



APPENDIX A

Terms of Reference

Appendix A

Certification Form

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

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

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

Dated at Toronto this 15th day of April, 2026
(City)

Name: Robert Keel, MCIP, RPP

Professional Title: Manager, Transportation Planning

Signature: _____

Office Contact Information (Please Print)

Address: 40 University Ave, Suite 503


City/Postal Code: Toronto M5J 1T1

Telephone/Extension: 904-470-0015

E-mail Address: rkeel@lea.ca

Appendix B

Pre-Study Consultation Checklist (2233-2235 Hurontario Street, Mississauga)

Description	Information	Section Reference
Development Information		
Development Description (land use, size, and number of phases of development)	<ul style="list-style-type: none"> • Phase 1: The subject site currently has two existing residential developments, one being 13 storeys and the other being 12 storeys. There is also a small medical office building on site of ~500m². <ul style="list-style-type: none"> ▶ The proposed development (tentative) consists of constructing two residential towers in addition to the existing residential towers. One is proposed to be 35 storeys and 324 units and the other is proposed to be 35 storeys and 242 units for a total of 566 units. The total combined residential and non-residential GFA is 43,170.9 m². <p>Figure 1: Subject Site and Proposed Study Area</p> 	2.3.6
Transportation Impact Assessment		
Step 1 – Screening		
Type of Application (attach a drawing)	<input type="checkbox"/> Official Plan Amendment <input checked="" type="checkbox"/> Zoning Amendment <input type="checkbox"/> Site Plan Control Application <input type="checkbox"/> Plan of Subdivision <input type="checkbox"/> Other _____	2.3.5
Screening Criteria	<input checked="" type="checkbox"/> Trip Generation Trigger Satisfied <input checked="" type="checkbox"/> Location Trigger Satisfied	2.2.1

Description	Information	Section Reference
	<input checked="" type="checkbox"/> Operational/Safety Trigger Satisfied	
Type of Study	<input checked="" type="checkbox"/> Transportation Impact Study <input checked="" type="checkbox"/> Access Review <input type="checkbox"/> No Additional Study Required	2.2.1
Step 2 – Scoping		
Study Area (intersections to be analyzed) Note: The Transportation Consultant is responsible to identify any further intersections impacted as the study progresses.	<ul style="list-style-type: none"> • Hurontario Street and Queensway (Signalized); • Queensway E and Existing Site Access (Signalized); • Queensway E and Camilla Road (Signalized); • Hurontario Street and Existing Site Accesses (2) (Unsignalized); and • Hurontario Street and Sherobee Road / Bronte College Crescent (Signalized). 	2.3.8
Horizon Years	<input checked="" type="checkbox"/> 5 years from date of TIS (2031) <input type="checkbox"/> Interim years _____ <input type="checkbox"/> Other _____	2.3.9
Analysis Periods	<input checked="" type="checkbox"/> AM weekday peak hour of adjacent roadway <input checked="" type="checkbox"/> PM weekday peak hour of adjacent roadway <input type="checkbox"/> Saturday peak hour of adjacent roadway <input type="checkbox"/> AM weekday peak hour of development <input type="checkbox"/> PM weekday peak hour of development <input type="checkbox"/> Saturday peak hour of development <input type="checkbox"/> Other _____	2.3.10
Input Parameters and Assumptions (potential deviations)	<ul style="list-style-type: none"> • The need for deviations from Mississauga standards will be determined upon review of data collected 	2.3.13
Existing Transportation Conditions	<input checked="" type="checkbox"/> City data sources <input checked="" type="checkbox"/> New data collection (<u>LEA to survey intersections if no recent counts are available</u>) <input type="checkbox"/> Other _____	2.3.14
Planned Network Improvements (with timing)	<ul style="list-style-type: none"> • Hurontario Line LRT (timeline to be discussed with City if applicable) 	2.3.16
Other Planned Developments (per City's Website)	<ul style="list-style-type: none"> • 2463 and 2469 Mimosa Row (link) • 49 South Service Road (link) • 65 to 71 Agnes Street (link) • 3085 Hurontario Street (link) • 3115 Hurontario Street (link) • 25 and 33 Hillcrest Avenue and 3146, 3154 and 3168 Hurontario Street (link) 	2.3.17
Identification of Mitigation Improvement Measures	<input type="checkbox"/> Neighbourhood Traffic Management Plan <input type="checkbox"/> Other _____	2.3.23

Description	Information	Section Reference
Safety Analysis (any special issues)	•	2.3.25
Site Access and Circulation (design vehicles)	<input checked="" type="checkbox"/> Passenger Car (P) <input type="checkbox"/> Light Single Unit Truck (LSU) <input checked="" type="checkbox"/> Medium Single Unit Truck (MSU) <input type="checkbox"/> Heavy Single Unit Truck (HSU) <input checked="" type="checkbox"/> Pumper Fire Truck <input type="checkbox"/> WB-20 Tractor Semi-Trailer Truck <input type="checkbox"/> Other _____	2.3.26
Impacts During Construction (any special issues)	• •	2.3.27
Step 3 – Forecasting		
Growth Rate	<input checked="" type="checkbox"/> Obtained from City <input checked="" type="checkbox"/> Historical traffic counts <input type="checkbox"/> Travel demand forecasts <input type="checkbox"/> Proposed Growth Rate: _____	2.3.15
Site Trip Generation	<input checked="" type="checkbox"/> ITE Trip Generation Manual <input type="checkbox"/> "First Principles" <input checked="" type="checkbox"/> Observed rates for similar developments in area <input type="checkbox"/> Other _____	2.3.19
Trip Reductions	<input checked="" type="checkbox"/> Internal capture reductions for mixed-use developments <input checked="" type="checkbox"/> Pass-by reductions <input type="checkbox"/> Other _____	2.3.19
Trip Distribution	<input type="checkbox"/> Local traffic patterns <input checked="" type="checkbox"/> TTS <input type="checkbox"/> Travel demand model <input type="checkbox"/> Population and employment distribution <input type="checkbox"/> Market analysis of catchment area <input type="checkbox"/> Other _____	2.3.20
Trip Assignment	<input checked="" type="checkbox"/> Local traffic patterns <input type="checkbox"/> Shortest distance <input checked="" type="checkbox"/> Site layout, access design and logical routing <input checked="" type="checkbox"/> Existing turning movements <input type="checkbox"/> Other _____	2.3.21
Transportation Demand Management Plan		
Format	<input checked="" type="checkbox"/> Within a TIA Report <input type="checkbox"/> Standalone	3.2.1
Type of Transportation Demand Management Plan	<input type="checkbox"/> TDM Statement <input checked="" type="checkbox"/> TDM Scheme	3.2.2
Pedestrian Circulation Plan		

Description	Information	Section Reference
Format	<input checked="" type="checkbox"/> Within a TIA Report <input type="checkbox"/> Standalone	4.2.1
Additional Comments		
<p>A site access review will be performed to ensure that the site access is conformed to all TAC standards such as corner clearances, clear throat links, vehicle and pedestrian sight line distances for ingress and egress, proximity/alignment other driveways and roads, etc.</p> <p>Confirmation and technical justification will be provided as to whether the site access locations and designs are safe for all roadway users and why.</p> <p>Detailed recommendations regarding the on site and off-site roadway improvements, site accesses, site circulation, and TDM measures shall be made.</p>		



Outlook


Terms of Reference: 2233-2235 Hurontario St, Mississauga

From Matea Ceric <mceric@lea.ca>

Date Wed 2026-02-11 9:59 AM

To michael.turco@mississauga.ca <michael.turco@mississauga.ca>

Cc Karen Montain <KMontain@lea.ca>; Robert Keel <rkeel@lea.ca>

 1 attachment (156 KB)

Mississauga TIS Guidelines Appendix B Pre-Study Consultation Checklist_2233-2235 Hurontario St, Mississauga.pdf;

Hi Michael,

I hope you're well.

Please find attached the Terms of Reference for the Transportation Impact Study (TIS) for the proposed development located at **2233-2235 Hurontario St, Mississauga**.

This submission is intended for your review and feedback.

The proposed development (tentatively) consists of constructing two residential towers in addition to the two existing residential towers. One is proposed to be 35 storeys and 324 units and the other is proposed to be 35 storeys and 242 units for a total of 566 units. The total combined residential and non-residential GFA is 43,170.9 m².

Figure 1: Subject Site and Proposed Study Area



Please let me know if you have any comments or concerns with our assumptions.

Kind regards,

Matea Ceric, E.I.T, M.A.Sc

Project Coordinator, Transportation Division

LEA Consulting Ltd.

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Certificates & Accolades



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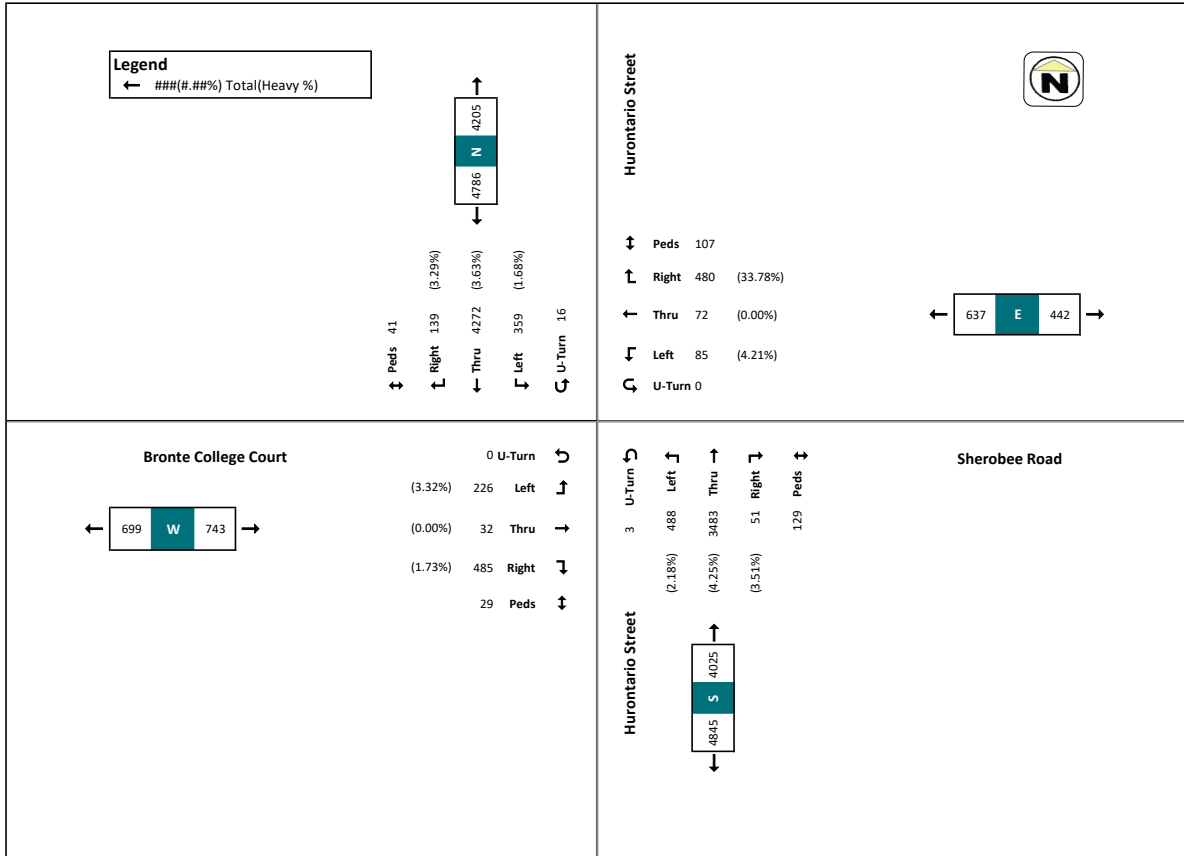
APPENDIX B

Traffic Data and Signal Timing Plans



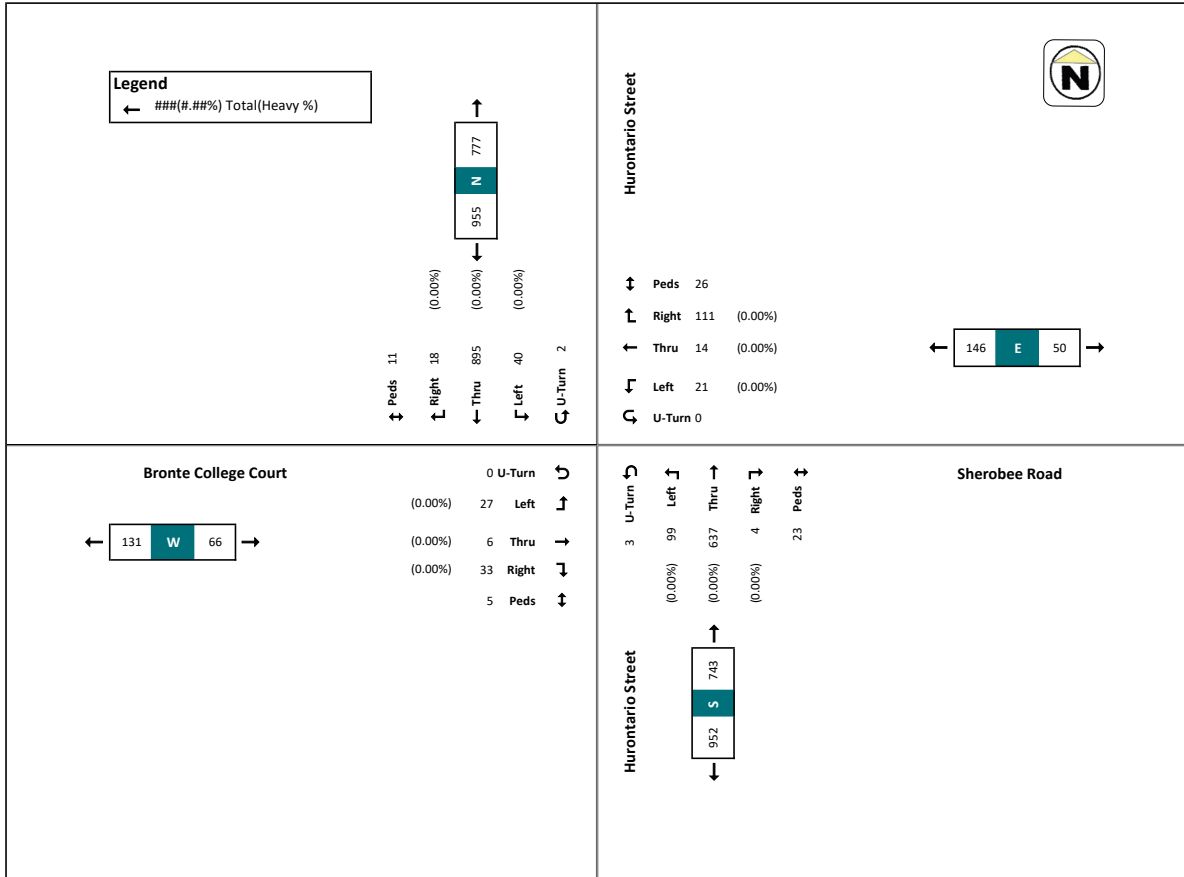
Turning Movement Count - Hurontario Street & Sherobee Road

Start Time	Hurontario Street Southbound					Sherobee Road Westbound					Hurontario Street Northbound					Bronte College Court Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
6:30	1	2	138	11	0	152	0	6	4	13	5	23	0	27	87	0	0	114	0	1	4	1	6	295	
6:45	0	6	134	16	3	156	0	2	10	14	4	26	1	53	86	5	3	145	0	5	1	4	2	10	337
Hourly Total	1	8	272	27	3	308	0	8	14	27	9	49	1	80	173	5	3	259	0	6	2	8	3	16	632
7:00	1	7	143	14	2	165	0	2	8	24	3	34	1	47	110	5	2	163	0	8	0	10	0	18	380
7:15	1	7	168	15	3	191	0	3	7	17	7	27	0	56	122	6	9	184	0	11	1	22	3	34	436
7:30	1	8	180	7	0	196	0	8	1	27	2	36	0	43	127	1	7	171	0	6	0	33	0	39	442
7:45	0	7	216	9	2	232	0	4	5	23	1	32	0	36	131	3	5	170	0	17	4	17	1	38	472
Hourly Total	3	29	707	45	7	784	0	17	21	91	13	129	1	182	490	15	23	688	0	42	5	82	4	129	1730
8:00	0	8	234	5	3	247	0	4	4	30	12	38	0	30	126	0	10	156	0	7	2	10	2	19	460
8:15	2	14	234	1	2	251	0	5	3	34	7	42	1	29	146	3	7	179	0	9	2	10	1	21	493
8:30	0	5	218	7	2	230	0	9	4	21	4	34	1	25	180	1	3	207	0	5	0	6	1	11	482
8:45	0	13	209	5	4	227	0	3	3	26	3	32	1	15	185	0	3	201	0	6	2	7	1	15	475
Hourly Total	2	40	895	18	11	955	0	21	14	111	26	146	0	99	637	4	23	740	0	27	6	33	5	66	1907
9:00	1	12	199	2	1	214	0	3	4	23	4	30	1	26	164	2	2	193	0	7	1	5	1	13	450
9:15	1	13	203	7	0	224	0	1	12	3	14	14	0	17	150	1	2	208	0	3	0	9	0	12	458
Hourly Total	2	25	402	9	1	438	0	4	5	35	7	44	0	43	354	3	4	400	0	10	1	14	1	25	907
* Break *																									
15:30	1	20	200	8	3	229	0	0	1	19	3	20	0	12	185	3	5	200	0	16	0	48	4	64	513
15:45	0	23	215	4	6	242	0	7	4	19	4	30	0	6	143	2	16	151	0	20	3	47	3	70	493
Hourly Total	1	43	415	12	9	471	0	7	5	38	7	50	0	18	328	5	21	351	0	36	3	95	7	134	1006
16:00	1	21	226	8	1	256	0	3	4	21	5	28	0	3	201	2	13	206	0	21	1	52	1	74	564
16:15	2	27	194	1	0	224	0	3	1	16	8	20	0	14	183	0	9	197	0	14	2	46	0	62	503
16:30	1	19	185	4	1	209	0	4	1	19	6	24	1	6	161	2	7	170	0	9	1	27	1	37	440
16:45	0	28	205	2	3	235	0	2	1	19	3	22	0	8	186	4	0	198	0	14	4	33	3	51	506
Hourly Total	4	95	810	15	5	924	0	12	7	75	22	94	1	31	731	8	29	771	0	58	8	158	5	224	2013
17:00	1	34	221	7	2	263	0	5	3	22	8	30	0	6	188	1	7	195	0	18	3	36	1	57	545
17:15	1	32	186	2	0	221	0	4	3	34	7	41	0	6	191	2	5	199	0	11	2	21	1	34	495
17:30	1	31	187	3	0	222	0	5	0	29	4	34	2	12	159	7	4	200	0	10	2	22	1	34	510
17:45	0	22	177	1	3	200	0	2	0	18	4	20	0	11	192	1	10	204	0	8	0	16	1	24	448
Hourly Total	3	119	771	13	5	906	0	16	6	103	23	125	0	35	770	11	26	816	0	47	7	95	4	149	1596
18:00	1	29	166	2	0	192	0	5	0	11	9	16	0	6	236	4	5	226	0	7	0	21	0	28	462
18:15	0	34	165	11	4	210	0	5	2	14	7	21	0	10	186	2	7	198	0	8	4	13	4	25	454
Hourly Total	1	57	331	13	4	402	0	10	2	25	16	37	0	16	402	6	12	424	0	15	4	34	4	53	916
Grand Total	16	359	4272	139	41	4786	0	85	72	480	107	637	3	488	3483	51	129	4025	0	226	32	485	29	743	10191
Approach %	0.3%	7.5%	89.3%	2.9%	-	-	0.0%	13.3%	11.3%	75.4%	-	-	0.1%	12.1%	86.5%	1.3%	-	-	0.0%	30.4%	4.3%	65.3%	-	-	-
Total %	0.2%	5.5%	41.9%	1.4%	-	47.0%	0.0%	0.8%	0.7%	4.7%	-	-	0.3%	0.0%	4.8%	34.2%	0.5%	-	39.5%	0.0%	2.2%	0.3%	4.8%	-	7.3%
Lights	17	409	4436	147	-	5009	0	91	74	480	-	645	9	493	3710	55	-	4277	0	231	36	510	-	779	10710
% Lights	106.3%	113.9%	103.8%	105.8%	-	104.7%	-	107.1%	102.8%	100.0%	-	101.3%	300.0%	101.0%	106.8%	107.8%	-	106.3%	-	103.1%	112.5%	105.2%	-	104.8%	105.1%
Busess	7	87	1	-	95	-	4	0	23	-	27	-	3	102	1	-	106	-	5	0	1	-	6	234	
% Buses	1.9%	2.0%	0.7%	-	2.0%	-	4.7%	0.0%	4.8%	-	4.2%	-	0.6%	2.9%	2.0%	-	2.6%	-	2.3%	0.0%	0.2%	-	0.8%	2.3%	
Trucks	0	80	4	-	84	-	0	0	2	-	2	-	8	63	1	-	72	-	3	0	8	-	11	169	
% Trucks	0.0%	1.9%	-	-	1.8%	-	0.0%	0.0%	0.4%	-	0.3%	-	1.6%	1.8%	2.0%	-	1.8%	-	1.3%	0.0%	1.6%	-	1.5%	1.7%	
Bicycles	-	-	-	-	1	1	-	-	-	-	3	3	-	-	-	-	-	0	0	-	-	-	0	4	
Pedestrians	-	-	-	-	45	-	-	-	-	-	123	-	-	-	-	-	141	-	-	-	-	-	33	-	342



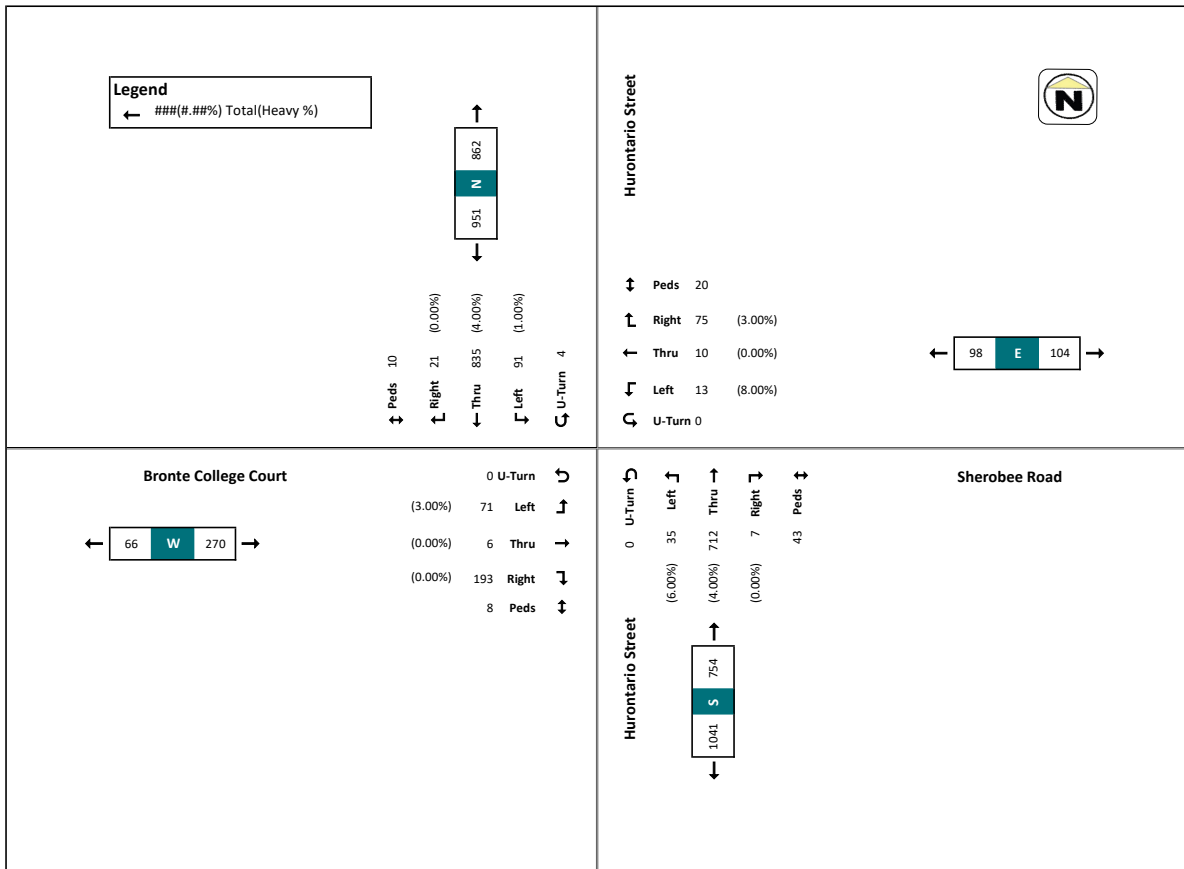
AM Peak Hour - Hurontario Street & Sherobee Road

Start Time	Hurontario Street						Sherobee Road						Hurontario Street						Bronte College Court						Grand Total
	Southbound			Northbound			Westbound			Eastbound			Northbound			Eastbound									
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
8:00	0	8	234	5	3	247	0	4	4	30	12	38	0	30	126	0	10	156	0	7	2	10	2	19	460
8:15	2	14	234	1	2	251	0	5	3	34	7	42	1	29	146	3	7	179	0	9	2	10	1	21	493
8:30	0	5	218	7	2	230	0	9	4	21	4	34	1	25	180	1	3	207	0	5	0	6	1	11	483
8:45	0	13	209	5	4	227	0	3	3	26	3	32	1	15	185	0	3	201	0	6	2	7	1	15	475
Hourly Total	2	40	895	18	11	955	0	21	14	111	26	146	3	99	637	4	23	743	0	27	6	33	5	66	1910
Approach %	0.2%	4.2%	93.7%	1.9%	-	-	0.0%	14.4%	9.6%	76.0%	-	-	0.4%	13.3%	85.7%	0.5%	-	-	0.0%	40.9%	9.1%	50.0%	-	-	-
Total %	0.3%	2.1%	46.9%	0.9%	-	50.0%	0.0%	1.1%	0.7%	5.8%	-	7.6%	0.2%	5.2%	33.4%	0.2%	-	38.9%	0.0%	1.4%	0.3%	1.7%	-	3.5%	-
PHF	0.25	0.71	0.96	0.64	-	0.95	0	0.58	0.88	0.82	-	0.87	0	0.83	0.86	0.83	-	0.9	0	0.75	0.75	0.83	-	0.79	0.97
Lights	0	#REF!	0	0	-	#REF!	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	#REF!
% Lights	0.0%	#REF!	0.0%	0.0%	-	#REF!	0	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	#REF!
Busess	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Busess	#VALUE!	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	0.0%
Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Trucks	#VALUE!	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	#VALUE!	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
Pedestrians	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	0	0	0



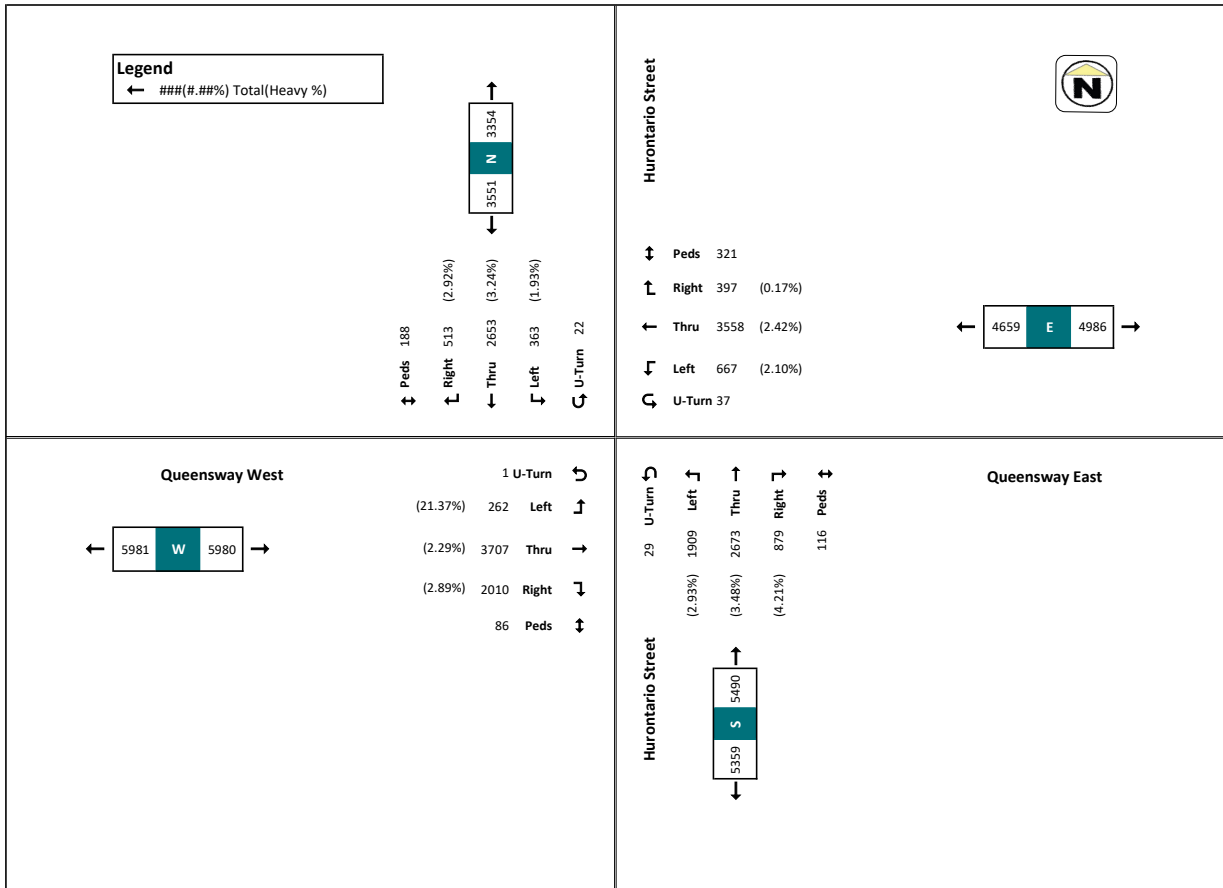
PM Peak Hour - Hurontario Street & Sherobee Road

Start Time	Hurontario Street Southbound						Sherobee Road Westbound						Hurontario Street Northbound						Bronte College Court Eastbound						Grand Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
15:30	1	20	200	8	3	229	0	0	1	19	3	20	0	12	185	3	5	200	0	16	0	48	4	64	513
15:45	0	23	215	4	6	242	0	7	4	19	4	30	0	6	143	2	16	151	0	20	3	47	3	70	493
16:00	1	21	226	8	1	256	0	3	4	21	5	28	0	3	201	2	13	206	0	21	1	52	1	74	564
16:15	2	27	184	1	0	224	0	3	1	16	8	20	0	14	183	0	9	197	0	14	2	46	0	62	503
Hourly Total	4	91	835	21	10	951	0	13	10	75	20	98	0	35	732	7	43	754	0	71	6	193	8	270	2073
Approach %	0.4%	9.6%	87.8%	2.2%	-	-	0.0%	13.3%	10.2%	76.5%	-	-	0.0%	4.6%	94.4%	0.9%	-	-	0.0%	26.3%	2.2%	71.5%	-	-	-
Total %	0.2%	4.4%	40.3%	1.0%	-	45.9%	0.0%	0.7%	0.5%	3.6%	-	4.7%	0.0%	1.8%	37.3%	0.4%	-	36.4%	0.0%	3.7%	0.3%	10.1%	-	13.0%	-
PHF	0.5	0.84	0.92	0.66	-	0.93	0	0.46	0.63	0.89	-	0.82	0	0.63	0.89	0.58	-	0.92	0	0.85	0.5	0.93	-	0.91	0.92
Lights	4	90	804	21	-	919	0	12	10	73	-	95	0	33	685	7	-	725	0	69	6	193	-	268	2007
% Lights	100.0%	98.9%	96.3%	100.0%	-	96.6%	-	92.3%	100.0%	97.3%	-	96.9%	-	94.3%	96.2%	100.0%	-	96.2%	-	97.2%	100.0%	100.0%	-	99.3%	96.8%
Buses	-	1	0	0	-	1	-	1	0	2	-	3	-	0	22	0	-	22	-	2	0	0	-	2	28
% Buses	#VALUE!	1.1%	0.0%	0.0%	-	0.1%	-	7.7%	0.0%	2.7%	-	3.1%	-	0.0%	3.1%	0.0%	-	2.9%	-	2.8%	0.0%	0.0%	-	0.7%	1.4%
Trucks	0	14	0	-	14	-	0	0	0	0	-	0	-	2	5	0	-	7	-	0	0	0	-	0	23
% Trucks	#VALUE!	0.0%	1.7%	0.0%	-	1.5%	-	0.0%	0.0%	0.0%	-	0.0%	-	5.7%	0.7%	0.0%	-	0.9%	-	0.0%	0.0%	0.0%	-	0.0%	1.0%
Bicycles	-	-	-	-	0	0	-	-	-	1	1	-	-	-	-	-	-	0	-	-	-	-	0	0	1
Pedestrians	-	-	-	-	10	-	-	-	-	0	0	-	-	-	-	-	0	-	-	-	-	-	0	-	10



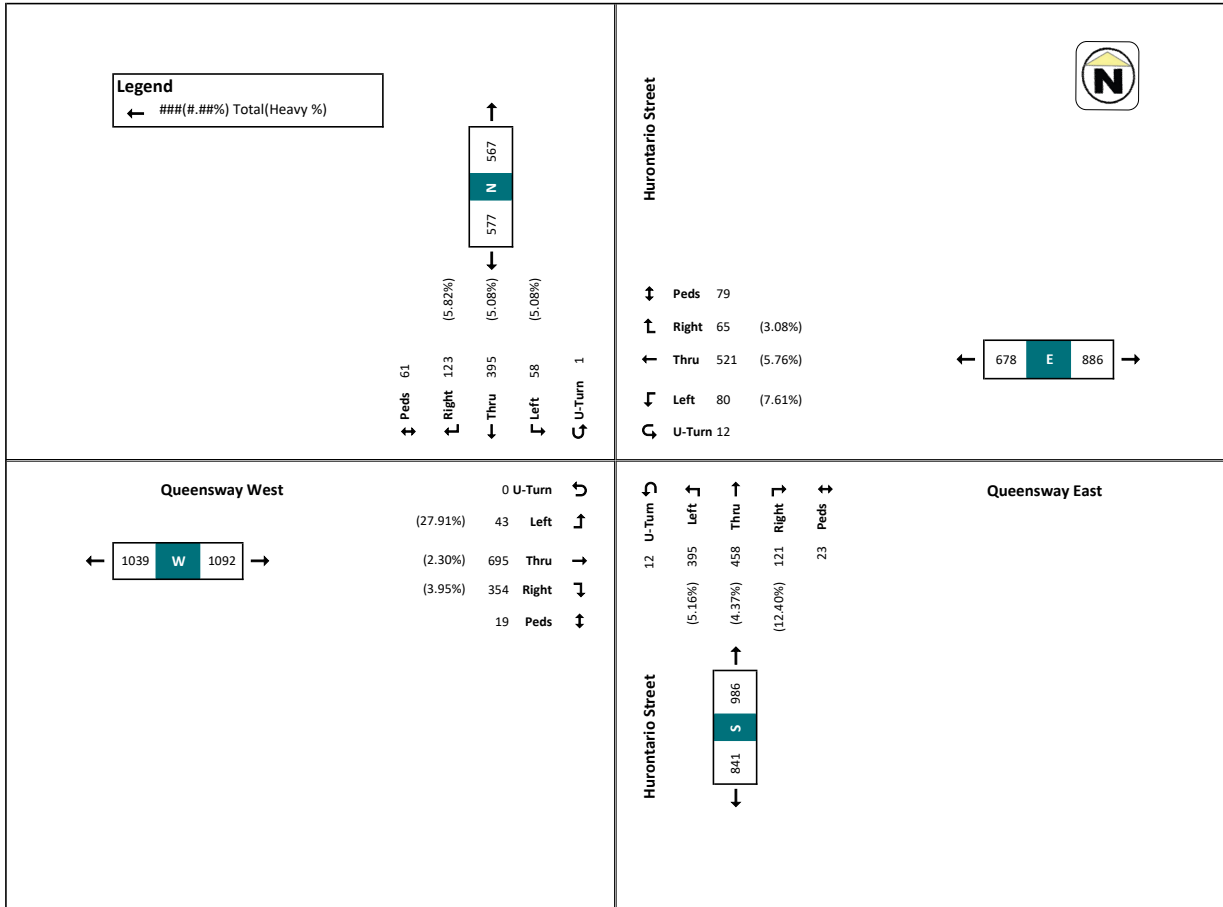
Turning Movement Count - Hurontario Street & Queensway West

Start Time	Hurontario Street Southbound					Queensway East Westbound					Hurontario Street Northbound					Queensway West Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds		App. Total			
7:00	1	7	79	7	1	94	1	33	70	6	0	110	1	53	51	15	3	120	1	10	116	76	5	203	527
7:15	0	8	106	13	2	127	2	24	71	8	8	105	2	61	64	22	2	149	0	10	106	72	0	188	569
7:30	1	12	107	10	2	130	7	19	97	11	4	134	7	76	93	18	6	194	0	9	159	58	3	226	684
7:45	0	9	78	27	12	114	1	22	115	11	13	148	1	74	73	33	4	181	0	10	171	79	5	260	704
Hourly Total	2	36	370	57	17	465	11	98	353	36	25	488	11	264	281	88	15	644	1	39	552	285	8	877	2484
8:00	0	10	124	21	11	155	7	15	111	12	17	145	7	103	109	35	11	254	0	12	155	89	7	256	810
8:15	1	15	69	19	14	104	0	18	140	19	9	177	0	106	117	30	4	253	0	15	191	90	4	296	830
8:30	0	11	114	27	8	152	3	18	136	18	12	175	3	93	111	31	5	238	0	7	181	99	6	287	852
8:45	0	22	88	56	28	166	2	29	134	16	41	181	2	93	121	35	3	241	0	9	168	76	2	253	841
Hourly Total	1	58	395	123	61	577	12	80	521	65	79	678	12	395	458	121	23	986	0	43	695	354	19	1092	3333
9:00	0	24	97	30	5	151	0	36	133	21	5	190	0	64	85	19	5	168	0	11	165	85	2	261	770
9:15	0	4	92	20	8	116	1	44	155	14	11	214	1	77	97	23	1	198	0	11	135	87	1	233	761
9:30	3	16	92	17	6	128	2	21	155	17	7	175	2	67	100	24	4	193	0	12	149	64	1	225	721
9:45	1	13	88	25	3	127	1	14	100	21	7	136	1	69	93	29	3	192	0	15	136	82	2	233	688
Hourly Total	4	57	369	92	22	522	4	115	523	73	30	715	0	277	375	95	13	747	0	49	585	318	6	952	2936
* Break *																									
16:00	1	17	110	18	7	146	1	21	195	21	20	238	1	57	132	60	3	250	0	13	161	84	4	258	892
16:15	3	17	104	15	15	139	0	31	211	20	15	262	0	84	132	56	8	272	0	11	157	79	4	247	930
16:30	1	24	126	27	15	178	1	25	182	16	15	224	1	87	135	44	9	267	0	12	141	79	6	232	901
16:45	0	17	123	31	2	171	1	35	197	18	14	251	1	70	134	49	3	254	0	10	179	107	2	296	972
Hourly Total	5	75	463	91	39	634	3	112	785	75	64	975	3	298	533	209	23	1043	0	46	638	349	16	1033	3685
17:00	1	19	138	17	11	175	2	34	198	24	16	258	2	65	102	46	11	215	0	9	190	93	8	292	940
17:15	1	19	156	24	6	200	0	35	168	18	13	212	0	90	107	47	2	244	0	12	157	91	4	260	926
17:30	2	22	126	23	16	173	0	34	257	14	24	305	0	82	138	43	9	263	0	11	187	97	2	295	1036
17:45	1	15	137	32	11	185	1	29	204	21	20	255	1	78	125	47	3	251	0	10	157	98	5	265	956
Hourly Total	5	75	557	96	42	733	3	132	827	78	73	1040	3	315	472	183	25	973	0	42	691	379	19	1112	3858
18:00	2	19	141	20	5	182	1	25	211	12	12	169	1	75	140	43	7	259	0	11	153	82	6	246	856
18:15	0	13	99	10	0	122	0	47	176	17	16	240	0	92	134	47	6	273	0	10	159	103	5	272	907
18:30	3	11	134	9	0	157	3	26	132	25	13	186	3	97	128	49	2	277	0	9	105	72	3	186	806
18:45	0	19	125	15	2	159	0	32	110	16	9	158	0	96	152	44	2	292	0	13	129	68	4	210	819
Hourly Total	5	62	469	54	7	620	4	120	549	70	50	753	0	260	394	183	17	1097	0	43	346	325	18	914	3384
Grand Total	22	363	2653	513	188	3551	37	667	3559	397	321	4659	29	1909	3672	879	116	5490	1	262	3707	2010	86	5980	19680
Approach %	0.6%	10.2%	74.7%	14.4%	-	-	0.8%	14.3%	76.4%	8.5%	-	-	0.5%	34.8%	48.7%	16.0%	-	-	0.0%	4.4%	67.0%	33.6%	-	-	-
Total %	0.1%	1.8%	13.5%	2.6%	-	18.0%	0.2%	3.4%	18.1%	2.0%	-	23.7%	0.1%	9.7%	13.6%	4.5%	-	27.9%	0.0%	1.3%	18.8%	10.2%	-	30.4%	-
Lights	22	356	2567	498	-	3443	37	653	3472	391	-	4553	37	1853	2580	842	-	5312	1	206	3622	1952	-	5781	19089
% Lights	100.0%	98.1%	96.8%	97.1%	-	97.0%	100.0%	97.9%	97.6%	98.5%	-	97.7%	127.6%	97.1%	96.5%	95.8%	-	96.8%	100.0%	78.6%	97.7%	97.1%	-	96.7%	97.0%
% Buses	-	3	57	11	-	71	-	3	45	1	-	49	-	34	63	16	-	113	-	51	35	24	-	110	343
% Buses	-	0.8%	2.1%	2.1%	-	2.0%	-	0.4%	1.3%	0.3%	-	1.1%	-	1.8%	2.4%	1.8%	-	2.1%	-	19.5%	0.9%	1.2%	-	1.8%	1.7%
Trucks	-	4	29	4	-	37	-	11	41	5	-	57	-	22	30	21	-	73	-	5	50	34	-	89	256
% Trucks	-	1.1%	1.1%	-	-	1.0%	-	1.6%	2.2%	1.3%	-	1.2%	-	1.2%	1.1%	2.4%	-	1.3%	-	1.9%	1.3%	1.7%	-	1.5%	1.3%
Bicycles	-	-	-	-	0	0	-	-	-	-	-	1	-	-	-	-	-	0	0	-	-	-	-	0	1
Pedestrians	-	-	-	-	188	-	-	-	-	-	-	321	-	-	-	-	-	116	-	-	-	-	-	-	1



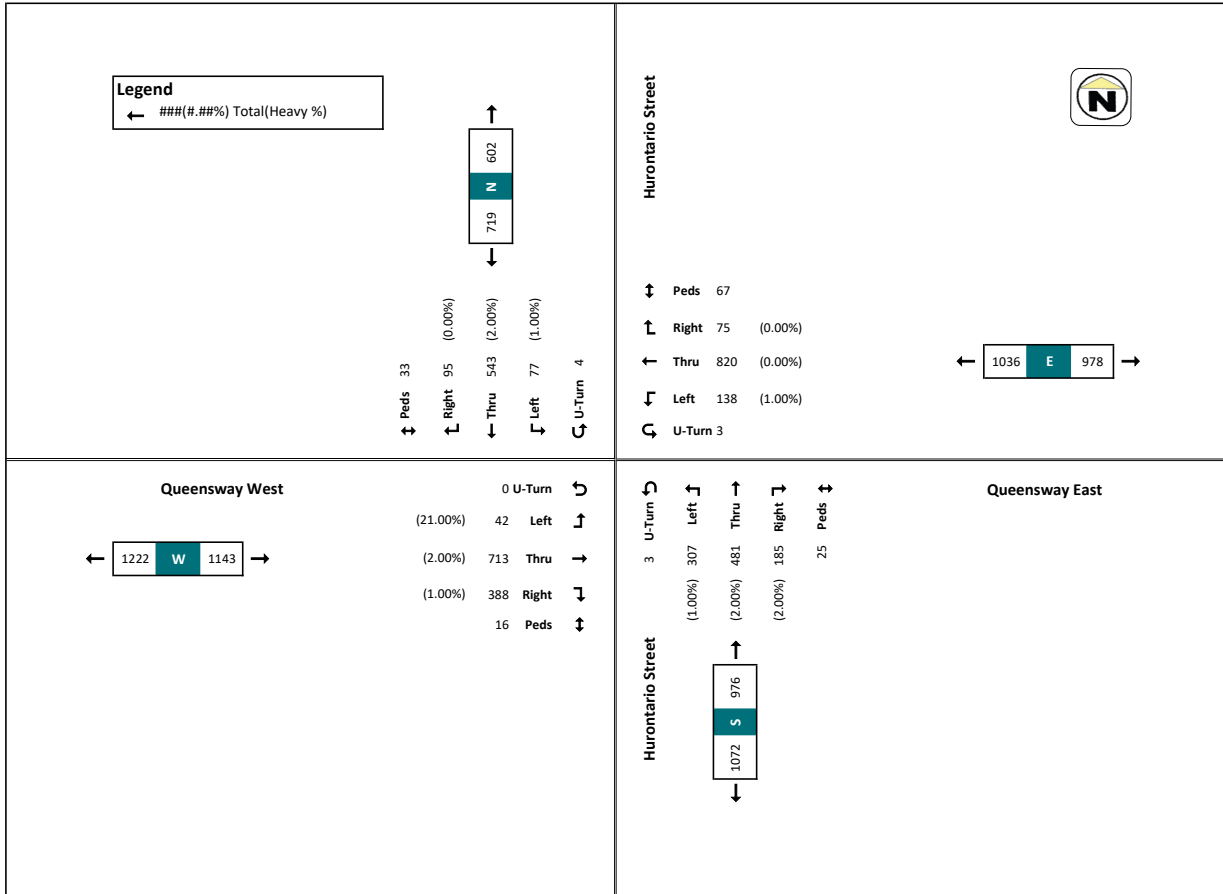
AM Peak Hour - Hurontario Street & Queensway West

Start Time	Hurontario Street Southbound					Queensway East Westbound					Hurontario Street Northbound					Queensway West Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
8:00	0	10	124	21	11	155	7	15	111	12	17	145	7	103	109	35	11	254	0	12	155	89	7	256	810
8:15	1	15	69	19	14	104	0	18	140	19	9	177	0	106	117	30	4	253	0	15	191	90	4	296	830
8:30	0	11	114	27	8	152	3	18	136	18	12	175	3	93	111	31	5	238	0	7	181	99	6	287	852
8:45	0	22	88	56	28	166	2	29	134	16	41	181	2	93	121	25	3	241	0	9	188	76	2	253	841
Hourly Total	1	58	395	123	61	577	12	80	521	65	79	678	12	395	458	121	23	986	0	43	655	354	19	1092	3333
Approach %	0.2%	10.1%	68.5%	21.3%	-	-	1.8%	11.8%	76.8%	9.6%	-	-	1.2%	40.1%	46.5%	12.3%	-	-	0.0%	3.9%	63.6%	32.4%	-	-	-
Total %	0.0%	1.7%	11.9%	3.7%	-	17.3%	0.4%	2.4%	15.6%	2.0%	-	20.3%	0.4%	11.9%	13.7%	3.6%	-	29.6%	0.0%	1.3%	20.9%	10.6%	-	32.8%	-
PHF	0.25	0.66	0.8	0.55	-	0.87	0.43	0.69	0.93	0.86	-	0.94	0	0.93	0.95	0.86	-	0.97	0	0.72	0.91	0.89	-	0.92	0.98
Lights	1	55	372	117	-	545	12	73	491	63	-	639	12	374	438	106	-	930	0	31	679	340	-	1050	3164
% Lights	100.0%	94.8%	94.2%	95.1%	-	94.5%	-	91.3%	94.2%	96.9%	-	94.2%	-	94.3%	95.6%	87.6%	-	94.3%	-	72.1%	97.7%	96.0%	-	96.2%	94.9%
% Buses	-	3	14	4	-	19	-	2	16	0	-	18	-	14	15	12	-	41	-	10	7	9	-	26	104
% Buses #VALUE!	1.7%	3.5%	3.3%	-	3.3%	-	2.5%	3.1%	0.0%	-	2.7%	-	3.5%	3.3%	9.9%	-	4.2%	-	23.3%	1.0%	2.5%	-	2.4%	3.1%	
% Trucks	-	2	9	2	-	13	-	5	14	2	-	21	-	7	5	3	-	15	-	2	9	5	-	16	65
% Trucks #VALUE!	3.4%	2.3%	1.6%	-	2.3%	#VALUE!	6.3%	2.7%	3.1%	-	3.1%	#VALUE!	1.8%	1.1%	2.5%	-	1.5%	-	4.7%	1.3%	1.4%	-	1.5%	2.0%	
% Bicycles	-	-	-	-	0	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	0
% Pedestrians	-	-	-	-	61	-	-	-	-	-	79	-	-	-	-	-	-	12	-	-	-	-	19	-	171



PM Peak Hour - Hurontario Street & Queensway West

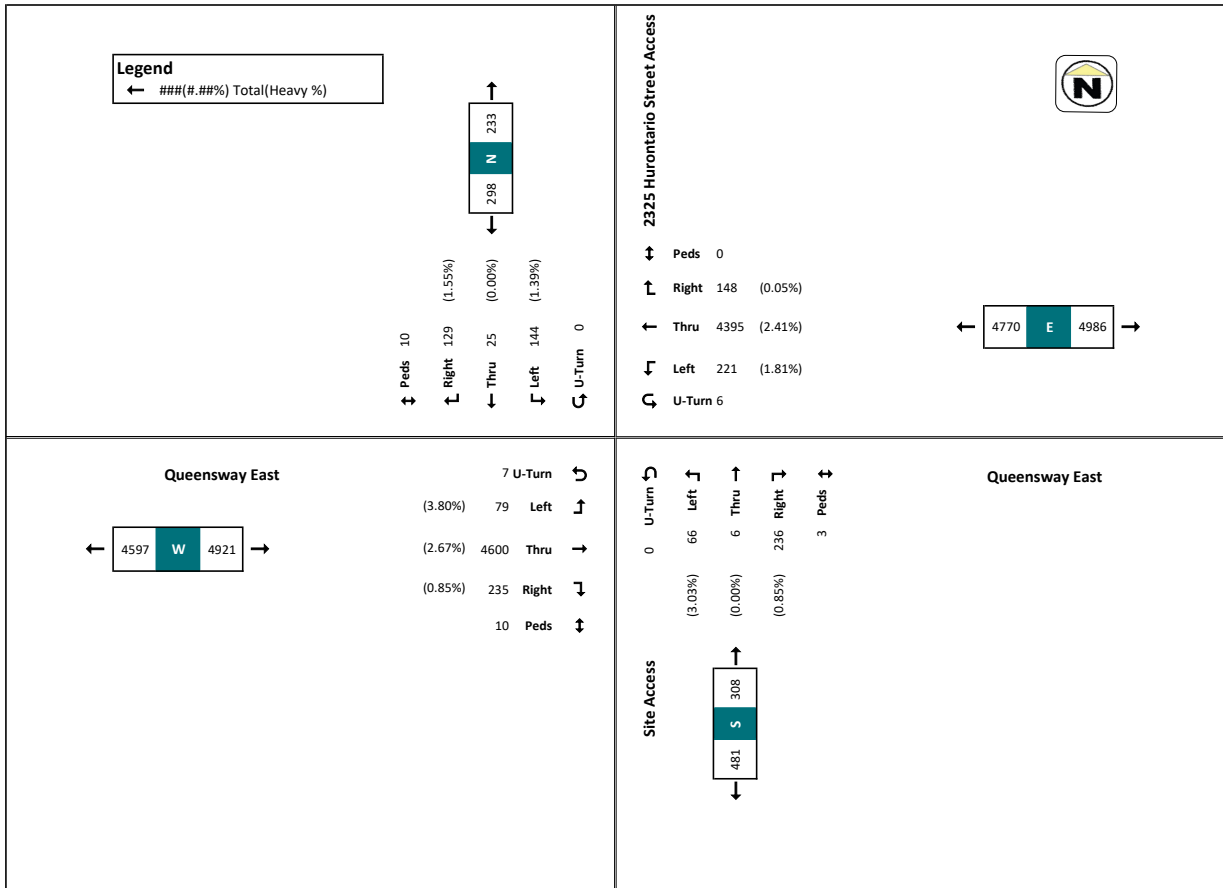
Start Time	Hurontario Street Southbound						Queensway East Westbound						Hurontario Street Northbound						Queensway West Eastbound						Grand Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
16:45	0	17	123	31	2	171	1	35	197	18	14	251	1	70	134	49	3	254	0	10	179	107	2	296	972
17:00	1	19	136	17	11	175	2	34	198	24	16	258	0	65	102	46	11	215	0	9	190	93	8	292	940
17:15	1	19	156	24	4	200	0	35	168	12	13	222	0	90	107	47	2	244	0	12	157	91	4	260	926
17:30	2	22	126	23	16	173	0	34	257	14	24	305	0	82	138	43	9	263	0	11	187	97	2	295	1036
Hourly Total	4	77	543	95	33	719	3	138	820	75	67	1036	3	307	481	185	25	976	0	42	713	388	16	1143	3874
Approach %	0.6%	10.7%	75.5%	13.2%	-	-	0.3%	13.3%	79.2%	7.2%	-	-	0.3%	31.5%	49.3%	19.0%	-	-	0.0%	3.7%	62.4%	33.9%	-	-	-
Total %	0.1%	2.0%	14.0%	2.5%	-	18.6%	0.1%	4.1%	26.6%	1.9%	-	26.7%	0.1%	9.2%	14.4%	5.6%	-	25.2%	0.0%	1.3%	21.4%	11.6%	-	29.5%	-
PHF	0.5	0.88	0.87	0.77	-	0.9	0.38	0.59	0.8	0.78	-	0.85	0	0.85	0.87	0.94	-	0.93	0	0.88	0.84	0.91	-	0.97	0.93
Lights	4	76	532	95	-	707	3	137	817	75	-	1032	3	303	471	181	-	958	0	33	700	385	-	1118	3815
% Lights	100.0%	98.7%	98.0%	100.0%	-	98.3%	-	99.3%	99.6%	100.0%	-	99.6%	-	98.7%	97.9%	97.8%	-	98.2%	-	78.6%	98.2%	99.2%	-	97.8%	98.5%
Buses	0	14	0	-	14	-	0	0	1	0	-	1	-	2	7	0	-	9	-	9	5	0	-	14	38
% Buses	IVALUE1	0.0%	2.6%	0.0%	-	1.9%	-	0.0%	0.1%	0.0%	-	0.1%	-	0.7%	1.5%	0.0%	-	0.9%	-	21.4%	0.7%	0.0%	-	1.2%	1.0%
Trucks	-	1	3	0	-	4	-	1	2	0	-	3	-	2	3	4	-	9	-	0	8	3	-	11	27
% Trucks	IVALUE1	1.3%	0.6%	0.0%	-	0.6%	-	0.7%	0.2%	0.0%	-	0.3%	-	0.7%	0.6%	2.2%	-	0.9%	-	0.0%	1.1%	0.8%	-	1.0%	0.7%
Bicycles	-	-	-	-	0	0	-	-	-	-	1	1	-	-	-	-	-	0	0	-	-	-	-	0	1
Pedestrians	-	-	-	-	33	-	-	-	-	-	3	3	-	-	-	-	-	3	-	-	-	-	-	0	39





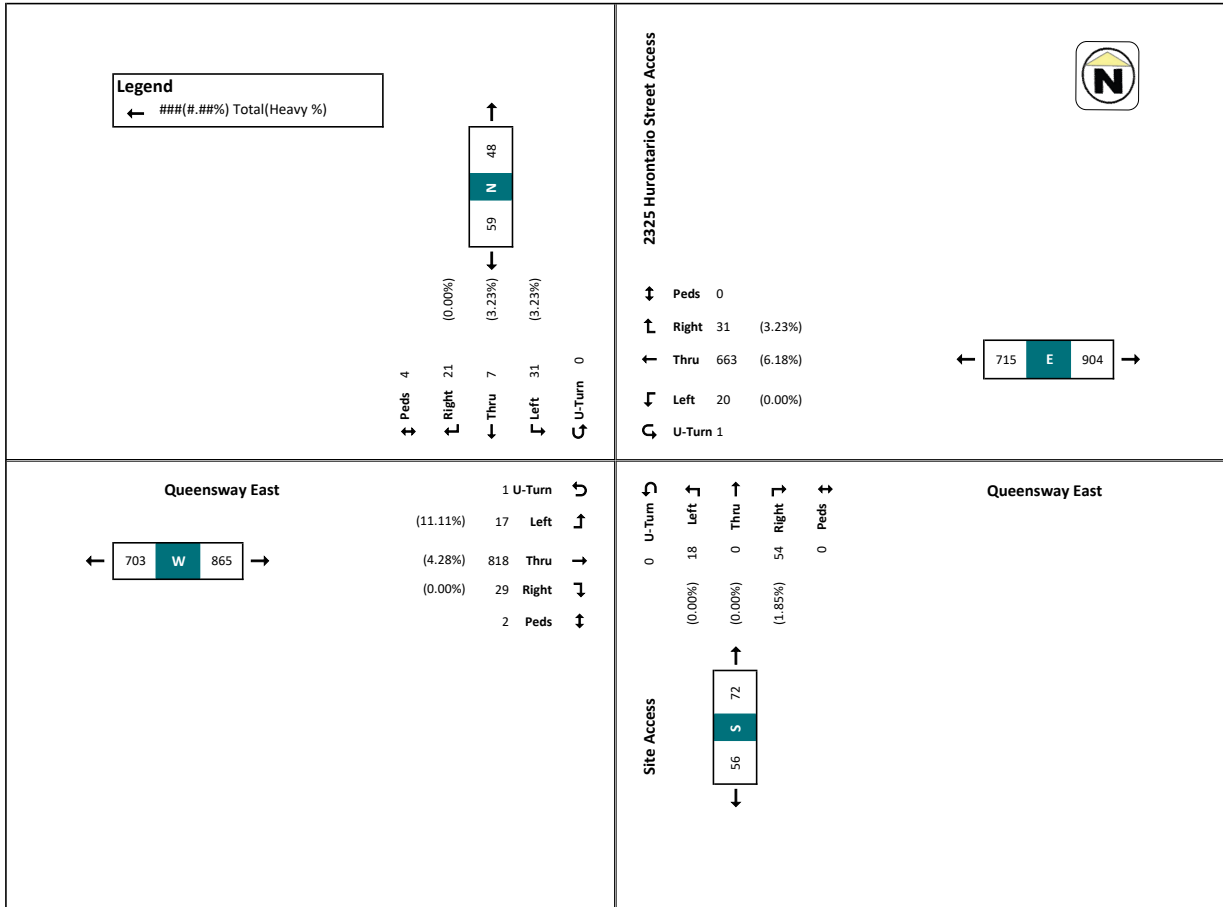
Turning Movement Count - Site Access & Queensway East

Start Time	2325 Hurontario Street Access					Queensway East					Site Access					Queensway East					Grand Total				
	Southbound					Westbound					Northbound					Eastbound									
	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	App. Total				
7:00	0	3	0	3	0	0	1	92	4	0	0	2	0	10	0	0	3	129	7	0	139				
7:15	0	4	0	6	0	0	2	107	3	0	0	3	0	10	0	0	2	125	2	0	129				
7:30	0	0	0	5	0	0	6	136	4	0	0	2	0	7	0	0	3	190	4	0	197				
7:45	0	6	0	7	0	0	13	5	155	3	0	4	0	10	0	0	1	207	4	0	212				
Hourly Total	0	13	0	21	0	0	14	481	14	0	0	11	0	37	0	0	9	651	17	0	677				
8:00	0	3	0	4	1	0	5	138	8	0	0	2	0	16	1	0	1	191	6	0	198				
8:15	0	7	0	6	2	0	6	165	5	0	0	4	0	24	0	0	3	218	6	2	228				
8:30	0	7	2	3	1	0	8	153	5	0	0	5	0	9	0	0	4	190	8	0	202				
8:45	0	2	2	4	1	0	3	149	8	0	0	6	0	10	0	0	6	212	8	0	226				
Hourly Total	0	19	4	17	5	0	22	605	26	0	0	17	0	59	1	0	14	811	28	2	854				
9:00	0	15	3	8	0	0	1	196	13	0	0	3	0	11	0	0	4	198	7	0	209				
9:15	0	6	0	6	0	0	10	210	5	0	0	3	0	5	0	0	5	148	6	0	159				
9:30	0	8	0	5	0	0	13	1	183	0	0	2	0	13	2	0	4	180	12	0	197				
9:45	0	8	0	3	1	0	11	7	134	4	0	6	0	4	0	0	7	150	3	2	160				
Hourly Total	0	37	3	22	1	0	3	25	707	32	0	14	0	33	2	0	1	20	676	28	4	725			
* Break *																									
16:00	0	7	2	3	2	0	8	237	9	0	0	1	1	5	0	0	4	235	13	2	252				
16:15	0	8	0	10	0	0	16	209	10	0	0	3	0	5	0	0	3	217	9	1	229				
16:30	0	11	3	6	0	0	14	217	4	0	0	1	0	8	0	0	1	192	15	0	212				
16:45	0	6	4	2	0	0	12	226	5	0	0	4	0	17	0	0	21	1	5	222					
Hourly Total	0	32	9	21	2	0	59	889	28	0	0	9	1	35	0	0	2	16	866	51	3	935			
17:00	0	8	1	9	0	0	22	228	8	0	0	3	0	13	0	0	2	221	15	0	241				
17:15	0	7	3	3	0	0	13	256	6	0	0	0	0	9	0	0	4	226	16	0	245				
17:30	0	6	1	3	0	0	14	264	8	0	0	2	2	11	0	0	1	225	20	0	246				
17:45	0	3	1	11	0	0	15	14	232	6	0	6	0	8	0	0	1	202	16	0	219				
Hourly Total	0	24	6	26	1	0	63	980	28	0	0	11	2	41	0	0	54	2	9	873	67	0	951		
18:00	0	9	1	3	1	0	12	161	7	0	0	1	1	7	0	0	5	201	16	1	222				
18:15	0	2	1	7	0	0	13	227	3	0	0	1	4	0	0	0	5	201	8	0	212				
18:30	0	5	1	4	0	0	10	8	181	11	0	1	1	14	0	0	1	143	6	0	150				
18:45	0	3	0	8	0	0	11	2	154	4	0	2	0	6	0	0	3	178	14	0	195				
Hourly Total	0	19	3	22	1	0	44	2	38	223	20	0	7	29	0	0	11	223	44	1	279				
Grand Total	0	144	25	129	10	0	298	6	221	4395	148	0	4770	0	66	6	308	7	79	4650	235	10	4921		
Approach %	0.0%	48.3%	8.4%	43.3%	-	-	0.1%	4.6%	92.1%	3.1%	-	0.0%	21.4%	1.9%	76.6%	-	0.1%	1.6%	93.5%	4.8%	-	-			
Total %	0.0%	1.4%	0.2%	1.3%	-	-	2.9%	0.1%	2.1%	42.7%	1.4%	-	46.3%	0.0%	0.6%	0.1%	2.3%	-	3.0%	0.1%	0.8%	44.7%	2.3%	-	47.8%
Lights	-	142	25	127	-	-	294	6	217	4289	146	-	4658	0	64	6	234	-	304	7	76	4477	233	-	4793
% Lights	-	98.6%	100.0%	98.4%	-	-	98.7%	100.0%	98.2%	97.6%	98.6%	-	97.7%	-	97.0%	100.0%	99.2%	-	98.7%	100.0%	96.2%	97.3%	99.1%	-	97.4%
% Buses	-	0	0	0	-	-	4	0	4	0	-	4	0	2	-	4	-	0	4	0	49	2	-	51	102
% Buses	-	0.0%	0.0%	0.0%	-	-	1.8%	1.0%	0.0%	-	1.0%	-	3.0%	0.0%	0.8%	-	1.3%	-	0.0%	1.1%	0.9%	-	-	1.0%	1.0%
Trucks	-	2	0	2	-	-	4	0	83	2	-	65	-	0	0	0	0	3	74	0	-	77	146	-	177
% Trucks	-	1.4%	0.0%	1.3%	-	-	0.0%	1.4%	1.4%	-	1.4%	-	0.0%	0.0%	0.0%	-	0.0%	-	3.8%	1.6%	0.0%	-	1.6%	-	1.4%
Bicycles	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	23	



AM Peak Hour - Site Access & Queensway East

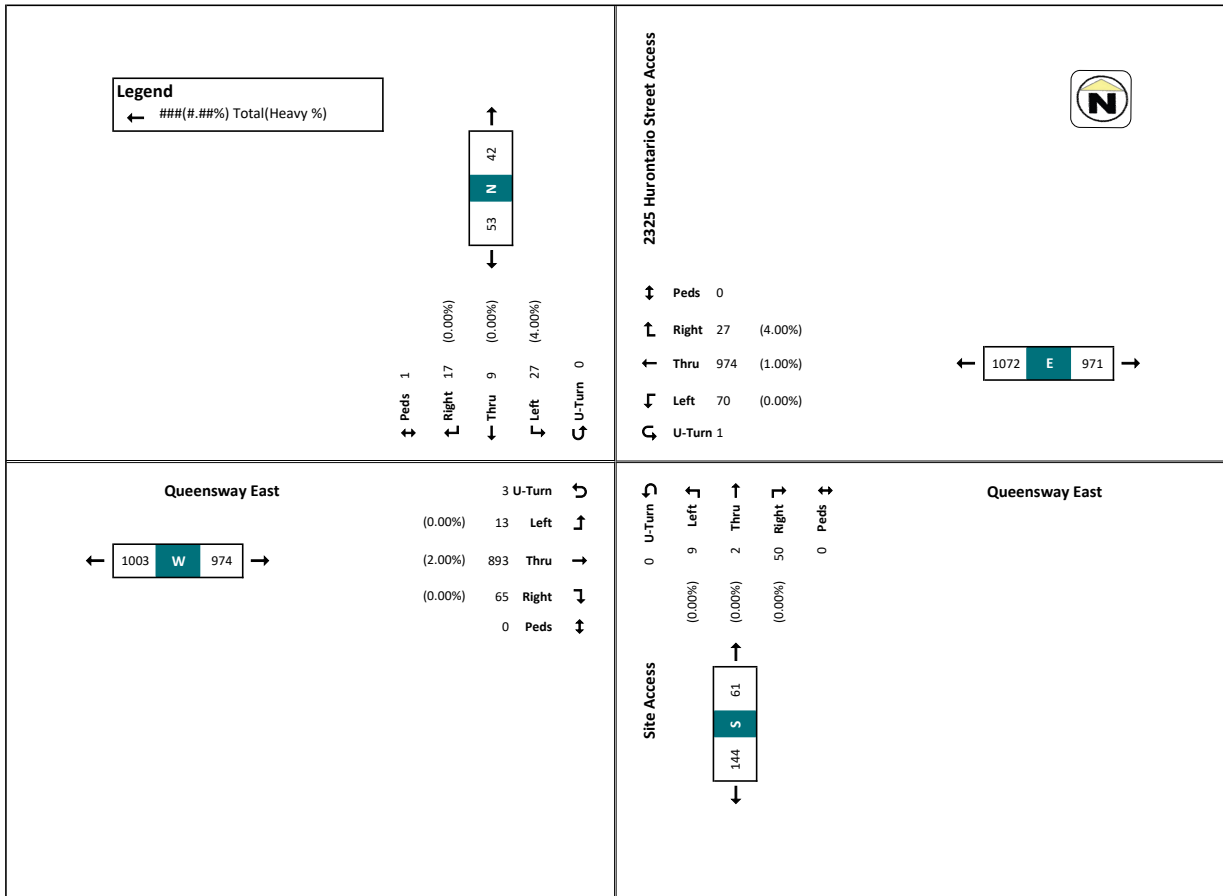
Start Time	2325 Hurlontario Street Access					Queensway East Westbound					Site Access Northbound					Queensway East Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds		App. Total			
8:15	0	7	0	6	2	13	0	6	165	5	0	176	0	4	0	24	0	28	1	3	218	8	2	228	445
8:30	0	7	2	3	1	12	0	8	153	5	0	166	0	5	0	9	0	14	0	4	190	8	0	202	394
8:45	0	2	2	4	1	8	0	3	149	8	0	160	0	6	0	10	0	16	0	6	212	8	0	226	410
9:00	0	15	3	8	0	26	1	3	196	13	0	213	0	3	0	11	0	14	0	4	198	7	0	209	462
Hourly Total	0	31	7	21	4	59	1	20	663	31	0	715	0	18	0	54	0	72	1	17	818	29	2	865	1711
Approach %	0.0%	52.5%	11.5%	35.6%	-	-	0.1%	2.8%	92.7%	4.3%	-	0.0%	25.0%	0.0%	75.0%	-	-	0.1%	2.0%	94.6%	3.4%	-	-	-	
Total %	0.0%	1.8%	0.4%	1.2%	-	3.4%	0.1%	1.2%	38.7%	1.8%	-	41.8%	0.0%	1.1%	0.0%	3.2%	-	4.2%	0.1%	1.0%	47.8%	1.7%	-	50.6%	
PHF	0	0.52	0.58	0.66	-	0.57	0.25	0.63	0.85	0.6	-	0.84	0	0.75	0	0.56	-	0.64	0.25	0.71	0.94	0.91	-	0.95	
Lights	0	30	7	20	-	57	1	20	622	30	-	673	0	18	-	53	-	71	1	15	783	29	-	828	
% Lights	-	96.8%	100.0%	95.2%	-	96.6%	-	100.0%	93.8%	96.8%	-	94.1%	-	100.0%	-	98.1%	-	98.6%	-	88.2%	95.7%	100.0%	-	-	95.7%
% Buses	-	0	0	0	-	0	-	0	16	0	-	16	-	0	1	-	4	-	4	0	18	0	-	-	18
% Trucks	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	2.4%	0.0%	-	2.2%	-	0.0%	-	1.9%	-	1.4%	-	0.0%	2.2%	0.0%	-	-	2.1%
% Bicycles	-	1	0	1	-	2	-	0	25	1	-	26	-	0	0	-	0	-	2	17	0	-	-	19	
% Pedestrians	-	3.2%	0.0%	4.8%	-	3.4%	#VALUE!	0.0%	3.8%	3.2%	-	3.6%	-	0.0%	-	0.0%	-	0.0%	-	11.8%	2.1%	0.0%	-	2.2%	
Pedestrians	-	-	-	-	4	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	17	2	-	-	6





PM Peak Hour - Site Access & Queensway East

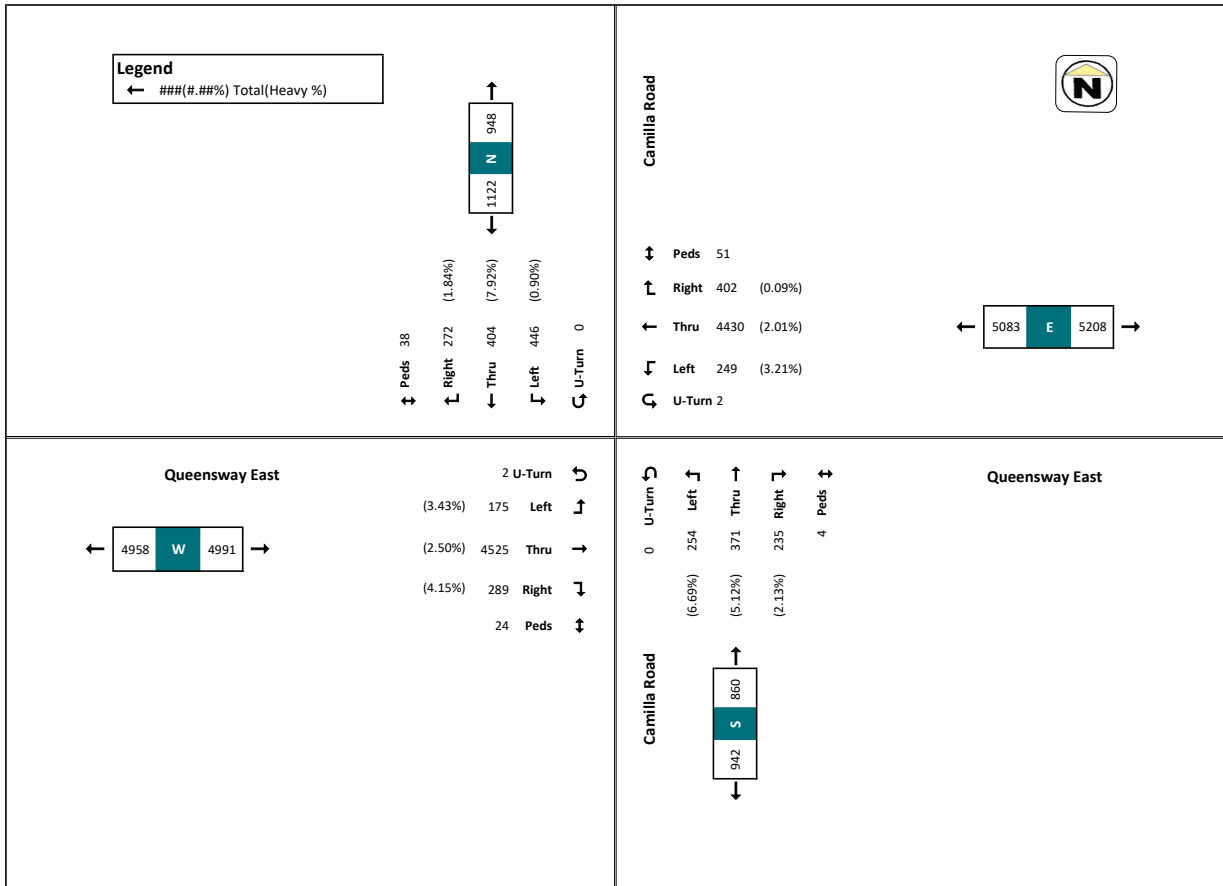
Start Time	2325 Hurontario Street Access Southbound					Queensway East Westbound					Site Access Northbound					Queensway East Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
16:45	0	6	4	2	0	12	0	21	226	5	0	252	0	4	0	17	0	21	1	5	222	14	0	242	527
17:00	0	8	1	9	0	18	0	22	228	8	0	258	0	3	0	13	0	16	2	3	221	15	0	241	533
17:15	0	7	3	3	1	13	0	13	256	6	0	275	0	0	0	9	0	9	0	4	225	16	0	245	542
17:30	0	6	1	3	0	10	1	14	264	8	0	287	0	2	2	11	0	15	0	1	225	20	0	246	558
Hourly Total	0	27	9	17	1	53	1	70	974	27	0	1072	0	9	2	50	0	61	3	13	893	65	0	974	2160
Approach %	0.0%	50.9%	17.0%	32.1%	-	-	0.1%	6.5%	90.9%	2.5%	-	-	0.0%	14.8%	3.3%	82.0%	-	-	0.3%	1.3%	91.7%	6.7%	-	-	-
Total %	0.0%	1.3%	0.4%	0.8%	-	2.5%	0.1%	4.1%	56.9%	1.3%	-	49.6%	0.0%	0.5%	0.1%	2.9%	-	2.8%	0.2%	0.8%	52.2%	3.8%	-	45.1%	-
PHF	0	0.84	0.56	0.47	-	0.74	0.25	0.8	0.92	0.84	-	0.93	0	0.56	0.25	0.74	-	0.73	0.38	0.65	0.99	0.81	-	0.99	0.97
Lights	0	26	9	17	-	52	1	70	967	26	-	1064	0	9	2	50	-	61	3	13	877	65	-	958	2135
% Lights	-	96.3%	100.0%	100.0%	-	98.1%	-	100.0%	99.3%	96.3%	-	99.3%	-	100.0%	100.0%	100.0%	-	100.0%	-	100.0%	98.2%	100.0%	-	98.4%	98.8%
Busies	-	0	0	0	-	0	-	0	2	0	-	2	-	0	0	0	-	0	-	0	4	0	-	4	6
% Buses	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.2%	0.0%	-	0.2%	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.4%	0.0%	-	0.4%	0.3%
Trucks	-	1	0	0	-	1	-	0	5	1	-	6	-	0	0	0	-	0	-	0	12	0	-	12	19
% Trucks	-	3.7%	0.0%	0.0%	-	1.9%	-	0.0%	0.5%	3.7%	-	0.6%	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	1.3%	0.0%	-	1.2%	0.9%
Bicycles	-	-	-	-	-	0	-	-	-	0	-	0	-	-	-	-	-	0	-	-	-	-	-	0	0
Pedestrians	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	0	-	-	-	-	3	-	5





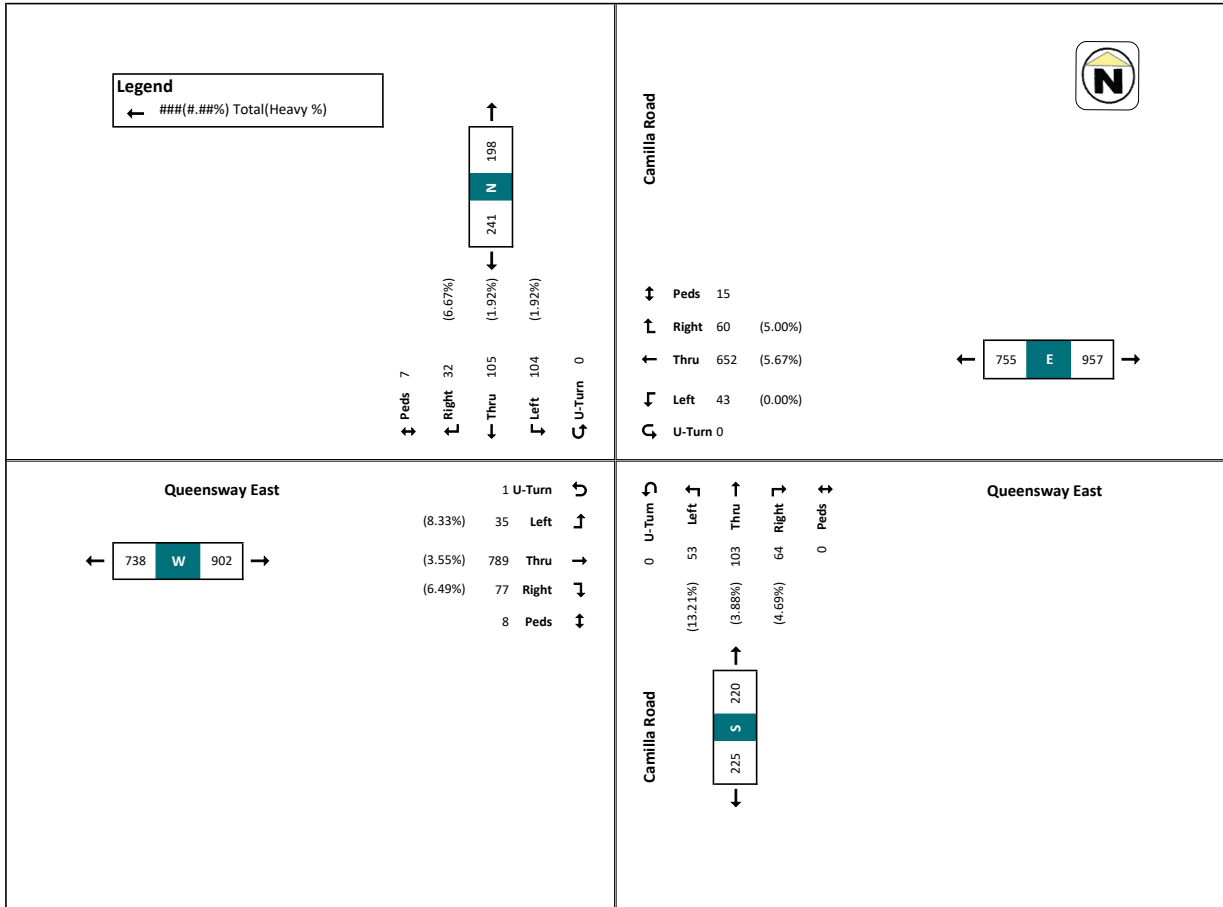
Turning Movement Count - Camilla Road & Queensway East

Start Time	Camilla Road Southbound					Queensway East Westbound					Camilla Road Northbound					Queensway East Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds		App. Total			
7:00	0	13	4	6	0	0	0	91	4	1	0	7	3	6	0	0	2	137	6	1	145	279			
7:15	0	20	9	7	1	0	2	98	8	0	0	4	3	6	0	0	4	128	3	0	135	293			
7:30	0	15	10	9	0	0	4	140	4	0	0	3	8	3	0	0	4	188	5	1	197	393			
7:45	0	20	21	6	1	0	6	150	8	3	0	8	11	12	0	0	8	190	11	0	209	451			
Hourly Total	0	68	44	28	2	0	12	479	24	4	0	22	25	27	0	0	18	643	25	2	688	1416			
8:00	0	23	45	8	16	0	12	152	9	13	0	14	18	19	0	0	4	197	21	1	222	522			
8:15	0	24	33	10	4	0	6	139	6	11	0	11	26	22	0	0	3	227	22	5	252	529			
8:30	0	32	19	10	1	0	15	154	27	2	0	9	28	8	0	0	16	179	10	2	205	502			
8:45	0	31	17	5	2	0	11	176	20	1	0	14	27	13	0	0	8	208	10	1	225	540			
Hourly Total	0	110	114	33	23	0	44	621	57	27	0	48	99	62	0	0	31	811	63	9	905	2093			
9:00	0	17	36	7	0	0	11	183	12	1	0	19	22	21	0	0	8	175	35	0	219	547			
9:15	0	11	15	7	0	0	8	202	16	0	0	24	20	14	0	0	8	148	8	0	164	481			
9:30	0	21	9	13	2	0	3	131	11	0	0	18	13	6	0	0	7	183	10	0	200	475			
9:45	0	16	10	13	0	0	5	131	17	1	0	10	7	6	1	0	7	151	6	0	164	379			
Hourly Total	0	65	70	40	2	0	27	647	56	2	0	71	62	47	1	0	30	657	59	0	747	1832			
* Break *																									
16:00	0	16	14	14	1	0	24	244	29	0	0	15	20	11	0	0	9	221	16	1	246	633			
16:15	0	12	15	13	2	0	11	214	21	3	0	16	19	11	1	0	12	211	20	0	233	565			
16:30	0	25	18	21	1	0	14	230	32	2	0	15	20	15	0	0	11	194	10	1	215	605			
16:45	0	22	26	19	1	0	9	225	23	6	0	4	15	7	0	0	9	218	17	4	244	594			
Hourly Total	0	75	73	67	5	0	58	913	105	11	0	50	74	44	1	0	41	844	53	6	938	2397			
17:00	0	14	16	21	2	0	10	273	26	1	0	6	18	6	0	0	8	227	15	0	250	640			
17:15	0	22	20	20	0	0	16	260	28	0	0	9	12	11	0	0	11	209	14	0	234	622			
17:30	0	16	16	12	2	0	15	266	17	1	0	15	14	8	0	0	3	220	20	0	243	622			
17:45	0	18	13	12	0	0	21	241	23	0	0	11	20	3	1	0	10	210	5	1	225	587			
Hourly Total	0	70	65	65	4	0	62	1030	94	2	0	41	64	28	1	0	32	866	54	1	952	2471			
18:00	0	17	17	7	1	0	10	166	11	5	0	5	14	10	1	0	4	202	8	3	214	471			
18:15	0	10	10	12	1	0	15	233	24	0	0	6	10	5	0	0	5	190	12	0	207	532			
18:30	0	12	5	15	0	0	11	182	12	0	0	8	6	6	0	0	1	10	137	10	2	158	416		
18:45	0	19	6	5	0	0	10	159	19	0	0	3	17	6	0	0	4	175	5	1	184	428			
Hourly Total	0	58	38	39	2	0	46	740	86	5	0	22	47	27	1	0	23	704	35	6	763	1847			
Grand Total	0	445	404	272	38	0	249	4490	402	51	0	254	371	235	4	0	860	2	175	4325	289	24	4991	12056	
Approach %	0.0%	39.8%	36.0%	24.2%	-	0.0%	4.9%	87.2%	7.9%	-	0.0%	29.5%	43.1%	27.3%	-	0.0%	3.5%	90.7%	5.8%	-	-	-			
Total %	0.0%	3.7%	3.4%	2.3%	-	0.0%	2.1%	36.7%	3.3%	-	0.0%	2.1%	3.1%	1.9%	-	0.0%	1.5%	37.5%	2.4%	-	-	41.4%			
Lights	0	442	372	267	-	1081	2	241	4341	398	-	4982	2	169	4412	277	-	819	2	169	4412	277	4860	11742	
% Lights	-	99.1%	92.1%	98.2%	-	96.3%	100.0%	96.8%	98.0%	99.0%	-	98.0%	-	93.3%	94.9%	97.9%	-	95.2%	100.0%	96.6%	97.5%	95.8%	-	97.4%	97.4%
Bus	4	30	4	-	38	-	4	36	2	-	42	-	13	19	3	-	35	-	6	35	11	-	52	167	
% Buses	-	0.9%	7.4%	1.5%	-	3.4%	-	1.6%	0.8%	0.5%	-	0.8%	-	5.1%	5.1%	1.3%	-	4.1%	-	3.4%	0.8%	3.8%	-	1.0%	1.4%
Trucks	0	2	1	-	3	-	4	53	7	-	59	-	4	2	-	6	-	0	78	1	-	79	147		
% Trucks	-	0.0%	0.5%	-	0.3%	-	1.6%	1.2%	0.5%	-	1.2%	-	1.6%	0.0%	0.9%	-	0.7%	-	0.0%	1.7%	0.3%	-	1.6%	1.2%	
Bicycles	-	-	-	-	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	0	5	
Pedestrians	-	-	-	-	38	-	-	-	-	-	51	-	-	-	-	-	-	-	-	-	-	-	24	-	



AM Peak Hour - Camilla Road & Queensway East

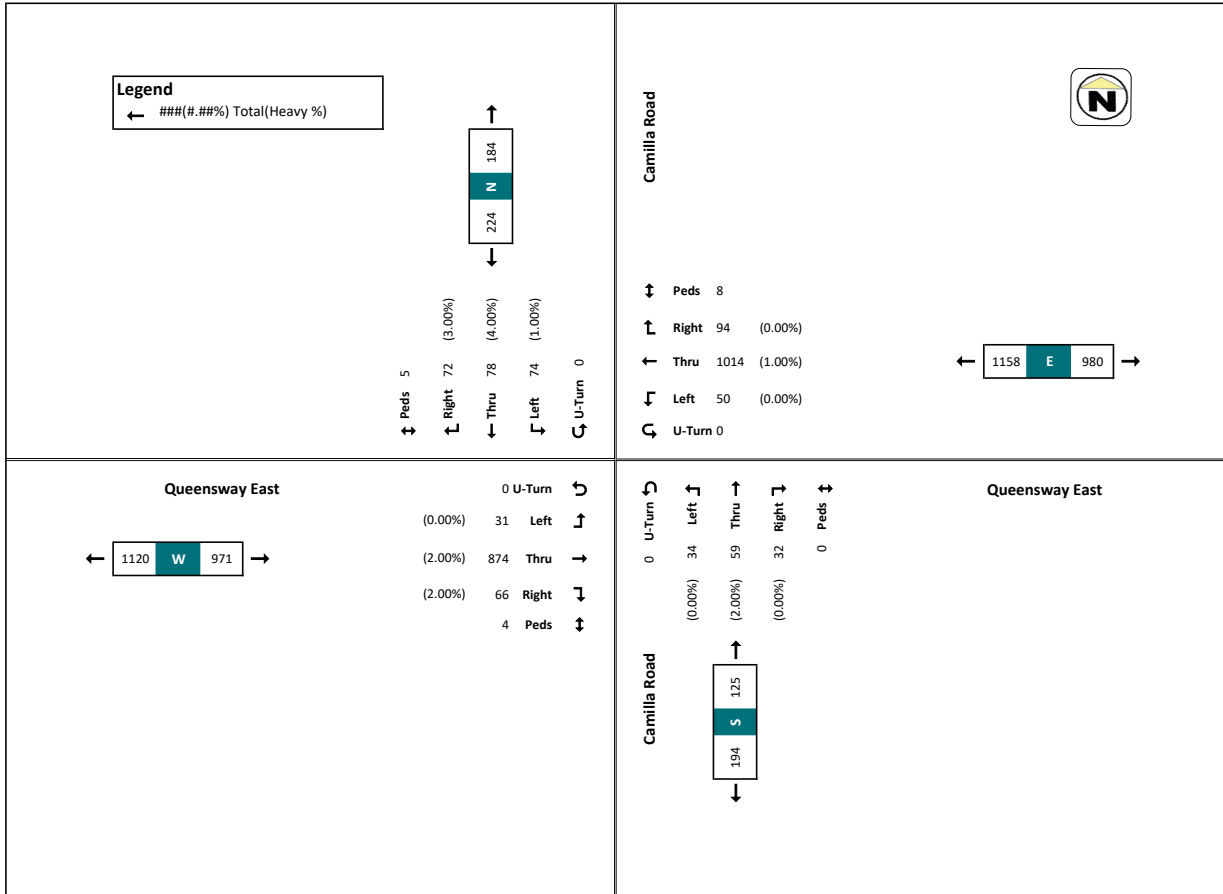
Start Time	Camilla Road Southbound					Queensway East Westbound					Camilla Road Northbound					Queensway East Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total	
8:15	0	24	33	10	1	67	0	6	139	6	11	151	0	11	26	22	0	59	0	3	227	22	5	252	529	
8:30	0	32	19	10	1	61	0	15	154	22	2	191	0	9	28	8	0	45	0	16	179	10	2	205	502	
8:45	0	31	17	5	2	53	0	11	176	20	1	207	0	14	27	13	0	54	0	8	208	10	1	226	540	
9:00	0	17	36	7	0	60	0	11	183	12	1	206	0	19	22	21	0	62	1	8	175	35	0	219	547	
Hourly Total	0	104	105	32	7	241	0	43	632	60	15	755	0	53	103	64	0	220	1	25	789	77	8	902	2118	
Approach %	0.0%	43.2%	43.6%	13.3%	-	-	0.0%	5.7%	86.4%	7.9%	-	-	0.0%	24.1%	46.8%	25.1%	-	0.1%	3.9%	87.5%	8.5%	-	-	-	-	
Total %	0.0%	4.9%	5.0%	1.5%	-	11.4%	0.0%	2.0%	30.8%	2.8%	-	35.6%	0.0%	2.5%	4.9%	3.0%	-	10.4%	0.0%	1.7%	37.3%	3.6%	-	42.6%		
PHF	0	0.81	0.73	0.8	-	0.9	0	0.72	0.89	0.68	-	0.91	0	0.7	0.92	0.73	-	0.89	0.25	0.55	0.87	0.55	-	0.89	0.97	
Lights	0	102	98	31	-	231	0	43	615	57	-	715	0	46	99	61	-	206	1	32	761	72	-	866	2018	
% Lights	-	98.1%	93.3%	96.9%	-	95.9%	-	100.0%	94.3%	95.0%	-	94.7%	-	86.8%	96.1%	95.3%	-	93.6%	-	91.4%	96.5%	93.5%	-	-	96.0%	99.3%
Buses	-	2	7	1	-	10	-	0	16	2	-	18	-	5	4	3	-	12	-	3	11	4	-	-	18	58
% Buses	-	1.9%	6.7%	3.1%	-	4.1%	-	0.0%	2.5%	3.3%	-	2.4%	-	9.4%	3.9%	4.7%	-	5.5%	-	8.6%	1.4%	5.2%	-	-	2.0%	2.7%
Trucks	-	0	0	0	-	0	-	0	21	1	-	22	-	2	0	0	-	2	-	0	17	1	-	-	18	42
% Trucks	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	3.2%	1.7%	-	2.9%	-	3.8%	0.0%	0.0%	-	0.9%	-	0.0%	2.2%	1.3%	-	-	2.0%	2.0%
Bicycles	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	-	-	3
Pedestrians	-	-	-	-	7	-	-	-	-	-	15	-	-	-	-	-	-	0	-	-	-	-	-	-	-	30





PM Peak Hour - Camilla Road & Queensway East

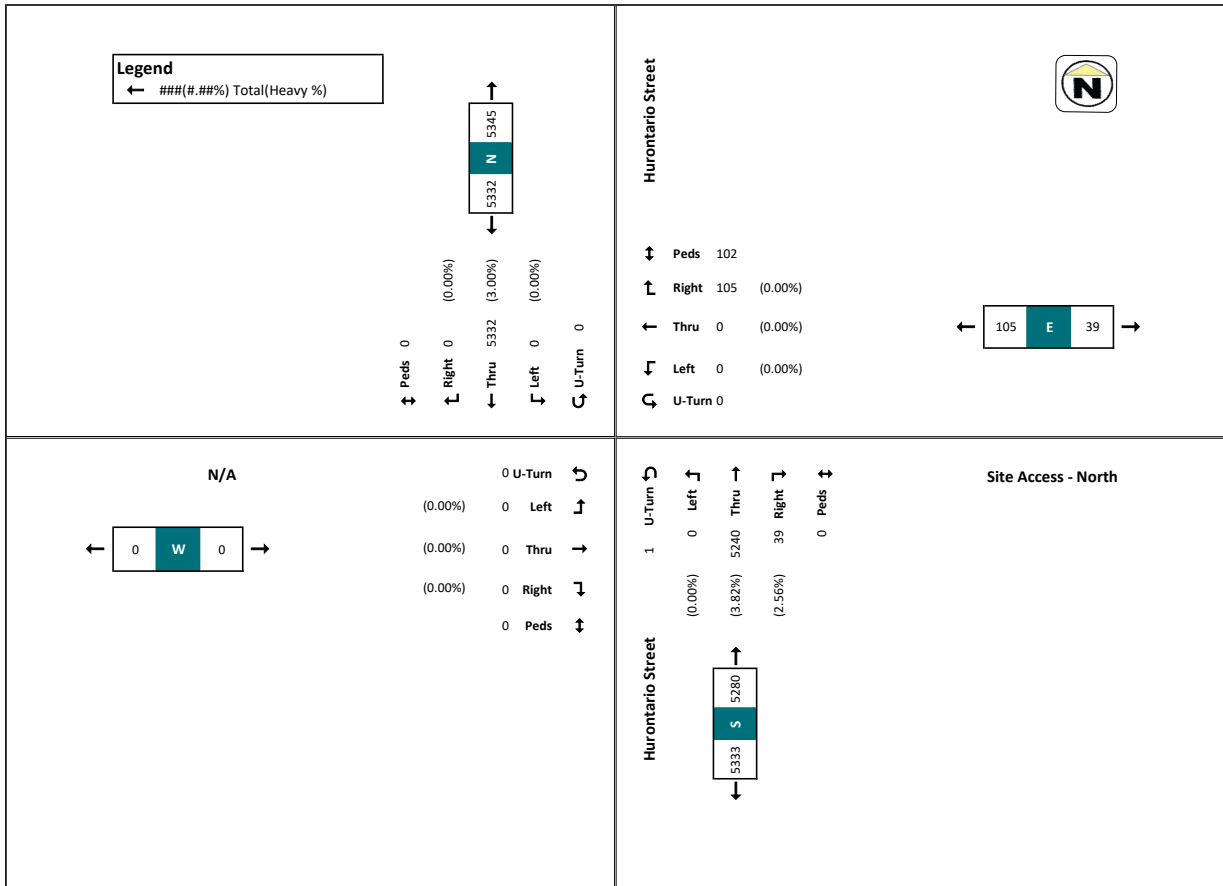
Start Time	Camilla Road Southbound					Queensway East Westbound					Camilla Road Northbound					Queensway East Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
16:45	0	22	26	19	1	67	0	9	225	23	6	257	0	4	15	7	0	26	0	9	218	17	4	244	594
17:00	0	14	16	21	2	51	0	10	273	26	1	309	0	6	18	6	0	30	0	8	227	15	0	250	640
17:15	0	22	20	20	0	62	0	16	250	28	0	294	0	9	12	11	0	32	0	11	209	14	0	234	622
17:30	0	16	16	12	2	44	0	15	266	17	1	298	0	15	14	8	0	37	0	3	220	20	0	243	622
Hourly Total	0	74	78	72	5	224	0	50	1014	94	8	1158	0	34	59	32	0	125	0	31	874	66	4	971	2478
Approach %	0.0%	33.0%	34.8%	32.1%	-	-	0.0%	4.3%	87.6%	8.1%	-	-	0.0%	27.2%	47.2%	25.6%	-	-	0.0%	3.2%	90.0%	6.8%	-	-	-
Total %	0.0%	3.0%	3.1%	2.9%	-	9.0%	0.0%	2.4%	47.9%	3.8%	-	46.7%	0.0%	1.6%	2.8%	1.5%	-	5.0%	0.0%	1.5%	41.3%	3.1%	-	39.2%	-
PHF	0	0.84	0.75	0.86	-	0.84	0	0.78	0.93	0.84	-	0.94	0	0.57	0.83	0.73	-	0.84	0	0.7	0.86	0.83	-	0.97	0.97
Lights	0	73	75	70	-	218	0	50	1008	94	-	1152	0	34	58	32	-	124	0	31	855	65	-	951	2445
% Lights	-	98.6%	96.2%	97.2%	-	97.3%	-	100.0%	99.4%	100.0%	-	99.5%	-	100.0%	98.3%	100.0%	-	99.2%	-	100.0%	97.8%	98.5%	-	97.9%	98.7%
% Buses	-	1	7	1	-	9	-	0	1	0	-	1	-	0	1	0	-	1	-	0	4	1	-	5	16
% Trucks	-	0	1	1	-	2	-	0	5	0	-	5	-	0	0	0	-	0	-	0	15	0	-	15	22
% Pedestrians	-	0.0%	1.3%	1.4%	-	0.9%	-	0.0%	0.5%	0.0%	-	0.4%	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	1.7%	0.0%	-	1.5%	0.9%
Bicycles	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	0
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	5





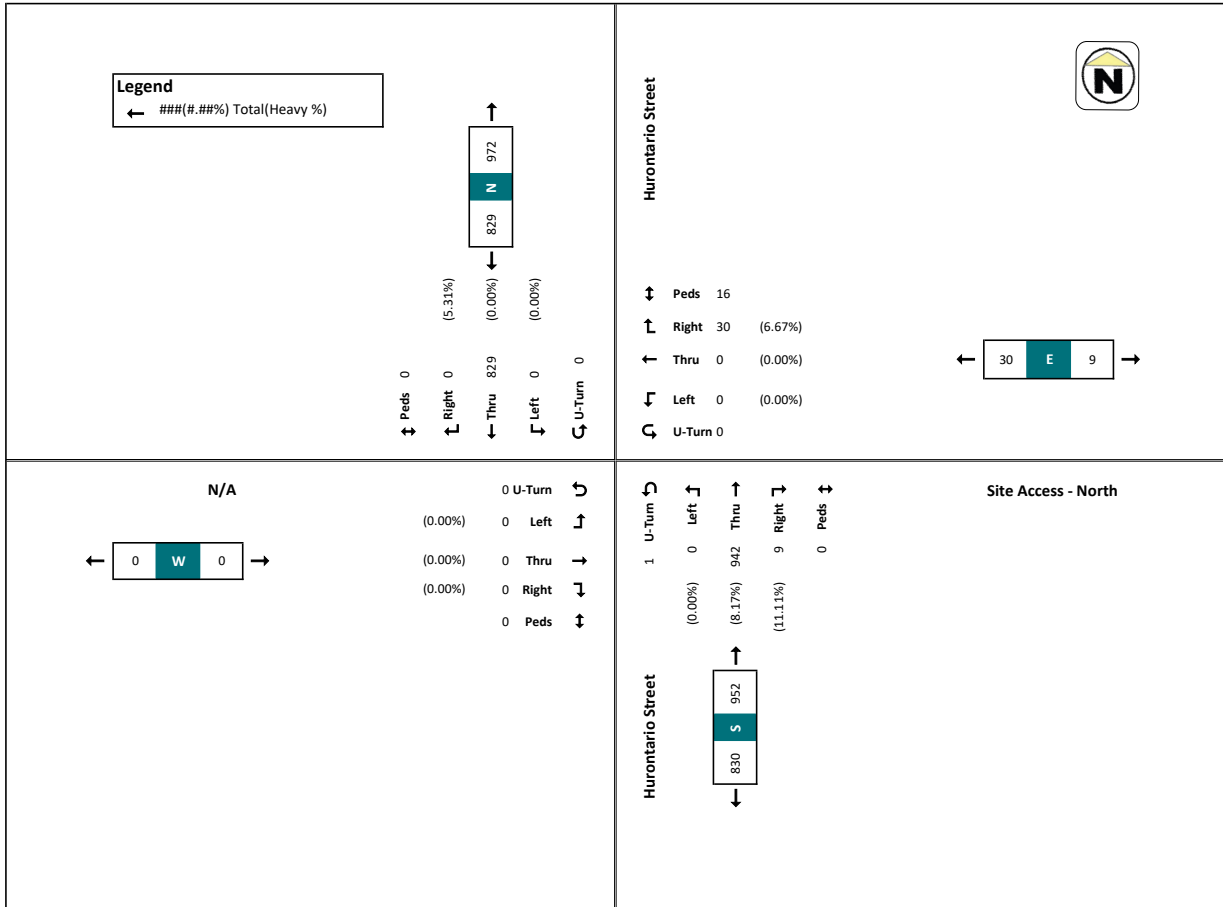
Turning Movement Count - Hurontario Street & Site Access - North

Start Time	Hurontario Street Southbound					Site Access - North Westbound					Hurontario Street Northbound					N/A Eastbound					Grand Total			
	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds		App. Total		
7:00	0	0	188	0	0	188	0	0	0	1	4	1	0	0	114	0	0	114	0	0	0	0	0	303
7:15	0	0	202	0	0	202	0	0	0	2	5	2	0	0	137	1	0	138	0	0	0	0	0	342
7:30	0	0	184	0	0	184	0	0	0	6	0	6	0	0	168	0	0	168	0	0	0	0	0	358
7:45	0	0	179	0	0	179	0	0	0	2	4	2	0	0	177	1	0	178	0	0	0	0	0	356
Hourly Total	0	0	753	0	0	753	0	0	0	11	13	11	0	0	586	2	0	588	0	0	0	0	0	1362
8:00	0	0	228	0	0	228	0	0	0	6	8	6	0	0	236	1	0	237	0	0	0	0	0	471
8:15	0	0	177	0	0	177	0	0	0	10	4	10	1	0	244	6	0	251	0	0	0	0	0	438
8:30	0	0	231	0	0	231	0	0	0	7	3	7	0	0	231	0	0	231	0	0	0	0	0	469
8:45	0	0	193	0	0	193	0	0	0	7	1	7	0	0	231	2	0	233	0	0	0	0	0	433
Hourly Total	0	0	829	0	0	829	0	0	0	30	16	30	1	0	942	9	0	952	0	0	0	0	0	1811
9:00	0	0	218	0	0	218	0	0	0	4	2	4	0	0	163	1	0	164	0	0	0	0	0	386
9:15	0	0	223	0	0	223	0	0	0	2	2	2	0	0	193	1	0	194	0	0	0	0	0	419
9:30	0	0	177	0	0	177	0	0	0	5	5	5	0	0	182	4	0	186	0	0	0	0	0	368
9:45	0	0	184	0	0	184	0	0	0	6	4	6	0	0	177	1	0	178	0	0	0	0	0	368
Hourly Total	0	0	802	0	0	802	0	0	0	17	13	17	0	0	715	7	0	722	0	0	0	0	0	1541
* Break *																								
16:00	0	0	215	0	0	215	0	0	0	4	8	4	0	0	236	2	0	238	0	0	0	0	0	457
16:15	0	0	214	0	0	214	0	0	0	4	8	4	0	0	260	1	0	261	0	0	0	0	0	479
16:30	0	0	230	0	0	230	0	0	0	4	2	4	0	0	250	1	0	251	0	0	0	0	0	485
16:45	0	0	265	0	0	265	0	0	0	6	5	6	0	0	243	1	0	244	0	0	0	0	0	515
Hourly Total	0	0	924	0	0	924	0	0	0	18	23	18	0	0	989	5	0	994	0	0	0	0	0	1936
17:00	0	0	265	0	0	265	0	0	0	2	2	3	0	0	198	1	0	199	0	0	0	0	0	467
17:15	0	0	282	0	0	282	0	0	0	5	4	5	0	0	234	3	0	237	0	0	0	0	0	524
17:30	0	0	257	0	0	257	0	0	0	2	4	2	0	0	255	2	0	257	0	0	0	0	0	516
17:45	0	0	264	0	0	264	0	0	0	2	8	2	0	0	242	2	0	244	0	0	0	0	0	510
Hourly Total	0	0	1068	0	0	1068	0	0	0	12	18	12	0	0	929	8	0	937	0	0	0	0	0	2037
18:00	0	0	248	0	0	248	0	0	0	4	5	4	0	0	252	1	0	253	0	0	0	0	0	505
18:15	0	0	249	0	0	249	0	0	0	8	2	8	0	0	261	3	0	264	0	0	0	0	0	521
18:30	0	0	232	0	0	232	0	0	0	3	8	3	0	0	265	4	0	269	0	0	0	0	0	504
18:45	0	0	227	0	0	227	0	0	0	2	4	2	0	0	281	0	0	281	0	0	0	0	0	510
Hourly Total	0	0	956	0	0	956	0	0	0	17	19	17	0	0	1059	8	0	1067	0	0	0	0	0	2040
Grand Total	0	0	5332	0	0	5332	0	0	0	105	102	105	1	1	5340	39	0	5280	0	0	0	0	0	10717
Approach %	0.0%	0.0%	100.0%	0.0%	-	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	99.2%	0.7%	-	-	-	-	-	-	-	
Total %	0.0%	0.0%	49.8%	0.0%	-	49.8%	0.0%	0.0%	1.0%	-	1.0%	0.0%	0.0%	48.9%	0.4%	-	49.3%	0.0%	0.0%	0.0%	0.0%	0.0%	-	
Lights	0	0	5172	0	-	5172	0	0	0	103	-	103	1	0	5040	38	-	5079	0	0	0	0	0	-
% Lights	-	-	97.0%	-	-	97.0%	-	-	-	98.1%	-	98.1%	100.0%	-	96.2%	97.4%	-	96.2%	-	-	-	-	-	-
Buses	-	-	84	0	-	84	-	-	0	1	-	1	-	0	105	1	-	106	-	-	0	0	0	-
% Buses	-	-	1.6%	0	-	1.6%	-	-	-	1.0%	-	1.0%	-	-	2.0%	2.6%	-	2.0%	-	-	-	-	-	-
Trucks	-	-	76	0	-	76	-	-	0	1	-	1	-	0	95	0	-	95	-	-	0	0	0	-
% Trucks	-	-	1.4%	0	-	1.4%	-	-	-	1.0%	-	1.0%	-	-	1.8%	0.0%	-	1.8%	-	-	0	0	0	-
Bicycles	-	-	0	0	-	0	-	-	-	0	0	0	-	-	0	0	-	0	-	-	-	-	-	-
Pedestrians	-	-	0	0	-	0	-	-	-	102	-	-	-	-	0	0	-	0	-	-	-	0	0	-



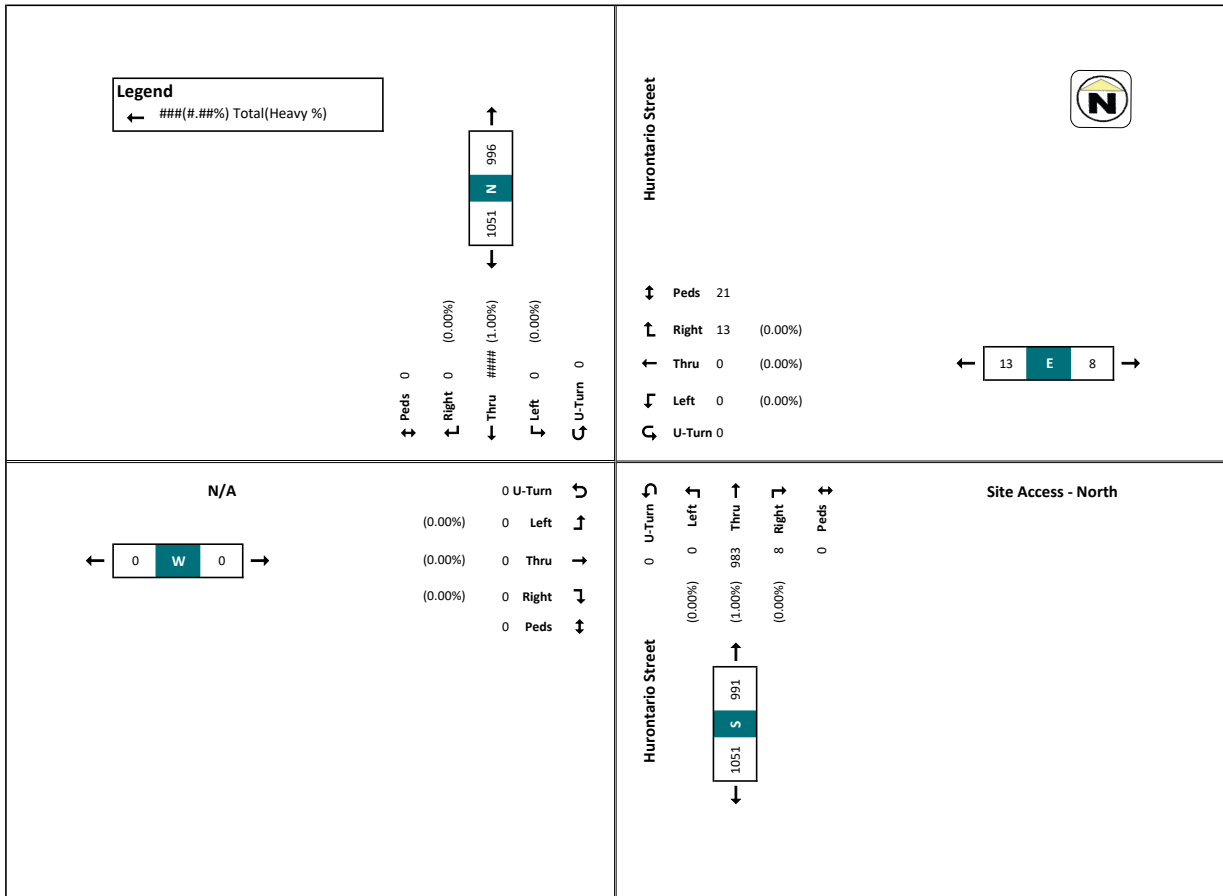
AM Peak Hour - Hurontario Street & Site Access - North

Start Time	Hurontario Street Southbound					Site Access - North Westbound					Hurontario Street Northbound					N/A Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total	
8:00	0	0	228	0	0	228	0	0	6	8	6	0	0	236	1	0	237	0	0	0	0	0	0	0	471	
8:15	0	0	177	0	0	177	0	0	10	4	10	0	0	244	6	0	251	0	0	0	0	0	0	0	438	
8:30	0	0	231	0	0	231	0	0	7	3	7	0	0	231	0	0	231	0	0	0	0	0	0	0	469	
8:45	0	0	193	0	0	193	0	0	7	1	7	0	0	231	2	0	233	0	0	0	0	0	0	0	433	
Hourly Total	0	0	829	0	0	829	0	0	30	16	30	1	0	952	9	0	952	0	0	0	0	0	0	0	1811	
Approach %	0.0%	0.0%	100.0%	0.0%	-	-	0.0%	0.0%	0.0%	100.0%	-	-	0.1%	0.0%	98.9%	0.9%	-	-	-	-	-	-	-	-	-	-
Total %	0.0%	0.0%	45.8%	0.0%	-	45.8%	0.0%	0.0%	0.0%	1.7%	-	1.7%	0.1%	0.0%	52.0%	0.5%	-	52.6%	0.0%	0.0%	0.0%	0.0%	-	0.0%	-	
PHF	0	0	0.9	0	-	0.9	0	0	0	0.75	-	0.75	0	0	0.97	0.38	-	0.95	0	0	0	0	-	0	0.96	
Lights	0	0	785	0	-	785	0	0	0	28	-	28	1	0	865	8	-	874	0	0	0	0	-	0	1687	
% Lights	-	-	94.7%	-	-	94.7%	-	-	-	93.3%	-	93.3%	-	-	91.8%	88.9%	-	91.8%	-	-	-	-	-	-	-	93.2%
Buses	-	-	0	25	0	25	-	-	0	0	1	1	-	0	37	1	-	38	-	-	0	0	-	-	64	
% Buses	-	-	3.0%	-	-	3.0%	-	-	-	3.3%	-	3.3%	-	-	3.9%	11.1%	-	4.0%	-	-	-	-	-	-	3.5%	
Trucks	-	-	0	19	0	19	-	-	0	1	-	1	-	0	40	0	-	40	-	-	0	0	-	-	60	
% Trucks	-	-	2.3%	-	-	2.3%	-	-	-	3.3%	-	3.3%	-	-	4.2%	0.0%	-	4.2%	-	-	-	-	-	-	3.3%	
Bicycles	-	-	-	-	0	0	-	-	-	-	-	-	-	-	0	0	-	0	-	-	-	-	-	-	0	
Pedestrians	-	-	-	-	0	0	-	-	-	16	-	16	-	-	1	-	-	1	-	-	-	-	-	-	17	



PM Peak Hour - Hurontario Street & Site Access - North

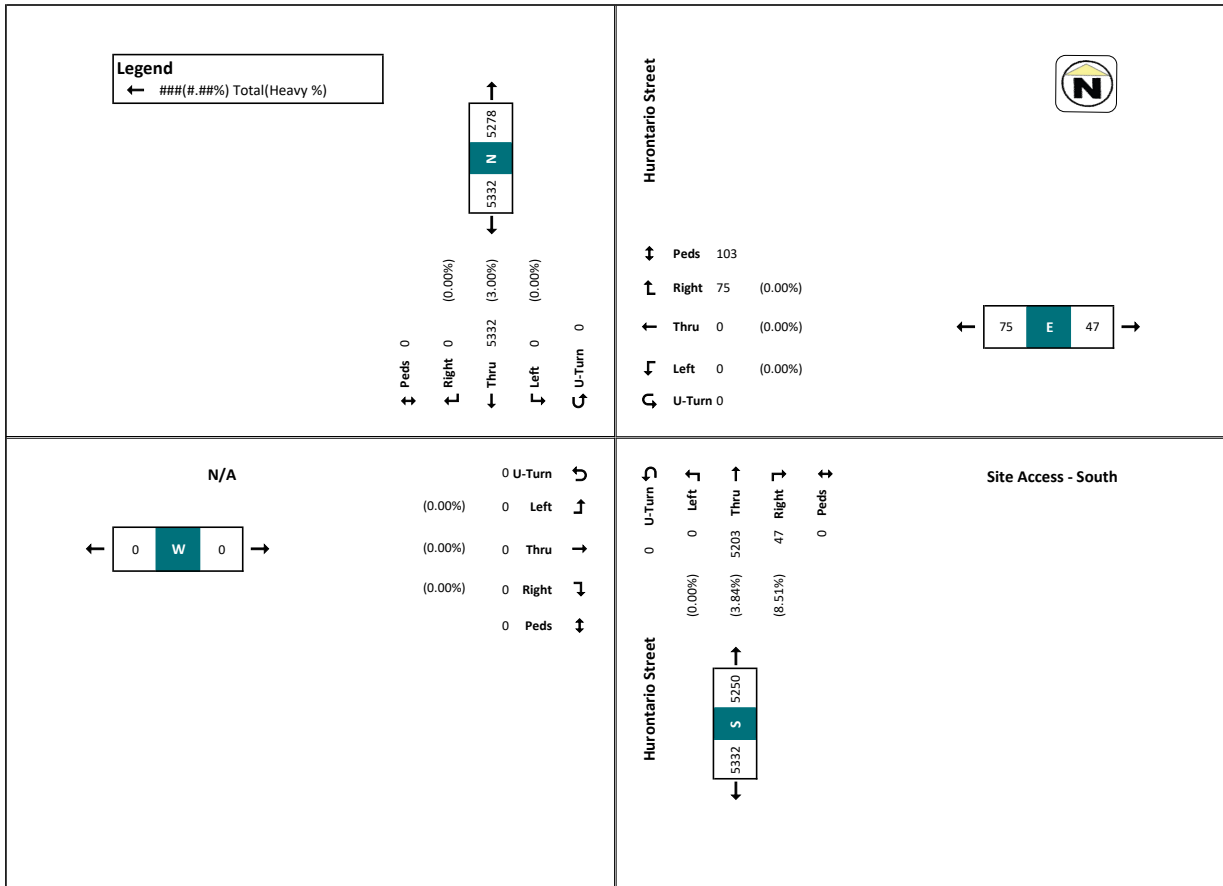
Start Time	Hurontario Street Southbound					Site Access - North Westbound					Hurontario Street Northbound					N/A Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total	
17:15	0	0	282	0	0	282	0	0	0	5	4	5	0	0	234	3	0	237	0	0	0	0	0	0	0	524
17:30	0	0	257	0	0	257	0	0	0	7	4	2	0	0	255	2	0	257	0	0	0	0	0	0	0	516
17:45	0	0	264	0	0	264	0	0	0	7	8	2	0	0	244	2	0	246	0	0	0	0	0	0	0	510
18:00	0	0	248	0	0	248	0	0	0	4	5	4	0	0	252	1	0	253	0	0	0	0	0	0	0	505
Hourly Total	0	0	1051	0	0	1051	0	0	0	13	21	13	0	0	983	8	0	991	0	0	0	0	0	0	0	2055
Approach %	0.0%	0.0%	100.0%	0.0%	-	-	0.0%	0.0%	0.0%	100.0%	-	-	0.0%	0.0%	99.2%	0.8%	-	-	-	-	-	-	-	-	-	-
Total %	0.0%	0.0%	51.1%	0.0%	-	51.1%	0.0%	0.0%	0.0%	0.6%	-	0.6%	0.0%	0.0%	54.3%	0.4%	-	48.2%	0.0%	0.0%	0.0%	0.0%	-	0.0%	-	-
PHF	0	0	0.93	0	-	0.93	0	0	0	0.65	-	0.65	0	0	0.96	0.67	-	0.96	0	0	0	0	-	0	-	0.98
Lights	0	0	1036	0	-	1036	0	0	0	13	-	13	0	0	975	8	-	983	0	0	0	0	-	0	-	2032
% Lights	-	-	98.6%	-	-	98.6%	-	-	-	100.0%	-	100.0%	-	-	99.2%	100.0%	-	99.2%	-	-	-	-	-	-	-	98.9%
Busies	-	0	25	-	-	25	-	0	0	0	-	0	-	0	8	0	-	8	-	0	0	0	-	0	-	33
% Buses	-	-	2.4%	-	-	2.4%	-	-	-	0.0%	-	0.0%	-	-	0.8%	0.0%	-	0.8%	-	-	-	-	-	-	-	1.6%
Trucks	-	0	7	-	-	7	-	0	0	0	-	0	-	0	0	0	-	0	-	0	0	0	-	0	-	7
% Trucks	-	-	0.7%	-	-	0.7%	-	-	-	0.0%	-	0.0%	-	-	0.0%	0.0%	-	0.0%	-	-	-	-	-	-	-	0.3%
Bicycles	-	-	-	-	-	0	-	-	-	0	-	0	-	-	-	-	-	0	-	-	-	-	-	-	-	0
Pedestrians	-	-	-	-	-	0	-	-	-	0	-	0	-	-	-	-	-	0	-	-	-	-	-	-	-	0





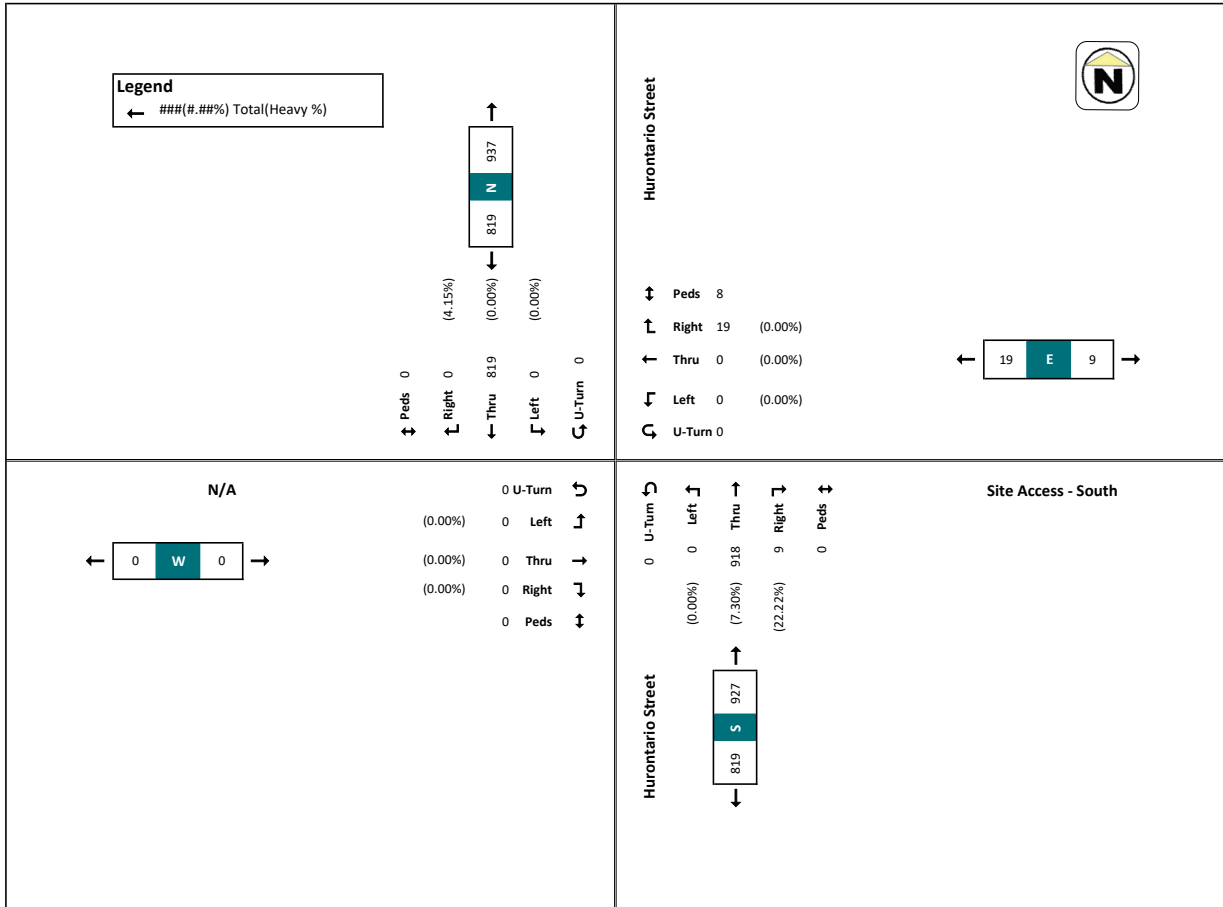
Turning Movement Count - Hurontario Street & Site Access - South

Start Time	Hurontario Street Southbound					Site Access - South Westbound					Hurontario Street Northbound					N/A Eastbound					Grand Total				
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total
7:00	0	0	188	0	0	188	0	0	0	2	4	2	0	0	10	1	0	11	0	0	0	0	0	0	201
7:15	0	0	202	0	0	202	0	0	0	2	4	2	0	0	109	0	0	109	0	0	0	0	0	0	313
7:30	0	0	184	0	0	184	0	0	0	5	1	5	0	0	139	1	0	140	0	0	0	0	0	0	329
7:45	0	0	179	0	0	179	0	0	0	4	7	1	0	0	168	1	0	169	0	0	0	0	0	0	345
Hourly Total	0	0	753	0	0	753	0	0	0	10	16	10	0	0	426	3	0	429	0	0	0	0	0	0	1192
8:00	0	0	228	0	0	228	0	0	0	6	7	6	0	0	182	0	0	182	0	0	0	0	0	0	416
8:15	0	0	177	0	0	177	0	0	0	3	5	3	0	0	231	3	0	234	0	0	0	0	0	0	414
8:30	0	0	231	0	0	231	0	0	0	5	2	5	0	0	248	1	0	249	0	0	0	0	0	0	485
8:45	0	0	193	0	0	193	0	0	0	8	0	8	0	0	219	2	0	221	0	0	0	0	0	0	422
Hourly Total	0	0	829	0	0	829	0	0	0	22	14	22	0	0	880	6	0	886	0	0	0	0	0	0	1737
9:00	0	0	218	0	0	218	0	0	0	3	1	3	0	0	220	3	0	223	0	0	0	0	0	0	444
9:15	0	0	223	0	0	223	0	0	0	2	2	2	0	0	164	2	0	166	0	0	0	0	0	0	391
9:30	0	0	177	0	0	177	0	0	0	5	5	5	0	0	187	0	0	187	0	0	0	0	0	0	369
9:45	0	0	184	0	0	184	0	0	0	4	3	4	0	0	174	2	0	176	0	0	0	0	0	0	364
Hourly Total	0	0	802	0	0	802	0	0	0	14	11	14	0	0	745	7	0	752	0	0	0	0	0	0	1568
* Break *																									
16:00	0	0	215	0	0	215	0	0	0	2	5	2	0	0	236	2	0	238	0	0	0	0	0	0	455
16:15	0	0	214	0	0	214	0	0	0	2	4	2	0	0	259	4	0	263	0	0	0	0	0	0	479
16:30	0	0	230	0	0	230	0	0	0	4	4	4	0	0	247	2	0	249	0	0	0	0	0	0	483
16:45	0	0	265	0	0	265	0	0	0	5	5	5	0	0	239	2	0	241	0	0	0	0	0	0	511
Hourly Total	0	0	924	0	0	924	0	0	0	13	18	13	0	0	981	10	0	991	0	0	0	0	0	0	1928
17:00	0	0	265	0	0	265	0	0	0	3	3	3	0	0	196	3	0	199	0	0	0	0	0	0	467
17:15	0	0	282	0	0	282	0	0	0	0	3	0	0	0	232	3	0	240	0	0	0	0	0	0	522
17:30	0	0	257	0	0	257	0	0	0	2	6	2	0	0	255	3	0	258	0	0	0	0	0	0	517
17:45	0	0	264	0	0	264	0	0	0	3	8	3	0	0	241	4	0	245	0	0	0	0	0	0	512
Hourly Total	0	0	1068	0	0	1068	0	0	0	8	20	8	0	0	929	13	0	942	0	0	0	0	0	0	2018
18:00	0	0	248	0	0	248	0	0	0	0	6	0	0	0	253	4	0	257	0	0	0	0	0	0	505
18:15	0	0	249	0	0	249	0	0	0	5	1	5	0	0	259	1	0	260	0	0	0	0	0	0	514
18:30	0	0	232	0	0	232	0	0	0	2	8	2	0	0	267	2	0	269	0	0	0	0	0	0	503
18:45	0	0	227	0	0	227	0	0	0	1	9	1	0	0	280	1	0	281	0	0	0	0	0	0	509
Hourly Total	0	0	956	0	0	956	0	0	0	8	24	8	0	0	1059	8	0	1067	0	0	0	0	0	0	2031
Grand Total	0	0	5332	0	0	5332	0	0	0	75	103	75	0	0	5202	47	0	5250	0	0	0	0	0	0	10557
Approach %	0.0%	0.0%	100.0%	0.0%	-	100.0%	0.0%	0.0%	0.0%	100.0%	-	-	0.0%	0.0%	99.1%	0.9%	-	-	-	-	-	-	-	-	-
Total %	0.0%	0.0%	50.0%	0.0%	-	50.0%	0.0%	0.0%	0.0%	0.7%	-	0.7%	0.0%	0.0%	48.8%	0.4%	-	49.3%	0.0%	0.0%	0.0%	0.0%	-	0.0%	-
Lights	0	0	5172	0	-	5172	0	0	0	75	-	75	0	0	5003	43	-	5046	0	0	0	0	0	-	10293
% Lights	-	-	97.0%	-	-	97.0%	-	-	-	100.0%	-	100.0%	-	-	96.2%	91.5%	-	96.1%	-	-	-	-	-	-	96.6%
Buses	0	0	84	0	-	84	0	0	0	0	-	0	0	0	105	3	-	108	0	0	0	0	0	-	192
% Buses	-	-	1.6%	-	-	1.6%	-	-	-	0.0%	-	0.0%	-	-	2.0%	6.4%	-	2.1%	-	-	-	-	-	-	1.8%
Trucks	0	0	76	0	-	76	0	0	0	0	-	0	0	0	95	1	-	96	0	0	0	0	0	-	172
% Trucks	-	-	1.4%	-	-	1.4%	-	-	-	0.0%	-	0.0%	-	-	1.8%	2.1%	-	1.8%	-	-	-	-	-	-	1.6%
Bicycles	-	-	0	-	-	0	-	-	-	0	-	0	-	-	-	-	-	2	-	-	-	-	-	-	2
Pedestrians	-	-	0	-	-	0	-	-	-	103	-	103	-	-	-	-	-	0	-	-	-	-	-	-	103



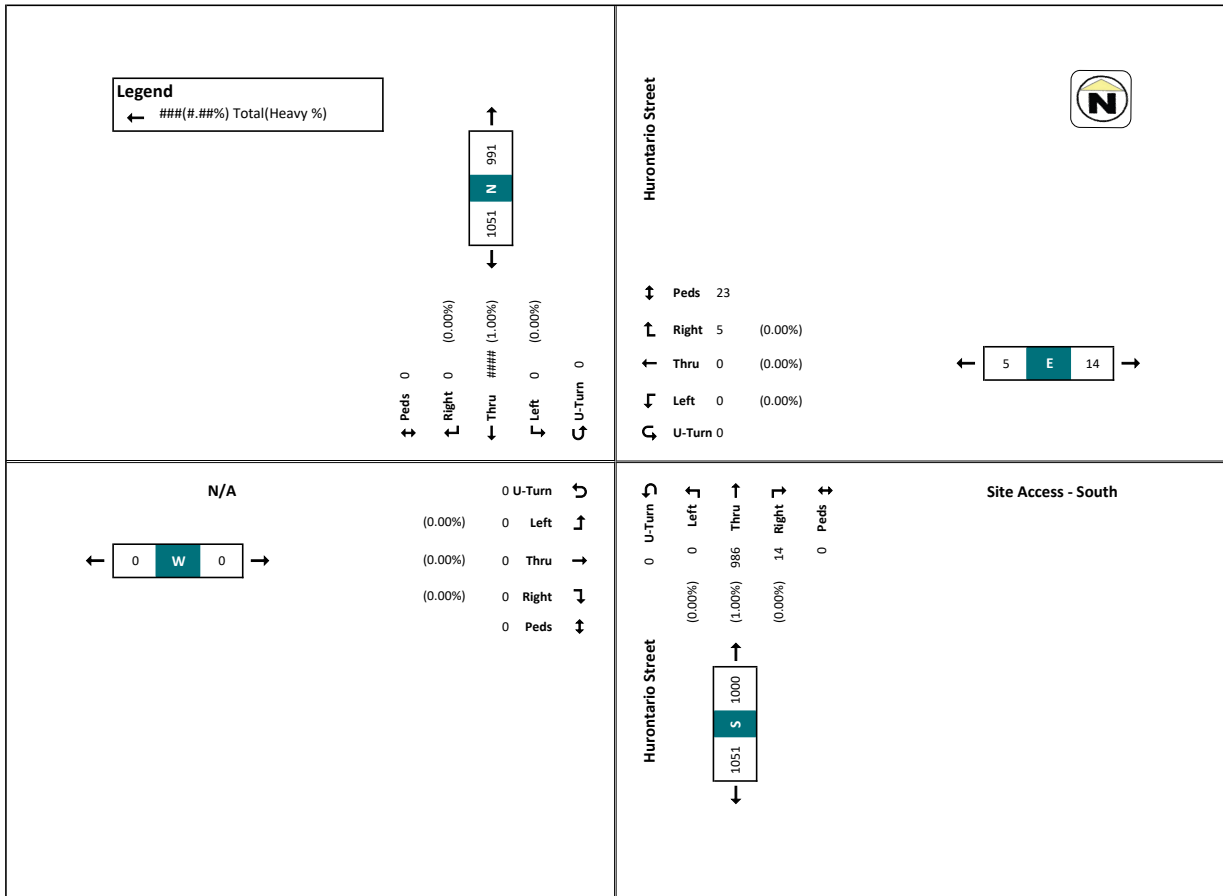
AM Peak Hour - Hurontario Street & Site Access - South

Start Time	Hurontario Street Southbound					Site Access - South Westbound					Hurontario Street Northbound					N/A Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total	
8:15	0	0	177	0	0	177	0	0	3	5	3	0	0	211	3	0	234	0	0	0	0	0	0	0	414	
8:30	0	0	231	0	0	231	0	0	5	2	5	0	0	248	1	0	249	0	0	0	0	0	0	0	485	
8:45	0	0	193	0	0	193	0	0	8	0	8	0	0	219	2	0	221	0	0	0	0	0	0	0	422	
9:00	0	0	218	0	0	218	0	0	3	1	3	0	0	220	3	0	223	0	0	0	0	0	0	0	444	
Hourly Total	0	0	819	0	0	819	0	0	19	8	19	0	0	928	9	0	927	0	0	0	0	0	0	0	1765	
Approach %	0.0%	0.0%	100.0%	0.0%	-	-	0.0%	0.0%	0.0%	100.0%	-	-	0.0%	0.0%	99.0%	1.0%	-	-	-	-	-	-	-	-	-	-
Total %	0.0%	0.0%	46.4%	0.0%	-	46.4%	0.0%	0.0%	0.0%	1.1%	-	1.1%	0.0%	0.0%	52.0%	0.5%	-	52.5%	0.0%	0.0%	0.0%	0.0%	-	0.0%	-	
PHF	0	0	0.89	0	-	0.89	0	0	0	0.59	-	0.59	0	0	0.93	0.75	-	0.93	0	0	0	0	-	0	0.91	
Lights	0	0	785	0	-	785	0	0	0	19	-	19	0	0	851	7	-	858	0	0	0	0	-	0	1662	
% Lights	-	-	95.8%	-	-	95.8%	-	-	-	100.0%	-	100.0%	-	-	92.7%	77.8%	-	92.6%	-	-	-	-	-	-	94.2%	
Bus	0	0	13	0	-	13	-	0	0	0	-	0	-	0	33	1	-	34	-	-	-	-	-	-	47	
% Buses	-	-	1.6%	-	-	1.6%	-	-	-	0.0%	-	0.0%	-	-	3.6%	11.1%	-	3.7%	-	-	-	-	-	-	2.7%	
Trucks	0	0	21	0	-	21	-	0	0	0	-	0	-	0	34	1	-	35	-	-	-	-	-	-	56	
% Trucks	-	-	2.6%	-	-	2.6%	-	-	-	0.0%	-	0.0%	-	-	3.7%	11.1%	-	3.8%	-	-	-	-	-	-	3.2%	
Bicycles	-	-	-	-	-	0	-	-	-	-	-	0	-	-	1	1	-	1	-	-	-	-	-	-	1	
Pedestrians	-	-	-	-	-	0	-	-	-	8	-	8	-	-	-	-	-	0	-	-	-	-	-	-	8	



PM Peak Hour - Hurontario Street & Site Access - South

Start Time	Hurontario Street Southbound					Site Access - South Westbound					Hurontario Street Northbound					N/A Eastbound					Grand Total					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left		Thru	Right	Peds	App. Total	
17:15	0	0	282	0	0	282	0	0	0	0	3	0	0	0	0	237	3	0	240	0	0	0	0	0	0	522
17:30	0	0	257	0	0	257	0	0	0	7	6	3	0	0	0	255	3	0	258	0	0	0	0	0	0	517
17:45	0	0	264	0	0	264	0	0	0	3	8	3	0	0	0	244	4	0	248	0	0	0	0	0	0	512
18:00	0	0	248	0	0	248	0	0	0	0	6	0	0	0	0	253	4	0	257	0	0	0	0	0	0	505
Hourly Total	0	0	1051	0	0	1051	0	0	0	5	23	5	0	0	0	986	14	0	1000	0	0	0	0	0	0	2056
Approach %	0.0%	0.0%	100.0%	0.0%	-	-	0.0%	0.0%	0.0%	100.0%	-	-	0.0%	0.0%	98.6%	1.4%	-	-	-	-	-	-	-	-	-	-
Total %	0.0%	0.0%	51.1%	0.0%	-	51.1%	0.0%	0.0%	0.0%	0.2%	-	0.2%	0.0%	0.0%	55.9%	0.8%	-	48.6%	0.0%	0.0%	0.0%	0.0%	-	0.0%	-	
PHF	0	0	0.93	0	-	0.93	0	0	0	0.42	-	0.42	0	0	0.97	0.88	-	0.97	0	0	0	0	-	0	-	
Lights	0	0	1036	0	-	1036	0	0	0	5	-	5	0	0	0	978	14	-	992	0	0	0	0	-	2033	
% Lights	-	-	98.6%	0	-	98.6%	-	-	-	100.0%	-	100.0%	-	-	99.2%	100.0%	-	99.2%	-	-	-	-	-	-	98.9%	
% Buses	-	-	13	0	-	13	-	-	0	0	-	0	-	-	8	0	-	8	-	-	0	0	-	0	21	
% Trucks	-	-	1.2%	-	-	1.2%	-	-	0.0%	-	-	0.0%	-	-	0.8%	0.0%	-	0.8%	-	-	-	-	-	-	1.0%	
% Pedestrians	-	-	0	0	-	0	-	-	0	0	-	0	-	-	0	0	-	0	-	-	0	0	-	0	7	
% Bicycles	-	-	0.7%	-	-	0.7%	-	-	-	0.0%	-	0.0%	-	-	0.0%	0.0%	-	0.0%	-	-	-	-	-	-	0.3%	
% Pedestrians	-	-	-	-	-	0	-	-	-	0	0	0	-	-	-	0	0	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0	-	-	-	0	0	0	-	-	-	0	0	-	0	-	-	-	-	-	0	



Scenario 2 - Midblock Construction

Timing Card Supplementary Table

North-South Street	East-West Street	Construction Stage	Drawing	Speed (km/h)				Senior Safety Zone (Mississauga) / APS or high pedestrian location (Brampton)?	Pedestrian Crossing Speed (m/s)
				North Leg	South Leg	East Leg	West Leg		
Hurontario Street	Burnhamthorpe Road West / Burnhamthorpe Road East	Stage 4	CPG_HU070_C0341	50	50	60	60	No	1.1
Hurontario Street	Matthews Gate	Stage 3 & Stage 4	CPG_HU060_C0421 / CPG_HU060_C0431	50	50		50	No	1.1
Hurontario Street	Elm Drive West / Elm Drive East	Stage 3 & Stage 4	CPG_HU060_C0421 / CPG_HU060_C0431	50	50	50	40	Yes	0.9
Hurontario Street	Central Parkway West / Central Parkway East	Stage 4	CPG_HU060_C0431	50	50	50	50	No	1.1
Hurontario Street	Fairview Road West / Fairview Road East	Stage 3 & Stage 4	CPG_HU050_C0422 / CPG_HU050_C0432	50	50	40	50	No	1.1
Hurontario Street	John Street West / John Street East	Stage 3 & Stage 4	CPG_HU050_C0421 / CPG_HU050_C0431	50	50	50	50	No	1.1
Hurontario Street	Hillcrest Avenue / Kirwin Avenue	Stage 3 & Stage 4	CPG_HU050_C0421 / CPG_HU050_C0431	50	50	50	50	No	1.1
Hurontario Street	Dundas Street West / Dundas Street East	Stage 4	CPG_HU040_C0432	50	50	50	50	No	1.1
Hurontario Street	King Street West / King Street East	Stage 3 & Stage 4	CPG_HU040_C0422 / CPG_HU040_C0432	50	50	50	50	Yes	0.9
Hurontario Street	Paisley Boulevard West / Paisley Boulevard East	Stage 3 & Stage 4	CPG_HU040_C0422 / CPG_HU040_C0431	50	50	50	50	Yes	0.9
Hurontario Street	Queensway West / Queensway East	Stage 4	CPG_HU040_C0431	50	50	60	60	Yes	0.9
Hurontario Street	Bronte College Court / Sherobee Road	Stage 3 & Stage 4	CPG_HU040_C0421 / CPG_HU040_C0431	50	50	50	40	No	1.1
Hurontario Street	Harborn Road / North Service Road	Stage 3A-1	CPG_HU030_C0472	50	50	60	50	No	1.1
Confederation Parkway	Burnhamthorpe Road West	N/A	N/A	50	50	60	60	N/A	N/A
Kariya Gate / Kariya Drive	Burnhamthorpe Road West	N/A	N/A	50	50	60	60	N/A	N/A
Central Parkway East	Burnhamthorpe Road East	N/A	N/A	50	50	60	60	N/A	N/A
Mississauga Valley Boulevard	Elm Drive East / Private Access	N/A	N/A	40	40	50	50	N/A	N/A
Mississauga Valley Boulevard	Central Parkway East	N/A	N/A	40	40	50	50	N/A	N/A
Kariya Drive	Elm Drive West	N/A	N/A	50	50	50	50	N/A	N/A
Joan Drive	Central Parkway West	N/A	N/A	50	50	50	50	N/A	N/A
Confederation Parkway	Central Parkway West	N/A	N/A	50	50	50	50	N/A	N/A
Confederation Parkway	Hillcrest Avenue	N/A	N/A	50	50	50	50	N/A	N/A
Confederation Parkway	Dundas Street West	N/A	N/A	50	50	50	50	N/A	N/A
Confederation Parkway	King Street West	N/A	N/A	50	50	50		N/A	N/A
Kirwin Avenue / Camilla Road	Dundas Street East	N/A	N/A	40	40	50	50	N/A	N/A
Confederation Parkway	Paisley Boulevard West	N/A	N/A	50	50	50	40	N/A	N/A
Confederation Parkway / Private Access	Queensway West	N/A	N/A	50	50	60	60	N/A	N/A
Camilla Road	Queensway East	N/A	N/A	40	30	60	60	N/A	N/A

HULRT-MBLX-TAT-MEM-00052 RB - **WZ 4-6 Construction Stage 4**

Scenario 2 - Midblock Construction

REVISED

CITY OF MISSISSAUGA										
Traffic Signal Timing Parameters										
Database Date						Prepared Date:		Friday, January 24th , 2025		
Database Rev			iNet			Completed By:		Mobilinx		
Timing Card / Field rev			iNet			Checked By:		Mobilinx		
Location:	Hurontario Street @ Bronte College Court / Sherobee Road						TIME PERIOD (sec.)			
Phase #	Direction	Vehicle Minimum (sec.)	Pedestrian Minimum (sec.)		Amber (sec.)	All Red (sec.)	*Peak Split= (Green+Amber+All Red) **Max = Green			
			WALK	FDWALK			AM Peak Split	OFF Peak Split	PM Peak Split	
1	Hurontario Street - NB PROT LT	8.0	-	-	3.0	2.0	24.0	22.0	25.0	
2	Hurontario Street - SB	8.0	8.0	15.0	4.0	3.5	89.0	91.0	88.0	
3	NIU	-	-	-	-	-	-	-	-	
4	Sherobee Road - WB	8.0	12.0	26.0	4.0	5.0	47.0	47.0	47.0	
5	Hurontario Street - SB PROT LT	8.0	-	-	3.0	2.0	24.0	20.0	18.0	
6	Hurontario Street - NB	8.0	8.0	15.0	4.0	3.5	89.0	93.0	95.0	
7	NIU	-	-	-	-	-	-	-	-	
8	Bronte College Court - EB	8.0	12.0	26.0	4.0	5.0	47.0	47.0	47.0	

System Control		Yes	TIME (M-F)	PEAK		CYCLE LENGTH (sec.)	OFFSET (sec.)
Local Control		No		06:00 - 09:30	AM	160	38
Semi-Actuated Mode		Yes		09:30 - 15:00	OFF	160	144
				19:30 - 00:00			
			15:00 - 19:30	PM	160	3	



APPENDIX C

Corridor Growth Rates

Hurontario Street and Queensway East

Intersection	Index	Movement	02-Apr-19				04-May-22				19-Feb-26			
			AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
Hurontario Street & Queensway East	1	NBL	403	494			684	1052			407	310		
	2	NBT	1270	1026	1945	1689	1504	1616	2620	3080	458	481	986	976
	3	NBR	272	169			432	412			121	185		
	4	SBL	241	166			130	148			59	81		
	5	SBT	1048	1219	1488	1511	644	757	926	987	395	543	577	719
	6	SBR	199	126			152	82			123	95		
	7	EBL	387	96			55	79			43	42		
	8	EBT	730	492	1173	1157	730	591	1474	1301	695	713	1092	1143
	9	EBR	56	569			689	631			354	388		
	10	WBL	178	191			139	185			92	141		
	11	WBT	553	1006	851	1450	494	753	730	1104	521	820	678	1036
	12	WBR	120	253			97	166			65	75		

AM Peak					
Year	Street Name		Street Name		Overall
	NB	SB	EB	WB	
2019	1945	1488	1173	851	5457
2022	2620	926	1474	730	5750
2026	986	577	1092	678	3333

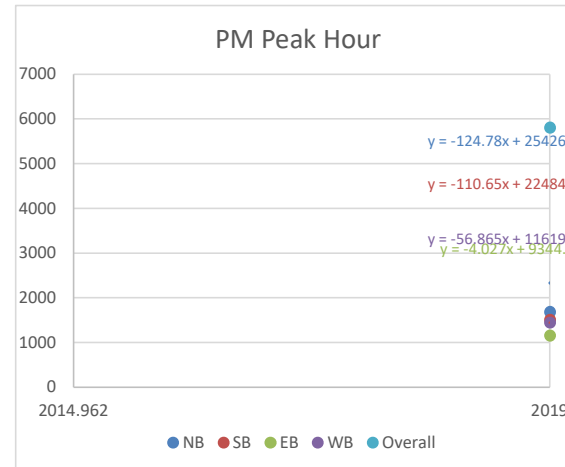
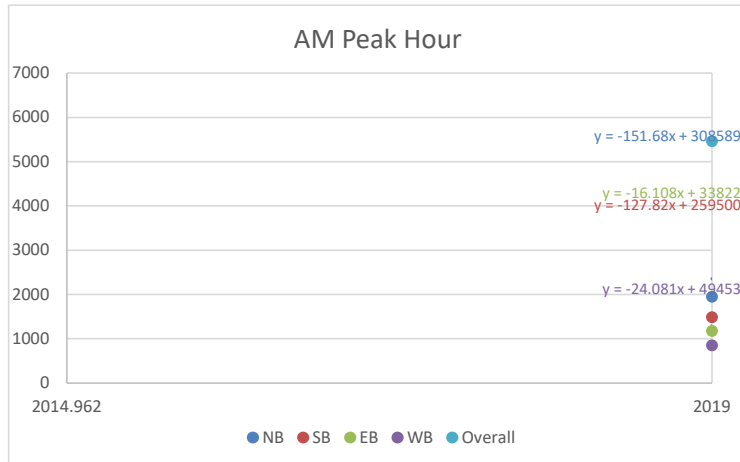
PM Peak					
Year	Street Name		Street Name		Overall
	NB	SB	EB	WB	
2019	1689	1511	1157	1450	5807
2022	3080	987	1301	1104	6472
2026	976	719	1143	1036	3874

Calculated Growth Rates: -15.38% -22.15% -1.48% -3.55% -9.59%

Applied Growth Rates: 0.00% 0.00% 0.00% 0.00%

Calculated Growth Rates: -12.79% -15.39% -0.35% -5.49% -7.65%

Applied Growth Rates: 0.00% 0.00% 0.00% 0.00%





Turning Movement Count (3 . HURONTARIO ST & QUEENSWAY W) CustID: 02005138 MioID: 638089

Start Time	N Approach HURONTARIO ST						E Approach QUEENSWAY W						S Approach HURONTARIO ST						W Approach QUEENSWAY W						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	U-Turn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	U-Turn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	U-Turn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	U-Turn W:W	Peds W:	Approach Total		
2019-04-02 07:00:00	38	194	48	0	1	280	13	57	20	0	2	90	32	161	70	0	8	263	89	155	22	0	3	266	899	
2019-04-02 07:15:00	29	213	50	0	5	292	11	78	31	0	6	120	32	168	71	0	3	271	115	194	13	0	6	322	1005	
2019-04-02 07:30:00	34	261	66	0	9	361	25	98	27	0	8	150	40	259	83	1	4	383	102	175	20	0	8	297	1191	
2019-04-02 07:45:00	35	222	74	0	14	331	31	133	22	0	13	186	58	207	85	0	12	350	88	216	32	0	8	336	1203	4298
2019-04-02 08:00:00	43	289	70	0	15	402	45	134	25	0	19	204	80	250	75	0	11	405	93	183	14	0	15	290	1301	4700
2019-04-02 08:15:00	36	291	60	0	11	387	53	127	18	0	23	198	82	331	98	0	7	511	91	201	15	0	13	307	1403	5098
2019-04-02 08:30:00	58	253	61	0	52	372	49	153	43	0	44	245	57	286	101	1	17	445	102	170	17	0	6	289	1351	5258
2019-04-02 08:45:00	62	215	50	0	69	327	31	139	34	0	61	204	53	403	129	0	20	585	101	176	10	0	28	287	1403	5458
2019-04-02 09:00:00	62	197	45	0	14	304	29	104	19	0	19	152	57	330	92	0	5	479	98	169	15	1	3	283	1218	5375
2019-04-02 09:15:00	42	195	42	0	4	279	52	116	35	1	9	204	44	245	86	0	7	375	118	169	13	1	6	301	1159	5131
BREAK																										
2019-04-02 16:00:00	23	290	48	0	10	361	55	189	47	0	24	291	48	315	130	0	12	493	120	115	32	3	17	270	1415	
2019-04-02 16:15:00	33	291	41	1	10	366	69	257	38	0	23	364	31	250	108	0	14	389	139	141	33	3	15	316	1435	
2019-04-02 16:30:00	29	332	35	0	17	396	57	247	54	0	18	358	46	263	118	0	13	427	133	112	28	1	10	274	1455	
2019-04-02 16:45:00	33	274	41	0	11	348	73	242	43	0	27	358	41	277	135	0	10	453	137	123	28	2	16	290	1449	5754
2019-04-02 17:00:00	31	291	41	0	14	363	62	245	46	0	3	353	42	215	115	0	24	372	157	134	22	0	23	313	1401	5740
2019-04-02 17:15:00	33	322	49	0	14	404	61	272	48	0	12	381	40	271	126	0	12	437	142	123	18	0	10	283	1505	5810
2019-04-02 17:30:00	35	271	45	0	16	351	72	239	50	0	0	361	38	218	111	0	18	367	121	147	23	0	12	291	1370	5725
2019-04-02 17:45:00	40	317	36	0	19	393	71	255	57	0	0	383	32	238	105	0	17	375	124	125	22	1	17	272	1423	5699
Grand Total	696	4718	902	1	305	6317	859	3085	657	1	311	4602	853	4687	1838	2	214	7380	2070	2828	377	12	216	5287	23586	-
Approach%	11%	74.7%	14.3%	0%	-	-	18.7%	67%	14.3%	0%	-	-	11.6%	63.5%	24.9%	0%	-	-	39.2%	53.5%	7.1%	0.2%	-	-	-	-
Totals %	3%	20%	3.8%	0%	-	26.8%	3.6%	13.1%	2.8%	0%	-	19.5%	3.6%	19.9%	7.8%	0%	-	31.3%	8.8%	12%	1.6%	0.1%	-	22.4%	-	-
Heavy	44	166	44	0	-	-	34	60	17	0	-	-	30	139	43	0	-	-	42	63	39	0	-	-	-	-
Heavy %	6.3%	3.5%	4.9%	0%	-	-	4%	1.9%	2.6%	0%	-	-	3.5%	3%	2.3%	0%	-	-	2%	2.2%	10.3%	0%	-	-	-	-
Bicycles	0	1	0	0	-	-	0	0	0	0	-	-	0	0	0	0	-	-	0	1	0	0	-	-	-	-
Bicycle %	0%	0%	0%	0%	-	-	0%	0%	0%	0%	-	-	0%	0%	0%	0%	-	-	0%	0%	0%	0%	-	-	-	-



Peak Hour: 08:00 AM - 09:00 AM Weather: Broken Clouds (0.3 °C)

Start Time	N Approach HURONTARIO ST						E Approach QUEENSWAY W						S Approach HURONTARIO ST						W Approach QUEENSWAY W						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2019-04-02 08:00:00	43	289	70	0	15	402	45	134	25	0	19	204	80	250	75	0	11	405	93	183	14	0	15	290	1301
2019-04-02 08:15:00	36	291	60	0	11	387	53	127	18	0	23	198	82	331	98	0	7	511	91	201	15	0	13	307	1403
2019-04-02 08:30:00	58	253	61	0	52	372	49	153	43	0	44	245	57	286	101	1	17	445	102	170	17	0	6	289	1351
2019-04-02 08:45:00	62	215	50	0	69	327	31	139	34	0	61	204	53	403	129	0	20	585	101	176	10	0	28	287	1403
Grand Total	199	1048	241	0	147	1488	178	553	120	0	147	851	272	1270	403	1	55	1946	387	730	56	0	62	1173	5458
Approach%	13.4%	70.4%	16.2%	0%	-	-	20.9%	65%	14.1%	0%	-	-	14%	65.3%	20.7%	0.1%	-	-	33%	62.2%	4.8%	0%	-	-	-
Totals %	3.6%	19.2%	4.4%	0%	27.3%	3.3%	10.1%	2.2%	0%	15.6%	5%	23.3%	7.4%	0%	35.7%	7.1%	13.4%	1%	0%	21.5%	-	-	-		
PHF	0.8	0.9	0.86	0	0.93	0.84	0.9	0.7	0	0.87	0.83	0.79	0.78	0.25	0.83	0.95	0.91	0.82	0	0.96	0.97	-	-		
Heavy	6	58	20	0	84	13	22	7	0	42	14	46	15	0	75	7	19	7	0	33	234	-			
Heavy %	3%	5.5%	8.3%	0%	5.6%	7.3%	4%	5.8%	0%	4.9%	5.1%	3.6%	3.7%	0%	3.9%	1.8%	2.6%	12.5%	0%	2.8%	4.3%	-			
Lights	193	990	221	0	1404	165	531	113	0	809	258	1224	388	1	1871	380	711	49	0	1140	5224	-			
Lights %	97%	94.5%	91.7%	0%	94.4%	92.7%	96%	94.2%	0%	95.1%	94.9%	96.4%	96.3%	100%	96.1%	98.2%	97.4%	87.5%	0%	97.2%	95.7%	-			
Single-Unit Trucks	0	27	15	0	42	5	8	4	0	17	2	14	5	0	21	2	9	0	0	11	91	-			
Single-Unit Trucks %	0%	2.6%	6.2%	0%	2.8%	2.8%	1.4%	3.3%	0%	2%	0.7%	1.1%	1.2%	0%	1.1%	0.5%	1.2%	0%	0%	0.9%	1.7%	-			
Buses	6	29	5	0	40	6	12	3	0	21	11	29	9	0	49	4	8	7	0	19	129	-			
Buses %	3%	2.8%	2.1%	0%	2.7%	3.4%	2.2%	2.5%	0%	2.5%	4%	2.3%	2.2%	0%	2.5%	1%	1.1%	12.5%	0%	1.6%	2.4%	-			
Articulated Trucks	0	2	0	0	2	2	2	0	0	4	1	3	1	0	5	1	2	0	0	3	14	-			
Articulated Trucks %	0%	0.2%	0%	0%	0.1%	1.1%	0.4%	0%	0%	0.5%	0.4%	0.2%	0.2%	0%	0.3%	0.3%	0.3%	0%	0%	0.3%	0.3%	-			
Pedestrians	-	-	-	-	146	-	-	-	-	145	-	-	-	53	-	-	-	-	-	59	-	-			
Pedestrians%	-	-	-	-	35.5%	-	-	-	-	35.3%	-	-	-	12.9%	-	-	-	-	-	14.4%	-	-			
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	2	-	-	-	2	-	-	-	-	-	3	-	-			
Bicycles on Crosswalk%	-	-	-	-	0.2%	-	-	-	-	0.5%	-	-	-	0.5%	-	-	-	-	-	0.7%	-	-			
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%	-	-	-			



Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (7.45 °C)

Start Time	N Approach HURONTARIO ST						E Approach QUEENSWAY W						S Approach HURONTARIO ST						W Approach QUEENSWAY W						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
2019-04-02 16:30:00	29	332	35	0	17	396	57	247	54	0	18	358	46	263	118	0	13	427	133	112	28	1	10	274	1455
2019-04-02 16:45:00	33	274	41	0	11	348	73	242	43	0	27	358	41	277	135	0	10	453	137	123	28	2	16	290	1449
2019-04-02 17:00:00	31	291	41	0	14	363	62	245	46	0	3	353	42	215	115	0	24	372	157	134	22	0	23	313	1401
2019-04-02 17:15:00	33	322	49	0	14	404	61	272	48	0	12	381	40	271	126	0	12	437	142	123	18	0	10	283	1505
Grand Total	126	1219	166	0	56	1511	253	1006	191	0	60	1450	169	1026	494	0	59	1689	569	492	96	3	59	1160	5810
Approach%	8.3%	80.7%	11%	0%	-	-	17.4%	69.4%	13.2%	0%	-	-	10%	60.7%	29.2%	0%	-	-	49.1%	42.4%	8.3%	0.3%	-	-	-
Totals %	2.2%	21%	2.9%	0%	26%	4.4%	17.3%	3.3%	0%	25%	2.9%	17.7%	8.5%	0%	29.1%	9.8%	8.5%	1.7%	0.1%	20%	0.97	-	-		
PHF	0.95	0.92	0.85	0	0.94	0.87	0.92	0.88	0	0.95	0.92	0.93	0.91	0	0.93	0.91	0.92	0.86	0.38	0.93	0.97	-	-		
Heavy	9	21	1	0	31	5	8	2	0	15	3	24	4	0	31	3	12	10	0	25	102	-			
Heavy %	7.1%	1.7%	0.6%	0%	2.1%	2%	0.8%	1%	0%	1%	1.8%	2.3%	0.8%	0%	1.8%	0.5%	2.4%	10.4%	0%	2.2%	1.8%	-			
Lights	117	1198	165	0	1480	248	998	189	0	1435	166	1002	490	0	1658	566	480	86	3	1135	5708	-			
Lights %	92.9%	98.3%	99.4%	0%	97.9%	98%	99.2%	99%	0%	99%	98.2%	97.7%	99.2%	0%	98.2%	99.5%	97.6%	89.6%	100%	97.8%	98.2%	-			
Single-Unit Trucks	1	5	0	0	6	4	5	1	0	10	3	10	1	0	14	2	7	1	0	10	40	-			
Single-Unit Trucks %	0.8%	0.4%	0%	0%	0.4%	1.6%	0.5%	0.5%	0%	0.7%	1.8%	1%	0.2%	0%	0.8%	0.4%	1.4%	1%	0%	0.9%	0.7%	-			
Buses	8	15	1	0	24	1	3	1	0	5	0	13	3	0	16	0	5	9	0	14	59	-			
Buses %	6.3%	1.2%	0.6%	0%	1.6%	0.4%	0.3%	0.5%	0%	0.3%	0%	1.3%	0.6%	0%	0.9%	0%	1%	9.4%	0%	1.2%	1%	-			
Articulated Trucks	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3	-			
Articulated Trucks %	0%	0.1%	0%	0%	0.1%	0%	0%	0%	0%	0%	0%	0%	0.1%	0%	0.1%	0.2%	0%	0%	0%	0.1%	0.1%	-			
Pedestrians	-	-	-	-	56	-	-	-	-	59	-	-	-	-	58	-	-	-	-	58	-	-			
Pedestrians%	-	-	-	-	23.9%	-	-	-	-	25.2%	-	-	-	-	24.8%	-	-	-	-	24.8%	-	-			
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	1	-	-	-	-	1	-	-	-	-	1	-	-			
Bicycles on Crosswalk%	-	-	-	-	0%	-	-	-	-	0.4%	-	-	-	-	0.4%	-	-	-	-	0.4%	-	-			
Bicycles on Road	0	1	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	-	-			
Bicycles on Road%	0%	100%	0%	0%	-	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-			

Peak Hour: 08:00 AM - 09:00 AM Weather: Broken Clouds (0.3 °C)



Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (7.45 °C)





Turning Movement Count (195 . QUEENSWAY E & HURONTARIO ST) CustID: 02005138

Start Time	N Approach HURONTARIO ST						E Approach QUEENSWAY W						S Approach HURONTARIO ST						W Approach QUEENSWAY W						Int. Total (15 min)	Int. Total (1 hr)
	Left N:E	Thru N:S	Right N:W	UTurn N:N	Peds N:	Approach Total	Left E:S	Thru E:W	Right E:N	UTurn E:E	Peds E:	Approach Total	Left S:W	Thru S:N	Right S:E	UTurn S:S	Peds S:	Approach Total	Left W:N	Thru W:E	Right W:S	UTurn W:W	Peds W:	Approach Total		
2022-05-04 07:00:00	20	112	26	0	4	158	18	55	11	0	3	84	116	220	54	0	2	390	20	82	87	0	5	189	821	
2022-05-04 07:15:00	28	111	23	0	5	162	17	60	14	0	5	91	132	206	74	0	2	412	19	128	106	0	4	253	918	
2022-05-04 07:30:00	35	134	22	1	4	192	16	58	12	0	9	86	148	318	78	0	6	544	18	133	103	0	3	254	1076	
2022-05-04 07:45:00	38	144	24	0	9	206	31	106	13	0	9	150	164	246	114	0	12	524	19	177	123	0	8	319	1199	4014
2022-05-04 08:00:00	34	169	35	0	8	238	28	120	23	0	8	171	180	384	118	0	2	682	11	200	150	0	3	361	1452	4645
2022-05-04 08:15:00	27	181	28	0	10	236	30	118	20	0	11	188	194	440	110	0	4	744	15	168	161	0	6	344	1492	5219
2022-05-04 08:30:00	30	143	28	0	31	201	36	133	28	0	34	197	140	332	86	0	10	558	14	208	149	1	8	372	1328	5471
2022-05-04 08:45:00	39	151	61	1	19	252	45	123	26	0	27	194	170	348	118	0	40	636	15	154	229	0	21	398	1480	5752
BREAK																										
2022-05-04 11:00:00	21	138	28	0	2	187	16	89	19	0	3	124	194	292	62	4	8	552	15	115	108	2	10	240	1103	
2022-05-04 11:15:00	30	129	24	0	7	183	25	105	24	0	6	154	188	250	64	0	10	502	18	111	119	3	6	251	1090	
2022-05-04 11:30:00	24	175	22	0	9	221	21	90	24	0	22	135	212	364	62	0	6	638	17	90	118	1	6	226	1220	
2022-05-04 11:45:00	27	137	38	0	9	202	29	78	24	0	13	131	254	320	88	0	0	662	18	102	134	1	5	255	1250	4663
2022-05-04 12:00:00	26	153	21	0	8	200	26	88	26	0	15	140	160	336	68	0	8	564	23	105	116	0	10	244	1148	4708
2022-05-04 12:15:00	32	148	35	0	13	215	25	95	34	0	15	154	226	346	76	0	10	648	18	93	118	1	7	230	1247	4865
2022-05-04 12:30:00	36	129	37	0	24	202	41	124	22	0	15	187	198	342	56	4	4	600	20	89	120	1	3	230	1219	4864
2022-05-04 12:45:00	25	181	30	0	8	236	35	113	31	0	19	179	276	334	46	0	14	656	16	98	101	0	9	215	1286	4900
2022-05-04 13:00:00	29	157	18	0	3	204	35	103	28	0	17	166	228	352	60	0	20	640	16	67	125	1	8	209	1219	4971
2022-05-04 13:15:00	31	157	23	0	7	211	48	94	17	0	21	159	228	308	46	0	8	582	17	85	122	0	5	224	1176	4900
2022-05-04 13:30:00	23	200	21	0	6	244	48	115	26	0	20	189	300	348	80	2	16	730	18	77	126	1	6	222	1385	5066
2022-05-04 13:45:00	22	178	35	0	10	235	25	105	24	0	20	154	334	336	72	4	14	746	15	104	135	0	9	254	1389	5169
BREAK																										
2022-05-04 15:00:00	22	151	29	0	10	202	33	147	35	0	12	215	272	314	122	0	28	708	24	144	156	2	4	326	1451	
2022-05-04 15:15:00	28	203	35	1	27	267	35	124	29	0	31	188	254	428	126	0	16	808	21	110	97	1	10	229	1492	
2022-05-04 15:30:00	28	152	36	0	39	216	45	184	40	0	35	269	238	392	112	0	50	742	23	163	129	1	13	316	1543	
2022-05-04 15:45:00	25	169	33	1	20	228	47	190	40	0	24	277	264	334	72	0	18	670	26	146	129	0	8	301	1476	5962
2022-05-04 16:00:00	27	171	23	0	11	221	33	165	40	0	21	238	264	420	90	0	8	774	11	133	132	0	8	276	1509	6020
2022-05-04 16:15:00	31	156	23	0	16	210	42	179	39	0	17	260	180	406	90	0	18	676	24	153	145	2	9	324	1470	5998
2022-05-04 16:30:00	32	195	25	0	17	252	53	215	54	0	34	322	300	456	108	4	22	868	21	119	148	5	13	293	1735	6190
2022-05-04 16:45:00	38	195	28	0	22	261	43	173	42	0	24	258	256	396	140	0	24	792	22	155	159	0	11	336	1647	6361
2022-05-04 17:00:00	34	162	13	0	12	209	41	187	39	0	14	267	236	352	96	2	10	686	18	169	174	1	7	362	1524	6376
2022-05-04 17:15:00	44	205	16	0	19	265	48	178	31	0	30	257	260	412	68	0	8	740	18	148	150	0	10	316	1578	6484
2022-05-04 17:30:00	28	158	18	0	12	204	54	207	39	0	19	300	242	382	116	2	8	742	15	153	137	1	3	306	1552	6301
2022-05-04 17:45:00	36	193	12	0	16	241	46	186	40	0	19	272	214	330	72	0	16	616	13	155	155	2	10	325	1454	6108
Grand Total	950	5137	870	4	417	6961	1115	4107	914	0	572	6136	7022	11044	2744	22	422	20832	578	4134	4261	27	248	9000	42929	-
Approach %	13.6%	73.8%	12.5%	0.1%	-	-	18.2%	66.9%	14.9%	0%	-	-	33.7%	53%	13.2%	0.1%	-	-	6.4%	45.9%	47.3%	0.3%	-	-	-	-
Totals %	2.2%	12%	2%	0%	-	16.2%	2.6%	9.6%	2.1%	0%	-	14.3%	16.4%	25.7%	6.4%	0.1%	-	48.5%	1.3%	9.6%	9.9%	0.1%	-	-	-	-
Heavy	35	180	74	0	-	-	35	125	27	0	-	-	190	406	104	0	-	-	32	115	98	0	-	-	-	-
Heavy %	3.7%	3.5%	8.5%	0%	-	-	3.1%	3%	3%	0%	-	-	2.7%	3.7%	3.8%	0%	-	-	5.5%	2.8%	2.3%	0%	-	-	-	-
Bicycles	0	1	0	0	-	-	0	2	0	0	-	-	0	2	0	0	-	-	0	1	0	0	-	-	-	-
Bicycle %	0%	0%	0%	0%	-	-	0%	0%	0%	0%	-	-	0%	0%	0%	0%	-	-	0%	0%	0%	0%	-	-	-	-



Peak Hour: 08:00 AM - 09:00 AM Weather: Moderate Rain (10.37 °C)

Start Time	N Approach HURONTARIO ST						E Approach QUEENSWAY W						S Approach HURONTARIO ST						W Approach QUEENSWAY W						Int. Total (15 min)
	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	
2022-05-04 08:00:00	34	169	35	0	8	238	28	120	23	0	8	171	180	384	118	0	2	682	11	200	150	0	3	361	1452
2022-05-04 08:15:00	27	181	28	0	10	236	30	118	20	0	11	168	194	440	110	0	4	744	15	168	161	0	6	344	1492
2022-05-04 08:30:00	30	143	28	0	31	201	36	133	28	0	34	197	140	332	86	0	10	558	14	208	149	1	8	372	1328
2022-05-04 08:45:00	39	151	61	1	19	252	45	123	26	0	27	194	170	348	118	0	40	636	15	154	229	0	21	398	1480
Grand Total	130	644	152	1	68	927	139	494	97	0	80	730	684	1504	432	0	56	2620	55	730	689	1	38	1475	5752
Approach%	14%	69.5%	16.4%	0.1%	-	-	19%	67.7%	13.3%	0%	-	-	26.1%	57.4%	16.5%	0%	-	-	3.7%	49.5%	46.7%	0.1%	-	-	-
Totals %	2.3%	11.2%	2.6%	0%	16.1%	16.1%	2.4%	8.6%	1.7%	0%	12.7%	12.7%	11.9%	26.1%	7.5%	0%	45.5%	45.5%	1%	12.7%	12%	0%	25.6%	25.6%	-
PHF	0.83	0.89	0.62	0.25	0.92	0.92	0.77	0.93	0.87	0	0.93	0.93	0.88	0.85	0.92	0	0.88	0.88	0.92	0.88	0.75	0.25	0.93	0.93	0.96
Heavy	6	35	11	0	52	52	10	26	5	0	41	41	20	68	22	0	110	110	3	16	23	0	42	42	245
Heavy %	4.6%	5.4%	7.2%	0%	5.6%	5.6%	7.2%	5.3%	5.2%	0%	5.6%	5.6%	2.9%	4.5%	5.1%	0%	4.2%	4.2%	5.5%	2.2%	3.3%	0%	2.8%	2.8%	4.3%
Lights	124	609	141	1	875	875	129	468	92	0	689	689	664	1436	410	0	2510	2510	52	714	666	1	1433	1433	5507
Lights %	95.4%	94.6%	92.8%	100%	94.4%	94.4%	92.8%	94.7%	94.8%	0%	94.4%	94.4%	97.1%	95.5%	94.9%	0%	95.8%	95.8%	94.5%	97.8%	96.7%	100%	97.2%	97.2%	95.7%
Single-Unit Trucks	2	13	3	0	18	18	7	12	3	0	22	22	2	20	2	0	24	24	0	10	8	0	18	18	82
Single-Unit Trucks %	1.5%	2%	2%	0%	1.9%	1.9%	5%	2.4%	3.1%	0%	3%	3%	0.3%	1.3%	0.5%	0%	0.9%	0.9%	0%	1.4%	1.2%	0%	1.2%	1.2%	1.4%
Buses	4	20	8	0	32	32	2	13	2	0	17	17	16	48	20	0	84	84	3	4	15	0	22	22	155
Buses %	3.1%	3.1%	5.3%	0%	3.5%	3.5%	1.4%	2.6%	2.1%	0%	2.3%	2.3%	2.3%	3.2%	4.6%	0%	3.2%	3.2%	5.5%	0.5%	2.2%	0%	1.5%	1.5%	2.7%
Articulated Trucks	0	2	0	0	2	2	1	1	0	0	2	2	2	0	0	0	2	2	0	2	0	0	2	2	8
Articulated Trucks %	0%	0.3%	0%	0%	0.2%	0.2%	0.7%	0.2%	0%	0%	0.3%	0.3%	0%	0%	0%	0%	0.1%	0.1%	0%	0.3%	0%	0%	0.1%	0.1%	0.1%
Pedestrians	-	-	-	-	68	68	-	-	-	-	80	80	-	-	-	-	56	56	-	-	-	-	38	38	-
Pedestrians%	-	-	-	-	28.1%	28.1%	-	-	-	-	33.1%	33.1%	-	-	-	-	23.1%	23.1%	-	-	-	-	15.7%	15.7%	-
Bicycles on Crosswalk	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	0	0	-
Bicycles on Crosswalk%	-	-	-	-	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 Road%	0%	0%	0%	0%	-	-	0%	0%	0%	0%	-	-	0%	0%	0%	0%	-	-	0%	0%	0%	0%	-	-	-



Peak Hour: 01:00 PM - 02:00 PM Weather: Overcast Clouds (11.91 °C)

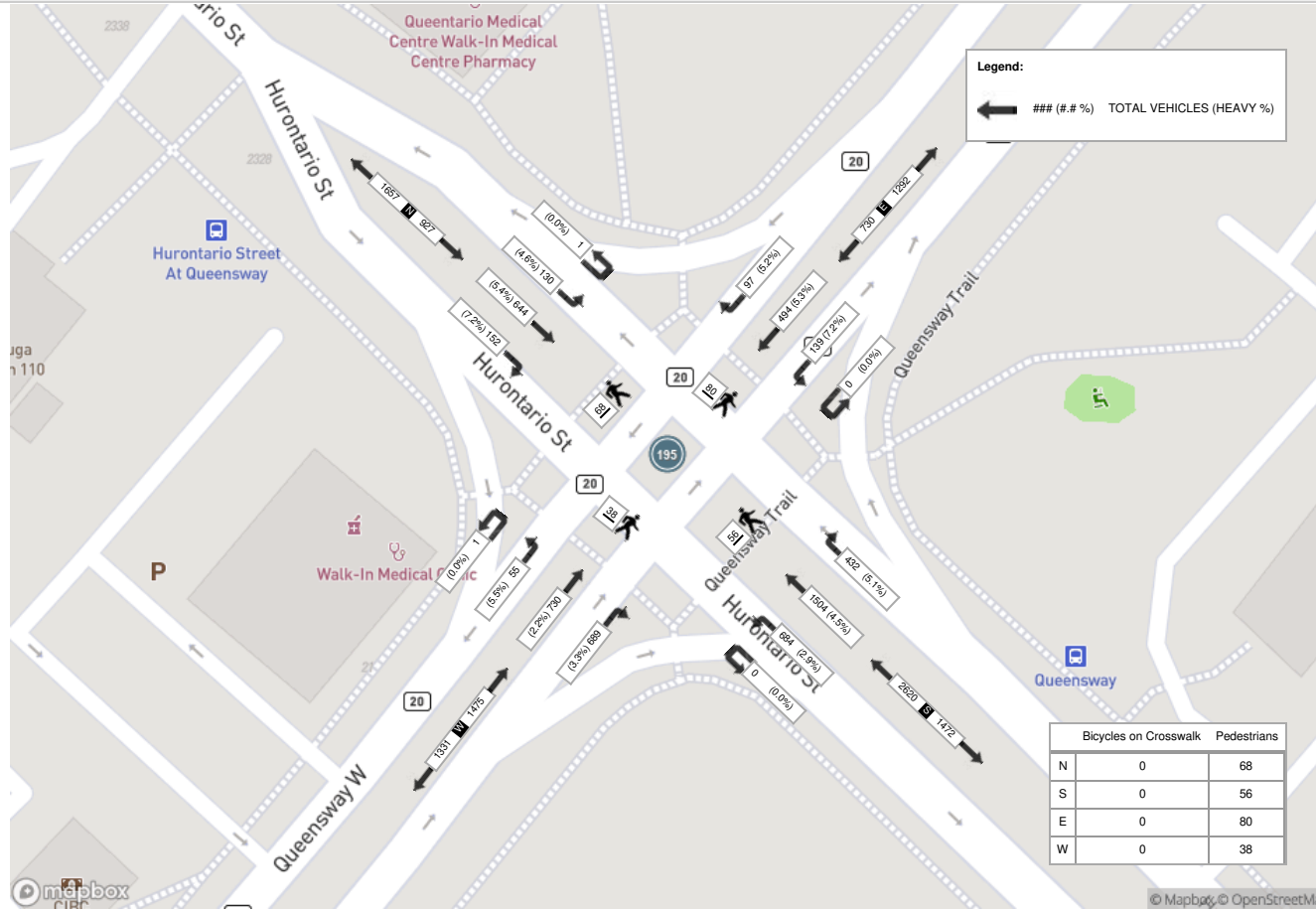
Start Time	N Approach HURONTARIO ST						E Approach QUEENSWAY W						S Approach HURONTARIO ST						W Approach QUEENSWAY W						Int. Total (15 min)
	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	
2022-05-04 13:00:00	29	157	18	0	3	204	35	103	28	0	17	166	228	352	60	0	20	640	16	67	125	1	8	209	1219
2022-05-04 13:15:00	31	157	23	0	7	211	48	94	17	0	21	159	228	308	46	0	8	582	17	85	122	0	5	224	1176
2022-05-04 13:30:00	23	200	21	0	6	244	48	115	26	0	20	189	300	348	80	2	16	730	18	77	126	1	6	222	1385
2022-05-04 13:45:00	22	178	35	0	10	235	25	105	24	0	20	154	334	336	72	4	14	746	15	104	135	0	9	254	1389
Grand Total	105	692	97	0	26	894	156	417	95	0	78	668	1090	1344	258	6	58	2698	66	333	508	2	28	909	5169
Approach%	11.7%	77.4%	10.9%	0%	-	-	23.4%	62.4%	14.2%	0%	-	-	40.4%	49.8%	9.6%	0.2%	-	-	7.3%	36.6%	55.9%	0.2%	-	-	-
Totals %	2%	13.4%	1.9%	0%	17.3%	3%	8.1%	1.8%	0%	12.9%	21.1%	26%	5%	0.1%	52.2%	1.3%	6.4%	9.8%	0%	17.6%	-	-	-		
PHF	0.85	0.87	0.69	0	0.92	0.81	0.91	0.85	0	0.88	0.82	0.95	0.81	0.38	0.9	0.92	0.8	0.94	0.5	0.89	0.93	-	-		
Heavy	5	21	7	0	33	3	15	4	0	22	22	58	6	0	86	3	17	12	0	32	173	-			
Heavy %	4.8%	3%	7.2%	0%	3.7%	1.9%	3.6%	4.2%	0%	3.3%	2%	4.3%	2.3%	0%	3.2%	4.5%	5.1%	2.4%	0%	3.5%	3.3%	-	-		
Lights	100	671	90	0	861	153	402	91	0	646	1068	1286	252	6	2612	63	316	496	2	877	4996	-			
Lights %	95.2%	97%	92.8%	0%	96.3%	98.1%	96.4%	95.8%	0%	96.7%	98%	95.7%	97.7%	100%	96.8%	95.5%	94.9%	97.6%	100%	96.5%	96.7%	-	-		
Single-Unit Trucks	5	9	1	0	15	2	11	4	0	17	20	32	6	0	58	1	8	7	0	16	106	-			
Single-Unit Trucks %	4.8%	1.3%	1%	0%	1.7%	1.3%	2.6%	4.2%	0%	2.5%	1.8%	2.4%	2.3%	0%	2.1%	1.5%	2.4%	1.4%	0%	1.8%	2.1%	-	-		
Buses	0	9	6	0	15	0	1	0	0	1	2	24	0	0	26	2	7	4	0	13	55	-			
Buses %	0%	1.3%	6.2%	0%	1.7%	0%	0.2%	0%	0%	0.1%	0.2%	1.8%	0%	0%	1%	3%	2.1%	0.8%	0%	1.4%	1.1%	-	-		
Articulated Trucks	0	3	0	0	3	1	3	0	0	4	0	2	0	0	2	0	2	1	0	3	12	-			
Articulated Trucks %	0%	0.4%	0%	0%	0.3%	0.6%	0.7%	0%	0%	0.6%	0%	0.1%	0%	0%	0.1%	0%	0.6%	0.2%	0%	0.3%	0.2%	-	-		
Pedestrians	-	-	-	-	26	-	-	-	-	76	-	-	-	58	-	-	-	-	-	27	-	-	-		
Pedestrians%	-	-	-	-	13.7%	-	-	-	-	40%	-	-	-	30.5%	-	-	-	-	-	14.2%	-	-	-		
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	2	-	-	-	0	-	-	-	-	-	1	-	-	-		
Bicycles on Crosswalk%	-	-	-	-	0%	-	-	-	-	1.1%	-	-	-	0%	-	-	-	-	-	0.5%	-	-	-		
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%	-	-	-	-		



Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (14.97 °C)

Start Time	N Approach HURONTARIO ST						E Approach QUEENSWAY W						S Approach HURONTARIO ST						W Approach QUEENSWAY W						Int. Total (15 min)
	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	Left	Thru	Right	UTurn	Peds	Approach Total	
2022-05-04 16:30:00	32	195	25	0	17	252	53	215	54	0	34	322	300	456	108	4	22	868	21	119	148	5	13	293	1735
2022-05-04 16:45:00	38	195	28	0	22	261	43	173	42	0	24	258	256	396	140	0	24	792	22	155	159	0	11	336	1647
2022-05-04 17:00:00	34	162	13	0	12	209	41	187	39	0	14	267	236	352	96	2	10	686	18	169	174	1	7	362	1524
2022-05-04 17:15:00	44	205	16	0	19	265	48	178	31	0	30	257	260	412	68	0	8	740	18	148	150	0	10	316	1578
Grand Total	148	757	82	0	70	987	185	753	166	0	102	1104	1052	1616	412	6	64	3086	79	591	631	6	41	1307	6484
Approach%	15%	76.7%	8.3%	0%	-	-	16.8%	68.2%	15%	0%	-	-	34.1%	52.4%	13.4%	0.2%	-	-	6%	45.2%	48.3%	0.5%	-	-	-
Totals %	2.3%	11.7%	1.3%	0%	15.2%	17%	2.9%	11.6%	2.6%	0%	17%	17%	16.2%	24.9%	6.4%	0.1%	47.6%	47.6%	1.2%	9.1%	9.7%	0.1%	20.2%	20.2%	-
PHF	0.84	0.92	0.73	0	0.93	0.86	0.87	0.88	0.77	0	0.86	0.86	0.88	0.89	0.74	0.38	0.89	0.89	0.9	0.87	0.91	0.3	0.9	0.93	0.93
Heavy	0	11	7	0	18	18	1	13	4	0	18	18	16	40	6	0	62	62	2	16	6	0	24	24	122
Heavy %	0%	1.5%	8.5%	0%	1.8%	1.6%	0.5%	1.7%	2.4%	0%	1.6%	1.6%	1.5%	2.5%	1.5%	0%	2%	2%	2.5%	2.7%	1%	0%	1.8%	1.8%	1.9%
Lights	148	746	75	0	969	969	184	740	162	0	1086	1086	1036	1576	406	6	3024	3024	77	575	625	6	1283	1283	6362
Lights %	100%	98.5%	91.5%	0%	98.2%	98.2%	99.5%	98.3%	97.6%	0%	98.4%	98.4%	98.5%	97.5%	98.5%	100%	98%	98%	97.5%	97.3%	99%	100%	98.2%	98.2%	98.1%
Single-Unit Trucks	0	2	2	0	4	4	1	8	3	0	12	12	6	18	4	0	28	28	0	11	4	0	15	15	59
Single-Unit Trucks %	0%	0.3%	2.4%	0%	0.4%	0.4%	0.5%	1.1%	1.8%	0%	1.1%	1.1%	0.6%	1.1%	1%	0%	0.9%	0.9%	0%	1.9%	0.6%	0%	1.1%	1.1%	0.9%
Buses	0	8	5	0	13	13	0	4	0	0	4	4	8	22	0	0	30	30	2	5	2	0	9	9	56
Buses %	0%	1.1%	6.1%	0%	1.3%	1.3%	0%	0.5%	0%	0%	0.4%	0.4%	0.8%	1.4%	0%	0%	1%	1%	2.5%	0.8%	0.3%	0%	0.7%	0.7%	0.9%
Articulated Trucks	0	1	0	0	1	1	0	1	1	0	2	2	2	0	2	0	4	4	0	0	0	0	0	0	7
Articulated Trucks %	0%	0.1%	0%	0%	0.1%	0.1%	0%	0.1%	0.6%	0%	0.2%	0.2%	0%	0.5%	0%	0%	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0.1%
Pedestrians	-	-	-	-	69	69	-	-	-	-	96	96	-	-	-	-	64	64	-	-	-	-	39	39	-
Pedestrians%	-	-	-	-	24.9%	24.9%	-	-	-	-	34.7%	34.7%	-	-	-	-	23.1%	23.1%	-	-	-	-	14.1%	14.1%	-
Bicycles on Crosswalk	-	-	-	-	1	1	-	-	-	-	6	6	-	-	-	-	0	0	-	-	-	-	2	2	-
Bicycles on Crosswalk%	-	-	-	-	0.4%	0.4%	-	-	-	-	2.2%	2.2%	-	-	-	-	0%	0%	-	-	-	-	0.7%	0.7%	-
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%	-	-	-

Peak Hour: 08:00 AM - 09:00 AM Weather: Moderate Rain (10.37 °C)



Peak Hour: 01:00 PM - 02:00 PM Weather: Overcast Clouds (11.91 °C)



Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (14.97 °C)





APPENDIX D

Background Developments

The trip distribution for the subject site for the weekday a.m. and p.m. peak hours is shown in **Figure 14**, with the site trip assignment provided in **Figure 15**.

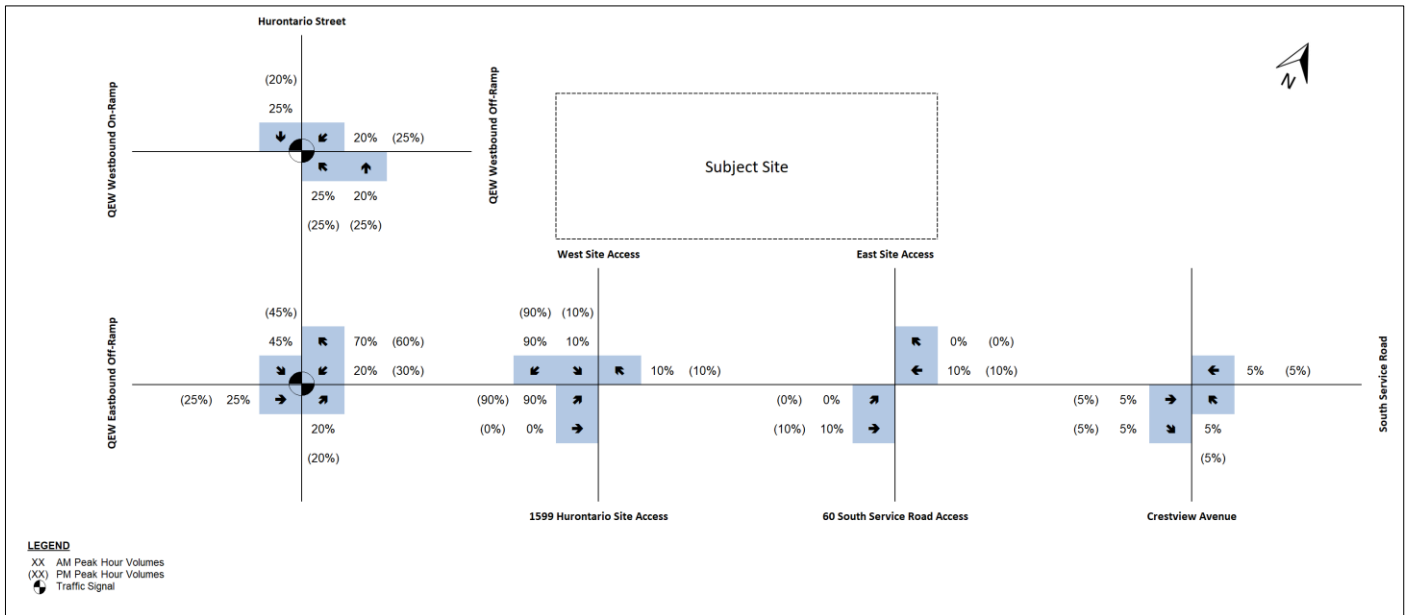


Figure 14 Trip Distribution

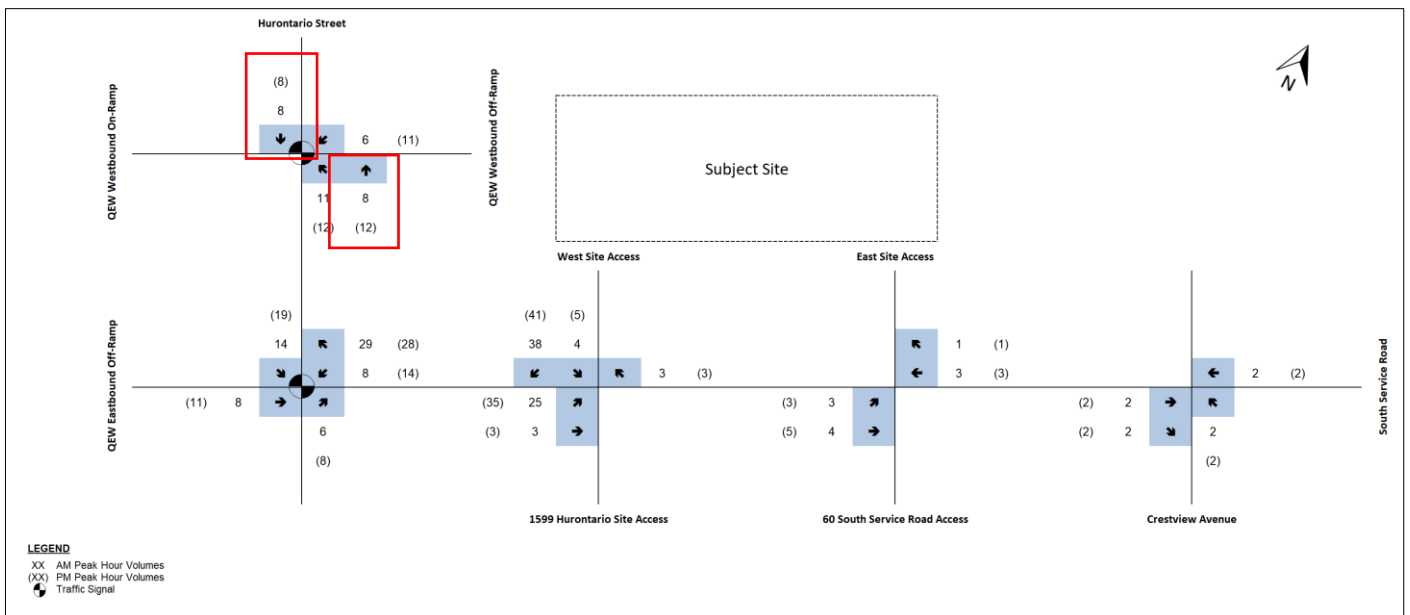
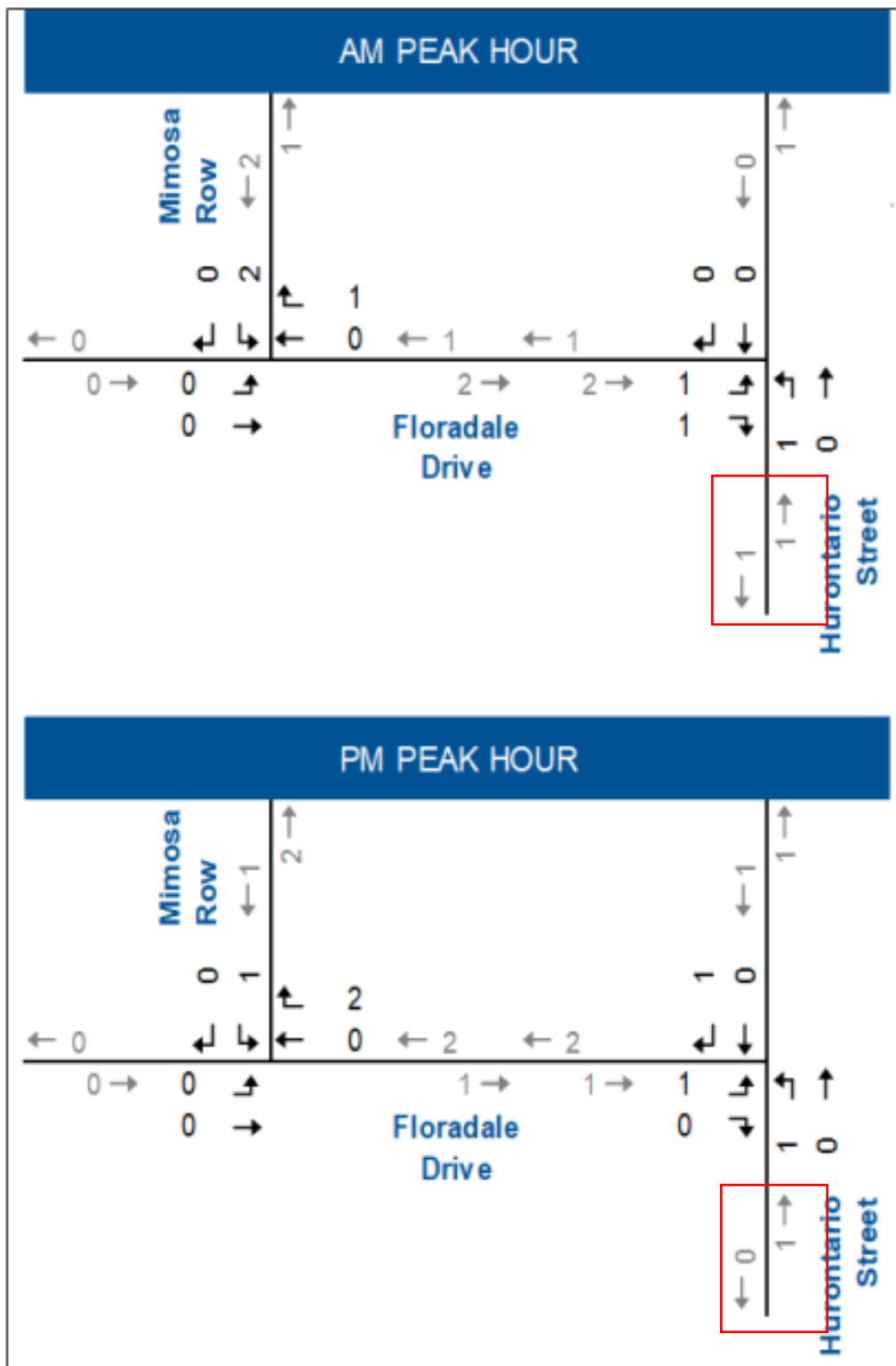


Figure 15 Total Site Trips



Site Generated Traffic Volume

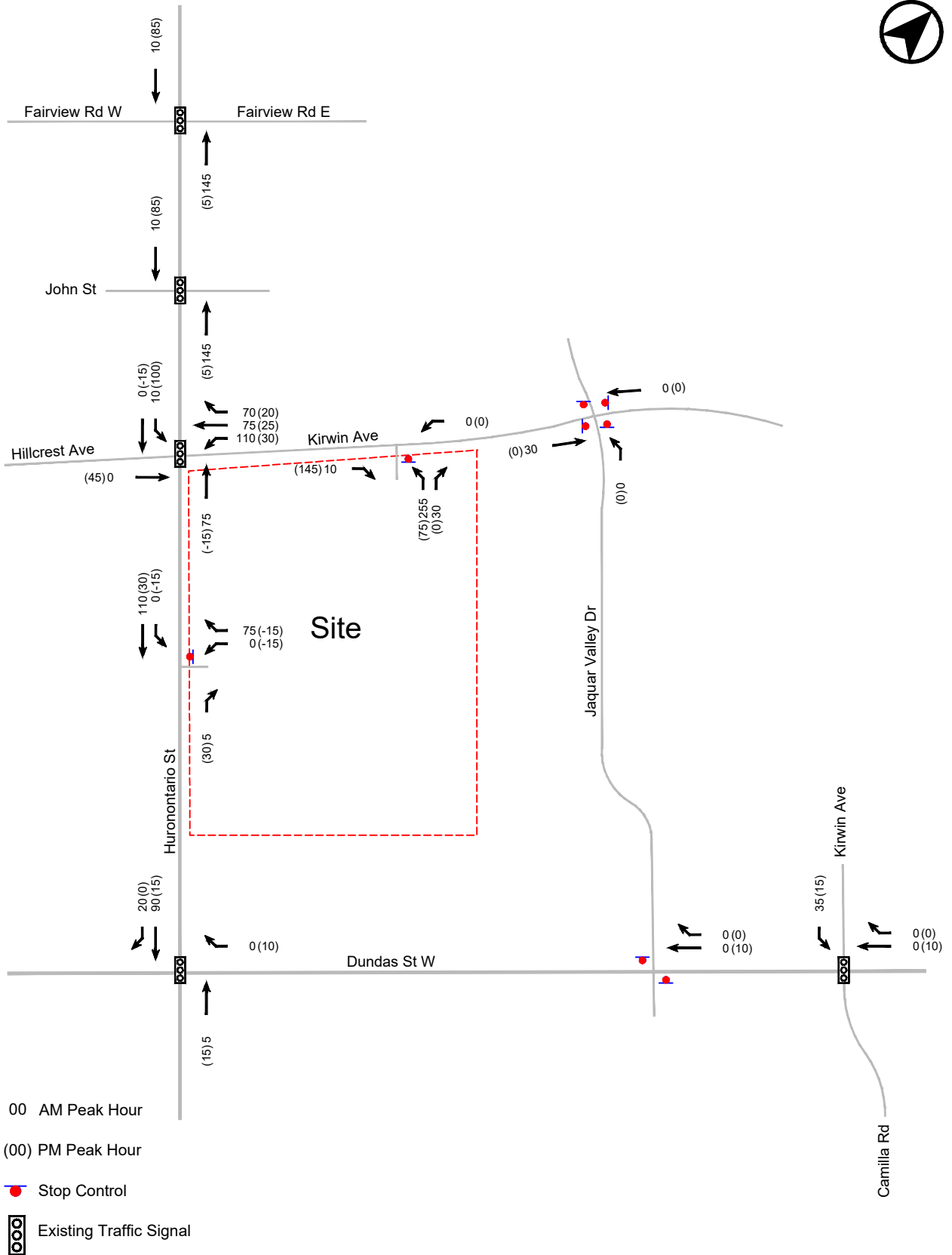


FIGURE 14 NET NEW SITE TRAFFIC VOLUMES

- **Figure 6** – Access Option 1 site traffic volumes for residential component
- **Figure 7** – Access Option 1 site traffic volumes for non-residential component
- **Figure 8** – Access Option 2 site traffic volumes for residential component
- **Figure 9** – Access Option 2 site traffic volumes for non-residential component

Figure 6 – Site Traffic Volumes for Residential Component Access Option 1

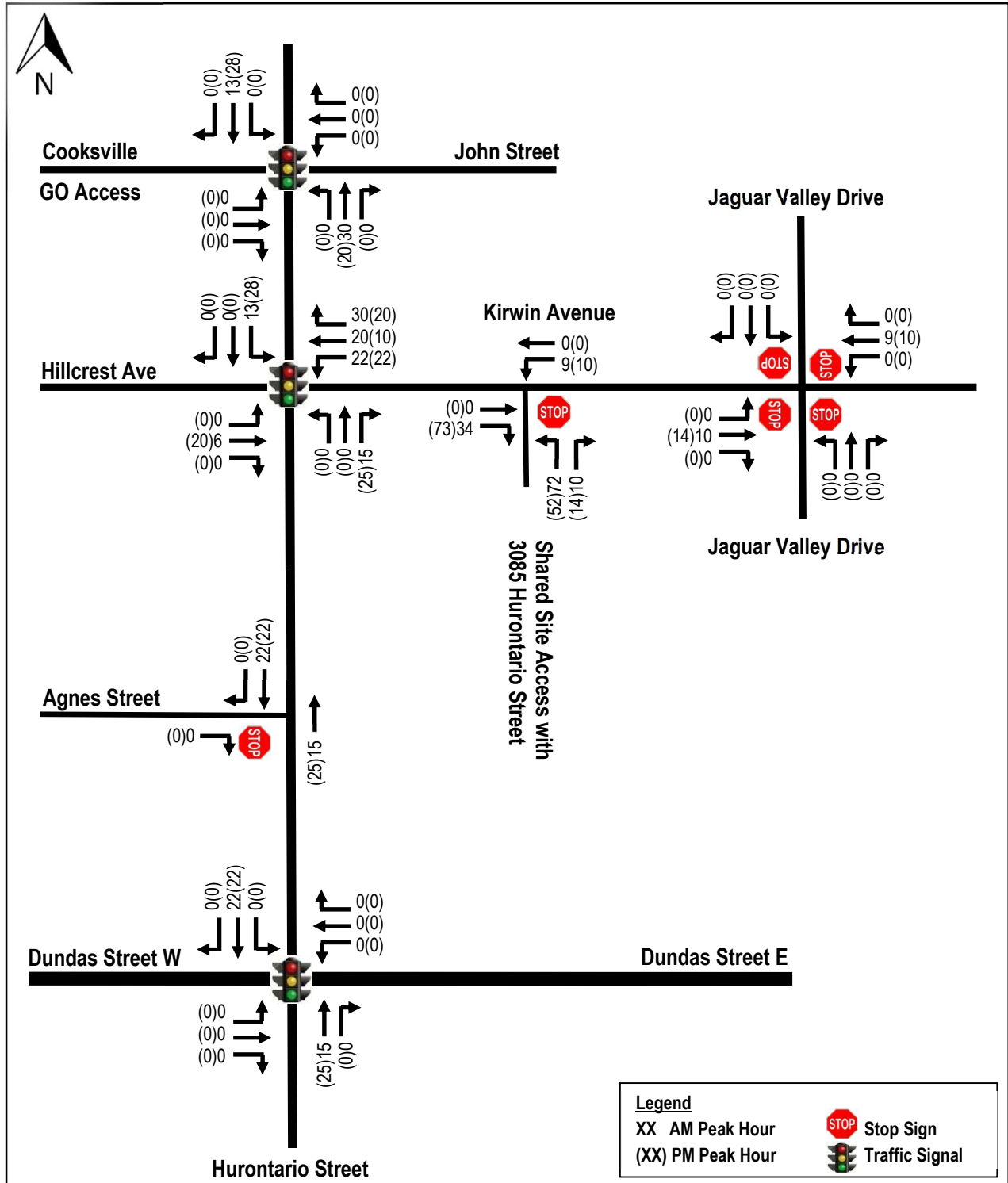


Figure 7 – Site Traffic Volumes for Residential Component Access Option 2

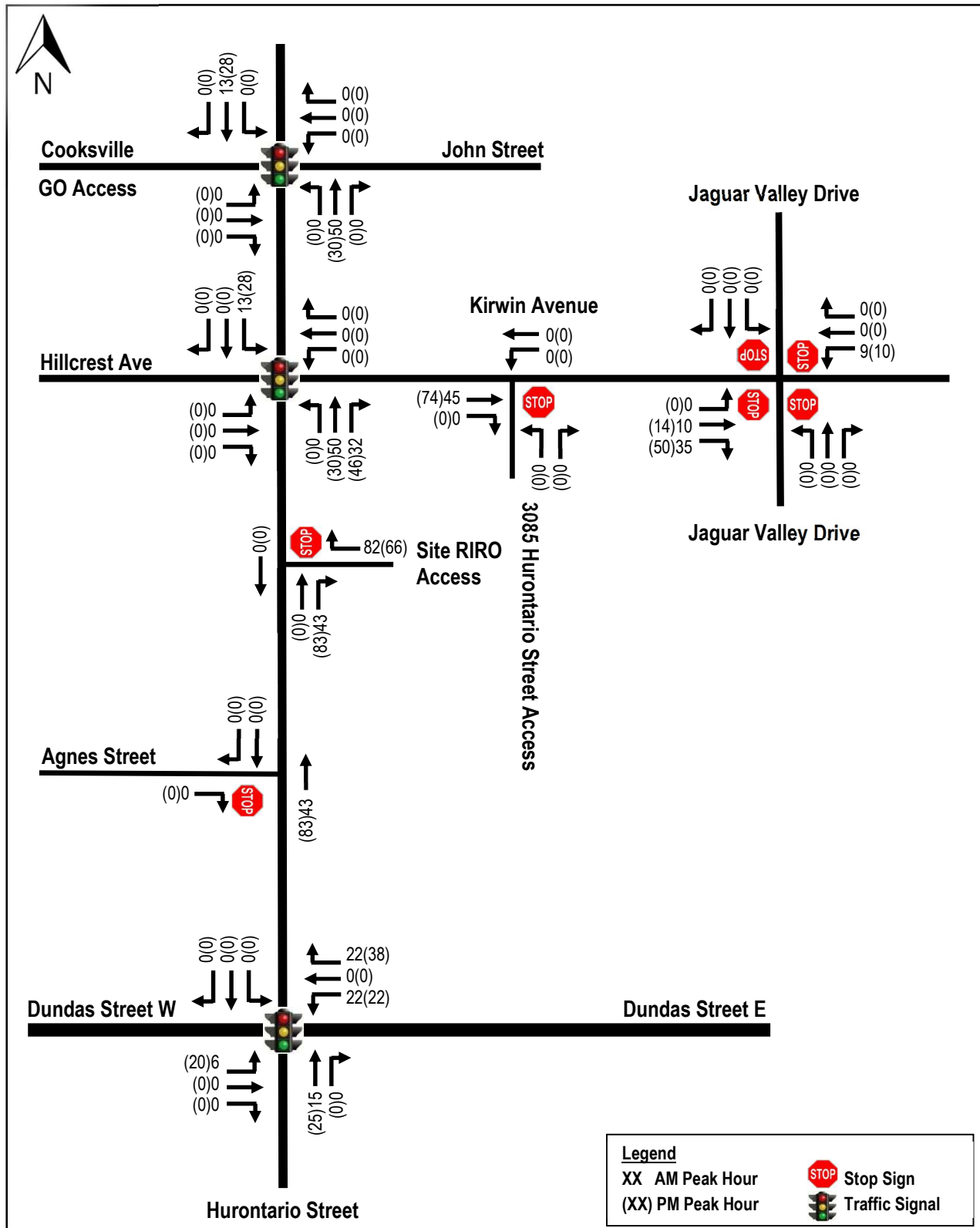


Figure 8 – Site Traffic Volumes for Non-Residential Component Access Option 1

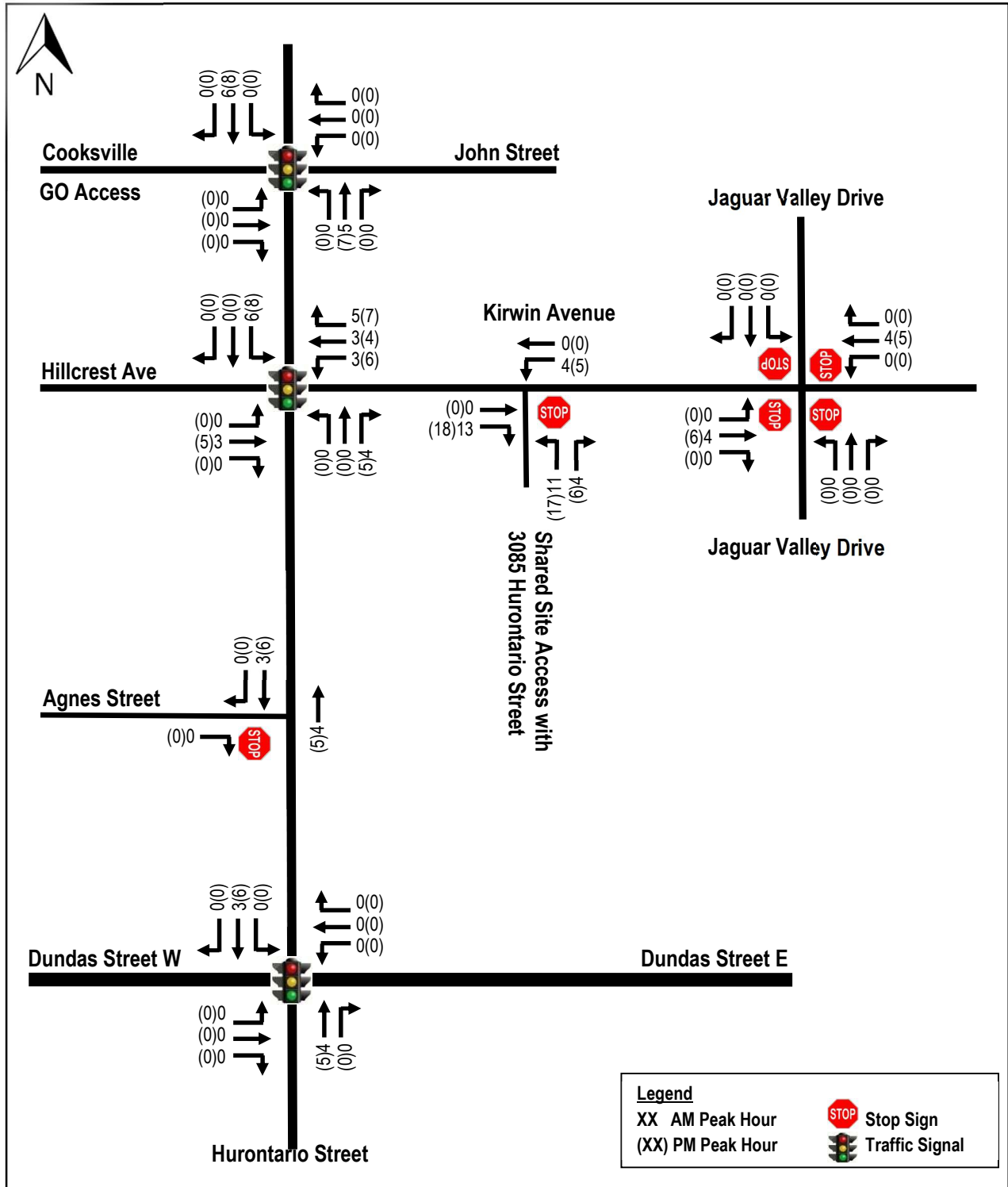
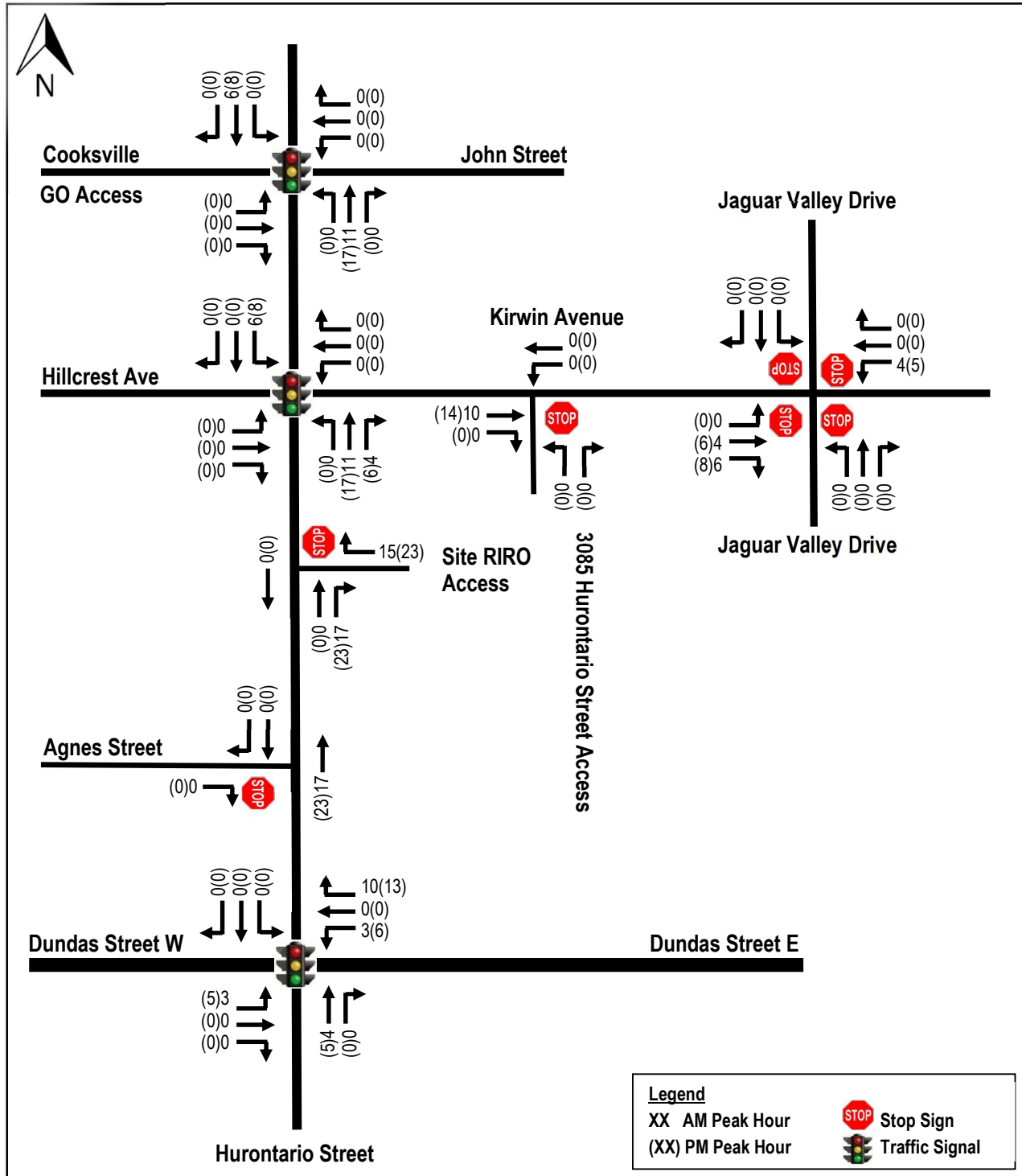


Figure 9 – Site Traffic Volumes for Non-Residential Component Access Option 2



4.0 EXISTING CONDITION ASSESSMENT

4.1. Setting Targets

It is our understanding that the Ontario Traffic Council Multimodal Level of Service (MMLoS) Guidelines provide a framework for practitioners to consider and document the context in which transportation projects occur, including, but

Date Plotted: May 31, 2022 Filename: P:\69\92\117\Graphics\CAD\Fig18-00-NNST.dwg

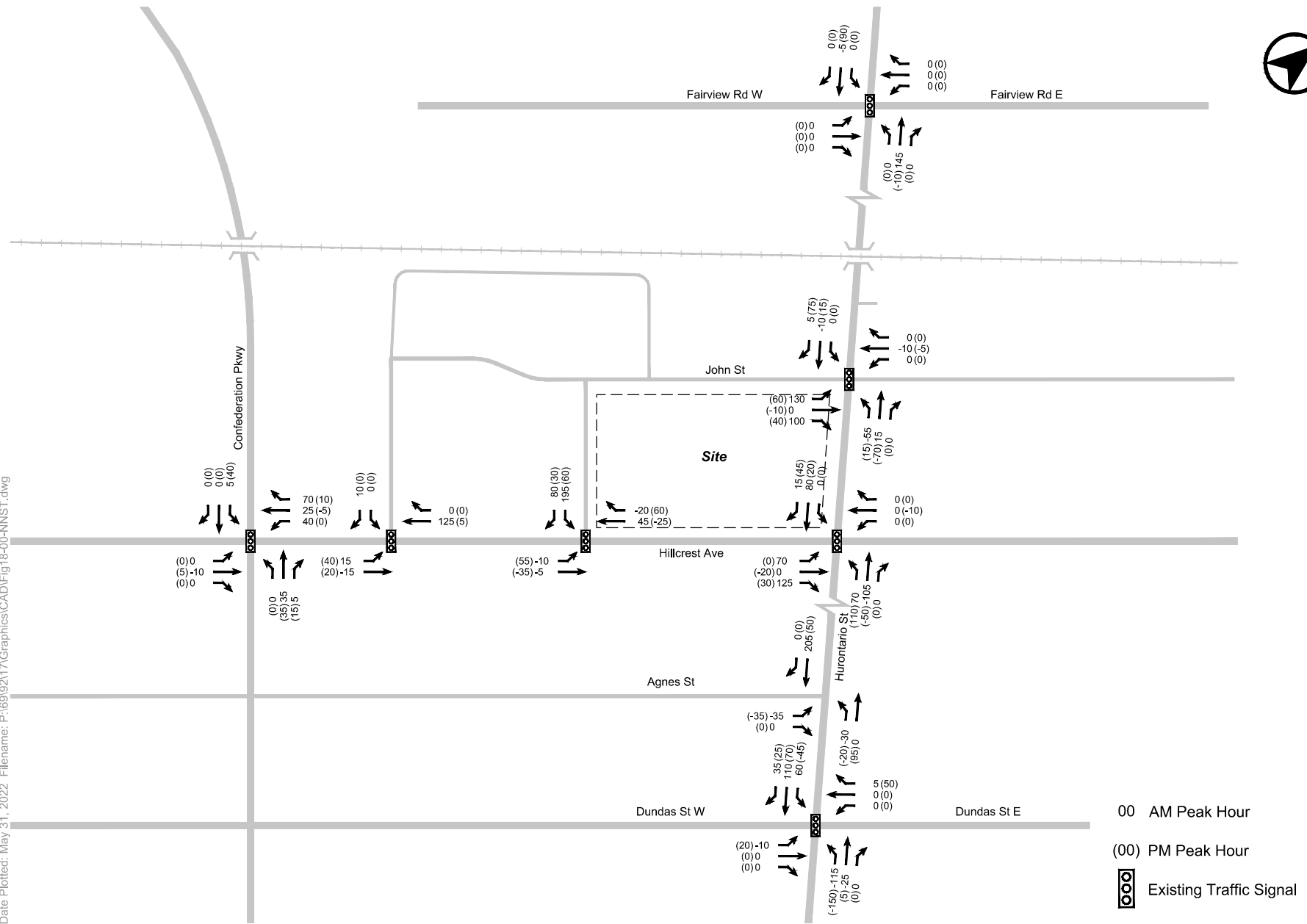


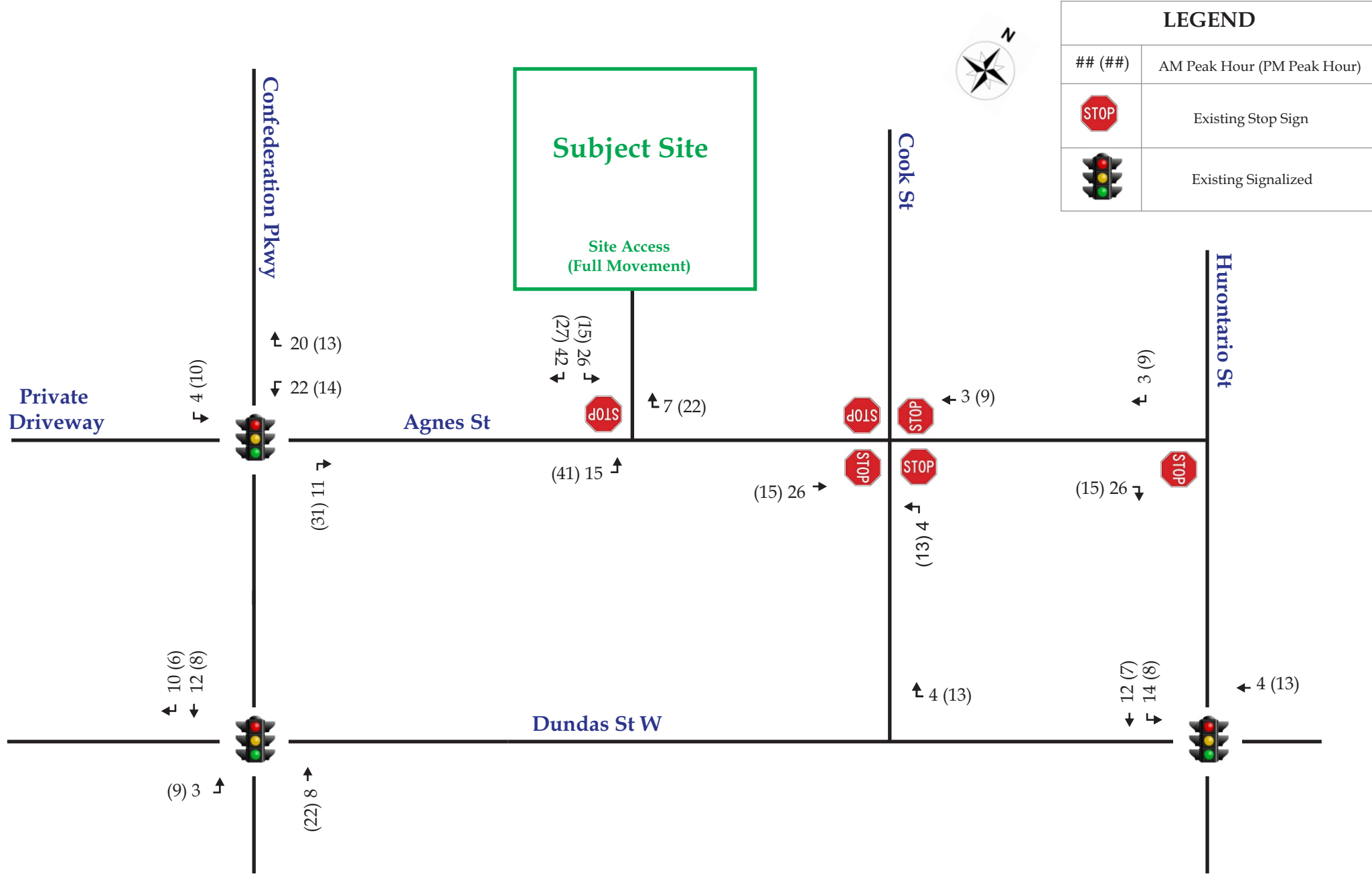


FIGURE 18 NET NEW SITE TRAFFIC VOLUMES - EXTERNAL

LEGEND	
## (##)	AM Peak Hour (PM Peak Hour)
	Existing Stop Sign
	Existing Signalized



Schematic
Not To Scale

Figure 8 - Site Generated Traffic Volumes



APPENDIX E

TTS 2022 Modal Split Data

Mode Split for Residential Trips

Tue Feb 10 2026 14:46:22 GMT-0500 (Eastern Standard Time) - Run Time: 4739ms

Cross Tabulation Query Form - Trip - 2022

Row: Type of dwelling unit - dwell_type

Column: Primary travel mode of trip - mode_prime

Filters:

(2022 TTS zone of household - tts22_hhld In 4602, 4603, 4607, 4609, 4615, 4625, 4626, 4627, 4628, 4633, 4642, 4643, 4644, 4645

and

Trip purpose - trip_purp In 1-3)

Trip 2022

Table:

	Transit excluding GO rail	Cycle	Auto driver	GO rail only	Joint GO rail and local transit	Auto passenger	School bus	Taxi passenger	Paid rideshare	Walk
House	0	0	189	0	0	71	0	0	0	57
Apartment	4388	227	12569	114	216	3697	891	303	38	3732
Townhouse	0	0	104	5	5	15	0	0	0	16
Townhouse	4388	227	12862	119	221	3783	891	303	38	3805
									GRAND SUM	26637

Mode	%
Auto Driver	48%
Passenger	15%
Paid Rideshare/Taxi	1%
Transit	21%
Pedestrian	14%
Cycling	1%
Total	100%

Mode Split for Retail Trips

Wed Feb 11 2026 10:34:51 GMT-0500 (Eastern Standard Time) - Run Time: 4099ms

Cross Tabulation Query Form - Trip - 2022

Row: Type of dwelling unit - dwell_type

Column: Primary travel mode of trip - mode_prime

Filters:

(2022 TTS zone of household - tts22_hhld In 4602, 4603, 4607, 4609, 4615, 4625, 4626, 4627, 4628, 4633, 4642, 4643, 4644, 4645

and

Trip purpose - trip_purp In 1,3,4

Trip 2022

Table:

	Transit excluding GO rail	Cycle	Auto driver	GO rail only	Joint GO rail and local transit	Auto passenger	Taxi passenger	Paid rideshare	Walk
House	0	0	208	0	0	27	0	0	57
Apartment	4290	176	13926	119	231	2616	303	38	3149
Townhouse	0	0	109	0	0	10	0	0	11
Sum	4290	176	14243	119	231	2653	303	38	3217
								GRAND SUM	25270

Mode	%
Auto Driver	56%
Passenger	11%
Paid Rideshare/Taxi	1%
Transit	18%
Pedestrian	13%
Cycling	1%
Total	100%

Table B.1 Baseline Weekday AM Peak Period Mode Share and Vehicle Occupancy Examples

Land Use	Location	Area Type ¹	Development Units ²	ITE LUC	Inbound										Outbound										Sample Size	Source
					Mode Shares					Vehicle Occ.	Mode Shares					Vehicle Occ.										
					Personal Passenger Vehicle	Truck	Walk	Transit	Bike		Personal Passenger Vehicle	Truck	Walk	Transit	Bike											
Apartments	Falmouth, ME	5	173 DU	220	82	18	0	0	0	0	1.22	23	98	2	0	0	0	0	0	0	1.10	128	Kevin Hooper Assoc.			
Apartments	Mt. Pleasant, SC	6	240 DU	220	92	0	8	0	0	0	1.02	49	96	0	4	0	0	0	0	0	1.06	126	betis, Inc.			
Apartments	Oklahoma City, OK	6	360 DU	220	88	12	0	0	0	0	1.05	39	99	1	0	0	0	0	0	0	1.07	145	Traffic Engr. Consultants			
Apartments	Tampa, FL	6	278 DU	220	93	6	0	0	0	1	1.14	46	95	2	1	0	2	1	0	2	1.14	153	Parsons Brinkerhoff			
Apartments	Tampa, FL	6	317 DU	220	90	2	6	2	0	0	1.23	40	97	1	1	0	1	0	1	0	1.09	158	Parsons Brinkerhoff			
Apartments	Tampa, FL	6	689 DU	220	90	4	6	0	0	0	1.12	73	96	0	3	0	1	0	1	0	1.08	314	Parsons Brinkerhoff			
Simple average					89.2	7.0	3.3	0.3	0.2	0.2	1.13		96.8	1.0	1.5	0.0	0.7									
Motel	College Station, TX	5	133 rooms	320	91	3	3	3	0	0	1.29	33	96	1	2	1	0	0	0	0	1.32	116	Texas A&M University			
Motel	College Station, TX	5	68 rooms	320	90	0	10	0	0	0	1.21	19	95	5	0	0	0	0	0	0	1.25	77	Texas A&M University			
Motel	College Station, TX	5	79 rooms	320	96	0	4	0	0	0	1.29	23	99	1	0	0	0	0	0	0	1.20	66	Texas A&M University			
Simple average					92.3	1.0	5.7	1.0	0.0	0.0	1.26		96.7	2.3	0.7	0.3	0.0									
Bowling alley	College Station, TX	5	73,000	437	94.0	3	3	0	0	0	1.13	71	100	0	0	0	0	0	0	0	1.00	8	TX A&M Transp. Inst.			
Simple average					94.0	3.0	3.0	0.0	0.0	0.0	1.13		100.0	0.0	0.0	0.0	0.0									
Office	Falmouth, ME	6	178,000	710	97	2	0	1	0	0	1.06	438	90	10	0	0	0	0	0	0	1.06	39	Kevin Hooper Assoc.			
Simple average					97.0	2.0	0.0	1.0	0.0	0.0	1.06		90.0	10.0	0.0	0.0	0.0									
Shopping center ³	Bryan, TX	5	110,000	820	100	0	0	0	0	0	1.19	179	100	0	0	0	0	0	0	0	1.19	130	TX A&M Transp. Inst.			
Shopping center ³	College Station, TX	5	116,000	820	100	0	0	0	0	0	1.14	233	100	0	0	0	0	0	0	0	1.13	210	TX A&M Transp. Inst.			
Simple average					100.0	0.0	0.0	0.0	0.0	0.0	1.17		100.0	0.0	0.0	0.0	0.0									

¹ Area types: (0a) regional CBD, (0b) outlying CBD, (1) urban core, (2) activity center, (3) general urban, (4) suburban business district, (5) suburban strip commercial, (6) general suburban, (7) special district, (8) rural town business district, (9) rural, (C) adjacent to university campus, (M) within larger mixed-use development, (ra) rail transit station within 1/4 mile, (to) rail station immediately adjacent or connected-TOD

² Development units in gross square feet of floor area unless otherwise indicated. Italics denote occupied development units.

³ Anchored by large grocery store.

Table B.2 Baseline Weekday PM Peak Period Mode Share and Vehicle Occupancy Examples

Land Use	Location	Area Type ¹	Development Units ²	ITE LUC	Inbound						Outbound						Sample Size	Vehicle Occ.	Sample Size	Source
					Mode Shares			Mode Shares			Mode Shares			Mode Shares						
					Personal Passenger Vehicle	Truck	Walk	Transit	Bike	Vehicle Occ.	Personal Passenger Vehicle	Truck	Walk	Transit	Bike	Vehicle Occ.				
Apartments	Falmouth, ME	5	173 DU	220	96	3	1	0	0	1.15	126	96	4	0	0	0	0	1.14	189	Kevin Hooper/Assoc.
Apartments	Mt. Pleasant, SC	6	240 DU	220	93	1	4	1	1	1.15	124	87	1	12	0	0	0	1.08	68	Iteris, Inc.
Apartments	Oklahoma City, OK	6	360 DU	220	100	0	0	0	0	1.10	186	99	1	0	0	0	0	1.24	78	Traffic Engr. Consultants
Apartments	Tampa, FL	6	278 DU	220	97	1	1	0	1	1.20	138	97	2	1	0	0	0	1.30	58	Parsons Brinkerhoff
Apartments	Tampa, FL	6	317 DU	220	98	0	1	0	1	1.14	614	96	0	3	0	1	0	1.26	96	Parsons Brinkerhoff
Apartments	Tampa, FL	6	689 DU	220	94	1	4	0	1	1.14	317	93	1	5	0	1	1.22	190	Parsons Brinkerhoff	
Sample average					96.3	1.0	1.8	0.2	0.7	1.15		94.7	1.5	3.5	0.0	0.3	1.21			
Motel	College Station, TX	5	133 rooms	320	94	2	4	0	0	1.33	67	98	2	0	0	0	0	1.55	51	Texas A&M University
Motel	College Station, TX	5	69 rooms	320	93	7	0	0	0	1.12	28	87	7	0	0	0	0	1.08	15	Texas A&M University
Motel	College Station, TX	5	79 rooms	320	100	0	0	0	0	1.47	44	100	0	0	0	0	0	1.26	29	Texas A&M University
Sample average					95.7	3.0	1.3	0.0	0.0	1.31		95.0	3.0	2.3	0.0	0.0	1.30			
Bowling alley	College Station, TX	5	75,000	437	100	0	0	0	0	1.27	75	100	0	0	0	0	0	1.33	27	TX A&M Transp. Inst.
Sample average					100	0	0	0	0	1.27		100	0	0	0	0	0	1.33		
Office	Falmouth, ME	6	178,000	710	96	4	0	0	0	1.11	47	98	1	1	0	0	0	1.07	452	Kevin Hooper/Assoc.
Sample average					96	4	0	0	0	1.11		98	1	1	0	0	0	1.07		
Shopping center ³	Bryan, TX	5	153,000	820	100	0	0	0	0	1.19	198	100	0	0	0	0	0	1.19	229	TX A&M Transp. Inst.
Shopping center ³	Bryan, TX	5	110,000	820	100	0	0	0	0	1.22	666	100	0	0	0	0	0	1.20	498	TX A&M Transp. Inst.
Shopping center ³	College Station, TX	5	116,000	820	100	0	0	0	0	1.21	362	100	0	0	0	0	0	1.23	274	TX A&M Transp. Inst.
Shopping center ³	Mt. Pleasant, SC	5	68,000	820	100	0	0	0	0	1.27	286	100	0	0	0	0	0	1.16	258	Iteris, Inc.
Shopping center ³	Falmouth, ME	6	48,800	820	100	0	0	0	0	1.16	665	99	1	0	0	0	0	1.14	663	Kevin Hooper/Assoc.
Sample average					100	0	0	0	0	1.21		99.8	0.2	0	0	0	0	1.18		
Bank	Prospect, KY	5	2,500	912	100	0	0	0	0	1.11	19	100	0	0	0	0	0	1.16	21	Jacobs Engr. Group
Sample average					100	0	0	0	0	1.11		100	0	0	0	0	0	1.16		
Quality restaurant	Oklahoma City, OK	6	5,000	931	100	0	0	0	0	1.62	105	100	0	0	0	0	0	1.52	54	Traffic Engr. Consultants
High turn restaurant	Mt. Pleasant, SC	6	8,150	932	100	0	0	0	0	1.33	151	97	3	0	0	0	0	1.34	39	Iteris, Inc.
Drive-thru restaurant	Prospect, KY	5	2,800	934	96	0	4	0	0	1.27	135	96	0	4	0	0	0	1.30	139	Jacobs Engr. Group
Sample average					98.7	0.0	1.3	0.0	0.0	1.41		97.7	1.0	1.3	0.0	0.0	1.39			

¹ Area types: (0a) regional CBD, (0b) outlying CBD, (1) urban core, (2) activity center, (3) general urban, (4) suburban business district (5) suburban strip commercial, (6) general suburban, (7) special district, (8) rural town business district, (9) rural, (C) adjacent to university campus, (M) within larger mixed-use development, (Ta) rail transit station within 1/4 mile, (To) rail station immediately adjacent or connected-TOD

² Development units in gross square feet of floor area unless otherwise indicated. Italics denote occupied development units.

³ Anchored by discount store.

⁴ Anchored by grocery store comprising major portion of total floor area.



**Table 6.1 Unconstrained Internal Person Trip Capture Rates
for Trip Origins within a Mixed-Use Development**

		WEEKDAY	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Retail	28%	20%
	To Restaurant	63%	4%
	To Cinema/Entertainment	0%	0%
	To Residential	1%	2%
	To Hotel	0%	0%
From RETAIL	To Office	29%	2%
	To Restaurant	13%	29%
	To Cinema/Entertainment	0%	4%
	To Residential	14%	26%
	To Hotel	0%	5%
From RESTAURANT	To Office	31%	3%
	To Retail	14%	41%
	To Cinema/Entertainment	0%	8%
	To Residential	4%	18%
	To Hotel	3%	7%
From CINEMA/ENTERTAINMENT	To Office	0%	2%
	To Retail	0%	21%
	To Restaurant	0%	31%
	To Residential	0%	8%
	To Hotel	0%	2%
From RESIDENTIAL	To Office	2%	4%
	To Retail	1%	42%
	To Restaurant	20%	21%
	To Cinema/Entertainment	0%	0%
	To Hotel	0%	3%
From HOTEL	To Office	75%	0%
	To Retail	14%	16%
	To Restaurant	9%	68%
	To Cinema/Entertainment	0%	0%
	To Residential	0%	2%

Source: Bochner, B., K. Hooper, B. Sperry, and R. Dunphy. NCHRP Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments*. Washington, DC: Transportation Research Board, Tables 99 and 100, 2011.

**Table 6.2 Unconstrained Internal Person Trip Capture Rates
for Trip Destinations within a Mixed-Use Development**

		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Retail	4%	31%
	From Restaurant	14%	30%
	From Cinema/Entertainment	0%	6%
	From Residential	3%	57%
	From Hotel	3%	0%
To RETAIL	From Office	32%	8%
	From Restaurant	8%	50%
	From Cinema/Entertainment	0%	4%
	From Residential	17%	10%
	From Hotel	4%	2%
To RESTAURANT	From Office	23%	2%
	From Retail	50%	29%
	From Cinema/Entertainment	0%	3%
	From Residential	20%	14%
	From Hotel	6%	5%
To CINEMA/ENTERTAINMENT	From Office	0%	1%
	From Retail	0%	26%
	From Restaurant	0%	32%
	From Residential	0%	0%
	From Hotel	0%	0%
To RESIDENTIAL	From Office	0%	4%
	From Retail	2%	46%
	From Restaurant	5%	16%
	From Cinema/Entertainment	0%	4%
	From Hotel	0%	0%
To HOTEL	From Office	0%	0%
	From Retail	0%	17%
	From Restaurant	4%	71%
	From Cinema/Entertainment	0%	1%
	From Residential	0%	12%

Source: Bochner, B., K. Hooper, B. Sperry, and R. Dunphy. NCHRP Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments*. Washington, DC: Transportation Research Board, Tables 101 and 102, 2011.

Multifamily Housing (High-Rise) Not Close to Rail Transit (222)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 23

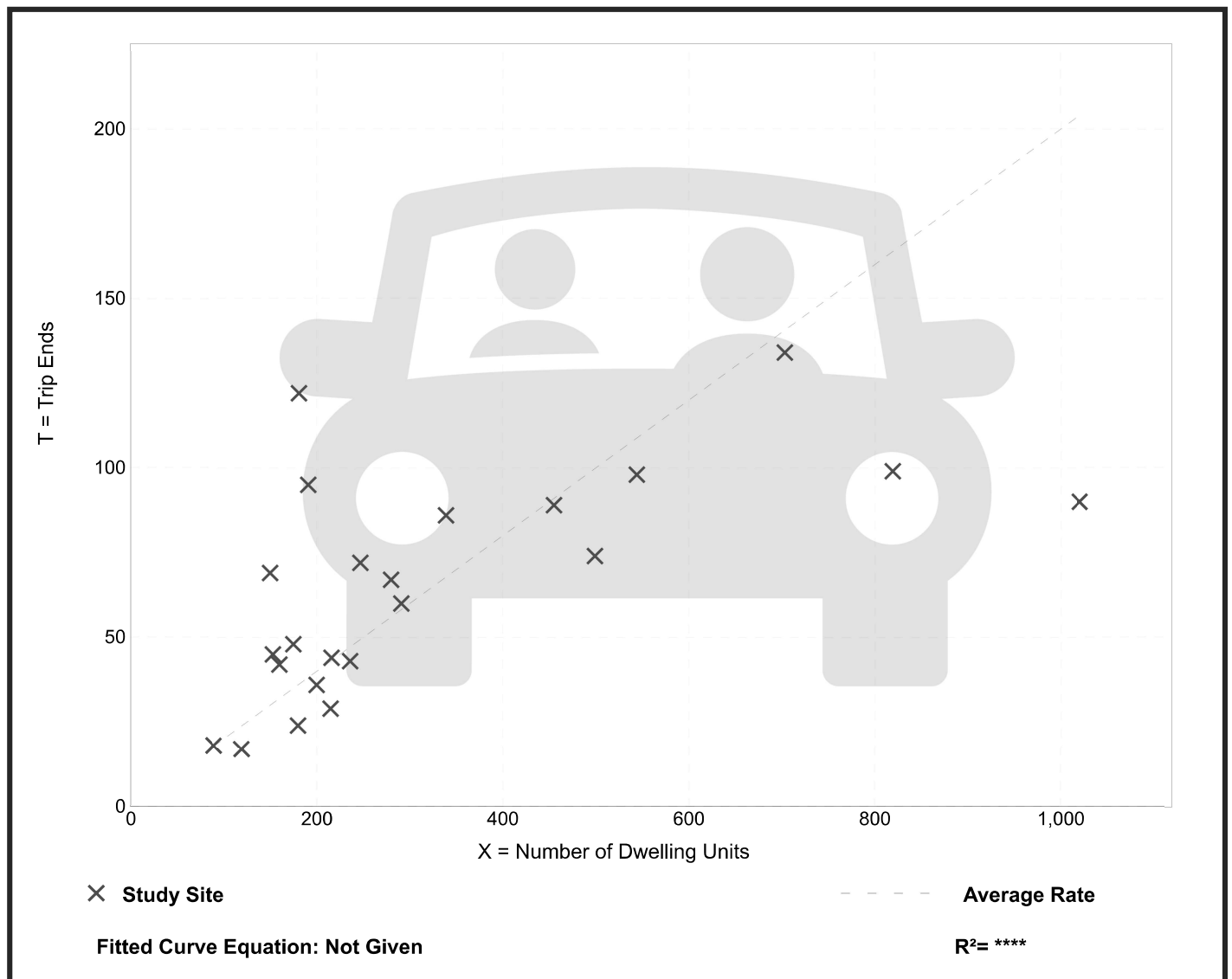
Avg. Num. of Dwelling Units: 324

Directional Distribution: 29% entering, 71% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.20	0.09 - 0.67	0.12

Data Plot and Equation



Multifamily Housing (High-Rise) Not Close to Rail Transit (222)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 23

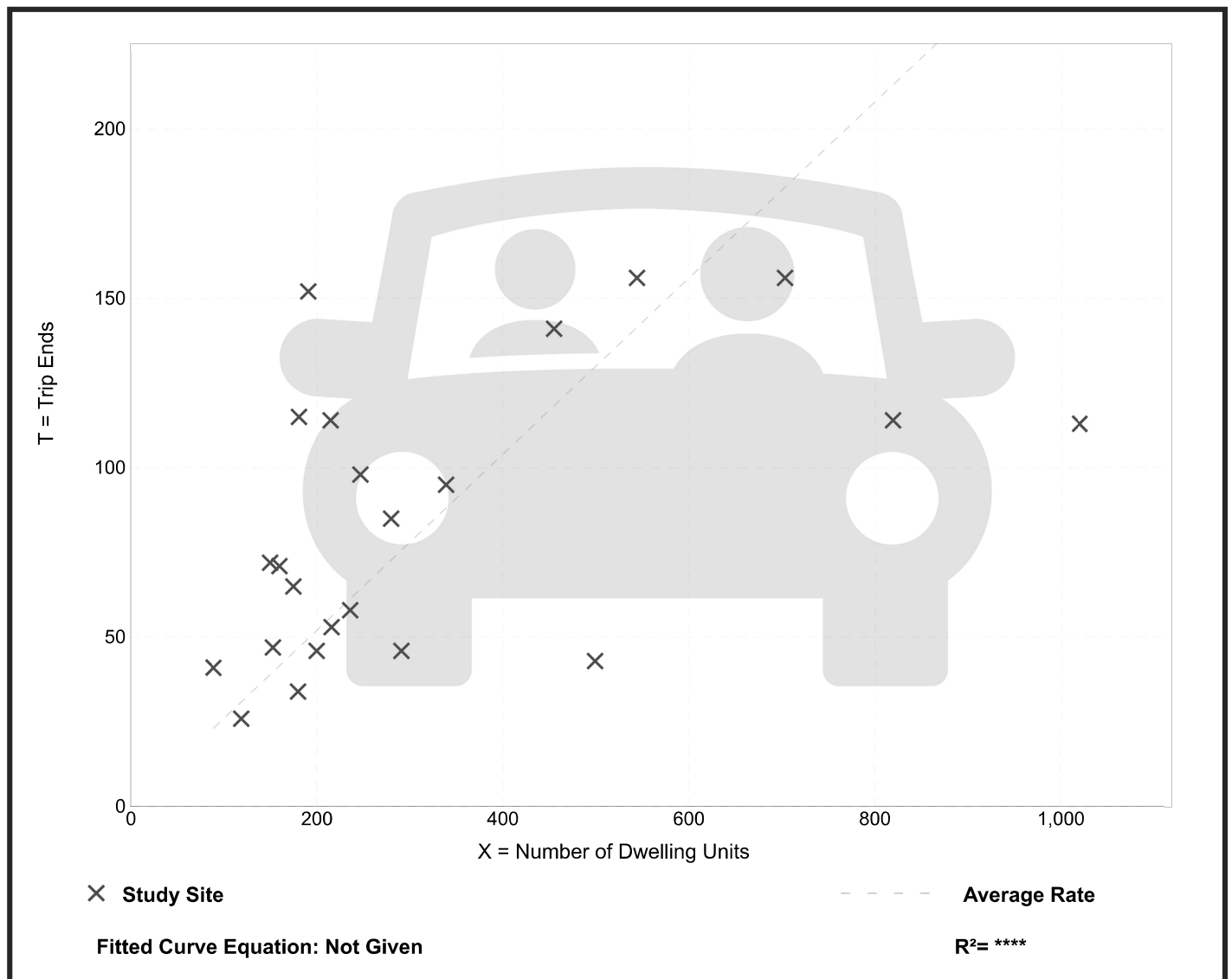
Avg. Num. of Dwelling Units: 324

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.26	0.09 - 0.80	0.16

Data Plot and Equation



Strip Retail Plaza (<40k)

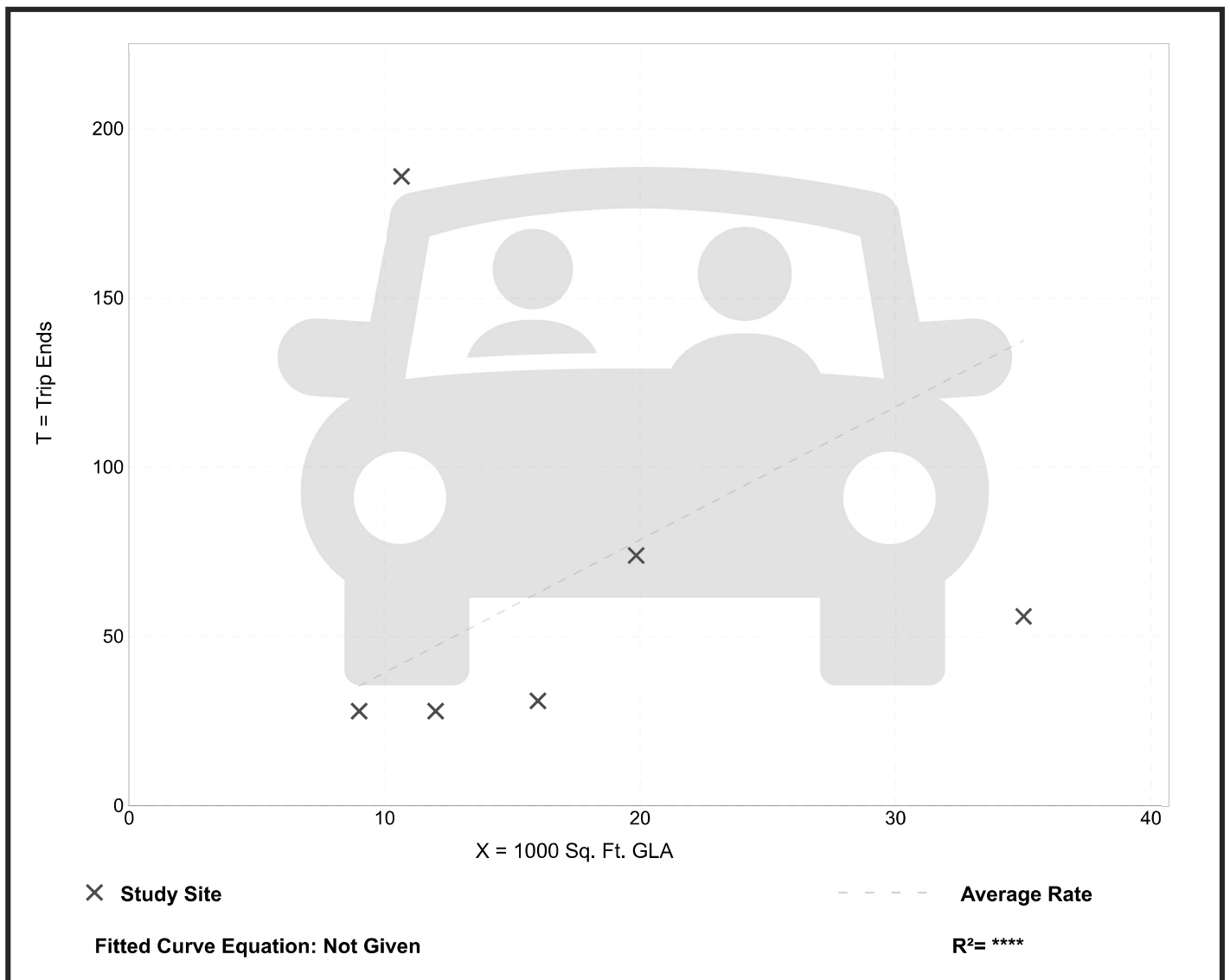
(822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 6
 Avg. 1000 Sq. Ft. GLA: 17
 Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.93	1.60 - 17.44	5.12

Data Plot and Equation



Strip Retail Plaza (<40k)

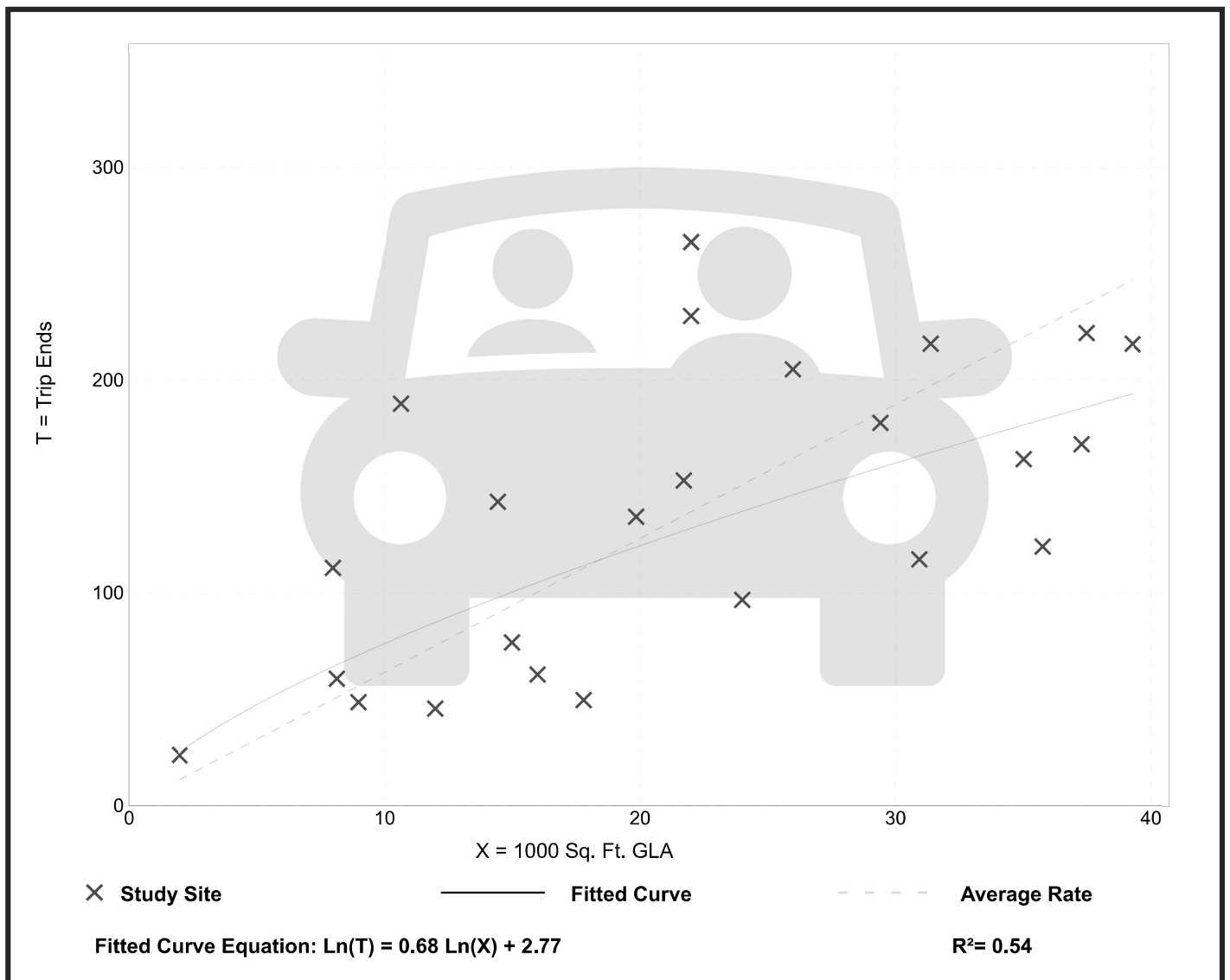
(822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 24
 Avg. 1000 Sq. Ft. GLA: 22
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.29	2.81 - 17.72	3.02

Data Plot and Equation





APPENDIX F

TTS 2022 Trip Distribution Data

Thu Feb 12 2026 16:31:38 GMT-0500 (Eastern Standard Time) - Run Time: 3640ms

Cross Tabulation Query Form - Trip - 2022

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

Filters:
 (2022 TTS zone of destination - tts22_dest In 4602, 4603, 4607, 4609, 4615, 4625, 4626, 4627, 4628, 4633, 4642, 4643, 4644, 4645
 and
 Start time of trip - start_time In 1500-1900
 and
 2022 Trip purpose of destination - purp_dest2022 In 80
 and
 Primary travel mode of trip - mode_prime In D, M, P, T, U,)

Trip 2022

Table:

Origin	Destination						Trips From Origin	Trip Distribution				Trip Assignment				
	4603	4607	4625	4626	4627	4633		4642	Distribution	Direction From	From East	From West	From North	From South	Hwy	Assignment
PD 1 of Toronto	35	10	25	56	0	0	0	126	3%	E	3%				Gardiner, QEW	NB Hurontario
PD 2 of Toronto	0	10	0	0	120	0	0	130	3%	E	3%				Gardiner, QEW	NB Hurontario
PD 7 of Toronto	0	0	0	112	0	0	0	112	3%	E	3%				Gardiner, QEW	NB Hurontario
PD 8 of Toronto	23	0	0	0	22	39	52	136	3%	E	3%				427, Gardiner, QEW	NB Hurontario
PD 9 of Toronto	0	0	90	0	0	0	0	90	2%	E	2%				401, 427, Gardiner, QEW	NB Hurontario
PD 16 of Toronto	0	0	80	0	0	0	0	80	2%	E	2%				401, 427, Gardiner, QEW	NB Hurontario
Markham	0	32	0	0	0	0	0	32	1%	E	1%				407, 427, Gardiner, QEW	NB Hurontario
Vaughan	0	0	0	0	39	0	0	39	1%	E	1%				407, 427, Gardiner, QEW	NB Hurontario
Brampton	0	56	0	37	30	0	0	123	3%	N		3%			410, QEW	NB Hurontario
Oakville	0	0	0	46	0	0	25	71	2%	W					QEW	NB Hurontario
Grimsby	0	0	0	0	20	0	0	20	0%	S			0%		QEW	NB Hurontario
4355	0	0	0	0	317	0	0	317	8%	N					427, Gardiner, QEW	NB Hurontario
4360	0	0	0	0	49	0	0	49	1%	E	1%				WB Sherobee, NB Hurontario	WB Sherobee, NB Hurontario
4362	0	0	0	0	33	0	0	33	1%	E	1%				QEW	NB Hurontario
4378	0	0	0	0	0	120	0	120	3%	E	3%				QEW	NB Hurontario
4385	0	0	45	0	0	0	0	45	1%	S			1%		QEW	NB Hurontario
4401	0	28	0	0	31	0	0	59	1%	W	1%				QEW	NB Hurontario
4418	0	0	0	0	5	0	0	5	0%	W	0%				QEW	NB Hurontario
4429	0	0	0	0	22	0	0	22	1%	E	1%				QEW	NB Hurontario
4445	66	0	0	0	0	0	0	66	2%	W	2%				Eastgate Pkwy, QEW	NB Hurontario
4456	0	61	0	0	0	0	0	61	1%	N		1%			SB Hurontario, EB Queensway	SB Hurontario, EB Queensway
4465	0	22	0	0	0	0	0	22	1%	N		1%			SB Hurontario, EB Queensway	SB Hurontario, EB Queensway
4485	0	0	0	0	0	26	0	26	1%	N		1%			SB Hurontario, EB Queensway	SB Hurontario, EB Queensway
4495	7	0	0	0	0	0	0	7	0%	N			0%		NB Hurontario	NB Hurontario
4506	0	0	0	0	133	0	0	133	3%	E	3%				427, Gardiner, QEW	NB Hurontario
4508	0	0	0	0	0	84	0	84	2%	N		2%			QEW	NB Hurontario
4509	0	40	0	0	0	0	0	40	1%	N		1%			410, QEW	NB Hurontario
4510	84	0	0	0	0	0	0	84	2%	N		2%			410, QEW	NB Hurontario
4512	0	0	0	48	0	0	0	48	1%	N		1%			410, QEW	NB Hurontario
4531	0	0	0	0	0	0	5	5	0%	N			0%		SB Hurontario, EB Queensway	SB Hurontario, EB Queensway
4534	0	0	0	0	0	84	0	84	2%	E	2%				NB Hurontario	NB Hurontario
4535	0	23	0	0	0	0	0	23	1%	E	1%				NB Hurontario	NB Hurontario
4551	0	0	0	0	14	0	0	14	0%	N			0%		NB Hurontario	NB Hurontario
4558	26	0	0	0	0	0	0	26	1%	N		1%			410, QEW	NB Hurontario
4564	0	0	0	0	0	0	42	42	1%	N		1%			SB Hurontario, EB Queensway	SB Hurontario, EB Queensway
4580	0	0	0	0	158	0	0	158	4%	W	4%				EB Queensway	EB Queensway
4582	0	0	10	0	0	0	0	10	0%	W	0%				EB Queensway	EB Queensway
4583	160	0	0	0	0	0	0	160	4%	W	4%				EB Queensway	EB Queensway
4607	0	0	0	0	0	82	0	82	2%	N		2%			SB Hurontario, EB Queensway	SB Hurontario, EB Queensway
4609	0	25	0	0	0	0	0	25	1%	N		1%			SB Hurontario, EB Queensway	SB Hurontario, EB Queensway
4619	0	0	40	0	0	0	0	40	1%	W	1%				SB Hurontario, EB Queensway	SB Hurontario, EB Queensway
4624	0	0	12	0	0	0	0	12	0%	N		0%			SB Hurontario, EB Queensway	SB Hurontario, EB Queensway
4626	0	0	0	0	20	0	0	20	0%	N		0%			SB Hurontario, EB Queensway	SB Hurontario, EB Queensway
4627	0	0	0	0	317	0	0	317	8%	S			8%		WB Sherobee, NB Hurontario	WB Sherobee, NB Hurontario
4629	70	0	0	0	0	0	0	70	2%	E	2%				NB Hurontario	NB Hurontario
4634	0	0	0	0	0	0	475	475	11%	E	11%				WB Queensway	WB Queensway
4635	0	0	0	55	0	0	0	55	1%	E	1%				WB Queensway	WB Queensway
4637	0	8	36	0	0	0	0	44	1%	E	1%				WB Queensway	WB Queensway
4644	89	0	0	0	0	26	0	115	3%	W	3%				EB Queensway	EB Queensway
4646	0	0	34	0	106	0	0	140	3%	N		3%			SB Hurontario, EB Queensway	SB Hurontario, EB Queensway
4662	0	0	0	33	0	0	0	33	1%	W	1%				EB Queensway	EB Queensway
4670	0	0	0	0	0	31	0	31	1%	W	1%				QEW	NB Hurontario
4683	0	0	35	0	0	0	0	35	1%	W	1%				QEW	NB Hurontario
4731	0	16	0	0	0	0	0	16	0%	W	0%				EB Queensway	EB Queensway
								4212	100%	TOTAL	44%	19%	28%	9%		100%

Pull for PD36 only:

Thu Feb 12 2026 16:49:12 GMT-0500 (Eastern Standard Time) - Run Time: 3229ms

Cross Tabulation Query Form - Trip - 2022

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

Filters:
 (2022 TTS zone of destination - tts22_dest In 4602, 4603, 4607, 4609, 4615, 4625, 4626, 4627, 4628, 4633, 4642, 4643, 4644, 4645
 and
 Start time of trip - start_time In 1500-1900
 and
 2022 Trip purpose of destination - purp_dest2022 In 80
 and
 Primary travel mode of trip - mode_prime In D, M, P, T, U,)
 and
 Planning district of origin - pd_orig In 36

Fri Feb 13 2026 10:30:59 GMT-0500 (Eastern Standard Time) - Run Time: 3900ms

Pull for PD36 only:

Cross Tabulation Query Form - Trip - 2022

Fri Feb 13 2026 10:33:10 GMT-0500 (Eastern Standard Time) - Run Time: 3286ms

Row: Planning district of destination - pd_dest
 Column: 2022 TTS zone of origin - tts22_orig

Cross Tabulation Query Form - Trip - 2022

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

Filters:
 (2022 TTS zone of origin - tts22_orig In 4602, 4603, 4607, 4609, 4615, 4625, 4626, 4627, 4628, 4633, 4642, 4643, 4644, 4645
 and
 Start time of trip - start_time In 600-1000
 and
 2022 Trip Purpose of Origin - purp_orig2022 In 80,
 and
 Primary travel mode of trip - mode_prime In D, M, P, T, U,)

Filters:
 (2022 TTS zone of origin - tts22_orig In 4602, 4603, 4607, 4609, 4615, 4625, 4626, 4627, 4628, 4633, 4642, 4643, 4644, 4645
 and
 Start time of trip - start_time In 600-1000
 and
 2022 Trip Purpose of Origin - purp_orig2022 In 80,
 and
 Primary travel mode of trip - mode_prime In D, M, P, T, U,
 and
 Planning district of destination - pd_dest In 36,)

Destination	Origin						Trips to Destination	Trip Distribution				Trip Assignment				
	4603	4607	4625	4626	4633	4642		Distribution	Direction To	To East	To West	To North	To South	Hwy	Assignment	
PD 1 of Toronto	0	16	0	56	0	14	86	2%	E	2%					Gardiner, QEW	NB Hurontario, EB Queensway
PD 2 of Toronto	0	0	0	0	120	0	120	3%	E	3%					Gardiner, QEW	NB Hurontario, EB Queensway
PD 3 of Toronto	0	0	0	103	0	0	103	2%	E	2%				407, 427, Gardiner, QEW	NB Hurontario, EB Queensway	
PD 7 of Toronto	0	0	0	112	0	0	112	2%	E	2%				Gardiner, QEW	NB Hurontario, EB Queensway	
PD 8 of Toronto	0	0	0	0	39	0	39	1%	E	1%				427, Gardiner, QEW	NB Hurontario, EB Queensway	
Vaughan	0	0	0	0	80	0	80	2%	E	2%				407, 427, Gardiner, QEW	NB Hurontario, EB Queensway	
Brampton	20	23	0	37	5	0	85	2%	N			2%	410, QEW	NB Hurontario, EB Queensway		
Milton	20	0	0	0	0	0	20	0%	W		0%		401	NB Hurontario, EB Queensway		
Oakville	28	0	0	46	0	0	99	2%	W		2%		QEW	WB Queensway, SB Hurontario		
Burlington	0	0	42	0	0	0	42	1%	W		1%		QEW	NB Hurontario, EB Queensway		
Hamilton	0	0	0	0	158	0	158	4%	W		4%		QEW	WB Queensway, SB Hurontario		
Kitchener	0	0	0	0	120	0	120	3%	W		3%		401,427,QEW	WB Queensway, SB Hurontario		
Guelph	0	0	0	0	22	0	22	0%	W		0%		401,427,QEW	NB Hurontario, EB Queensway		
4355	0	0	0	0	442	0	442	10%	N			10%	427, Gardiner, QEW	NB Hurontario, EB Queensway		
4377	0	0	0	0	0	19	19	0%	S						NB Hurontario, EB Queensway	
4378	0	0	0	0	0	120	120	3%	E	3%					QEW	NB Hurontario, EB Queensway
4385	0	0	45	0	0	0	45	1%	S					QEW	NB Hurontario, EB Queensway	
4392	0	16	0	0	0	0	16	0%	W		0%				QEW	NB Hurontario, EB Queensway
4401	0	28	0	0	0	0	28	1%	W		1%			QEW	NB Hurontario, EB Queensway	
4416	0	0	0	0	0	0	12	0%	W		0%			QEW	NB Hurontario, EB Queensway	
4423	0	0	0	0	0	0	64	1%	W		1%			QEW	NB Hurontario, EB Queensway	
4445	66	0	0	0	0	0	66	1%	E		1%			Eastgate Pkwy, QEW	NB Hurontario, EB Queensway	
4446	0	0	0	0	7	0	7	0%	E	0%				QEW	NB Hurontario, EB Queensway	
4448	0	0	0	8	0	28	36	1%	E	1%				QEW	EB Queensway	
4456	25	0	0	0	0	0	25	1%	N			0%			WB Queensway, NB Hurontario	
4470	0	15	0	0	0	0	15	0%	N						WB Queensway, NB Hurontario	
4484	53	0	0	0	0	0	53	1%	W		1%				WB Queensway	
4495	7	0	0	0	0	0	7	0%	N			0%			NB Hurontario, EB Queensway	
4498	0	0	0	0	45	0	45	1%	W		1%			QEW	NB Hurontario, EB Queensway	
4506	0	0	0	0	133	0	133	3%	E	3%				427, Gardiner, QEW	NB Hurontario, EB Queensway	
4508	0	0	0	0	0	84	84	2%	N			2%		QEW	NB Hurontario, EB Queensway	
4509	0	40	0	0	0	0	40	1%	N			1%		410, QEW	NB Hurontario, EB Queensway	
4510	84	0	0	0	0	0	84	2%	N			2%		410, QEW	NB Hurontario, EB Queensway	
4530	0	32	0	0	0	0	32	1%	N			1%			WB Queensway, NB Hurontario	
4535	0	23	0	0	0	0	23	1%	E	1%					NB Hurontario, EB Queensway	
4550	0	0	0	0	5	0	5	0%	E	0%					NB Hurontario, EB Queensway	
4551	0	0	0	0	14	0	14	0%	N			0%			NB Hurontario, EB Queensway	
4559	0	8	0	0	0	0	8	0%	N			0%			NB Hurontario, EB Queensway	
4564	0	0	0	0	0	42	42	1%	N			1%			WB Queensway, NB Hurontario	
4580	0	0	0	0	158	0	158	4%	W		4%				WB Queensway	
4583	160	0	0	0	0	0	160	4%	W		4%				WB Queensway	
4594	0	0	0	0	23	0	23	1%	W		1%				WB Queensway	
4607	0	8	0	0	0	0	8	0%	N			0%			WB Queensway, NB Hurontario	
4609	0	0	0	39	0	0	39	1%	N			1%			WB Queensway, NB Hurontario	
4615	0	10	0	0	0	0	10	0%	W		0%				WB Queensway	
4617	0	0	270	0	0	0	270	6%	W		6%				WB Queensway	
4619	0	0	4	0	0	0	4	0%	W		0%				WB Queensway, NB Hurontario	
4626	0	0	0	125	0	0	125	3%	N			3%			WB Queensway, NB Hurontario	
4629	25	0	0	0	0	0	25	1%	E						NB Hurontario, EB Queensway	
4634	0	0	0	0	0	9	475	11%	E	11%					EB Queensway	
4635	0	0	0	9	0	0	9	0%	E	0%					EB Queensway	
4637	0	0	36	0	0	0	36	1%	E	1%					EB Queensway	
4642	21	0	0	0	0	0	21	0%	N			0%			WB Queensway, NB Hurontario	
4644	45	0	0	0	0	0	45	1%	W		1%				WB Queensway	
4646	0	0	34	0	106	0	140	3%	N			3%			WB Queensway, NB Hurontario	
4656	0	164	0	0	0	0	164	4%	W		4%				WB Queensway	
4662	0	0	0	33	0	0	33	1%	W		1%				WB Queensway	
4670	0	0	0	0	0	31	31	1%	W		1%				WB Queensway, SB Hurontario	
4731	0	16	0	0	0	0	16	0%	W		0%				WB Queensway	
4734	0	61	0	0	0	0	61	1%	W		1%				WB Queensway	
4740	0	0	0	66	0	0	66	1%	W		1%				WB Queensway	
4747	0	8	0	0	0	0	8	0%	W		0%				WB Queensway	
							4487	100%	TOTAL	32%	40%	27%	1%			100%

Fri Feb 13 2026 10:41:37 GMT-0500 (Eastern Standard Time) - Run Time: 3087ms

Cross Tabulation Query Form - Trip - 2022

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

Filters:
 (2022 TTS zone of destination - tts22_dest In 4602, 4603, 4607, 4609, 4615, 4625, 4626, 4627, 4628, 4633, 4642, 4643, 4644, 4645
 and
 2022 Trip purpose of destination
 and
 Primary travel mode of trip - mode_prime In D, M, P, T, U,)

Trip 2022

Table:

Pull for PD36 only:

Fri Feb 13 2026 10:46:11 GMT-0500 (Eastern Standard Time) - Run Time: 3316ms

Cross Tabulation Query Form - Trip - 2022

Row: 2022 TTS zone of origin - tts22_orig

Column: 2022 TTS zone of destination - tts22_dest
 Filters:
 (2022 TTS zone of destination - tts22_dest In 4602, 4603, 4607, 4609, 4615, 4625, 4626, 4627, 4628, 4633, 4642, 4643, 4644, 4645
 and
 2022 Trip purpose o
 and
 Primary travel mode of trip - mode_prime In D, M, P, T, U,)
 and
 Planning district of origin - pd_orig In 36)

Origin	Destination								Trips from Origin	Trip Distribution		Trip Assignment				Hwy	Assignment	
	4602	4607	4609	4615	4625	4626	4633	4642		4644	Distribution	Direction From	From East	From West	From North			From South
PD 3 of Toronto	0	0	48	0	0	0	0	0	0	48	2%	E	2%				401, 427, QEW	NB Hurontario
PD 8 of Toronto	0	0	32	0	0	0	0	0	0	32	1%	E	1%				427, Gardiner, QEW	NB Hurontario
PD 10 of Toronto	0	0	54	0	0	30	0	0	0	84	4%	E	4%				401, 427, QEW	NB Hurontario
PD 11 of Toronto	0	0	0	0	0	0	0	40	0	40	2%	E	2%				401, 427, QEW	NB Hurontario
Vaughan	0	0	18	0	0	0	0	0	0	18	1%	E	1%				407, 427, Gardiner, QEW	NB Hurontario
Hamilton	0	0	158	0	0	0	0	0	0	158	7%	W		7%			QEW	NB Hurontario
4354	0	0	0	0	0	6	0	0	0	6	0%	S			0%		QEW	NB Hurontario
4365	0	0	6	0	0	0	0	0	0	6	0%	E	0%				QEW	NB Hurontario
4379	0	0	0	0	0	6	0	0	0	6	0%	E	0%				QEW	NB Hurontario
4382	58	0	0	0	0	0	0	0	0	58	3%	S			3%		QEW	NB Hurontario
4415	0	0	7	0	0	0	0	0	0	7	0%	W		0%			QEW	NB Hurontario
4419	0	69	0	0	0	0	0	0	0	69	3%	W		3%			QEW	NB Hurontario
4443	0	0	0	0	0	16	0	0	0	16	1%	E	1%				QEW	NB Hurontario
4447	0	11	0	0	0	0	0	0	0	11	0%	E	0%				QEW	NB Hurontario
4467	0	0	11	0	0	0	0	0	0	11	0%	N			0%		QEW	NB Hurontario
4473	0	0	0	0	0	64	0	0	0	64	3%	N			3%		QEW	NB Hurontario
4474	0	0	0	0	0	15	0	0	0	15	1%	N			1%		QEW	NB Hurontario
4475	0	0	0	11	0	0	0	0	0	11	0%	N			0%		QEW	NB Hurontario
4478	0	11	0	0	0	0	0	11	0	22	1%	E	1%				QEW	NB Hurontario
4501	8	0	0	0	0	0	0	0	0	8	0%	W		0%			QEW	NB Hurontario
4542	0	0	95	0	0	0	0	0	0	95	4%	W		4%			QEW	NB Hurontario
4568	0	0	5	0	0	0	0	0	0	5	0%	N			0%		QEW	NB Hurontario
4580	0	0	9	0	0	0	0	0	0	9	0%	W		0%			QEW	NB Hurontario
4581	0	0	24	0	0	0	0	0	0	24	1%	W		1%			QEW	NB Hurontario
4583	0	0	0	0	0	26	0	0	0	26	1%	W		1%			QEW	NB Hurontario
4595	0	0	231	0	0	0	0	0	0	231	10%	W		10%			QEW	NB Hurontario
4601	0	0	15	0	0	0	0	0	0	15	1%	W		1%			QEW	NB Hurontario
4604	0	0	10	0	0	0	0	0	0	10	0%	N			0%		QEW	NB Hurontario
4607	0	8	0	0	0	0	0	0	0	8	0%	N			0%		QEW	NB Hurontario
4608	0	0	0	0	0	42	0	0	0	42	2%	N			2%		QEW	NB Hurontario
4609	0	0	10	0	0	0	7	0	0	17	1%	N			1%		QEW	NB Hurontario
4612	0	0	0	0	0	0	0	22	0	22	1%	W		1%			QEW	NB Hurontario
4613	0	0	0	0	0	0	0	0	22	22	1%	W		1%			QEW	NB Hurontario
4617	0	0	0	0	0	24	0	0	0	24	1%	W		1%			QEW	NB Hurontario
4618	0	0	0	0	0	0	0	5	0	5	0%	W		0%			QEW	NB Hurontario
4619	0	0	36	0	0	0	0	0	0	36	2%	W		2%			QEW	NB Hurontario
4622	0	0	8	0	0	0	0	0	0	8	0%	W		0%			QEW	NB Hurontario
4625	0	0	12	0	0	0	0	0	0	12	1%	W		1%			QEW	NB Hurontario
4626	0	0	39	0	0	125	0	0	0	164	7%	N		7%			QEW	NB Hurontario
4629	0	31	29	11	0	23	131	0	6	231	10%	E	10%		7%		QEW	NB Hurontario
4631	0	0	24	0	0	0	21	0	0	45	2%	E	2%				QEW	NB Hurontario
4632	0	0	13	0	0	0	0	0	0	13	1%	N			1%		QEW	NB Hurontario
4633	0	0	194	0	0	0	0	0	0	194	9%	N			9%		QEW	NB Hurontario
4634	0	0	48	0	0	0	0	0	0	48	2%	E	2%				QEW	NB Hurontario
4638	0	0	34	0	0	0	0	0	0	34	2%	N			2%		QEW	NB Hurontario
4644	0	0	0	0	0	17	0	0	0	17	1%	W		1%			QEW	NB Hurontario
4646	0	156	9	0	0	0	0	0	0	165	7%	N			7%		QEW	NB Hurontario
4648	0	0	0	0	5	0	0	0	0	5	0%	N			0%		QEW	NB Hurontario
4717	0	0	20	0	0	0	0	0	0	20	1%	W		1%			QEW	NB Hurontario
4737	0	5	0	0	0	0	0	0	0	5	0%	W		0%			QEW	NB Hurontario
4738	0	6	0	0	0	0	0	0	0	6	0%	N			0%		QEW	NB Hurontario
4740	0	0	16	0	0	0	0	0	0	16	1%	W		1%			QEW	NB Hurontario
										2264	100%	TOTAL	27%	37%	34%	3%	TOTAL	100%

Cross Tabulation Query Form - Trip - 2022

Fri Feb 13 2026 11:02:19 GMT-0500 (Eastern Standard Time) - Run Time: 3351ms

Row: Planning district of destination - pd_dest
 Column: 2022 TTS zone of origin - tts22_orig

Cross Tabulation Query Form - Trip - 2022

Filters:
 (2022 TTS zone of origin - tts22_orig In 4602, 4603, 4607, 4609, 4615, 4625, 4626, 4627, 4628, 4633, 4642, 4643, 4644, 4645
 and
 2022 Trip Purpose of Origin - purp_orig2022 In 41
 and
 Primary travel mode of trip - mode_prime In D, M, P, T, U,)

Row: 2022 TTS zone of destination - tts22_dest
 Column: 2022 TTS zone of origin - tts22_orig
 Filters:
 (2022 TTS zone of origin - tts22_orig In 4602, 4603, 4607, 4609, 4615, 4625, 4626, 4627, 4628, 4633, 4642, 4643, 4644, 4645
 and
 2022 Trip Purpose of Origin - purp_orig2022 In 41
 and
 Primary travel mode of trip - mode_prime In D, M, P, T, U,)
 and
 Planning district of destination - pd_dest In 36)

Trip 2022

Table:

Destination	Origin								Trips to Destination	Trip Distribution				Trip Assignment				
	4602	4607	4609	4615	4625	4626	4633	4642		4644	Distribution	Direction To	To East	To West	To North	To South	Hwy	Assignment
PD 3 of Toronto	0	0	48	0	0	0	0	0	0	48	2%	E	2%				407, 427, Gardiner, QEW	NB Hurontario, EB Queensway
PD 5 of Toronto	0	0	0	0	0	0	0	40	0	40	2%	E	2%				DVP, Gardiner, QEW	NB Hurontario, EB Queensway
PD 8 of Toronto	0	0	0	11	0	0	16	0	6	33	1%	E	1%				427, Gardiner, QEW	NB Hurontario, EB Queensway
Brampton	0	0	16	0	0	0	0	0	0	16	1%	N			1%		410, QEW	NB Hurontario, EB Queensway
Flamborough	0	69	0	0	0	0	0	0	0	69	3%	W						WB Queensway, SB Hurontario
4354	8	0	0	0	0	6	0	0	0	14	1%	W		3%	1%			WB Queensway, SB Hurontario
4356	0	0	36	0	0	0	0	0	0	36	2%	E	2%					NB Hurontario, EB Queensway
4357	0	0	231	0	0	0	0	0	0	231	10%	E	10%					NB Hurontario, EB Queensway
4358	0	0	0	0	0	0	7	0	0	7	0%	E	0%					NB Hurontario, EB Queensway
4368	0	0	10	0	0	0	0	0	0	10	0%	E	0%					NB Hurontario, EB Queensway
4379	0	0	0	0	0	6	0	0	0	6	0%	E	0%					NB Hurontario, EB Queensway
4412	0	0	95	0	0	0	0	0	0	95	4%	W		4%				WB Queensway, SB Hurontario
4416	0	0	6	0	0	0	0	0	0	6	0%	W		0%			QEW	NB Hurontario, EB Queensway
4443	0	11	0	0	0	0	0	0	0	11	0%	E	0%					NB Hurontario, EB Queensway
4455	0	0	0	0	0	30	0	0	0	30	1%	N			1%			NB Hurontario
4473	0	0	0	0	0	64	0	0	0	64	3%	N			3%			NB Hurontario
4475	0	0	0	11	0	0	0	0	0	11	0%	N			0%			NB Hurontario
4476	0	0	0	0	0	15	0	0	0	15	1%	N			1%			NB Hurontario
4478	0	11	0	0	0	0	0	11	0	22	1%	E	1%					NB Hurontario, EB Queensway
4482	0	0	0	0	0	0	131	0	0	131	6%	W		6%				NB Hurontario, WB Queensway
4485	0	0	8	0	0	0	0	0	0	8	0%	N			0%			NB Hurontario
4510	0	0	0	0	0	0	0	11	0	11	0%	N			0%		410, QEW	NB Hurontario, EB Queensway
4568	0	0	5	0	0	0	0	0	0	5	0%	N			0%			NB Hurontario, EB Queensway
4569	0	0	0	0	0	26	0	0	0	26	1%	N			1%			NB Hurontario, EB Queensway
4580	0	0	11	0	0	0	0	0	0	11	0%	W		0%				WB Queensway
4581	0	0	24	0	0	0	0	0	0	24	1%	W		1%				WB Queensway
4582	0	0	17	0	0	0	0	0	0	17	1%	W		1%				NB Hurontario, WB Queensway
4583	0	0	0	0	0	0	21	0	0	21	1%	W		1%				WB Queensway
4595	0	0	10	0	0	0	0	0	0	10	0%	W		0%				NB Hurontario, WB Queensway
4601	0	0	7	0	0	0	0	0	0	7	0%	W		0%				NB Hurontario, WB Queensway
4602	0	0	42	0	0	0	0	0	0	42	2%	N			2%			NB Hurontario
4607	0	8	25	0	0	0	0	0	0	33	1%	N			1%			WB Queensway, NB Hurontario
4608	0	0	10	0	0	0	0	0	0	10	0%	N			0%			NB Hurontario
4609	58	0	0	0	5	0	0	0	0	63	3%	N			3%			NB Hurontario, NB Hurontario
4611	0	0	18	0	0	0	0	0	0	18	1%	W		1%				NB Hurontario, WB Queensway
4612	0	0	0	0	0	0	0	11	0	11	0%	W		0%				NB Hurontario, WB Queensway
4613	0	0	0	0	0	0	0	22	0	22	1%	W		1%				NB Hurontario, WB Queensway
4617	0	0	0	0	0	24	0	0	0	24	1%	W		1%				WB Queensway
4618	0	0	54	0	0	0	0	5	0	59	3%	W		3%				NB Hurontario
4619	0	0	22	0	0	13	0	0	0	35	2%	W		2%				WB Queensway, NB Hurontario
4625	0	0	7	0	0	0	0	0	0	7	0%	W		0%				NB Hurontario, WB Queensway
4626	0	0	39	0	0	125	0	0	0	164	7%	N			7%			WB Queensway, NB Hurontario
4627	0	0	177	0	0	0	0	0	0	177	8%	S				8%		NB Hurontario, EB Queensway
4629	0	31	0	0	0	23	0	0	0	54	2%	E	2%					NB Hurontario, EB Queensway
4631	0	0	24	0	0	0	0	0	0	24	1%	N			1%			NB Hurontario, EB Queensway
4633	0	0	201	0	0	0	0	0	0	201	9%	N			9%			NB Hurontario
4634	0	0	31	0	0	0	0	0	0	31	1%	E	1%					EB Queensway
4638	0	0	34	0	0	0	0	0	0	34	2%	N			2%			NB Hurontario, WB Queensway
4644	0	0	0	0	0	17	0	0	0	17	1%	W		1%				WB Queensway
4646	0	156	15	0	0	0	0	0	0	171	8%	N			8%			WB Queensway, NB Hurontario
4703	0	0	20	0	0	0	0	0	0	20	1%	N			1%			NB Hurontario, WB Queensway
4737	0	5	0	0	0	0	0	0	0	5	0%	N			0%			NB Hurontario, EB Queensway
4738	0	6	0	0	0	0	0	0	0	6	0%	N			0%			NB Hurontario, EB Queensway
TOTAL	2263									2263	100%	TOTAL	23%	26%	42%	8%		100%



APPENDIX G

LOS Definition Summary

LEVELS OF SERVICE FOR SIGNALIZED INTERSECTIONS: METHODOLOGY

Signalized intersection analyses contained in this report were carried out using methodology described in the *Highway Capacity Manual, 2000 update*, by the Transportation Research Board and implemented using Synchro 12.1 (Build 0, Revision 30) software.

Analyses of signalized intersections compare the volume of traffic passing through an intersection with the capacity of each of the intersection's approaches. Volumes can be either observed or estimated whereas an intersection's capacity is a function of its geometry, the number of lanes per approach, speeds, signal timing, and other considerations. The level of service is evaluated in terms of the average control delay (seconds) per vehicle, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Delay is a complex measure and is calculated as a function of a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group in question.

The criteria for each level of service are given below.

Level of Service	Features	Control Delay (sec/veh)
A	Very low control delay. Occurs when signal progression (i.e. coordination) is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not have to stop.	0.0 – 10.0
B	Occurs with good progression, short cycle length, or both. More vehicles stop than with LOS A.	10.1 – 20.0
C	Occurs with fair progression, longer cycle length, or both. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.	20.0 – 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles have to stop. Individual cycle failures are noticeable (i.e. some vehicles require more than one cycle to make it through the intersection).	35.0 – 55.0
E	Considered by many agencies to be the limit of acceptable delay. High delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.	55.0- 80.0
F	Considered to be unacceptable to most drivers and often occurs with oversaturation. It may also occur at high v/c ratios below 1.0 with many individual cycle failures.	80.1 +

LEVELS OF SERVICE FOR UNSIGNALIZED INTERSECTIONS: METHODOLOGY

Unsignalized intersection analyses contained in this report were carried out using methodology described in the *Highway Capacity Manual 6th edition* by the Transportation Research Board and implemented using the Synchro 11 (Build 2, Revision 9) software.

Analyses of unsignalized intersections compare observed or estimated traffic volumes with the capacity of each of the intersection's approaches. The analysis derives an estimation of queue lengths and the resulting delays experienced by vehicles from the time they join a queue to the moment they cross the stop bar at the intersection. Queuing and delays at unsignalized approaches are a function of the volumes of all other conflicting movements and the characteristics of the intersection. Traffic volumes can be either observed or estimated while an intersection's capacity is a function of its geometry, lane configurations, speeds, and other operational considerations. The resulting statistic is termed "average total delay" for each approach and is measured in seconds per vehicle. The delay can then be assigned a letter grade, which provides a simple qualitative assessment of the Level of Service for any unsignalized intersection.

The Level of Service grading for unsignalized intersections is more sensitive than that used for signalized analyses: delays are more onerous at unsignalized intersections as drivers must remain attentive while waiting for acceptable conditions to complete their movement. As a result, the thresholds between grades are lower for unsignalized analyses.

Level of Service	Features	Average Total Delay (sec/veh)
A	Almost no delay occurs. Approaches appear clear and turns are made easily.	0.0 – 10.0
B	Short delays are experienced. Drivers find their movement becoming more restricted.	10.1 – 15.0
C	Longer delays occur. Operation of both the minor and major streets are generally stable but movements from the minor street become more difficult. This level is often used for urban intersection design standards.	15.1 – 25.0
D	Motorists encounter increasing traffic restrictions and substantial delays. Delays on the major street occur as turning traffic interferes with the flow of traffic. Traffic flows are approaching the capacity of the intersection.	25.1 - 35.0
E	At level "E", capacity is reached. There are long queues of vehicles waiting upstream for the approach to clear. Delays to vehicles reach frustrating levels.	35.1- 50.0
F	Intersection saturation occurs as vehicle demand has exceeded the capacity. Drivers will often accept less than ideal gap opportunities; safety is compromised.	50.1 +

Appendix C

Performance Evaluation Requirements

C.1 Introduction

This appendix details the performance measures to be assessed through a TIA. Detailed analyses and supporting information should be included in the appendices of the final TIA Study report.

C.2 Requirements

The performance of signalized and un-signalized intersections within the study area will be assessed based on the following three criteria:

- Volume-to-capacity (V/C) ratio for signalized intersections;
- Level of Service (LOS) (vehicle delay) for un-signalized intersections; and
- 95th percentile queues, as derived from SimTraffic or *Highway Capacity Manual* (HCM) outputs from Synchro. If SimTraffic, use 15 minute minimum seeding interval time and 60 minute minimum analysis period, and average the results from ten runs.

Threshold Criteria for Signalized Intersections

- V/C ratios for overall intersection operations to reach or exceed 0.85
- V/C ratios for individual through or turning movements to reach or exceed 1.0
- Estimated 95th percentile queue lengths for an individual movement to exceed available turning lane storage
- Estimated 95th percentile queue lengths for through lanes to block vehicles from entering turning lanes

Table C.1 summarizes the level of service criteria for signalized intersections for comparison.

TABLE C.1: LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Level of Service	Delay (sec/veh)	V/C
A	≤10	0 to 0.60
B	>10-20	0.61 to 0.70
C	>20-35	0.71 to 0.80
D	>35-55	0.81 to 0.90
E	>55-80	0.91 to 1.00
F	>80	>1.00

Threshold Criteria for Unsignalized Intersections

- Level of service, based on average delay per vehicle, on individual movements to exceed LOS E
- Estimated 95th percentile queue lengths for an individual movement to exceed available storage

Table C.2 summarizes the level of service criteria for unsignalized intersections.

TABLE C.2: LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Level of Service	Delay (sec/veh)
A	≤10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

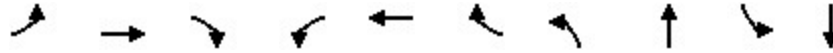


APPENDIX H

Existing Intersection Capacity Analysis

Queues
1: Camilla Road & Queensway

Existing
Weekday AM Peak



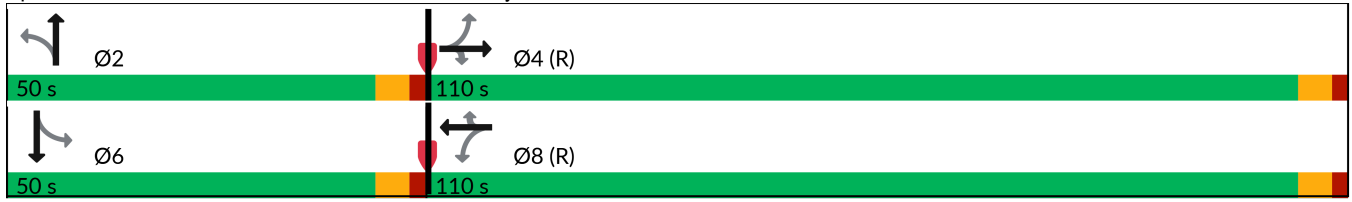
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	37	798	77	43	652	60	53	103	104	105
Future Volume (vph)	37	798	77	43	652	60	53	103	104	105
Lane Group Flow (vph)	40	867	84	47	709	65	58	182	113	149
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	55.0	55.0	55.0	55.0	55.0	55.0	30.0	30.0	30.0	30.0
Minimum Split (s)	61.0	61.0	61.0	61.0	61.0	61.0	36.0	36.0	36.0	36.0
Total Split (s)	110.0	110.0	110.0	110.0	110.0	110.0	50.0	50.0	50.0	50.0
Total Split (%)	68.8%	68.8%	68.8%	68.8%	68.8%	68.8%	31.3%	31.3%	31.3%	31.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	116.1	116.1	116.1	116.1	116.1	116.1	31.9	31.9	31.9	31.9
Actuated g/C Ratio	0.73	0.73	0.73	0.73	0.73	0.73	0.20	0.20	0.20	0.20
v/c Ratio	0.09	0.35	0.08	0.12	0.29	0.06	0.34	0.52	0.70	0.43
Control Delay (s/veh)	6.4	6.0	1.4	8.1	8.2	1.7	60.5	56.4	83.0	55.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.4	6.0	1.4	8.1	8.2	1.7	60.5	56.4	83.0	55.8
LOS	A	A	A	A	A	A	E	E	F	E
Approach Delay (s/veh)		5.6			7.7			57.4		67.5
Approach LOS		A			A			E		E
Queue Length 50th (m)	1.8	21.9	0.0	3.6	34.9	0.0	16.9	45.6	32.3	39.1
Queue Length 95th (m)	6.4	40.4	4.3	9.4	52.7	4.7	30.3	65.6	51.5	57.6
Internal Link Dist (m)		293.4			127.4			111.6		70.0
Turn Bay Length (m)	94.0		78.0	110.0		80.0	33.0		28.0	
Base Capacity (vph)	431	2490	1054	388	2443	1019	233	472	221	474
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.35	0.08	0.12	0.29	0.06	0.25	0.39	0.51	0.31

Intersection Summary	
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	90 (56%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle:	100
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.70
Intersection Signal Delay (s/veh):	18.7
Intersection LOS:	B
Intersection Capacity Utilization:	131.7%
ICU Level of Service:	H
Analysis Period (min):	15

Queues
1: Camilla Road & Queensway

Existing
Weekday AM Peak



























Splits and Phases: 1: Camilla Road & Queensway



HCM Signalized Intersection Capacity Analysis

1: Camilla Road & Queensway

Existing
Weekday AM Peak

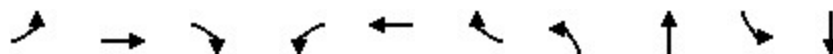
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (vph)	37	798	77	43	652	60	53	103	64	104	105	32
Future Volume (vph)	37	798	77	43	652	60	53	103	64	104	105	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.96	1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	0.99	1.00		0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3433	1422	1685	3368	1381	1474	1668		1621	1698	
Flt Permitted	0.36	1.00	1.00	0.30	1.00	1.00	0.55	1.00		0.47	1.00	
Satd. Flow (perm)	594	3433	1422	535	3368	1381	849	1668		807	1698	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	867	84	47	709	65	58	112	70	113	114	35
RTOR Reduction (vph)	0	0	23	0	0	18	0	15	0	0	8	0
Lane Group Flow (vph)	40	867	61	47	709	47	58	167	0	113	141	0
Confl. Peds. (#/hr)	7					7	8		15	15		8
Confl. Bikes (#/hr)									2			1
Heavy Vehicles (%)	8%	4%	6%	0%	6%	5%	13%	4%	5%	2%	7%	3%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	116.1	116.1	116.1	116.1	116.1	116.1	31.9	31.9		31.9	31.9	
Effective Green, g (s)	116.1	116.1	116.1	116.1	116.1	116.1	31.9	31.9		31.9	31.9	
Actuated g/C Ratio	0.73	0.73	0.73	0.73	0.73	0.73	0.20	0.20		0.20	0.20	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	431	2491	1031	388	2443	1002	169	332		160	338	
v/s Ratio Prot		c0.25			0.21			0.10				0.08
v/s Ratio Perm	0.07		0.04	0.09		0.03	0.07			c0.14		
v/c Ratio	0.09	0.35	0.06	0.12	0.29	0.05	0.34	0.50		0.71	0.42	
Uniform Delay, d1	6.5	8.1	6.3	6.6	7.6	6.2	55.0	57.0		59.7	55.9	
Progression Factor	0.82	0.67	0.91	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.1	0.6	0.3	0.1	2.5	2.5		16.4	1.7	
Delay (s)	5.7	5.7	5.8	7.2	7.9	6.3	57.6	59.5		76.1	57.7	
Level of Service	A	A	A	A	A	A	E	E		E	E	
Approach Delay (s/veh)		5.7			7.8			59.0			65.6	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			18.8			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			160.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			131.7%			ICU Level of Service			H			
Analysis Period (min)			15									

c Critical Lane Group

Queues

2: East Site Access/2325 Hurontario Street Site Access & Queensway

Existing Weekday AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	19	827	29	22	683	32	18	0	31	7
Future Volume (vph)	19	827	29	22	683	32	18	0	31	7
Lane Group Flow (vph)	21	899	32	24	742	35	0	79	0	65
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	110.0	110.0	110.0	110.0	110.0	110.0	12.0	12.0	12.0	12.0
Minimum Split (s)	116.0	116.0	116.0	116.0	116.0	116.0	41.0	41.0	41.0	41.0
Total Split (s)	119.0	119.0	119.0	119.0	119.0	119.0	41.0	41.0	41.0	41.0
Total Split (%)	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%	25.6%	25.6%	25.6%	25.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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)	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	130.6	130.6	130.6	130.6	130.6	130.6		17.4		17.4
Actuated g/C Ratio	0.82	0.82	0.82	0.82	0.82	0.82		0.11		0.11
v/c Ratio	0.04	0.22	0.03	0.05	0.27	0.03		0.36		0.43
Control Delay (s/veh)	3.7	3.1	0.9	3.6	3.2	0.9		24.9		56.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	3.7	3.1	0.9	3.6	3.2	0.9		24.9		56.1
LOS	A	A	A	A	A	A		C		E
Approach Delay (s/veh)		3.1			3.1			24.9		56.1
Approach LOS		A			A			C		E
Queue Length 50th (m)	0.7	12.0	0.3	0.7	12.7	0.0		5.6		14.0
Queue Length 95th (m)	m2.0	m21.2	m0.1	3.5	30.4	1.2		18.0		25.0
Internal Link Dist (m)		176.7			293.4			40.1		8.7
Turn Bay Length (m)	32.0		33.0	36.0		30.0				
Base Capacity (vph)	472	4025	1235	438	2748	1161		379		291
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	0.04	0.22	0.03	0.05	0.27	0.03		0.21		0.22

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 86 (54%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 160	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay (s/veh): 5.8	Intersection LOS: A
Intersection Capacity Utilization 209.6%	ICU Level of Service H
Analysis Period (min) 15	

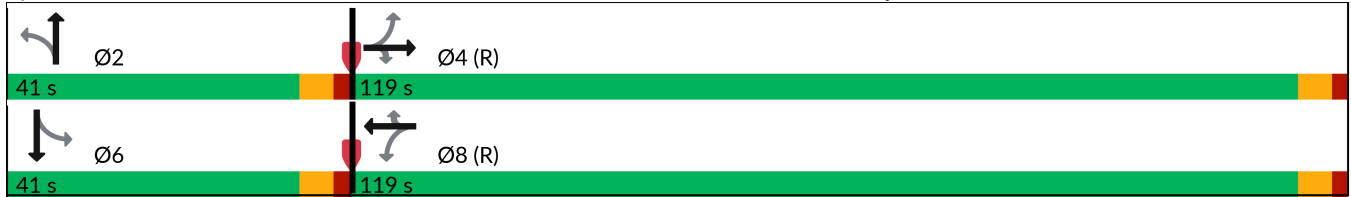
Queues

2: East Site Access/2325 Hurontario Street Site Access & Queensway

Existing
Weekday AM Peak

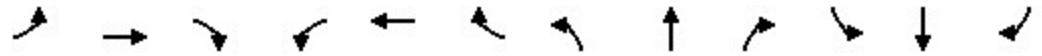
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: East Site Access/2325 Hurontario Street Site Access & Queensway



HCM Signalized Intersection Capacity Analysis
 2: East Site Access/2325 Hurontario Street Site Access & Queensway

Existing
 Weekday AM Peak

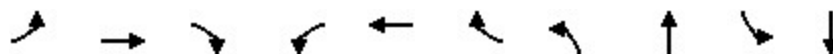


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑	↗		↕			↕	
Traffic Volume (vph)	19	827	29	22	683	32	18	0	54	31	7	21
Future Volume (vph)	19	827	29	22	683	32	18	0	54	31	7	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00		1.00			1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97		1.00			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.90			0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99			0.97	
Satd. Flow (prot)	1511	4932	1507	1685	3368	1415		1643			1678	
Flt Permitted	0.36	1.00	1.00	0.30	1.00	1.00		0.92			0.74	
Satd. Flow (perm)	579	4932	1507	538	3368	1415		1525			1277	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	899	32	24	742	35	20	0	59	34	8	23
RTOR Reduction (vph)	0	0	6	0	0	6	0	53	0	0	14	0
Lane Group Flow (vph)	21	899	26	24	742	29	0	26	0	0	51	0
Confl. Peds. (#/hr)	4					4	2					2
Heavy Vehicles (%)	11%	4%	0%	0%	6%	3%	0%	0%	2%	3%	0%	5%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	130.6	130.6	130.6	130.6	130.6	130.6		17.4			17.4	
Effective Green, g (s)	130.6	130.6	130.6	130.6	130.6	130.6		17.4			17.4	
Actuated g/C Ratio	0.82	0.82	0.82	0.82	0.82	0.82		0.11			0.11	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	472	4025	1230	439	2749	1154		165			138	
v/s Ratio Prot		0.18			c0.22							
v/s Ratio Perm	0.04		0.02	0.04		0.02		0.02			c0.04	
v/c Ratio	0.04	0.22	0.02	0.05	0.27	0.02		0.16			0.37	
Uniform Delay, d1	2.8	3.3	2.7	2.8	3.5	2.8		64.7			66.2	
Progression Factor	0.79	0.77	0.53	0.75	0.71	0.50		1.00			1.00	
Incremental Delay, d2	0.1	0.1	0.0	0.2	0.2	0.0		1.0			3.4	
Delay (s)	2.4	2.7	1.5	2.4	2.7	1.4		65.6			69.6	
Level of Service	A	A	A	A	A	A		E			E	
Approach Delay (s/veh)		2.6			2.6			65.6			69.6	
Approach LOS		A			A			E			E	

Intersection Summary		
HCM 2000 Control Delay (s/veh)	7.5	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.28	A
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	209.6%	12.0
Analysis Period (min)	15	ICU Level of Service
		H
c Critical Lane Group		

Queues
3: Hurontario Street & Queensway

Existing
Weekday AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	43	695	354	98	555	69	407	458	59	395
Future Volume (vph)	43	695	354	98	555	69	407	458	59	395
Lane Group Flow (vph)	47	755	385	107	603	75	442	630	64	563
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		3	8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	50.0	50.0	50.0	5.0	62.0	62.0	5.0	68.0	5.0	51.0
Minimum Split (s)	57.0	57.0	57.0	10.0	69.0	69.0	10.0	75.0	10.0	58.0
Total Split (s)	60.0	60.0	60.0	12.0	72.0	72.0	30.0	76.0	12.0	58.0
Total Split (%)	37.5%	37.5%	37.5%	7.5%	45.0%	45.0%	18.8%	47.5%	7.5%	36.3%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	3.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	2.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	5.0	7.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	None	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	53.0	53.0	53.0	67.0	65.0	65.0	24.9	69.0	7.0	51.1
Actuated g/C Ratio	0.33	0.33	0.33	0.42	0.41	0.41	0.16	0.43	0.04	0.32
v/c Ratio	0.26	0.65	0.54	0.59	0.31	0.12	0.91	0.45	0.91	0.54
Control Delay (s/veh)	43.9	48.8	6.3	35.8	24.7	2.2	85.5	26.3	158.5	44.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.9	48.8	6.3	35.8	24.7	2.2	85.5	26.3	158.5	44.7
LOS	D	D	A	D	C	A	F	C	F	D
Approach Delay (s/veh)		34.8			24.1			50.7		56.3
Approach LOS		C			C			D		E
Queue Length 50th (m)	12.8	101.4	0.0	15.3	38.1	1.4	66.0	69.6	20.0	72.1
Queue Length 95th (m)	26.8	122.3	23.9	24.3	37.9	3.0	#95.4	78.2	#49.6	90.7
Internal Link Dist (m)		171.6			176.7			106.5		184.3
Turn Bay Length (m)	101.0		88.0	100.0		72.0	63.0		43.0	
Base Capacity (vph)	183	1159	719	182	1965	602	486	1404	70	1048
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.65	0.54	0.59	0.31	0.12	0.91	0.45	0.91	0.54

Intersection Summary

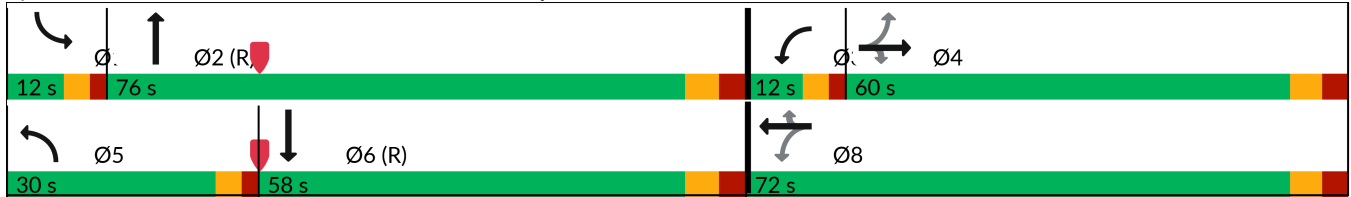
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 54.5 (34%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 155	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay (s/veh): 40.9	Intersection LOS: D
Intersection Capacity Utilization 167.5%	ICU Level of Service H
Analysis Period (min) 15	

Queues
3: Hurontario Street & Queensway

Existing
Weekday AM Peak

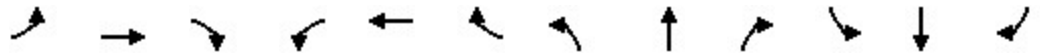
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Hurontario Street & Queensway



HCM Signalized Intersection Capacity Analysis
3: Hurontario Street & Queensway

Existing
Weekday AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑↑	↗	↘↗	↑↗		↘	↑↗	
Traffic Volume (vph)	43	695	354	98	555	69	407	458	121	59	395	123
Future Volume (vph)	43	695	354	98	555	69	407	458	121	59	395	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		5.0	7.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.92	1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1275	3500	1394	1558	4839	1343	3113	3222		1604	3228	
Flt Permitted	0.41	1.00	1.00	0.19	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	555	3500	1394	307	4839	1343	3113	3222		1604	3228	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	47	755	385	107	603	75	442	498	132	64	429	134
RTOR Reduction (vph)	0	0	257	0	0	45	0	15	0	0	18	0
Lane Group Flow (vph)	47	755	128	107	603	30	442	615	0	64	545	0
Confl. Peds. (#/hr)	61		23	23		61	19		79	79		19
Heavy Vehicles (%)	28%	2%	4%	8%	6%	3%	5%	4%	12%	5%	6%	5%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	53.0	53.0	53.0	65.0	65.0	65.0	24.9	69.0		7.0	51.1	
Effective Green, g (s)	53.0	53.0	53.0	65.0	65.0	65.0	24.9	69.0		7.0	51.1	
Actuated g/C Ratio	0.33	0.33	0.33	0.41	0.41	0.41	0.16	0.43		0.04	0.32	
Clearance Time (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		5.0	7.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	183	1159	461	179	1965	545	484	1389		70	1030	
v/s Ratio Prot		c0.22		c0.03	0.12		c0.14	0.19		0.04	c0.17	
v/s Ratio Perm	0.08		0.09	0.22		0.02						
v/c Ratio	0.26	0.65	0.28	0.60	0.31	0.06	0.91	0.44		0.91	0.53	
Uniform Delay, d1	39.1	45.6	39.4	33.3	32.2	28.9	66.5	32.0		76.2	44.6	
Progression Factor	1.00	1.00	1.00	0.74	0.75	0.64	0.94	0.82		1.00	1.00	
Incremental Delay, d2	3.4	2.9	1.5	7.7	0.4	0.2	22.0	1.0		80.7	1.9	
Delay (s)	42.5	48.5	40.9	32.4	24.6	18.8	84.6	27.2		156.9	46.5	
Level of Service	D	D	D	C	C	B	F	C		F	D	
Approach Delay (s/veh)		45.8			25.1			50.9			57.8	
Approach LOS		D			C			D			E	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			44.9			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			160.0			Sum of lost time (s)			24.0			
Intersection Capacity Utilization			167.5%			ICU Level of Service			H			
Analysis Period (min)			15									
c Critical Lane Group												

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	30	956	9	0	847
Future Vol, veh/h	0	30	956	9	0	847
Conflicting Peds, #/hr	0	0	0	16	16	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	7	8	11	0	5
Mvmt Flow	0	33	1039	10	0	921

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	541	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.04	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.37	-	-	-	-
Pot Cap-1 Maneuver	0	473	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	467	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	467
HCM Lane V/C Ratio	-	-	0.07
HCM Ctrl Dly (s/v)	-	-	13.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0.2

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	20	945	9	0	847
Future Vol, veh/h	0	20	945	9	0	847
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	7	22	0	4
Mvmt Flow	0	22	1027	10	0	921

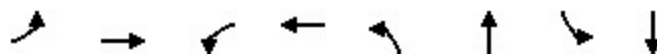
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	527	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	501	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	498	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	498
HCM Lane V/C Ratio	-	-	0.044
HCM Ctrl Dly (s/v)	-	-	12.6
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0.1

Queues
6: Hurontario Street & Bronte College Court/Sherobee Road

Existing
Weekday AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↕	↖	↕
Traffic Volume (vph)	33	6	21	14	102	784	37	794
Future Volume (vph)	33	6	21	14	102	784	37	794
Lane Group Flow (vph)	36	43	23	164	111	856	40	880
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	47.0	47.0	47.0	47.0	13.0	30.5	13.0	30.5
Total Split (s)	47.0	47.0	47.0	47.0	24.0	89.0	24.0	89.0
Total Split (%)	29.4%	29.4%	29.4%	29.4%	15.0%	55.6%	15.0%	55.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	5.0	5.0	5.0	5.0	2.0	3.5	2.0	3.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.9	12.9	12.9	12.9	17.7	117.0	11.2	107.9
Actuated g/C Ratio	0.08	0.08	0.08	0.08	0.11	0.73	0.07	0.67
v/c Ratio	0.71	0.27	0.23	0.62	0.60	0.33	0.34	0.37
Control Delay (s/veh)	130.7	27.6	72.4	23.2	80.4	9.0	67.3	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	130.7	27.6	72.4	23.2	80.4	9.0	67.3	10.6
LOS	F	C	E	C	F	A	E	B
Approach Delay (s/veh)		74.5		29.3		17.2		13.0
Approach LOS		E		C		B		B
Queue Length 50th (m)	10.5	1.9	6.4	4.2	31.5	45.4	11.9	40.5
Queue Length 95th (m)	#23.6	13.4	14.9	25.6	49.3	66.4	m21.0	63.4
Internal Link Dist (m)		55.8		61.0		168.5		77.5
Turn Bay Length (m)			30.0		50.0		47.0	
Base Capacity (vph)	150	404	298	490	212	2606	200	2399
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	0.24	0.11	0.08	0.33	0.52	0.33	0.20	0.37

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 38 (24%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay (s/veh): 18.6	Intersection LOS: B
Intersection Capacity Utilization 76.7%	ICU Level of Service D
Analysis Period (min) 15	

Queues

6: Hurontario Street & Bronte College Court/Sherobee Road

Existing
Weekday AM Peak

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

Queue shown is maximum after two cycles.

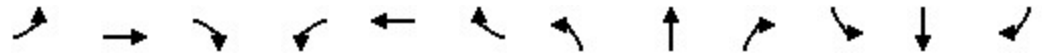
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Hurontario Street & Bronte College Court/Sherobee Road



HCM Signalized Intersection Capacity Analysis
 6: Hurontario Street & Bronte College Court/Sherobee Road

Existing
 Weekday AM Peak

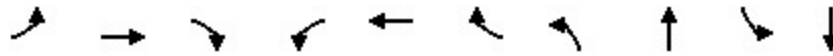


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕		↖	↗	
Traffic Volume (vph)	33	6	33	21	14	137	102	784	4	37	794	16
Future Volume (vph)	33	6	33	21	14	137	102	784	4	37	794	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frbp, ped/bikes	1.00	0.97		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.97	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.87		1.00	0.86		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1667	1587		1639	1585		1685	3566		1685	3557	
Flt Permitted	0.36	1.00		0.73	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	636	1587		1257	1585		1685	3566		1685	3557	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	7	36	23	15	149	111	852	4	40	863	17
RTOR Reduction (vph)	0	33	0	0	137	0	0	0	0	0	1	0
Lane Group Flow (vph)	36	10	0	23	27	0	111	856	0	40	879	0
Confl. Peds. (#/hr)	11		23	23		11	5		26	26		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	12.9	12.9		12.9	12.9		17.7	116.0		9.6	107.9	
Effective Green, g (s)	12.9	12.9		12.9	12.9		17.7	116.0		9.6	107.9	
Actuated g/C Ratio	0.08	0.08		0.08	0.08		0.11	0.73		0.06	0.67	
Clearance Time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	51	127		101	127		186	2585		101	2398	
v/s Ratio Prot		0.01			0.02		c0.07	0.24		0.02	c0.25	
v/s Ratio Perm	c0.06			0.02								
v/c Ratio	0.71	0.08		0.23	0.21		0.60	0.33		0.40	0.37	
Uniform Delay, d1	71.7	68.0		68.9	68.8		67.8	8.0		72.4	11.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.87	0.84	
Incremental Delay, d2	43.4	0.6		2.4	1.8		7.6	0.3		4.5	0.4	
Delay (s)	115.1	68.6		71.3	70.6		75.3	8.3		67.1	9.8	
Level of Service	F	E		E	E		E	A		E	A	
Approach Delay (s/veh)		89.8			70.6			16.0			12.3	
Approach LOS		F			E			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	21.5
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Queues
1: Camilla Road & Queensway

Existing
Weekday PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	31	878	66	50	1014	94	34	59	74	78
Future Volume (vph)	31	878	66	50	1014	94	34	59	74	78
Lane Group Flow (vph)	34	954	72	54	1102	102	37	99	80	163
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	55.0	55.0	55.0	55.0	55.0	55.0	15.0	15.0	15.0	15.0
Minimum Split (s)	61.0	61.0	61.0	61.0	61.0	61.0	33.0	33.0	33.0	33.0
Total Split (s)	120.0	120.0	120.0	120.0	120.0	120.0	40.0	40.0	40.0	40.0
Total Split (%)	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	25.0%	25.0%	25.0%	25.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0	8.0	8.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	125.0	125.0	125.0	125.0	125.0	125.0	21.0	21.0	21.0	21.0
Actuated g/C Ratio	0.78	0.78	0.78	0.78	0.78	0.78	0.13	0.13	0.13	0.13
v/c Ratio	0.10	0.35	0.06	0.14	0.40	0.09	0.34	0.41	0.51	0.68
Control Delay (s/veh)	2.9	2.7	0.2	6.1	6.4	1.1	69.9	57.8	75.0	68.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.9	2.7	0.2	6.1	6.4	1.1	69.9	57.8	75.0	68.8
LOS	A	A	A	A	A	A	E	E	E	E
Approach Delay (s/veh)		2.6			6.0			61.1		70.8
Approach LOS		A			A			E		E
Queue Length 50th (m)	0.9	13.6	0.1	3.4	47.2	0.0	10.0	23.4	22.5	40.6
Queue Length 95th (m)	2.3	18.8	0.2	8.9	71.0	4.6	20.4	39.2	37.4	61.9
Internal Link Dist (m)		293.4			127.4			111.6		70.0
Turn Bay Length (m)	94.0		78.0	110.0		80.0	33.0		28.0	
Base Capacity (vph)	327	2733	1170	390	2761	1160	166	360	239	354
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.35	0.06	0.14	0.40	0.09	0.22	0.28	0.33	0.46

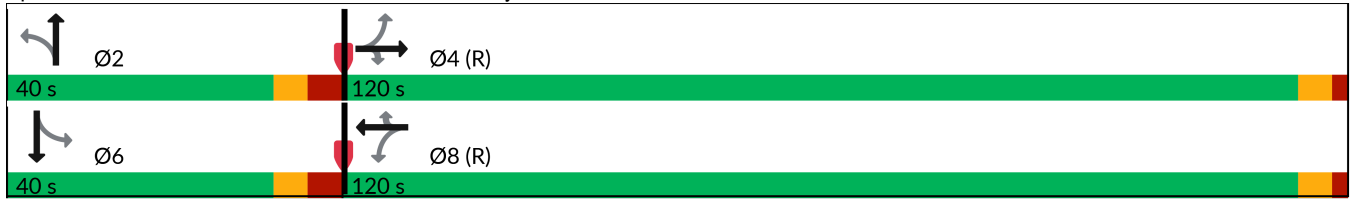
Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 90 (56%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 13.3	Intersection LOS: B
Intersection Capacity Utilization 122.8%	ICU Level of Service H
Analysis Period (min) 15	

Queues
1: Camilla Road & Queensway

Existing
Weekday PM Peak

Splits and Phases: 1: Camilla Road & Queensway



HCM Signalized Intersection Capacity Analysis

1: Camilla Road & Queensway

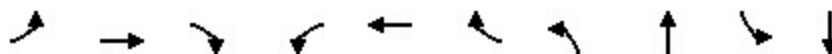
Existing
Weekday PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	878	66	50	1014	94	34	59	32	74	78	72
Future Volume (vph)	31	878	66	50	1014	94	34	59	32	74	78	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0		8.0	8.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97	1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	3500	1478	1685	3535	1457	1676	1740		1646	1669	
Flt Permitted	0.24	1.00	1.00	0.28	1.00	1.00	0.47	1.00		0.69	1.00	
Satd. Flow (perm)	419	3500	1478	500	3535	1457	832	1740		1195	1669	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	954	72	54	1102	102	37	64	35	80	85	78
RTOR Reduction (vph)	0	0	16	0	0	22	0	13	0	0	23	0
Lane Group Flow (vph)	34	954	56	54	1102	80	37	86	0	80	140	0
Confl. Peds. (#/hr)	5					5	4		8	8		4
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	2%	0%	1%	4%	3%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	125.0	125.0	125.0	125.0	125.0	125.0	21.0	21.0		21.0	21.0	
Effective Green, g (s)	125.0	125.0	125.0	125.0	125.0	125.0	21.0	21.0		21.0	21.0	
Actuated g/C Ratio	0.78	0.78	0.78	0.78	0.78	0.78	0.13	0.13		0.13	0.13	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0		8.0	8.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	327	2734	1154	390	2761	1138	109	228		156	219	
v/s Ratio Prot		0.27			c0.31			0.05			c0.08	
v/s Ratio Perm	0.08		0.04	0.11		0.05	0.04			0.07		
v/c Ratio	0.10	0.35	0.05	0.14	0.40	0.07	0.34	0.38		0.51	0.64	
Uniform Delay, d1	4.2	5.3	4.0	4.3	5.6	4.0	63.2	63.5		64.7	65.9	
Progression Factor	0.43	0.42	0.08	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.3	0.1	0.7	0.4	0.1	3.9	2.2		5.6	8.5	
Delay (s)	2.4	2.5	0.4	5.0	6.0	4.2	67.0	65.7		70.3	74.4	
Level of Service	A	A	A	A	A	A	E	E		E	E	
Approach Delay (s/veh)		2.4			5.8			66.1			73.1	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			13.6					HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio			0.43									
Actuated Cycle Length (s)			160.0					Sum of lost time (s)		14.0		
Intersection Capacity Utilization			122.8%					ICU Level of Service		H		
Analysis Period (min)			15									
c Critical Lane Group												

Queues

2: East Site Access/2325 Hurontario Street Site Access & Queensway

Existing Weekday PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	16	898	65	74	1018	28	9	2	27	9
Future Volume (vph)	16	898	65	74	1018	28	9	2	27	9
Lane Group Flow (vph)	17	976	71	80	1107	30	0	66	0	57
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	105.0	105.0	105.0	105.0	105.0	105.0	17.0	17.0	17.0	17.0
Minimum Split (s)	111.0	111.0	111.0	111.0	111.0	111.0	41.0	41.0	41.0	41.0
Total Split (s)	119.0	119.0	119.0	119.0	119.0	119.0	41.0	41.0	41.0	41.0
Total Split (%)	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%	25.6%	25.6%	25.6%	25.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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)	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	131.0	131.0	131.0	131.0	131.0	131.0		17.0		17.0
Actuated g/C Ratio	0.82	0.82	0.82	0.82	0.82	0.82		0.11		0.11
v/c Ratio	0.05	0.24	0.06	0.20	0.38	0.03		0.30		0.36
Control Delay (s/veh)	3.2	3.6	0.7	3.9	3.5	1.1		24.6		58.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	3.2	3.6	0.7	3.9	3.5	1.1		24.6		58.5
LOS	A	A	A	A	A	A		C		E
Approach Delay (s/veh)		3.4			3.5			24.6		58.5
Approach LOS		A			A			C		E
Queue Length 50th (m)	0.8	19.5	0.2	3.9	29.2	0.3		3.2		12.1
Queue Length 95th (m)	m1.2	m19.8	m0.8	6.7	32.4	m1.8		17.2		26.0
Internal Link Dist (m)		176.7			293.4			40.1		8.7
Turn Bay Length (m)	32.0		33.0	36.0		30.0				
Base Capacity (vph)	351	4117	1246	405	2894	1163		390		314
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	0.05	0.24	0.06	0.20	0.38	0.03		0.17		0.18

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 86 (54%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 155	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.38	
Intersection Signal Delay (s/veh): 5.3	Intersection LOS: A
Intersection Capacity Utilization 204.2%	ICU Level of Service H
Analysis Period (min) 15	

Queues

2: East Site Access/2325 Hurontario Street Site Access & Queensway

Existing
Weekday PM Peak

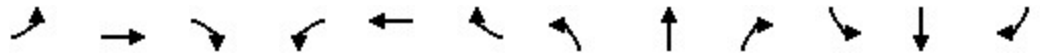
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: East Site Access/2325 Hurontario Street Site Access & Queensway



HCM Signalized Intersection Capacity Analysis
 2: East Site Access/2325 Hurontario Street Site Access & Queensway

Existing
 Weekday PM Peak

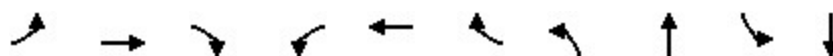


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↗	↙	↑↑	↗		↕			↕	
Traffic Volume (vph)	16	898	65	74	1018	28	9	2	50	27	9	17
Future Volume (vph)	16	898	65	74	1018	28	9	2	50	27	9	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00		1.00			1.00	
Frbp, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98		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	1.00	0.85	1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99			0.98	
Satd. Flow (prot)	1684	5029	1507	1685	3535	1416		1659			1719	
Flt Permitted	0.24	1.00	1.00	0.28	1.00	1.00		0.95			0.79	
Satd. Flow (perm)	429	5029	1507	494	3535	1416		1589			1391	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	976	71	80	1107	30	10	2	54	29	10	18
RTOR Reduction (vph)	0	0	13	0	0	4	0	48	0	0	12	0
Lane Group Flow (vph)	17	976	58	80	1107	26	0	18	0	0	45	0
Confl. Peds. (#/hr)	1					1						
Heavy Vehicles (%)	0%	2%	0%	0%	1%	4%	0%	0%	0%	4%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	131.0	131.0	131.0	131.0	131.0	131.0		17.0			17.0	
Effective Green, g (s)	131.0	131.0	131.0	131.0	131.0	131.0		17.0			17.0	
Actuated g/C Ratio	0.82	0.82	0.82	0.82	0.82	0.82		0.11			0.11	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	351	4117	1233	404	2894	1159		168			147	
v/s Ratio Prot		0.19			c0.31							
v/s Ratio Perm	0.04		0.04	0.16		0.02		0.01				c0.03
v/c Ratio	0.05	0.24	0.05	0.20	0.38	0.02		0.11				0.31
Uniform Delay, d1	2.7	3.3	2.7	3.1	3.8	2.7		64.6				66.1
Progression Factor	1.06	1.06	1.23	0.86	0.81	0.83		1.00				1.00
Incremental Delay, d2	0.2	0.1	0.1	1.0	0.4	0.0		0.6				2.5
Delay (s)	3.1	3.6	3.4	3.7	3.5	2.3		65.2				68.6
Level of Service	A	A	A	A	A	A		E				E
Approach Delay (s/veh)		3.5			3.5			65.2				68.6
Approach LOS		A			A			E				E

Intersection Summary		
HCM 2000 Control Delay (s/veh)	6.7	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.37	A
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	204.2%	12.0
Analysis Period (min)	15	ICU Level of Service
		H
c Critical Lane Group		

Queues
3: Hurontario Street & Queensway

Existing
Weekday PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	42	713	388	142	826	76	310	481	81	543
Future Volume (vph)	42	713	388	142	826	76	310	481	81	543
Lane Group Flow (vph)	46	775	422	154	898	83	337	724	88	693
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	50.0	50.0	5.0	52.0	52.0	5.0	68.0	5.0	51.0
Minimum Split (s)	10.0	60.0	60.0	10.0	59.0	59.0	10.0	75.0	10.0	58.0
Total Split (s)	12.0	60.0	60.0	12.0	60.0	60.0	30.0	76.0	12.0	58.0
Total Split (%)	7.5%	37.5%	37.5%	7.5%	37.5%	37.5%	18.8%	47.5%	7.5%	36.3%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	2.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.0	0.0
Total Lost Time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	3.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	62.0	53.0	53.0	63.0	55.4	55.4	22.7	69.0	9.0	53.3
Actuated g/C Ratio	0.39	0.33	0.33	0.39	0.35	0.35	0.14	0.43	0.06	0.33
v/c Ratio	0.27	0.67	0.60	0.81	0.51	0.14	0.74	0.50	0.95	0.60
Control Delay (s/veh)	32.3	49.4	11.9	56.4	35.2	2.5	58.7	19.8	152.0	46.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.3	49.4	11.9	56.4	35.2	2.5	58.7	19.8	152.0	46.7
LOS	C	D	B	E	D	A	E	B	F	D
Approach Delay (s/veh)		36.0			35.7			32.2		58.6
Approach LOS		D			D			C		E
Queue Length 50th (m)	9.7	104.8	15.3	21.8	81.1	1.2	37.8	81.5	26.5	90.3
Queue Length 95th (m)	19.3	126.3	48.3	#43.4	84.6	3.0	52.5	101.1	#60.1	111.8
Internal Link Dist (m)		171.6			176.7			106.5		184.3
Turn Bay Length (m)	101.0		88.0	100.0		72.0	63.0		43.0	
Base Capacity (vph)	170	1159	707	191	1775	580	505	1445	93	1147
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.67	0.60	0.81	0.51	0.14	0.67	0.50	0.95	0.60

Intersection Summary

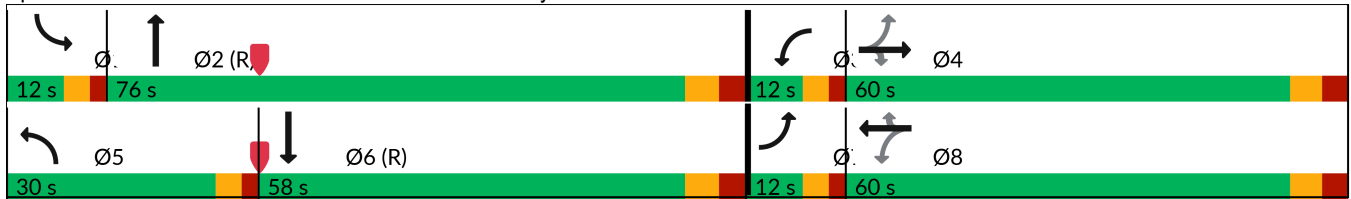
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 54.5 (34%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 155	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay (s/veh): 39.1	Intersection LOS: D
Intersection Capacity Utilization 129.9%	ICU Level of Service H
Analysis Period (min) 15	

Queues
 3: Hurontario Street & Queensway

Existing
 Weekday PM Peak

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

Splits and Phases: 3: Hurontario Street & Queensway



HCM Signalized Intersection Capacity Analysis

3: Hurontario Street & Queensway

Existing
Weekday PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑	↗	↙	↑↑↑	↗	↙↗	↑↗		↙	↑↗	
Traffic Volume (vph)	42	713	388	142	826	76	310	481	185	81	543	95
Future Volume (vph)	42	713	388	142	826	76	310	481	185	81	543	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.95	1.00	0.98		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1390	3500	1432	1666	5129	1431	3236	3295		1668	3416	
Flt Permitted	0.22	1.00	1.00	0.19	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	322	3500	1432	339	5129	1431	3236	3295		1668	3416	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	775	422	154	898	83	337	523	201	88	590	103
RTOR Reduction (vph)	0	0	231	0	0	54	0	25	0	0	9	0
Lane Group Flow (vph)	46	775	191	154	898	29	337	699	0	88	684	0
Confl. Peds. (#/hr)	33		25	25		33	16		67	67		16
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	21%	2%	1%	1%	0%	0%	1%	2%	2%	1%	2%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	59.6	54.0	54.0	62.4	55.4	55.4	22.7	68.0		7.0	52.3	
Effective Green, g (s)	59.6	54.0	54.0	62.4	55.4	55.4	22.7	68.0		9.0	52.3	
Actuated g/C Ratio	0.37	0.34	0.34	0.39	0.35	0.35	0.14	0.43		0.06	0.33	
Clearance Time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		5.0	7.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	157	1181	483	190	1775	495	459	1400		93	1116	
v/s Ratio Prot	0.01	0.22		c0.04	0.18		c0.10	0.21		c0.05	c0.20	
v/s Ratio Perm	0.10		0.13	c0.28		0.02						
v/c Ratio	0.29	0.66	0.40	0.81	0.51	0.06	0.73	0.50		0.95	0.61	
Uniform Delay, d1	33.4	45.1	40.5	42.1	41.5	34.9	65.8	33.6		75.3	45.3	
Progression Factor	1.00	1.00	1.00	0.77	0.81	2.94	0.75	0.60		1.00	1.00	
Incremental Delay, d2	2.2	2.9	2.4	23.7	1.0	0.2	6.7	1.2		76.7	2.5	
Delay (s)	35.5	48.0	42.9	56.4	34.6	103.0	56.1	21.4		152.0	47.9	
Level of Service	D	D	D	E	C	F	E	C		F	D	
Approach Delay (s/veh)		45.8			42.5			32.4			59.6	
Approach LOS		D			D			C			E	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			44.1									D
HCM 2000 Volume to Capacity ratio			0.74									
Actuated Cycle Length (s)			160.0							24.0		
Intersection Capacity Utilization			129.9%									H
Analysis Period (min)			15									

c Critical Lane Group

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	13	963	8	0	1073
Future Vol, veh/h	0	13	963	8	0	1073
Conflicting Peds, #/hr	0	0	0	21	21	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	0	14	1047	9	0	1166

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	549	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	485	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	477	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	477
HCM Lane V/C Ratio	-	-	0.03
HCM Ctrl Dly (s/v)	-	-	12.8
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0.1

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	5	966	14	0	1073
Future Vol, veh/h	0	5	966	14	0	1073
Conflicting Peds, #/hr	0	0	0	23	23	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	0	5	1050	15	0	1166

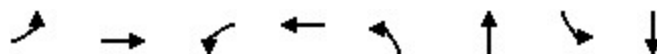
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	556	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	480	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	472	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	472
HCM Lane V/C Ratio	-	-	0.012
HCM Ctrl Dly (s/v)	-	-	12.7
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0

Queues
6: Hurontario Street & Bronte College Court/Sherobee Road

Existing
Weekday PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	6	13	10	35	813	107	942
Future Volume (vph)	81	6	13	10	35	813	107	942
Lane Group Flow (vph)	88	217	14	104	38	892	116	1050
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	47.0	47.0	47.0	47.0	13.0	30.5	13.0	30.5
Total Split (s)	47.0	47.0	47.0	47.0	25.0	95.0	18.0	88.0
Total Split (%)	29.4%	29.4%	29.4%	29.4%	15.6%	59.4%	11.3%	55.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	5.0	5.0	5.0	5.0	2.0	3.5	2.0	3.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	C-Max	Max	C-Max
Act Effct Green (s)	19.7	19.7	19.7	19.7	38.3	87.5	31.3	80.5
Actuated g/C Ratio	0.12	0.12	0.12	0.12	0.24	0.55	0.20	0.50
v/c Ratio	0.61	0.59	0.24	0.38	0.10	0.48	0.36	0.61
Control Delay (s/veh)	82.7	14.8	70.5	17.5	51.7	23.2	51.5	45.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	82.7	14.8	70.5	17.5	51.7	23.2	51.5	45.9
LOS	F	B	E	B	D	C	D	D
Approach Delay (s/veh)		34.4		23.8		24.4		46.5
Approach LOS		C		C		C		D
Queue Length 50th (m)	25.7	1.9	4.1	2.9	9.2	85.1	30.5	139.3
Queue Length 95th (m)	41.6	24.1	11.2	18.8	20.7	101.4	m50.9	172.2
Internal Link Dist (m)		55.8		61.0		168.5		77.5
Turn Bay Length (m)			30.0		50.0		47.0	
Base Capacity (vph)	279	517	112	438	380	1875	325	1720
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	0.32	0.42	0.13	0.24	0.10	0.48	0.36	0.61

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 3 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay (s/veh): 35.8	Intersection LOS: D
Intersection Capacity Utilization 79.3%	ICU Level of Service D
Analysis Period (min) 15	

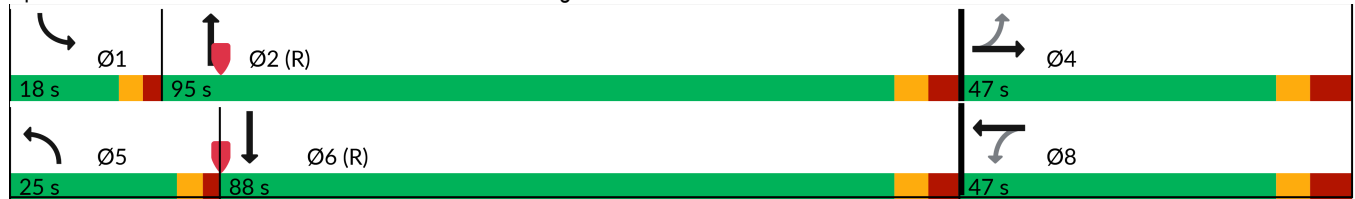
Queues

6: Hurontario Street & Bronte College Court/Sherobee Road

Existing
Weekday PM Peak























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

Splits and Phases: 6: Hurontario Street & Bronte College Court/Sherobee Road



HCM Signalized Intersection Capacity Analysis
 6: Hurontario Street & Bronte College Court/Sherobee Road

Existing
 Weekday PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (vph)	81	6	193	13	10	86	35	813	7	107	942	24
Future Volume (vph)	81	6	193	13	10	86	35	813	7	107	942	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frbp, ped/bikes	1.00	0.94		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.97	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.87		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1618	1505		1506	1547		1589	3426		1668	3419	
Flt Permitted	0.69	1.00		0.30	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1175	1505		474	1547		1589	3426		1668	3419	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	7	210	14	11	93	38	884	8	116	1024	26
RTOR Reduction (vph)	0	184	0	0	82	0	0	0	0	0	1	0
Lane Group Flow (vph)	88	33	0	14	22	0	38	892	0	116	1049	0
Confl. Peds. (#/hr)	10		43	43		10	8		20	20		8
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	3%	0%	0%	8%	0%	3%	6%	4%	0%	1%	4%	0%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	19.7	19.7		19.7	19.7		38.3	87.5		31.3	80.5	
Effective Green, g (s)	19.7	19.7		19.7	19.7		38.3	87.5		31.3	80.5	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.24	0.55		0.20	0.50	
Clearance Time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	144	185		58	190		380	1873		326	1720	
v/s Ratio Prot		0.02			0.01		0.02	c0.26		c0.07	c0.31	
v/s Ratio Perm	c0.07			0.03								
v/c Ratio	0.61	0.18		0.24	0.12		0.10	0.48		0.36	0.61	
Uniform Delay, d1	66.5	62.9		63.4	62.4		47.4	22.2		55.6	28.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.84	1.55	
Incremental Delay, d2	10.6	1.0		4.5	0.6		0.5	0.9		2.4	1.3	
Delay (s)	77.1	63.9		67.9	63.0		47.9	23.1		49.1	45.6	
Level of Service	E	E		E	E		D	C		D	D	
Approach Delay (s/veh)		67.7			63.6			24.1			45.9	
Approach LOS		E			E			C			D	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			41.3									D
HCM 2000 Volume to Capacity ratio			0.54									
Actuated Cycle Length (s)			160.0								21.5	
Intersection Capacity Utilization			79.3%									D
Analysis Period (min)			15									

c Critical Lane Group

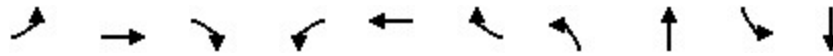


APPENDIX I

Future Background Intersection Capacity Analysis

Queues
1: Camilla Road & Queensway

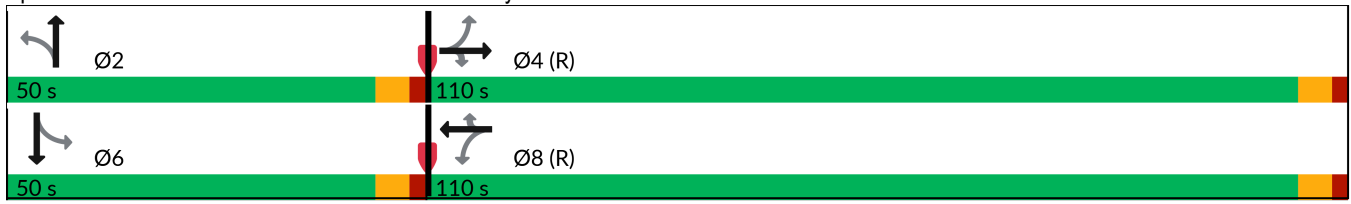
Future Background
Weekday AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	37	818	77	43	652	60	53	103	104	105
Future Volume (vph)	37	818	77	43	652	60	53	103	104	105
Lane Group Flow (vph)	40	889	84	47	709	65	58	182	113	149
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	55.0	55.0	55.0	55.0	55.0	55.0	30.0	30.0	30.0	30.0
Minimum Split (s)	61.0	61.0	61.0	61.0	61.0	61.0	36.0	36.0	36.0	36.0
Total Split (s)	110.0	110.0	110.0	110.0	110.0	110.0	50.0	50.0	50.0	50.0
Total Split (%)	68.8%	68.8%	68.8%	68.8%	68.8%	68.8%	31.3%	31.3%	31.3%	31.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	116.1	116.1	116.1	116.1	116.1	116.1	31.9	31.9	31.9	31.9
Actuated g/C Ratio	0.73	0.73	0.73	0.73	0.73	0.73	0.20	0.20	0.20	0.20
v/c Ratio	0.09	0.36	0.08	0.12	0.29	0.06	0.34	0.52	0.70	0.43
Control Delay (s/veh)	6.3	5.9	1.4	8.2	8.2	1.7	60.5	56.4	83.0	55.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.3	5.9	1.4	8.2	8.2	1.7	60.5	56.4	83.0	55.8
LOS	A	A	A	A	A	A	E	E	F	E
Approach Delay (s/veh)		5.5			7.7			57.4		67.5
Approach LOS		A			A			E		E
Queue Length 50th (m)	1.8	22.0	0.3	3.6	34.9	0.0	16.9	45.6	32.3	39.1
Queue Length 95th (m)	6.3	40.3	4.1	9.4	52.7	4.7	30.3	65.6	51.5	57.6
Internal Link Dist (m)		293.4			127.4			111.6		70.0
Turn Bay Length (m)	94.0		78.0	110.0		80.0	33.0		28.0	
Base Capacity (vph)	431	2490	1054	378	2443	1019	233	472	221	474
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.36	0.08	0.12	0.29	0.06	0.25	0.39	0.51	0.31

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 90 (56%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay (s/veh): 18.6	Intersection LOS: B
Intersection Capacity Utilization 131.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: Camilla Road & Queensway



HCM Signalized Intersection Capacity Analysis
1: Camilla Road & Queensway

Future Background
Weekday AM Peak

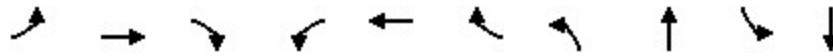
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	818	77	43	652	60	53	103	64	104	105	32
Future Volume (vph)	37	818	77	43	652	60	53	103	64	104	105	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.96	1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	0.99	1.00		0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3433	1422	1685	3368	1381	1474	1668		1621	1698	
Flt Permitted	0.36	1.00	1.00	0.29	1.00	1.00	0.55	1.00		0.47	1.00	
Satd. Flow (perm)	594	3433	1422	521	3368	1381	849	1668		807	1698	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	889	84	47	709	65	58	112	70	113	114	35
RTOR Reduction (vph)	0	0	23	0	0	18	0	15	0	0	8	0
Lane Group Flow (vph)	40	889	61	47	709	47	58	167	0	113	141	0
Confl. Peds. (#/hr)	7					7	8		15	15		8
Confl. Bikes (#/hr)									2			1
Heavy Vehicles (%)	8%	4%	6%	0%	6%	5%	13%	4%	5%	2%	7%	3%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	116.1	116.1	116.1	116.1	116.1	116.1	31.9	31.9		31.9	31.9	
Effective Green, g (s)	116.1	116.1	116.1	116.1	116.1	116.1	31.9	31.9		31.9	31.9	
Actuated g/C Ratio	0.73	0.73	0.73	0.73	0.73	0.73	0.20	0.20		0.20	0.20	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	431	2491	1031	378	2443	1002	169	332		160	338	
v/s Ratio Prot		c0.26			0.21			0.10				0.08
v/s Ratio Perm	0.07		0.04	0.09		0.03	0.07			c0.14		
v/c Ratio	0.09	0.36	0.06	0.12	0.29	0.05	0.34	0.50		0.71	0.42	
Uniform Delay, d1	6.5	8.1	6.3	6.6	7.6	6.2	55.0	57.0		59.7	55.9	
Progression Factor	0.80	0.65	0.85	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.1	0.7	0.3	0.1	2.5	2.5		16.4	1.7	
Delay (s)	5.6	5.7	5.5	7.3	7.9	6.3	57.6	59.5		76.1	57.7	
Level of Service	A	A	A	A	A	A	E	E		E	E	
Approach Delay (s/veh)		5.6			7.8			59.0			65.6	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			18.6									B
HCM 2000 Volume to Capacity ratio			0.43									
Actuated Cycle Length (s)			160.0								12.0	
Intersection Capacity Utilization			131.7%									H
Analysis Period (min)			15									

c Critical Lane Group

Queues

2: East Site Access/2325 Hurontario Street Site Access & Queensway

Future Background
Weekday AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	19	847	29	22	683	32	18	0	31	7
Future Volume (vph)	19	847	29	22	683	32	18	0	31	7
Lane Group Flow (vph)	21	921	32	24	742	35	0	79	0	65
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	110.0	110.0	110.0	110.0	110.0	110.0	12.0	12.0	12.0	12.0
Minimum Split (s)	116.0	116.0	116.0	116.0	116.0	116.0	41.0	41.0	41.0	41.0
Total Split (s)	119.0	119.0	119.0	119.0	119.0	119.0	41.0	41.0	41.0	41.0
Total Split (%)	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%	25.6%	25.6%	25.6%	25.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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)	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	130.6	130.6	130.6	130.6	130.6	130.6		17.4		17.4
Actuated g/C Ratio	0.82	0.82	0.82	0.82	0.82	0.82		0.11		0.11
v/c Ratio	0.04	0.23	0.03	0.06	0.27	0.03		0.36		0.43
Control Delay (s/veh)	4.1	3.6	1.3	3.7	3.2	0.9		24.9		56.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	4.1	3.6	1.3	3.7	3.2	0.9		24.9		56.1
LOS	A	A	A	A	A	A		C		E
Approach Delay (s/veh)		3.5			3.1			24.9		56.1
Approach LOS		A			A			C		E
Queue Length 50th (m)	0.8	13.8	0.1	0.7	12.7	0.0		5.6		14.0
Queue Length 95th (m)	m2.1	m24.0	m0.3	3.5	30.4	1.2		18.0		25.0
Internal Link Dist (m)		176.7			293.4			40.1		8.7
Turn Bay Length (m)	32.0		33.0	36.0		30.0				
Base Capacity (vph)	472	4025	1235	428	2748	1161		379		291
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	0.04	0.23	0.03	0.06	0.27	0.03		0.21		0.22

Intersection Summary

Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 86 (54%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
 Natural Cycle: 160
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.43
 Intersection Signal Delay (s/veh): 6.0
 Intersection Capacity Utilization 209.6%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service H

Queues

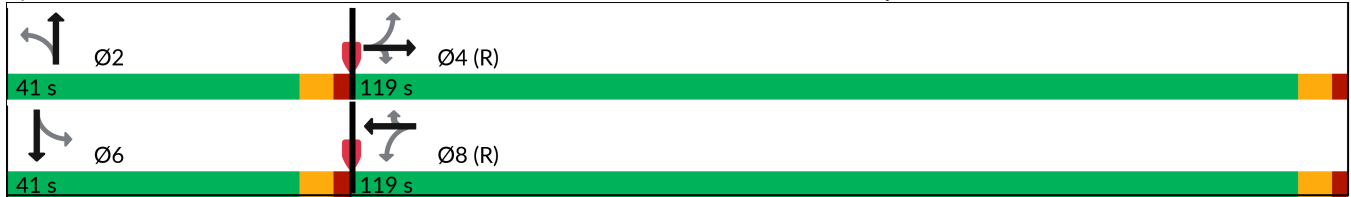
2: East Site Access/2325 Hurontario Street Site Access & Queensway

Future Background

Weekday AM Peak

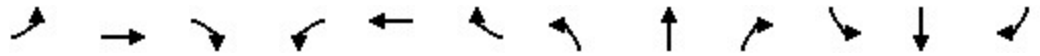
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: East Site Access/2325 Hurontario Street Site Access & Queensway



HCM Signalized Intersection Capacity Analysis
 2: East Site Access/2325 Hurontario Street Site Access & Queensway

Future Background
 Weekday AM Peak



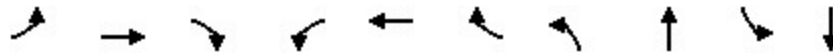
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑	↗		↕			↕	
Traffic Volume (vph)	19	847	29	22	683	32	18	0	54	31	7	21
Future Volume (vph)	19	847	29	22	683	32	18	0	54	31	7	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00		1.00			1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97		1.00			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.90			0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99			0.97	
Satd. Flow (prot)	1511	4932	1507	1685	3368	1415		1643			1678	
Flt Permitted	0.36	1.00	1.00	0.30	1.00	1.00		0.92			0.74	
Satd. Flow (perm)	579	4932	1507	525	3368	1415		1525			1277	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	921	32	24	742	35	20	0	59	34	8	23
RTOR Reduction (vph)	0	0	6	0	0	6	0	53	0	0	14	0
Lane Group Flow (vph)	21	921	26	24	742	29	0	26	0	0	51	0
Confl. Peds. (#/hr)	4					4	2					2
Heavy Vehicles (%)	11%	4%	0%	0%	6%	3%	0%	0%	2%	3%	0%	5%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	130.6	130.6	130.6	130.6	130.6	130.6		17.4			17.4	
Effective Green, g (s)	130.6	130.6	130.6	130.6	130.6	130.6		17.4			17.4	
Actuated g/C Ratio	0.82	0.82	0.82	0.82	0.82	0.82		0.11			0.11	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	472	4025	1230	428	2749	1154		165			138	
v/s Ratio Prot		0.19			c0.22							
v/s Ratio Perm	0.04		0.02	0.05		0.02		0.02				c0.04
v/c Ratio	0.04	0.23	0.02	0.06	0.27	0.02		0.16				0.37
Uniform Delay, d1	2.8	3.3	2.7	2.8	3.5	2.8		64.7			66.2	
Progression Factor	0.88	0.87	0.74	0.75	0.71	0.50		1.00			1.00	
Incremental Delay, d2	0.1	0.1	0.0	0.2	0.2	0.0		1.0			3.4	
Delay (s)	2.6	3.0	2.1	2.4	2.7	1.4		65.6			69.6	
Level of Service	A	A	A	A	A	A		E			E	
Approach Delay (s/veh)		3.0			2.6			65.6			69.6	
Approach LOS		A			A			E			E	

Intersection Summary		
HCM 2000 Control Delay (s/veh)	7.7	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.28	A
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	209.6%	12.0
Analysis Period (min)	15	ICU Level of Service
		H

c Critical Lane Group

Queues
3: Hurontario Street & Queensway

Future Background
Weekday AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	43	695	354	98	555	69	407	462	79	574
Future Volume (vph)	43	695	354	98	555	69	407	462	79	574
Lane Group Flow (vph)	47	755	385	107	603	75	442	634	86	806
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		3	8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	50.0	50.0	50.0	5.0	62.0	62.0	5.0	67.0	5.0	51.0
Minimum Split (s)	57.0	57.0	57.0	10.0	69.0	69.0	10.0	74.0	10.0	58.0
Total Split (s)	60.0	60.0	60.0	12.0	72.0	72.0	30.0	74.0	14.0	58.0
Total Split (%)	37.5%	37.5%	37.5%	7.5%	45.0%	45.0%	18.8%	46.3%	8.8%	36.3%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	3.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	2.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	5.0	7.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	None	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	53.0	53.0	53.0	67.0	65.0	65.0	24.9	67.0	9.0	51.1
Actuated g/C Ratio	0.33	0.33	0.33	0.42	0.41	0.41	0.16	0.42	0.06	0.32
v/c Ratio	0.26	0.65	0.55	0.59	0.31	0.12	0.91	0.46	0.96	0.77
Control Delay (s/veh)	43.9	48.8	8.6	35.8	24.7	2.2	85.5	27.9	155.7	53.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.9	48.8	8.6	35.8	24.7	2.2	85.5	27.9	155.7	53.4
LOS	D	D	A	D	C	A	F	C	F	D
Approach Delay (s/veh)		35.6			24.1			51.6		63.2
Approach LOS		D			C			D		E
Queue Length 50th (m)	12.8	101.4	6.5	15.3	38.1	1.4	65.4	71.8	26.9	115.7
Queue Length 95th (m)	26.8	122.3	34.1	24.3	37.9	3.0	#95.5	90.9	#61.6	140.2
Internal Link Dist (m)		171.6			176.7			106.5		184.3
Turn Bay Length (m)	101.0		88.0	100.0		72.0	63.0		43.0	
Base Capacity (vph)	183	1159	698	182	1965	602	486	1364	90	1049
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.65	0.55	0.59	0.31	0.12	0.91	0.46	0.96	0.77

Intersection Summary

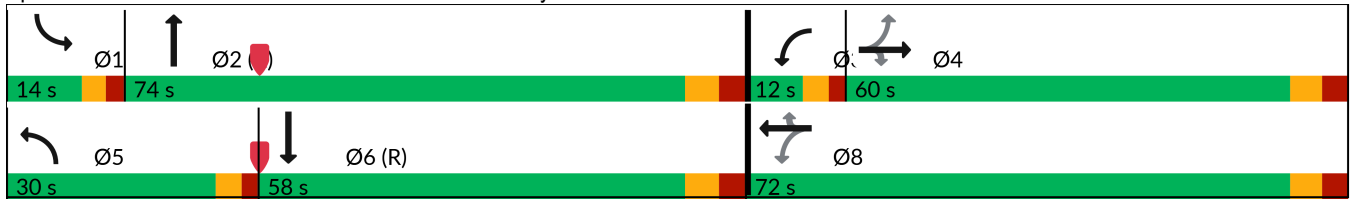
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 54.5 (34%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 155	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay (s/veh): 43.9	Intersection LOS: D
Intersection Capacity Utilization 166.7%	ICU Level of Service H
Analysis Period (min) 15	

Queues
3: Hurontario Street & Queensway

Future Background
Weekday AM Peak

























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

Splits and Phases: 3: Hurontario Street & Queensway



HCM Signalized Intersection Capacity Analysis
3: Hurontario Street & Queensway

Future Background
Weekday AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	695	354	98	555	69	407	462	121	79	574	167
Future Volume (vph)	43	695	354	98	555	69	407	462	121	79	574	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		5.0	7.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.92	1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1275	3500	1394	1558	4839	1343	3113	3223		1604	3235	
Flt Permitted	0.41	1.00	1.00	0.19	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	555	3500	1394	307	4839	1343	3113	3223		1604	3235	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	47	755	385	107	603	75	442	502	132	86	624	182
RTOR Reduction (vph)	0	0	237	0	0	45	0	15	0	0	17	0
Lane Group Flow (vph)	47	755	148	107	603	30	442	619	0	86	789	0
Confl. Peds. (#/hr)	61		23	23		61	19		79	79		19
Heavy Vehicles (%)	28%	2%	4%	8%	6%	3%	5%	4%	12%	5%	6%	5%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	53.0	53.0	53.0	65.0	65.0	65.0	24.9	67.0		9.0	51.1	
Effective Green, g (s)	53.0	53.0	53.0	65.0	65.0	65.0	24.9	67.0		9.0	51.1	
Actuated g/C Ratio	0.33	0.33	0.33	0.41	0.41	0.41	0.16	0.42		0.06	0.32	
Clearance Time (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		5.0	7.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	183	1159	461	179	1965	545	484	1349		90	1033	
v/s Ratio Prot		c0.22		c0.03	0.12		c0.14	0.19		0.05	c0.24	
v/s Ratio Perm	0.08		0.11	0.22		0.02						
v/c Ratio	0.26	0.65	0.32	0.60	0.31	0.06	0.91	0.46		0.96	0.76	
Uniform Delay, d1	39.1	45.6	40.0	33.3	32.2	28.9	66.5	33.5		75.3	49.0	
Progression Factor	1.00	1.00	1.00	0.74	0.75	0.64	0.94	0.83		1.00	1.00	
Incremental Delay, d2	3.4	2.9	1.8	7.7	0.4	0.2	22.0	1.1		80.9	5.4	
Delay (s)	42.5	48.5	41.9	32.4	24.6	18.8	84.6	28.8		156.2	54.4	
Level of Service	D	D	D	C	C	B	F	C		F	D	
Approach Delay (s/veh)		46.1			25.1			51.7			64.2	
Approach LOS		D			C			D			E	
Intersection Summary												
HCM 2000 Control Delay (s/veh)	47.6			HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio	0.74											
Actuated Cycle Length (s)	160.0			Sum of lost time (s)				24.0				
Intersection Capacity Utilization	166.7%			ICU Level of Service				H				
Analysis Period (min)	15											
c Critical Lane Group												

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	30	960	9	0	1026
Future Vol, veh/h	0	30	960	9	0	1026
Conflicting Peds, #/hr	0	0	0	16	16	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	7	8	11	0	5
Mvmt Flow	0	33	1043	10	0	1115

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	543	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.04	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.37	-	-	-	-
Pot Cap-1 Maneuver	0	471	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	465	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	465
HCM Lane V/C Ratio	-	-	0.07
HCM Ctrl Dly (s/v)	-	-	13.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0.2

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	20	949	9	0	1026
Future Vol, veh/h	0	20	949	9	0	1026
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	7	22	0	4
Mvmt Flow	0	22	1032	10	0	1115

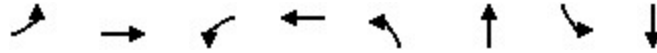
Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	529	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	499	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	496	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	496
HCM Lane V/C Ratio	-	-	0.044
HCM Ctrl Dly (s/v)	-	-	12.6
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0.1

Queues
6: Hurontario Street & Bronte College Court/Sherobee Road

Future Background
Weekday AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↶	↷	↶	↷	↶	↷	↶	↷
Traffic Volume (vph)	33	6	21	14	102	788	37	973
Future Volume (vph)	33	6	21	14	102	788	37	973
Lane Group Flow (vph)	36	43	23	164	111	861	40	1075
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	47.0	47.0	47.0	47.0	13.0	30.5	13.0	30.5
Total Split (s)	47.0	47.0	47.0	47.0	24.0	89.0	24.0	89.0
Total Split (%)	29.4%	29.4%	29.4%	29.4%	15.0%	55.6%	15.0%	55.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	5.0	5.0	5.0	5.0	2.0	3.5	2.0	3.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.9	12.9	12.9	12.9	17.7	117.0	11.2	107.9
Actuated g/C Ratio	0.08	0.08	0.08	0.08	0.11	0.73	0.07	0.67
v/c Ratio	0.71	0.27	0.23	0.62	0.60	0.33	0.34	0.45
Control Delay (s/veh)	130.7	27.6	72.4	23.2	80.4	9.0	62.8	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	130.7	27.6	72.4	23.2	80.4	9.0	62.8	10.3
LOS	F	C	E	C	F	A	E	B
Approach Delay (s/veh)		74.5		29.3		17.2		12.1
Approach LOS		E		C		B		B
Queue Length 50th (m)	10.5	1.9	6.4	4.2	31.5	45.7	11.8	45.6
Queue Length 95th (m)	#23.6	13.4	14.9	25.6	49.3	67.0	m17.2	74.1
Internal Link Dist (m)		55.8		61.0		168.5		77.5
Turn Bay Length (m)			30.0		50.0		47.0	
Base Capacity (vph)	150	404	298	490	212	2606	200	2401
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	0.24	0.11	0.08	0.33	0.52	0.33	0.20	0.45

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 38 (24%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay (s/veh): 17.7	Intersection LOS: B
Intersection Capacity Utilization 81.7%	ICU Level of Service D
Analysis Period (min) 15	

Queues

6: Hurontario Street & Bronte College Court/Sherobee Road

Future Background
Weekday AM Peak

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

Queue shown is maximum after two cycles.

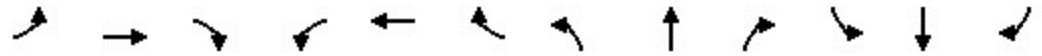
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Hurontario Street & Bronte College Court/Sherobee Road



HCM Signalized Intersection Capacity Analysis
 6: Hurontario Street & Bronte College Court/Sherobee Road

Future Background
 Weekday AM Peak

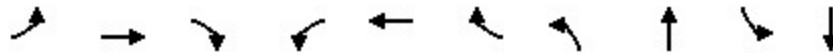


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕		↖	↗	
Traffic Volume (vph)	33	6	33	21	14	137	102	788	4	37	973	16
Future Volume (vph)	33	6	33	21	14	137	102	788	4	37	973	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frbp, ped/bikes	1.00	0.97		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.97	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.87		1.00	0.86		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1667	1587		1639	1585		1685	3566		1685	3559	
Flt Permitted	0.36	1.00		0.73	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	636	1587		1257	1585		1685	3566		1685	3559	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	7	36	23	15	149	111	857	4	40	1058	17
RTOR Reduction (vph)	0	33	0	0	137	0	0	0	0	0	0	0
Lane Group Flow (vph)	36	10	0	23	27	0	111	861	0	40	1075	0
Confl. Peds. (#/hr)	11		23	23		11	5		26	26		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	12.9	12.9		12.9	12.9		17.7	116.0		9.6	107.9	
Effective Green, g (s)	12.9	12.9		12.9	12.9		17.7	116.0		9.6	107.9	
Actuated g/C Ratio	0.08	0.08		0.08	0.08		0.11	0.73		0.06	0.67	
Clearance Time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	51	127		101	127		186	2585		101	2400	
v/s Ratio Prot		0.01			0.02		c0.07	0.24		0.02	c0.30	
v/s Ratio Perm	c0.06			0.02								
v/c Ratio	0.71	0.08		0.23	0.21		0.60	0.33		0.40	0.45	
Uniform Delay, d1	71.7	68.0		68.9	68.8		67.8	8.0		72.4	12.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.82	0.75	
Incremental Delay, d2	43.4	0.6		2.4	1.8		7.6	0.3		3.9	0.4	
Delay (s)	115.1	68.6		71.3	70.6		75.3	8.3		62.9	9.5	
Level of Service	F	E		E	E		E	A		E	A	
Approach Delay (s/veh)		89.8			70.6			16.0			11.4	
Approach LOS		F			E			B			B	

Intersection Summary		
HCM 2000 Control Delay (s/veh)	20.6	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.49	C
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	81.7%	ICU Level of Service
Analysis Period (min)	15	D
c Critical Lane Group		

Queues
1: Camilla Road & Queensway

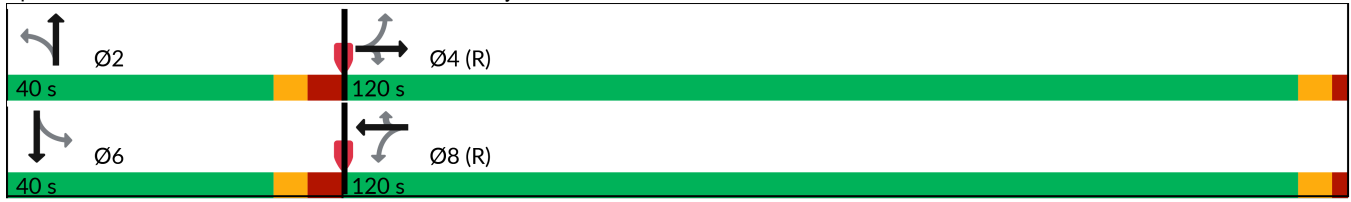
Future Background
Weekday PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	31	885	66	50	1014	94	34	59	74	78
Future Volume (vph)	31	885	66	50	1014	94	34	59	74	78
Lane Group Flow (vph)	34	962	72	54	1102	102	37	99	80	163
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	55.0	55.0	55.0	55.0	55.0	55.0	15.0	15.0	15.0	15.0
Minimum Split (s)	61.0	61.0	61.0	61.0	61.0	61.0	33.0	33.0	33.0	33.0
Total Split (s)	120.0	120.0	120.0	120.0	120.0	120.0	40.0	40.0	40.0	40.0
Total Split (%)	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	25.0%	25.0%	25.0%	25.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0	8.0	8.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	125.0	125.0	125.0	125.0	125.0	125.0	21.0	21.0	21.0	21.0
Actuated g/C Ratio	0.78	0.78	0.78	0.78	0.78	0.78	0.13	0.13	0.13	0.13
v/c Ratio	0.10	0.35	0.06	0.14	0.40	0.09	0.34	0.41	0.51	0.68
Control Delay (s/veh)	2.9	2.7	0.2	6.1	6.4	1.1	69.9	57.8	75.0	68.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.9	2.7	0.2	6.1	6.4	1.1	69.9	57.8	75.0	68.8
LOS	A	A	A	A	A	A	E	E	E	E
Approach Delay (s/veh)		2.5			6.0			61.1		70.8
Approach LOS		A			A			E		E
Queue Length 50th (m)	0.9	13.6	0.1	3.4	47.2	0.0	10.0	23.4	22.5	40.6
Queue Length 95th (m)	2.3	18.8	0.1	9.0	71.0	4.6	20.4	39.2	37.4	61.9
Internal Link Dist (m)		293.4			127.4			111.6		70.0
Turn Bay Length (m)	94.0		78.0	110.0		80.0	33.0		28.0	
Base Capacity (vph)	327	2733	1170	386	2761	1160	166	360	239	354
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.35	0.06	0.14	0.40	0.09	0.22	0.28	0.33	0.46

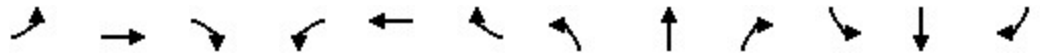
Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 90 (56%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 13.2	Intersection LOS: B
Intersection Capacity Utilization 122.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: Camilla Road & Queensway



HCM Signalized Intersection Capacity Analysis
1: Camilla Road & Queensway

Future Background
Weekday PM Peak



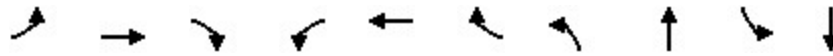
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗	↖	↖	↗↗	↖	↖	↗		↖	↗	
Traffic Volume (vph)	31	885	66	50	1014	94	34	59	32	74	78	72
Future Volume (vph)	31	885	66	50	1014	94	34	59	32	74	78	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0		8.0	8.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97	1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	3500	1478	1685	3535	1457	1676	1740		1646	1669	
Flt Permitted	0.24	1.00	1.00	0.28	1.00	1.00	0.47	1.00		0.69	1.00	
Satd. Flow (perm)	419	3500	1478	495	3535	1457	832	1740		1195	1669	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	962	72	54	1102	102	37	64	35	80	85	78
RTOR Reduction (vph)	0	0	16	0	0	22	0	13	0	0	23	0
Lane Group Flow (vph)	34	962	56	54	1102	80	37	86	0	80	140	0
Confl. Peds. (#/hr)	5					5	4		8	8		4
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	2%	0%	1%	4%	3%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2				6
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	125.0	125.0	125.0	125.0	125.0	125.0	21.0	21.0		21.0	21.0	
Effective Green, g (s)	125.0	125.0	125.0	125.0	125.0	125.0	21.0	21.0		21.0	21.0	
Actuated g/C Ratio	0.78	0.78	0.78	0.78	0.78	0.78	0.13	0.13		0.13	0.13	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0		8.0	8.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	327	2734	1154	386	2761	1138	109	228		156	219	
v/s Ratio Prot		0.27			c0.31			0.05				c0.08
v/s Ratio Perm	0.08		0.04	0.11		0.05	0.04			0.07		
v/c Ratio	0.10	0.35	0.05	0.14	0.40	0.07	0.34	0.38		0.51	0.64	
Uniform Delay, d1	4.2	5.3	4.0	4.3	5.6	4.0	63.2	63.5		64.7	65.9	
Progression Factor	0.43	0.41	0.08	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4	0.1	0.8	0.4	0.1	3.9	2.2		5.6	8.5	
Delay (s)	2.4	2.5	0.4	5.1	6.0	4.2	67.0	65.7		70.3	74.4	
Level of Service	A	A	A	A	A	A	E	E		E	E	
Approach Delay (s/veh)		2.4			5.8			66.1			73.1	
Approach LOS		A			A			E			E	

Intersection Summary		
HCM 2000 Control Delay (s/veh)	13.5	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.43	B
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	122.8%	ICU Level of Service
Analysis Period (min)	15	H
c Critical Lane Group		

Queues

2: East Site Access/2325 Hurontario Street Site Access & Queensway

Future Background
Weekday PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	16	905	65	74	1018	28	9	2	27	9
Future Volume (vph)	16	905	65	74	1018	28	9	2	27	9
Lane Group Flow (vph)	17	984	71	80	1107	30	0	66	0	57
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	105.0	105.0	105.0	105.0	105.0	105.0	17.0	17.0	17.0	17.0
Minimum Split (s)	111.0	111.0	111.0	111.0	111.0	111.0	41.0	41.0	41.0	41.0
Total Split (s)	119.0	119.0	119.0	119.0	119.0	119.0	41.0	41.0	41.0	41.0
Total Split (%)	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%	25.6%	25.6%	25.6%	25.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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)	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	131.0	131.0	131.0	131.0	131.0	131.0		17.0		17.0
Actuated g/C Ratio	0.82	0.82	0.82	0.82	0.82	0.82		0.11		0.11
v/c Ratio	0.05	0.24	0.06	0.20	0.38	0.03		0.30		0.36
Control Delay (s/veh)	3.1	3.4	0.7	3.9	3.5	1.1		24.6		58.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	3.1	3.4	0.7	3.9	3.5	1.1		24.6		58.5
LOS	A	A	A	A	A	A		C		E
Approach Delay (s/veh)		3.2			3.5			24.6		58.5
Approach LOS		A			A			C		E
Queue Length 50th (m)	0.7	18.2	0.3	3.9	29.2	0.3		3.2		12.1
Queue Length 95th (m)	m1.1	19.0	m0.7	6.7	32.4	m1.8		17.2		26.0
Internal Link Dist (m)		176.7			293.4			40.1		8.7
Turn Bay Length (m)	32.0		33.0	36.0		30.0				
Base Capacity (vph)	351	4117	1246	400	2894	1163		390		314
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	0.05	0.24	0.06	0.20	0.38	0.03		0.17		0.18

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 86 (54%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 155	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.38	
Intersection Signal Delay (s/veh): 5.2	Intersection LOS: A
Intersection Capacity Utilization 204.2%	ICU Level of Service H
Analysis Period (min) 15	

Queues

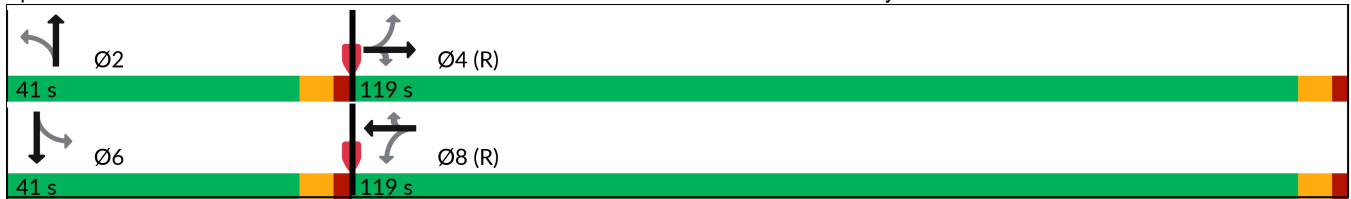
2: East Site Access/2325 Hurontario Street Site Access & Queensway

Future Background

Weekday PM Peak

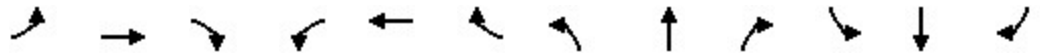
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: East Site Access/2325 Hurontario Street Site Access & Queensway



HCM Signalized Intersection Capacity Analysis
 2: East Site Access/2325 Hurontario Street Site Access & Queensway

Future Background
 Weekday PM Peak

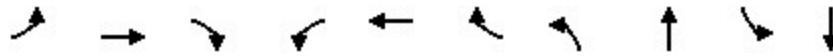


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↗	↙	↑↑	↗		↕			↕	
Traffic Volume (vph)	16	905	65	74	1018	28	9	2	50	27	9	17
Future Volume (vph)	16	905	65	74	1018	28	9	2	50	27	9	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00		1.00			1.00	
Frbp, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98		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	1.00	0.85	1.00	1.00	0.85		0.89			0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99			0.98	
Satd. Flow (prot)	1684	5029	1507	1685	3535	1416		1659			1719	
Flt Permitted	0.24	1.00	1.00	0.28	1.00	1.00		0.95			0.79	
Satd. Flow (perm)	429	5029	1507	490	3535	1416		1589			1391	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	984	71	80	1107	30	10	2	54	29	10	18
RTOR Reduction (vph)	0	0	13	0	0	4	0	48	0	0	12	0
Lane Group Flow (vph)	17	984	58	80	1107	26	0	18	0	0	45	0
Confl. Peds. (#/hr)	1					1						
Heavy Vehicles (%)	0%	2%	0%	0%	1%	4%	0%	0%	0%	4%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	131.0	131.0	131.0	131.0	131.0	131.0		17.0			17.0	
Effective Green, g (s)	131.0	131.0	131.0	131.0	131.0	131.0		17.0			17.0	
Actuated g/C Ratio	0.82	0.82	0.82	0.82	0.82	0.82		0.11			0.11	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	351	4117	1233	401	2894	1159		168			147	
v/s Ratio Prot		0.20			c0.31							
v/s Ratio Perm	0.04		0.04	0.16		0.02		0.01			c0.03	
v/c Ratio	0.05	0.24	0.05	0.20	0.38	0.02		0.11			0.31	
Uniform Delay, d1	2.7	3.3	2.7	3.1	3.8	2.7		64.6			66.1	
Progression Factor	1.02	1.00	1.11	0.86	0.81	0.83		1.00			1.00	
Incremental Delay, d2	0.2	0.1	0.1	1.0	0.4	0.0		0.6			2.5	
Delay (s)	3.0	3.4	3.1	3.7	3.5	2.3		65.2			68.6	
Level of Service	A	A	A	A	A	A		E			E	
Approach Delay (s/veh)		3.4			3.5			65.2			68.6	
Approach LOS		A			A			E			E	

Intersection Summary		
HCM 2000 Control Delay (s/veh)	6.6	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.37	A
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	204.2%	12.0
Analysis Period (min)	15	ICU Level of Service
		H
c Critical Lane Group		

Queues
3: Hurontario Street & Queensway

Future Background
Weekday PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	42	713	388	142	826	76	310	539	88	648
Future Volume (vph)	42	713	388	142	826	76	310	539	88	648
Lane Group Flow (vph)	46	775	422	154	898	83	337	787	96	818
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	50.0	50.0	5.0	52.0	52.0	5.0	67.0	5.0	51.0
Minimum Split (s)	10.0	60.0	60.0	10.0	59.0	59.0	10.0	74.0	10.0	58.0
Total Split (s)	12.0	60.0	60.0	12.0	60.0	60.0	30.0	74.0	14.0	58.0
Total Split (%)	7.5%	37.5%	37.5%	7.5%	37.5%	37.5%	18.8%	46.3%	8.8%	36.3%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	2.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.0	0.0
Total Lost Time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	3.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	62.0	53.0	53.0	63.0	55.4	55.4	22.7	67.0	11.0	53.3
Actuated g/C Ratio	0.39	0.33	0.33	0.39	0.35	0.35	0.14	0.42	0.07	0.33
v/c Ratio	0.27	0.67	0.61	0.81	0.51	0.14	0.74	0.56	0.84	0.71
Control Delay (s/veh)	32.3	49.4	13.9	56.4	35.2	2.5	59.4	21.9	121.9	50.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.3	49.4	13.9	56.4	35.2	2.5	59.4	21.9	121.9	50.5
LOS	C	D	B	E	D	A	E	C	F	D
Approach Delay (s/veh)		36.7			35.7			33.2		58.0
Approach LOS		D			D			C		E
Queue Length 50th (m)	9.7	104.8	21.0	21.8	81.1	1.2	36.4	93.3	28.6	112.1
Queue Length 95th (m)	19.3	126.3	55.2	#43.4	84.6	3.0	54.0	113.8	#59.8	136.7
Internal Link Dist (m)		171.6			176.7			106.5		184.3
Turn Bay Length (m)	101.0		88.0	100.0		72.0	63.0		43.0	
Base Capacity (vph)	170	1159	693	191	1775	580	505	1408	114	1148
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.67	0.61	0.81	0.51	0.14	0.67	0.56	0.84	0.71

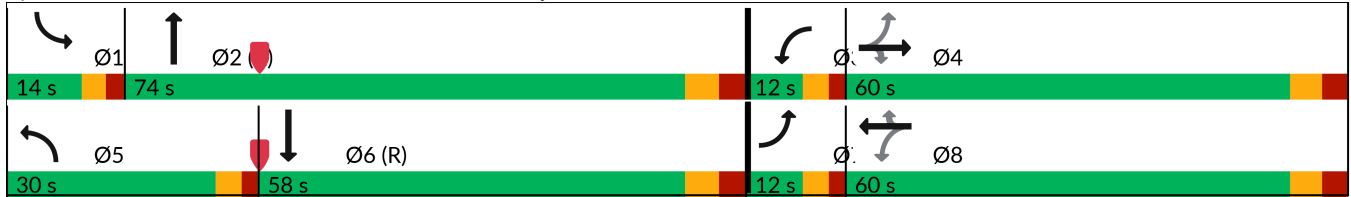
Intersection Summary	
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	54.5 (34%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	155
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.84
Intersection Signal Delay (s/veh):	39.9
Intersection LOS:	D
Intersection Capacity Utilization:	129.4%
ICU Level of Service:	H
Analysis Period (min):	15

Queues
 3: Hurontario Street & Queensway

Future Background
 Weekday PM Peak

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

Splits and Phases: 3: Hurontario Street & Queensway



HCM Signalized Intersection Capacity Analysis
3: Hurontario Street & Queensway

Future Background
Weekday PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	713	388	142	826	76	310	539	185	88	648	105
Future Volume (vph)	42	713	388	142	826	76	310	539	185	88	648	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.95	1.00	0.98		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1390	3500	1432	1666	5129	1431	3236	3311		1668	3421	
Flt Permitted	0.22	1.00	1.00	0.19	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	322	3500	1432	339	5129	1431	3236	3311		1668	3421	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	775	422	154	898	83	337	586	201	96	704	114
RTOR Reduction (vph)	0	0	217	0	0	54	0	22	0	0	8	0
Lane Group Flow (vph)	46	775	205	154	898	29	337	765	0	96	810	0
Confl. Peds. (#/hr)	33		25	25		33	16		67	67		16
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	21%	2%	1%	1%	0%	0%	1%	2%	2%	1%	2%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	59.6	54.0	54.0	62.4	55.4	55.4	22.7	66.0		9.0	52.3	
Effective Green, g (s)	59.6	54.0	54.0	62.4	55.4	55.4	22.7	66.0		11.0	52.3	
Actuated g/C Ratio	0.37	0.34	0.34	0.39	0.35	0.35	0.14	0.41		0.07	0.33	
Clearance Time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		5.0	7.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	157	1181	483	190	1775	495	459	1365		114	1118	
v/s Ratio Prot	0.01	0.22		c0.04	0.18		c0.10	0.23		c0.06	c0.24	
v/s Ratio Perm	0.10		0.14	c0.28		0.02						
v/c Ratio	0.29	0.66	0.42	0.81	0.51	0.06	0.73	0.56		0.84	0.72	
Uniform Delay, d1	33.4	45.1	41.0	42.1	41.5	34.9	65.8	35.9		73.6	47.5	
Progression Factor	1.00	1.00	1.00	0.77	0.81	2.94	0.77	0.61		1.00	1.00	
Incremental Delay, d2	2.2	2.9	2.7	23.7	1.0	0.2	6.6	1.5		43.3	4.1	
Delay (s)	35.5	48.0	43.7	56.4	34.6	103.0	56.9	23.3		117.0	51.6	
Level of Service	D	D	D	E	C	F	E	C		F	D	
Approach Delay (s/veh)		46.0			42.5			33.4			58.5	
Approach LOS		D			D			C			E	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			44.5									D
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			160.0							24.0		
Intersection Capacity Utilization			129.4%									H
Analysis Period (min)			15									

c Critical Lane Group

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	13	1021	8	0	1178
Future Vol, veh/h	0	13	1021	8	0	1178
Conflicting Peds, #/hr	0	0	0	21	21	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	0	14	1110	9	0	1280

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	581	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	462	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	455	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	455
HCM Lane V/C Ratio	-	-	0.031
HCM Ctrl Dly (s/v)	-	-	13.2
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0.1

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	5	1024	14	0	1178
Future Vol, veh/h	0	5	1024	14	0	1178
Conflicting Peds, #/hr	0	0	0	23	23	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	0	5	1113	15	0	1280

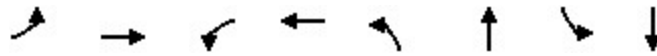
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	587	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	458	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	450	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	450
HCM Lane V/C Ratio	-	-	0.012
HCM Ctrl Dly (s/v)	-	-	13.1
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0

Queues
6: Hurontario Street & Bronte College Court/Sherobee Road

Future Background
Weekday PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↶	↷	↶	↷	↶	↷	↶	↷
Traffic Volume (vph)	81	6	13	10	35	871	107	1047
Future Volume (vph)	81	6	13	10	35	871	107	1047
Lane Group Flow (vph)	88	217	14	104	38	955	116	1164
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	47.0	47.0	47.0	47.0	13.0	30.5	13.0	30.5
Total Split (s)	47.0	47.0	47.0	47.0	25.0	95.0	18.0	88.0
Total Split (%)	29.4%	29.4%	29.4%	29.4%	15.6%	59.4%	11.3%	55.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	5.0	5.0	5.0	5.0	2.0	3.5	2.0	3.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	C-Max	Max	C-Max
Act Effct Green (s)	19.7	19.7	19.7	19.7	38.3	87.5	31.3	80.5
Actuated g/C Ratio	0.12	0.12	0.12	0.12	0.24	0.55	0.20	0.50
v/c Ratio	0.61	0.59	0.24	0.38	0.10	0.51	0.36	0.68
Control Delay (s/veh)	82.7	14.8	70.5	17.5	51.7	23.9	49.3	50.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	82.7	14.8	70.5	17.5	51.7	23.9	49.3	50.9
LOS	F	B	E	B	D	C	D	D
Approach Delay (s/veh)		34.4		23.8		25.0		50.8
Approach LOS		C		C		C		D
Queue Length 50th (m)	25.7	1.9	4.1	2.9	9.2	93.4	31.1	162.3
Queue Length 95th (m)	41.6	24.1	11.2	18.8	20.7	110.7	m48.5	193.3
Internal Link Dist (m)		55.8		61.0		168.5		77.5
Turn Bay Length (m)			30.0		50.0		47.0	
Base Capacity (vph)	279	517	112	438	380	1875	325	1722
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	0.32	0.42	0.13	0.24	0.10	0.51	0.36	0.68

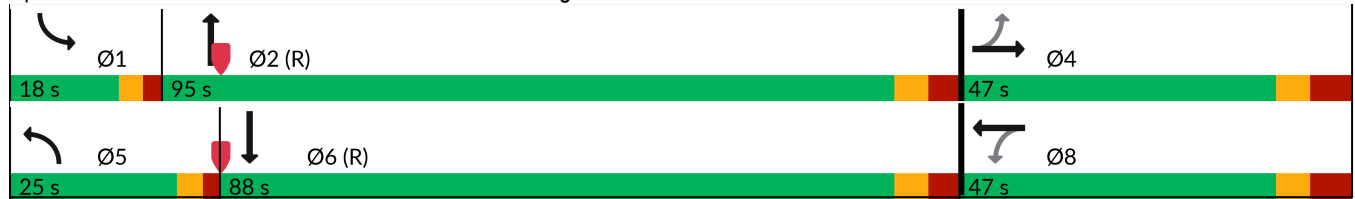
Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 3 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 38.2	Intersection LOS: D
Intersection Capacity Utilization 82.2%	ICU Level of Service E
Analysis Period (min) 15	

Queues
6: Hurontario Street & Bronte College Court/Sherobee Road

Future Background
Weekday PM Peak

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

Splits and Phases: 6: Hurontario Street & Bronte College Court/Sherobee Road



HCM Signalized Intersection Capacity Analysis
6: Hurontario Street & Bronte College Court/Sherobee Road

Future Background
Weekday PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	6	193	13	10	86	35	871	7	107	1047	24
Future Volume (vph)	81	6	193	13	10	86	35	871	7	107	1047	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frbp, ped/bikes	1.00	0.94		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.97	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.87		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1618	1505		1506	1547		1589	3427		1668	3420	
Flt Permitted	0.69	1.00		0.30	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1175	1505		474	1547		1589	3427		1668	3420	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	7	210	14	11	93	38	947	8	116	1138	26
RTOR Reduction (vph)	0	184	0	0	82	0	0	0	0	0	1	0
Lane Group Flow (vph)	88	33	0	14	22	0	38	955	0	116	1163	0
Confl. Peds. (#/hr)	10		43	43		10	8		20	20		8
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	3%	0%	0%	8%	0%	3%	6%	4%	0%	1%	4%	0%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	19.7	19.7		19.7	19.7		38.3	87.5		31.3	80.5	
Effective Green, g (s)	19.7	19.7		19.7	19.7		38.3	87.5		31.3	80.5	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.24	0.55		0.20	0.50	
Clearance Time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	144	185		58	190		380	1874		326	1720	
v/s Ratio Prot		0.02			0.01		0.02	c0.28		c0.07	c0.34	
v/s Ratio Perm	c0.07			0.03								
v/c Ratio	0.61	0.18		0.24	0.12		0.10	0.51		0.36	0.68	
Uniform Delay, d1	66.5	62.9		63.4	62.4		47.4	22.8		55.6	29.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.81	1.64	
Incremental Delay, d2	10.6	1.0		4.5	0.6		0.5	1.0		2.2	1.5	
Delay (s)	77.1	63.9		67.9	63.0		47.9	23.8		47.0	50.5	
Level of Service	E	E		E	E		D	C		D	D	
Approach Delay (s/veh)		67.7			63.6			24.7			50.2	
Approach LOS		E			E			C			D	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			43.3									D
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			160.0								21.5	
Intersection Capacity Utilization			82.2%									E
Analysis Period (min)			15									

c Critical Lane Group

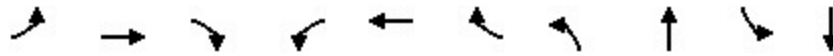


APPENDIX J

Future Total Intersection Capacity Analysis

Queues
1: Camilla Road & Queensway

Future Total
Weekday AM Peak



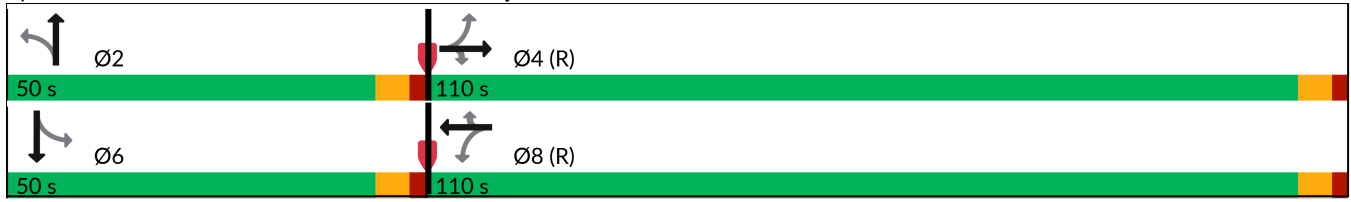
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	37	853	77	43	658	60	53	103	104	105
Future Volume (vph)	37	853	77	43	658	60	53	103	104	105
Lane Group Flow (vph)	40	927	84	47	715	65	58	182	113	149
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	55.0	55.0	55.0	55.0	55.0	55.0	30.0	30.0	30.0	30.0
Minimum Split (s)	61.0	61.0	61.0	61.0	61.0	61.0	36.0	36.0	36.0	36.0
Total Split (s)	110.0	110.0	110.0	110.0	110.0	110.0	50.0	50.0	50.0	50.0
Total Split (%)	68.8%	68.8%	68.8%	68.8%	68.8%	68.8%	31.3%	31.3%	31.3%	31.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	116.1	116.1	116.1	116.1	116.1	116.1	31.9	31.9	31.9	31.9
Actuated g/C Ratio	0.73	0.73	0.73	0.73	0.73	0.73	0.20	0.20	0.20	0.20
v/c Ratio	0.09	0.37	0.08	0.13	0.29	0.06	0.34	0.52	0.70	0.43
Control Delay (s/veh)	6.3	6.2	1.4	8.3	8.3	1.7	60.5	56.4	83.0	55.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.3	6.2	1.4	8.3	8.3	1.7	60.5	56.4	83.0	55.8
LOS	A	A	A	A	A	A	E	E	F	E
Approach Delay (s/veh)		5.9			7.8			57.4		67.5
Approach LOS		A			A			E		E
Queue Length 50th (m)	1.7	26.8	0.0	3.6	35.4	0.0	16.9	45.6	32.3	39.1
Queue Length 95th (m)	6.8	48.4	4.2	9.5	53.3	4.7	30.3	65.6	51.5	57.6
Internal Link Dist (m)		293.4			127.4			111.6		70.0
Turn Bay Length (m)	94.0		78.0	110.0		80.0	33.0		28.0	
Base Capacity (vph)	427	2490	1054	361	2443	1019	233	472	221	474
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.37	0.08	0.13	0.29	0.06	0.25	0.39	0.51	0.31

Intersection Summary	
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	90 (56%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle:	100
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.70
Intersection Signal Delay (s/veh):	18.5
Intersection Capacity Utilization:	131.7%
Analysis Period (min):	15
Intersection LOS:	B
ICU Level of Service:	H

Queues
1: Camilla Road & Queensway

Future Total
Weekday AM Peak

Splits and Phases: 1: Camilla Road & Queensway



HCM Signalized Intersection Capacity Analysis

1: Camilla Road & Queensway

Future Total
Weekday AM Peak

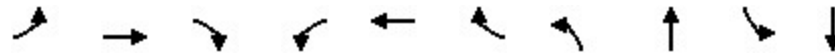
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	853	77	43	658	60	53	103	64	104	105	32
Future Volume (vph)	37	853	77	43	658	60	53	103	64	104	105	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.96	1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	0.99	1.00		0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1550	3433	1422	1685	3368	1381	1474	1668		1621	1698	
Flt Permitted	0.36	1.00	1.00	0.28	1.00	1.00	0.55	1.00		0.47	1.00	
Satd. Flow (perm)	590	3433	1422	498	3368	1381	849	1668		807	1698	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	927	84	47	715	65	58	112	70	113	114	35
RTOR Reduction (vph)	0	0	23	0	0	18	0	15	0	0	8	0
Lane Group Flow (vph)	40	927	61	47	715	47	58	167	0	113	141	0
Confl. Peds. (#/hr)	7					7	8		15	15		8
Confl. Bikes (#/hr)									2			1
Heavy Vehicles (%)	8%	4%	6%	0%	6%	5%	13%	4%	5%	2%	7%	3%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	116.1	116.1	116.1	116.1	116.1	116.1	31.9	31.9		31.9	31.9	
Effective Green, g (s)	116.1	116.1	116.1	116.1	116.1	116.1	31.9	31.9		31.9	31.9	
Actuated g/C Ratio	0.73	0.73	0.73	0.73	0.73	0.73	0.20	0.20		0.20	0.20	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	428	2491	1031	361	2443	1002	169	332		160	338	
v/s Ratio Prot		c0.27			0.21			0.10				0.08
v/s Ratio Perm	0.07		0.04	0.09		0.03	0.07			c0.14		
v/c Ratio	0.09	0.37	0.06	0.13	0.29	0.05	0.34	0.50		0.71	0.42	
Uniform Delay, d1	6.5	8.3	6.3	6.7	7.6	6.2	55.0	57.0		59.7	55.9	
Progression Factor	0.81	0.68	0.89	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.1	0.7	0.3	0.1	2.5	2.5		16.4	1.7	
Delay (s)	5.6	6.0	5.7	7.4	8.0	6.3	57.6	59.5		76.1	57.7	
Level of Service	A	A	A	A	A	A	E	E		E	E	
Approach Delay (s/veh)		6.0			7.8			59.0			65.6	
Approach LOS		A			A			E			E	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			18.5									B
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			160.0							12.0		
Intersection Capacity Utilization			131.7%									H
Analysis Period (min)			15									

c Critical Lane Group

Queues

2: East Site Access/2325 Hurontario Street Site Access & Queensway

Future Total
Weekday AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑↑	↗	↘	↑↑	↗		↕		↕
Traffic Volume (vph)	19	847	41	28	683	32	57	0	31	7
Future Volume (vph)	19	847	41	28	683	32	57	0	31	7
Lane Group Flow (vph)	21	921	45	30	742	35	0	159	0	65
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	110.0	110.0	110.0	110.0	110.0	110.0	12.0	12.0	12.0	12.0
Minimum Split (s)	116.0	116.0	116.0	116.0	116.0	116.0	41.0	41.0	41.0	41.0
Total Split (s)	119.0	119.0	119.0	119.0	119.0	119.0	41.0	41.0	41.0	41.0
Total Split (%)	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%	25.6%	25.6%	25.6%	25.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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)	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	126.6	126.6	126.6	126.6	126.6	126.6		21.4		21.4
Actuated g/C Ratio	0.79	0.79	0.79	0.79	0.79	0.79		0.13		0.13
v/c Ratio	0.05	0.24	0.04	0.07	0.28	0.03		0.69		0.39
Control Delay (s/veh)	4.8	4.3	1.1	4.4	4.0	0.9		60.5		51.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	4.8	4.3	1.1	4.4	4.0	0.9		60.5		51.6
LOS	A	A	A	A	A	A		E		D
Approach Delay (s/veh)		4.1			3.9			60.5		51.6
Approach LOS		A			A			E		D
Queue Length 50th (m)	1.1	17.3	0.2	1.3	23.6	0.1		32.8		13.3
Queue Length 95th (m)	m2.1	m24.0	m0.4	4.1	30.4	1.2		50.6		25.3
Internal Link Dist (m)		176.7			293.4			40.1		8.7
Turn Bay Length (m)	32.0		33.0	36.0		30.0				
Base Capacity (vph)	453	3902	1201	411	2664	1127		352		262
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	0.05	0.24	0.04	0.07	0.28	0.03		0.45		0.25

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 86 (54%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 160	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay (s/veh): 10.0	Intersection LOS: B
Intersection Capacity Utilization 209.6%	ICU Level of Service H
Analysis Period (min) 15	

Queues

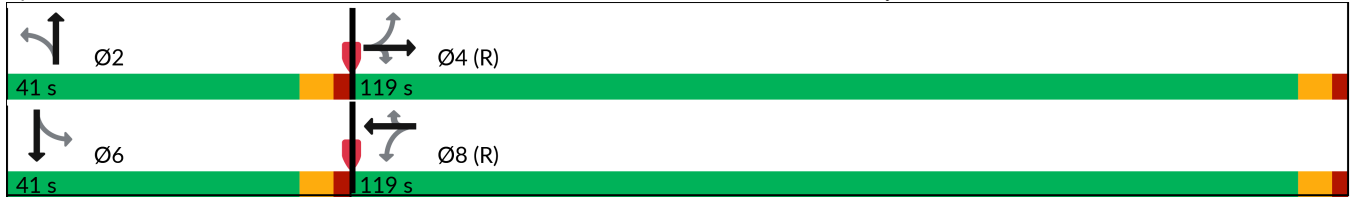
Future Total

2: East Site Access/2325 Hurontario Street Site Access & Queensway

Weekday AM Peak

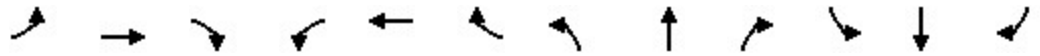
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: East Site Access/2325 Hurontario Street Site Access & Queensway



HCM Signalized Intersection Capacity Analysis
 2: East Site Access/2325 Hurontario Street Site Access & Queensway

Future Total
 Weekday AM Peak

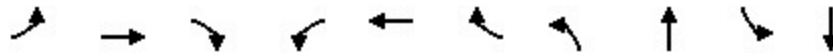


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↗	↙	↑↑	↗		↕			↕	
Traffic Volume (vph)	19	847	41	28	683	32	57	0	89	31	7	21
Future Volume (vph)	19	847	41	28	683	32	57	0	89	31	7	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00		1.00			1.00	
Frbp, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97		1.00			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.92			0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.98			0.97	
Satd. Flow (prot)	1511	4932	1507	1685	3368	1415		1679			1678	
Flt Permitted	0.36	1.00	1.00	0.29	1.00	1.00		0.85			0.67	
Satd. Flow (perm)	573	4932	1507	521	3368	1415		1451			1146	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	921	45	30	742	35	62	0	97	34	8	23
RTOR Reduction (vph)	0	0	9	0	0	7	0	39	0	0	14	0
Lane Group Flow (vph)	21	921	36	30	742	28	0	120	0	0	51	0
Confl. Peds. (#/hr)	4					4	2					2
Heavy Vehicles (%)	11%	4%	0%	0%	6%	3%	0%	0%	1%	3%	0%	5%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	126.6	126.6	126.6	126.6	126.6	126.6		21.4			21.4	
Effective Green, g (s)	126.6	126.6	126.6	126.6	126.6	126.6		21.4			21.4	
Actuated g/C Ratio	0.79	0.79	0.79	0.79	0.79	0.79		0.13			0.13	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	453	3902	1192	412	2664	1119		194			153	
v/s Ratio Prot		0.19			c0.22							
v/s Ratio Perm	0.04		0.02	0.06		0.02		c0.08			0.04	
v/c Ratio	0.05	0.24	0.03	0.07	0.28	0.02		0.62			0.33	
Uniform Delay, d1	3.6	4.3	3.6	3.7	4.5	3.6		65.4			62.8	
Progression Factor	0.88	0.85	0.68	0.76	0.73	0.51		1.00			1.00	
Incremental Delay, d2	0.1	0.1	0.0	0.3	0.3	0.0		8.2			2.7	
Delay (s)	3.3	3.7	2.5	3.1	3.5	1.8		73.7			65.5	
Level of Service	A	A	A	A	A	A		E			E	
Approach Delay (s/veh)		3.7			3.4			73.7			65.5	
Approach LOS		A			A			E			E	

Intersection Summary		
HCM 2000 Control Delay (s/veh)	11.1	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.33	B
Actuated Cycle Length (s)	160.0	Sum of lost time (s)
Intersection Capacity Utilization	209.6%	ICU Level of Service
Analysis Period (min)	15	H
c Critical Lane Group		

Queues
3: Hurontario Street & Queensway

Future Total
Weekday AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	43	704	354	103	589	69	407	492	82	574
Future Volume (vph)	43	704	354	103	589	69	407	492	82	574
Lane Group Flow (vph)	47	765	385	112	640	75	442	667	89	806
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		3	8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	50.0	50.0	50.0	5.0	62.0	62.0	5.0	67.0	5.0	51.0
Minimum Split (s)	57.0	57.0	57.0	10.0	69.0	69.0	10.0	74.0	10.0	58.0
Total Split (s)	60.0	60.0	60.0	12.0	72.0	72.0	30.0	74.0	14.0	58.0
Total Split (%)	37.5%	37.5%	37.5%	7.5%	45.0%	45.0%	18.8%	46.3%	8.8%	36.3%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	3.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	2.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	5.0	7.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	None	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	53.0	53.0	53.0	67.0	65.0	65.0	24.9	67.0	9.0	51.1
Actuated g/C Ratio	0.33	0.33	0.33	0.42	0.41	0.41	0.16	0.42	0.06	0.32
v/c Ratio	0.27	0.66	0.55	0.63	0.33	0.12	0.91	0.49	0.99	0.77
Control Delay (s/veh)	44.4	49.1	8.7	39.5	25.7	1.9	85.9	28.6	164.2	53.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.4	49.1	8.7	39.5	25.7	1.9	85.9	28.6	164.2	53.4
LOS	D	D	A	D	C	A	F	C	F	D
Approach Delay (s/veh)		35.9			25.4			51.5		64.4
Approach LOS		D			C			D		E
Queue Length 50th (m)	12.9	103.1	6.9	16.9	46.2	0.6	64.8	76.8	27.9	115.7
Queue Length 95th (m)	27.0	124.4	34.7	27.0	42.3	2.8	#95.9	96.3	#64.8	140.2
Internal Link Dist (m)		171.6			176.7			106.5		184.3
Turn Bay Length (m)	101.0		88.0	100.0		72.0	63.0		43.0	
Base Capacity (vph)	177	1159	697	179	1965	602	486	1366	90	1049
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.66	0.55	0.63	0.33	0.12	0.91	0.49	0.99	0.77

Intersection Summary

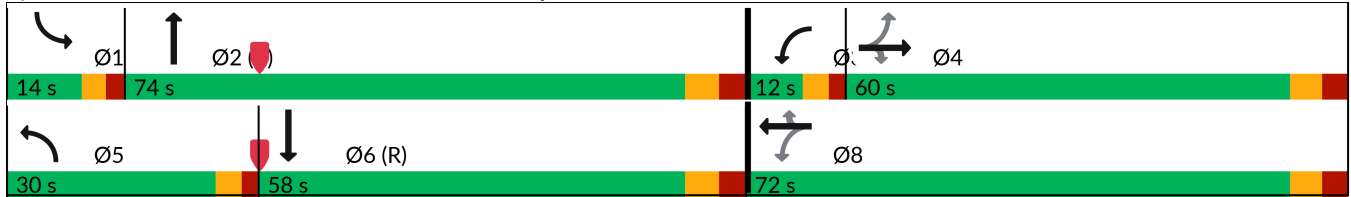
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 54.5 (34%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 155	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay (s/veh): 44.4	Intersection LOS: D
Intersection Capacity Utilization 166.7%	ICU Level of Service H
Analysis Period (min) 15	

Queues
3: Hurontario Street & Queensway

Future Total
Weekday AM Peak























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

Splits and Phases: 3: Hurontario Street & Queensway



HCM Signalized Intersection Capacity Analysis
3: Hurontario Street & Queensway

Future Total
Weekday AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	704	354	103	589	69	407	492	121	82	574	167
Future Volume (vph)	43	704	354	103	589	69	407	492	121	82	574	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		5.0	7.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.92	1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1278	3500	1394	1559	4839	1343	3113	3233		1604	3235	
Flt Permitted	0.40	1.00	1.00	0.18	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	535	3500	1394	298	4839	1343	3113	3233		1604	3235	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	47	765	385	112	640	75	442	535	132	89	624	182
RTOR Reduction (vph)	0	0	235	0	0	45	0	13	0	0	17	0
Lane Group Flow (vph)	47	765	150	112	640	30	442	654	0	89	789	0
Confl. Peds. (#/hr)	61		23	23		61	19		79	79		19
Heavy Vehicles (%)	28%	2%	4%	8%	6%	3%	5%	4%	12%	5%	6%	5%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	53.0	53.0	53.0	65.0	65.0	65.0	24.9	67.0		9.0	51.1	
Effective Green, g (s)	53.0	53.0	53.0	65.0	65.0	65.0	24.9	67.0		9.0	51.1	
Actuated g/C Ratio	0.33	0.33	0.33	0.41	0.41	0.41	0.16	0.42		0.06	0.32	
Clearance Time (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		5.0	7.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	177	1159	461	176	1965	545	484	1353		90	1033	
v/s Ratio Prot		0.22		c0.03	0.13		c0.14	0.20		0.06	c0.24	
v/s Ratio Perm	0.09		0.11	c0.23		0.02						
v/c Ratio	0.27	0.66	0.32	0.64	0.33	0.06	0.91	0.48		0.99	0.76	
Uniform Delay, d1	39.2	45.8	40.1	34.6	32.5	28.9	66.5	33.9		75.5	49.0	
Progression Factor	1.00	1.00	1.00	0.77	0.77	0.56	0.95	0.83		1.00	1.00	
Incremental Delay, d2	3.6	3.0	1.9	9.8	0.4	0.2	22.0	1.2		90.9	5.4	
Delay (s)	42.9	48.7	42.0	36.6	25.6	16.3	85.0	29.4		166.4	54.4	
Level of Service	D	D	D	D	C	B	F	C		F	D	
Approach Delay (s/veh)		46.3			26.2			51.6			65.5	
Approach LOS		D			C			D			E	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			47.9				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			160.0				Sum of lost time (s)				24.0	
Intersection Capacity Utilization			166.7%				ICU Level of Service				H	
Analysis Period (min)			15									
c Critical Lane Group												

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	30	990	9	0	1031
Future Vol, veh/h	0	30	990	9	0	1031
Conflicting Peds, #/hr	0	0	0	16	16	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	7	8	11	0	5
Mvmt Flow	0	33	1076	10	0	1121

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	559	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.04	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.37	-	-	-	-
Pot Cap-1 Maneuver	0	460	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	454	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	454
HCM Lane V/C Ratio	-	-	0.072
HCM Ctrl Dly (s/v)	-	-	13.5
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0.2

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	50	949	38	0	1031
Future Vol, veh/h	0	50	949	38	0	1031
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	7	5	0	4
Mvmt Flow	0	54	1032	41	0	1121

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	545	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	488	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	485	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

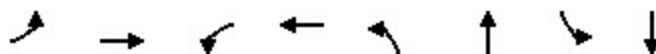
Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	485
HCM Lane V/C Ratio	-	-	0.112
HCM Ctrl Dly (s/v)	-	-	13.4
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0.4

Queues

6: Hurontario Street & Bronte College Court/Sherobee Road

Future Total
Weekday AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↕	↖	↕
Traffic Volume (vph)	33	6	21	14	102	815	37	978
Future Volume (vph)	33	6	21	14	102	815	37	978
Lane Group Flow (vph)	36	43	23	166	111	890	40	1080
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	47.0	47.0	47.0	47.0	13.0	30.5	13.0	30.5
Total Split (s)	47.0	47.0	47.0	47.0	24.0	89.0	24.0	89.0
Total Split (%)	29.4%	29.4%	29.4%	29.4%	15.0%	55.6%	15.0%	55.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	5.0	5.0	5.0	5.0	2.0	3.5	2.0	3.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	13.0	13.0	13.0	13.0	17.7	116.9	11.2	107.9
Actuated g/C Ratio	0.08	0.08	0.08	0.08	0.11	0.73	0.07	0.67
v/c Ratio	0.72	0.27	0.23	0.62	0.60	0.34	0.34	0.45
Control Delay (s/veh)	133.3	27.5	72.3	23.1	80.4	9.2	62.8	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	133.3	27.5	72.3	23.1	80.4	9.2	62.8	10.4
LOS	F	C	E	C	F	A	E	B
Approach Delay (s/veh)		75.7		29.0		17.1		12.3
Approach LOS		E		C		B		B
Queue Length 50th (m)	10.5	1.9	6.4	4.2	31.5	47.8	11.8	46.6
Queue Length 95th (m)	#24.0	13.3	14.9	25.6	49.3	69.8	m16.9	75.0
Internal Link Dist (m)		55.8		61.0		168.5		77.5
Turn Bay Length (m)			30.0		50.0		47.0	
Base Capacity (vph)	147	404	298	491	212	2605	200	2401
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	0.24	0.11	0.08	0.34	0.52	0.34	0.20	0.45

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 38 (24%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay (s/veh): 17.7	Intersection LOS: B
Intersection Capacity Utilization 81.8%	ICU Level of Service D
Analysis Period (min) 15	

Queues

6: Hurontario Street & Bronte College Court/Sherobee Road

Future Total
Weekday AM Peak

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

Queue shown is maximum after two cycles.

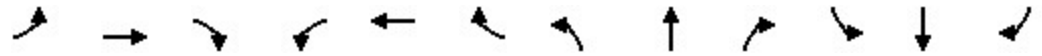
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Hurontario Street & Bronte College Court/Sherobee Road



HCM Signalized Intersection Capacity Analysis
 6: Hurontario Street & Bronte College Court/Sherobee Road

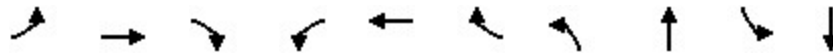
Future Total
 Weekday AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕		↖	↗	
Traffic Volume (vph)	33	6	33	21	14	139	102	815	4	37	978	16
Future Volume (vph)	33	6	33	21	14	139	102	815	4	37	978	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frbp, ped/bikes	1.00	0.97		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.97	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.87		1.00	0.86		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1668	1587		1639	1585		1685	3566		1685	3559	
Flt Permitted	0.35	1.00		0.73	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	622	1587		1257	1585		1685	3566		1685	3559	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	7	36	23	15	151	111	886	4	40	1063	17
RTOR Reduction (vph)	0	33	0	0	139	0	0	0	0	0	0	0
Lane Group Flow (vph)	36	10	0	23	27	0	111	890	0	40	1080	0
Confl. Peds. (#/hr)	11		23	23		11	5		26	26		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	13.0	13.0		13.0	13.0		17.7	115.9		9.6	107.8	
Effective Green, g (s)	13.0	13.0		13.0	13.0		17.7	115.9		9.6	107.8	
Actuated g/C Ratio	0.08	0.08		0.08	0.08		0.11	0.72		0.06	0.67	
Clearance Time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	50	128		102	128		186	2583		101	2397	
v/s Ratio Prot		0.01			0.02		c0.07	0.25		0.02	c0.30	
v/s Ratio Perm	c0.06			0.02								
v/c Ratio	0.72	0.08		0.23	0.21		0.60	0.34		0.40	0.45	
Uniform Delay, d1	71.7	68.0		68.8	68.7		67.8	8.1		72.4	12.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.81	0.75	
Incremental Delay, d2	47.2	0.5		2.3	1.7		7.6	0.4		3.8	0.4	
Delay (s)	118.9	68.5		71.1	70.5		75.3	8.5		62.8	9.6	
Level of Service	F	E		E	E		E	A		E	A	
Approach Delay (s/veh)		91.5			70.5			15.9			11.5	
Approach LOS		F			E			B			B	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			20.7				HCM 2000 Level of Service				C	
HCM 2000 Volume to Capacity ratio			0.49									
Actuated Cycle Length (s)			160.0				Sum of lost time (s)			21.5		
Intersection Capacity Utilization			81.8%				ICU Level of Service			D		
Analysis Period (min)			15									
c Critical Lane Group												

Queues
1: Camilla Road & Queensway

Future Total
Weekday PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	31	909	66	50	1030	94	34	59	74	78
Future Volume (vph)	31	909	66	50	1030	94	34	59	74	78
Lane Group Flow (vph)	34	988	72	54	1120	102	37	99	80	163
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	55.0	55.0	55.0	55.0	55.0	55.0	15.0	15.0	15.0	15.0
Minimum Split (s)	61.0	61.0	61.0	61.0	61.0	61.0	33.0	33.0	33.0	33.0
Total Split (s)	120.0	120.0	120.0	120.0	120.0	120.0	40.0	40.0	40.0	40.0
Total Split (%)	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	25.0%	25.0%	25.0%	25.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0	8.0	8.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	125.0	125.0	125.0	125.0	125.0	125.0	21.0	21.0	21.0	21.0
Actuated g/C Ratio	0.78	0.78	0.78	0.78	0.78	0.78	0.13	0.13	0.13	0.13
v/c Ratio	0.11	0.36	0.06	0.14	0.41	0.09	0.34	0.41	0.51	0.68
Control Delay (s/veh)	3.0	2.8	0.3	6.2	6.5	1.1	69.9	57.8	75.0	68.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.0	2.8	0.3	6.2	6.5	1.1	69.9	57.8	75.0	68.8
LOS	A	A	A	A	A	A	E	E	E	E
Approach Delay (s/veh)		2.7			6.1			61.1		70.8
Approach LOS		A			A			E		E
Queue Length 50th (m)	1.1	18.7	0.0	3.4	48.3	0.0	10.0	23.4	22.5	40.6
Queue Length 95th (m)	2.7	23.4	0.7	9.0	72.7	4.6	20.4	39.2	37.4	61.9
Internal Link Dist (m)		293.4			127.4			111.6		70.0
Turn Bay Length (m)	94.0		78.0	110.0		80.0	33.0		28.0	
Base Capacity (vph)	321	2733	1170	375	2761	1160	166	360	239	354
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.36	0.06	0.14	0.41	0.09	0.22	0.28	0.33	0.46

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 90 (56%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 13.2	Intersection LOS: B
Intersection Capacity Utilization 122.8%	ICU Level of Service H
Analysis Period (min) 15	

Queues
1: Camilla Road & Queensway

Future Total
Weekday PM Peak

Splits and Phases: 1: Camilla Road & Queensway



HCM Signalized Intersection Capacity Analysis

1: Camilla Road & Queensway

Future Total
Weekday PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗	↖	↖	↗↗	↖	↖	↗		↖	↗	
Traffic Volume (vph)	31	909	66	50	1030	94	34	59	32	74	78	72
Future Volume (vph)	31	909	66	50	1030	94	34	59	32	74	78	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0		8.0	8.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97	1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	3500	1478	1685	3535	1457	1676	1740		1646	1669	
Flt Permitted	0.23	1.00	1.00	0.27	1.00	1.00	0.47	1.00		0.69	1.00	
Satd. Flow (perm)	410	3500	1478	481	3535	1457	832	1740		1195	1669	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	988	72	54	1120	102	37	64	35	80	85	78
RTOR Reduction (vph)	0	0	16	0	0	22	0	13	0	0	23	0
Lane Group Flow (vph)	34	988	56	54	1120	80	37	86	0	80	140	0
Confl. Peds. (#/hr)	5					5	4		8	8		4
Heavy Vehicles (%)	0%	2%	2%	0%	1%	0%	0%	2%	0%	1%	4%	3%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2				6
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	125.0	125.0	125.0	125.0	125.0	125.0	21.0	21.0		21.0	21.0	
Effective Green, g (s)	125.0	125.0	125.0	125.0	125.0	125.0	21.0	21.0		21.0	21.0	
Actuated g/C Ratio	0.78	0.78	0.78	0.78	0.78	0.78	0.13	0.13		0.13	0.13	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0		8.0	8.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	320	2734	1154	375	2761	1138	109	228		156	219	
v/s Ratio Prot		0.28			c0.32			0.05				c0.08
v/s Ratio Perm	0.08		0.04	0.11		0.05	0.04			0.07		
v/c Ratio	0.11	0.36	0.05	0.14	0.41	0.07	0.34	0.38		0.51	0.64	
Uniform Delay, d1	4.2	5.3	4.0	4.3	5.6	4.0	63.2	63.5		64.7	65.9	
Progression Factor	0.45	0.43	0.15	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.4	0.1	0.8	0.4	0.1	3.9	2.2		5.6	8.5	
Delay (s)	2.5	2.7	0.7	5.1	6.0	4.2	67.0	65.7		70.3	74.4	
Level of Service	A	A	A	A	A	A	E	E		E	E	
Approach Delay (s/veh)		2.5			5.9			66.1			73.1	
Approach LOS		A			A			E			E	

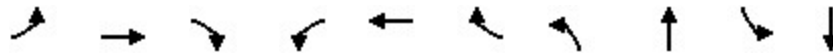
Intersection Summary

HCM 2000 Control Delay (s/veh)	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	122.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Queues

2: East Site Access/2325 Hurontario Street Site Access & Queensway

Future Total
Weekday PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	16	905	96	90	1018	28	39	2	27	9
Future Volume (vph)	16	905	96	90	1018	28	39	2	27	9
Lane Group Flow (vph)	17	984	104	98	1107	30	0	124	0	57
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		4			8			2		6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	8	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	105.0	105.0	105.0	105.0	105.0	105.0	17.0	17.0	17.0	17.0
Minimum Split (s)	111.0	111.0	111.0	111.0	111.0	111.0	41.0	41.0	41.0	41.0
Total Split (s)	119.0	119.0	119.0	119.0	119.0	119.0	41.0	41.0	41.0	41.0
Total Split (%)	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%	25.6%	25.6%	25.6%	25.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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)	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	129.7	129.7	129.7	129.7	129.7	129.7		18.3		18.3
Actuated g/C Ratio	0.81	0.81	0.81	0.81	0.81	0.81		0.11		0.11
v/c Ratio	0.05	0.24	0.08	0.25	0.39	0.03		0.57		0.39
Control Delay (s/veh)	3.6	3.8	0.7	4.7	3.8	1.4		49.0		58.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	3.6	3.8	0.7	4.7	3.8	1.4		49.0		58.3
LOS	A	A	A	A	A	A		D		E
Approach Delay (s/veh)		3.5			3.9			49.0		58.3
Approach LOS		A			A			D		E
Queue Length 50th (m)	0.8	18.4	0.4	4.9	29.3	0.3		20.3		12.2
Queue Length 95th (m)	m1.2	m22.3	m1.1	8.7	37.2	m1.8		39.7		25.3
Internal Link Dist (m)		176.7			293.4			40.1		8.7
Turn Bay Length (m)	32.0		33.0	36.0		30.0				
Base Capacity (vph)	345	4075	1240	396	2864	1151		368		271
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	0.05	0.24	0.08	0.25	0.39	0.03		0.34		0.21

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 86 (54%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 155	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay (s/veh): 7.1	Intersection LOS: A
Intersection Capacity Utilization 204.2%	ICU Level of Service H
Analysis Period (min) 15	

Queues

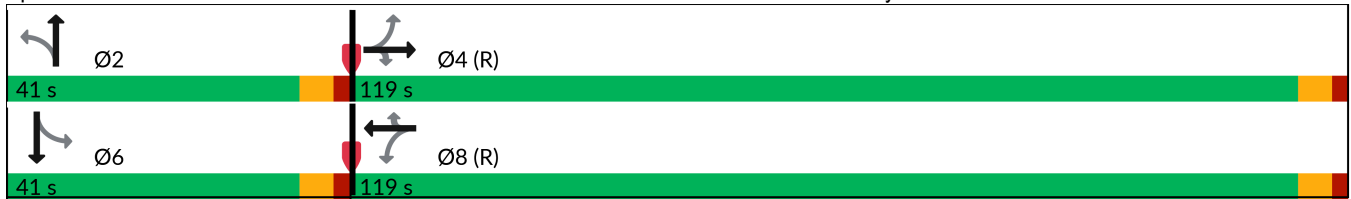
Future Total

2: East Site Access/2325 Hurontario Street Site Access & Queensway

Weekday PM Peak

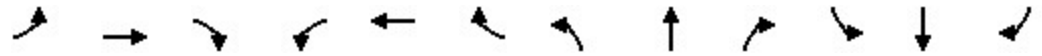
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: East Site Access/2325 Hurontario Street Site Access & Queensway



HCM Signalized Intersection Capacity Analysis
 2: East Site Access/2325 Hurontario Street Site Access & Queensway

Future Total
 Weekday PM Peak

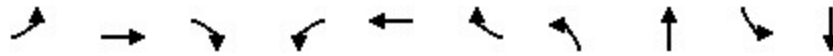


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘	↑↑	↗		↕			↕	
Traffic Volume (vph)	16	905	96	90	1018	28	39	2	74	27	9	17
Future Volume (vph)	16	905	96	90	1018	28	39	2	74	27	9	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00		1.00			1.00	
Frbp, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98		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	1.00	0.85	1.00	1.00	0.85		0.91			0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.98			0.98	
Satd. Flow (prot)	1684	5029	1507	1685	3535	1416		1687			1719	
Flt Permitted	0.24	1.00	1.00	0.28	1.00	1.00		0.87			0.68	
Satd. Flow (perm)	427	5029	1507	489	3535	1416		1499			1193	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	984	104	98	1107	30	42	2	80	29	10	18
RTOR Reduction (vph)	0	0	20	0	0	4	0	46	0	0	12	0
Lane Group Flow (vph)	17	984	84	98	1107	26	0	78	0	0	45	0
Confl. Peds. (#/hr)	1					1						
Heavy Vehicles (%)	0%	2%	0%	0%	1%	4%	0%	0%	0%	4%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	129.7	129.7	129.7	129.7	129.7	129.7		18.3			18.3	
Effective Green, g (s)	129.7	129.7	129.7	129.7	129.7	129.7		18.3			18.3	
Actuated g/C Ratio	0.81	0.81	0.81	0.81	0.81	0.81		0.11			0.11	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		6.0			6.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	346	4076	1221	396	2865	1147		171			136	
v/s Ratio Prot		0.20			c0.31							
v/s Ratio Perm	0.04		0.06	0.20		0.02		c0.05			0.04	
v/c Ratio	0.05	0.24	0.07	0.25	0.39	0.02		0.46			0.33	
Uniform Delay, d1	3.0	3.6	3.0	3.6	4.2	2.9		66.2			65.2	
Progression Factor	1.00	0.99	1.08	0.82	0.80	0.80		1.00			1.00	
Incremental Delay, d2	0.2	0.1	0.1	1.4	0.4	0.0		4.0			3.0	
Delay (s)	3.2	3.6	3.3	4.3	3.7	2.4		70.2			68.3	
Level of Service	A	A	A	A	A	A		E			E	
Approach Delay (s/veh)		3.6			3.7			70.2			68.3	
Approach LOS		A			A			E			E	

Intersection Summary		
HCM 2000 Control Delay (s/veh)	8.4	HCM 2000 Level of Service A
HCM 2000 Volume to Capacity ratio	0.39	
Actuated Cycle Length (s)	160.0	Sum of lost time (s) 12.0
Intersection Capacity Utilization	204.2%	ICU Level of Service H
Analysis Period (min)	15	
c Critical Lane Group		

Queues
3: Hurontario Street & Queensway

Future Total
Weekday PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	42	736	388	146	852	76	310	558	96	648
Future Volume (vph)	42	736	388	146	852	76	310	558	96	648
Lane Group Flow (vph)	46	800	422	159	926	83	337	808	104	818
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	50.0	50.0	5.0	52.0	52.0	5.0	67.0	5.0	51.0
Minimum Split (s)	10.0	60.0	60.0	10.0	59.0	59.0	10.0	74.0	10.0	58.0
Total Split (s)	12.0	60.0	60.0	12.0	60.0	60.0	30.0	74.0	14.0	58.0
Total Split (%)	7.5%	37.5%	37.5%	7.5%	37.5%	37.5%	18.8%	46.3%	8.8%	36.3%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	2.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.0	0.0
Total Lost Time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	3.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	62.0	53.0	53.0	63.0	55.4	55.4	22.7	67.0	11.0	53.3
Actuated g/C Ratio	0.39	0.33	0.33	0.39	0.35	0.35	0.14	0.42	0.07	0.33
v/c Ratio	0.28	0.69	0.61	0.87	0.52	0.14	0.74	0.57	0.91	0.71
Control Delay (s/veh)	32.6	50.1	14.1	67.4	36.0	2.4	62.3	21.6	135.1	50.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.6	50.1	14.1	67.4	36.0	2.4	62.3	21.6	135.1	50.5
LOS	C	D	B	E	D	A	E	C	F	D
Approach Delay (s/veh)		37.5			37.9			33.6		60.0
Approach LOS		D			D			C		E
Queue Length 50th (m)	9.7	109.2	21.5	23.0	84.6	1.1	36.9	96.6	31.1	112.1
Queue Length 95th (m)	19.3	131.2	56.0	#49.0	89.9	3.9	55.3	117.6	#66.6	136.7
Internal Link Dist (m)		171.6			176.7			106.5		184.3
Turn Bay Length (m)	101.0		88.0	100.0		72.0	63.0		43.0	
Base Capacity (vph)	165	1159	692	183	1775	580	505	1409	114	1148
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.69	0.61	0.87	0.52	0.14	0.67	0.57	0.91	0.71

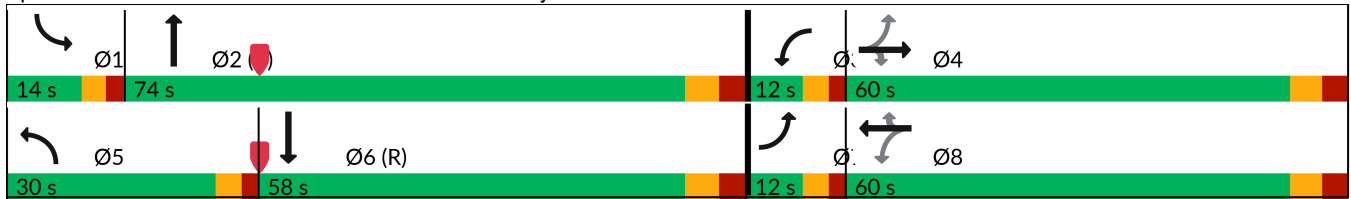
Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 54.5 (34%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 155	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay (s/veh): 41.2	Intersection LOS: D
Intersection Capacity Utilization 130.1%	ICU Level of Service H
Analysis Period (min) 15	

Queues
 3: Hurontario Street & Queensway

Future Total
 Weekday PM Peak





























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

Splits and Phases: 3: Hurontario Street & Queensway



HCM Signalized Intersection Capacity Analysis
3: Hurontario Street & Queensway

Future Total
Weekday PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			  		 	 			 	
Traffic Volume (vph)	42	736	388	146	852	76	310	558	185	96	648	105
Future Volume (vph)	42	736	388	146	852	76	310	558	185	96	648	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		3.0	7.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.95	1.00	0.98		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1390	3500	1432	1666	5129	1431	3236	3316		1668	3421	
Flt Permitted	0.21	1.00	1.00	0.18	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	306	3500	1432	317	5129	1431	3236	3316		1668	3421	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	800	422	159	926	83	337	607	201	104	704	114
RTOR Reduction (vph)	0	0	216	0	0	54	0	21	0	0	8	0
Lane Group Flow (vph)	46	800	206	159	926	29	337	787	0	104	810	0
Confl. Peds. (#/hr)	33		25	25		33	16		67	67		16
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	21%	2%	1%	1%	0%	0%	1%	2%	2%	1%	2%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	59.6	54.0	54.0	62.4	55.4	55.4	22.7	66.0		9.0	52.3	
Effective Green, g (s)	59.6	54.0	54.0	62.4	55.4	55.4	22.7	66.0		11.0	52.3	
Actuated g/C Ratio	0.37	0.34	0.34	0.39	0.35	0.35	0.14	0.41		0.07	0.33	
Clearance Time (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0		5.0	7.0	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	151	1181	483	182	1775	495	459	1367		114	1118	
v/s Ratio Prot	0.01	0.23		c0.04	0.18		c0.10	0.24		c0.06	c0.24	
v/s Ratio Perm	0.10		0.14	c0.30		0.02						
v/c Ratio	0.30	0.68	0.43	0.87	0.52	0.06	0.73	0.58		0.91	0.72	
Uniform Delay, d1	33.5	45.5	41.0	43.7	41.7	34.9	65.8	36.2		74.0	47.5	
Progression Factor	1.00	1.00	1.00	0.79	0.82	2.79	0.81	0.59		1.00	1.00	
Incremental Delay, d2	2.4	3.1	2.7	34.6	1.0	0.2	6.5	1.6		59.6	4.1	
Delay (s)	35.8	48.7	43.8	69.2	35.4	97.6	59.8	22.9		133.6	51.6	
Level of Service	D	D	D	E	D	F	E	C		F	D	
Approach Delay (s/veh)		46.6			44.4			33.8			60.8	
Approach LOS		D			D			C			E	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			45.7				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			160.0			Sum of lost time (s)			24.0			
Intersection Capacity Utilization			130.1%			ICU Level of Service			H			
Analysis Period (min)			15									

c Critical Lane Group

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	13	1040	8	0	1182
Future Vol, veh/h	0	13	1040	8	0	1182
Conflicting Peds, #/hr	0	0	0	21	21	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	0	14	1130	9	0	1285

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	591	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	455	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	448	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	448
HCM Lane V/C Ratio	-	-	0.032
HCM Ctrl Dly (s/v)	-	-	13.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0.1

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	24	1024	86	0	1182
Future Vol, veh/h	0	24	1024	86	0	1182
Conflicting Peds, #/hr	0	0	0	23	23	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	0	26	1113	93	0	1285

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	626	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	432	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	424	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	14	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	424
HCM Lane V/C Ratio	-	-	0.062
HCM Ctrl Dly (s/v)	-	-	14
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0.2

Queues

6: Hurontario Street & Bronte College Court/Sherobee Road

Future Total
Weekday PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	6	13	10	35	938	107	1051
Future Volume (vph)	81	6	13	10	35	938	107	1051
Lane Group Flow (vph)	88	217	14	110	38	1028	116	1168
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	47.0	47.0	47.0	47.0	13.0	30.5	13.0	30.5
Total Split (s)	47.0	47.0	47.0	47.0	25.0	95.0	18.0	88.0
Total Split (%)	29.4%	29.4%	29.4%	29.4%	15.6%	59.4%	11.3%	55.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	5.0	5.0	5.0	5.0	2.0	3.5	2.0	3.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	9.0	9.0	9.0	9.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	C-Max	Max	C-Max
Act Effct Green (s)	19.8	19.8	19.8	19.8	38.2	87.5	31.2	80.5
Actuated g/C Ratio	0.12	0.12	0.12	0.12	0.24	0.55	0.20	0.50
v/c Ratio	0.62	0.59	0.24	0.40	0.10	0.55	0.36	0.68
Control Delay (s/veh)	83.1	14.7	70.1	17.2	51.7	24.8	49.6	50.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	83.1	14.7	70.1	17.2	51.7	24.8	49.6	50.9
LOS	F	B	E	B	D	C	D	D
Approach Delay (s/veh)		34.5		23.2		25.8		50.8
Approach LOS		C		C		C		D
Queue Length 50th (m)	25.7	1.9	4.1	2.9	9.3	103.7	31.0	163.2
Queue Length 95th (m)	41.6	24.0	11.2	19.0	20.7	122.1	m48.0	194.3
Internal Link Dist (m)		55.8		61.0		168.5		77.5
Turn Bay Length (m)			30.0		50.0		47.0	
Base Capacity (vph)	275	517	113	442	379	1875	325	1722
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	0.32	0.42	0.12	0.25	0.10	0.55	0.36	0.68

Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 3 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 38.2	Intersection LOS: D
Intersection Capacity Utilization 82.3%	ICU Level of Service E
Analysis Period (min) 15	

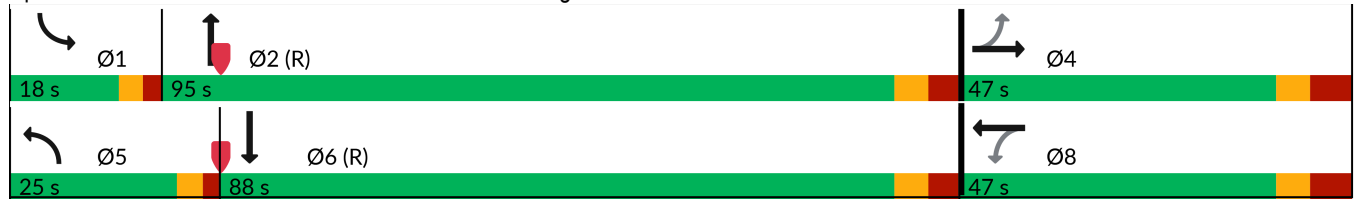
Queues

6: Hurontario Street & Bronte College Court/Sherobee Road

Future Total
Weekday PM Peak

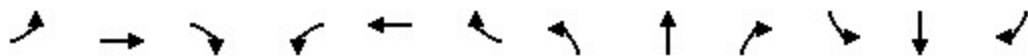
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Hurontario Street & Bronte College Court/Sherobee Road



HCM Signalized Intersection Capacity Analysis
6: Hurontario Street & Bronte College Court/Sherobee Road

Future Total
Weekday PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	6	193	13	10	91	35	938	7	107	1051	24
Future Volume (vph)	81	6	193	13	10	91	35	938	7	107	1051	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frbp, ped/bikes	1.00	0.94		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		0.97	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.87		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1618	1505		1506	1545		1589	3427		1668	3420	
Flt Permitted	0.68	1.00		0.30	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1161	1505		477	1545		1589	3427		1668	3420	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	7	210	14	11	99	38	1020	8	116	1142	26
RTOR Reduction (vph)	0	184	0	0	87	0	0	0	0	0	1	0
Lane Group Flow (vph)	88	33	0	14	23	0	38	1028	0	116	1167	0
Confl. Peds. (#/hr)	10		43	43		10	8		20	20		8
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	3%	0%	0%	8%	0%	3%	6%	4%	0%	1%	4%	0%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	19.8	19.8		19.8	19.8		38.2	87.5		31.2	80.5	
Effective Green, g (s)	19.8	19.8		19.8	19.8		38.2	87.5		31.2	80.5	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.24	0.55		0.20	0.50	
Clearance Time (s)	9.0	9.0		9.0	9.0		5.0	7.5		5.0	7.5	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	143	186		59	191		379	1874		325	1720	
v/s Ratio Prot		0.02			0.02		0.02	c0.30		c0.07	c0.34	
v/s Ratio Perm	c0.08			0.03								
v/c Ratio	0.62	0.18		0.24	0.12		0.10	0.55		0.36	0.68	
Uniform Delay, d1	66.5	62.8		63.3	62.4		47.5	23.5		55.7	30.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.81	1.63	
Incremental Delay, d2	10.8	1.0		4.3	0.6		0.5	1.2		2.1	1.5	
Delay (s)	77.3	63.8		67.6	63.0		48.0	24.6		47.3	50.5	
Level of Service	E	E		E	E		D	C		D	D	
Approach Delay (s/veh)		67.7			63.5			25.5			50.2	
Approach LOS		E			E			C			D	
Intersection Summary												
HCM 2000 Control Delay (s/veh)			43.2									D
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			160.0								21.5	
Intersection Capacity Utilization			82.3%									E
Analysis Period (min)			15									

c Critical Lane Group



APPENDIX K

Lost Time Adjustment Review

LOST TIME ADJUSTMENT REVIEW (Hurontario & Queensway)

PM Peak Hour

PM (4:45-5:45)

SBL

Recorded Time Start (HH:MM:SS)	Recorded Time End (HH:MM:SS)	Recorded Time (s)	# of cars	Green Time (s)*	LTA (s)
16:45:55	16:46:09	14	3	7	-7
16:48:35	16:48:47	12	2	7	-5
16:51:12	16:51:31	19	5	7	-12
16:53:53	16:54:04	11	3	7	-4
16:56:35	16:56:46	11	2	7	-4
16:59:16	16:59:29	13	3	7	-6
17:01:47	17:02:00	13	4	7	-6
17:04:34	17:04:52	18	3	7	-11
17:07:15	17:07:29	14	3	7	-7
17:09:54	17:10:06	12	4	7	-5
17:12:34	17:12:49	15	5	7	-8
17:15:15	17:15:27	12	3	7	-5
17:17:54	17:18:08	14	4	7	-7
17:20:36	17:20:45	9	1	7	-2
17:23:15	17:23:29	14	4	7	-7
17:25:55	17:26:09	14	4	7	-7
17:28:19	17:28:34	15	4	7	-8
17:31:17	17:31:28	11	3	7	-4
17:33:55	17:34:09	14	4	7	-7
17:36:35	17:36:49	14	3	7	-7
17:39:14	17:39:30	16	5	7	-9
17:41:56	17:42:10	14	3	7	-7
17:44:31	17:44:46	15	4	7	-8

*Green time is the advance green portion of the protected SB left turn movement a per video review

Recorded Time Start (Time vehicle starts moving): Time vehicle passes stop bar for the SBL movement.

Recorded Time End (Time last vehicle exits/crosses): Time vehicle passes cross walk on the east intersection leg.



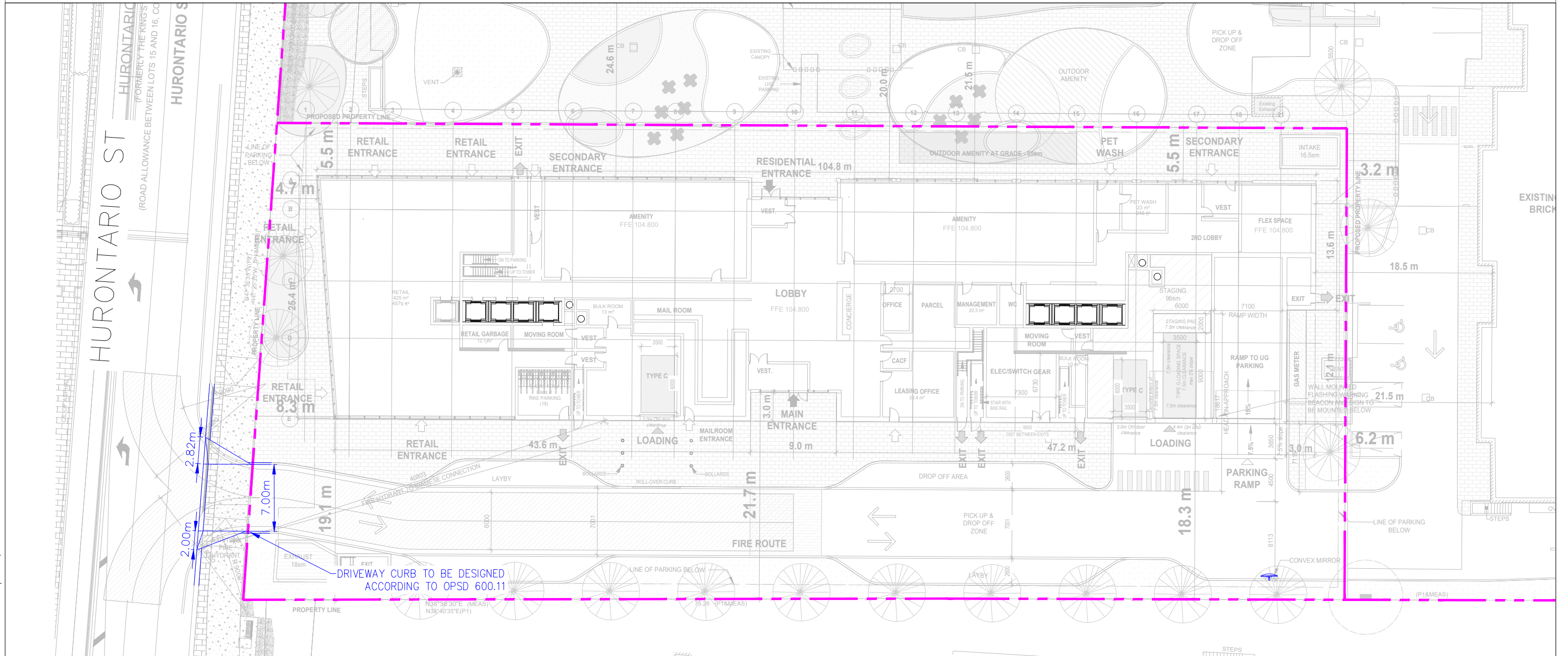


APPENDIX L

Functional Design Review

NOTES:

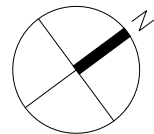
1. ACCESS DESIGN AS PER PEEL REGION 5-1-8 URBAN ENTRANCES
2. LAYBY DESIGN AS PER CITY OF MISSISSAUGA STD 2230.031
3. AS PER MISSISSAUGA ZONING BY-LAW 0225-2007 3.1.1.5.1:
 - 3.1. THE MINIMUM AISLE WIDTH SHALL BE 7.0m.
 - 3.2. THE MINIMUM WIDTH OF PICK UP AND DROP OFF LANES SHALL BE 2.6m.
4. AS PER TAC 9.7.2:
 - 4.1. WHILE CROSSING AT 90 DEGREES IS PREFERABLE IN MOST CASES, IT IS OCCASIONALLY NECESSARY AND EVEN ADVANTAGEOUS TO SKEW THE CROSSING. HOWEVER, ANGLES LESS THAN 70 DEGREES AND GREATER THAN 110 DEGREES ARE TYPICALLY NOT DESIRABLE.



DRIVEWAY CURB TO BE DESIGNED ACCORDING TO OPSD 600.11

DRAWN BY: J.L. PLOT DATE: April 15, 2026

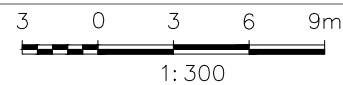
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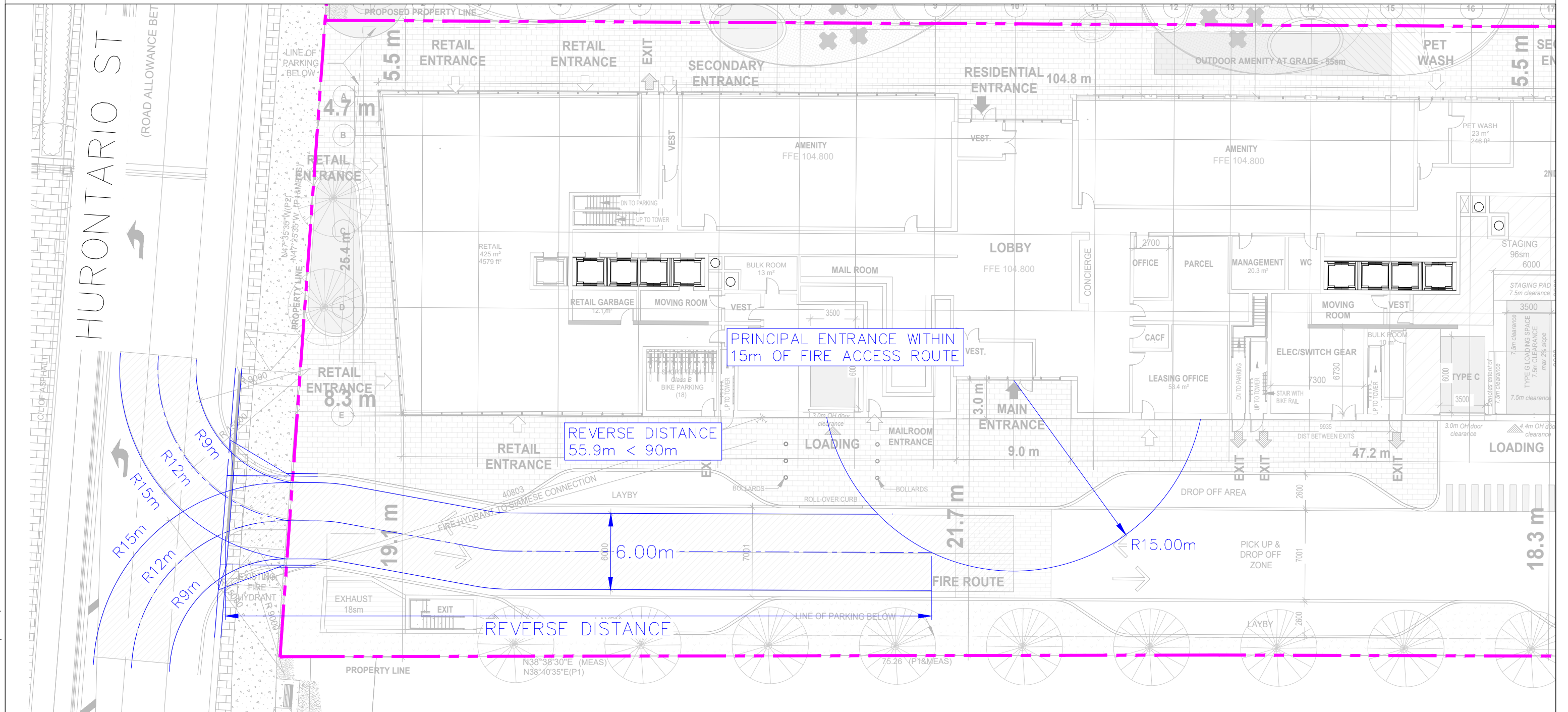
ACCESS DESIGN REVIEW

Drawing No.
001

NOTES:

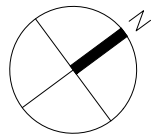
AS PER THE ONTARIO BUILDING CODE 3.2.5

1. 5.5 LOCATION OF ACCESS ROUTES – ACCESS ROUTES SHALL BE LOCATED SO THAT THE PRINCIPAL ENTRANCE AND EVERY ACCESS OPENING ARE LOCATED NOT LESS THAN 3m AND NOT MORE THAN 15m FROM THE CLOSEST PORTION OF THE ACCESS ROUTE
2. 6.1 ACCESS ROUTE DESIGN – A PORTION OF A ROADWAY PROVIDED AS A REQUIRED ACCESS ROUTE FOR FIRE DEPARTMENT USE SHALL:
 - 2.1. 6.1.a HAVE A CLEAR WIDTH NOT LESS THAN 6m
 - 2.2. 6.1.b HAVE A CENTRELINE RADIUS NOT LESS THAN 12m
 - 2.3. 6.1.c HAVE AN OH CLEARANCE OF NOT LESS THAN 5m
 - 2.4. 6.1.d BE CONNECTED WITH A PUBLIC THOROUGHFARE



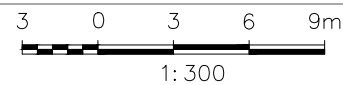
DRAWN BY: J.L. PLOT DATE: April 15, 2026

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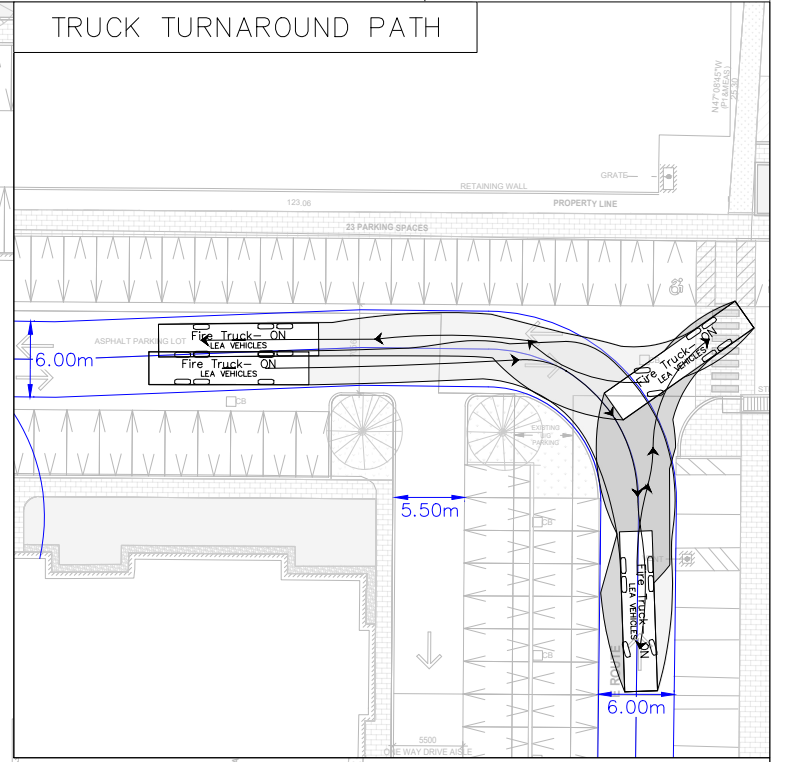
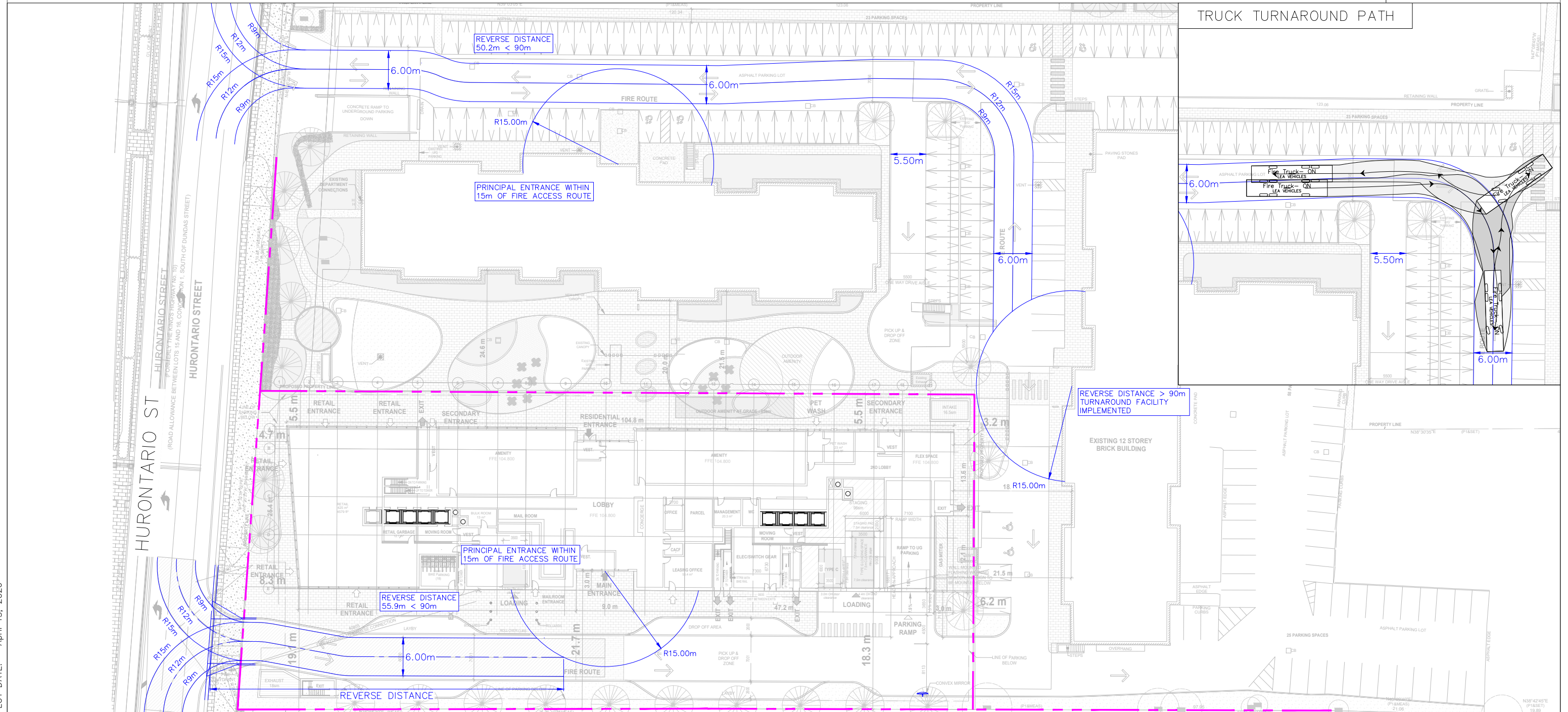
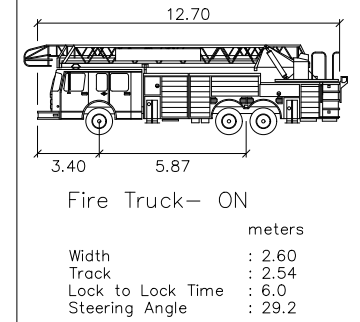
FIRE ROUTE REVIEW

Drawing No.
002

NOTES:

AS PER THE ONTARIO BUILDING CODE 3.2.5

1. 5.5 LOCATION OF ACCESS ROUTES – ACCESS ROUTES SHALL BE LOCATED SO THAT THE PRINCIPAL ENTRANCE AND EVERY ACCESS OPENING ARE LOCATED NOT LESS THAN 3m AND NOT MORE THAN 15m FROM THE CLOSEST PORTION OF THE ACCESS ROUTE
2. 6.1 ACCESS ROUTE DESIGN – A PORTION OF A ROADWAY PROVIDED AS A REQUIRED ACCESS ROUTE FOR FIRE DEPARTMENT USE SHALL:
 - 2.1. 6.1.a HAVE A CLEAR WIDTH NOT LESS THAN 6m
 - 2.2. 6.1.b HAVE A CENTRELINE RADIUS NOT LESS THAN 12m
 - 2.3. 6.1.c HAVE AN OH CLEARANCE OF NOT LESS THAN 5m
 - 2.4. 6.1.d BE CONNECTED WITH A PUBLIC THOROUGHFARE



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1:600

EXISTING BUILDINGS
 FIRE ROUTE REVIEW

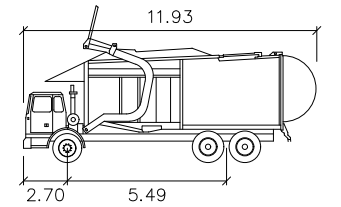
Drawing No. 003

NOTES: AS PER THE CITY REGION OF PEEL WASTE COLLECTION DESIGN STANDARDS MANUAL (2020):

1. ACCESS ROAD – MIN. 6m ROADWAY WIDTH AND MIN. 4.4m CLEAR HEIGHT ALONG ACCESS ROAD.
2. INDOOR WASTE COLLECTION SHOULD HAVE:
 - 2.1. MIN. 18m HEAD-ON APPROACH
 - 2.2. MIN. 6m WIDE CONCRETE PAD AND MIN 7.5m OVERHEAD CLEARANCE
 - 2.3. MIN. 10m² BULKY SET OUT AREA
 - 2.4. MAX 2% SLOPE AT CONCRETE PAD
3. THE WASTE COLLECTION VEHICLE IS NOT PERMITTED TO REVERSE IN EXCESS OF 15m
4. AS PER THE CITY OF MISSISSAUGA ZONING BY-LAW PART 3: REQUIRED LOADING SPACES SHALL HAVE AN UNOBSTRUCTED RECTANGULAR AREA WITH A MINIMUM WIDTH OF 3.5m AND A MINIMUM LENGTH OF 9.0m
5. A TRAINED ON-SITE STAFF MEMBER WILL BE AVAILABLE TO MANEUVER THE GARBAGE BINS FOR THE COLLECTION DRIVER AND ACT AS A FLAGMAN WHEN THE TRUCK IS REVERSING. IN THE EVENT THE ON-SITE STAFF MEMBER IS UNAVAILABLE AT THE TIME THE CITY COLLECTION VEHICLE ARRIVES AT THE SITE, THE COLLECTION VEHICLE WILL LEAVE THE SITE AND NOT RETURN UNTIL THE NEXT SCHEDULED COLLECTION DAY.
6. FLASHING BEACON TO BE ACTIVATED WHEN TRUCKS ENTER AND EXIT THE SITE. THE SYSTEM TO REMAIN ACTIVATED DURING THE DELIVERY AND UNTIL THE TRUCK EXITS THE SITE. WARNING SIGN TO BE MOUNTED BELOW THE FLASHING BEACON.
7. COLLECTION BINS
 - 7.1. NUMBER OF RECYCLE BINS SHOWN IN STAGING AREA IS MEANT TO DENOTE THAT THE SPACE CAN ACCOMMODATE THE NECESSARY NUMBER OF RESIDENTIAL COLLECTION BINS AS PER SECTION 4.
 - 7.2. FOR 698 UNITS, $698/45 = 16$ 3-YD3/ BINS ARE REQUIRED (REFER TO APPENDIX 7) – EACH 3-YD3/ BIN RESERVES 2m x 3m SPACE, TOTAL STAGING AREA = 96m².
 - 7.3. GARBAGE STAGING AREA CONFIGURATION SUBJECT TO THE APPROVAL OF REGION OF PEEL'S WASTE MANAGEMENT DEPARTMENT.

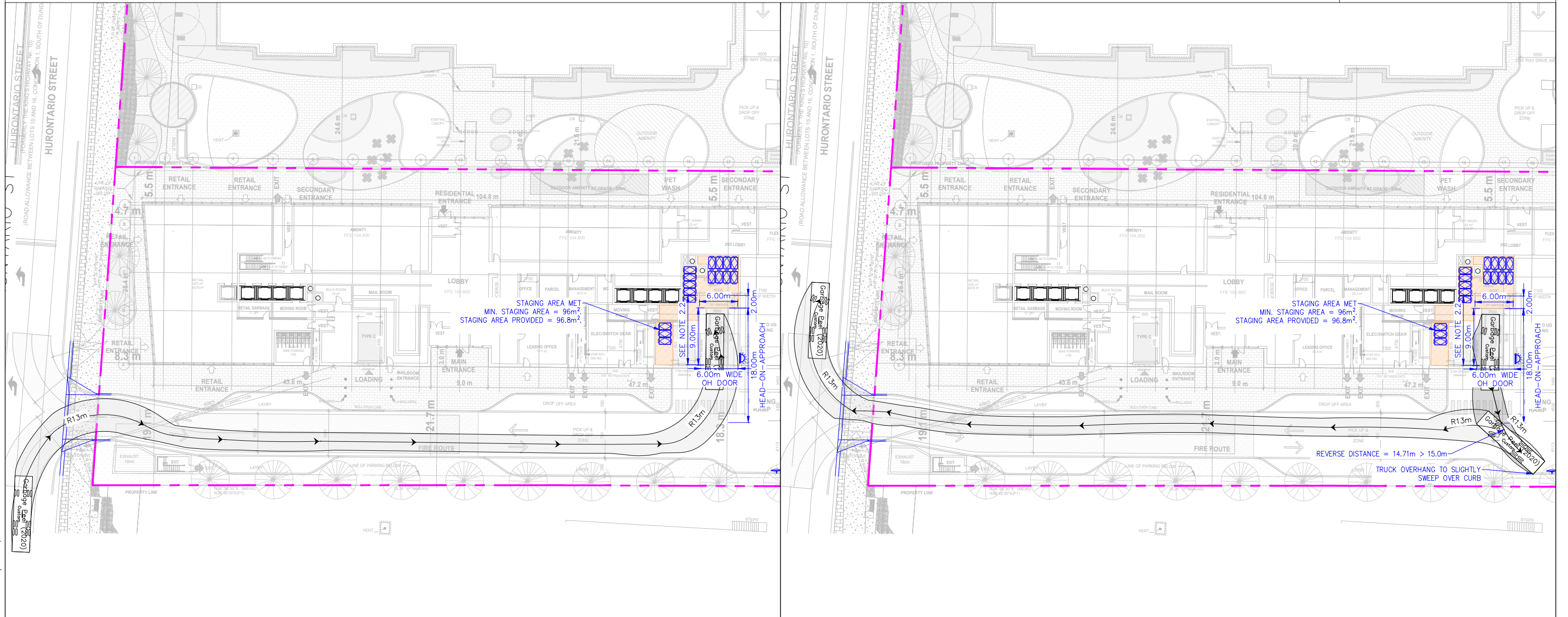
WATCH FOR
TURNING TRUCKS
WHEN FLASHING

(600x300)
BLACK LEGEND & BORDER,
WHITE REFL. BACKGROUND.



Garbage Peel (2020)
Width : 2.77
Track : 2.77
Lock to Lock Time : 6.0
Steering Angle : 25.0

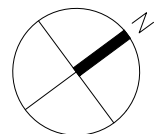
FORWARD IN
REVERSE OUT



ENTRY PATH

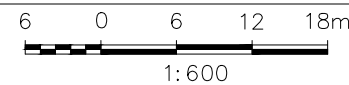
EXIT PATH

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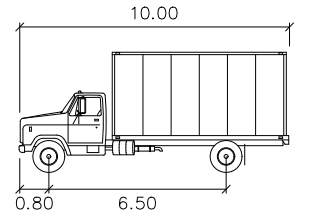


LOADING REVIEW
PEEL GARBAGE TRUCK
ENTRY AND EXIT PATHS

Drawing No.
004

NOTES:

1. A TRAINED ON-SITE STAFF MEMBER WILL BE AVAILABLE TO ACT AS A FLAG MAN WHEN THE TRUCK IS REVERSING.
2. FLASHING WARNING LIGHT TO BE ACTIVATED WHEN TRUCKS ENTER AND EXIT THE SITE. THE SYSTEM TO REMAIN ACTIVATED DURING THE CITY GARBAGE COLLECTION ACTIVITY AND UNTIL THE TRUCK EXITS THE SITE. TWO (2) WARNING SIGNS TO BE MOUNTED BELOW THE FLASH LIGHT.
3. ACCESS ROUTE MUST BE MIN 6m AT POINT OF INGRESS/EGRESS TO SITE AND MIN OF 4.5m WIDE THROUGHOUT THE SITE WITH A UNENCUMBERED VERTICAL CLEARANCE OF 4.4m.
 - 3.1. TYPE C LOADING SPACE VERTICAL CLEARANCE TO BE 3.0m.



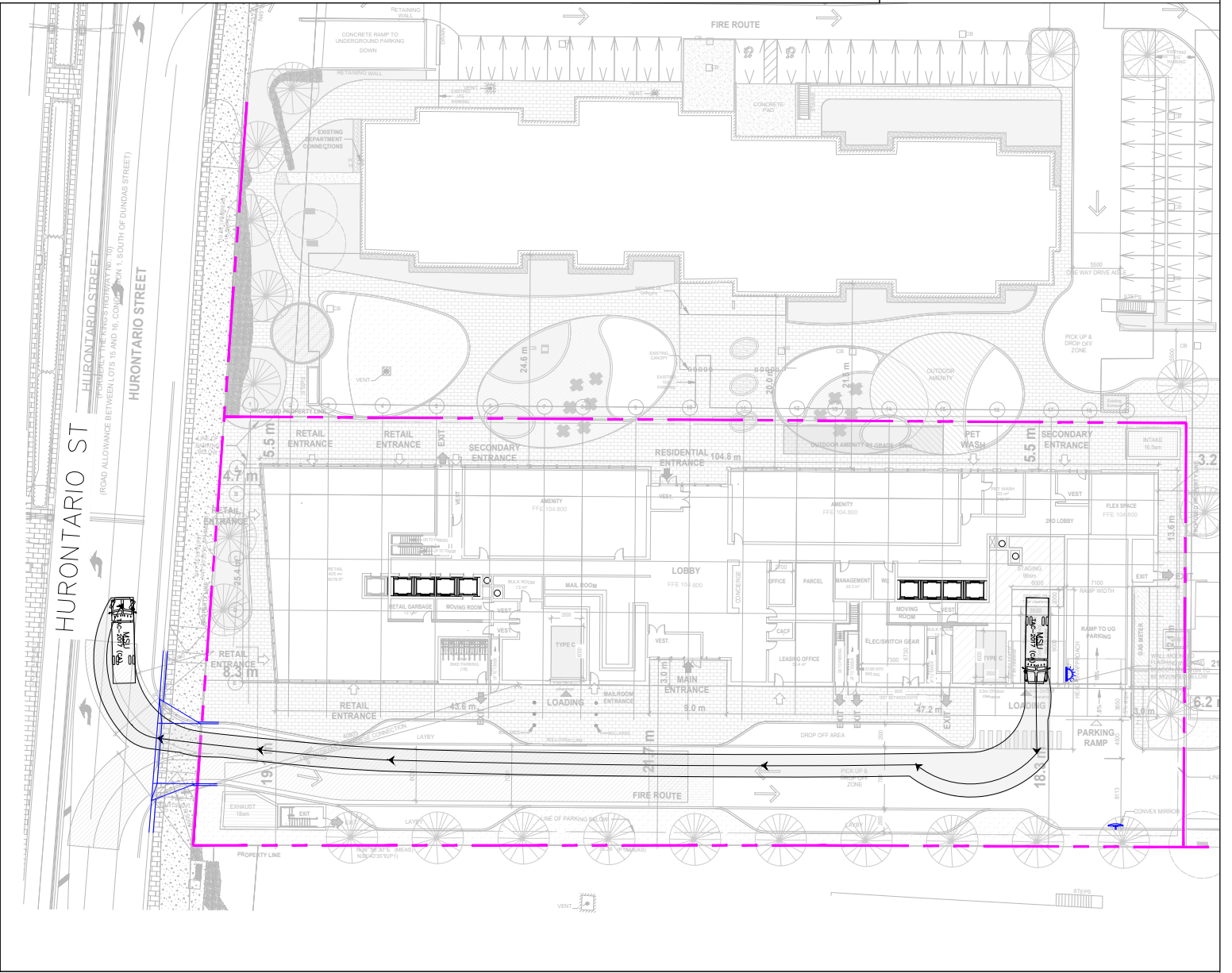
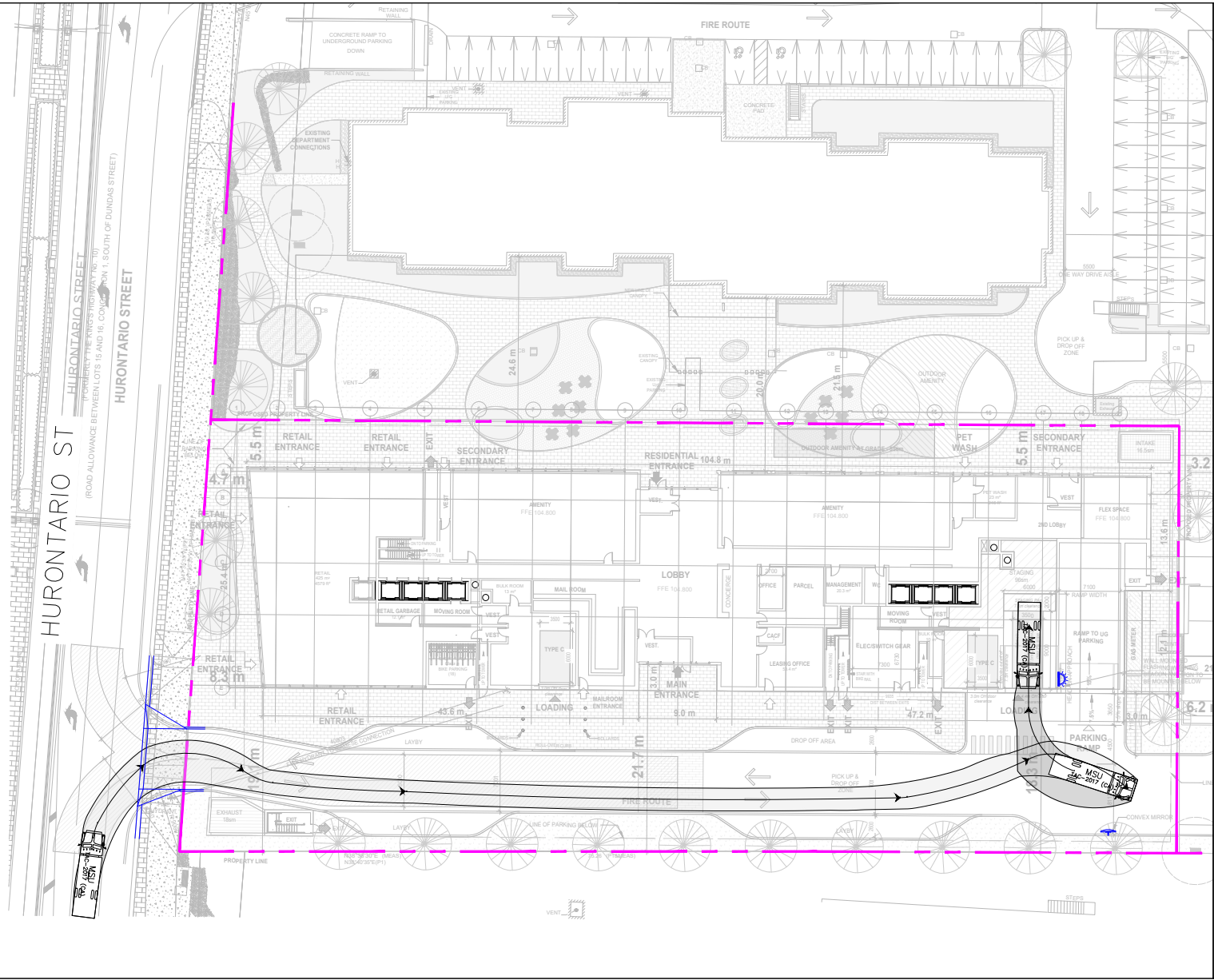
MSU

	units
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 40.2

WATCH FOR TURNING TRUCKS WHEN FLASHING

(600x300)
BLACK LEGEND & BORDER,
WHITE REFL. BACKGROUND.

REVERSE IN FORWARD OUT

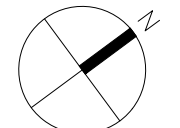


ENTRY PATH

EXIT PATH

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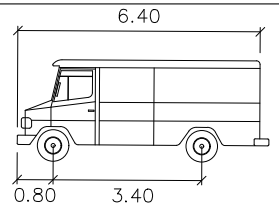
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LOADING REVIEW
MSU (DELIVERY) TRUCK
ENTRY AND EXIT PATHS

Drawing No.
005

NOTES:

1. A TRAINED ON-SITE STAFF MEMBER WILL BE AVAILABLE TO ACT AS A FLAG MAN WHEN THE TRUCK IS REVERSING.
2. FLASHING WARNING LIGHT TO BE ACTIVATED WHEN TRUCKS ENTER AND EXIT THE SITE. THE SYSTEM TO REMAIN ACTIVATED DURING THE CITY GARBAGE COLLECTION ACTIVITY AND UNTIL THE TRUCK EXITS THE SITE. TWO (2) WARNING SIGNS TO BE MOUNTED BELOW THE FLASH LIGHT.
3. ACCESS ROUTE MUST BE MIN 6m AT POINT OF INGRESS/EGRESS TO SITE AND MIN OF 4.5m WIDE THROUGHOUT THE SITE WITH A UNENCUMBERED VERTICAL CLEARANCE OF 4.4m.
 - 3.1. TYPE C LOADING SPACE VERTICAL CLEARANCE TO BE 3.0m.

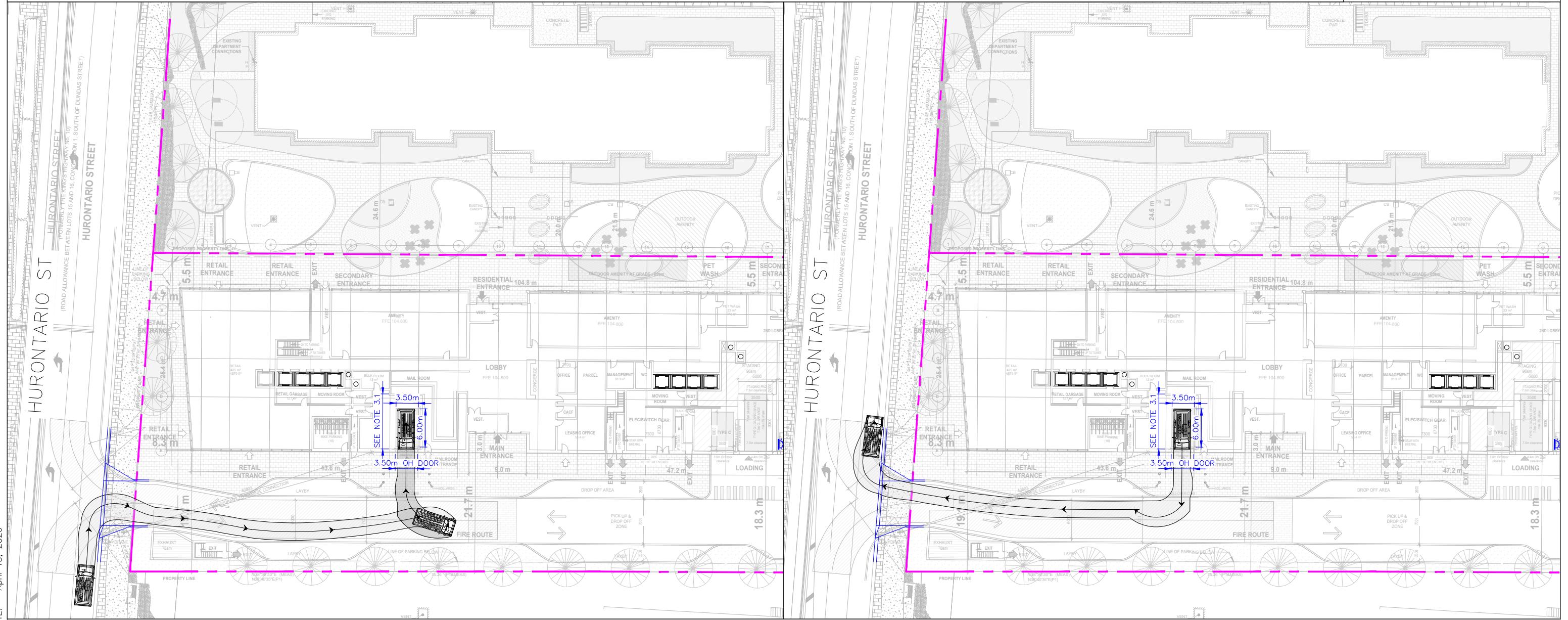


LSU
 Width : 2.60 meters
 Track : 2.60
 Lock to Lock Time : 6.0
 Steering Angle : 40.3

WATCH FOR
TURNING TRUCKS
WHEN FLASHING

(600x300)
BLACK LEGEND & BORDER,
WHITE REFL. BACKGROUND.

REVERSE IN
FORWARD OUT

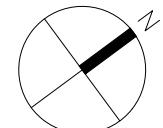


ENTRY PATH

EXIT PATH

DRAWN BY: J.L. PLOT DATE: April 15, 2026

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Project No.
25123
 Date
APR 15, 2026

2233-2235 HURONTARIO ST
 MISSISSAUGA ONTARIO
 4 0 4 8 12m
 1:400

LOADING REVIEW
 LSU TRUCK
 ENTRY AND EXIT PATHS WEST

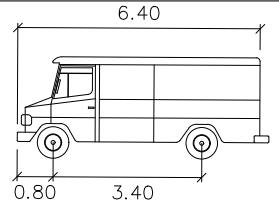
Drawing No.
006

NOTES:

1. A TRAINED ON-SITE STAFF MEMBER WILL BE AVAILABLE TO ACT AS A FLAG MAN WHEN THE TRUCK IS REVERSING.
2. FLASHING WARNING LIGHT TO BE ACTIVATED WHEN TRUCKS ENTER AND EXIT THE SITE. THE SYSTEM TO REMAIN ACTIVATED DURING THE CITY GARBAGE COLLECTION ACTIVITY AND UNTIL THE TRUCK EXITS THE SITE. TWO (2) WARNING SIGNS TO BE MOUNTED BELOW THE FLASH LIGHT.
3. ACCESS ROUTE MUST BE MIN 6m AT POINT OF INGRESS/EGRESS TO SITE AND MIN OF 4.5m WIDE THROUGHOUT THE SITE WITH A UNENCUMBERED VERTICAL CLEARANCE OF 4.4m.
 - 3.1. TYPE C LOADING SPACE VERTICAL CLEARANCE TO BE 3.0m.

WATCH FOR
TURNING TRUCKS
WHEN FLASHING

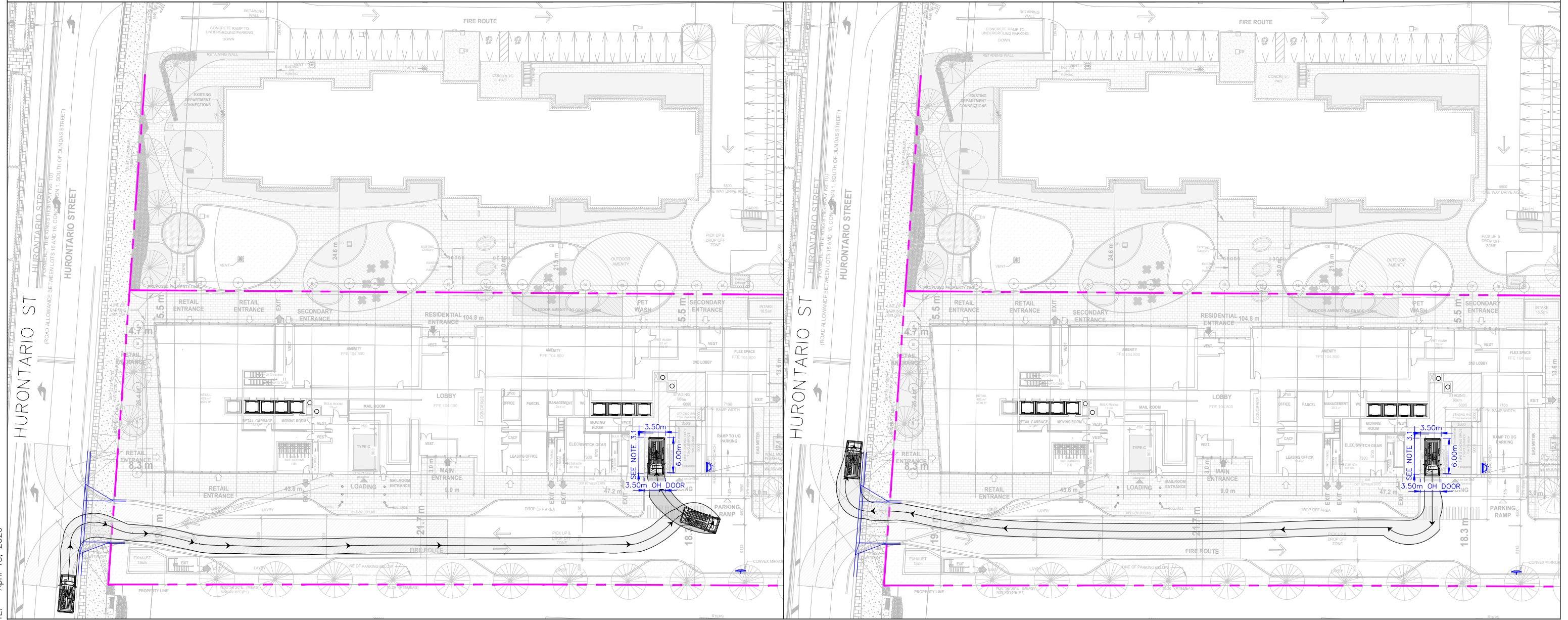
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BLACK LEGEND & BORDER,
WHITE REFL. BACKGROUND.



LSU

Width	: 2.60	units
Track	: 2.60	meters
Lock to Lock Time	: 6.0	
Steering Angle	: 40.3	

REVERSE IN
FORWARD OUT

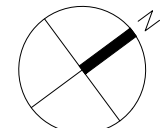


ENTRY PATH

EXIT PATH

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Date	APR 15, 2026

2233-2235 HURONTARIO ST
MISSISSAUGA ONTARIO

1: 400

LOADING REVIEW
LSU TRUCK
ENTRY AND EXIT PATHS EAST

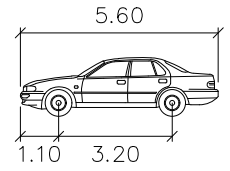
Drawing No.
007

NOTES:

1. ACCESS DESIGN AS PER PEEL REGION 5-1-8 URBAN ENTRANCES
2. LAYBY DESIGN AS PER CITY OF MISSISSAUGA STD 2230.031
3. AS PER MISSISSAUGA ZONING BY-LAW 0225-2007 3.1.1.5.1:
 - 3.1. THE MINIMUM AISLE WIDTH SHALL BE 7.0m.
 - 3.2. THE MINIMUM WIDTH OF PICK UP AND DROP OFF LANES SHALL BE 2.6m.
4. AS PER TAC 9.7.2:
 - 4.1. WHILE CROSSING AT 90 DEGREES IS PREFERABLE IN MOST CASES, IT IS OCCASIONALLY NECESSARY AND EVEN ADVANTAGEOUS TO SKEW THE CROSSING. HOWEVER, ANGLES LESS THAN 70 DEGREES AND GREATER THAN 110 DEGREES ARE TYPICALLY NOT DESIRABLE.

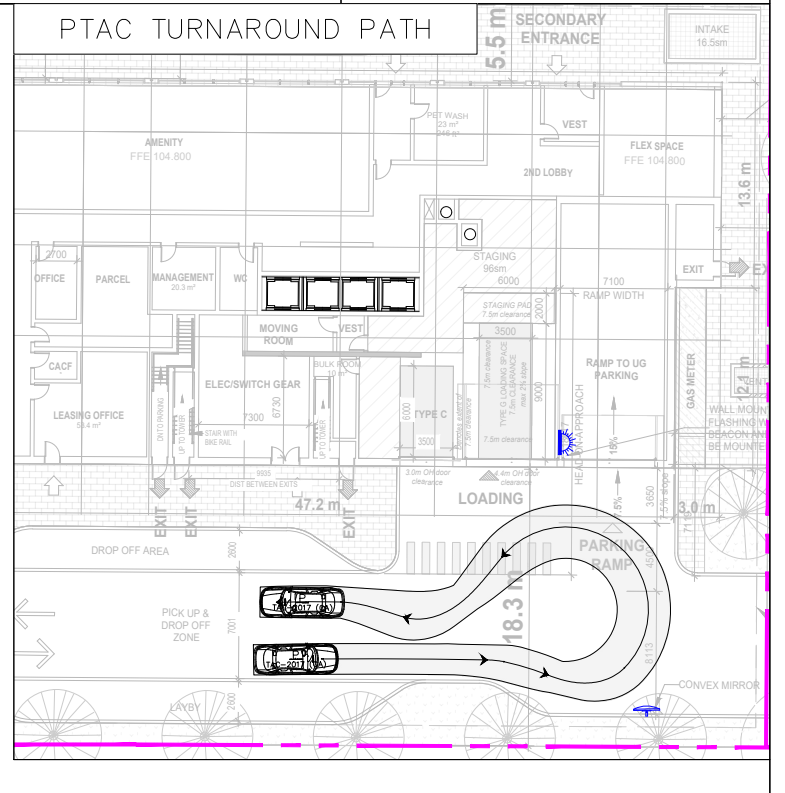
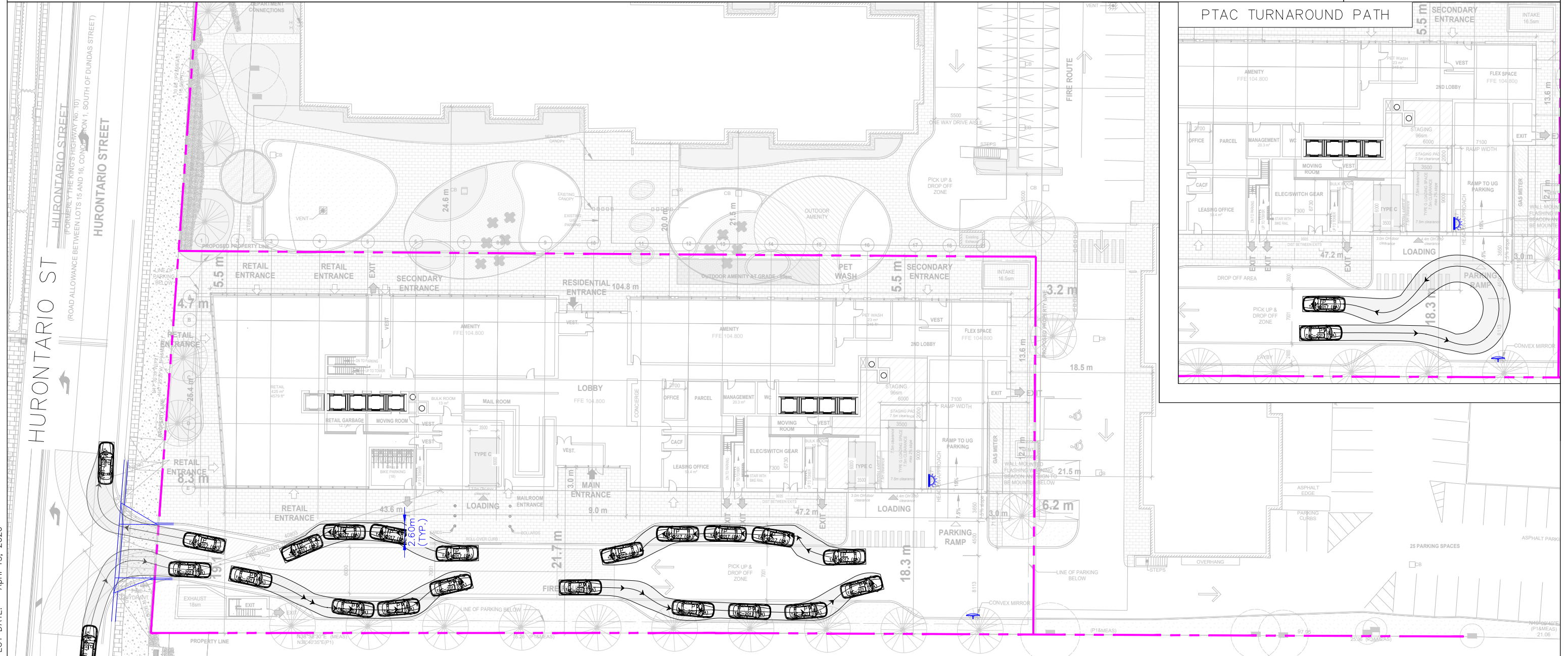
WATCH FOR
TURNING TRUCKS
WHEN FLASHING

(600x300)
BLACK LEGEND & BORDER,
WHITE REFL. BACKGROUND.



P

	Width	Track	Lock to Lock Time	Steering Angle
	: 2.00	: 2.00	: 6.0	: 35.9



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1:500

PUDO DESIGN AND
SITE CIRCULATION REVIEW

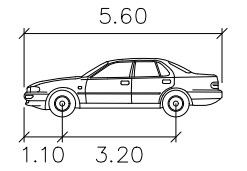
Drawing No.
008

NOTES:

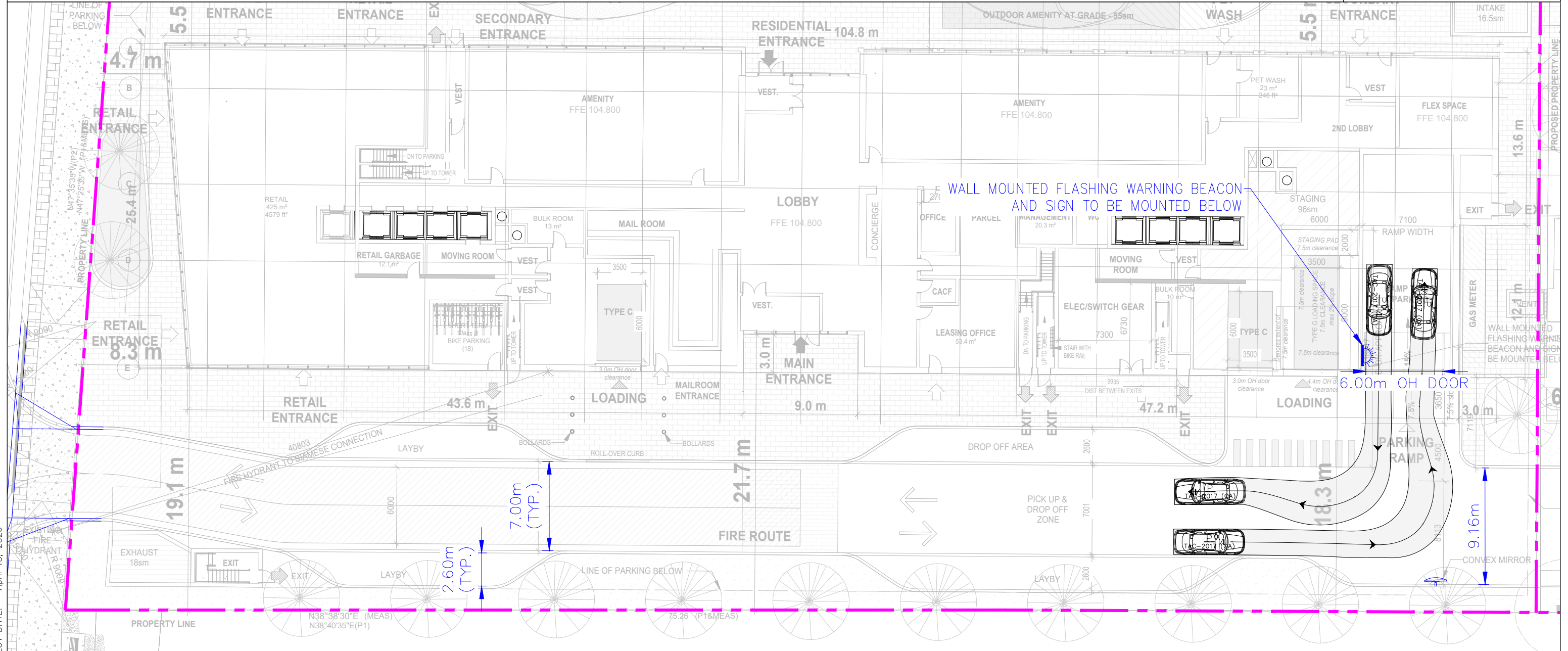
1. ACCESS DESIGN AS PER PEEL REGION 5-1-8 URBAN ENTRANCES
2. LAYBY DESIGN AS PER CITY OF MISSISSAUGA STD 2230.031
3. AS PER MISSISSAUGA ZONING BY-LAW 0225-2007 3.1.1.5.1:
 - 3.1. THE MINIMUM AISLE WIDTH SHALL BE 7.0m.
 - 3.2. THE MINIMUM WIDTH OF PICK UP AND DROP OFF LANES SHALL BE 2.6m.
4. AS PER TAC 9.7.2:
 - 4.1. WHILE CROSSING AT 90 DEGREES IS PREFERABLE IN MOST CASES, IT IS OCCASIONALLY NECESSARY AND EVEN ADVANTAGEOUS TO SKEW THE CROSSING. HOWEVER, ANGLES LESS THAN 70 DEGREES AND GREATER THAN 110 DEGREES ARE TYPICALLY NOT DESIRABLE.

WATCH FOR
TURNING TRUCKS
WHEN FLASHING

(600x300)
BLACK LEGEND & BORDER,
WHITE REFL. BACKGROUND.



P	Width	: 2.00	meters
	Track	: 2.00	
	Lock to Lock Time	: 6.0	
	Steering Angle	: 35.9	



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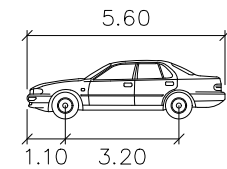
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GENERAL PARKING REVIEW

Drawing No.
009

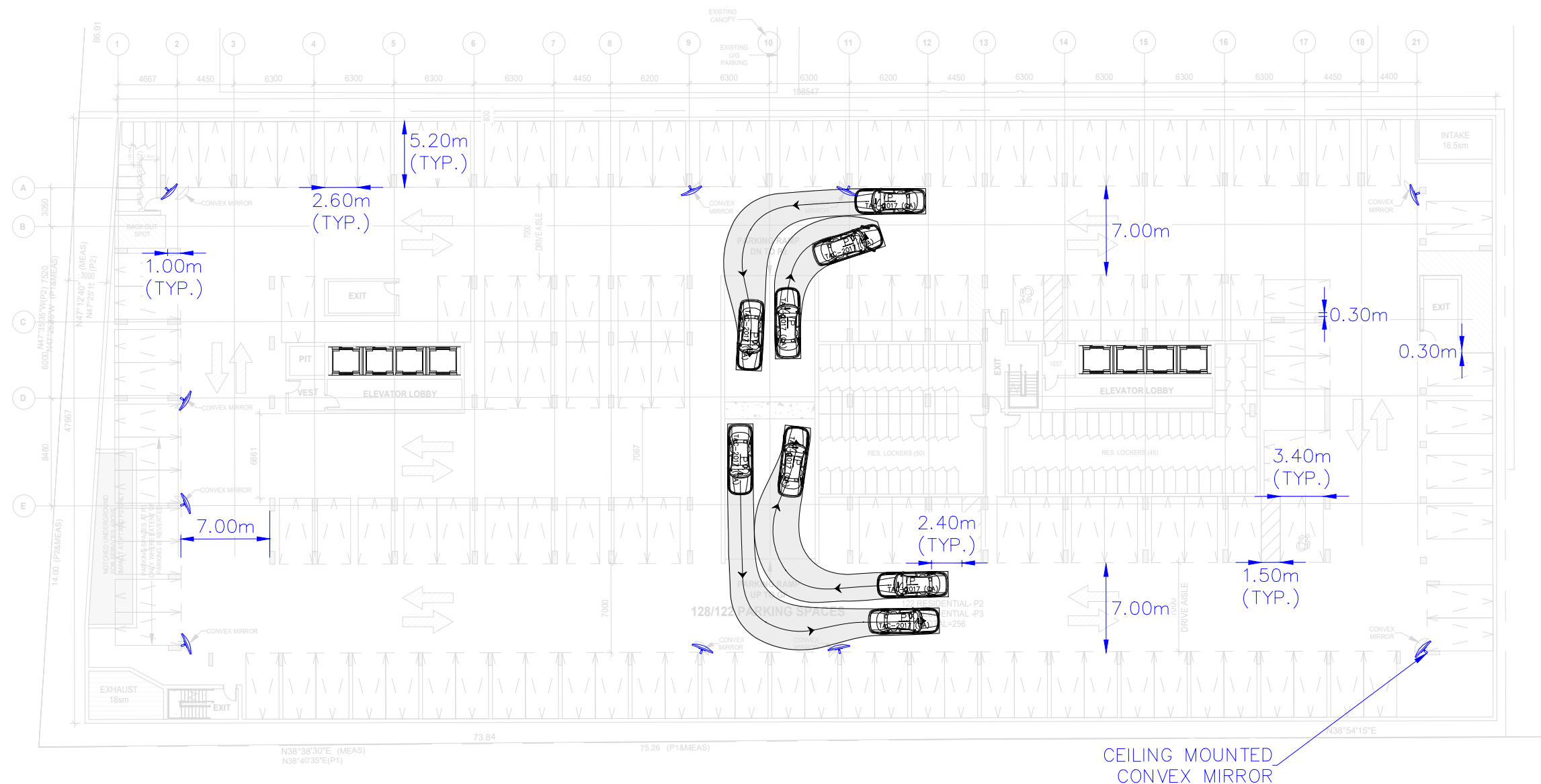
NOTES:

1. AS PER MISSISSAUGA ZONING BY-LAW 0225-2007 3.1.1.5:
 - 1.1. THE MINIMUM AISLE WIDTH SHALL BE 7.0m.
 - 1.2. NOTWITHSTANDING SENTENCE 3.1.1.5.1, WHERE A ONE-WAY AISLE IS PROVIDED FOR ACCESS TO AND FROM PARKING SPACES WITH A PARKING ANGLE NOT EXCEEDING 60°, THE MINIMUM AISLE WIDTH MAY BE 5.5 M.
2. AS PER MISSISSAUGA ZONING BY-LAW 0225-2007 3.1.1.4:
 - 2.1. PARKING SPACES WITH A PARKING ANGLE EXCEEDING 15°, EXCEPT THOSE DESIGNATED FOR PERSONS WITH DISABILITIES, SHALL HAVE AN UNOBSTRUCTED RECTANGULAR AREA WITH A MINIMUM WIDTH OF 2.6 M AND A MINIMUM LENGTH OF 5.2 M, EXCLUSIVE OF ANY AISLE OR DRIVEWAY.
 - 2.2. THE MINIMUM WIDTH OF A PARKING SPACE, OTHER THAN AN ACCESSIBLE PARKING SPACE OR PARALLEL PARKING SPACE, SHALL BE INCREASED TO 2.75 M WHERE THE LENGTH OF ONE SIDE OF THE PARKING SPACE ABUTS A BUILDING, STRUCTURE OR PART THEREOF, EXCEPT FOR A BUILDING, STRUCTURE OR PART THEREOF, THAT EXTENDS 1.0 M OR LESS INTO THE FRONT AND/OR REAR OF THE PARKING SPACE.
 - 2.3. THE MINIMUM WIDTH OF A PARKING SPACE, OTHER THAN AN ACCESSIBLE PARKING SPACE OR PARALLEL PARKING SPACE, SHALL BE INCREASED TO 2.9 M WHERE THE LENGTH OF BOTH SIDES OF THE PARKING SPACE ABUTS A BUILDING, STRUCTURE OR PART THEREOF, EXCEPT FOR A BUILDING, STRUCTURE OR PART THEREOF, THAT EXTENDS 1.0 M OR LESS INTO THE FRONT AND/OR REAR OF THE PARKING SPACE.
 - 2.4. ACCESSIBLE PARKING SPACES ARE TO BE PROVIDED IN TWO SIZES AND MAINTAIN A 1.5 M WIDE ACCESS AISLE ABUTTING THE ENTIRE LENGTH OF EACH PARKING SPACE: (0190-2014)
 - (1) TYPE A SHALL HAVE AN UNOBSTRUCTED RECTANGULAR AREA WITH A MINIMUM WIDTH OF 3.4 M AND A MINIMUM LENGTH OF 5.2 M.
 - (2) TYPE B SHALL HAVE AN UNOBSTRUCTED RECTANGULAR AREA WITH A MINIMUM WIDTH OF 2.4 M AND A MINIMUM LENGTH OF 5.2 M.
 - (3) AN ACCESS AISLE IS REQUIRED TO ABUT EACH ACCESSIBLE PARKING SPACE. WHERE TWO OR MORE ACCESSIBLE PARKING SPACES ARE REQUIRED IN ACCORDANCE WITH THE REGULATIONS CONTAINED IN TABLE 3.1.3.1 OF THIS BY-LAW, THE ACCESS AISLE MAY BE SHARED BETWEEN THE ACCESSIBLE PARKING SPACES.

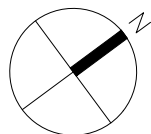


P

Width	: 2.00	meters
Track	: 2.00	
Lock to Lock Time	: 6.0	
Steering Angle	: 35.9	

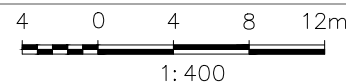


DRAWN BY: JL PLOT DATE: April 15, 2026



Project No.
25123
Date
APR 15, 2026

2233-2235 HURONTARIO ST
MISSISSAUGA ONTARIO



GENERAL PARKING REVIEW
P2

Drawing No.
011



APPENDIX M

TDM Checklist

Appendix E

Transportation Demand Management and Pedestrian Circulation Checklist

This checklist is designed to evaluate the incorporation of Transportation Demand Management (TDM) measures, including pedestrian circulation techniques, into development proposals. The template is modelled on the prototype Class 2: Medium Density/Moderate Congestion (TDM Moderate) checklist contained in *TDM Supportive Guidelines for Development Approvals* (ACT Canada, 2008).

The applicant must complete and return this checklist with their **Transportation Demand Management Plan** (TDMP) and/or **Pedestrian Circulation Plan** (PCP).

Application Summary

Development Application No: _____ Date: April 6, 2026

Applicant: _____ Staff: _____

SCORE AND RATING: 61% (2 stars) **TDM SUPPORTIVE?** Yes _____ No _____

Scorecard

Use the scorecard below to determine the TDM rating and supportiveness of the development proposal based on the final score calculated on page E-5. If the proposal does not satisfy the minimum threshold, review and enhance the TDM measures.

Final Score	Rating	TDM Supportive?
91% - 100%	***** (5 Star)	YES
81% - 90%	**** (4 Star)	
71% - 80%	*** (3 Star)	
61% - 70%	** (2 Star)	NO (Review and Enhance TDM Measures)
50% - 60%	* (1 Star)	
Less than 50%	(None)	

CATEGORY A – Pedestrian Circulation					
In creating an environment that facilitates and supports pedestrian activity, the public realm needs to be accessible, safe, and comfortable to encourage movement on the street and in the surrounding area(s).					
	Features	Yes	No	N/A	Comments
A1	Development located within 800 m walking distance of residential (if employment) or employment (if residential) uses				
A2	Development located within 400 m walking distance of retail, restaurant, or other pedestrian-oriented uses or similar services provided on-site				
A3	At least one functional building entrance oriented towards public space (i.e., street, park, square)				
A4	At least one functional building entrance located close to on-site or adjacent street transit stop				
A5	Nearest functional building entrance located within 50 m of (and connected to) public street with sidewalk				
A6	Accessible on-site pedestrian routes provided and connected to surrounding network and transit				
A7	Continuous sidewalks (1.5 m min. width) provided along all on-site roads and both sides of adjacent public streets				
A8	No conflict points between pedestrians and other users (i.e., vehicles, cyclists)				
A9	Adequate and properly designed pedestrian crossings provided on-site				
A10	Off-site road works designed to maximize pedestrian safety and minimize pedestrian crossing distances (e.g., no right turn channelization)				
A11	Amenities provided along pedestrian routes (i.e., benches, street furniture)				
A11	Shelters and benches provided at transit stops				
A12	Wayfinding provided to guide pedestrians				
A13	Lighting provided along pedestrian routes				
A14	Weather protection provided along pedestrian routes				
A15	Vehicle parking areas located away from street and pedestrian routes				
A16	Protected pedestrian routes provided through vehicle parking lots and linked to building(s)				

CATEGORY A – Pedestrian Circulation

In creating an environment that facilitates and supports pedestrian activity, the public realm needs to be accessible, safe, and comfortable to encourage movement on the street and in the surrounding area(s).

Features		Yes	No	N/A	Comments
A17	Passenger pick-up and drop-off areas located to side or rear of buildings, downstream from major building entrance points, but no more than 30 m away				
A18	Loading areas located away from street and pedestrian routes				
Sub-Total		16	2		

CATEGORY B – Cycling Orientation

In creating an environment that facilitates and supports cycling activity, the public realm needs to be accessible, safe, and comfortable to encourage movement on the street and in the surrounding area(s).

Features		Yes	No	N/A	Comments
B1	On-site cycling routes provided and connected to surrounding network				
B2	Class A (long-term) and Class B (short-term) bicycle parking spaces provided per City of Mississauga Zoning By-law (reproduced at end of this checklist for reference)				
B3	Bicycle repair station provided at-grade or within underground structure close to long-term bicycle parking				
B4	Wayfinding provided to guide cyclists				
B5	Other amenities provided for cyclists (e.g., showers, change rooms)				
Sub-Total		3	2		

CATEGORY C – Transit Service

The availability and proximity of convenient public transit service with direct pedestrian linkages to the building expands the range of viable travel options for employees, visitors, and residents.

Features		Yes	No	N/A	Comments
C1	Development located within 800 m walking distance of a rapid transit station (existing or planned) or within 400 m of two or more public bus routes with minimum 15-minute headway service during peak commuter periods and every 30 minutes throughout the remainder of the day				
C2	Information about public transit routes, schedules, and fares provided in accessible and visible location on-site and in adjacent bus stops				
C3	Sufficient capacity available to accommodate transit riders generated by development				
Sub-Total		2	1		

CATEGORY D – Motor Vehicle Parking

The location and design of motor vehicle parking facilities can affect the character and cost of a development. Avoiding the oversupply of parking can also help reduce single occupant vehicle travel.

Features		Yes	No	N/A	Comments
D1	No more than the minimum number of parking spaces required by the Zoning By-law provided				
D2	Priority parking equivalent to 10% of employee spaces provided for carpooling/vanpooling				
D3	Priority parking equivalent to 3% of full-time building occupants provided for auto share and hybrid/alternative fuel vehicles				
D4	Priority parking equivalent to 1% of the parking stalls provided for mopeds, motorcycles, and minicars				
D5	Parking shared for different uses on-site and/or adjoining properties				
D6	50% of parking located underground or in structured parking				
Sub-Total		2	3	1	

CATEGORY E – Incentives				
Building owners and tenants can offer occupants Transportation Demand Management incentives that help reduce single occupant vehicle travel.				
Features	Yes	No	N/A	Comments
E1				
E2				
E3				
E4				Providing 1 month pass only for all 703 units
E5				
E6				
E7				
Sub-Total	2	3	2	

SCORING SUMMARY				
Count the number of applicable features for each category (items not assigned "N/A") and enter under the column "Applicable" in the table below.				
Assign 1 point to each "Yes" answer, except for Category A (Pedestrian Circulation) where each "Yes" answer is worth ½ a point and Category C (Transit Service) where each "Yes" answer is worth 2 points. Award 0 points for a "No" answer. Tally the points for each category under the column "Points" in the table below.				
Calculate "Final Score" as a percentage by dividing total "Points" by the total "Applicable" and enter in the table below and in the "SCORE AND RATING" field on page E-1.				
Category	Possible	Applicable	Points	Comments
A – Pedestrian Circulation	9 (18/2)	9	8	
B – Cyclist Orientation	5	5	3	
C – Transit Service	6 (3x2)	6	4	
D – Motor Vehicle Parking	6	5	2	
E – Incentives	7	5	2	
TOTAL	33	30	19	
Score% (Points/Applicable)			63%	