%	34.1%		65.9%	65.9%	
Maximum Green (s)	5.0	22.0		49.0	49.0	
Yellow Time (s)	3.5	4.0		5.0	5.0	
All-Red Time (s)	1.0	3.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0	
Flash Dont Walk (s)		11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0	
Act Effct Green (s)	10.1			66.8	66.8	
Actuated g/C Ratio	0.12			0.79	0.79	
v/c Ratio	0.41			0.20	0.23	
Control Delay	40.0			3.4	3.6	
Queue Delay	0.0			0.0	0.0	
Total Delay	40.0			3.4	3.6	
LOS	D			A	A	
Approach Delay	40.0			3.4	3.6	
Approach LOS	D			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 5.8		Intersection LOS: A	
Intersection Capacity Utilization 29.9%		ICU Level of Service A	
Analysis Period (min) 15			

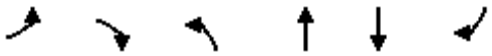
Splits and Phases: 6: Appleby & Hwy407 Eastbound





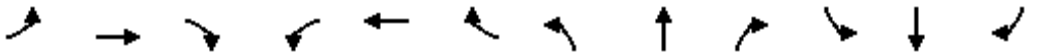
Lane Group	EBL	NBT	SBT
Lane Group Flow (vph)	83	569	648
v/c Ratio	0.41	0.20	0.23
Control Delay	40.0	3.4	3.6
Queue Delay	0.0	0.0	0.0
Total Delay	40.0	3.4	3.6
Queue Length 50th (m)	12.6	12.1	14.1
Queue Length 95th (m)	25.2	19.1	22.2
Internal Link Dist (m)	122.5	80.0	349.0
Turn Bay Length (m)			
Base Capacity (vph)	496	2786	2760
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.17	0.20	0.23

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	75	0	0	512	583	0
Future Volume (vph)	75	0	0	512	583	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5			7.0	7.0	
Lane Util. Factor	1.00			0.95	0.95	
Frt	1.00			1.00	1.00	
Flt Protected	0.95			1.00	1.00	
Satd. Flow (prot)	1722			3544	3510	
Flt Permitted	0.95			1.00	1.00	
Satd. Flow (perm)	1722			3544	3510	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	0	0	569	648	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	83	0	0	569	648	0
Heavy Vehicles (%)	6%	2%	2%	3%	4%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	7			2	6	
Permitted Phases		4				
Actuated Green, G (s)	9.5			64.0	64.0	
Effective Green, g (s)	9.5			64.0	64.0	
Actuated g/C Ratio	0.11			0.75	0.75	
Clearance Time (s)	4.5			7.0	7.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	192			2668	2642	
v/s Ratio Prot	c0.05			0.16	c0.18	
v/s Ratio Perm						
v/c Ratio	0.43			0.21	0.25	
Uniform Delay, d1	35.2			3.1	3.2	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	1.6			0.2	0.2	
Delay (s)	36.8			3.3	3.4	
Level of Service	D			A	A	
Approach Delay (s)	36.8			3.3	3.4	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	29.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



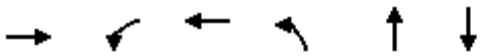
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	103	0	18	4	561	0	0	580	1
Future Volume (vph)	0	0	5	103	0	18	4	561	0	0	580	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	80.0		0.0	0.0		0.0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91
Frt		0.865			0.953							
Flt Protected				0.950	0.967		0.950					
Satd. Flow (prot)	0	1629	0	1636	1606	0	1789	3476	0	0	5092	0
Flt Permitted				0.950	0.967		0.382					
Satd. Flow (perm)	0	1629	0	1636	1606	0	719	3476	0	0	5092	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		367			193							
Link Speed (k/h)		50			50			50			70	
Link Distance (m)		127.4			84.3			373.0			64.3	
Travel Time (s)		9.2			6.1			26.9			3.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	2%	5%	2%	2%	3%	2%
Adj. Flow (vph)	0	0	5	106	0	19	4	578	0	0	598	1
Shared Lane Traffic (%)				40%								
Lane Group Flow (vph)	0	5	0	64	61	0	4	578	0	0	599	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2			2	
Detector Template	Left	Thru		Left	Thru		Left	Thru			Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5			30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8			1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							2					
Detector Phase	4	4		8	8		5	2			6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)	15.0	15.0		20.0	20.0		12.0	33.0			33.0	
Total Split (s)	17.0	17.0		20.0	20.0		13.0	48.0			35.0	
Total Split (%)	20.0%	20.0%		23.5%	23.5%		15.3%	56.5%			41.2%	
Maximum Green (s)	10.0	10.0		13.0	13.0		9.0	41.0			28.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	5.0			5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0			2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Recall Mode	None	None		None	None		None	Max			Max	
Walk Time (s)				8.0	8.0			7.0			7.0	
Flash Dont Walk (s)				5.0	5.0			19.0			19.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		8.1		8.9	8.9		51.2	49.8			47.7	
Actuated g/C Ratio		0.11		0.13	0.13		0.73	0.71			0.68	
v/c Ratio		0.01		0.31	0.16		0.01	0.24			0.17	
Control Delay		0.0		33.0	0.9		6.2	6.5			8.1	
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay		0.0		33.0	0.9		6.2	6.5			8.1	
LOS		A		C	A		A	A			A	
Approach Delay					17.4			6.5			8.1	
Approach LOS					B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 70.5			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay: 8.2		Intersection LOS: A	
Intersection Capacity Utilization 37.2%		ICU Level of Service A	
Analysis Period (min) 15			

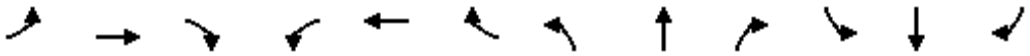
Splits and Phases: 7: Appleby & Carpool/Hwy407 Westbound





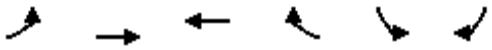
Lane Group	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	5	64	61	4	578	599
v/c Ratio	0.01	0.31	0.16	0.01	0.24	0.17
Control Delay	0.0	33.0	0.9	6.2	6.5	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.0	33.0	0.9	6.2	6.5	8.1
Queue Length 50th (m)	0.0	7.6	0.0	0.2	12.3	8.4
Queue Length 95th (m)	0.0	21.1	0.0	1.6	37.4	33.2
Internal Link Dist (m)	103.4		60.3		349.0	40.3
Turn Bay Length (m)				80.0		
Base Capacity (vph)	547	305	456	660	2453	3444
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.21	0.13	0.01	0.24	0.17

Intersection Summary

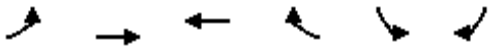


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	103	0	18	4	561	0	0	580	1
Future Volume (vph)	0	0	5	103	0	18	4	561	0	0	580	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95			0.91	
Frt		0.86		1.00	0.95		1.00	1.00			1.00	
Flt Protected		1.00		0.95	0.97		0.95	1.00			1.00	
Satd. Flow (prot)		1629		1636	1606		1789	3476			5091	
Flt Permitted		1.00		0.95	0.97		0.38	1.00			1.00	
Satd. Flow (perm)		1629		1636	1606		719	3476			5091	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	5	106	0	19	4	578	0	0	598	1
RTOR Reduction (vph)	0	5	0	0	56	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	64	5	0	4	578	0	0	599	0
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	2%	5%	2%	2%	3%	2%
Turn Type		NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	
Permitted Phases							2					
Actuated Green, G (s)		1.4		7.1	7.1		51.5	51.5			46.1	
Effective Green, g (s)		1.4		7.1	7.1		51.5	51.5			46.1	
Actuated g/C Ratio		0.02		0.09	0.09		0.64	0.64			0.57	
Clearance Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		28		143	140		475	2210			2897	
v/s Ratio Prot		c0.00		c0.04	0.00		0.00	c0.17			0.12	
v/s Ratio Perm							0.01					
v/c Ratio		0.00		0.45	0.04		0.01	0.26			0.21	
Uniform Delay, d1		39.1		35.1	33.8		5.5	6.4			8.5	
Progression Factor		1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.0		2.2	0.1		0.0	0.3			0.2	
Delay (s)		39.2		37.3	33.9		5.5	6.7			8.7	
Level of Service		D		D	C		A	A			A	
Approach Delay (s)		39.2			35.7			6.7			8.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	81.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



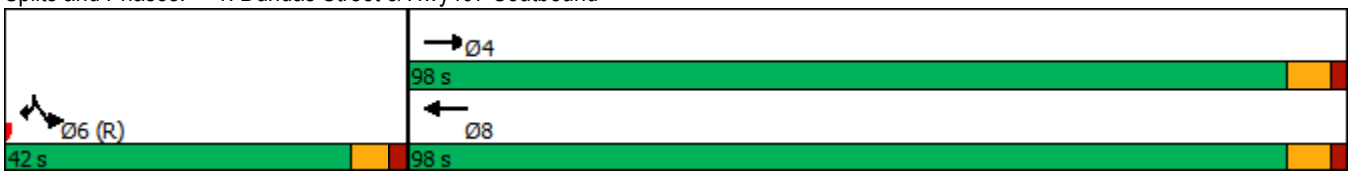
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1229	2044	0	100	425
Future Volume (vph)	0	1229	2044	0	100	425
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	0.91
Frt					0.898	0.850
Flt Protected					0.984	
Satd. Flow (prot)	0	5092	3579	0	3219	1457
Flt Permitted					0.984	
Satd. Flow (perm)	0	5092	3579	0	3219	1457
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					13	13
Link Speed (k/h)		50	50		50	
Link Distance (m)		173.3	204.0		140.6	
Travel Time (s)		12.5	14.7		10.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	2%	2%	3%	2%
Adj. Flow (vph)	0	1267	2107	0	103	438
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	0	1267	2107	0	322	219
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Detector Phase		4	8		6	6
Switch Phase						

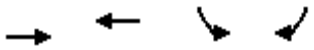


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		8.0	8.0		8.0	8.0
Minimum Split (s)		31.5	31.5		24.0	24.0
Total Split (s)		98.0	98.0		42.0	42.0
Total Split (%)		70.0%	70.0%		30.0%	30.0%
Maximum Green (s)		91.5	91.5		36.0	36.0
Yellow Time (s)		4.6	4.6		4.0	4.0
All-Red Time (s)		1.9	1.9		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		6.5	6.5		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		18.0	18.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		91.5	91.5		36.0	36.0
Actuated g/C Ratio		0.65	0.65		0.26	0.26
v/c Ratio		0.38	0.90		0.38	0.57
Control Delay		11.6	21.0		42.7	49.2
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		11.6	21.0		42.7	49.2
LOS		B	C		D	D
Approach Delay		11.6	21.0		45.3	
Approach LOS		B	C		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 21.3		Intersection LOS: C	
Intersection Capacity Utilization 84.5%		ICU Level of Service E	
Analysis Period (min) 15			

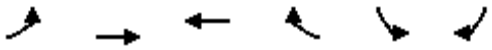
Splits and Phases: 1: Dundas Street & Hwy407 Soutbound





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1267	2107	322	219
v/c Ratio	0.38	0.90	0.38	0.57
Control Delay	11.6	21.0	42.7	49.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	11.6	21.0	42.7	49.2
Queue Length 50th (m)	55.4	86.6	36.4	54.9
Queue Length 95th (m)	63.9	95.3	50.5	84.8
Internal Link Dist (m)	149.3	180.0	116.6	
Turn Bay Length (m)				
Base Capacity (vph)	3327	2339	837	384
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	0.38	0.90	0.38	0.57

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↰↰	↱
Traffic Volume (vph)	0	1229	2044	0	100	425
Future Volume (vph)	0	1229	2044	0	100	425
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5	6.5		6.0	6.0
Lane Util. Factor		0.91	0.95		0.97	0.91
Frt		1.00	1.00		0.90	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5092	3579		3219	1457
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5092	3579		3219	1457
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1267	2107	0	103	438
RTOR Reduction (vph)	0	0	0	0	10	10
Lane Group Flow (vph)	0	1267	2107	0	312	209
Heavy Vehicles (%)	2%	3%	2%	2%	3%	2%
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Actuated Green, G (s)		91.5	91.5		36.0	36.0
Effective Green, g (s)		91.5	91.5		36.0	36.0
Actuated g/C Ratio		0.65	0.65		0.26	0.26
Clearance Time (s)		6.5	6.5		6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		3327	2339		827	374
v/s Ratio Prot		0.25	c0.59		0.10	c0.14
v/s Ratio Perm						
v/c Ratio		0.38	0.90		0.38	0.56
Uniform Delay, d1		11.2	20.4		42.8	45.1
Progression Factor		1.00	0.78		1.00	1.00
Incremental Delay, d2		0.3	4.6		1.3	5.9
Delay (s)		11.5	20.4		44.1	51.1
Level of Service		B	C		D	D
Approach Delay (s)		11.5	20.4		46.9	
Approach LOS		B	C		D	

Intersection Summary			
HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

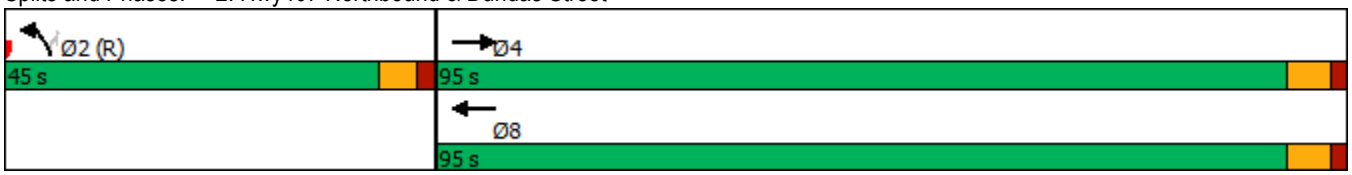


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1110	0	0	2145	68	131
Future Volume (vph)	1110	0	0	2145	68	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0	50.0		0.0	0.0
Storage Lanes		0	1		2	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.91
Frt					0.927	0.850
Flt Protected					0.975	
Satd. Flow (prot)	3544	0	0	5142	3087	1429
Flt Permitted					0.975	
Satd. Flow (perm)	3544	0	0	5142	3087	1429
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)					69	69
Link Speed (k/h)	50			50	50	
Link Distance (m)	141.9			1154.0	117.1	
Travel Time (s)	10.2			83.1	8.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	2%	2%	2%	14%	4%
Adj. Flow (vph)	1168	0	0	2258	72	138
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	1168	0	0	2258	141	69
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases						2
Detector Phase	4			8	2	2
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	8.0
Minimum Split (s)	31.5			31.5	24.0	24.0
Total Split (s)	95.0			95.0	45.0	45.0
Total Split (%)	67.9%			67.9%	32.1%	32.1%
Maximum Green (s)	88.5			88.5	39.0	39.0
Yellow Time (s)	4.6			4.6	4.0	4.0
All-Red Time (s)	1.9			1.9	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.5			6.5	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	None			None	C-Max	C-Max
Walk Time (s)	7.0			7.0		
Flash Dont Walk (s)	18.0			18.0		
Pedestrian Calls (#/hr)	0			0		
Act Effct Green (s)	85.6			85.6	41.9	41.9
Actuated g/C Ratio	0.61			0.61	0.30	0.30
v/c Ratio	0.54			0.72	0.15	0.15
Control Delay	11.5			20.2	19.7	8.9
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	11.5			20.2	19.7	8.9
LOS	B			C	B	A
Approach Delay	11.5			20.2	16.2	
Approach LOS	B			C	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 17.2		Intersection LOS: B	
Intersection Capacity Utilization 84.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Hwy407 Northbound & Dundas Street



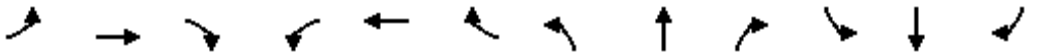
Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1168	2258	141	69
v/c Ratio	0.54	0.72	0.15	0.15
Control Delay	11.5	20.2	19.7	8.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	11.5	20.2	19.7	8.9
Queue Length 50th (m)	42.9	143.4	7.5	0.0
Queue Length 95th (m)	47.4	157.1	15.9	12.6
Internal Link Dist (m)	117.9	1130.0	93.1	
Turn Bay Length (m)				
Base Capacity (vph)	2240	3250	972	475
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	0.52	0.69	0.15	0.15

Intersection Summary



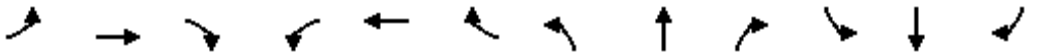
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1110	0	0	2145	68	131
Future Volume (vph)	1110	0	0	2145	68	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5			6.5	6.0	6.0
Lane Util. Factor	0.95			0.91	0.97	0.91
Frt	1.00			1.00	0.93	0.85
Flt Protected	1.00			1.00	0.98	1.00
Satd. Flow (prot)	3544			5142	3086	1429
Flt Permitted	1.00			1.00	0.98	1.00
Satd. Flow (perm)	3544			5142	3086	1429
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1168	0	0	2258	72	138
RTOR Reduction (vph)	0	0	0	0	48	48
Lane Group Flow (vph)	1168	0	0	2258	93	21
Heavy Vehicles (%)	3%	2%	2%	2%	14%	4%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	85.6			85.6	41.9	41.9
Effective Green, g (s)	85.6			85.6	41.9	41.9
Actuated g/C Ratio	0.61			0.61	0.30	0.30
Clearance Time (s)	6.5			6.5	6.0	6.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2166			3143	923	427
v/s Ratio Prot	0.33			c0.44	c0.03	
v/s Ratio Perm						0.01
v/c Ratio	0.54			0.72	0.10	0.05
Uniform Delay, d1	15.8			18.8	35.4	34.9
Progression Factor	0.67			1.00	1.00	1.00
Incremental Delay, d2	0.2			0.8	0.2	0.2
Delay (s)	10.9			19.7	35.7	35.1
Level of Service	B			B	D	D
Approach Delay (s)	10.9			19.7	35.5	
Approach LOS	B			B	D	

Intersection Summary			
HCM 2000 Control Delay	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	5	11	235	11	20	19	290	83	9	282	1
Future Volume (vph)	2	5	11	235	11	20	19	290	83	9	282	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		60.0	50.0		0.0	30.0		15.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850		0.902			0.966			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1921	1633	1825	1733	0	1825	3472	0	1825	3610	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1825	1921	1633	1825	1733	0	1825	3472	0	1825	3610	0
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		86.0			162.7			532.8			105.0	
Travel Time (s)		5.2			9.8			32.0			6.3	
Confl. Peds. (#/hr)	1		1	1		1			3	3		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	2	5	11	242	11	21	20	299	86	9	291	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	5	11	242	32	0	20	385	0	9	292	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

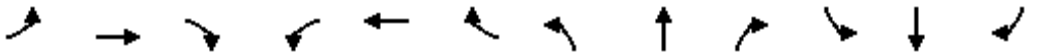
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	5	11	235	11	20	19	290	83	9	282	1
Future Volume (Veh/h)	2	5	11	235	11	20	19	290	83	9	282	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	2	5	11	242	11	21	20	299	86	9	291	1
Pedestrians					3			1			1	
Lane Width (m)					3.7			3.7			3.7	
Walking Speed (m/s)					1.1			1.1			1.1	
Percent Blockage					0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	526	738	147	563	695	196	292			388		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	526	738	147	563	695	196	292			388		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	99	99	39	97	97	98			99		
cM capacity (veh/h)	409	339	879	394	359	815	1281			1178		

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2	5	11	242	32	20	199	186	9	194	98
Volume Left	2	0	0	242	0	20	0	0	9	0	0
Volume Right	0	0	11	0	21	0	0	86	0	0	1
cSH	409	339	879	394	567	1281	1700	1700	1178	1700	1700
Volume to Capacity	0.00	0.01	0.01	0.61	0.06	0.02	0.12	0.11	0.01	0.11	0.06
Queue Length 95th (m)	0.1	0.3	0.3	30.0	1.4	0.4	0.0	0.0	0.2	0.0	0.0
Control Delay (s)	13.8	15.8	9.1	27.6	11.7	7.9	0.0	0.0	8.1	0.0	0.0
Lane LOS	B	C	A	D	B	A			A		
Approach Delay (s)	11.5			25.8		0.4			0.2		
Approach LOS	B			D							

Intersection Summary					
Average Delay	7.5				
Intersection Capacity Utilization	42.1%	ICU Level of Service		A	
Analysis Period (min)	15				



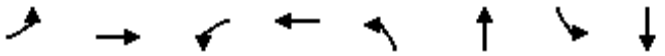
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	138	9	195	73	7	35	100	929	18	29	711	127
Future Volume (vph)	138	9	195	73	7	35	100	929	18	29	711	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	55.0		0.0	95.0		0.0	70.0		100.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00								
Frt		0.857			0.874			0.997			0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1623	0	1772	1598	0	1825	5128	0	1825	4997	0
Flt Permitted	0.728			0.435			0.266			0.272		
Satd. Flow (perm)	1399	1623	0	810	1598	0	511	5128	0	523	4997	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		207			37			6			57	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		616.2			251.6			287.9			279.5	
Travel Time (s)		37.0			15.1			14.8			14.4	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	3%	0%	6%	0%	2%	0%	0%	3%	0%
Adj. Flow (vph)	147	10	207	78	7	37	106	988	19	31	756	135
Shared Lane Traffic (%)												
Lane Group Flow (vph)	147	217	0	78	44	0	106	1007	0	31	891	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		11.0	32.0		32.0	32.0	
Total Split (s)	27.0	27.0		27.0	27.0		12.0	73.0		61.0	61.0	
Total Split (%)	27.0%	27.0%		27.0%	27.0%		12.0%	73.0%		61.0%	61.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		8.0	67.0		55.0	55.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		Max	C-Max		C-Max	C-Max	
Walk Time (s)								7.0		7.0	7.0	
Flash Dont Walk (s)								19.0		19.0	19.0	
Pedestrian Calls (#/hr)								0		0	0	
Act Effct Green (s)	15.3	15.3		15.3	15.3		73.7	71.7		55.0	55.0	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.74	0.72		0.55	0.55	
v/c Ratio	0.69	0.51		0.63	0.16		0.19	0.27		0.11	0.32	
Control Delay	56.2	10.5		61.2	15.0		5.2	5.5		7.5	12.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	56.2	10.5		61.2	15.0		5.2	5.5		7.5	12.3	
LOS	E	B		E	B		A	A		A	B	
Approach Delay		29.0			44.6			5.5			12.1	
Approach LOS		C			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 12 (12%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 13.2		Intersection LOS: B	
Intersection Capacity Utilization 66.1%		ICU Level of Service C	
Analysis Period (min) 15			

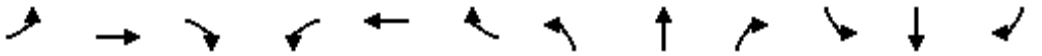
Splits and Phases: 5: Appleby & Palladium Way/Harrison





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	147	217	78	44	106	1007	31	891
v/c Ratio	0.69	0.51	0.63	0.16	0.19	0.27	0.11	0.32
Control Delay	56.2	10.5	61.2	15.0	5.2	5.5	7.5	12.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.2	10.5	61.2	15.0	5.2	5.5	7.5	12.3
Queue Length 50th (m)	27.2	1.7	14.3	1.2	4.9	21.8	3.1	48.0
Queue Length 95th (m)	45.3	20.1	28.5	9.9	11.0	32.1	0.0	0.0
Internal Link Dist (m)		592.2		227.6		263.9		255.5
Turn Bay Length (m)	45.0		55.0		95.0		70.0	
Base Capacity (vph)	279	490	162	349	544	3680	287	2774
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	0.53	0.44	0.48	0.13	0.19	0.27	0.11	0.32

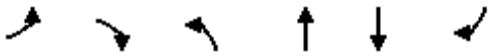
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	138	9	195	73	7	35	100	929	18	29	711	127
Future Volume (vph)	138	9	195	73	7	35	100	929	18	29	711	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.86		1.00	0.87		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	1621		1768	1598		1825	5129		1825	4998	
Flt Permitted	0.73	1.00		0.43	1.00		0.27	1.00		0.27	1.00	
Satd. Flow (perm)	1399	1621		809	1598		510	5129		523	4998	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	147	10	207	78	7	37	106	988	19	31	756	135
RTOR Reduction (vph)	0	175	0	0	31	0	0	2	0	0	26	0
Lane Group Flow (vph)	147	42	0	78	13	0	106	1005	0	31	865	0
Confl. Peds. (#/hr)			2	2								
Heavy Vehicles (%)	0%	0%	0%	3%	0%	6%	0%	2%	0%	0%	3%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	15.3	15.3		15.3	15.3		71.7	71.7		55.0	55.0	
Effective Green, g (s)	15.3	15.3		15.3	15.3		71.7	71.7		55.0	55.0	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.72	0.72		0.55	0.55	
Clearance Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	214	248		123	244		532	3677		287	2748	
v/s Ratio Prot		0.03			0.01		0.03	c0.20			c0.17	
v/s Ratio Perm	c0.11			0.10			0.12			0.06		
v/c Ratio	0.69	0.17		0.63	0.05		0.20	0.27		0.11	0.31	
Uniform Delay, d1	40.1	36.8		39.7	36.2		4.6	5.0		10.8	12.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.60	1.04	
Incremental Delay, d2	8.8	0.3		10.2	0.1		0.8	0.2		0.7	0.3	
Delay (s)	48.9	37.1		49.9	36.2		5.5	5.2		7.1	13.0	
Level of Service	D	D		D	D		A	A		A	B	
Approach Delay (s)		41.9			45.0			5.2			12.8	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	48	0	0	801	904	0
Future Volume (vph)	48	0	0	801	904	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1690	1795	0	3544	3544	0
Flt Permitted	0.950					
Satd. Flow (perm)	1690	1795	0	3544	3544	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (k/h)	50			50	70	
Link Distance (m)	146.5			104.0	373.0	
Travel Time (s)	10.5			7.5	19.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	8%	7%	2%	3%	3%	2%
Adj. Flow (vph)	51	0	0	843	952	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	51	0	0	843	952	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0		8.0	8.0	
Minimum Split (s)	25.0	25.0		25.0	25.0	
Total Split (s)	32.0	32.0		68.0	68.0	
Total Split (%)	32.0%	32.0%		68.0%	68.0%	
Maximum Green (s)	25.0	25.0		61.0	61.0	
Yellow Time (s)	4.0	4.0		5.0	5.0	
All-Red Time (s)	3.0	3.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	9.1			81.3	81.3	
Actuated g/C Ratio	0.09			0.81	0.81	
v/c Ratio	0.33			0.29	0.33	
Control Delay	48.1			3.0	5.5	
Queue Delay	0.0			0.0	0.0	
Total Delay	48.1			3.0	5.5	
LOS	D			A	A	
Approach Delay	48.1			3.0	5.5	
Approach LOS	D			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay: 5.5		Intersection LOS: A	
Intersection Capacity Utilization 43.3%		ICU Level of Service A	
Analysis Period (min) 15			

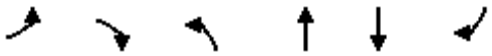
Splits and Phases: 6: Appleby & Hwy407 Eastbound





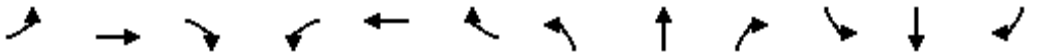
Lane Group	EBL	NBT	SBT
Lane Group Flow (vph)	51	843	952
v/c Ratio	0.33	0.29	0.33
Control Delay	48.1	3.0	5.5
Queue Delay	0.0	0.0	0.0
Total Delay	48.1	3.0	5.5
Queue Length 50th (m)	9.5	16.9	42.9
Queue Length 95th (m)	20.3	25.2	51.5
Internal Link Dist (m)	122.5	80.0	349.0
Turn Bay Length (m)			
Base Capacity (vph)	422	2880	2880
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.12	0.29	0.33

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	48	0	0	801	904	0
Future Volume (vph)	48	0	0	801	904	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0			7.0	7.0	
Lane Util. Factor	1.00			0.95	0.95	
Frt	1.00			1.00	1.00	
Flt Protected	0.95			1.00	1.00	
Satd. Flow (prot)	1690			3544	3544	
Flt Permitted	0.95			1.00	1.00	
Satd. Flow (perm)	1690			3544	3544	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	51	0	0	843	952	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	51	0	0	843	952	0
Heavy Vehicles (%)	8%	7%	2%	3%	3%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	7.5			78.5	78.5	
Effective Green, g (s)	7.5			78.5	78.5	
Actuated g/C Ratio	0.08			0.78	0.78	
Clearance Time (s)	7.0			7.0	7.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	126			2782	2782	
v/s Ratio Prot	c0.03			0.24	c0.27	
v/s Ratio Perm						
v/c Ratio	0.40			0.30	0.34	
Uniform Delay, d1	44.1			3.0	3.2	
Progression Factor	1.00			0.84	1.55	
Incremental Delay, d2	2.1			0.3	0.3	
Delay (s)	46.2			2.8	5.2	
Level of Service	D			A	A	
Approach Delay (s)	46.2			2.8	5.2	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

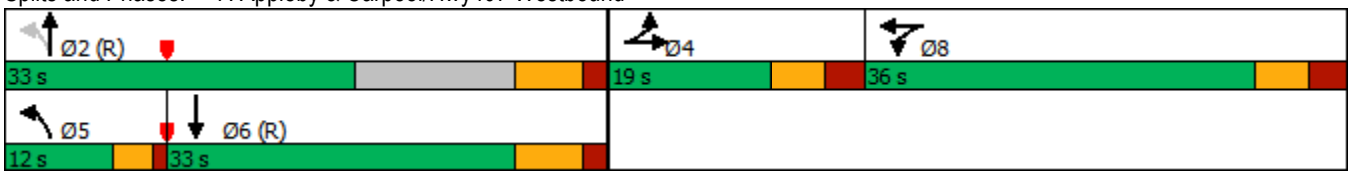


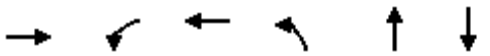
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	10	426	5	40	7	749	0	0	589	5
Future Volume (vph)	4	0	10	426	5	40	7	749	0	0	589	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	80.0		0.0	0.0		0.0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91
Frt		0.904			0.974						0.999	
Flt Protected		0.986		0.950	0.961		0.950					
Satd. Flow (prot)	0	1588	0	1700	1675	0	1560	3544	0	0	5087	0
Flt Permitted		0.986		0.950	0.961		0.380					
Satd. Flow (perm)	0	1588	0	1700	1675	0	624	3544	0	0	5087	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		164			10						1	
Link Speed (k/h)		50			50			50			70	
Link Distance (m)		127.4			84.3			373.0			64.3	
Travel Time (s)		9.2			6.1			26.9			3.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	11%	2%	2%	2%	17%	3%	0%	2%	3%	2%
Adj. Flow (vph)	4	0	10	439	5	41	7	772	0	0	607	5
Shared Lane Traffic (%)				44%								
Lane Group Flow (vph)	0	14	0	246	239	0	7	772	0	0	612	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2			2	
Detector Template	Left	Thru		Left	Thru		Left	Thru			Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5			30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8			1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							2					
Detector Phase	4	4		8	8		5	2			6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)	15.0	15.0		20.0	20.0		12.0	33.0			33.0	
Total Split (s)	19.0	19.0		36.0	36.0		12.0	33.0			33.0	
Total Split (%)	19.0%	19.0%		36.0%	36.0%		12.0%	33.0%			33.0%	
Maximum Green (s)	12.0	12.0		29.0	29.0		8.0	26.0			26.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	5.0			5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0			2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Recall Mode	None	None		None	None		None	C-Max			C-Max	
Walk Time (s)				8.0	8.0			7.0			7.0	
Flash Dont Walk (s)				5.0	5.0			19.0			19.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		8.0		20.3	20.3		65.7	62.7			60.3	
Actuated g/C Ratio		0.08		0.20	0.20		0.66	0.63			0.60	
v/c Ratio		0.05		0.71	0.69		0.01	0.35			0.20	
Control Delay		0.4		48.0	44.9		11.0	11.9			12.2	
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay		0.4		48.0	44.9		11.0	11.9			12.2	
LOS		A		D	D		B	B			B	
Approach Delay		0.4			46.5			11.9			12.2	
Approach LOS		A			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 20.8		Intersection LOS: C	
Intersection Capacity Utilization 52.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Appleby & Carpool/Hwy407 Westbound

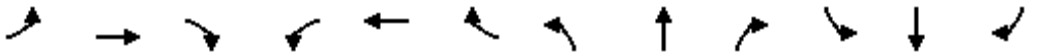




Lane Group	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	14	246	239	7	772	612
v/c Ratio	0.05	0.71	0.69	0.01	0.35	0.20
Control Delay	0.4	48.0	44.9	11.0	11.9	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.4	48.0	44.9	11.0	11.9	12.2
Queue Length 50th (m)	0.0	46.9	43.3	0.4	41.0	15.3
Queue Length 95th (m)	0.0	67.2	63.5	m3.0	70.3	44.1
Internal Link Dist (m)	103.4		60.3		349.0	40.3
Turn Bay Length (m)				80.0		
Base Capacity (vph)	334	493	492	484	2221	3066
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.50	0.49	0.01	0.35	0.20

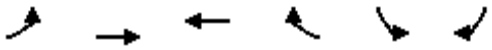
Intersection Summary

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

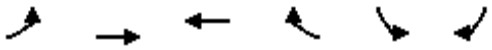


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	10	426	5	40	7	749	0	0	589	5
Future Volume (vph)	4	0	10	426	5	40	7	749	0	0	589	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95			0.91	
Frt		0.90		1.00	0.97		1.00	1.00			1.00	
Flt Protected		0.99		0.95	0.96		0.95	1.00			1.00	
Satd. Flow (prot)		1587		1700	1676		1560	3544			5086	
Flt Permitted		0.99		0.95	0.96		0.38	1.00			1.00	
Satd. Flow (perm)		1587		1700	1676		624	3544			5086	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	4	0	10	439	5	41	7	772	0	0	607	5
RTOR Reduction (vph)	0	14	0	0	8	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	246	231	0	7	772	0	0	612	0
Heavy Vehicles (%)	0%	0%	11%	2%	2%	2%	17%	3%	0%	2%	3%	2%
Turn Type	Split	NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	
Permitted Phases							2					
Actuated Green, G (s)		1.6		20.3	20.3		57.1	57.1			51.5	
Effective Green, g (s)		1.6		20.3	20.3		57.1	57.1			51.5	
Actuated g/C Ratio		0.02		0.20	0.20		0.57	0.57			0.52	
Clearance Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		25		345	340		371	2023			2619	
v/s Ratio Prot		c0.00		c0.14	0.14		0.00	c0.22			0.12	
v/s Ratio Perm							0.01					
v/c Ratio		0.01		0.71	0.68		0.02	0.38			0.23	
Uniform Delay, d1		48.4		37.1	36.8		9.3	11.8			13.4	
Progression Factor		1.00		1.00	1.00		1.02	1.05			1.00	
Incremental Delay, d2		0.1		6.8	5.3		0.0	0.5			0.2	
Delay (s)		48.6		44.0	42.2		9.5	12.8			13.6	
Level of Service		D		D	D		A	B			B	
Approach Delay (s)		48.6			43.1			12.8			13.6	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



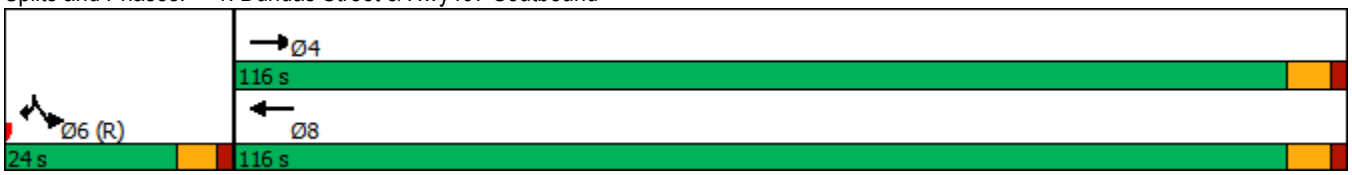
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1955	804	0	34	130
Future Volume (vph)	0	1955	804	0	34	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	0.91
Frt					0.901	0.850
Flt Protected					0.983	
Satd. Flow (prot)	0	5092	3411	0	3025	1415
Flt Permitted					0.983	
Satd. Flow (perm)	0	5092	3411	0	3025	1415
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					67	66
Link Speed (k/h)		50	50		50	
Link Distance (m)		173.3	204.0		140.6	
Travel Time (s)		12.5	14.7		10.1	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	3%	7%	2%	17%	5%
Adj. Flow (vph)	0	1995	820	0	35	133
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	0	1995	820	0	102	66
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Detector Phase		4	8		6	6
Switch Phase						

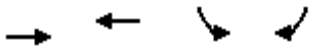


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		8.0	8.0		8.0	8.0
Minimum Split (s)		31.5	31.5		24.0	24.0
Total Split (s)		116.0	116.0		24.0	24.0
Total Split (%)		82.9%	82.9%		17.1%	17.1%
Maximum Green (s)		109.5	109.5		18.0	18.0
Yellow Time (s)		4.6	4.6		4.0	4.0
All-Red Time (s)		1.9	1.9		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		6.5	6.5		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		18.0	18.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		109.5	109.5		18.0	18.0
Actuated g/C Ratio		0.78	0.78		0.13	0.13
v/c Ratio		0.50	0.31		0.23	0.28
Control Delay		6.0	3.6		23.2	15.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		6.0	3.6		23.2	15.3
LOS		A	A		C	B
Approach Delay		6.0	3.6		20.1	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 59.3%		ICU Level of Service B	
Analysis Period (min) 15			

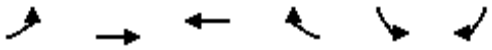
Splits and Phases: 1: Dundas Street & Hwy407 Soutbound





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1995	820	102	66
v/c Ratio	0.50	0.31	0.23	0.28
Control Delay	6.0	3.6	23.2	15.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	6.0	3.6	23.2	15.3
Queue Length 50th (m)	62.2	15.3	4.4	0.0
Queue Length 95th (m)	69.4	25.8	13.0	15.3
Internal Link Dist (m)	149.3	180.0	116.6	
Turn Bay Length (m)				
Base Capacity (vph)	3982	2667	447	239
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	0.50	0.31	0.23	0.28

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1955	804	0	34	130
Future Volume (vph)	0	1955	804	0	34	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5	6.5		6.0	6.0
Lane Util. Factor		0.91	0.95		0.97	0.91
Frt		1.00	1.00		0.90	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5092	3411		3027	1415
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5092	3411		3027	1415
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1995	820	0	35	133
RTOR Reduction (vph)	0	0	0	0	58	58
Lane Group Flow (vph)	0	1995	820	0	44	8
Heavy Vehicles (%)	2%	3%	7%	2%	17%	5%
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Actuated Green, G (s)		109.5	109.5		18.0	18.0
Effective Green, g (s)		109.5	109.5		18.0	18.0
Actuated g/C Ratio		0.78	0.78		0.13	0.13
Clearance Time (s)		6.5	6.5		6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		3982	2667		389	181
v/s Ratio Prot		c0.39	0.24		c0.01	0.01
v/s Ratio Perm						
v/c Ratio		0.50	0.31		0.11	0.05
Uniform Delay, d1		5.5	4.4		53.9	53.5
Progression Factor		1.00	0.75		1.00	1.00
Incremental Delay, d2		0.5	0.3		0.6	0.5
Delay (s)		5.9	3.6		54.5	54.0
Level of Service		A	A		D	D
Approach Delay (s)		5.9	3.6		54.3	
Approach LOS		A	A		D	

Intersection Summary			
HCM 2000 Control Delay	8.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

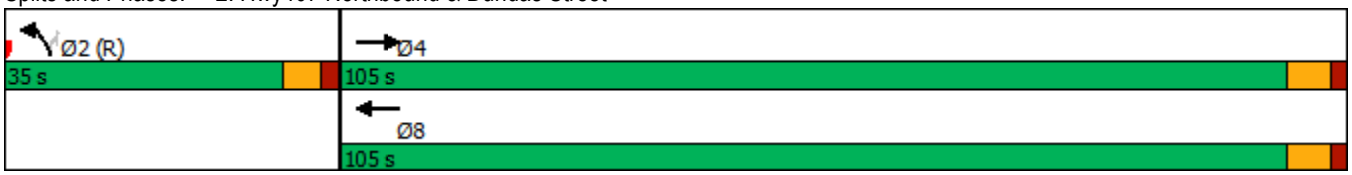


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1526	0	0	899	30	159
Future Volume (vph)	1526	0	0	899	30	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0	50.0		0.0	0.0
Storage Lanes		0	1		2	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.91
Frt					0.892	0.850
Flt Protected					0.986	
Satd. Flow (prot)	3544	0	0	4995	3002	1457
Flt Permitted					0.986	
Satd. Flow (perm)	3544	0	0	4995	3002	1457
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)					56	56
Link Speed (k/h)	50			50	50	
Link Distance (m)	141.9			1154.0	117.1	
Travel Time (s)	10.2			83.1	8.4	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	2%	2%	5%	28%	2%
Adj. Flow (vph)	1557	0	0	917	31	162
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	1557	0	0	917	112	81
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases						2
Detector Phase	4			8	2	2
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	8.0
Minimum Split (s)	31.5			31.5	24.0	24.0
Total Split (s)	105.0			105.0	35.0	35.0
Total Split (%)	75.0%			75.0%	25.0%	25.0%
Maximum Green (s)	98.5			98.5	29.0	29.0
Yellow Time (s)	4.6			4.6	4.0	4.0
All-Red Time (s)	1.9			1.9	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.5			6.5	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	None			None	C-Max	C-Max
Walk Time (s)	7.0			7.0		
Flash Dont Walk (s)	18.0			18.0		
Pedestrian Calls (#/hr)	0			0		
Act Effct Green (s)	87.4			87.4	40.1	40.1
Actuated g/C Ratio	0.62			0.62	0.29	0.29
v/c Ratio	0.70			0.29	0.12	0.18
Control Delay	13.7			12.0	22.1	18.0
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	13.7			12.0	22.1	18.0
LOS	B			B	C	B
Approach Delay	13.7			12.0	20.4	
Approach LOS	B			B	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 13.6		Intersection LOS: B	
Intersection Capacity Utilization 59.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Hwy407 Northbound & Dundas Street





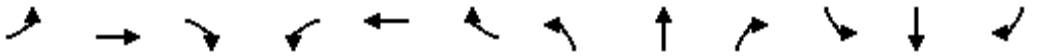
Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1557	917	112	81
v/c Ratio	0.70	0.29	0.12	0.18
Control Delay	13.7	12.0	22.1	18.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.7	12.0	22.1	18.0
Queue Length 50th (m)	61.6	39.4	5.9	5.6
Queue Length 95th (m)	49.5	36.5	14.7	21.7
Internal Link Dist (m)	117.9	1130.0	93.1	
Turn Bay Length (m)				
Base Capacity (vph)	2493	3514	900	457
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	0.62	0.26	0.12	0.18

Intersection Summary



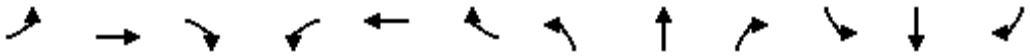
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1526	0	0	899	30	159
Future Volume (vph)	1526	0	0	899	30	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5			6.5	6.0	6.0
Lane Util. Factor	0.95			0.91	0.97	0.91
Frt	1.00			1.00	0.89	0.85
Flt Protected	1.00			1.00	0.99	1.00
Satd. Flow (prot)	3544			4995	3001	1457
Flt Permitted	1.00			1.00	0.99	1.00
Satd. Flow (perm)	3544			4995	3001	1457
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1557	0	0	917	31	162
RTOR Reduction (vph)	0	0	0	0	40	40
Lane Group Flow (vph)	1557	0	0	917	72	41
Heavy Vehicles (%)	3%	2%	2%	5%	28%	2%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	87.4			87.4	40.1	40.1
Effective Green, g (s)	87.4			87.4	40.1	40.1
Actuated g/C Ratio	0.62			0.62	0.29	0.29
Clearance Time (s)	6.5			6.5	6.0	6.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2212			3118	859	417
v/s Ratio Prot	c0.44			0.18	0.02	
v/s Ratio Perm						c0.03
v/c Ratio	0.70			0.29	0.08	0.10
Uniform Delay, d1	17.6			12.1	36.5	36.7
Progression Factor	0.70			1.00	1.00	1.00
Incremental Delay, d2	0.9			0.1	0.2	0.5
Delay (s)	13.2			12.2	36.7	37.1
Level of Service	B			B	D	D
Approach Delay (s)	13.2			12.2	36.9	
Approach LOS	B			B	D	

Intersection Summary			
HCM 2000 Control Delay	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	4	19	135	3	9	14	213	274	19	246	1
Future Volume (vph)	1	4	19	135	3	9	14	213	274	19	246	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		60.0	50.0		0.0	30.0		15.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.890			0.916				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1921	1633	1825	1710	0	1825	3254	0	1825	3510	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1825	1921	1633	1825	1710	0	1825	3254	0	1825	3510	0
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		86.0			162.7			532.8			105.0	
Travel Time (s)		5.2			9.8			32.0			6.3	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	5%	1%	0%	4%	0%
Adj. Flow (vph)	1	5	23	165	4	11	17	260	334	23	300	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	5	23	165	15	0	17	594	0	23	301	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

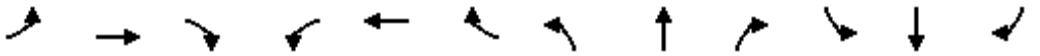
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.6%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	4	19	135	3	9	14	213	274	19	246	1
Future Volume (Veh/h)	1	4	19	135	3	9	14	213	274	19	246	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	1	5	23	165	4	11	17	260	334	23	300	1
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	524	974	150	682	808	297	301			594		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	524	974	150	682	808	297	301			594		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	97	48	99	98	99			98		
cM capacity (veh/h)	418	244	875	316	306	705	1272			992		

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1	5	23	165	15	17	173	421	23	200	101
Volume Left	1	0	0	165	0	17	0	0	23	0	0
Volume Right	0	0	23	0	11	0	0	334	0	0	1
cSH	418	244	875	316	523	1272	1700	1700	992	1700	1700
Volume to Capacity	0.00	0.02	0.03	0.52	0.03	0.01	0.10	0.25	0.02	0.12	0.06
Queue Length 95th (m)	0.1	0.5	0.6	21.6	0.7	0.3	0.0	0.0	0.5	0.0	0.0
Control Delay (s)	13.6	20.0	9.2	28.1	12.1	7.9	0.0	0.0	8.7	0.0	0.0
Lane LOS	B	C	A	D	B	A			A		
Approach Delay (s)	11.2			26.8		0.2			0.6		
Approach LOS	B			D							

Intersection Summary					
Average Delay	4.8				
Intersection Capacity Utilization	36.6%	ICU Level of Service		A	
Analysis Period (min)	15				



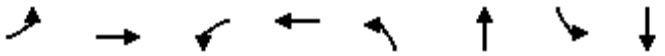
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	5	63	36	4	17	165	968	7	17	695	105
Future Volume (vph)	116	5	63	36	4	17	165	968	7	17	695	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	55.0		0.0	95.0		0.0	70.0		100.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00			1.00				1.00	
Frt		0.860			0.877			0.999			0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1572	0	1521	1523	0	1825	5039	0	1706	4908	0
Flt Permitted	0.743			0.710			0.267			0.264		
Satd. Flow (perm)	1427	1572	0	1134	1523	0	512	5039	0	474	4908	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		67			18			1			34	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		616.2			251.6			287.9			279.5	
Travel Time (s)		37.0			15.1			14.8			14.4	
Confl. Peds. (#/hr)			2	2			3					3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	4%	20%	0%	13%	0%	4%	0%	7%	5%	0%
Adj. Flow (vph)	123	5	67	38	4	18	176	1030	7	18	739	112
Shared Lane Traffic (%)												
Lane Group Flow (vph)	123	72	0	38	22	0	176	1037	0	18	851	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	41.0	41.0		41.0	41.0		11.0	32.0		32.0	32.0	
Total Split (s)	42.0	42.0		42.0	42.0		12.0	78.0		66.0	66.0	
Total Split (%)	35.0%	35.0%		35.0%	35.0%		10.0%	65.0%		55.0%	55.0%	
Maximum Green (s)	35.0	35.0		35.0	35.0		8.0	72.0		60.0	60.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	27.0	27.0		27.0	27.0			19.0		19.0	19.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	15.7	15.7		15.7	15.7		93.3	91.3		60.0	60.0	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.78	0.76		0.50	0.50	
v/c Ratio	0.66	0.27		0.26	0.10		0.25	0.27		0.08	0.34	
Control Delay	65.5	14.2		49.1	21.0		4.8	4.9		16.8	17.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	65.5	14.2		49.1	21.0		4.8	4.9		16.8	17.8	
LOS	E	B		D	C		A	A		B	B	
Approach Delay		46.5			38.8			4.9			17.8	
Approach LOS		D			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 12 (10%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 14.0		Intersection LOS: B	
Intersection Capacity Utilization 59.1%		ICU Level of Service B	
Analysis Period (min) 15			

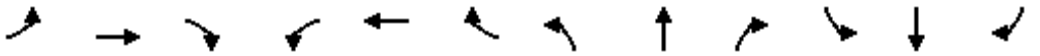
Splits and Phases: 5: Appleby & Palladium Way/Harrison





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	123	72	38	22	176	1037	18	851
v/c Ratio	0.66	0.27	0.26	0.10	0.25	0.27	0.08	0.34
Control Delay	65.5	14.2	49.1	21.0	4.8	4.9	16.8	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.5	14.2	49.1	21.0	4.8	4.9	16.8	17.8
Queue Length 50th (m)	27.9	1.1	8.2	0.8	8.5	22.9	2.1	41.0
Queue Length 95th (m)	45.3	13.3	17.8	8.0	18.0	35.4	6.4	50.6
Internal Link Dist (m)		592.2		227.6		263.9		255.5
Turn Bay Length (m)	45.0		55.0		95.0		70.0	
Base Capacity (vph)	416	505	330	456	696	3833	237	2471
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	0.30	0.14	0.12	0.05	0.25	0.27	0.08	0.34

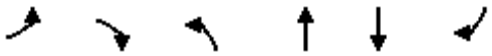
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	5	63	36	4	17	165	968	7	17	695	105
Future Volume (vph)	116	5	63	36	4	17	165	968	7	17	695	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.86		1.00	0.88		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	1573		1518	1523		1824	5039		1706	4910	
Flt Permitted	0.74	1.00		0.71	1.00		0.27	1.00		0.26	1.00	
Satd. Flow (perm)	1427	1573		1135	1523		513	5039		474	4910	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	123	5	67	38	4	18	176	1030	7	18	739	112
RTOR Reduction (vph)	0	58	0	0	16	0	0	0	0	0	17	0
Lane Group Flow (vph)	123	14	0	38	6	0	176	1037	0	18	834	0
Confl. Peds. (#/hr)			2	2			3					3
Heavy Vehicles (%)	0%	0%	4%	20%	0%	13%	0%	4%	0%	7%	5%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	15.7	15.7		15.7	15.7		91.3	91.3		60.0	60.0	
Effective Green, g (s)	15.7	15.7		15.7	15.7		91.3	91.3		60.0	60.0	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.76	0.76		0.50	0.50	
Clearance Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	186	205		148	199		688	3833		237	2455	
v/s Ratio Prot		0.01			0.00		0.06	c0.21			c0.17	
v/s Ratio Perm	c0.09			0.03			0.14			0.04		
v/c Ratio	0.66	0.07		0.26	0.03		0.26	0.27		0.08	0.34	
Uniform Delay, d1	49.6	45.7		46.9	45.5		4.5	4.3		15.6	18.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.5	0.1		0.9	0.1		0.9	0.2		0.6	0.4	
Delay (s)	58.1	45.9		47.8	45.6		5.3	4.5		16.2	18.4	
Level of Service	E	D		D	D		A	A		B	B	
Approach Delay (s)		53.6			47.0			4.6			18.4	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	75	0	0	514	588	0
Future Volume (vph)	75	0	0	514	588	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1722	1883	0	3544	3510	0
Flt Permitted	0.950					
Satd. Flow (perm)	1722	1883	0	3544	3510	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (k/h)	50			50	70	
Link Distance (m)	146.5			104.0	373.0	
Travel Time (s)	10.5			7.5	19.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	2%	2%	3%	4%	2%
Adj. Flow (vph)	83	0	0	571	653	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	83	0	0	571	653	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	7			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	7	4		2	6	
Switch Phase						
Minimum Initial (s)	5.0	8.0		8.0	8.0	
Minimum Split (s)	9.5	25.0		25.0	25.0	
Total Split (s)	9.5	29.0		56.0	56.0	
Total Split (%)	11.2%	34.1%		65.9%	65.9%	
Maximum Green (s)	5.0	22.0		49.0	49.0	
Yellow Time (s)	3.5	4.0		5.0	5.0	
All-Red Time (s)	1.0	3.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0	
Flash Dont Walk (s)		11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0	
Act Effct Green (s)	10.1			66.8	66.8	
Actuated g/C Ratio	0.12			0.79	0.79	
v/c Ratio	0.41			0.20	0.24	
Control Delay	40.0			3.4	3.6	
Queue Delay	0.0			0.0	0.0	
Total Delay	40.0			3.4	3.6	
LOS	D			A	A	
Approach Delay	40.0			3.4	3.6	
Approach LOS	D			A	A	

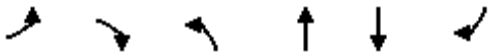
Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 5.8		Intersection LOS: A	
Intersection Capacity Utilization 30.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Appleby & Hwy407 Eastbound



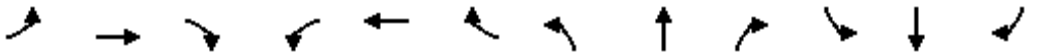
Lane Group	EBL	NBT	SBT
Lane Group Flow (vph)	83	571	653
v/c Ratio	0.41	0.20	0.24
Control Delay	40.0	3.4	3.6
Queue Delay	0.0	0.0	0.0
Total Delay	40.0	3.4	3.6
Queue Length 50th (m)	12.6	12.1	14.3
Queue Length 95th (m)	25.2	19.2	22.3
Internal Link Dist (m)	122.5	80.0	349.0
Turn Bay Length (m)			
Base Capacity (vph)	496	2786	2760
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.17	0.20	0.24

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	75	0	0	514	588	0
Future Volume (vph)	75	0	0	514	588	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5			7.0	7.0	
Lane Util. Factor	1.00			0.95	0.95	
Frt	1.00			1.00	1.00	
Flt Protected	0.95			1.00	1.00	
Satd. Flow (prot)	1722			3544	3510	
Flt Permitted	0.95			1.00	1.00	
Satd. Flow (perm)	1722			3544	3510	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	0	0	571	653	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	83	0	0	571	653	0
Heavy Vehicles (%)	6%	2%	2%	3%	4%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	7			2	6	
Permitted Phases		4				
Actuated Green, G (s)	9.5			64.0	64.0	
Effective Green, g (s)	9.5			64.0	64.0	
Actuated g/C Ratio	0.11			0.75	0.75	
Clearance Time (s)	4.5			7.0	7.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	192			2668	2642	
v/s Ratio Prot	c0.05			0.16	c0.19	
v/s Ratio Perm						
v/c Ratio	0.43			0.21	0.25	
Uniform Delay, d1	35.2			3.1	3.2	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	1.6			0.2	0.2	
Delay (s)	36.8			3.3	3.4	
Level of Service	D			A	A	
Approach Delay (s)	36.8			3.3	3.4	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	30.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



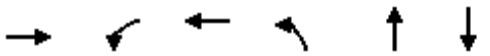
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	106	0	18	4	562	0	0	583	1
Future Volume (vph)	0	0	5	106	0	18	4	562	0	0	583	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	80.0		0.0	0.0		0.0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91
Frt		0.865			0.955							
Flt Protected				0.950	0.966		0.950					
Satd. Flow (prot)	0	1629	0	1636	1607	0	1789	3476	0	0	5092	0
Flt Permitted				0.950	0.966		0.380					
Satd. Flow (perm)	0	1629	0	1636	1607	0	716	3476	0	0	5092	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		364			193							
Link Speed (k/h)		50			50			50			70	
Link Distance (m)		127.4			84.3			373.0			64.3	
Travel Time (s)		9.2			6.1			26.9			3.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	2%	5%	2%	2%	3%	2%
Adj. Flow (vph)	0	0	5	109	0	19	4	579	0	0	601	1
Shared Lane Traffic (%)				40%								
Lane Group Flow (vph)	0	5	0	65	63	0	4	579	0	0	602	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2			2	
Detector Template	Left	Thru		Left	Thru		Left	Thru			Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5			30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8			1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							2					
Detector Phase	4	4		8	8		5	2			6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)	15.0	15.0		20.0	20.0		12.0	33.0			33.0	
Total Split (s)	17.0	17.0		20.0	20.0		13.0	48.0			35.0	
Total Split (%)	20.0%	20.0%		23.5%	23.5%		15.3%	56.5%			41.2%	
Maximum Green (s)	10.0	10.0		13.0	13.0		9.0	41.0			28.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	5.0			5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0			2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Recall Mode	None	None		None	None		None	Max			Max	
Walk Time (s)				8.0	8.0			7.0			7.0	
Flash Dont Walk (s)				5.0	5.0			19.0			19.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		8.1		9.0	9.0		51.2	49.7			47.6	
Actuated g/C Ratio		0.11		0.13	0.13		0.73	0.70			0.68	
v/c Ratio		0.01		0.31	0.17		0.01	0.24			0.17	
Control Delay		0.0		33.1	1.0		6.2	6.5			8.1	
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay		0.0		33.1	1.0		6.2	6.5			8.1	
LOS		A		C	A		A	A			A	
Approach Delay					17.3			6.5			8.1	
Approach LOS					B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 70.5			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay: 8.3		Intersection LOS: A	
Intersection Capacity Utilization 37.4%		ICU Level of Service A	
Analysis Period (min) 15			

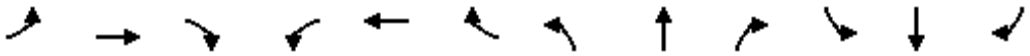
Splits and Phases: 7: Appleby & Carpool/Hwy407 Westbound





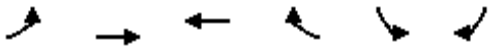
Lane Group	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	5	65	63	4	579	602
v/c Ratio	0.01	0.31	0.17	0.01	0.24	0.17
Control Delay	0.0	33.1	1.0	6.2	6.5	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.0	33.1	1.0	6.2	6.5	8.1
Queue Length 50th (m)	0.0	7.7	0.0	0.2	12.3	8.4
Queue Length 95th (m)	0.0	21.4	0.0	1.6	37.5	33.4
Internal Link Dist (m)	103.4		60.3		349.0	40.3
Turn Bay Length (m)				80.0		
Base Capacity (vph)	545	305	456	658	2451	3441
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.21	0.14	0.01	0.24	0.17

Intersection Summary



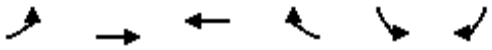
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	106	0	18	4	562	0	0	583	1
Future Volume (vph)	0	0	5	106	0	18	4	562	0	0	583	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95			0.91	
Frt		0.86		1.00	0.95		1.00	1.00			1.00	
Flt Protected		1.00		0.95	0.97		0.95	1.00			1.00	
Satd. Flow (prot)		1629		1636	1607		1789	3476			5091	
Flt Permitted		1.00		0.95	0.97		0.38	1.00			1.00	
Satd. Flow (perm)		1629		1636	1607		717	3476			5091	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	5	109	0	19	4	579	0	0	601	1
RTOR Reduction (vph)	0	5	0	0	57	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	65	6	0	4	579	0	0	602	0
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	2%	5%	2%	2%	3%	2%
Turn Type		NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	
Permitted Phases							2					
Actuated Green, G (s)		1.4		7.2	7.2		51.5	51.5			46.1	
Effective Green, g (s)		1.4		7.2	7.2		51.5	51.5			46.1	
Actuated g/C Ratio		0.02		0.09	0.09		0.64	0.64			0.57	
Clearance Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		28		145	142		473	2207			2893	
v/s Ratio Prot		c0.00		c0.04	0.00		0.00	c0.17			0.12	
v/s Ratio Perm							0.01					
v/c Ratio		0.00		0.45	0.04		0.01	0.26			0.21	
Uniform Delay, d1		39.2		35.1	33.8		5.5	6.5			8.6	
Progression Factor		1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.0		2.2	0.1		0.0	0.3			0.2	
Delay (s)		39.2		37.3	33.9		5.5	6.8			8.7	
Level of Service		D		D	C		A	A			A	
Approach Delay (s)		39.2			35.6			6.8			8.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	10.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	81.1	Sum of lost time (s)	25.0
Intersection Capacity Utilization	37.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	42	256	133	10	4	15
Future Volume (vph)	42	256	133	10	4	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0			0.0	0.0	0.0
Storage Lanes	1			0	1	0
Taper Length (m)	2.5				2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990		0.892	
Flt Protected	0.950				0.990	
Satd. Flow (prot)	1789	1883	1865	0	1663	0
Flt Permitted	0.950				0.990	
Satd. Flow (perm)	1789	1883	1865	0	1663	0
Link Speed (k/h)		50	60		50	
Link Distance (m)		188.5	183.9		65.2	
Travel Time (s)		13.6	11.0		4.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	278	145	11	4	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	46	278	156	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

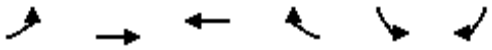
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.3%		ICU Level of Service A	
Analysis Period (min) 15			



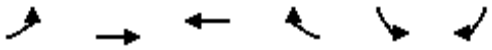
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	42	256	133	10	4	15
Future Volume (Veh/h)	42	256	133	10	4	15
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	46	278	145	11	4	16
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	156				520	150
vC1, stage 1 conf vol					150	
vC2, stage 2 conf vol					370	
vCu, unblocked vol	156				520	150
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	97				99	98
cM capacity (veh/h)	1424				638	896

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	46	278	156	20
Volume Left	46	0	0	4
Volume Right	0	0	11	16
cSH	1424	1700	1700	829
Volume to Capacity	0.03	0.16	0.09	0.02
Queue Length 95th (m)	0.8	0.0	0.0	0.6
Control Delay (s)	7.6	0.0	0.0	9.5
Lane LOS	A			A
Approach Delay (s)	1.1		0.0	9.5
Approach LOS				A

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	24.3%	ICU Level of Service	A
Analysis Period (min)	15		



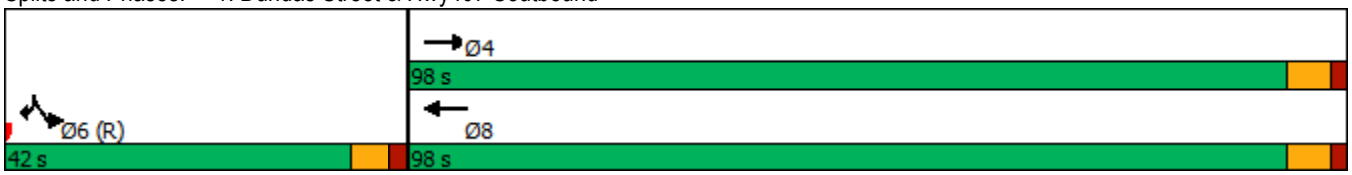
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1234	2053	0	100	425
Future Volume (vph)	0	1234	2053	0	100	425
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	0.91
Frt					0.898	0.850
Flt Protected					0.984	
Satd. Flow (prot)	0	5092	3579	0	3219	1457
Flt Permitted					0.984	
Satd. Flow (perm)	0	5092	3579	0	3219	1457
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					13	13
Link Speed (k/h)		50	50		50	
Link Distance (m)		173.3	204.0		140.6	
Travel Time (s)		12.5	14.7		10.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	3%	2%	2%	3%	2%
Adj. Flow (vph)	0	1272	2116	0	103	438
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	0	1272	2116	0	322	219
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Detector Phase		4	8		6	6
Switch Phase						

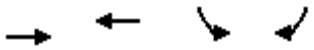


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		8.0	8.0		8.0	8.0
Minimum Split (s)		31.5	31.5		24.0	24.0
Total Split (s)		98.0	98.0		42.0	42.0
Total Split (%)		70.0%	70.0%		30.0%	30.0%
Maximum Green (s)		91.5	91.5		36.0	36.0
Yellow Time (s)		4.6	4.6		4.0	4.0
All-Red Time (s)		1.9	1.9		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		6.5	6.5		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		18.0	18.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		91.5	91.5		36.0	36.0
Actuated g/C Ratio		0.65	0.65		0.26	0.26
v/c Ratio		0.38	0.90		0.38	0.57
Control Delay		11.6	21.3		42.7	49.2
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		11.6	21.3		42.7	49.2
LOS		B	C		D	D
Approach Delay		11.6	21.3		45.3	
Approach LOS		B	C		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 21.5		Intersection LOS: C	
Intersection Capacity Utilization 84.7%		ICU Level of Service E	
Analysis Period (min) 15			

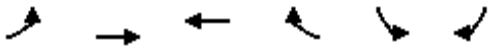
Splits and Phases: 1: Dundas Street & Hwy407 Soutbound





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1272	2116	322	219
v/c Ratio	0.38	0.90	0.38	0.57
Control Delay	11.6	21.3	42.7	49.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	11.6	21.3	42.7	49.2
Queue Length 50th (m)	55.7	86.7	36.4	54.9
Queue Length 95th (m)	64.3	96.8	50.5	84.8
Internal Link Dist (m)	149.3	180.0	116.6	
Turn Bay Length (m)				
Base Capacity (vph)	3327	2339	837	384
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	0.38	0.90	0.38	0.57

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1234	2053	0	100	425
Future Volume (vph)	0	1234	2053	0	100	425
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5	6.5		6.0	6.0
Lane Util. Factor		0.91	0.95		0.97	0.91
Frt		1.00	1.00		0.90	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5092	3579		3219	1457
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5092	3579		3219	1457
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1272	2116	0	103	438
RTOR Reduction (vph)	0	0	0	0	10	10
Lane Group Flow (vph)	0	1272	2116	0	312	209
Heavy Vehicles (%)	2%	3%	2%	2%	3%	2%
Turn Type		NA	NA		Prot	Prot
Protected Phases		4	8		6	6
Permitted Phases						
Actuated Green, G (s)		91.5	91.5		36.0	36.0
Effective Green, g (s)		91.5	91.5		36.0	36.0
Actuated g/C Ratio		0.65	0.65		0.26	0.26
Clearance Time (s)		6.5	6.5		6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		3327	2339		827	374
v/s Ratio Prot		0.25	c0.59		0.10	c0.14
v/s Ratio Perm						
v/c Ratio		0.38	0.90		0.38	0.56
Uniform Delay, d1		11.2	20.6		42.8	45.1
Progression Factor		1.00	0.78		1.00	1.00
Incremental Delay, d2		0.3	4.7		1.3	5.9
Delay (s)		11.5	20.7		44.1	51.1
Level of Service		B	C		D	D
Approach Delay (s)		11.5	20.7		46.9	
Approach LOS		B	C		D	

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

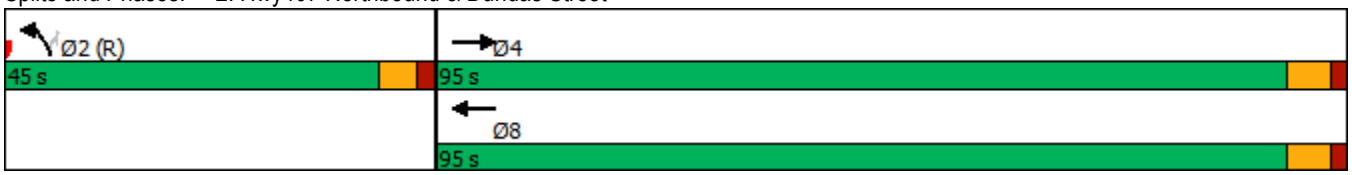


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1115	0	0	2157	68	133
Future Volume (vph)	1115	0	0	2157	68	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0	50.0		0.0	0.0
Storage Lanes		0	1		2	1
Taper Length (m)			2.5		2.5	
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.91
Frt					0.926	0.850
Flt Protected					0.975	
Satd. Flow (prot)	3544	0	0	5142	3085	1429
Flt Permitted					0.975	
Satd. Flow (perm)	3544	0	0	5142	3085	1429
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)					70	70
Link Speed (k/h)	50			50	50	
Link Distance (m)	141.9			1154.0	117.1	
Travel Time (s)	10.2			83.1	8.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	2%	2%	2%	14%	4%
Adj. Flow (vph)	1174	0	0	2271	72	140
Shared Lane Traffic (%)						50%
Lane Group Flow (vph)	1174	0	0	2271	142	70
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases						2
Detector Phase	4			8	2	2
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	8.0
Minimum Split (s)	31.5			31.5	24.0	24.0
Total Split (s)	95.0			95.0	45.0	45.0
Total Split (%)	67.9%			67.9%	32.1%	32.1%
Maximum Green (s)	88.5			88.5	39.0	39.0
Yellow Time (s)	4.6			4.6	4.0	4.0
All-Red Time (s)	1.9			1.9	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.5			6.5	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	None			None	C-Max	C-Max
Walk Time (s)	7.0			7.0		
Flash Dont Walk (s)	18.0			18.0		
Pedestrian Calls (#/hr)	0			0		
Act Effct Green (s)	85.7			85.7	41.8	41.8
Actuated g/C Ratio	0.61			0.61	0.30	0.30
v/c Ratio	0.54			0.72	0.15	0.15
Control Delay	11.4			20.2	19.6	8.8
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	11.4			20.2	19.6	8.8
LOS	B			C	B	A
Approach Delay	11.4			20.2	16.0	
Approach LOS	B			C	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 17.2		Intersection LOS: B	
Intersection Capacity Utilization 84.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Hwy407 Northbound & Dundas Street





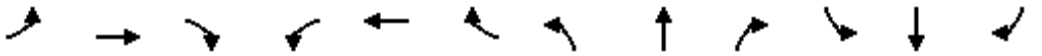
Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1174	2271	142	70
v/c Ratio	0.54	0.72	0.15	0.15
Control Delay	11.4	20.2	19.6	8.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	11.4	20.2	19.6	8.8
Queue Length 50th (m)	42.7	144.1	7.6	0.0
Queue Length 95th (m)	47.6	158.7	15.9	12.8
Internal Link Dist (m)	117.9	1130.0	93.1	
Turn Bay Length (m)				
Base Capacity (vph)	2240	3250	969	475
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	0.52	0.70	0.15	0.15

Intersection Summary



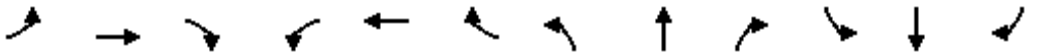
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1115	0	0	2157	68	133
Future Volume (vph)	1115	0	0	2157	68	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5			6.5	6.0	6.0
Lane Util. Factor	0.95			0.91	0.97	0.91
Frt	1.00			1.00	0.93	0.85
Flt Protected	1.00			1.00	0.98	1.00
Satd. Flow (prot)	3544			5142	3086	1429
Flt Permitted	1.00			1.00	0.98	1.00
Satd. Flow (perm)	3544			5142	3086	1429
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1174	0	0	2271	72	140
RTOR Reduction (vph)	0	0	0	0	49	49
Lane Group Flow (vph)	1174	0	0	2271	93	21
Heavy Vehicles (%)	3%	2%	2%	2%	14%	4%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	85.7			85.7	41.8	41.8
Effective Green, g (s)	85.7			85.7	41.8	41.8
Actuated g/C Ratio	0.61			0.61	0.30	0.30
Clearance Time (s)	6.5			6.5	6.0	6.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2169			3147	921	426
v/s Ratio Prot	0.33			c0.44	c0.03	
v/s Ratio Perm						0.01
v/c Ratio	0.54			0.72	0.10	0.05
Uniform Delay, d1	15.7			18.9	35.5	35.0
Progression Factor	0.67			1.00	1.00	1.00
Incremental Delay, d2	0.3			0.8	0.2	0.2
Delay (s)	10.9			19.7	35.7	35.2
Level of Service	B			B	D	D
Approach Delay (s)	10.9			19.7	35.5	
Approach LOS	B			B	D	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	5	11	279	11	23	19	290	108	11	282	1
Future Volume (vph)	2	5	11	279	11	23	19	290	108	11	282	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		60.0	50.0		0.0	30.0		15.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850		0.897			0.959			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1921	1633	1825	1723	0	1825	3450	0	1825	3610	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1825	1921	1633	1825	1723	0	1825	3450	0	1825	3610	0
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		86.0			162.7			532.8			105.0	
Travel Time (s)		5.2			9.8			32.0			6.3	
Confl. Peds. (#/hr)	1		1	1		1			3	3		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	2	5	11	288	11	24	20	299	111	11	291	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	5	11	288	35	0	20	410	0	11	292	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

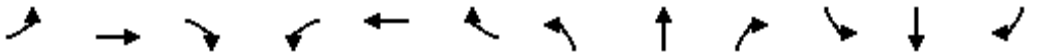
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.6%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	5	11	279	11	23	19	290	108	11	282	1
Future Volume (Veh/h)	2	5	11	279	11	23	19	290	108	11	282	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	2	5	11	288	11	24	20	299	111	11	291	1
Pedestrians					3			1			1	
Lane Width (m)					3.7			3.7			3.7	
Walking Speed (m/s)					1.1			1.1			1.1	
Percent Blockage					0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	534	766	147	580	712	209	292			413		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	534	766	147	580	712	209	292			413		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	25	97	97	98			99		
cM capacity (veh/h)	402	326	879	383	350	800	1281			1154		

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2	5	11	288	35	20	199	211	11	194	98
Volume Left	2	0	0	288	0	20	0	0	11	0	0
Volume Right	0	0	11	0	24	0	0	111	0	0	1
cSH	402	326	879	383	570	1281	1700	1700	1154	1700	1700
Volume to Capacity	0.00	0.02	0.01	0.75	0.06	0.02	0.12	0.12	0.01	0.11	0.06
Queue Length 95th (m)	0.1	0.4	0.3	45.9	1.5	0.4	0.0	0.0	0.2	0.0	0.0
Control Delay (s)	14.0	16.2	9.1	38.0	11.7	7.9	0.0	0.0	8.2	0.0	0.0
Lane LOS	B	C	A	E	B	A			A		
Approach Delay (s)	11.7			35.1		0.4			0.3		
Approach LOS	B			E							

Intersection Summary				
Average Delay	11.0			
Intersection Capacity Utilization	44.6%	ICU Level of Service	A	
Analysis Period (min)	15			



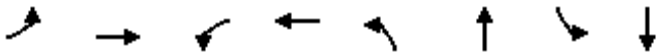
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	9	201	73	7	35	103	929	18	29	711	130
Future Volume (vph)	144	9	201	73	7	35	103	929	18	29	711	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	55.0		0.0	95.0		0.0	70.0		100.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00								
Frt		0.857			0.874			0.997			0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1623	0	1772	1598	0	1825	5128	0	1825	4997	0
Flt Permitted	0.728			0.420			0.265			0.272		
Satd. Flow (perm)	1399	1623	0	782	1598	0	509	5128	0	523	4997	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		214			37			6			58	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		616.2			251.6			287.9			279.5	
Travel Time (s)		37.0			15.1			14.8			14.4	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	3%	0%	6%	0%	2%	0%	0%	3%	0%
Adj. Flow (vph)	153	10	214	78	7	37	110	988	19	31	756	138
Shared Lane Traffic (%)												
Lane Group Flow (vph)	153	224	0	78	44	0	110	1007	0	31	894	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		7.0	8.0		8.0	8.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		11.0	32.0		32.0	32.0	
Total Split (s)	27.0	27.0		27.0	27.0		12.0	73.0		61.0	61.0	
Total Split (%)	27.0%	27.0%		27.0%	27.0%		12.0%	73.0%		61.0%	61.0%	
Maximum Green (s)	20.0	20.0		20.0	20.0		8.0	67.0		55.0	55.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		Max	C-Max		C-Max	C-Max	
Walk Time (s)								7.0		7.0	7.0	
Flash Dont Walk (s)								19.0		19.0	19.0	
Pedestrian Calls (#/hr)								0		0	0	
Act Effct Green (s)	15.6	15.6		15.6	15.6		73.4	71.4		55.0	55.0	
Actuated g/C Ratio	0.16	0.16		0.16	0.16		0.73	0.71		0.55	0.55	
v/c Ratio	0.71	0.52		0.64	0.16		0.20	0.27		0.11	0.32	
Control Delay	56.9	10.4		62.5	14.9		5.3	5.6		7.5	12.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	56.9	10.4		62.5	14.9		5.3	5.6		7.5	12.2	
LOS	E	B		E	B		A	A		A	B	
Approach Delay		29.2			45.3			5.6			12.1	
Approach LOS		C			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 12 (12%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 66.5%		ICU Level of Service C	
Analysis Period (min) 15			

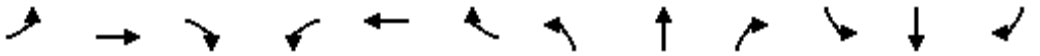
Splits and Phases: 5: Appleby & Palladium Way/Harrison





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	153	224	78	44	110	1007	31	894
v/c Ratio	0.71	0.52	0.64	0.16	0.20	0.27	0.11	0.32
Control Delay	56.9	10.4	62.5	14.9	5.3	5.6	7.5	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.9	10.4	62.5	14.9	5.3	5.6	7.5	12.2
Queue Length 50th (m)	28.3	1.7	14.3	1.2	5.2	22.2	3.1	48.1
Queue Length 95th (m)	47.1	20.5	28.8	9.9	11.4	32.1	0.0	0.0
Internal Link Dist (m)		592.2		227.6		263.9		255.5
Turn Bay Length (m)	45.0		55.0		95.0		70.0	
Base Capacity (vph)	279	495	156	349	537	3665	287	2774
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	0.55	0.45	0.50	0.13	0.20	0.27	0.11	0.32

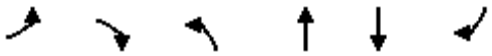
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	9	201	73	7	35	103	929	18	29	711	130
Future Volume (vph)	144	9	201	73	7	35	103	929	18	29	711	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.86		1.00	0.87		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	1621		1768	1598		1825	5129		1825	4996	
Flt Permitted	0.73	1.00		0.42	1.00		0.26	1.00		0.27	1.00	
Satd. Flow (perm)	1399	1621		782	1598		508	5129		523	4996	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	153	10	214	78	7	37	110	988	19	31	756	138
RTOR Reduction (vph)	0	181	0	0	31	0	0	2	0	0	26	0
Lane Group Flow (vph)	153	43	0	78	13	0	110	1005	0	31	868	0
Confl. Peds. (#/hr)			2	2								
Heavy Vehicles (%)	0%	0%	0%	3%	0%	6%	0%	2%	0%	0%	3%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	15.6	15.6		15.6	15.6		71.4	71.4		55.0	55.0	
Effective Green, g (s)	15.6	15.6		15.6	15.6		71.4	71.4		55.0	55.0	
Actuated g/C Ratio	0.16	0.16		0.16	0.16		0.71	0.71		0.55	0.55	
Clearance Time (s)	7.0	7.0		7.0	7.0		4.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	218	252		121	249		526	3662		287	2747	
v/s Ratio Prot		0.03			0.01		0.03	c0.20			c0.17	
v/s Ratio Perm	c0.11			0.10			0.12			0.06		
v/c Ratio	0.70	0.17		0.64	0.05		0.21	0.27		0.11	0.32	
Uniform Delay, d1	40.0	36.6		39.6	35.9		4.7	5.1		10.8	12.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.60	1.04	
Incremental Delay, d2	9.8	0.3		11.2	0.1		0.9	0.2		0.7	0.3	
Delay (s)	49.8	36.9		50.8	36.0		5.6	5.3		7.2	13.0	
Level of Service	D	D		D	D		A	A		A	B	
Approach Delay (s)		42.1			45.5			5.3			12.8	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	48	0	0	807	907	0
Future Volume (vph)	48	0	0	807	907	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	50.0			0.0
Storage Lanes	1	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1690	1795	0	3544	3544	0
Flt Permitted	0.950					
Satd. Flow (perm)	1690	1795	0	3544	3544	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (k/h)	50			50	70	
Link Distance (m)	146.5			104.0	373.0	
Travel Time (s)	10.5			7.5	19.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	8%	7%	2%	3%	3%	2%
Adj. Flow (vph)	51	0	0	849	955	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	51	0	0	849	955	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0		8.0	8.0	
Minimum Split (s)	25.0	25.0		25.0	25.0	
Total Split (s)	32.0	32.0		68.0	68.0	
Total Split (%)	32.0%	32.0%		68.0%	68.0%	
Maximum Green (s)	25.0	25.0		61.0	61.0	
Yellow Time (s)	4.0	4.0		5.0	5.0	
All-Red Time (s)	3.0	3.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	9.1			81.3	81.3	
Actuated g/C Ratio	0.09			0.81	0.81	
v/c Ratio	0.33			0.29	0.33	
Control Delay	48.1			2.9	5.5	
Queue Delay	0.0			0.0	0.0	
Total Delay	48.1			2.9	5.5	
LOS	D			A	A	
Approach Delay	48.1			2.9	5.5	
Approach LOS	D			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay: 5.5		Intersection LOS: A	
Intersection Capacity Utilization 43.4%		ICU Level of Service A	
Analysis Period (min) 15			

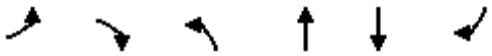
Splits and Phases: 6: Appleby & Hwy407 Eastbound





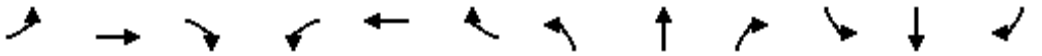
Lane Group	EBL	NBT	SBT
Lane Group Flow (vph)	51	849	955
v/c Ratio	0.33	0.29	0.33
Control Delay	48.1	2.9	5.5
Queue Delay	0.0	0.0	0.0
Total Delay	48.1	2.9	5.5
Queue Length 50th (m)	9.5	17.0	43.1
Queue Length 95th (m)	20.3	25.2	51.6
Internal Link Dist (m)	122.5	80.0	349.0
Turn Bay Length (m)			
Base Capacity (vph)	422	2880	2880
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.12	0.29	0.33

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	48	0	0	807	907	0
Future Volume (vph)	48	0	0	807	907	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0			7.0	7.0	
Lane Util. Factor	1.00			0.95	0.95	
Frt	1.00			1.00	1.00	
Flt Protected	0.95			1.00	1.00	
Satd. Flow (prot)	1690			3544	3544	
Flt Permitted	0.95			1.00	1.00	
Satd. Flow (perm)	1690			3544	3544	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	51	0	0	849	955	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	51	0	0	849	955	0
Heavy Vehicles (%)	8%	7%	2%	3%	3%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	7.5			78.5	78.5	
Effective Green, g (s)	7.5			78.5	78.5	
Actuated g/C Ratio	0.08			0.78	0.78	
Clearance Time (s)	7.0			7.0	7.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	126			2782	2782	
v/s Ratio Prot	c0.03			0.24	c0.27	
v/s Ratio Perm						
v/c Ratio	0.40			0.31	0.34	
Uniform Delay, d1	44.1			3.0	3.2	
Progression Factor	1.00			0.83	1.55	
Incremental Delay, d2	2.1			0.3	0.3	
Delay (s)	46.2			2.8	5.2	
Level of Service	D			A	A	
Approach Delay (s)	46.2			2.8	5.2	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

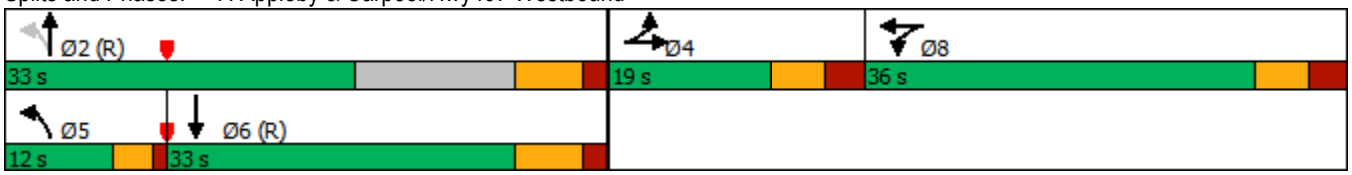


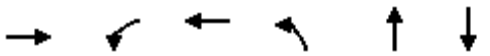
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	10	428	5	40	7	752	0	0	591	5
Future Volume (vph)	4	0	10	428	5	40	7	752	0	0	591	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	80.0		0.0	0.0		0.0
Storage Lanes	0		0	1		0	1		0	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.91	0.91
Frt		0.904			0.974						0.999	
Flt Protected		0.986		0.950	0.961		0.950					
Satd. Flow (prot)	0	1588	0	1700	1675	0	1560	3544	0	0	5087	0
Flt Permitted		0.986		0.950	0.961		0.379					
Satd. Flow (perm)	0	1588	0	1700	1675	0	622	3544	0	0	5087	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		164			10						1	
Link Speed (k/h)		50			50			50			70	
Link Distance (m)		127.4			84.3			373.0			64.3	
Travel Time (s)		9.2			6.1			26.9			3.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	11%	2%	2%	2%	17%	3%	0%	2%	3%	2%
Adj. Flow (vph)	4	0	10	441	5	41	7	775	0	0	609	5
Shared Lane Traffic (%)				44%								
Lane Group Flow (vph)	0	14	0	247	240	0	7	775	0	0	614	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2			2	
Detector Template	Left	Thru		Left	Thru		Left	Thru			Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5			30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8			1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							2					
Detector Phase	4	4		8	8		5	2			6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		8.0	8.0			8.0	
Minimum Split (s)	15.0	15.0		20.0	20.0		12.0	33.0			33.0	
Total Split (s)	19.0	19.0		36.0	36.0		12.0	33.0			33.0	
Total Split (%)	19.0%	19.0%		36.0%	36.0%		12.0%	33.0%			33.0%	
Maximum Green (s)	12.0	12.0		29.0	29.0		8.0	26.0			26.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	5.0			5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		1.0	2.0			2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Recall Mode	None	None		None	None		None	C-Max			C-Max	
Walk Time (s)				8.0	8.0			7.0			7.0	
Flash Dont Walk (s)				5.0	5.0			19.0			19.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)		8.0		20.4	20.4		65.6	62.6			60.2	
Actuated g/C Ratio		0.08		0.20	0.20		0.66	0.63			0.60	
v/c Ratio		0.05		0.71	0.69		0.01	0.35			0.20	
Control Delay		0.4		48.0	44.8		11.1	12.0			12.2	
Queue Delay		0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay		0.4		48.0	44.8		11.1	12.0			12.2	
LOS		A		D	D		B	B			B	
Approach Delay		0.4			46.4			12.0			12.2	
Approach LOS		A			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 20.8		Intersection LOS: C	
Intersection Capacity Utilization 52.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Appleby & Carpool/Hwy407 Westbound

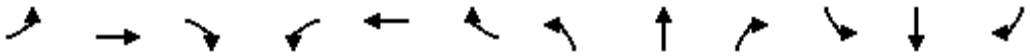




Lane Group	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	14	247	240	7	775	614
v/c Ratio	0.05	0.71	0.69	0.01	0.35	0.20
Control Delay	0.4	48.0	44.8	11.1	12.0	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.4	48.0	44.8	11.1	12.0	12.2
Queue Length 50th (m)	0.0	47.0	43.5	0.4	41.5	15.4
Queue Length 95th (m)	0.0	67.3	63.7	m2.9	71.0	44.3
Internal Link Dist (m)	103.4		60.3		349.0	40.3
Turn Bay Length (m)				80.0		
Base Capacity (vph)	334	493	492	483	2218	3062
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.50	0.49	0.01	0.35	0.20

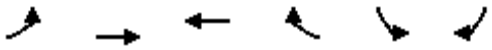
Intersection Summary

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



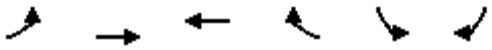
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	10	428	5	40	7	752	0	0	591	5
Future Volume (vph)	4	0	10	428	5	40	7	752	0	0	591	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95			0.91	
Frt		0.90		1.00	0.97		1.00	1.00			1.00	
Flt Protected		0.99		0.95	0.96		0.95	1.00			1.00	
Satd. Flow (prot)		1587		1700	1676		1560	3544			5086	
Flt Permitted		0.99		0.95	0.96		0.38	1.00			1.00	
Satd. Flow (perm)		1587		1700	1676		622	3544			5086	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	4	0	10	441	5	41	7	775	0	0	609	5
RTOR Reduction (vph)	0	14	0	0	8	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	247	232	0	7	775	0	0	614	0
Heavy Vehicles (%)	0%	0%	11%	2%	2%	2%	17%	3%	0%	2%	3%	2%
Turn Type	Split	NA		Split	NA		pm+pt	NA			NA	
Protected Phases	4	4		8	8		5	2			6	
Permitted Phases							2					
Actuated Green, G (s)		1.6		20.4	20.4		57.0	57.0			51.4	
Effective Green, g (s)		1.6		20.4	20.4		57.0	57.0			51.4	
Actuated g/C Ratio		0.02		0.20	0.20		0.57	0.57			0.51	
Clearance Time (s)		7.0		7.0	7.0		4.0	7.0			7.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		25		346	341		369	2020			2614	
v/s Ratio Prot		c0.00		c0.15	0.14		0.00	c0.22			0.12	
v/s Ratio Perm							0.01					
v/c Ratio		0.01		0.71	0.68		0.02	0.38			0.23	
Uniform Delay, d1		48.4		37.1	36.8		9.4	11.8			13.4	
Progression Factor		1.00		1.00	1.00		1.03	1.05			1.00	
Incremental Delay, d2		0.1		6.8	5.5		0.0	0.5			0.2	
Delay (s)		48.6		43.9	42.3		9.6	13.0			13.6	
Level of Service		D		D	D		A	B			B	
Approach Delay (s)		48.6			43.1			12.9			13.6	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	26	99	267	7	12	46
Future Volume (vph)	26	99	267	7	12	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0			0.0	0.0	0.0
Storage Lanes	1			0	1	0
Taper Length (m)	2.5				2.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996		0.893	
Flt Protected	0.950				0.990	
Satd. Flow (prot)	1789	1883	1876	0	1665	0
Flt Permitted	0.950				0.990	
Satd. Flow (perm)	1789	1883	1876	0	1665	0
Link Speed (k/h)		50	60		50	
Link Distance (m)		187.3	185.1		63.9	
Travel Time (s)		13.5	11.1		4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	108	290	8	13	50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	28	108	298	0	63	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	26	99	267	7	12	46
Future Volume (Veh/h)	26	99	267	7	12	46
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	28	108	290	8	13	50
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	298				458	294
vC1, stage 1 conf vol					294	
vC2, stage 2 conf vol					164	
vCu, unblocked vol	298				458	294
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	98				98	93
cM capacity (veh/h)	1263				693	745

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	28	108	298	63
Volume Left	28	0	0	13
Volume Right	0	0	8	50
cSH	1263	1700	1700	734
Volume to Capacity	0.02	0.06	0.18	0.09
Queue Length 95th (m)	0.5	0.0	0.0	2.1
Control Delay (s)	7.9	0.0	0.0	10.4
Lane LOS	A			B
Approach Delay (s)	1.6		0.0	10.4
Approach LOS				B

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	31.3%	ICU Level of Service	A
Analysis Period (min)	15		

Appendix G

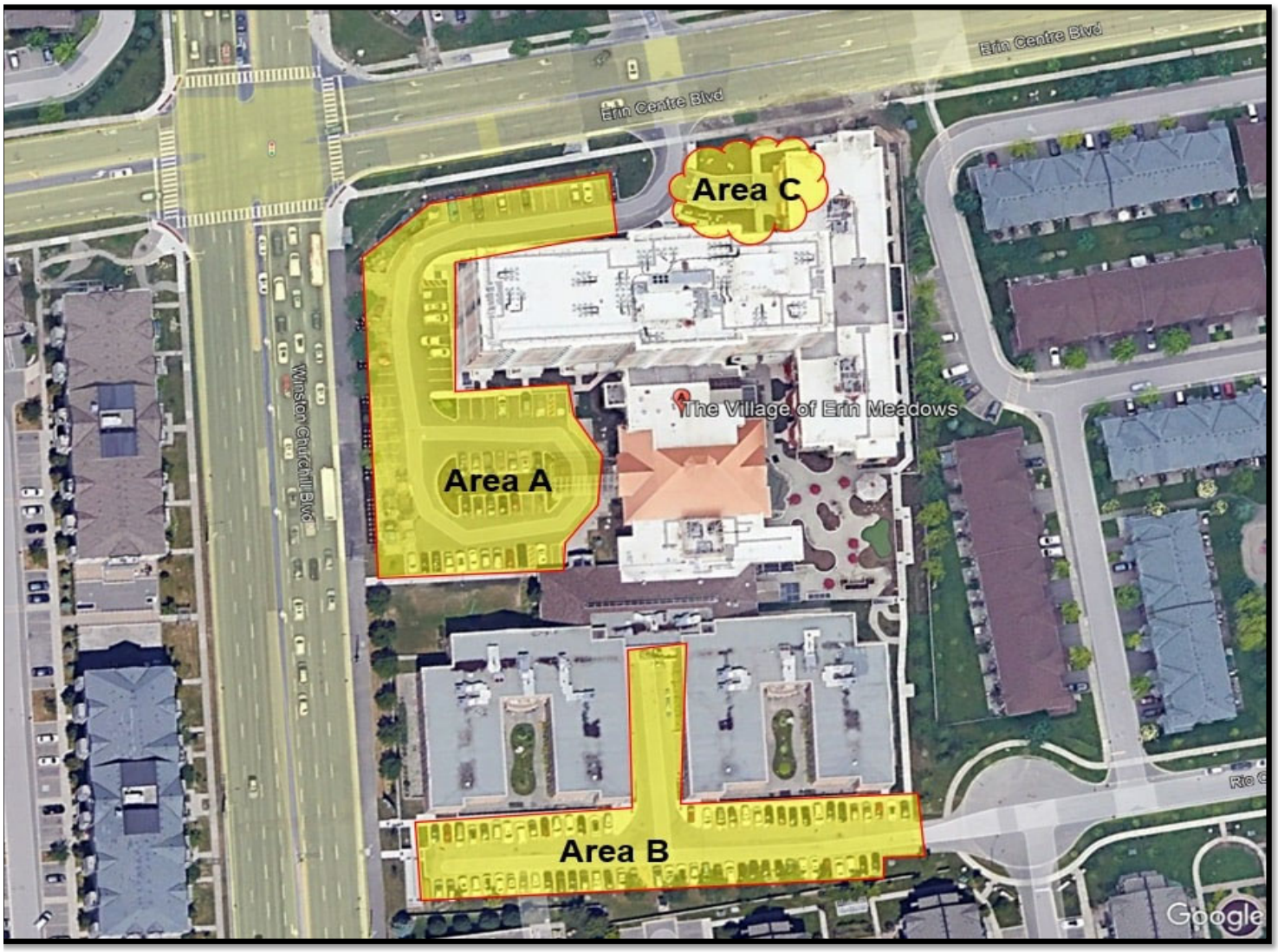
Parking Survey Data

Ontario Traffic Inc - Parking Counts

Location: The Village of Erin Meadows (2930 Erin Centre Boulevard, Mississauga)

Date: Friday, October 04, 2024

Time			Parked Vehicles						
			Area A			Area B		Area C	
			Regular	Accessible	Visitor	Regular	Visitor	Regular	Visitor
17:00	to	17:30	45	3	0	26	0	61	0
17:30	to	18:00	44	4	0	27	0	61	0
18:00	to	18:30	43	4	1	27	0	60	0
18:30	to	19:00	41	1	0	24	0	58	0
19:00	to	19:30	40	0	0	23	0	56	0
19:30	to	20:00	37	0	0	24	0	54	0
20:00	to	20:30	31	0	0	22	0	54	0
20:30	to	21:00	24	1	0	20	0	52	0
Available Parking Spaces =			**70**	**5**	**2**	**68**	**1**	**84**	**1**

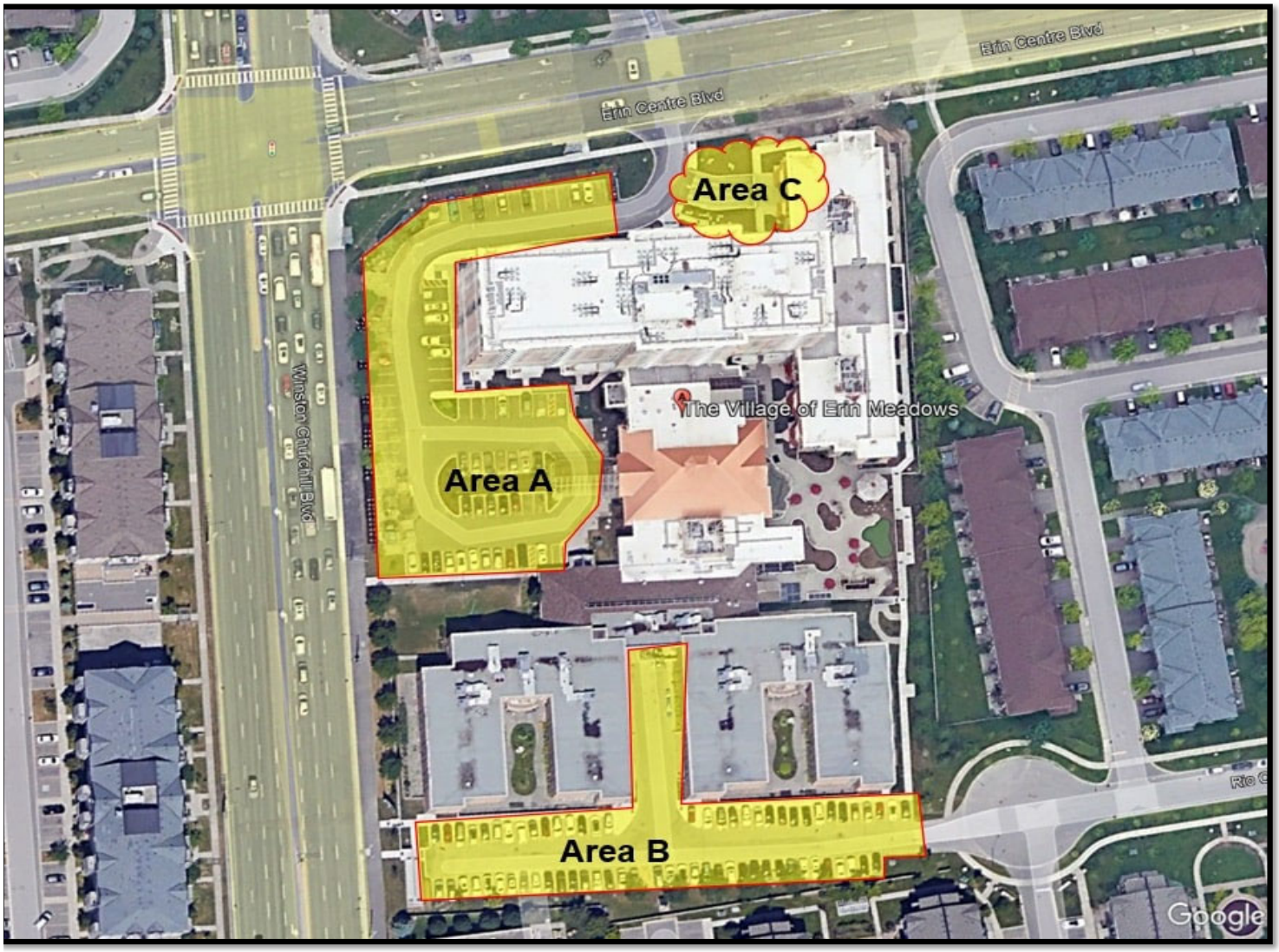


Ontario Traffic Inc - Parking Counts

Location: The Village of Erin Meadows (2930 Erin Centre Boulevard, Mississauga)

Date: Saturday, October 05, 2024

Time			Parked Vehicles						
			Area A			Area B		Area C	
			Regular	Accessible	Visitor	Regular	Visitor	Regular	Visitor
11:00	to	11:30	49	3	0	43	0	59	0
11:30	to	12:00	37	3	0	39	0	63	0
12:00	to	12:30	36	2	0	37	0	63	0
12:30	to	13:00	35	2	0	39	0	63	0
13:00	to	13:30	39	2	0	44	0	68	0
13:30	to	14:00	42	3	0	42	0	68	0
14:00	to	14:30	37	3	0	47	0	61	0
14:30	to	15:00	35	2	0	43	0	61	0
15:00	to	15:30	39	2	0	45	0	66	0
15:30	to	16:00	36	3	0	49	0	59	0
16:00	to	16:30	38	3	0	46	0	58	0
16:30	to	17:00	36	3	0	51	0	59	0
Available Parking Spaces =			**70**	**5**	**2**	**68**	**1**	**84**	**1**

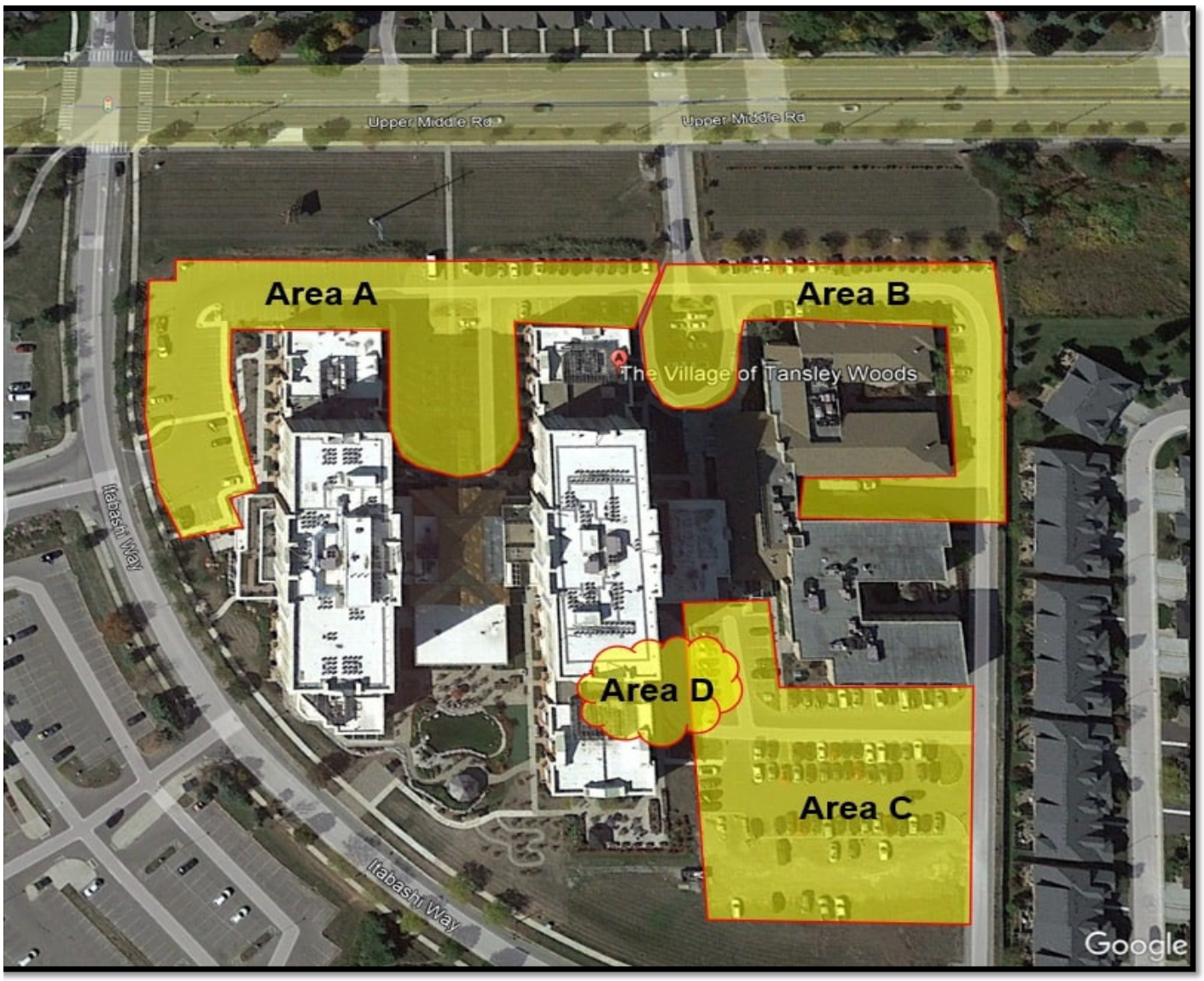


Ontario Traffic Inc - Parking Counts

Location: The Village of Tansley Woods (4100 Upper Middle Road, Burlington)

Date: Friday, October 04, 2024

Time			Parked Vehicles									
			Area A			Area B			Area C		Area D	
			Regular	Accessible	Visitor	Regular	Accessible	Visitor	Regular	Visitor	Regular	Accessible
17:00	to	17:30	24	4	7	13	1	11	32	4	74	2
17:30	to	18:00	22	4	6	13	1	9	31	3	74	2
18:00	to	18:30	21	3	5	14	1	6	30	3	74	2
18:30	to	19:00	20	3	3	13	1	5	29	3	74	2
19:00	to	19:30	20	3	1	12	1	6	27	4	74	2
19:30	to	20:00	18	2	1	12	1	5	25	3	74	2
20:00	to	20:30	16	1	1	11	1	5	18	2	74	2
20:30	to	21:00	15	1	1	11	1	4	16	2	74	2
Available Parking Spaces =			**90**	**6**	**16**	**51**	**2**	**12**	**71**	**6**	**117**	**5**



Ontario Traffic Inc - Parking Counts

Location: The Village of Tansley Woods (4100 Upper Middle Road, Burlington)

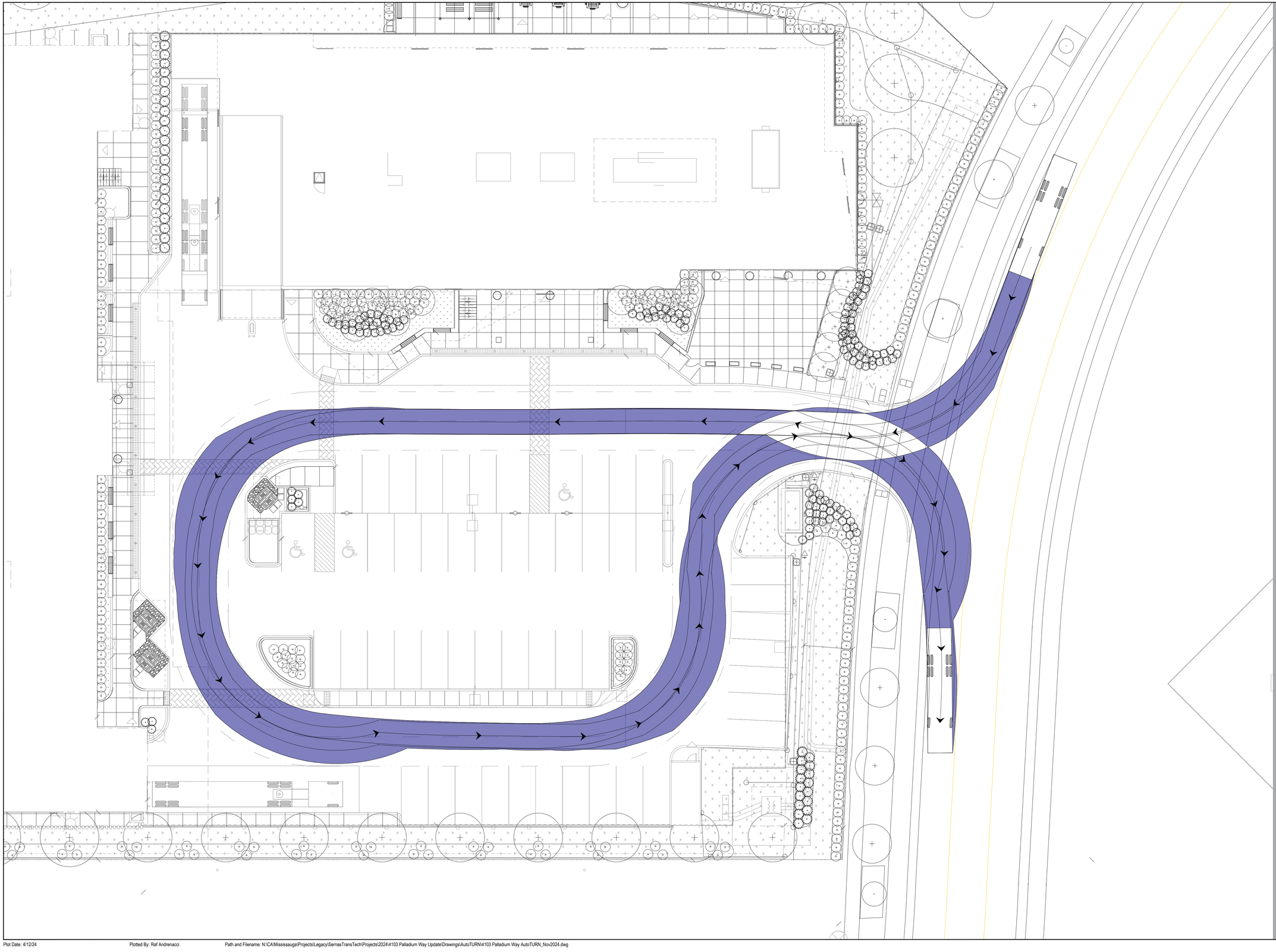
Date: Saturday, October 05, 2024

Time			Parked Vehicles									
			Area A			Area B			Area C		Area D	
			Regular	Accessible	Visitor	Regular	Accessible	Visitor	Regular	Visitor	Regular	Accessible
11:00	to	11:30	33	3	7	25	1	8	32	3	63	2
11:30	to	12:00	35	4	8	26	1	10	33	4	64	2
12:00	to	12:30	36	4	10	26	2	10	34	4	64	2
12:30	to	13:00	35	5	11	27	2	9	34	5	64	2
13:00	to	13:30	33	6	13	25	1	9	35	4	62	1
13:30	to	14:00	32	5	12	25	1	8	35	3	60	1
14:00	to	14:30	32	4	10	24	2	8	36	3	60	1
14:30	to	15:00	33	4	9	24	2	10	38	2	61	1
15:00	to	15:30	34	3	8	23	2	9	39	1	60	1
15:30	to	16:00	32	3	4	20	1	9	35	3	59	1
16:00	to	16:30	31	2	6	19	1	10	33	2	61	1
16:30	to	17:00	28	1	7	17	1	10	32	2	60	1
Available Parking Spaces =			**90**	**6**	**16**	**51**	**2**	**12**	**71**	**6**	**117**	**5**



Appendix H

AutoTURN Swept Path Analysis



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LICENSED PROFESSIONAL ENGINEER
Nov. 13, 2024
W.C. MARIA
PROVINCE OF ONTARIO

12.80
3.09 5.84

Aerial Fire

	meters
Width	: 2.54
Track	: 2.54
Lock to Lock Time	: 6.0
Steering Angle	: 37.0

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	11/13/24

Author	R.A	Designer	R.A
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client

BETTER LIFE DEVELOPMENT

Project

4103 PALLADIUM WAY

Date November 13, 2024

Scale NTS

Project No. 12569474

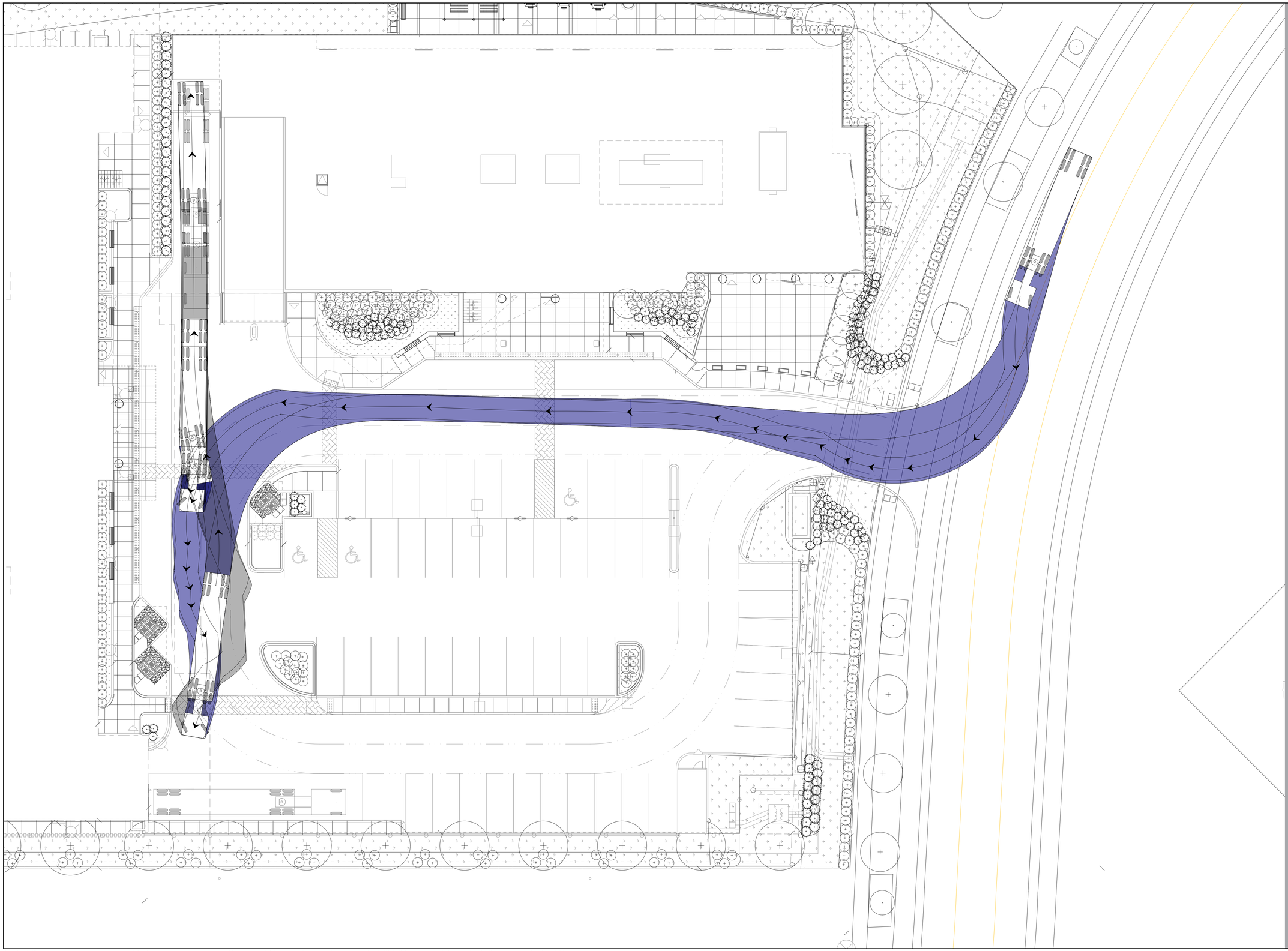
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VEHICLE MANEUVERING DIAGRAM - FIRE TRUCK

Size ANSI D

Sheet No. AT-101

Plot Date: 4/12/24 Plotted By: Raf Andrenacci Path and Filename: N:\CA\Mississauga\Projects\Legacy\SernasTransTech\Projects\2024\4103 Palladium Way Update\Drawings\AutoTURN\4103 Palladium Way AutoTURN_Nov2024.dwg



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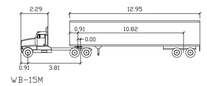
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WB-15M

meters			
Tractor Width	2.44	Lock to Lock Time	6.0
Trailer Width	2.59	Steering Angle	17.7
Tractor Track	2.44	Articulating Angle	70.0
Trailer Track	2.59		

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	11/13/24

Author	R.A	Designer	R.A
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client

BETTER LIFE DEVELOPMENT

Project

4103 PALLADIUM WAY

Date: November 13, 2024

Scale: NTS

Project No.: 12569474

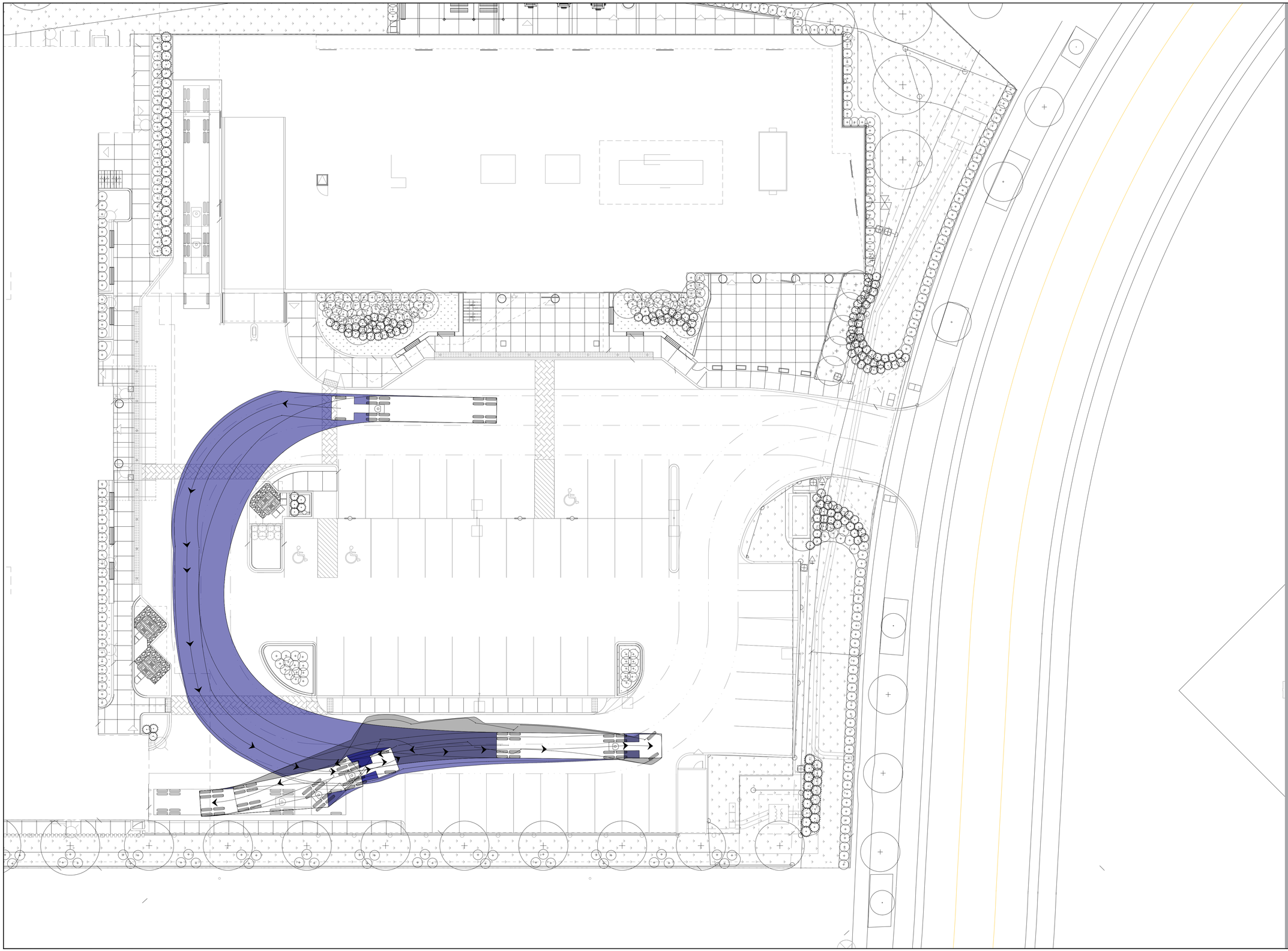
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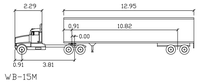
VEHICLE MANEUVERING DIAGRAM - WB-15 TRUCK (INBOUND - NORTH)

Size: ANSI D

Sheet No.: AT-102

Plot Date: 4/12/24 Plotted By: Raf Andrenacci Path and Filename: N:\CA\Mississauga\Projects\Legacy\SernasTransTech\Projects\2024\4103 Palladium Way Update\Drawings\AutoTURN\4103 Palladium Way AutoTURN_Nov2024.dwg





WB-15M

meters			
Tractor Width	: 2.44	Lock to Lock Time	: 6.0
Trailer Width	: 2.59	Steering Angle	: 17.7
Tractor Track	: 2.44	Articulating Angle	: 70.0
Trailer Track	: 2.59		

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No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	11/13/24

Author	R.A	Designer	R.A
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

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Project

4103 PALLADIUM WAY

Date	Scale
November 13, 2024	NTS

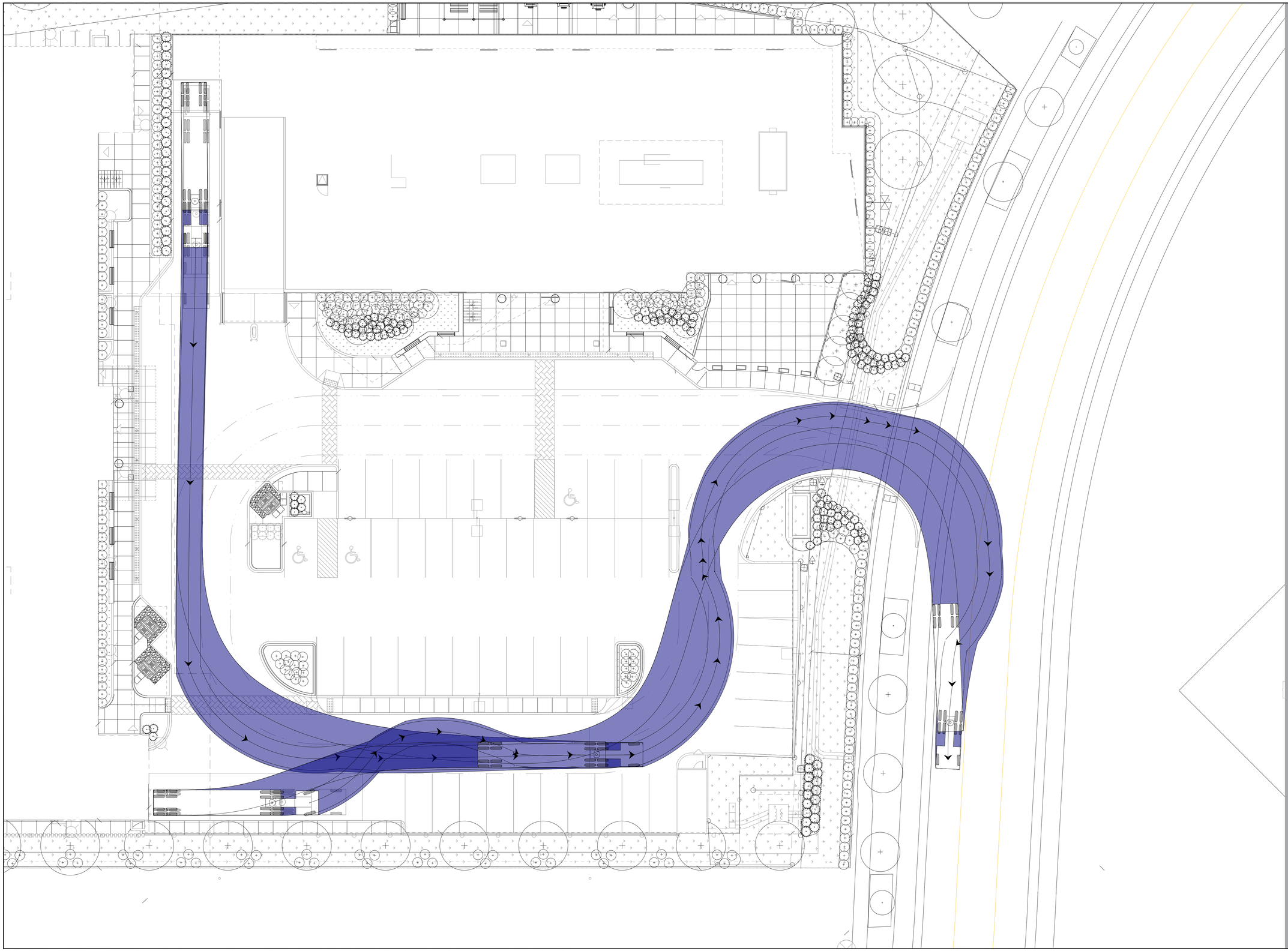
Project No.
12569474

Title

VEHICLE MANEUVERING DIAGRAM - WB-15 TRUCK (INBOUND - SOUTH)

Size
ANSI D

Sheet No.
AT-103



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Nov. 13, 2024
W.C. MARIA
PROVINCE OF ONTARIO

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	11/13/24

Author	R.A	Designer	R.A
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

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BETTER LIFE DEVELOPMENT

Project

4103 PALLADIUM WAY

Date November 13, 2024

Scale NTS

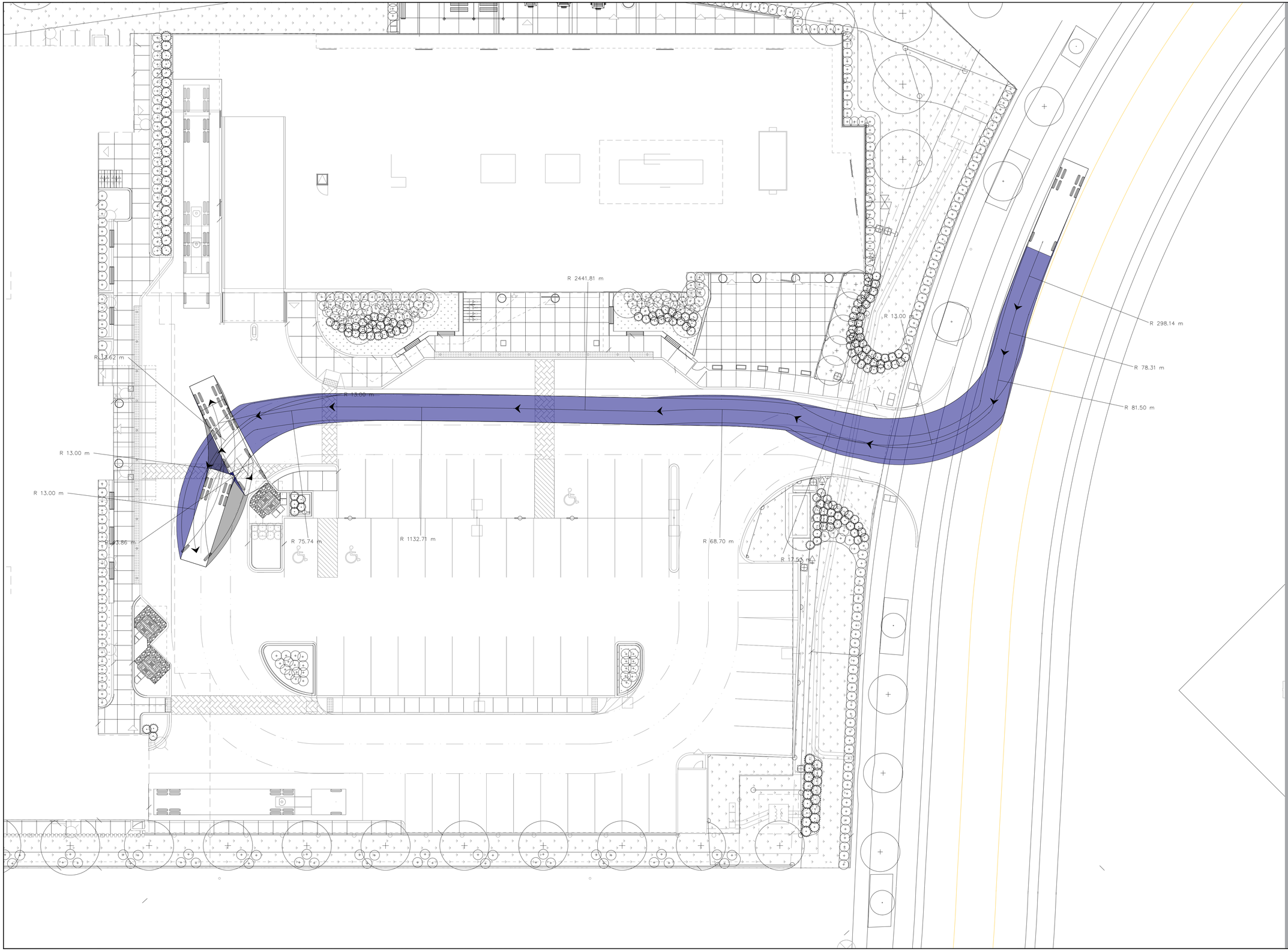
Project No. 12569474

Title

VEHICLE MANEUVERING DIAGRAM - WB-15 TRUCK (OUTBOUND)

Size ANSI D

Sheet No. AT-104



GHD

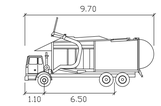
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PROVINCE OF ONTARIO



Halton-Front-End

	meters
Width	2.70
Track	2.70
Lock to Lock Time	6.0
Steering Angle	30.0

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	11/13/24

Author	R.A	Designer	R.A
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client

BETTER LIFE DEVELOPMENT

Project

4103 PALLADIUM WAY

Date: November 13, 2024

Scale: NTS

Project No.: 12569474

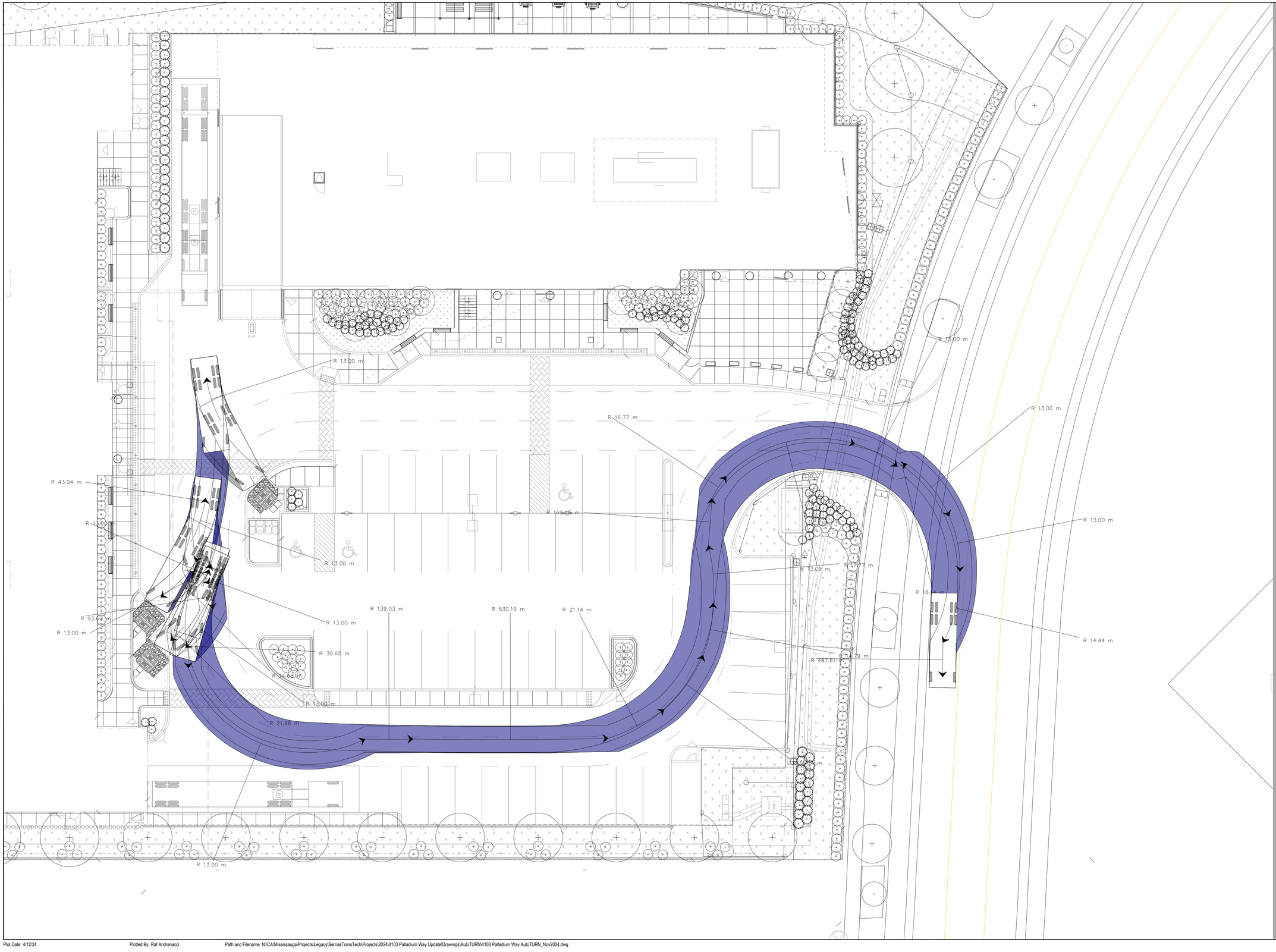
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VEHICLE MANEUVERING DIAGRAM - WASTE COLLECTION VEHICLE (INBOUND)

Size: ANSI D

Sheet No.: AT-105

Plot Date: 4/12/24 Plotted By: Raf Andrenacci Path and Filename: N:\CA\Mississauga\Projects\Legacy\SernasTransTech\Projects\2024\4103 Palladium Way Update\Drawings\AutoTURN\4103 Palladium Way AutoTURN_Nov2024.dwg



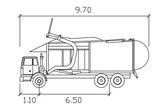
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LICENSED PROFESSIONAL ENGINEER
Nov. 13, 2024
W.C. MARIA
PROVINCE OF ONTARIO



Halton-Front-End
meters

Width	: 2.70
Track	: 2.70
Lock to Lock Time	6.0
Steering Angle	: 30.0

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	11/13/24

Author	R.A	Designer	R.A
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client

BETTER LIFE DEVELOPMENT

Project

4103 PALLADIUM WAY

Date: November 13, 2024
Scale: NTS

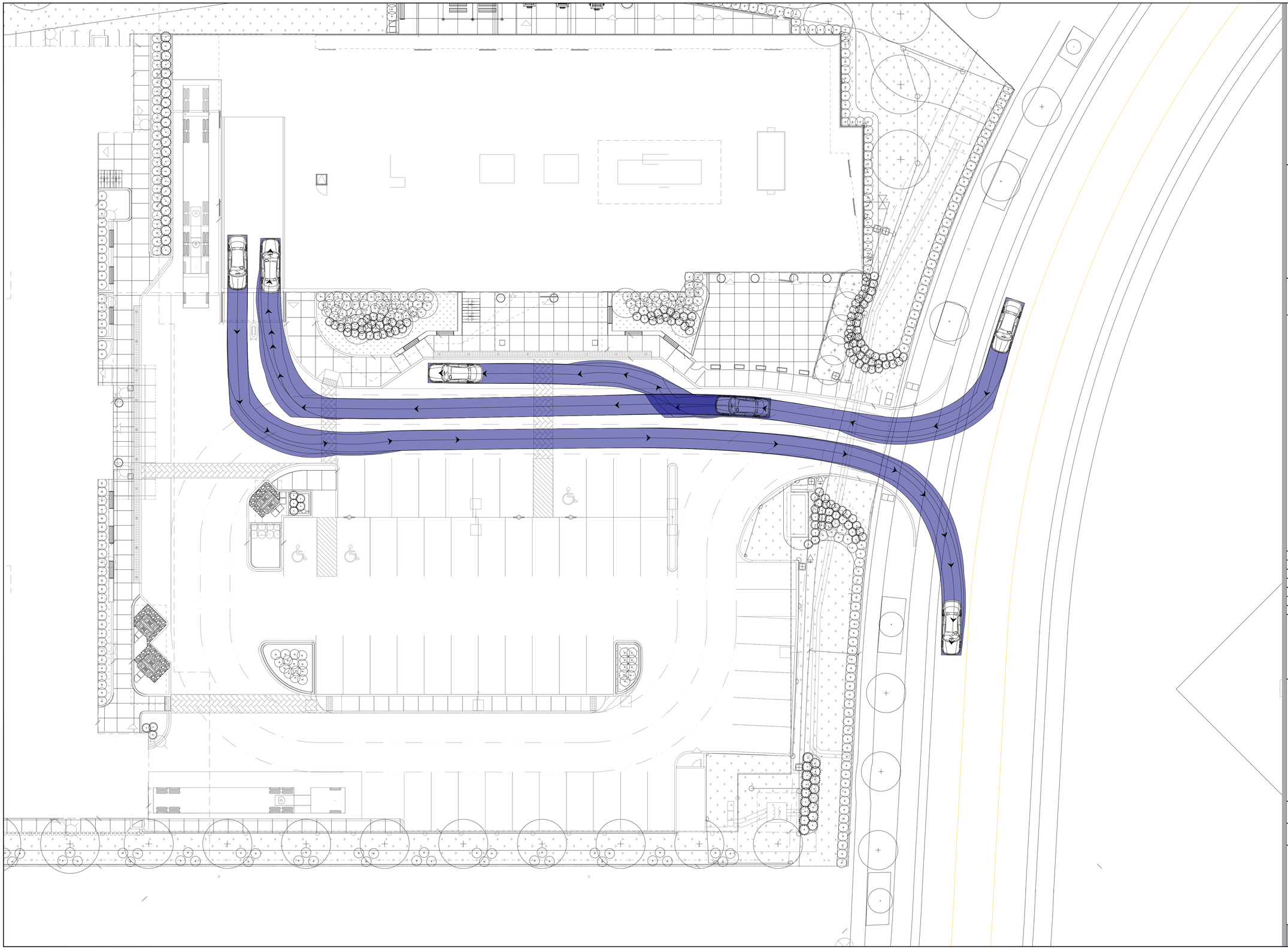
Project No.: 12569474

Title

VEHICLE MANEUVERING DIAGRAM - WASTE COLLECTION VEHICLE (OUTBOUND)

Size: ANSI D

Sheet No.: AT-106



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LICENSED PROFESSIONAL ENGINEER
Nov. 13, 2024
W.C. MARIA
PROVINCE OF ONTARIO

5.60
1.10 3.20

P

	meters
Width	: 2.00
Track	: 2.00
Lock to Lock Time	6.0
Steering Angle	: 35.9

No.	Issue	Checked	Approved	Date
1	First Submission	W.M	W.M	11/13/24

Author	R.A	Designer	R.A
Drafting Check	W.M	Design Check	W.M
Project Manager	W.M	Project Director	W.M

Client

BETTER LIFE DEVELOPMENT

Project

4103 PALLADIUM WAY

Date	Scale
November 13, 2024	NTS

Project No.
12569474

Title

VEHICLE MANEUVERING DIAGRAM - PASSENGER VEHICLE

Size
ANSI D

Sheet No.
AT-107

Plot Date: 4/12/24 Plotted By: Raf Andrenacci Path and Filename: N:\CA\Mississauga\Projects\Legacy\SernasTransTech\Projects\2024\4103 Palladium Way Update\Drawings\AutoTURN\4103 Palladium Way AutoTURN_Nov2024.dwg


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