APPENDIX A

Terms of Reference

Alex Yoo

From: James Emerson <James.Emerson@mississauga.ca>
Sent: August 25, 2026 1:57 PM
To: Matea Ceric
Cc: Robert Keel; Trans Projects
Subject: RE: Terms of Reference: 2233-2235 Hurontario St, Mississauga
Attachments: Mississauga TIS Guidelines Appendix B Pre-Study Consultation Checklist_2233-2235 Hurontario St Mississauga (APPROVED).pdf; Appendix A Certification Form - TEMPLATE.pdf; Transportation Impact Study (55 Dundas & 60-66 Agnes St, Site Trips).pdf

Follow Up Flag: Flag for follow up
Flag Status: Flagged

External Sender

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Please find attached stamped and approved ToR for the proposed development, which encompasses City comments. I have attached the expected trips generation for the additional background study I noted in the TOR to this email. Other items to note:

- **Certification Form** - The Transportation Consultant must complete, sign, and seal (if appropriate) the attached Certification Form from the City's TIS Guidelines (2022) and append the document to the report to ensure compliance with qualification requirements. The TIS Guidelines can be found at https://www.mississauga.ca/wp-content/uploads/2023/03/CMississauga-TIS-Guidelines-Version-5.1-Dec-2022.pdf . It must be ensured that the report conforms to the City's TIS Guidelines.
- **Growth Rates** - Please contact Tyler Xuereb from the City's Transportation Planning Section (tyler.xuereb@mississauga.ca, Ext. 4783) to confirm growth rates and/or obtain traffic data for the study area roadways. **Please include the correspondence with the city confirming the growth rates in the TIS appendices.**
- **Traffic Data** - Please contact to William Wright from the City's Transportation Planning Section (William.Wright@mississauga.ca, Ext. 3221) to obtain traffic data for the study area roadways. **Please include the correspondence with the city confirming the traffic data in the TIS appendices.**
- **Signal Timing Plans** - Signal timing plans for signalized intersections under the City's jurisdiction can be obtained dependant on signal location:
    - **North of Highway 403:**
        - Please contact Amir Koda (amir.koda@mississauga.ca, Ext. 3468).
    - **South of the Highway 403**:
        - Please contact Dennis Shaw (Dennis.Shaw@mississauga.ca, Ext. 3107).
    - **Please include the correspondence with the city confirming the timing plans in the TIS appendices.**

- **TOR Document and Correspondence -** Please include the TOR approved by the city in the TIS appendices as well as any relevant additional correspondence with Traffic Planning staff, if applicable.

Regards,

James Emerson
Traffic Planning – Acting Coordinator
T 905-615-3200 ext.3043
james.emerson@mississauga.ca

City of Mississauga | Planning & Building Department,
300 City Centre Drive | Mississauga ON | L5B 3C1

Honoured to live and work on the Treaty Lands and Territory of the Mississaugas of the Credit First Nations as well as the traditional territory of the Huron-Wendat, and the Haudenosaunee people.

Please consider the environment before printing.

From: Matea Ceric <mceric@lea.ca>
Sent: Monday, August 24, 2026 9:00 AM
To: Trans Projects <Trans.Projects@mississauga.ca>
Cc: Robert Keel <rkeel@lea.ca>; James Emerson <James.Emerson@mississauga.ca>
Subject: [EXTERNAL] Fw: Terms of Reference: 2233-2235 Hurontario St, Mississauga

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Hi James,

Thank you for meeting with us last week.

In response to comments received for File OZ 26/008 W7 (2233 & 2235 Hurontario Street), the TOR has been revised and resubmitted for City review. Upon receiving City approval, the signed TOR will be provided as part of the next submission.

Please let us know if you have any questions.

Kind regards,

Matea Ceric, P.Eng, M.A.Sc
Project Coordinator, Transportation Division
T: 905-470-0015 ext. 296 **E:** Mceric@lea.ca **W:** www.LEA.ca
LEA Consulting Ltd.

From: Matea Ceric <mceric@lea.ca>
Sent: Wednesday, February 11, 2026 9:59 AM
To: michael.turco@mississauga.ca <michael.turco@mississauga.ca>
Cc: Karen Montain <KMontain@lea.ca>; Robert Keel <rkeel@lea.ca>
Subject: Terms of Reference: 2233-2235 Hurontario St, Mississauga

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.
40 University Avenue, Suite 503 | Toronto, ON | M5J 1T1
T: 905-470-0015 ext. 296 **E:** Mceric@lea.ca **W:** www.LEA.ca

APPENDIX B

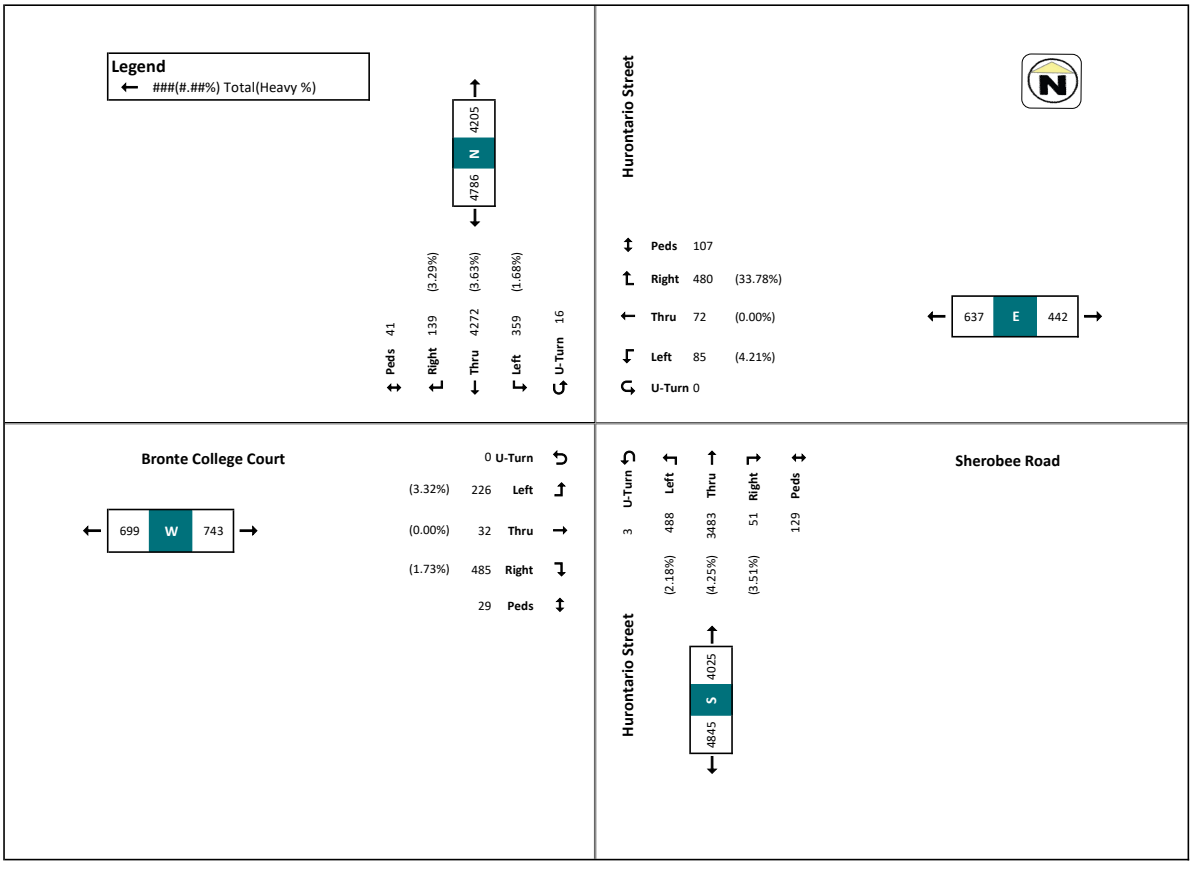
Traffic Data and Signal Timing Plans

LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Hurontario Street & Sherobee Road
Survey Date : March 4, 2025
Project No. : 23307
Count ID : 25108

Turning Movement Count - Hurontario Street & Sherobee Road

	Hurontario Street Southbound						Sherobee Road Westbound						Hurontario Street Northbound						Bronte College Court Eastbound						
Start Time	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	Grand Total
6:30	1	2	138	11	0	152	0	6	4	13	5	23	0	27	87	0	0	114	0	1	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	1	12	3	14	0	17	190	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	199	7	4	220	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	1996
18:00	1	23	166	2	0	192	0	5	0	11	9	16	0	6	216	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%	3.5%	41.9%	1.4%	-	47.0%	0.0%	0.8%	0.7%	4.7%	-	6.3%	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	3720	55	-	4277	0	233	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%
Buses	-	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%	-	2.2%	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	0	4
Pedestrians	-	-	-	-	45	-	-	-	-	-	123	-	-	-	-	-	141	-	-	-	-	-	33	-	342

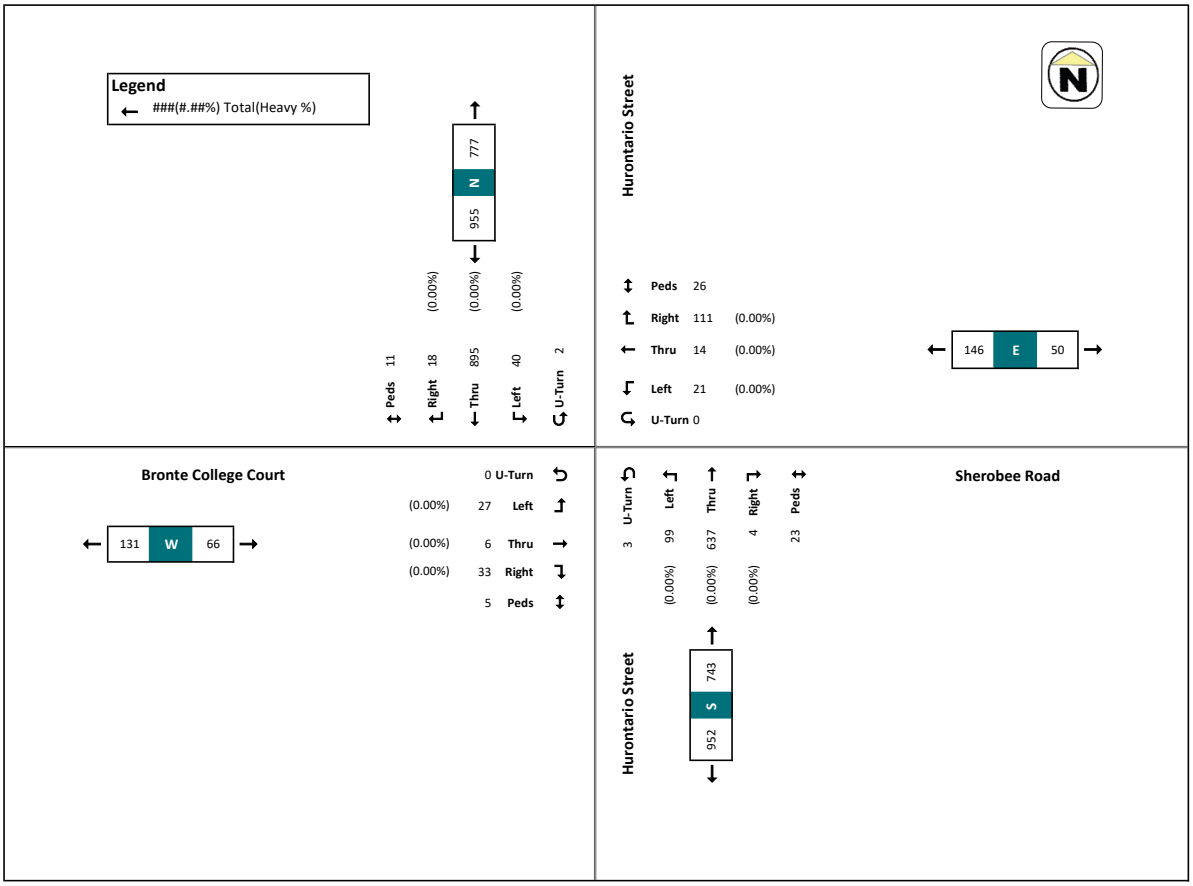


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Hurontario Street & Sherobee Road
Survey Date : March 4, 2025
Project No. : 23307
Count ID : 25108

AM Peak Hour - Hurontario Street & Sherobee Road

	Hurontario Street Southbound						Sherobee Road Westbound						Hurontario Street Northbound						Bronte College Court Eastbound						
Start Time	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	Grand 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	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	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 %	0.1%	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	0.33	-	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%	#REF!
Buses	-	0	0	0	-	0	-	0	0	0	-	0	-	0	0	0	-	0	-	0	0	0	-	0	0
% Buses	#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
% 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

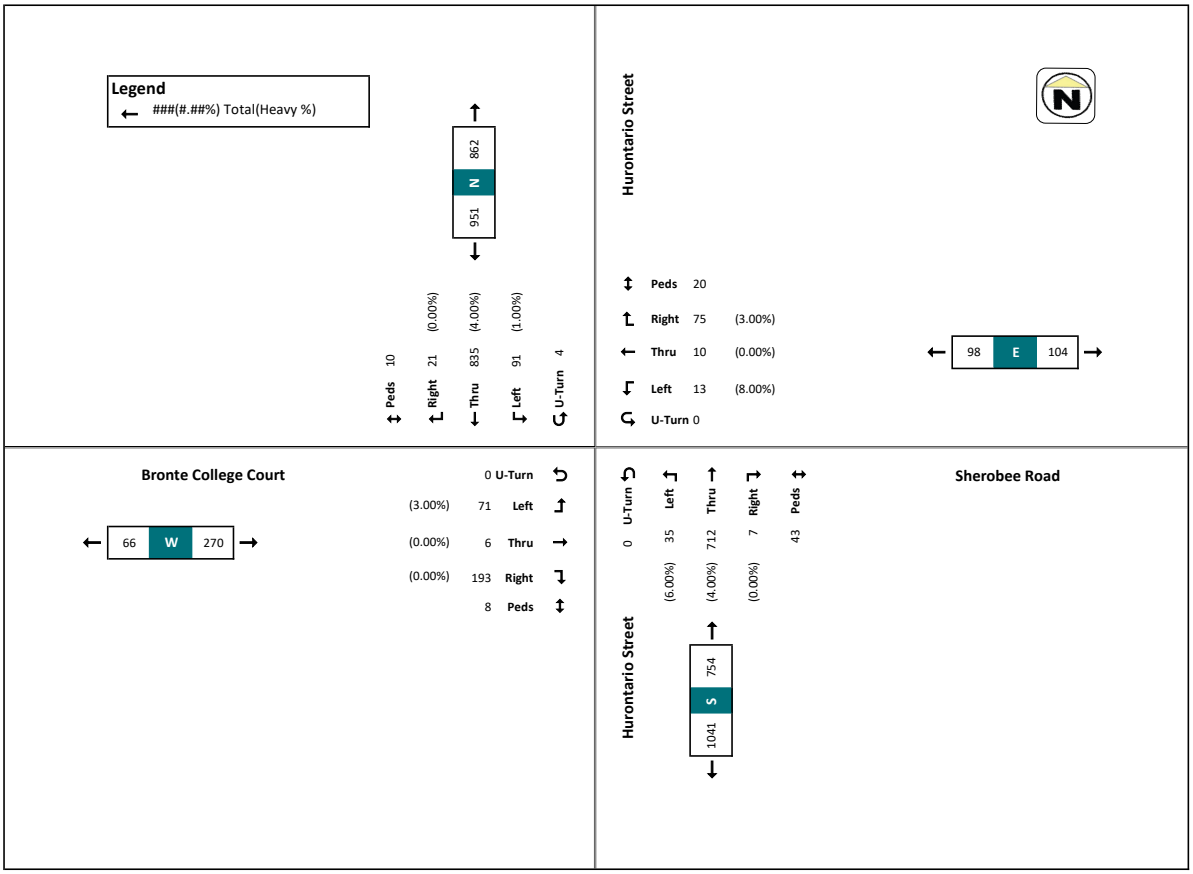


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Hurontario Street & Sherobee Road
Survey Date : March 4, 2025
Project No. : 23307
Count ID : 25108

PM Peak Hour - Hurontario Street & Sherobee Road

	Hurontario Street Southbound						Sherobee Road Westbound						Hurontario Street Northbound						Bronte College Court Eastbound						
Start Time	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	Grand 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	194	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	712	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	-	2	5	0	-	7	-	0	0	0	-	0	21
% 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	0	1
Pedestrians	-	-	-	-	10	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	10

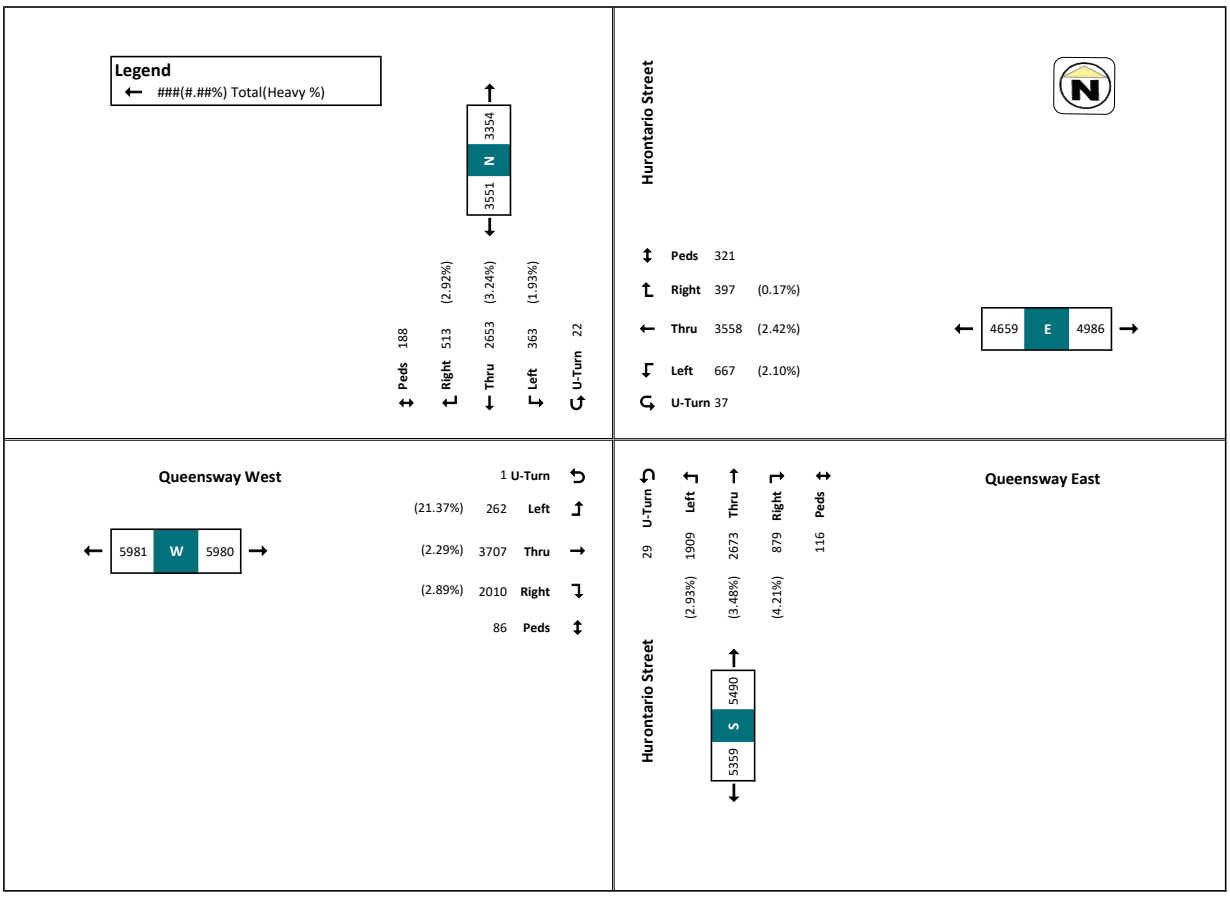


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Hurontario Street & Queensway West
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25469

Turning Movement Count - Hurontario Street & Queensway West

	Hurontario Street Southbound						Queensway East Westbound						Hurontario Street Northbound						Queensway West Eastbound						
Start Time	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	Grand 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	s	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	149	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	498	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	25	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	135	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	920
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	4	200	0	35	168	19	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
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	131	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	499	54	7	620	4	130	549	70	50	753	0	360	554	183	17	1097	0	43	546	325	18	914	3384
Grand Total	22	363	2653	513	188	3551	37	667	3558	397	321	4659	29	1909	2673	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%	62.0%	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%	1.2%	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	1	-	-	-	-	0	0	-	-	-	-	0	0	1
Pedestrians	-	-	-	-	188	-	-	-	-	-	321	-	-	-	-	-	116	-	-	-	-	-	#VALUE!	-	#VALUE!

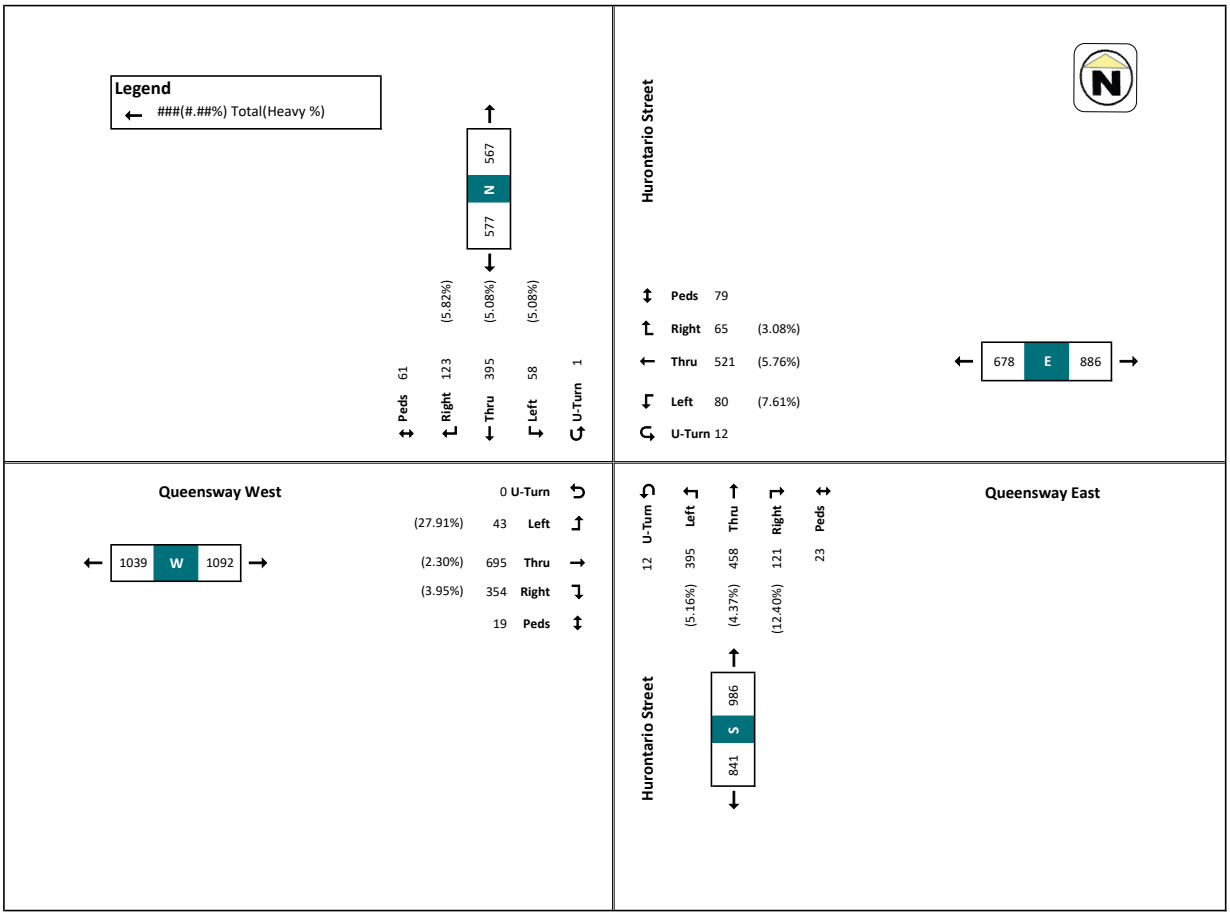


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Hurontario Street & Queensway West
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25469

AM Peak Hour - Hurontario Street & Queensway West

	Hurontario Street Southbound						Queensway East Westbound						Hurontario Street Northbound						Queensway West Eastbound						
Start Time	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	Grand 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	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
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%	-	94.7%	95.6%	87.6%	-	94.3%	-	72.1%	97.7%	96.0%	-	96.2%	94.9%
Buses	-	1	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	-	-	-	-	0	0	0
Pedestrians	-	-	-	-	61	-	-	-	-	-	79	-	-	-	-	-	12	-	-	-	-	-	19	-	171

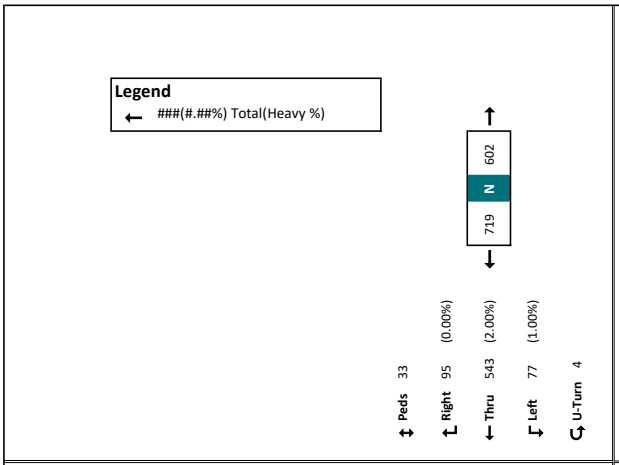


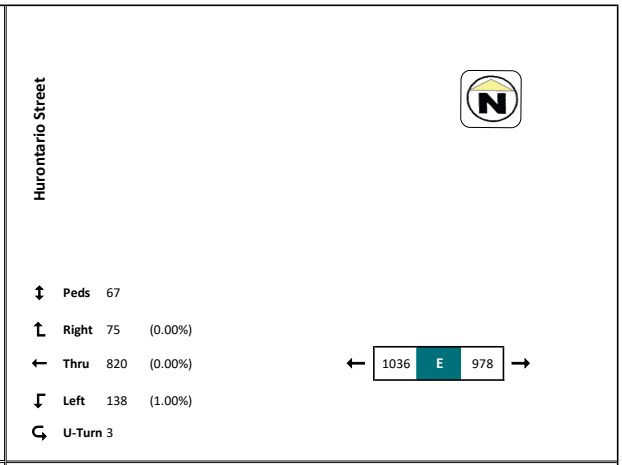
LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

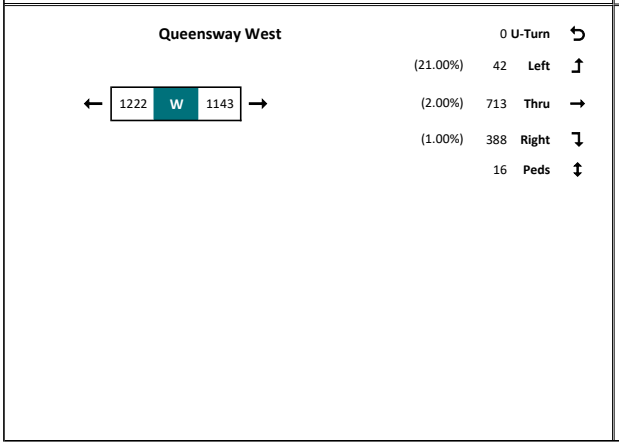
Intersection : Hurontario Street & Queensway West
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25469

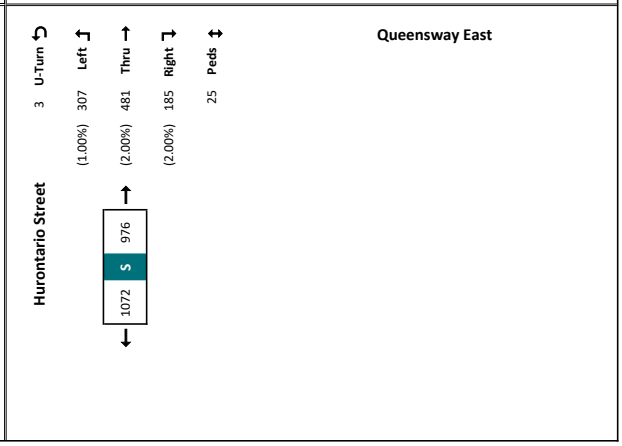
PM Peak Hour - Hurontario Street & Queensway West

	Hurontario Street Southbound						Queensway East Westbound						Hurontario Street Northbound						Queensway West Eastbound						
Start Time	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	Grand 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	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	4	200	0	35	168	19	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%	24.6%	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	0.99	0.8	0.78	-	0.85	0	0.85	0.87	0.94	-	0.93	0	0.88	0.94	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	1	0	-	1	-	2	7	0	-	9	-	9	5	0	-	14	38
% Buses	#VALUE!	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	#VALUE!	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	0	1
Pedestrians	-	-	-	-	33	-	-	-	-	-	3	-	-	-	-	-	3	-	-	-	-	-	0	-	39







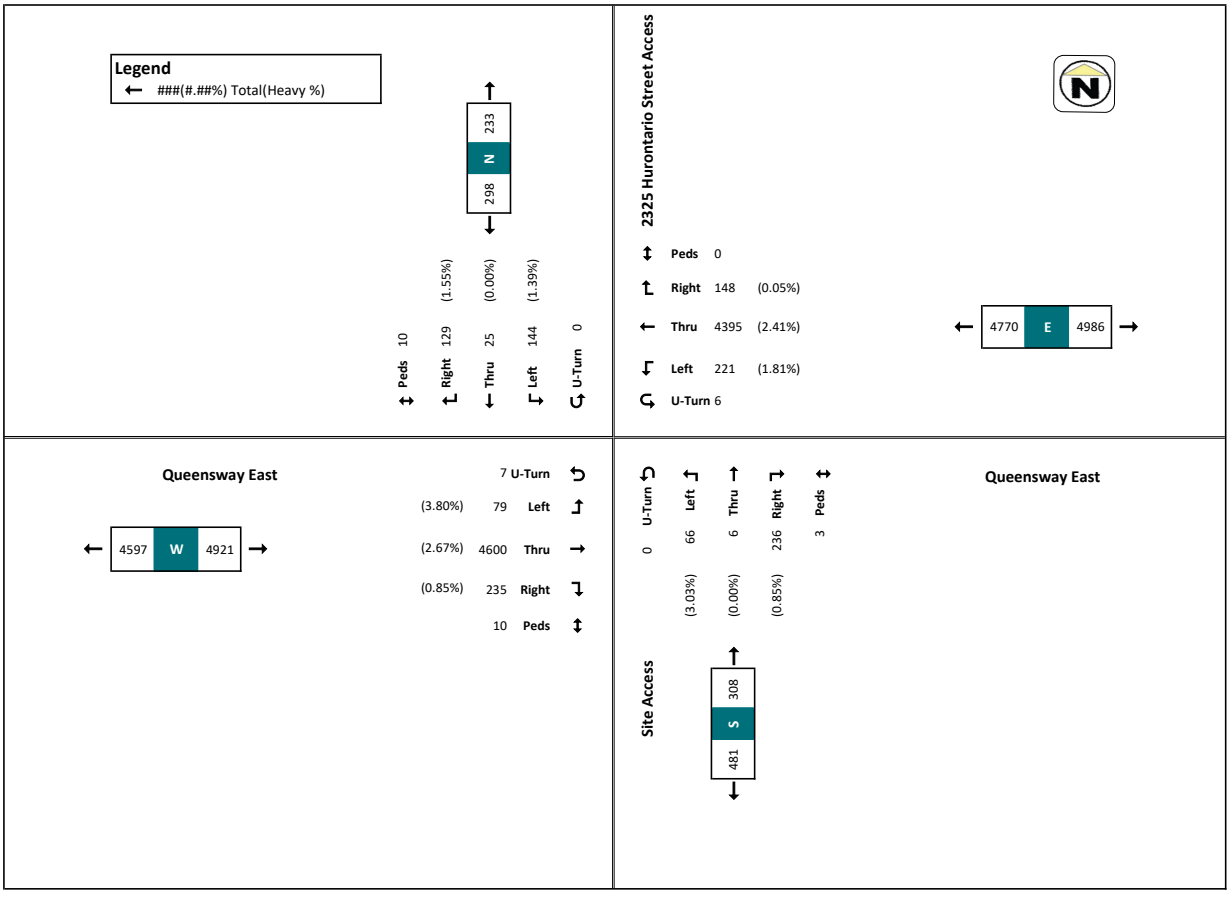


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Site Access & Queensway East
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25470

Turning Movement Count - Site Access & Queensway East

	2325 Hurontario Street Access Southbound						Queensway East Westbound						Site Access Northbound						Queensway East Eastbound						
Start Time	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	Grand Total
7:00	0	3	0	3	0	6	0	1	92	4	0	97	0	2	0	10	0	12	0	3	129	7	0	139	254
7:15	0	4	0	6	0	10	0	2	107	3	0	112	0	3	0	10	0	13	0	2	125	2	0	129	264
7:30	0	0	0	5	0	5	0	6	136	4	0	146	0	2	0	7	0	9	0	3	190	4	0	197	357
7:45	0	6	0	7	0	13	0	5	156	3	0	164	0	4	0	10	0	14	0	1	207	4	0	212	403
Hourly Total	0	13	0	21	0	34	0	14	491	14	0	519	0	11	0	37	0	48	0	9	651	17	0	677	1278
8:00	0	3	0	4	1	7	0	5	138	8	0	151	0	2	0	16	1	18	0	1	191	6	0	198	374
8:15	0	7	0	6	2	13	0	6	165	5	0	176	0	4	0	24	0	28	1	3	218	6	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
Hourly Total	0	19	4	17	5	40	0	22	605	26	0	653	0	17	0	59	1	76	1	14	811	28	2	854	1623
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
9:15	0	6	0	6	0	12	0	10	210	5	0	225	0	3	0	5	0	8	0	5	148	6	0	159	404
9:30	0	8	0	5	0	13	1	5	167	10	0	183	0	2	0	13	2	15	1	4	180	12	2	197	408
9:45	0	8	0	3	1	11	1	7	134	4	0	146	0	6	0	4	0	10	0	7	150	3	2	160	327
Hourly Total	0	37	3	22	1	62	3	25	707	32	0	767	0	14	0	33	2	47	1	20	676	28	4	725	1601
* Break *																									
16:00	0	7	2	3	2	12	0	8	237	9	0	254	0	1	1	5	0	7	0	4	235	13	2	252	525
16:15	0	8	0	10	0	18	0	16	209	10	0	235	0	3	0	5	0	8	0	3	217	9	1	229	490
16:30	0	11	3	6	0	20	0	14	217	4	0	235	0	1	0	8	0	9	1	4	192	15	0	212	476
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
Hourly Total	0	32	9	21	2	62	0	59	889	28	0	976	0	9	1	35	0	45	2	16	866	51	3	935	2018
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
17:45	0	3	1	11	0	15	0	14	232	6	0	252	0	6	0	8	0	14	0	1	202	16	0	219	500
Hourly Total	0	24	6	26	1	56	1	63	980	28	0	1072	0	11	2	41	0	54	2	9	873	67	0	951	2133
18:00	0	9	1	3	1	13	0	12	161	2	0	175	0	1	1	7	0	9	0	5	201	16	1	222	419
18:15	0	2	1	7	0	10	0	13	227	3	0	243	0	0	1	4	0	5	0	3	201	8	0	212	470
18:30	0	5	1	4	0	10	0	8	181	11	0	200	0	1	1	14	0	16	1	0	143	6	0	150	376
18:45	0	3	0	8	0	11	2	5	154	4	0	165	0	2	0	6	0	8	0	3	178	14	0	195	379
Hourly Total	0	19	3	22	1	44	2	38	723	20	0	783	0	4	3	31	0	38	1	11	723	44	1	779	1644
Grand Total	0	144	25	129	10	298	6	221	4395	148	0	4770	0	66	6	236	3	308	7	79	4600	235	10	4921	10297
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	0	142	25	127	-	294	6	217	4289	146	-	4658	0	64	6	234	-	304	7	76	4477	233	-	4793	10049
% 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%	97.6%
Buses	-	0	0	0	-	0	-	4	43	0	-	47	-	2	0	2	-	4	-	0	49	2	-	51	102
% Buses	-	0.0%	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	63	2	-	65	-	0	0	0	-	0	-	3	74	0	-	77	146
% 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
Pedestrians	-	-	-	-	10	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	10	-	23

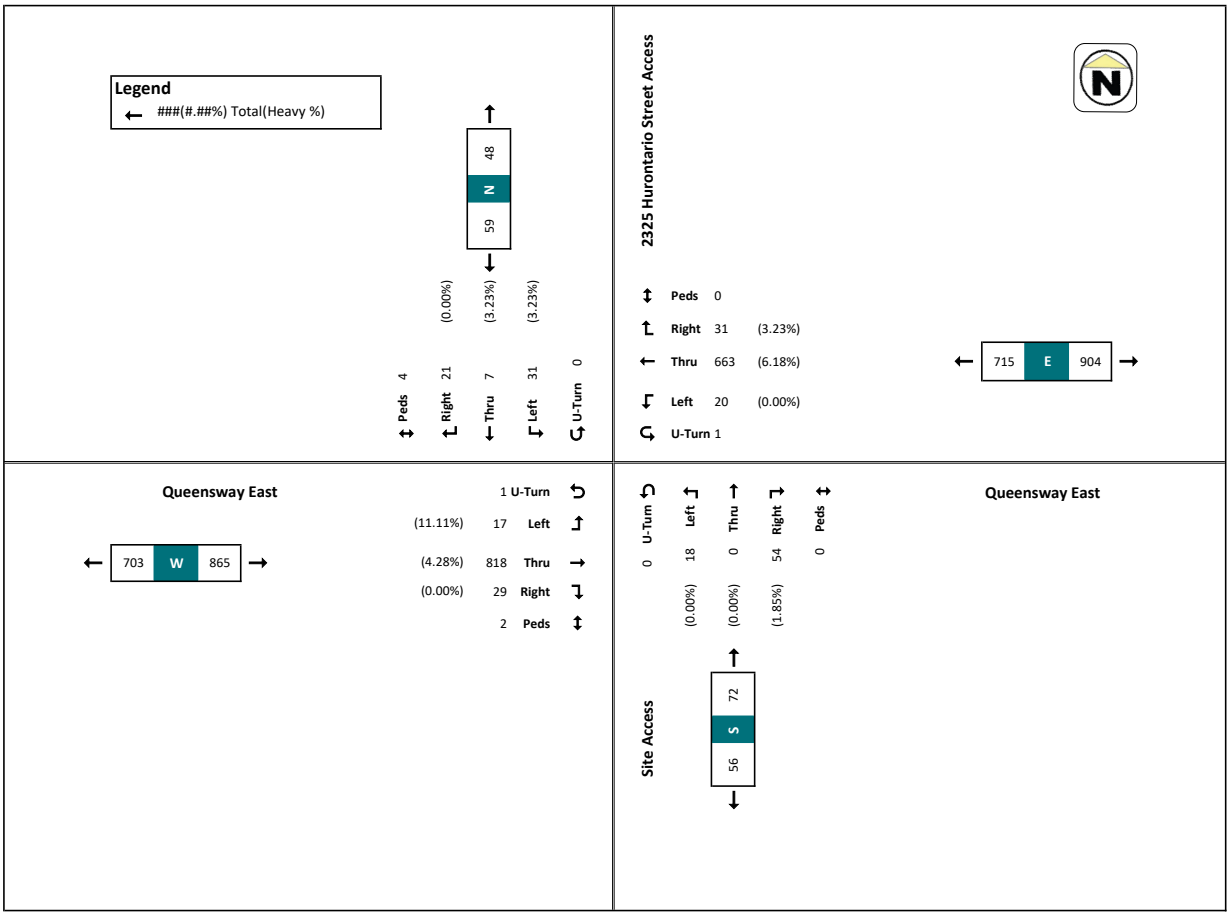


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Site Access & Queensway East
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25470

AM Peak Hour - Site Access & Queensway East

	2325 Hurontario Street Access Southbound						Queensway East Westbound						Site Access Northbound						Queensway East Eastbound						
Start Time	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	Grand Total
8:15	0	7	0	6	2	13	0	6	165	5	0	176	0	4	0	24	0	28	1	3	218	6	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%	11.9%	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	0.93
Lights	0	30	7	20	-	57	1	20	622	30	-	673	0	18	0	53	-	71	1	15	783	29	-	828	1629
% 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%	95.2%
Buses	-	0	0	0	-	0	-	0	16	0	-	16	-	0	0	1	-	1	-	0	18	0	-	18	35
% Buses	-	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%	2.0%
Trucks	-	1	0	1	-	2	-	0	25	1	-	26	-	0	0	0	-	0	-	2	17	0	-	19	47
% Trucks	-	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%	2.7%
Bicycles	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	0	0	0
Pedestrians	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	6

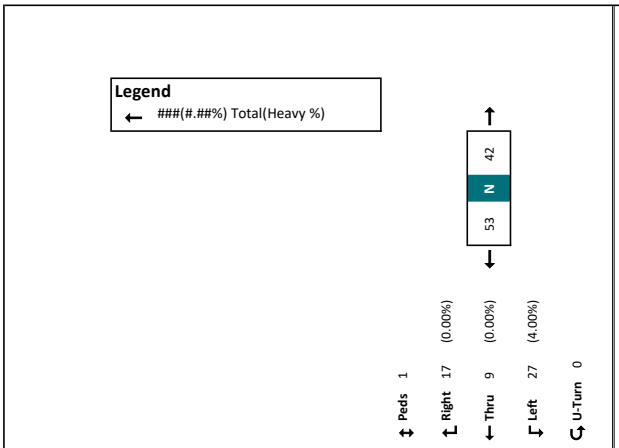


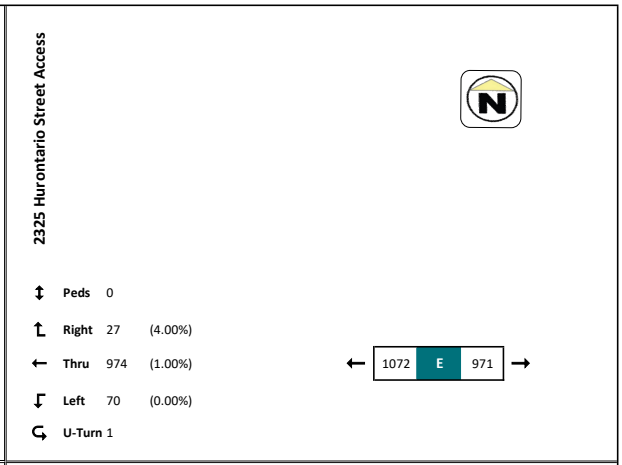
LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

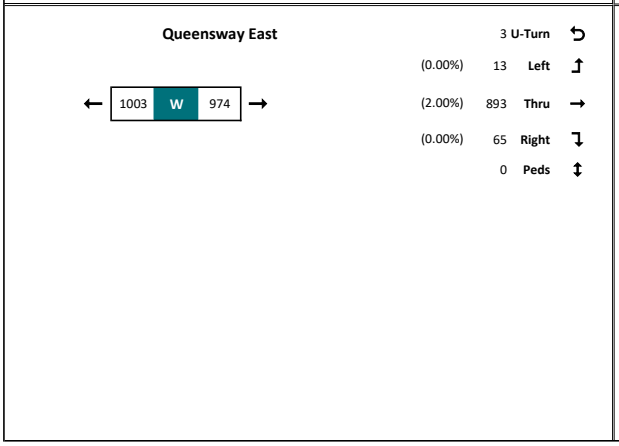
Intersection : Site Access & Queensway East
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25470

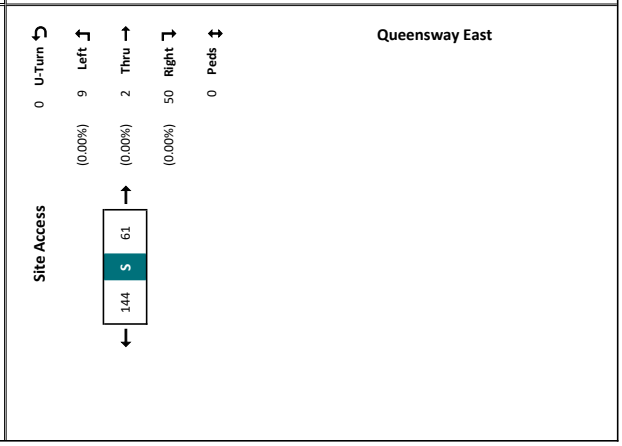
PM Peak Hour - Site Access & Queensway East

	2325 Hurontario Street Access Southbound						Queensway East Westbound						Site Access Northbound						Queensway East Eastbound						
Start Time	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	Grand 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%
Buses	-	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	-	-	-	-	0	0	0
Pedestrians	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	-	5







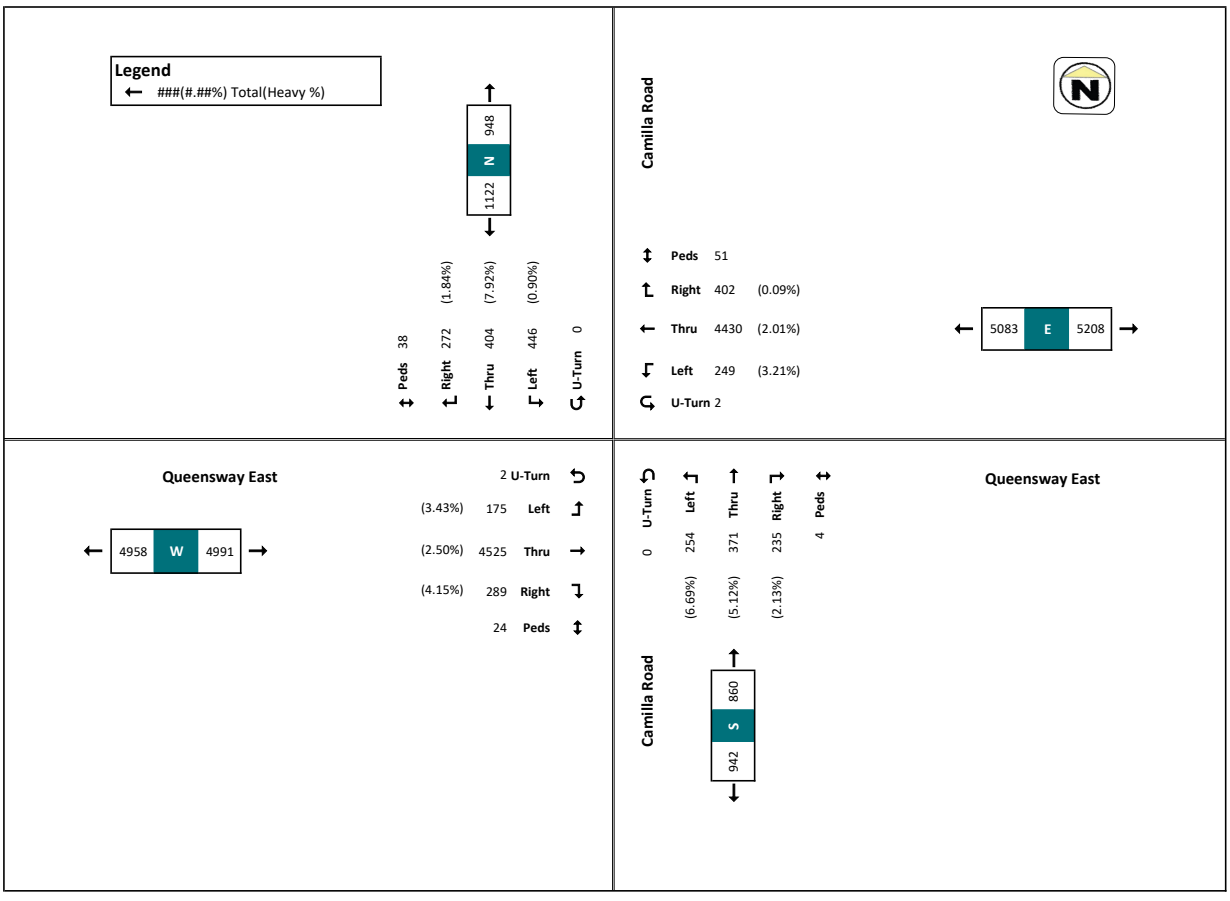


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Camilla Road & Queensway East
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25471

Turning Movement Count - Camilla Road & Queensway East

	Camilla Road Southbound						Queensway East Westbound						Camilla Road Northbound						Queensway East Eastbound						
Start Time	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	Grand Total
7:00	0	13	4	6	0	23	0	0	91	4	1	95	0	7	3	6	0	16	0	2	137	6	1	145	279
7:15	0	20	9	7	1	36	1	2	98	8	0	109	0	4	3	6	0	13	0	4	128	3	0	135	293
7:30	0	15	10	9	0	34	0	4	140	4	0	148	0	3	8	3	0	14	0	4	188	5	1	197	393
7:45	0	20	21	6	1	47	0	6	150	8	3	164	0	8	11	12	0	31	0	8	190	11	0	209	451
Hourly Total	0	68	44	28	2	140	1	12	479	24	4	516	0	22	25	27	0	74	0	18	643	25	2	686	1416
8:00	0	23	45	8	16	76	0	12	152	9	13	173	0	14	18	19	0	51	0	4	197	21	1	222	522
8:15	0	24	33	10	4	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
Hourly Total	0	110	114	33	23	257	0	44	621	57	27	722	0	48	99	62	0	209	0	31	811	63	9	905	2093
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
9:15	0	11	15	7	0	33	0	8	202	16	0	226	0	24	20	14	0	58	0	8	148	8	0	164	481
9:30	0	21	9	13	2	43	0	3	131	11	0	145	0	18	13	6	0	37	0	7	183	10	0	200	425
9:45	0	16	10	13	0	39	0	5	131	17	1	153	0	10	7	6	1	23	0	7	151	6	0	164	379
Hourly Total	0	65	70	40	2	175	0	27	647	56	2	730	0	71	62	47	1	180	1	30	657	59	0	747	1832
* Break *																									
16:00	0	16	14	14	1	44	0	24	244	29	0	297	0	15	20	11	0	46	0	9	221	16	1	246	633
16:15	0	12	15	13	2	40	0	11	214	21	3	246	0	16	19	11	1	46	0	12	211	10	0	233	565
16:30	0	25	18	21	1	64	0	14	230	32	2	276	0	15	20	15	0	50	0	11	194	10	1	215	605
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
Hourly Total	0	75	73	67	5	215	0	58	913	105	11	1076	0	50	74	44	1	168	0	41	844	53	6	938	2397
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
17:45	0	18	13	12	0	43	0	21	241	23	0	285	0	11	20	3	1	34	0	10	210	5	1	225	587
Hourly Total	0	70	65	65	4	200	0	62	1030	94	2	1186	0	41	64	28	1	133	0	32	866	54	1	952	2471
18:00	0	17	17	7	1	41	0	10	166	11	5	187	0	5	14	10	1	29	0	4	202	8	3	214	471
18:15	0	10	10	12	1	32	0	15	233	24	0	272	0	6	10	5	0	21	0	5	190	12	0	207	532
18:30	0	12	5	15	0	32	1	11	182	12	0	206	0	8	6	6	0	20	1	10	137	10	2	158	416
18:45	0	19	6	5	0	30	0	10	159	19	0	188	0	3	17	6	0	26	0	4	175	5	1	184	428
Hourly Total	0	58	38	39	2	135	1	46	740	66	5	853	0	22	47	27	1	96	1	23	704	35	6	763	1847
Grand Total	0	446	404	272	38	1122	2	249	4430	402	51	5083	0	254	371	235	4	860	2	175	4525	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%	-	9.3%	0.0%	2.1%	36.7%	3.3%	-	42.2%	0.0%	2.1%	3.1%	1.9%	-	7.1%	0.0%	1.5%	37.5%	2.4%	-	41.4%	-
Lights	0	442	372	267	-	1081	2	241	4341	398	-	4982	0	237	352	230	-	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%
Buses	-	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	2	-	59	-	4	0	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	2	-	-	-	-	1	1	-	-	-	-	2	2	-	-	-	-	0	0	5
Pedestrians	-	-	-	-	38	-	-	-	-	-	51	-	-	-	-	-	4	-	-	-	-	-	24	-	117

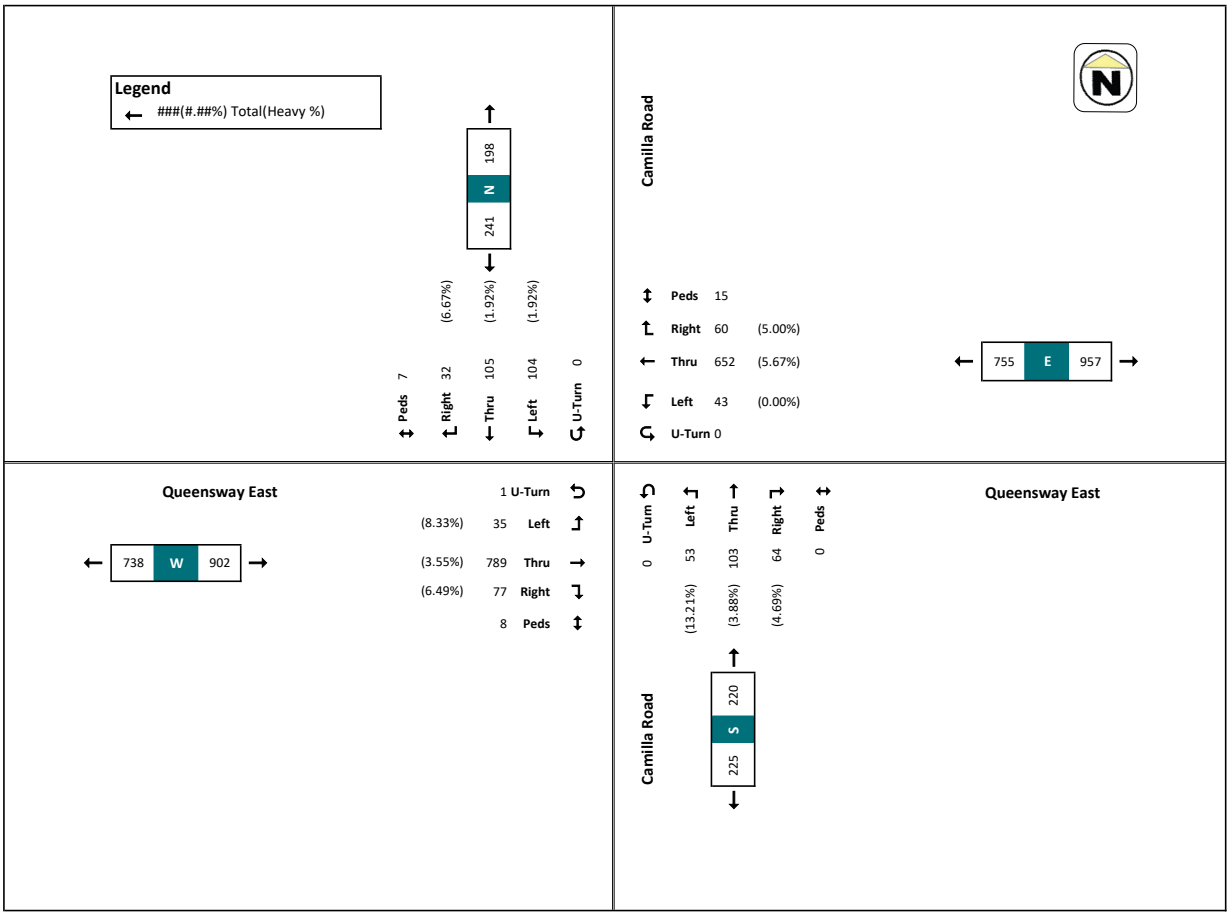


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Camilla Road & Queensway East
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25471

AM Peak Hour - Camilla Road & Queensway East

	Camilla Road Southbound						Queensway East Westbound						Camilla Road Northbound						Queensway East Eastbound						
Start Time	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	Grand Total
8:15	0	24	33	10	4	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	652	60	15	755	0	53	103	64	0	220	1	35	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%	29.1%	-	-	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%	95.3%
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	1	-	-	-	-	0	0	-	-	-	-	2	2	-	-	-	-	0	0	3
Pedestrians	-	-	-	-	7	-	-	-	-	-	15	-	-	-	-	-	0	-	-	-	-	-	8	-	30

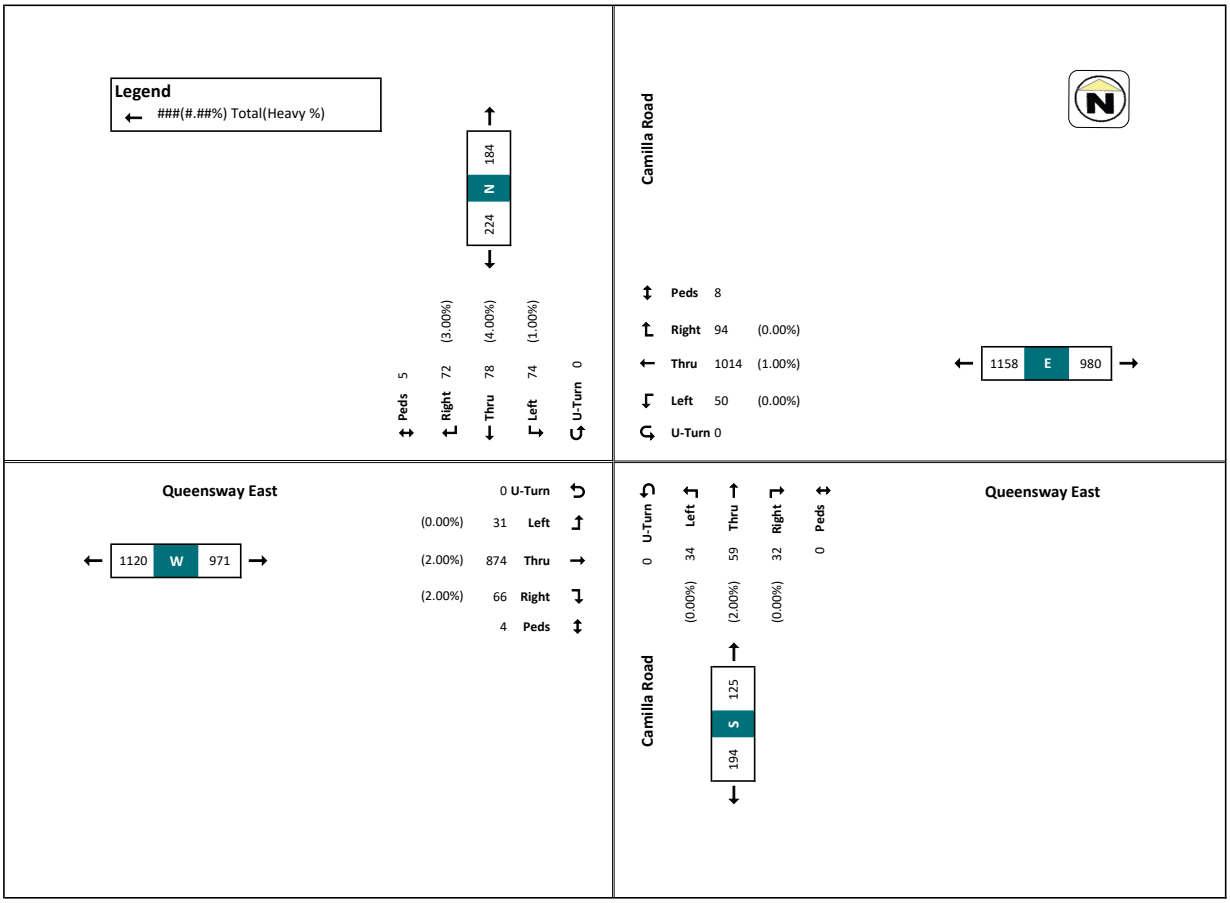


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Camilla Road & Queensway East
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25471

PM Peak Hour - Camilla Road & Queensway East

	Camilla Road Southbound						Queensway East Westbound						Camilla Road Northbound						Queensway East Eastbound						
Start Time	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	Grand 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	0.82	0.73	-	0.84	0	0.7	0.96	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
% Buses	-	1.4%	9.0%	1.4%	-	4.0%	-	0.0%	0.1%	0.0%	-	0.1%	-	0.0%	1.7%	0.0%	-	0.8%	-	0.0%	0.5%	1.5%	-	0.5%	0.6%
Trucks	-	0	1	1	-	2	-	0	5	0	-	5	-	0	0	0	-	0	-	0	15	0	-	15	22
% Trucks	-	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	0	-	-	-	-	0	0	0
Pedestrians	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	5

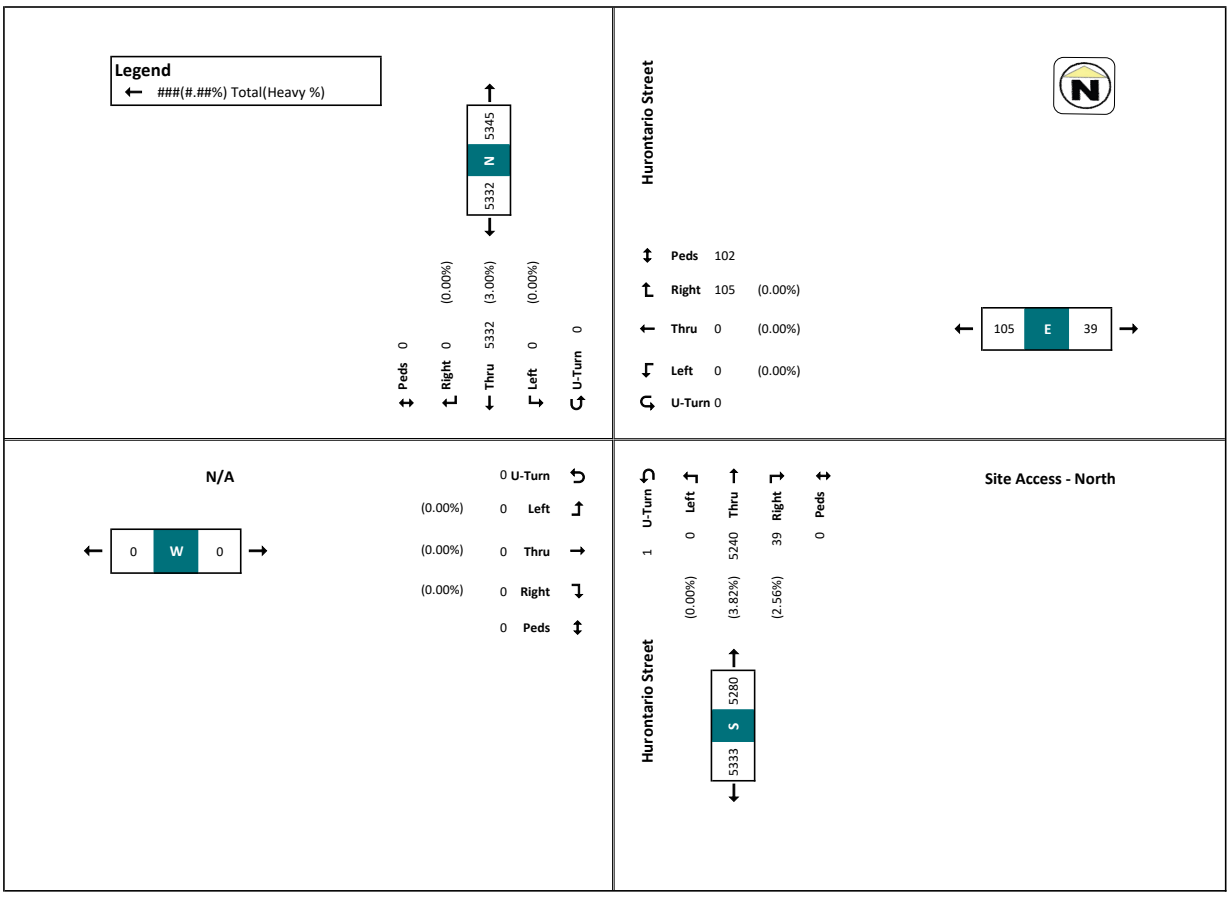


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Hurontario Street & Site Access - North
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25472

Turning Movement Count - Hurontario Street & Site Access - North

	Hurontario Street Southbound						Site Access - North Westbound						Hurontario Street Northbound						N/A Eastbound						
Start Time	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	Grand 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	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	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	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	0	359
Hourly Total	0	0	753	0	0	753	0	0	0	11	13	11	0	0	596	2	0	598	0	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	0	1936
17:00	0	0	265	0	0	265	0	0	0	3	2	3	0	0	198	1	0	199	0	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	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	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	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	0	2017
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	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	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	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	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	0	2040
Grand Total	0	0	5332	0	0	5332	0	0	0	105	102	105	1	0	5240	39	0	5280	0	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%	99.2%	0.7%	-	-	-	-	-	-	-	-	-
Total %	0.0%	0.0%	49.8%	0.0%	-	49.8%	0.0%	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	10354
% Lights	-	-	97.0%	-	-	97.0%	-	-	-	98.1%	-	98.1%	100.0%	-	96.2%	97.4%	-	96.2%	-	-	-	-	-	-	96.6%
Buses	-	0	84	0	-	84	-	0	0	1	-	1	-	0	105	1	-	106	-	0	0	0	-	0	191
% Buses	-	-	1.6%	-	-	1.6%	-	-	-	1.0%	-	1.0%	-	-	2.0%	2.6%	-	2.0%	-	-	-	-	-	-	1.8%
Trucks	-	0	76	0	-	76	-	0	0	1	-	1	-	0	95	0	-	95	-	0	0	0	-	0	172
% Trucks	-	-	1.4%	-	-	1.4%	-	-	-	1.0%	-	1.0%	-	-	1.8%	0.0%	-	1.8%	-	-	-	-	-	-	1.6%
Bicycles	-	-	-	-	0	0	-	-	-	-	0	-	-	-	-	-	0	0	-	-	-	-	0	0	0
Pedestrians	-	-	-	-	0	-	-	-	-	-	102	-	-	-	-	-	0	-	-	-	-	-	0	-	102

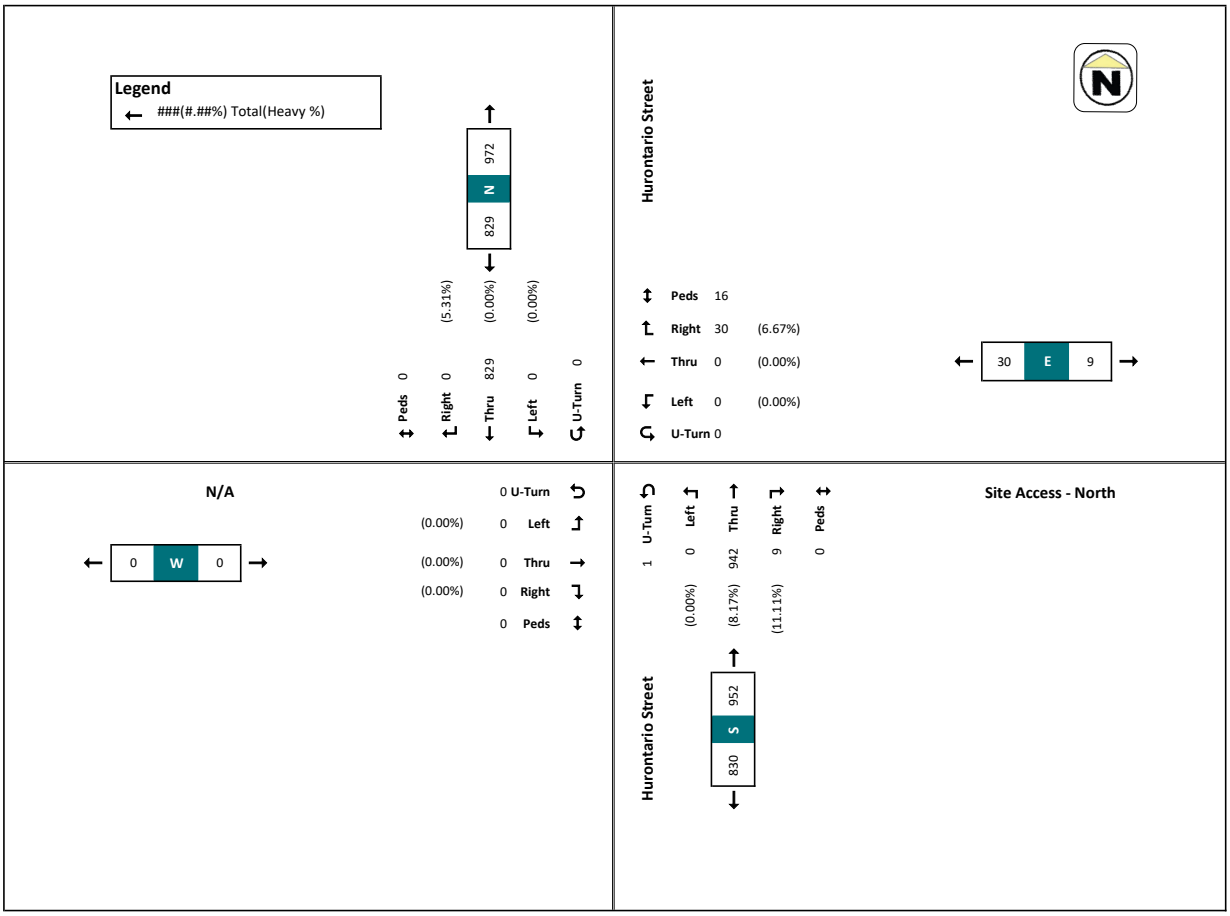


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Hurontario Street & Site Access - North
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25472

AM Peak Hour - Hurontario Street & Site Access - North

	Hurontario Street Southbound						Site Access - North Westbound						Hurontario Street Northbound						N/A Eastbound						
Start Time	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	Grand Total
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	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	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	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	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	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	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	0	1	-	1	-	0	40	0	-	40	-	0	0	0	-	0	60
% Trucks	-	-	2.3%	-	-	2.3%	-	-	-	3.3%	-	3.3%	#VALUE!	-	4.2%	0.0%	-	4.2%	-	-	-	-	-	-	3.3%
Bicycles	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	0	0	0
Pedestrians	-	-	-	-	0	-	-	-	-	-	16	-	-	-	-	-	1	-	-	-	-	-	0	-	17

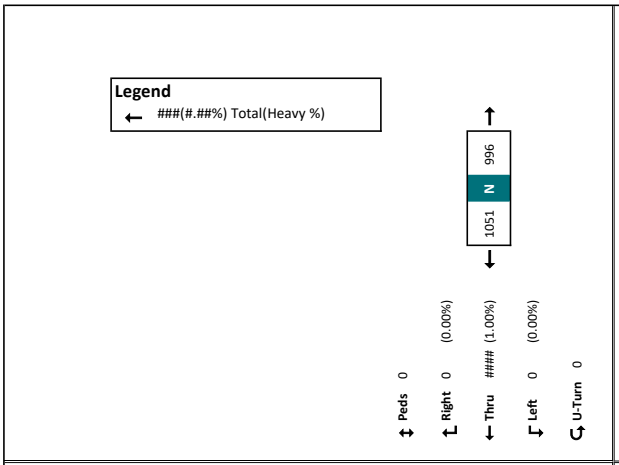


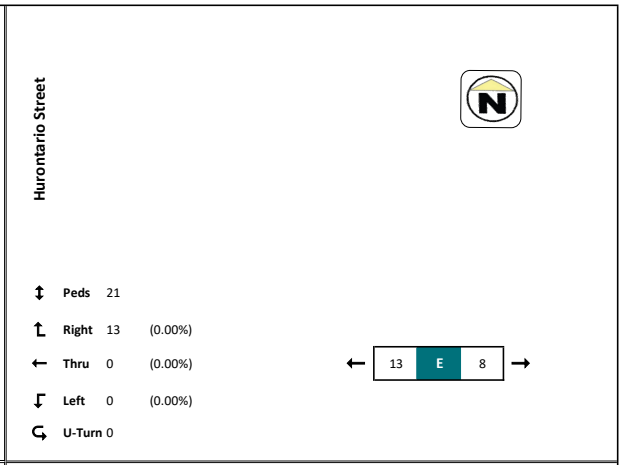
LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

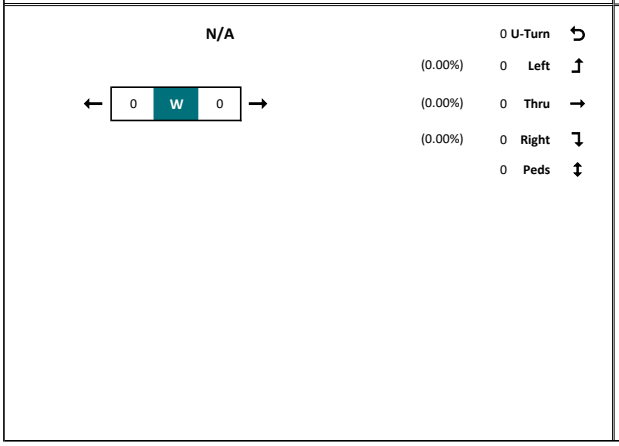
Intersection : Hurontario Street & Site Access - North
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25472

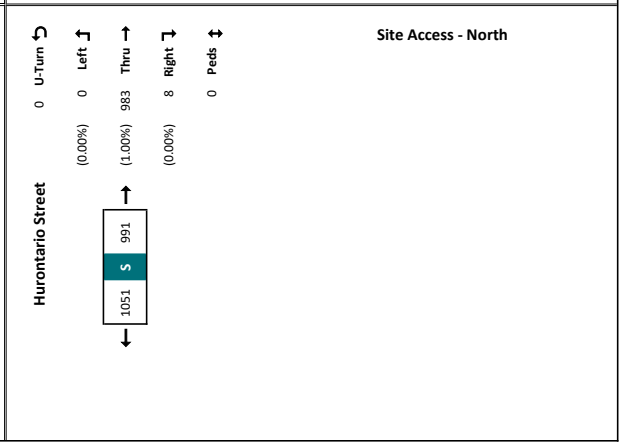
PM Peak Hour - Hurontario Street & Site Access - North

	Hurontario Street Southbound						Site Access - North Westbound						Hurontario Street Northbound						N/A Eastbound						
Start Time	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	Grand 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	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	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	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	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	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%
Buses	-	0	25	0	-	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	0	-	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	0	-	-	-	-	0	0	0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	0







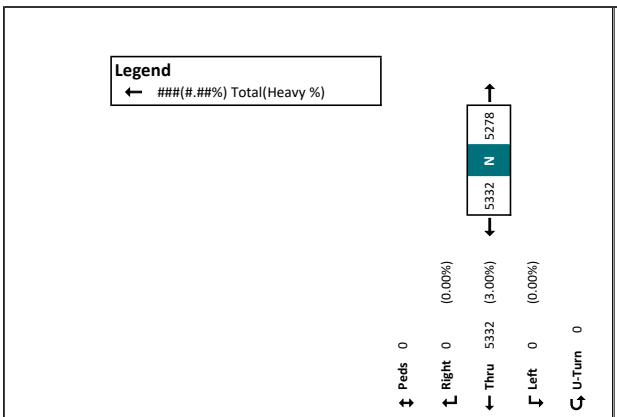


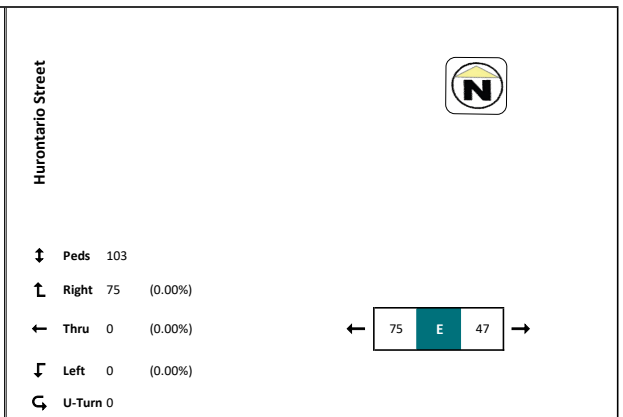
LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

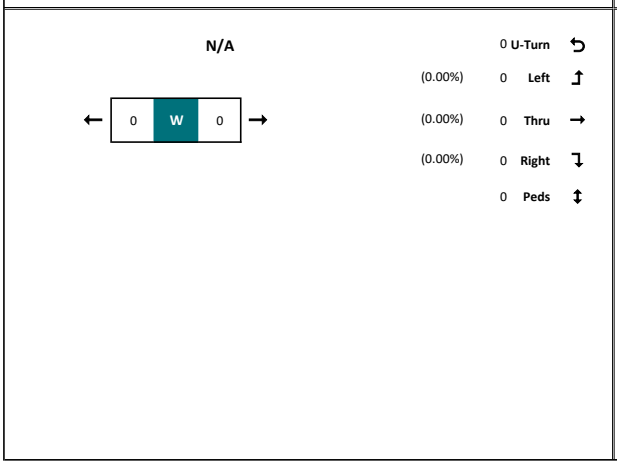
Intersection : Hurontario Street & Site Access - South
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25473

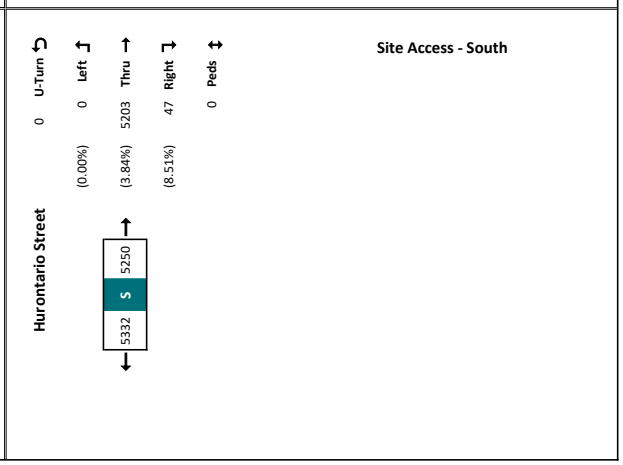
Turning Movement Count - Hurontario Street & Site Access - South

	Hurontario Street Southbound						Site Access - South Westbound						Hurontario Street Northbound						N/A Eastbound						
Start Time	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	Grand 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	1	7	1	0	0	168	1	0	169	0	0	0	0	0	0	349
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	237	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	5203	47	0	5250	0	0	0	0	0	0	10657
Approach %	0.0%	0.0%	100.0%	0.0%	-	-	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	84	0	-	84	-	0	0	0	-	0	-	0	105	3	-	108	-	0	0	0	-	0	192
% Buses	-	-	1.6%	-	-	1.6%	-	-	-	0.0%	-	0.0%	-	-	2.0%	6.4%	-	2.1%	-	-	-	-	-	-	1.8%
Trucks	-	0	76	0	-	76	-	0	0	0	-	0	-	0	95	1	-	96	-	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	-	-	-	-	0	0	2
Pedestrians	-	-	-	-	0	-	-	-	-	-	103	-	-	-	-	-	0	-	-	-	-	-	0	-	103







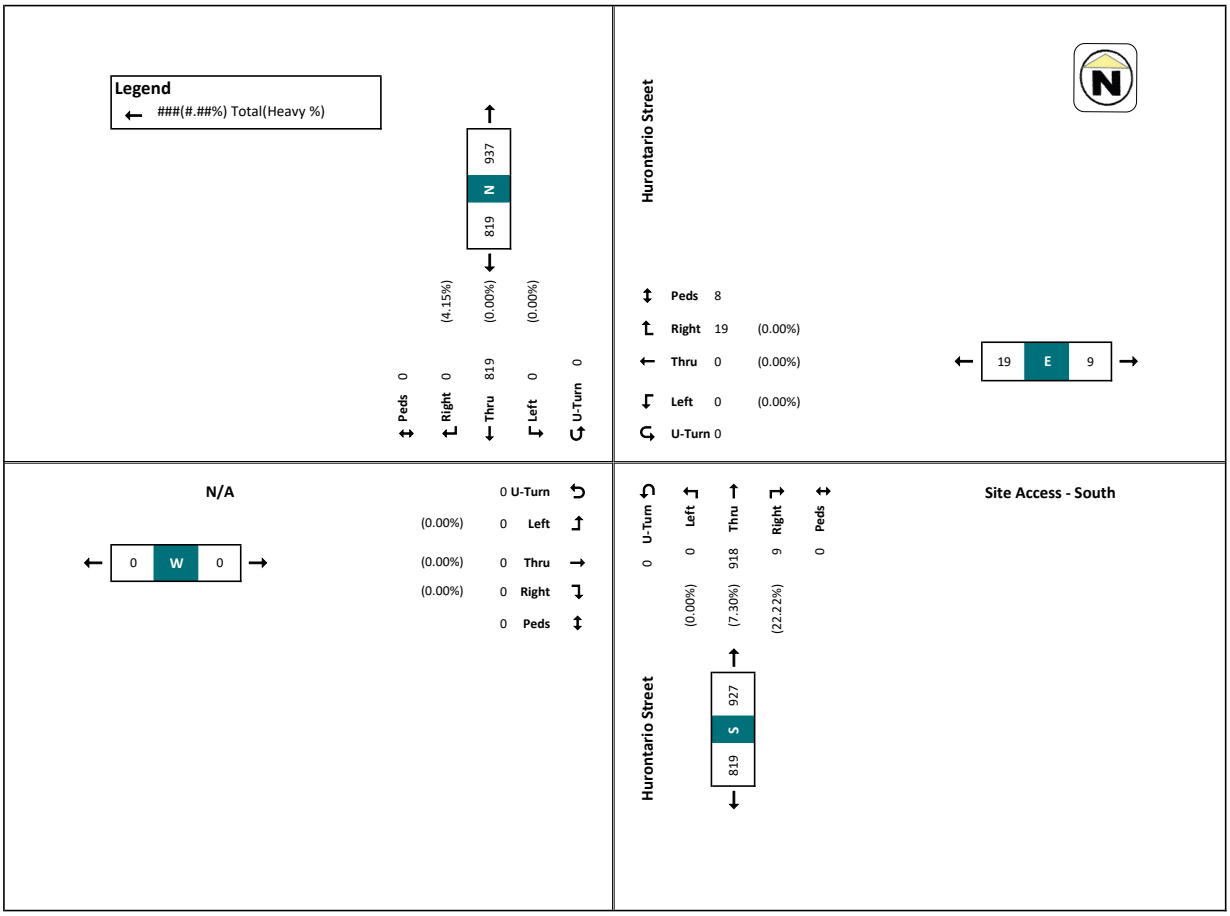


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Hurontario Street & Site Access - South
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25473

AM Peak Hour - Hurontario Street & Site Access - South

	Hurontario Street Southbound						Site Access - South Westbound						Hurontario Street Northbound						N/A Eastbound						
Start Time	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	Grand Total
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
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
Hourly Total	0	0	819	0	0	819	0	0	0	19	8	19	0	0	918	9	0	927	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%
Buses	-	0	13	0	-	13	-	0	0	0	-	0	-	0	33	1	-	34	-	0	0	0	-	0	47
% Buses	-	-	1.6%	-	-	1.6%	-	-	-	0.0%	-	0.0%	-	-	3.6%	11.1%	-	3.7%	-	-	-	-	-	-	2.7%
Trucks	-	0	21	0	-	21	-	0	0	0	-	0	-	0	34	1	-	35	-	0	0	0	-	0	56
% Trucks	-	-	2.6%	-	-	2.6%	-	-	-	0.0%	-	0.0%	-	-	3.7%	11.1%	-	3.8%	-	-	-	-	-	-	3.2%
Bicycles	-	-	-	-	0	0	-	-	-	-	0	0	-	-	-	-	1	1	-	-	-	-	0	0	1
Pedestrians	-	-	-	-	0	-	-	-	-	-	8	-	-	-	-	-	0	-	-	-	-	-	0	-	8

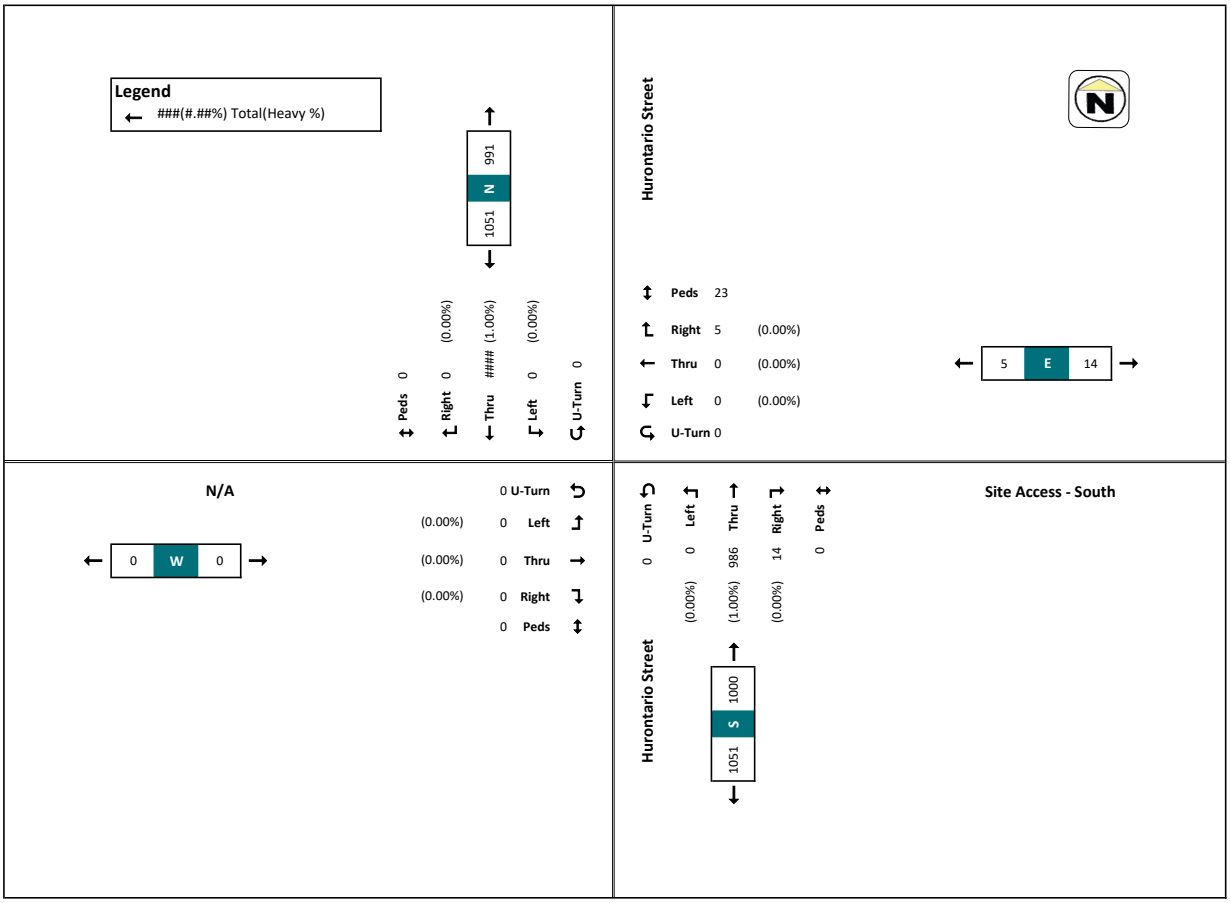


LEA Consulting Ltd.
625 Cochrane Drive, 5th Floor
Markham, ON L3R 9R9

Intersection : Hurontario Street & Site Access - South
Survey Date : February 19, 2026
Project No. : 25123
Count ID : 25473

PM Peak Hour - Hurontario Street & Site Access - South

	Hurontario Street Southbound						Site Access - South Westbound						Hurontario Street Northbound						N/A Eastbound						
Start Time	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	Grand Total
17:15	0	0	282	0	0	282	0	0	0	0	3	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	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
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
Hourly Total	0	0	1051	0	0	1051	0	0	0	5	23	5	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	0.98
Lights	0	0	1036	0	-	1036	0	0	0	5	-	5	0	0	978	14	-	992	0	0	0	0	-	0	2033
% Lights	-	-	98.6%	-	-	98.6%	-	-	-	100.0%	-	100.0%	-	-	99.2%	100.0%	-	99.2%	-	-	-	-	-	-	98.9%
Buses	-	0	13	0	-	13	-	0	0	0	-	0	-	0	8	0	-	8	-	0	0	0	-	0	21
% Buses	-	-	1.2%	-	-	1.2%	-	-	-	0.0%	-	0.0%	-	-	0.8%	0.0%	-	0.8%	-	-	-	-	-	-	1.0%
Trucks	-	0	7	0	-	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	0	-	-	-	-	0	0	0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	0



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

Scenario 2 - Midblock Construction

REVISED

REOPENING TIMING CARD

CITY OF MISSISSAUGA

Traffic Signal Timing Parameters

Database Date		**Prepared Date:**	Wednesday, March 25th , 2025
Database Rev	**iNet**	**Completed By:**	**Mobilinx**
Timing Card / Field rev	**iNet**	**Checked By:**	**Mobilinx**

Location: **Hurontario Street @ Bronte College Court / Sherobee Road**

Phase #	Direction	Vehicle Minimum (sec.)	Pedestrian Minimum (sec.) WALK	Pedestrian Minimum (sec.) FDWALK	Amber (sec.)	All Red (sec.)	TIME PERIOD (sec.) *Peak Split= (Green+Amber+All Red) **Max = Green 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	27.0	3.0	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	27.0	3.0	5.0	47.0	47.0	47.0

System Control	Yes
Local Control	No
Semi-Actuated Mode	Yes

TIME (M-F)	PEAK	CYCLE LENGTH (sec.)	OFFSET (sec.)
06:00 - 09:30	AM	160	38
09:30 - 15:00 19:30 - 00:00	OFF	160	144
15:00 - 19:30	PM	160	3

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**September 14, 2026**	**Prepared Date**	**September 15, 2026**
Database Rev	**iNet**	**Completed By**	**HA**
Timing Card / Field rev	**-**	**Checked By**	**MS**
Location	**Queensway East at Camilla Road**		

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s)				
			WALK	FDWALK			AM 1 SPLITS	AM 2 SPLITS	OFF 1 SPLITS	OFF 2 SPLITS	PM SPLITS
1	Not In Use	-	-	-	-	-	-	-	-	-	-
2	Queensway East - EB	8.0	10.0	17.0	4.0	2.2	50.0	105.0	82.0	56.0	94.0
3	Not In Use	-	-	-	-	-	-	-	-	-	-
4	Camilla Road - NB	8.0	10.0	24.0	4.0	5.1	30.0	55.0	78.0	24.0	66.0
5	Not In Use	-	-	-	-	-	-	-	-	-	-
6	Queensway East - WB	8.0	10.0	17.0	4.0	2.2	50.0	105.0	82.0	56.0	94.0
7	Not In Use	-	-	-	-	-	-	-	-	-	-
8	Camilla Road - SB	8.0	10.0	24.0	4.0	5.1	30.0	55.0	78.0	24.0	66.0

System Control

Yes

Semi-Actuated Mode

Yes

TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)
06:00 - 08:00	AM 1	80	17
08:00 - 09:30	AM 2	160	97
09:30 - 15:00 19:30 - 00:00	OFF 1	160	56
15:00 - 16:00	OFF 2	80	36
16:00 - 19:30	PM	160	94

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**September 14, 2026**	**Prepared Date**	**September 15, 2026**
Database Rev	**iNet**	**Completed By**	**HA**
Timing Card / Field rev	**-**	**Checked By**	**MS**
Location	**Queensway East at Hurontario Street**		

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s)		
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS
1	Hurontario Street - NB LT Prot.	8.0	0.0	0.0	3.0	2.0	30.0	30.0	28.0
2	Hurontario Street - SB	8.0	15.0	36.0	4.0	4.7	60.0	60.0	62.0
3	Queensway East - EB LT Prot. Perm.	5.0	0.0	0.0	3.0	0.0	0.0	8.0	8.0
4	Queensway East - WB	8.0	16.0	38.0	4.0	3.8	70.0	62.0	62.0
5	Hurontario Street - SB LT Prot.	8.0	0.0	0.0	3.0	2.0	29.0	21.0	23.0
6	Hurontario Street - NB	8.0	15.0	36.0	4.0	4.7	61.0	69.0	67.0
7	Queensway East - WB LT Prot. Perm.	5.0	0.0	0.0	3.0	0.0	8.0	8.0	8.0
8	Queensway East - EB	8.0	16.0	38.0	4.0	3.8	62.0	62.0	62.0

System Control
Yes

Semi-Actuated Mode
Yes

TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)
06:00 - 09:30	AM	160	19
09:30 - 15:00 19:30 - 00:00	OFF	160	40
15:00 - 19:30	PM	160	39

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**September 16, 2026**		**Prepared Date**	**September 16, 2026**
Database Rev	**iNet**		**Completed By**	**HA**
Timing Card / Field rev	**-**		**Checked By**	**MS**

Location — **Queensway East at Private Access**

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s)		
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS
1	Not In Use	-	-	-	-	-	-	-	-
2	Queensway East - EB	8.0	10.0	15.0	4.0	2.0	107.0	101.0	107.0
3	Not In Use	-	-	-	-	-	-	-	-
4	Private Access - NB	8.0	10.0	29.0	4.0	4.1	53.0	59.0	53.0
5	Not In Use	-	-	-	-	-	-	-	-
6	Queensway East - WB	8.0	10.0	15.0	4.0	2.0	107.0	101.0	107.0
7	Not In Use	-	-	-	-	-	-	-	-
8	Private Access - SB	8.0	10.0	29.0	4.0	4.1	53.0	59.0	53.0

System Control
Yes

Semi-Actuated Mode
Yes

TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)
06:00 - 09:30	AM	160	82
09:30 - 15:00 19:30 - 22:00	OFF	160	99
15:00 - 19:30	PM	160	97

APPENDIX C

Corridor Growth Rates

Alex Yoo

From: Tyler Xuereb <Tyler.Xuereb@mississauga.ca>
Sent: September 14, 2026 11:30 AM
To: Matea Ceric
Subject: RE: Terms of Reference: 2233-2235 Hurontario St, Mississauga (File OZ 26/008 W7)

Follow Up Flag: Flag for follow up
Flag Status: Flagged

External Sender

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

Hi Matea,

Below are the recommended growth rates for Hurontario Street. These rates are compounded annually from the existing year to 2031.

Please note that the recommended growth rates are negative to account for the lane reduction along Hurontario Street resulting from the implementation of the LRT.

Hurontario Street

	Compounded Annual Growth from Existing to 2031	
	NB	SB
AM Peak	-2.0%	-2.0%
PM Peak	-2.0%	-2.0%

Thanks,

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

City of Mississauga | Transportation and Works Department,
Infrastructure Planning and Engineering Services Division

Date: October 16, 2026
Requestor: Alex Yoo, LEA Consulting Ltd.
Request Type: Growth Rate Data Request
Location: The Queensway at Hurontario Street

Alex Yoo,

See below the forecasted compound annual growth rate values for The Queensway at Hurontario Street.

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

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

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

Regards,

Luciano Marchesan
Transportation Data & Modelling Analyst,
Transportation Infrastructure Programming
Transportation Division | Public Works | Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor

APPENDIX D

Background Developments

- **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

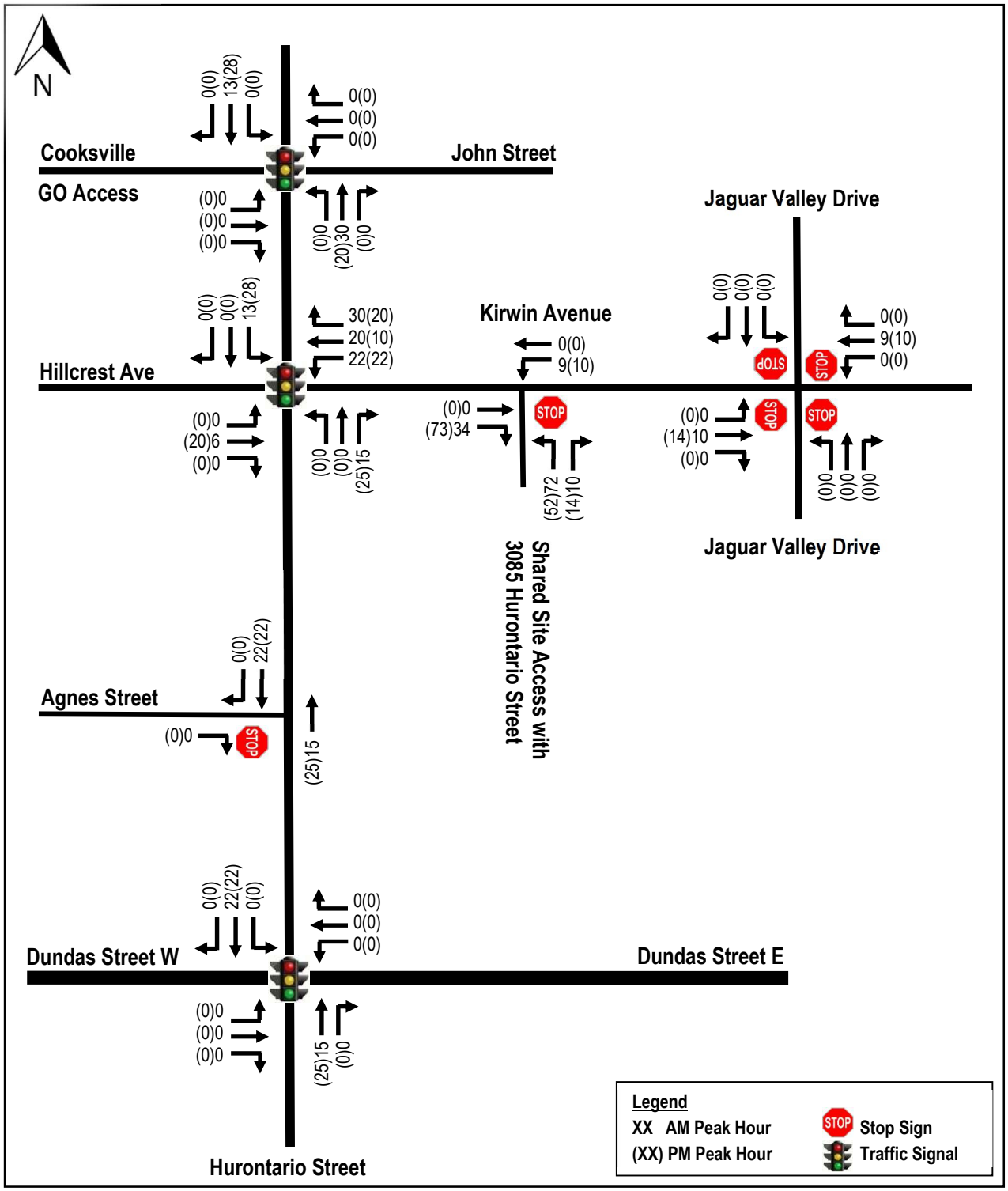


Figure 7 – Site Traffic Volumes for Residential Component Access Option 2

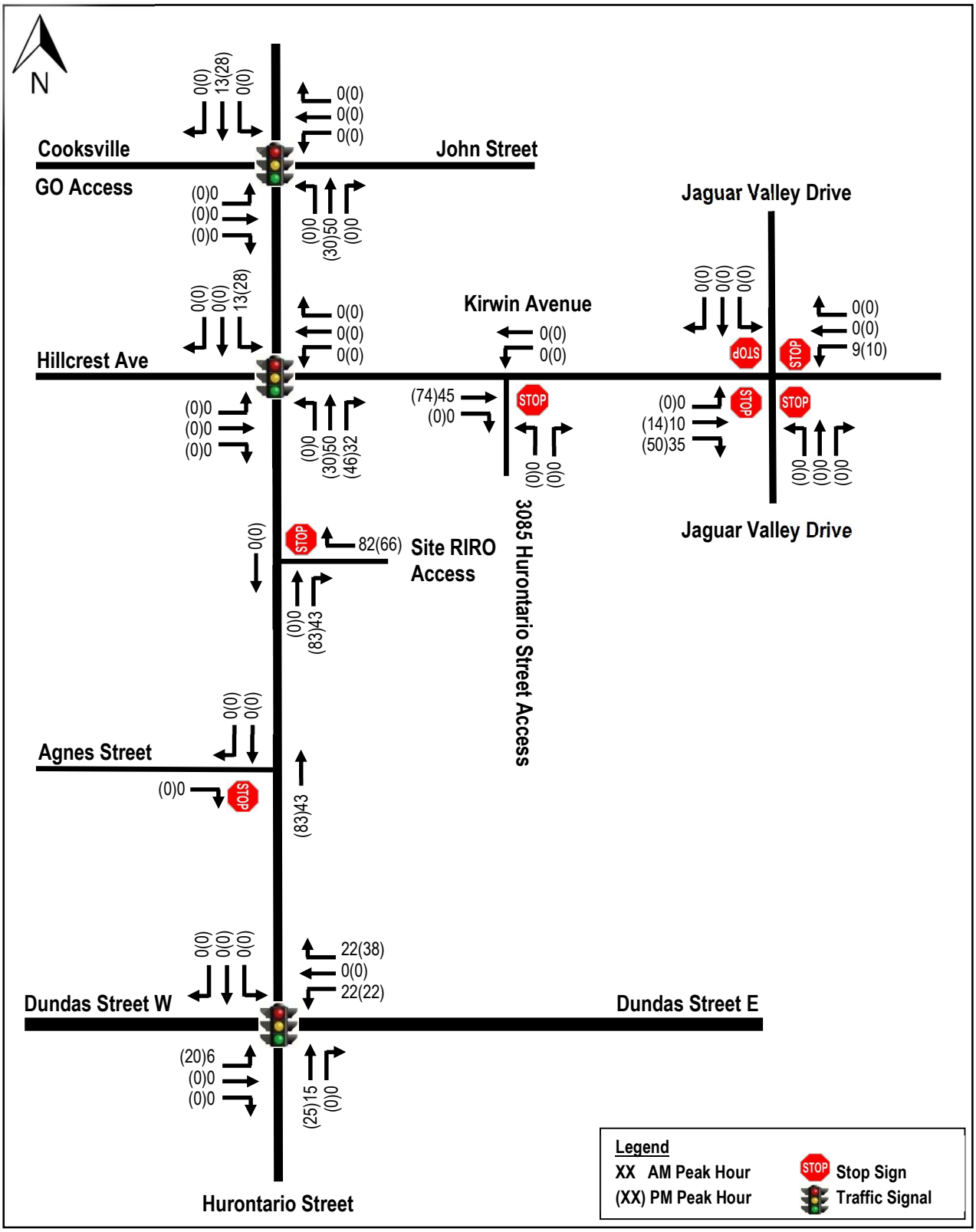


Figure 8 – Site Traffic Volumes for Non-Residential Component Access Option 1

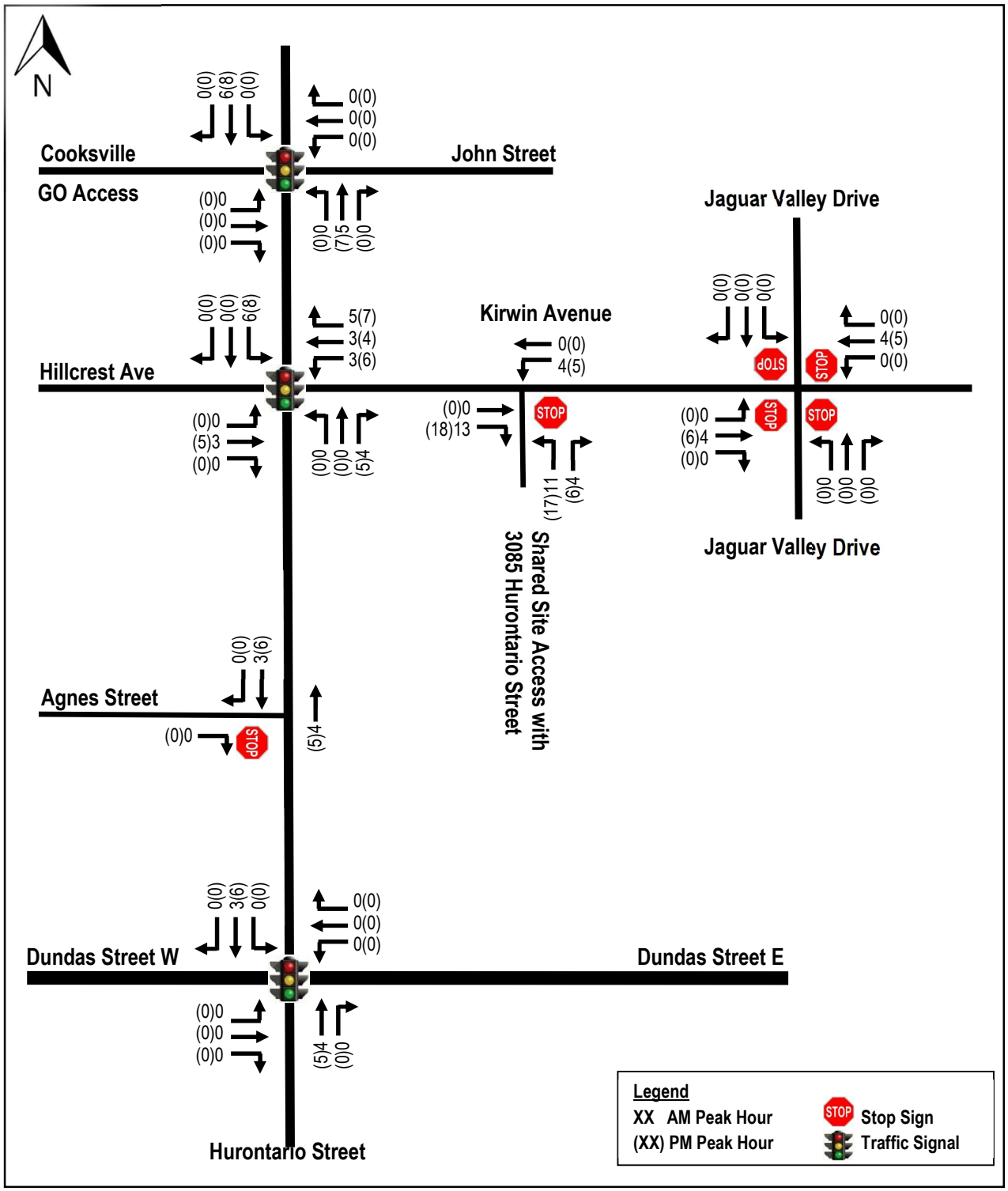
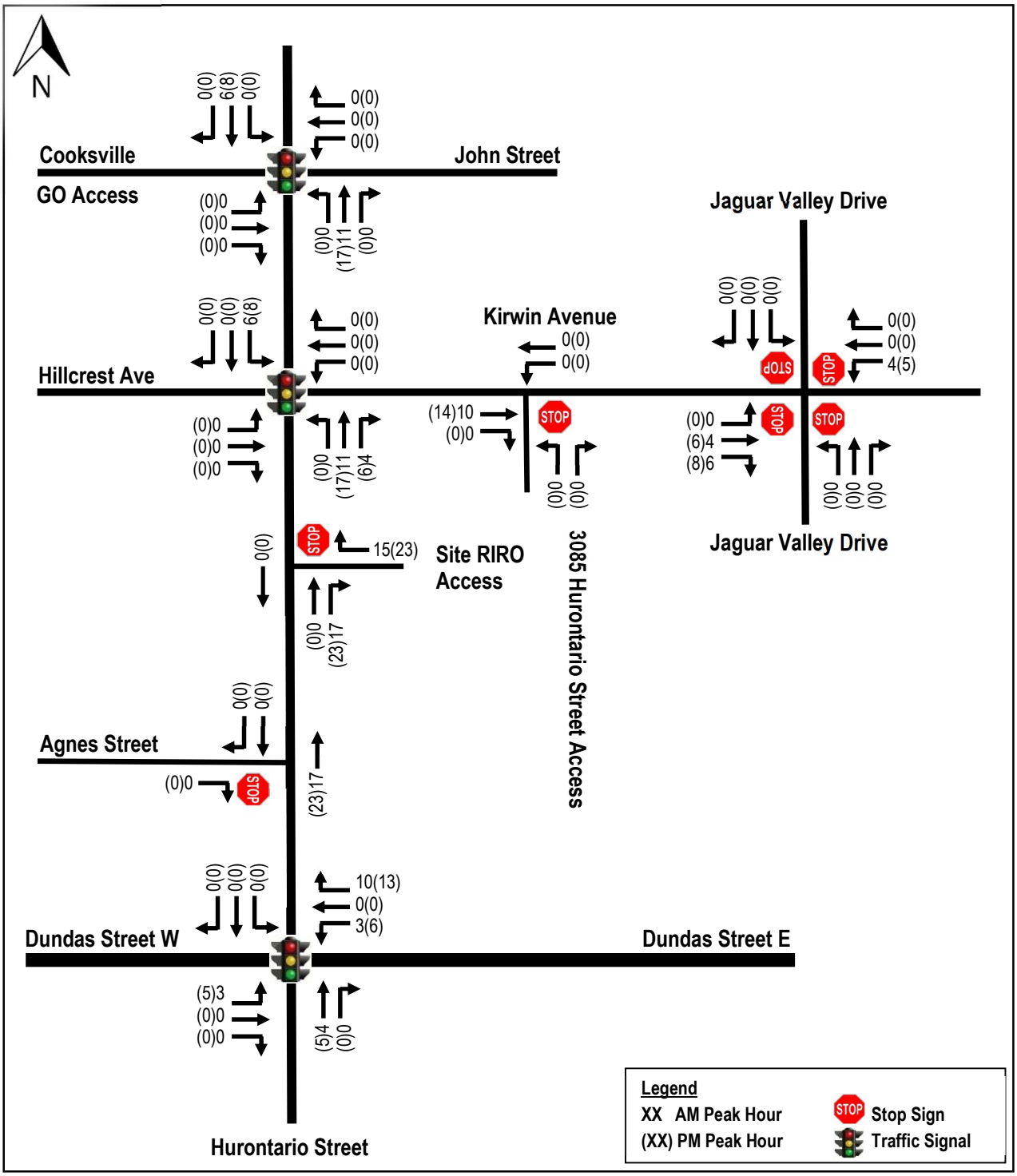


Figure 9 – Site Traffic Volumes for Non-Residential Component Access Option 2



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

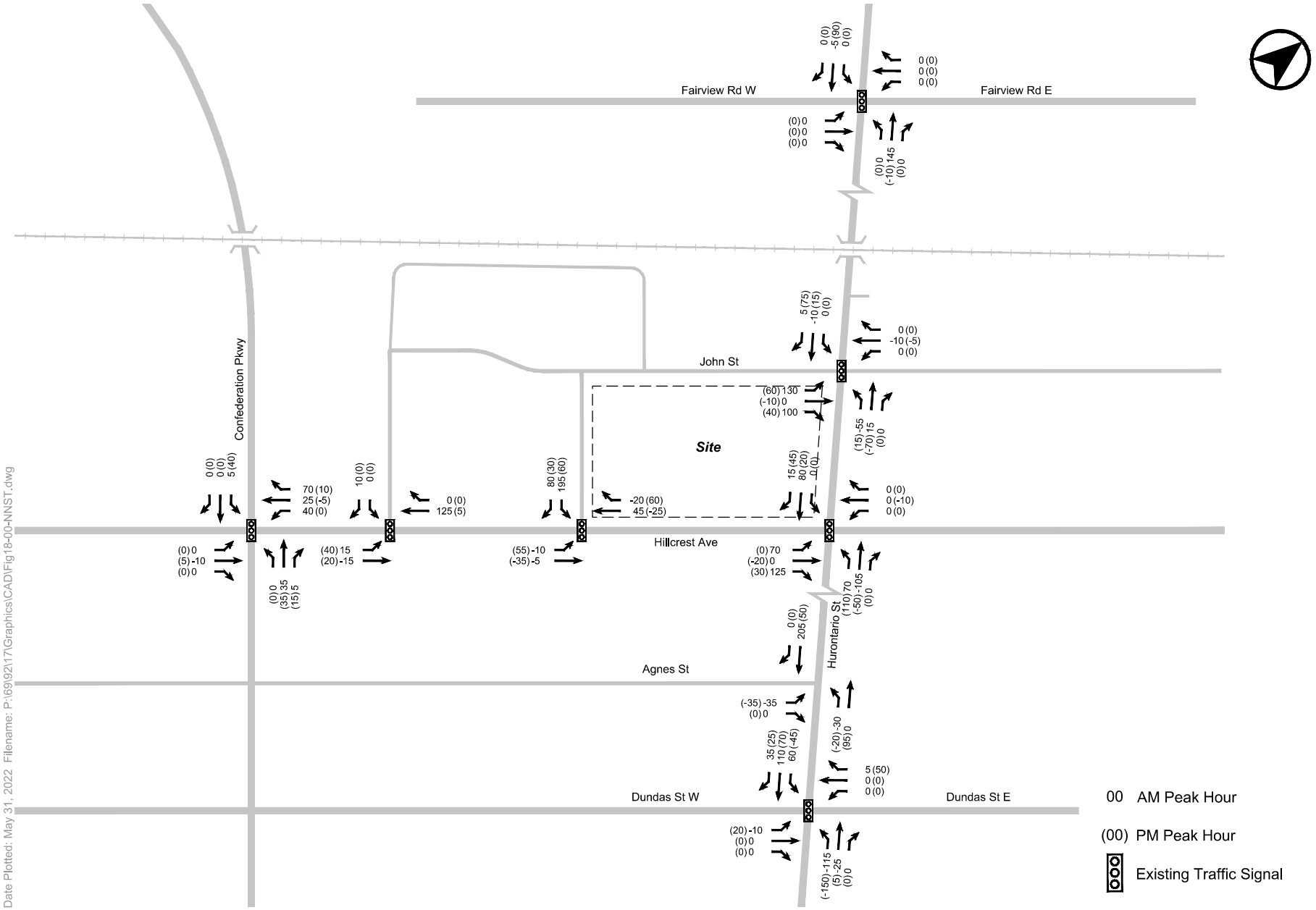


FIGURE 18 NET NEW SITE TRAFFIC VOLUMES - EXTERNAL

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**.

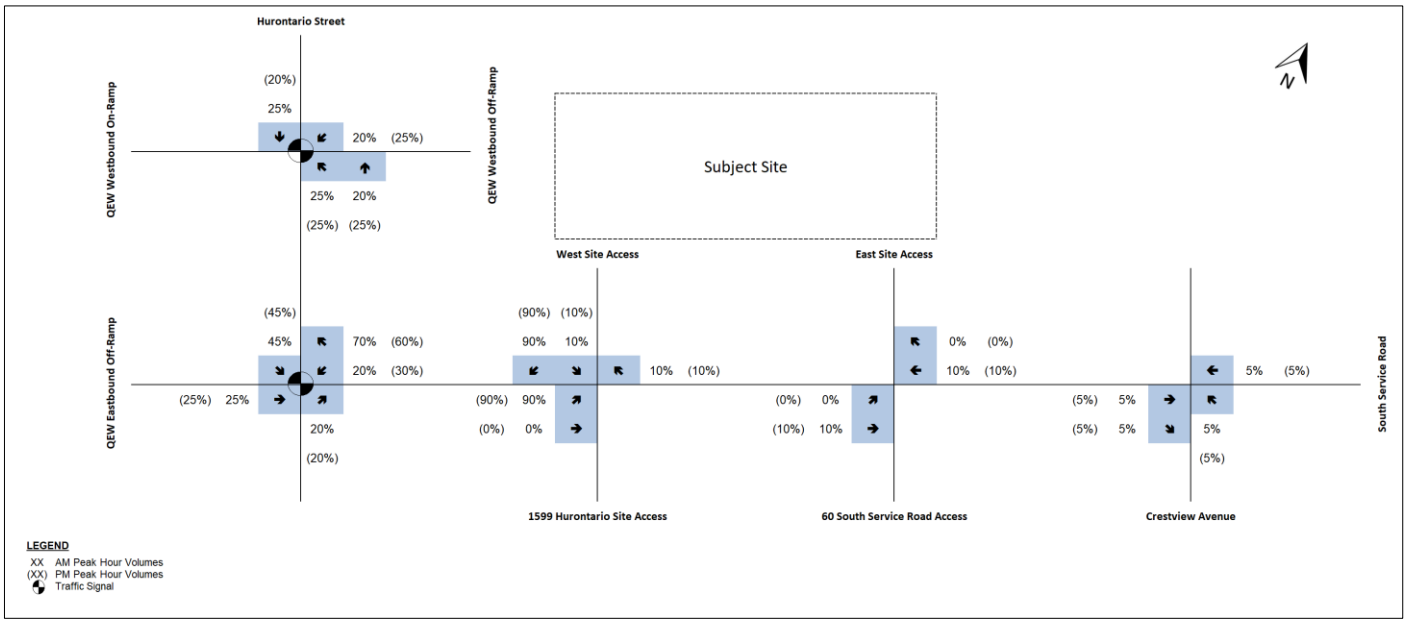


Figure 14 Trip Distribution

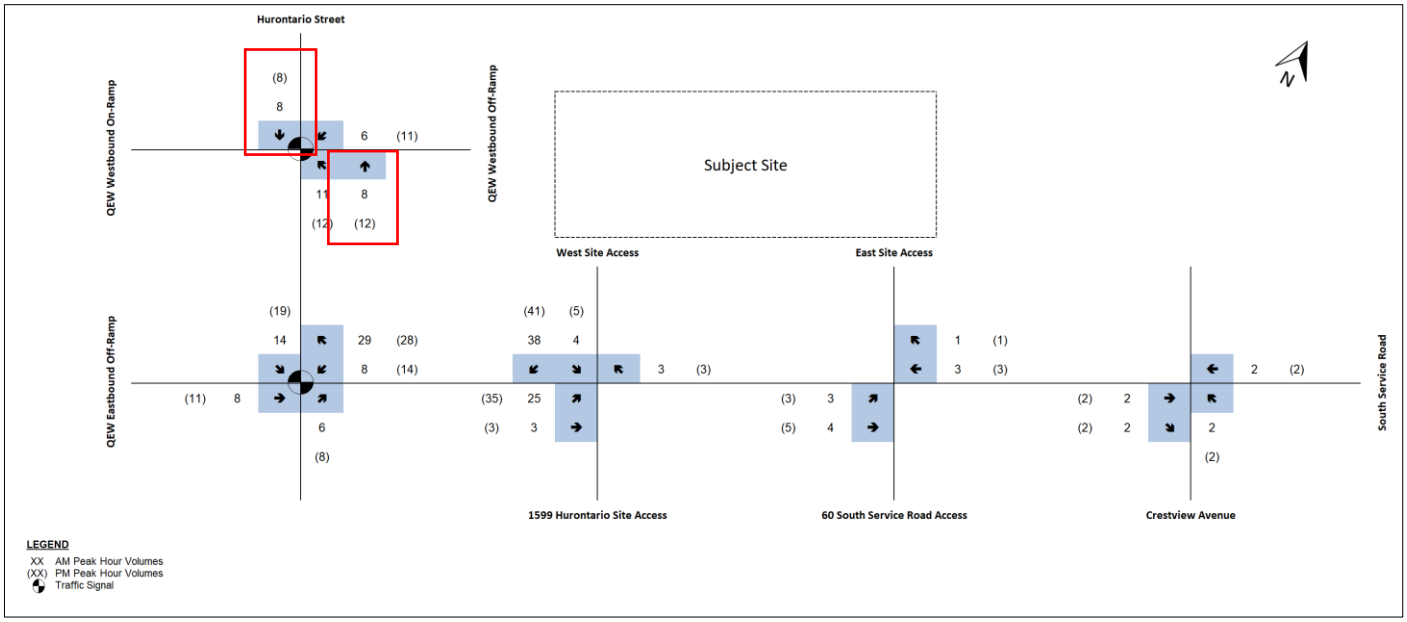


Figure 15 Total Site Trips

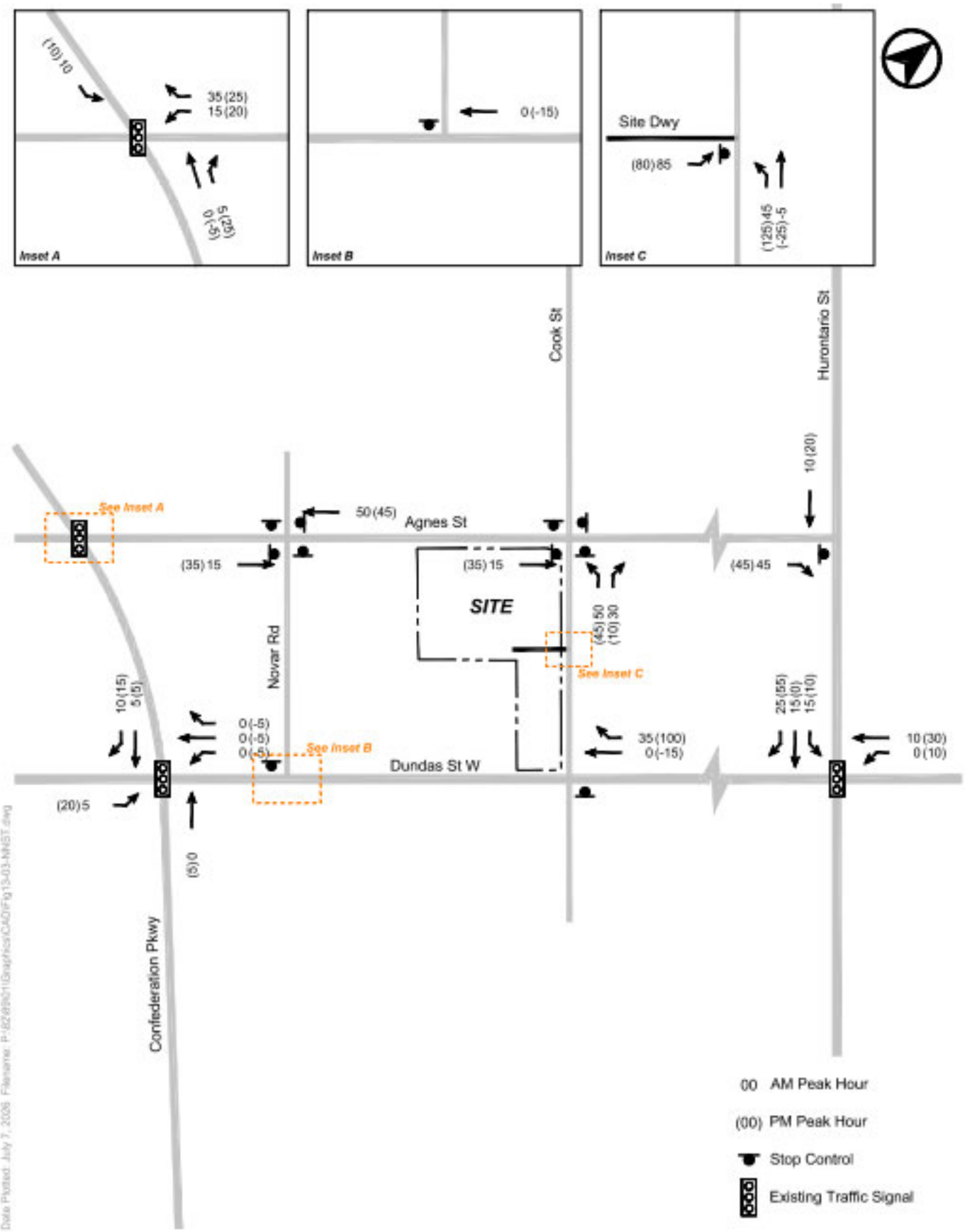
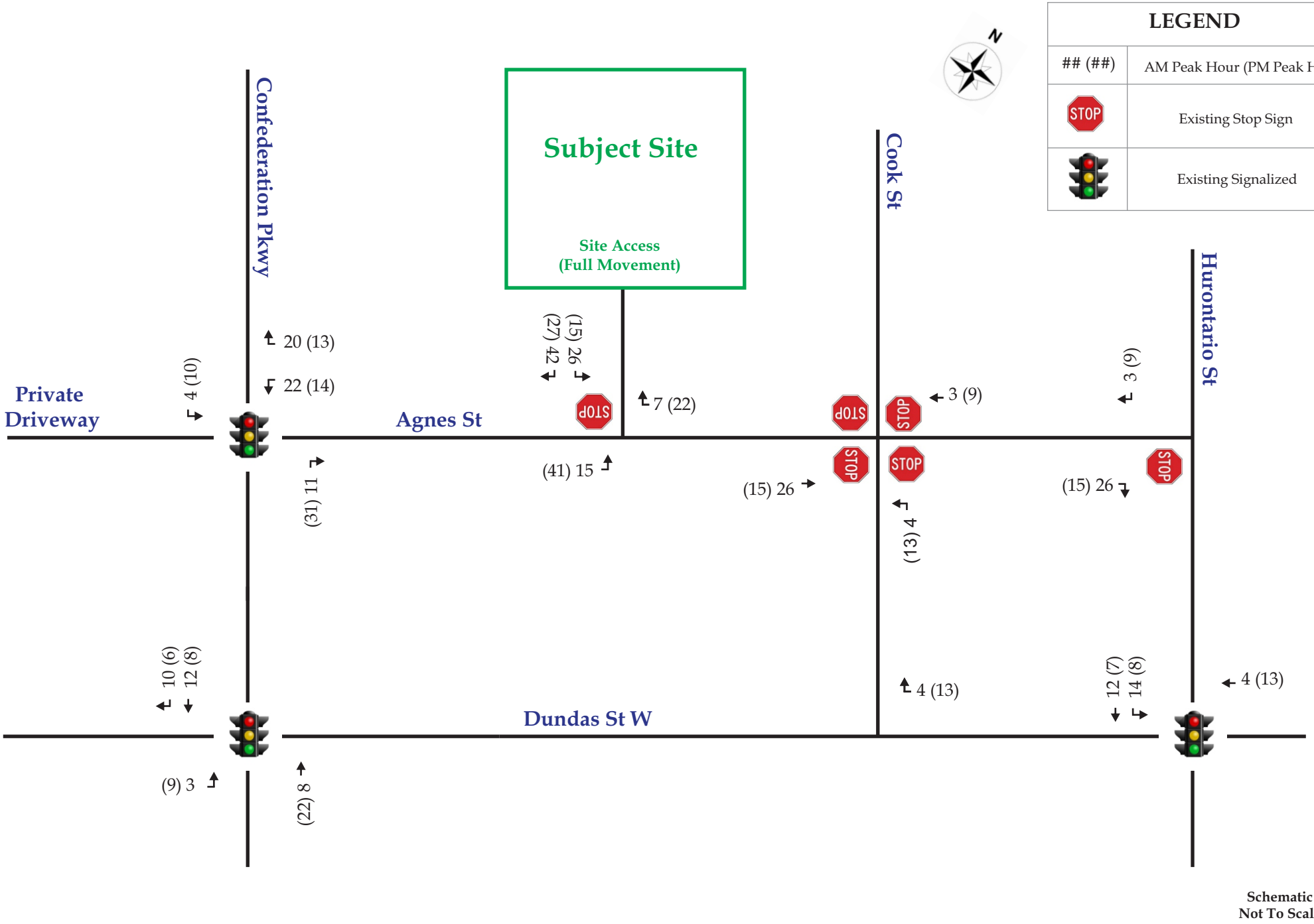


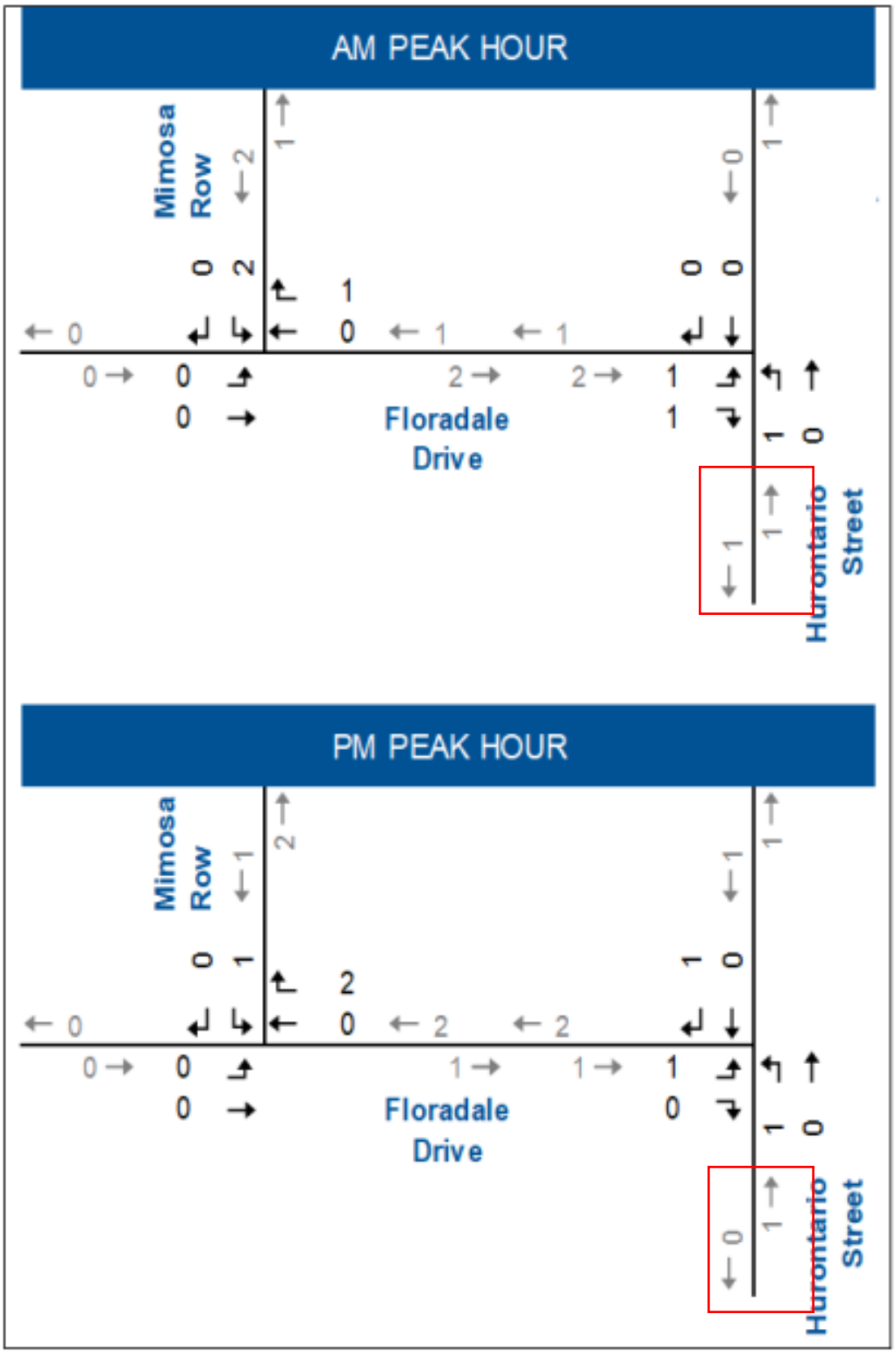
FIGURE 13 NET NEW SITE TRAFFIC VOLUMES



URBANTRANS Engineering Solutions Inc.

65-79 Agnes Street, City of Mississauga ON
Project No. UT-21-032
April 2022

Figure 8 - Site Generated Traffic Volumes



paradigm TRANSPORTATION SOLUTIONS LIMITED

Site Generated Traffic Volume

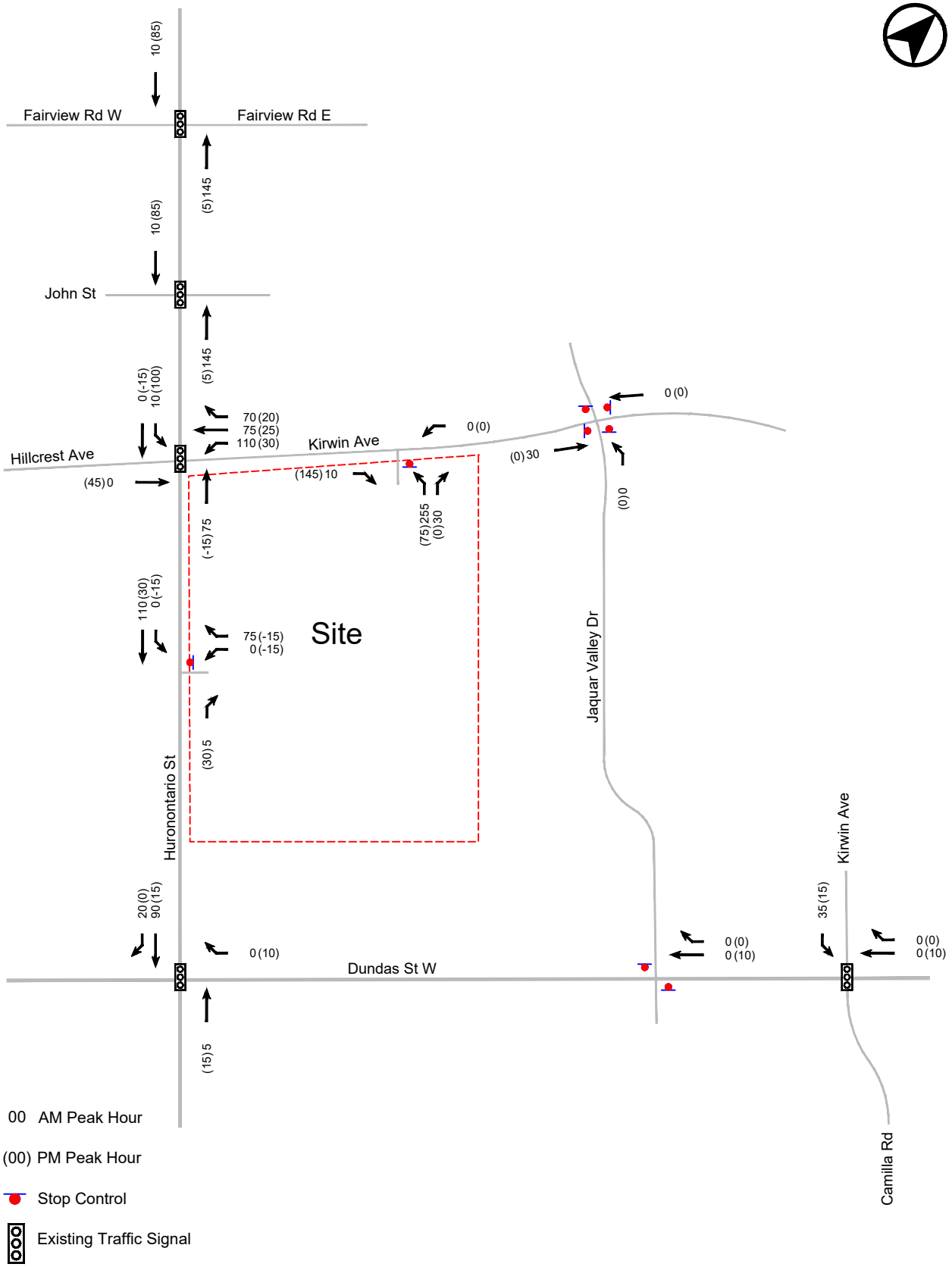


FIGURE 14 NET NEW SITE TRAFFIC VOLUMES

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%**

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		2%			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			8%		427, Gardiner, QEW	NB Hurontario
4360	0	0	0	0	49	0	0	49	1%	E	1%					WB Sherobee, NB Hurontario
4362	0	0	0	0	33	0	0	33	1%	E	1%					WB Sherobee, 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
4465	0	22	0	0	0	0	0	22	1%	N			1%			SB Hurontario, EB Queensway
4485	0	0	0	0	0	26	0	26	1%	N			1%			SB Hurontario, EB Queensway
4495	7	0	0	0	0	0	0	7	0%	N			0%			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
4534	0	0	0	0	0	84	0	84	2%	E	2%					NB Hurontario
4535	0	23	0	0	0	0	0	23	1%	E	1%					NB Hurontario
4551	0	0	0	0	14	0	0	14	0%	N			0%			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
4580	0	0	0	0	158	0	0	158	4%	W		4%				EB Queensway
4582	0	0	10	0	0	0	0	10	0%	W		0%				EB Queensway
4583	160	0	0	0	0	0	0	160	4%	W		4%				EB Queensway
4607	0	0	0	0	0	82	0	82	2%	N			2%			SB Hurontario, EB Queensway
4609	0	25	0	0	0	0	0	25	1%	N			1%			SB Hurontario, EB Queensway
4619	0	0	40	0	0	0	0	40	1%	W		1%				SB Hurontario, EB Queensway
4624	0	0	12	0	0	0	0	12	0%	N			0%			SB Hurontario, EB Queensway
4626	0	0	0	0	20	0	0	20	0%	N			0%			SB Hurontario, EB Queensway
4627	0	0	0	0	317	0	0	317	8%	S				8%		WB Sherobee, NB Hurontario
4629	70	0	0	0	0	0	0	70	2%	E	2%					NB Hurontario
4634	0	0	0	0	0	0	475	475	11%	E	11%					WB Queensway
4635	0	0	0	55	0	0	0	55	1%	E	1%					WB Queensway
4637	0	8	36	0	0	0	0	44	1%	E	1%					WB Queensway
4644	89	0	0	0	0	26	0	115	3%	W		3%				EB Queensway
4646	0	0	34	0	106	0	0	140	3%	N			3%			SB Hurontario, EB Queensway
4662	0	0	0	33	0	0	0	33	1%	W		1%				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
								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

Cross Tabulation Query Form - Trip - 2022

Row: Planning district of destination - pd_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,)

Trip 2022
Table:

Destination	Origin							Trips to Destination
	4603	4607	4625	4626	4627	4633	4642	
PD 1 of Toronto	0	16	0	56	0	0	14	86
PD 2 of Toronto	0	0	0	0	120	0	0	120
PD 3 of Toronto	0	0	0	103	0	0	0	103
PD 7 of Toronto	0	0	0	112	0	0	0	112
PD 8 of Toronto	0	0	0	0	0	39	0	39
Vaughan	0	0	0	0	80	0	0	80
Brampton	20	23	0	37	5	0	0	85
Milton	20	0	0	0	0	0	0	20
Oakville	28	0	0	46	0	0	25	99
Burlington	0	0	42	0	0	0	0	42
Hamilton	0	0	0	0	158	0	0	158
Kitchener	0	0	0	0	120	0	0	120
Guelph	0	0	0	0	22	0	0	22
4355	0	0	0	0	442	0	0	442
4377	0	0	0	0	0	0	19	19
4378	0	0	0	0	0	120	0	120
4385	0	0	45	0	0	0	0	45
4392	0	16	0	0	0	0	0	16
4401	0	28	0	0	0	0	0	28
4416	0	0	0	0	0	0	12	12
4423	0	0	0	0	0	0	64	64
4445	66	0	0	0	0	0	0	66
4446	0	0	0	0	7	0	0	7
4448	0	0	0	8	0	28	0	36
4456	25	0	0	0	0	0	0	25
4470	0	15	0	0	0	0	0	15
4484	53	0	0	0	0	0	0	53
4495	7	0	0	0	0	0	0	7
4498	0	0	0	0	45	0	0	45
4506	0	0	0	0	133	0	0	133
4508	0	0	0	0	0	84	0	84
4509	0	40	0	0	0	0	0	40
4510	84	0	0	0	0	0	0	84
4530	0	32	0	0	0	0	0	32
4535	0	23	0	0	0	0	0	23
4550	0	0	0	0	5	0	0	5
4551	0	0	0	0	14	0	0	14
4559	0	8	0	0	0	0	0	8
4564	0	0	0	0	0	0	42	42
4580	0	0	0	0	158	0	0	158
4583	160	0	0	0	0	0	0	160
4594	0	0	0	0	23	0	0	23
4607	0	8	0	0	0	0	0	8
4609	0	0	0	39	0	0	0	39
4615	0	10	0	0	0	0	0	10
4617	0	0	270	0	0	0	0	270
4619	0	0	4	0	0	0	0	4
4626	0	0	0	125	0	0	0	125
4629	25	0	0	0	0	0	0	25
4634	0	0	0	0	0	9	475	484
4635	0	0	0	9	0	0	0	9
4637	0	0	36	0	0	0	0	36
4642	21	0	0	0	0	0	0	21
4644	45	0	0	0	0	0	0	45
4646	0	0	34	0	106	0	0	140
4656	0	164	0	0	0	0	0	164
4662	0	0	0	33	0	0	0	33
4670	0	0	0	0	0	31	0	31
4731	0	16	0	0	0	0	0	16
4734	0	61	0	0	0	0	0	61
4740	0	0	0	66	0	0	0	66
4747	0	8	0	0	0	0	0	8
								4487

Trip Distribution		Trip Assignment					
Distribution	Direction To	To East	To West	To North	To South	Hwy	Assignment
2%	E	2%				Gardiner, QEW	NB Hurontario, EB Queensway
3%	E	3%				Gardiner, QEW	NB Hurontario, EB Queensway
2%	E	2%				407, 427, Gardiner, QEW	NB Hurontario, EB Queensway
2%	E	2%				Gardiner, QEW	NB Hurontario, EB Queensway
1%	E	1%				427, Gardiner, QEW	NB Hurontario, EB Queensway
2%	E	2%				407, 427, Gardiner, QEW	NB Hurontario, EB Queensway
2%	N			2%		410, QEW	NB Hurontario, EB Queensway
0%	W		0%			401	NB Hurontario, EB Queensway
2%	W		2%			QEW	WB Queensway, SB Hurontario
1%	W		1%				NB Hurontario, EB Queensway
4%	W		4%			QEW	WB Queensway, SB Hurontario
3%	W		3%			401,427,QEW	WB Queensway, SB Hurontario
0%	W		0%			401,427,QEW	NB Hurontario, EB Queensway
10%	N			10%		427, Gardiner, QEW	NB Hurontario, EB Queensway
0%	S				0%		NB Hurontario, EB Queensway
3%	E	3%				QEW	NB Hurontario, EB Queensway
1%	S				1%	QEW	NB Hurontario, EB Queensway
0%	W		0%				NB Hurontario, EB Queensway
1%	W		1%			QEW	NB Hurontario, EB Queensway
0%	W		0%			QEW	NB Hurontario, EB Queensway
1%	W		1%			QEW	NB Hurontario, EB Queensway
1%	W		1%			Eastgate Pkwy, QEW	NB Hurontario, EB Queensway
0%	E	0%				QEW	NB Hurontario, EB Queensway
1%	E	1%					EB Queensway
1%	N			0%			WB Queensway, NB Hurontario
0%	N			1%			WB Queensway, NB Hurontario
1%	W		1%				WB Queensway
0%	N			0%			NB Hurontario, EB Queensway
1%	W		1%			QEW	NB Hurontario, EB Queensway
3%	E	3%				427, Gardiner, QEW	NB Hurontario, EB Queensway
2%	N			2%		QEW	NB Hurontario, EB Queensway
1%	N			1%		410, QEW	NB Hurontario, EB Queensway
2%	N			2%		410, QEW	NB Hurontario, EB Queensway
1%	N			1%			WB Queensway, NB Hurontario
1%	E	1%					NB Hurontario, EB Queensway
0%	E	0%					NB Hurontario, EB Queensway
0%	N			0%			NB Hurontario, EB Queensway
0%	N			0%			NB Hurontario, EB Queensway
1%	N			1%			WB Queensway, NB Hurontario
4%	W		4%				WB Queensway
4%	W		4%				WB Queensway
1%	W		1%				WB Queensway
0%	N			0%			WB Queensway, NB Hurontario
0%	N			1%			WB Queensway, NB Hurontario
0%	W		0%				WB Queensway
6%	W		6%				WB Queensway
0%	W		0%				WB Queensway, NB Hurontario
3%	N			3%			WB Queensway, NB Hurontario
1%	E	1%					NB Hurontario, EB Queensway
11%	E	11%					EB Queensway
0%	E	0%					EB Queensway
1%	E	1%					EB Queensway
0%	N			0%			WB Queensway, NB Hurontario
1%	W		1%				WB Queensway
3%	N			3%			WB Queensway, NB Hurontario
4%	W		4%				WB Queensway
1%	W		1%				WB Queensway
1%	W		1%			QEW	WB Queensway, SB Hurontario
0%	W		0%				WB Queensway
1%	W		1%				WB Queensway
1%	W		1%				WB Queensway
0%	W		0%				WB Queensway
100%	**TOTAL**	**32%**	**40%**	**27%**	**1%**		**100%**

Pull for PD36 only:

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

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,
and
Planning district of destination - pd_dest In 36,)

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 destinatio
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 In D, M, P, T, U,)
and
Planning district of origin - pd_orig In 36)

Origin	Destination									Trips from Origin	Trip Distribution		Trip Assignment					
	4602	4607	4609	4615	4625	4626	4633	4642	4644		Distribution	Direction From	From East	From West	From North	From South	Hwy	Assignment
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%		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%		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	0	16	0	0	16	1%	E	1%					WB Queensway
4447	0	11	0	0	0	0	0	0	0	11	0%	E	0%					WB Queensway
4467	0	0	11	0	0	0	0	0	0	11	0%	N			0%			SB Hurontario, EB Queensway
4473	0	0	0	0	0	64	0	0	0	64	3%	N			3%			SB Hurontario, EB Queensway
4474	0	0	0	0	0	15	0	0	0	15	1%	N			1%			SB Hurontario, EB Queensway
4475	0	0	0	11	0	0	0	0	0	11	0%	N			0%			SB Hurontario, EB Queensway
4478	0	11	0	0	0	0	0	11	0	22	1%	E	1%					WB Queensway
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%			SB Hurontario, EB Queensway
4580	0	0	9	0	0	0	0	0	0	9	0%	W		0%				EB Queensway
4581	0	0	24	0	0	0	0	0	0	24	1%	W		1%				EB Queensway
4583	0	0	0	0	0	26	0	0	0	26	1%	W		1%				EB Queensway
4595	0	0	231	0	0	0	0	0	0	231	10%	W		10%				EB Queensway
4601	0	0	15	0	0	0	0	0	0	15	1%	W		1%				EB Queensway
4604	0	0	10	0	0	0	0	0	0	10	0%	N			0%			SB Hurontario, EB Queensway
4607	0	8	0	0	0	0	0	0	0	8	0%	N			0%			SB Hurontario, EB Queensway
4608	0	0	0	0	0	42	0	0	0	42	2%	N			2%			SB Hurontario, EB Queensway
4609	0	0	10	0	0	0	7	0	0	17	1%	N			1%			SB Hurontario, EB Queensway
4612	0	0	0	0	0	0	0	22	0	22	1%	W		1%				EB Queensway
4613	0	0	0	0	0	0	0	0	22	22	1%	W		1%				EB Queensway
4617	0	0	0	0	0	24	0	0	0	24	1%	W		1%				EB Queensway
4618	0	0	0	0	0	0	0	5	0	5	0%	W		0%				SB Hurontario, EB Queensway
4619	0	0	36	0	0	0	0	0	0	36	2%	W		2%				SB Hurontario, EB Queensway
4622	0	0	8	0	0	0	0	0	0	8	0%	W		0%				SB Hurontario, EB Queensway
4625	0	0	12	0	0	0	0	0	0	12	1%	W		1%				SB Hurontario, EB Queensway
4626	0	0	39	0	0	125	0	0	0	164	7%	N			7%			SB Hurontario, EB Queensway
4629	0	31	29	11	0	23	131	0	6	231	10%	E	10%					NB Hurontario
4631	0	0	24	0	0	0	21	0	0	45	2%	E	2%					WB Queensway
4632	0	0	13	0	0	0	0	0	0	13	1%	N			1%			SB Hurontario, EB Queensway
4633	0	0	194	0	0	0	0	0	0	194	9%	N			9%			SB Hurontario, EB Queensway
4634	0	0	48	0	0	0	0	0	0	48	2%	E	2%					WB Queensway
4638	0	0	34	0	0	0	0	0	0	34	2%	N			2%			SB Hurontario, EB Queensway
4644	0	0	0	0	0	17	0	0	0	17	1%	W		1%				EB Queensway
4646	0	156	9	0	0	0	0	0	0	165	7%	N			7%			SB Hurontario, EB Queensway
4648	0	0	0	0	5	0	0	0	0	5	0%	N			0%			SB Hurontario, EB Queensway
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%				EB Queensway
4738	0	6	0	0	0	0	0	0	0	6	0%	N			0%			SB Hurontario, EB Queensway
4740	0	0	16	0	0	0	0	0	0	16	1%	W		1%				EB Queensway
										2264	100%	TOTAL	27%	37%	34%	3%		100%

Fri Feb 13 2026 10:59:56 GMT-0500 (Eastern Standard Time) - Run Time: 3551ms

Cross Tabulation Query Form - Trip - 2022

Row: Planning district of destination - pd_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,)

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		3%				WB Queensway, SB Hurontario
4354	8	0	0	0	0	6	0	0	0	14	1%	W		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%			WB Queensway, 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	0	22	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
										2263	**100%**	**TOTAL**	**23%**	**26%**	**42%**	**8%**		**100%**

Pull for PD36 only:

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

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
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)

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

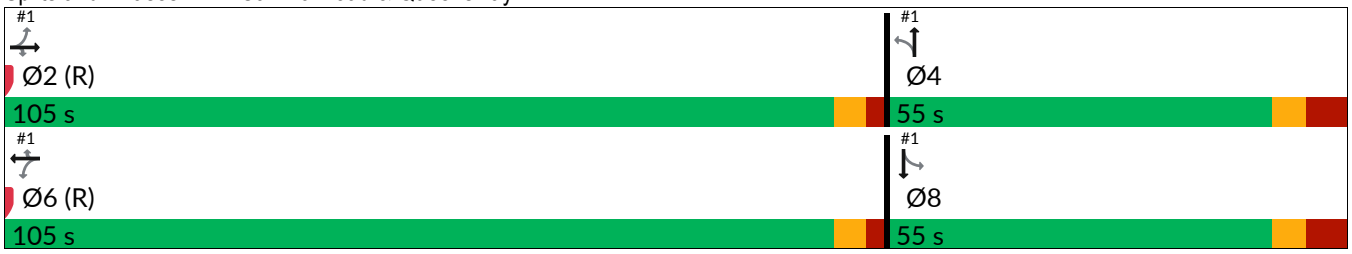
Existing Intersection Capacity Analysis



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		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	36.2	36.2	36.2	36.2	36.2	36.2	43.1	43.1	43.1	43.1
Total Split (s)	105.0	105.0	105.0	105.0	105.0	105.0	55.0	55.0	55.0	55.0
Total Split (%)	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%	34.4%	34.4%	34.4%	34.4%
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)	2.2	2.2	2.2	2.2	2.2	2.2	5.1	5.1	5.1	5.1
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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1	9.1	9.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	98.8	98.8	98.8	98.8	98.8	98.8	45.9	45.9	45.9	45.9
Actuated g/C Ratio	0.62	0.62	0.62	0.62	0.62	0.62	0.29	0.29	0.29	0.29
v/c Ratio	0.12	0.41	0.09	0.15	0.34	0.07	0.20	0.37	0.39	0.30
Control Delay (s/veh)	3.5	3.2	0.3	14.6	15.4	2.7	45.6	42.8	50.7	43.4
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)	3.5	3.2	0.3	14.6	15.4	2.7	45.6	42.8	50.7	43.4
LOS	A	A	A	B	B	A	D	D	D	D
Approach Delay (s/veh)		3.0			14.3			43.5		46.6
Approach LOS		A			B			D		D
Queue Length 50th (m)	0.8	9.4	0.2	5.6	53.6	0.0	14.6	39.4	27.3	34.0
Queue Length 95th (m)	2.2	14.0	0.1	11.8	65.3	5.8	27.7	61.1	45.7	53.9
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)	346	2119	910	305	2079	893	287	494	289	494
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	0.12	0.41	0.09	0.15	0.34	0.07	0.20	0.37	0.39	0.30

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 97 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 80		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.41		
Intersection Signal Delay (s/veh): 16.2	Intersection LOS: B	
Intersection Capacity Utilization 89.7%	ICU Level of Service E	
Analysis Period (min) 15		

Splits and Phases: 1: Camilla Road & Queensway



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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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	0.98	1.00	0.99		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	1406	1477	1675		1626	1700	
Flt Permitted	0.34	1.00	1.00	0.28	1.00	1.00	0.64	1.00		0.59	1.00	
Satd. Flow (perm)	562	3433	1422	494	3368	1406	1003	1675		1010	1700	
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	32	0	0	25	0	14	0	0	7	0
Lane Group Flow (vph)	40	867	52	47	709	40	58	168	0	113	142	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	98.8	98.8	98.8	98.8	98.8	98.8	45.9	45.9		45.9	45.9	
Effective Green, g (s)	98.8	98.8	98.8	98.8	98.8	98.8	45.9	45.9		45.9	45.9	
Actuated g/C Ratio	0.62	0.62	0.62	0.62	0.62	0.62	0.29	0.29		0.29	0.29	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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)	347	2119	878	305	2079	868	287	480		289	487	
v/s Ratio Prot		c0.25			0.21			0.10			0.08	
v/s Ratio Perm	0.07		0.04	0.10		0.03	0.06			c0.11		
v/c Ratio	0.12	0.41	0.06	0.15	0.34	0.05	0.20	0.35		0.39	0.29	
Uniform Delay, d1	12.6	15.7	12.1	12.9	14.8	12.0	43.2	45.2		45.8	44.4	
Progression Factor	0.22	0.17	0.03	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.6	0.1	1.1	0.4	0.1	1.6	2.0		3.9	1.5	
Delay (s)	3.4	3.2	0.5	14.0	15.3	12.1	44.8	47.2		49.8	45.9	
Level of Service	A	A	A	B	B	B	D	D		D	D	
Approach Delay (s/veh)		3.0			15.0			46.6			47.6	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.3
Intersection Capacity Utilization	89.7%	ICU Level of Service	E
Analysis Period (min)	15		

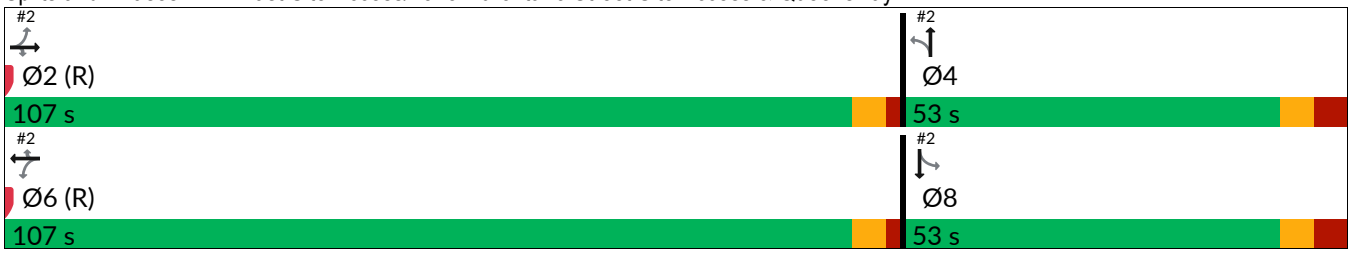
c Critical Lane Group

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		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	43.0	43.0	43.0	43.0	43.0	43.0	47.1	47.1	47.1	47.1
Total Split (s)	107.0	107.0	107.0	107.0	107.0	107.0	53.0	53.0	53.0	53.0
Total Split (%)	66.9%	66.9%	66.9%	66.9%	66.9%	66.9%	33.1%	33.1%	33.1%	33.1%
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	4.1	4.1	4.1	4.1
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		8.1		8.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9		44.9
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28		0.28
v/c Ratio	0.06	0.29	0.03	0.08	0.35	0.04		0.17		0.16
Control Delay (s/veh)	4.9	4.2	0.1	10.3	11.3	2.1		15.6		33.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	4.9	4.2	0.1	10.3	11.3	2.1		15.6		33.2
LOS	A	A	A	B	B	A		B		C
Approach Delay (s/veh)		4.1			10.9			15.6		33.2
Approach LOS		A			B			B		C
Queue Length 50th (m)	0.8	12.3	0.0	2.2	38.0	0.1		4.3		10.5
Queue Length 95th (m)	m1.4	15.1	m0.0	5.1	44.1	1.8		16.5		22.4
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)	333	3113	964	316	2126	925		472		412
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	0.06	0.29	0.03	0.08	0.35	0.04		0.17		0.16

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 82 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay (s/veh): 8.4	Intersection LOS: A
Intersection Capacity Utilization 65.1%	ICU Level of Service C
Analysis Period (min) 15	

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

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



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		8.1			8.1	
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	0.99		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		0.90			0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99			0.97	
Satd. Flow (prot)	1512	4932	1507	1685	3368	1445		1643			1686	
Flt Permitted	0.33	1.00	1.00	0.28	1.00	1.00		0.92			0.82	
Satd. Flow (perm)	528	4932	1507	502	3368	1445		1533			1426	
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	12	0	0	13	0	42	0	0	12	0
Lane Group Flow (vph)	21	899	20	24	742	22	0	37	0	0	53	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Effective Green, g (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28			0.28	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		8.1			8.1	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	333	3113	951	316	2126	912		430			400	
v/s Ratio Prot		0.18			c0.22							
v/s Ratio Perm	0.04		0.01	0.05		0.02		0.02			c0.04	
v/c Ratio	0.06	0.29	0.02	0.08	0.35	0.02		0.09			0.13	
Uniform Delay, d1	11.3	13.3	11.0	11.4	14.0	11.0		42.4			43.0	
Progression Factor	0.39	0.30	0.02	0.83	0.77	0.63		1.00			1.00	
Incremental Delay, d2	0.3	0.2	0.0	0.4	0.4	0.0		0.4			0.7	
Delay (s)	4.8	4.2	0.2	10.0	11.2	7.0		42.8			43.7	
Level of Service	A	A	A	A	B	A		D			D	
Approach Delay (s/veh)		4.1			11.0			42.8			43.7	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.1
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

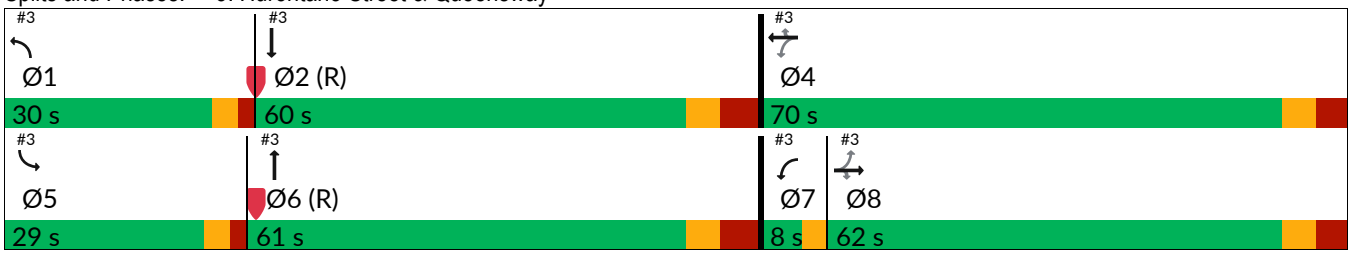


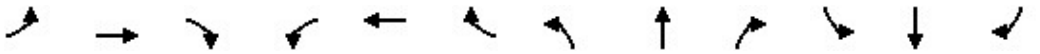
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	43	695	402	104	555	69	407	458	59	449
Future Volume (vph)	43	695	402	104	555	69	407	458	59	449
Lane Group Flow (vph)	47	755	437	113	603	75	442	630	64	622
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8		7	4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	5.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	62.0	62.0	62.0	8.0	61.8	61.8	13.0	61.0	13.0	60.0
Total Split (s)	62.0	62.0	62.0	8.0	70.0	70.0	30.0	61.0	29.0	60.0
Total Split (%)	38.8%	38.8%	38.8%	5.0%	43.8%	43.8%	18.8%	38.1%	18.1%	37.5%
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)	3.8	3.8	3.8	0.0	3.8	3.8	2.0	4.7	2.0	4.7
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)	7.8	7.8	7.8	3.0	7.8	7.8	5.0	8.7	5.0	8.7
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)	54.2	54.2	54.2	67.0	62.2	62.2	24.9	65.4	13.7	51.4
Actuated g/C Ratio	0.34	0.34	0.34	0.42	0.39	0.39	0.16	0.41	0.09	0.32
v/c Ratio	0.25	0.64	0.57	0.64	0.32	0.13	0.91	0.47	0.47	0.59
Control Delay (s/veh)	42.7	47.6	6.9	57.2	42.7	15.9	95.0	42.5	79.9	46.4
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)	42.7	47.6	6.9	57.2	42.7	15.9	95.0	42.5	79.9	46.4
LOS	D	D	A	E	D	B	F	D	E	D
Approach Delay (s/veh)		33.1			42.2			64.2		49.5
Approach LOS		C			D			E		D
Queue Length 50th (m)	12.6	100.2	2.2	18.2	38.3	1.9	73.5	61.8	19.1	82.1
Queue Length 95th (m)	26.4	120.8	28.8	32.8	48.4	12.8	#101.0	92.2	33.6	102.1
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)	189	1185	762	177	1881	583	486	1330	240	1059
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.64	0.57	0.64	0.32	0.13	0.91	0.47	0.27	0.59

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 19 (12%), Referenced to phase 2:SBT and 6:NBT, Start of Green		
Natural Cycle: 145		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.91		
Intersection Signal Delay (s/veh): 46.7	Intersection LOS: D	
Intersection Capacity Utilization 130.2%	ICU Level of Service H	
Analysis Period (min) 15		

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

Splits and Phases: 3: Hurontario Street & Queensway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	695	402	104	555	69	407	458	121	59	449	123
Future Volume (vph)	43	695	402	104	555	69	407	458	121	59	449	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)	7.8	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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	0.98	1.00	1.00	0.95	1.00	0.98		1.00	1.00	
Flpb, ped/bikes	0.98	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)	1285	3500	1420	1558	4839	1384	3113	3221		1604	3253	
Flt Permitted	0.41	1.00	1.00	0.20	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	559	3500	1420	335	4839	1384	3113	3221		1604	3253	
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	437	113	603	75	442	498	132	64	488	134
RTOR Reduction (vph)	0	0	282	0	0	46	0	13	0	0	16	0
Lane Group Flow (vph)	47	755	155	113	603	29	442	617	0	64	606	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		8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)	54.2	54.2	54.2	62.2	62.2	62.2	24.9	64.4		11.9	51.4	
Effective Green, g (s)	54.2	54.2	54.2	62.2	62.2	62.2	24.9	64.4		11.9	51.4	
Actuated g/C Ratio	0.34	0.34	0.34	0.39	0.39	0.39	0.16	0.40		0.07	0.32	
Clearance Time (s)	7.8	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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)	189	1185	481	168	1881	538	484	1296		119	1045	
v/s Ratio Prot		0.22		c0.02	0.12		c0.14	0.19		0.04	c0.19	
v/s Ratio Perm	0.08		0.11	c0.24		0.02						
v/c Ratio	0.25	0.64	0.32	0.67	0.32	0.05	0.91	0.48		0.54	0.58	
Uniform Delay, d1	38.2	44.6	39.3	41.8	34.1	30.5	66.5	35.3		71.4	45.3	
Progression Factor	1.00	1.00	1.00	1.24	1.23	2.50	1.10	1.19		1.00	1.00	
Incremental Delay, d2	3.1	2.6	1.8	12.5	0.4	0.2	21.6	1.2		8.3	2.4	
Delay (s)	41.3	47.2	41.1	64.3	42.5	76.6	94.6	43.1		79.7	47.7	
Level of Service	D	D	D	E	D	E	F	D		E	D	
Approach Delay (s/veh)		44.8			48.8			64.3			50.6	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	52.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	130.2%	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	955
Future Vol, veh/h	0	30	956	9	0	955
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	1038

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	NBR	WBLn1	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	-

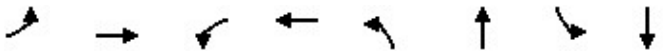
Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	945	9	0	955
Future Vol, veh/h	0	20	945	9	0	955
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	1038

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	NBR	WBLn1	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	-

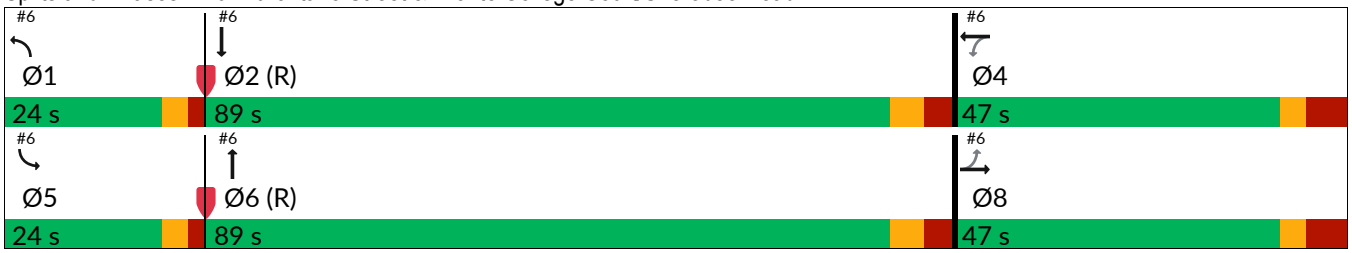


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	33	6	21	14	102	784	42	895
Future Volume (vph)	33	6	21	14	102	784	42	895
Lane Group Flow (vph)	36	43	23	164	111	856	46	993
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
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	15.5	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)	3.0	3.0	3.0	3.0	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)	8.0	8.0	8.0	8.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	39.0	39.0	39.0	39.0	16.6	91.4	11.7	83.9
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.10	0.57	0.07	0.52
v/c Ratio	0.14	0.10	0.08	0.33	0.64	0.42	0.37	0.53
Control Delay (s/veh)	49.5	17.3	47.6	10.8	85.1	21.0	96.0	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.5	17.3	47.6	10.8	85.1	21.0	96.0	16.3
LOS	D	B	D	B	F	C	F	B
Approach Delay (s/veh)		31.9		15.3		28.4		19.8
Approach LOS		C		B		C		B
Queue Length 50th (m)	8.3	1.6	5.3	3.4	31.5	75.1	13.8	66.6
Queue Length 95th (m)	18.1	11.3	12.6	21.3	50.9	94.9	m23.8	99.3
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)	249	417	306	503	200	2035	200	1867
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.10	0.08	0.33	0.56	0.42	0.23	0.53

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 38 (24%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay (s/veh): 23.5	Intersection LOS: C
Intersection Capacity Utilization 81.6%	ICU Level of Service D
Analysis Period (min) 15	

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

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



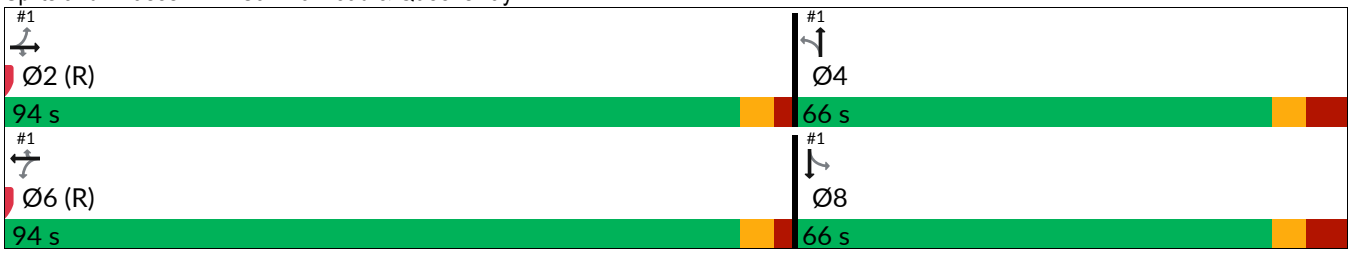
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	6	33	21	14	137	102	784	4	42	895	18
Future Volume (vph)	33	6	33	21	14	137	102	784	4	42	895	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	8.0	8.0		8.0	8.0		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	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		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	1604		1640	1603		1685	3566		1685	3558	
Flt Permitted	0.58	1.00		0.73	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1025	1604		1258	1603		1685	3566		1685	3558	
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	46	973	20
RTOR Reduction (vph)	0	27	0	0	113	0	0	0	0	0	1	0
Lane Group Flow (vph)	36	16	0	23	51	0	111	856	0	46	992	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		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)	39.0	39.0		39.0	39.0		16.6	90.4		10.1	83.9	
Effective Green, g (s)	39.0	39.0		39.0	39.0		16.6	90.4		10.1	83.9	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.10	0.57		0.06	0.52	
Clearance Time (s)	8.0	8.0		8.0	8.0		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)	249	390		306	390		174	2014		106	1865	
v/s Ratio Prot		0.01			0.03		c0.07	0.24		0.03	c0.28	
v/s Ratio Perm	c0.04			0.02								
v/c Ratio	0.14	0.04		0.08	0.13		0.64	0.43		0.43	0.53	
Uniform Delay, d1	47.4	46.2		46.6	47.3		68.8	19.9		72.2	25.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.27	0.60	
Incremental Delay, d2	1.2	0.2		0.5	0.7		10.2	0.7		4.8	0.9	
Delay (s)	48.6	46.4		47.1	48.0		79.0	20.6		96.8	16.0	
Level of Service	D	D		D	D		E	C		F	B	
Approach Delay (s/veh)		47.4			47.9			27.3			19.6	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	31	880	67	50	1014	94	34	59	74	78
Future Volume (vph)	31	880	67	50	1014	94	34	59	74	78
Lane Group Flow (vph)	34	957	73	54	1102	102	37	99	80	163
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	36.2	36.2	36.2	36.2	36.2	36.2	43.1	43.1	43.1	43.1
Total Split (s)	94.0	94.0	94.0	94.0	94.0	94.0	66.0	66.0	66.0	66.0
Total Split (%)	58.8%	58.8%	58.8%	58.8%	58.8%	58.8%	41.3%	41.3%	41.3%	41.3%
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)	2.2	2.2	2.2	2.2	2.2	2.2	5.1	5.1	5.1	5.1
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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1	9.1	9.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	87.8	87.8	87.8	87.8	87.8	87.8	56.9	56.9	56.9	56.9
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55	0.36	0.36	0.36	0.36
v/c Ratio	0.20	0.50	0.09	0.25	0.57	0.12	0.09	0.16	0.19	0.26
Control Delay (s/veh)	13.9	12.4	1.2	22.6	25.1	3.1	35.4	29.0	37.1	30.5
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)	13.9	12.4	1.2	22.6	25.1	3.1	35.4	29.0	37.1	30.5
LOS	B	B	A	C	C	A	D	C	D	C
Approach Delay (s/veh)		11.6			23.2			30.8		32.7
Approach LOS		B			C			C		C
Queue Length 50th (m)	2.1	32.9	0.2	8.1	109.5	0.0	7.2	16.1	16.4	28.1
Queue Length 95th (m)	5.5	45.2	2.0	17.2	128.1	8.2	15.4	29.4	29.0	46.3
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)	171	1920	843	218	1939	860	401	634	428	618
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	0.20	0.50	0.09	0.25	0.57	0.12	0.09	0.16	0.19	0.26

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 94 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay (s/veh): 19.9	Intersection LOS: B
Intersection Capacity Utilization 80.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Camilla Road & Queensway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	880	67	50	1014	94	34	59	32	74	78	72
Future Volume (vph)	31	880	67	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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		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)	1685	3500	1478	1685	3535	1485	1677	1750		1652	1680	
Flt Permitted	0.18	1.00	1.00	0.22	1.00	1.00	0.64	1.00		0.69	1.00	
Satd. Flow (perm)	312	3500	1478	398	3535	1485	1131	1750		1205	1680	
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	957	73	54	1102	102	37	64	35	80	85	78
RTOR Reduction (vph)	0	0	33	0	0	46	0	12	0	0	21	0
Lane Group Flow (vph)	34	957	40	54	1102	56	37	87	0	80	142	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	87.8	87.8	87.8	87.8	87.8	87.8	56.9	56.9		56.9	56.9	
Effective Green, g (s)	87.8	87.8	87.8	87.8	87.8	87.8	56.9	56.9		56.9	56.9	
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55	0.36	0.36		0.36	0.36	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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)	171	1920	811	218	1939	814	402	622		428	597	
v/s Ratio Prot		0.27			c0.31			0.05			c0.08	
v/s Ratio Perm	0.11		0.03	0.14		0.04	0.03			0.07		
v/c Ratio	0.20	0.50	0.05	0.25	0.57	0.07	0.09	0.14		0.19	0.24	
Uniform Delay, d1	18.3	22.4	16.7	18.9	23.7	16.9	34.3	35.0		35.6	36.3	
Progression Factor	0.58	0.51	0.30	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.5	0.9	0.1	2.7	1.2	0.2	0.5	0.5		1.0	0.9	
Delay (s)	13.2	12.2	5.1	21.5	24.9	17.1	34.8	35.4		36.5	37.2	
Level of Service	B	B	A	C	C	B	C	D		D	D	
Approach Delay (s/veh)		11.8			24.1			35.2			37.0	
Approach LOS		B			C			D			D	

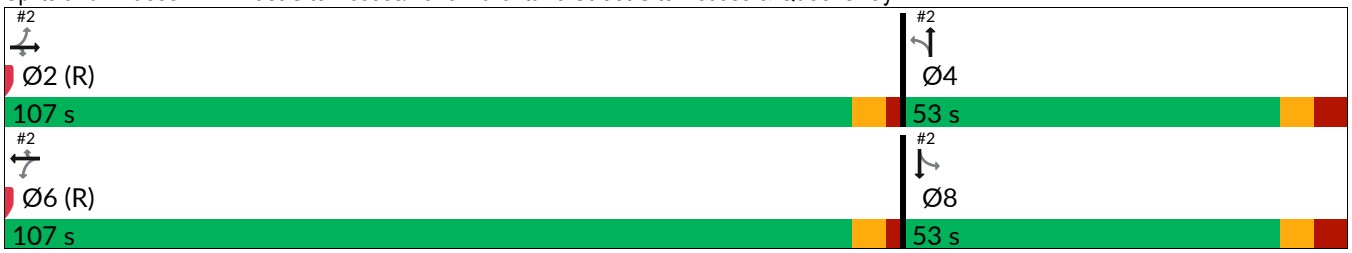
Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.3
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	16	901	66	74	1018	28	9	2	27	9
Future Volume (vph)	16	901	66	74	1018	28	9	2	27	9
Lane Group Flow (vph)	17	979	72	80	1107	30	0	66	0	57
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	43.0	43.0	43.0	43.0	43.0	43.0	47.1	47.1	47.1	47.1
Total Split (s)	107.0	107.0	107.0	107.0	107.0	107.0	53.0	53.0	53.0	53.0
Total Split (%)	66.9%	66.9%	66.9%	66.9%	66.9%	66.9%	33.1%	33.1%	33.1%	33.1%
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	4.1	4.1	4.1	4.1
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		8.1		8.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9		44.9
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28		0.28
v/c Ratio	0.08	0.31	0.07	0.28	0.50	0.03		0.13		0.13
Control Delay (s/veh)	6.6	6.7	0.4	7.3	5.9	0.2		14.1		33.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	6.6	6.7	0.4	7.3	5.9	0.2		14.1		33.8
LOS	A	A	A	A	A	A		B		C
Approach Delay (s/veh)		6.3			5.9			14.1		33.8
Approach LOS		A			A			B		C
Queue Length 50th (m)	0.9	20.0	0.0	2.9	21.8	0.1		2.6		9.4
Queue Length 95th (m)	m1.6	23.7	m0.6	5.1	24.8	m0.2		13.7		20.4
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)	224	3174	977	286	2231	925		490		425
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	0.08	0.31	0.07	0.28	0.50	0.03		0.13		0.13

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 97 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay (s/veh): 6.9	Intersection LOS: A
Intersection Capacity Utilization 59.5%	ICU Level of Service B
Analysis Period (min) 15	

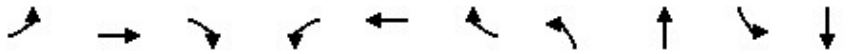
m Volume for 95th percentile queue is metered by upstream signal.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	901	66	74	1018	28	9	2	50	27	9	17
Future Volume (vph)	16	901	66	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		8.1			8.1	
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	1.00		1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00			1.00	
Frt	1.00	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	1445		1659			1719	
Flt Permitted	0.20	1.00	1.00	0.26	1.00	1.00		0.96			0.84	
Satd. Flow (perm)	356	5029	1507	454	3535	1445		1608			1483	
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	979	72	80	1107	30	10	2	54	29	10	18
RTOR Reduction (vph)	0	0	26	0	0	11	0	39	0	0	10	0
Lane Group Flow (vph)	17	979	46	80	1107	19	0	27	0	0	47	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Effective Green, g (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28			0.28	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		8.1			8.1	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	224	3174	951	286	2231	912		451			416	
v/s Ratio Prot		0.19			c0.31							
v/s Ratio Perm	0.05		0.03	0.18		0.01		0.02			c0.03	
v/c Ratio	0.08	0.31	0.05	0.28	0.50	0.02		0.06			0.11	
Uniform Delay, d1	11.4	13.5	11.2	13.2	15.8	11.0		42.1			42.8	
Progression Factor	0.51	0.48	0.13	0.38	0.33	0.06		1.00			1.00	
Incremental Delay, d2	0.5	0.2	0.1	2.1	0.7	0.0		0.3			0.5	
Delay (s)	6.3	6.6	1.5	7.1	5.9	0.7		42.4			43.3	
Level of Service	A	A	A	A	A	A		D			D	
Approach Delay (s/veh)		6.3			5.8			42.4			43.3	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.1
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

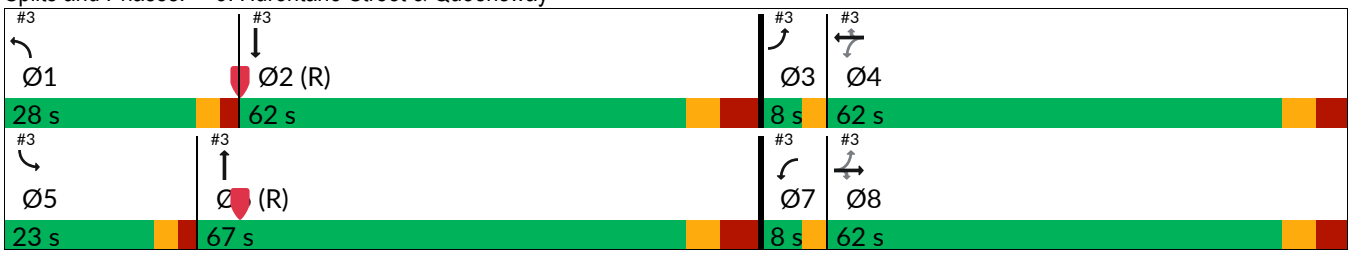


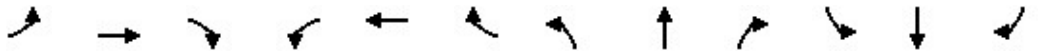
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	42	713	388	142	826	76	316	491	81	543
Future Volume (vph)	42	713	388	142	826	76	316	491	81	543
Lane Group Flow (vph)	46	775	422	154	898	83	343	739	88	693
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases	3	8		7	4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	3	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	8.0	62.0	62.0	8.0	61.8	61.8	13.0	61.0	13.0	60.0
Total Split (s)	8.0	62.0	62.0	8.0	62.0	62.0	28.0	67.0	23.0	62.0
Total Split (%)	5.0%	38.8%	38.8%	5.0%	38.8%	38.8%	17.5%	41.9%	14.4%	38.8%
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)	0.0	3.8	3.8	0.0	3.8	3.8	2.0	4.7	2.0	4.7
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)	3.0	7.8	7.8	3.0	7.8	7.8	5.0	8.7	5.0	8.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes									
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	64.0	54.2	54.2	64.6	55.8	55.8	21.8	61.3	15.0	54.5
Actuated g/C Ratio	0.40	0.34	0.34	0.40	0.35	0.35	0.14	0.38	0.09	0.34
v/c Ratio	0.28	0.65	0.59	0.84	0.50	0.15	0.78	0.58	0.56	0.59
Control Delay (s/veh)	32.9	48.1	12.9	64.7	30.1	4.5	87.0	25.5	82.8	45.4
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)	32.9	48.1	12.9	64.7	30.1	4.5	87.0	25.5	82.8	45.4
LOS	C	D	B	E	C	A	F	C	F	D
Approach Delay (s/veh)		35.6			32.9			45.0		49.6
Approach LOS		D			C			D		D
Queue Length 50th (m)	9.7	103.5	19.0	16.7	32.2	0.3	38.7	91.3	25.3	89.4
Queue Length 95th (m)	19.3	124.8	52.4	#36.3	60.0	7.1	58.1	114.6	42.4	109.2
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)	163	1185	714	184	1788	564	465	1285	187	1174
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	0.65	0.59	0.84	0.50	0.15	0.74	0.58	0.47	0.59

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 39 (24%), Referenced to phase 2:SBT and 6:NBT, Start of Green		
Natural Cycle: 145		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.84		
Intersection Signal Delay (s/veh): 39.9	Intersection LOS: D	
Intersection Capacity Utilization 125.6%	ICU Level of Service H	
Analysis Period (min) 15		

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

Splits and Phases: 3: Hurontario Street & Queensway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	713	388	142	826	76	316	491	189	81	543	95
Future Volume (vph)	42	713	388	142	826	76	316	491	189	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)	3.0	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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	0.98	1.00	1.00	0.96	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	1459	1666	5129	1446	3236	3296		1668	3424	
Flt Permitted	0.22	1.00	1.00	0.20	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	328	3500	1459	358	5129	1446	3236	3296		1668	3424	
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	343	534	205	88	590	103
RTOR Reduction (vph)	0	0	219	0	0	54	0	24	0	0	9	0
Lane Group Flow (vph)	46	775	203	154	898	29	343	715	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	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)	58.8	54.8	54.8	60.8	55.8	55.8	21.8	60.7		15.0	53.9	
Effective Green, g (s)	58.8	54.8	54.8	60.8	55.8	55.8	21.8	60.7		15.0	53.9	
Actuated g/C Ratio	0.37	0.34	0.34	0.38	0.35	0.35	0.14	0.38		0.09	0.34	
Clearance Time (s)	3.0	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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)	147	1198	499	176	1788	504	440	1250		156	1153	
v/s Ratio Prot	0.01	0.22		c0.03	0.18		c0.11	c0.22		0.05	0.20	
v/s Ratio Perm	0.11		0.14	c0.30		0.02						
v/c Ratio	0.31	0.65	0.41	0.88	0.50	0.06	0.78	0.57		0.56	0.59	
Uniform Delay, d1	33.8	44.4	40.2	48.0	41.1	34.6	66.8	39.4		69.4	44.0	
Progression Factor	1.00	1.00	1.00	0.88	0.70	0.81	1.13	0.63		1.00	1.00	
Incremental Delay, d2	2.5	2.7	2.5	34.2	0.9	0.2	9.1	1.7		7.5	2.3	
Delay (s)	36.4	47.1	42.6	76.3	29.7	28.1	84.4	26.7		76.9	46.2	
Level of Service	D	D	D	E	C	C	F	C		E	D	
Approach Delay (s/veh)		45.2			35.9			45.0			49.7	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	43.5	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)	24.5
Intersection Capacity Utilization	125.6%	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	983	8	0	1073
Future Vol, veh/h	0	13	983	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	1068	9	0	1166

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	560	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	477	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	469	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	469	-
HCM Lane V/C Ratio	-	-	0.03	-
HCM Ctrl Dly (s/v)	-	-	12.9	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q (veh)	-	-	0.1	-

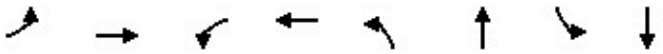
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	986	14	0	1073
Future Vol, veh/h	0	5	986	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	1072	15	0	1166

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	567	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	472	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	464	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	464	-
HCM Lane V/C Ratio	-	-	0.012	-
HCM Ctrl Dly (s/v)	-	-	12.9	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q (veh)	-	-	0	-

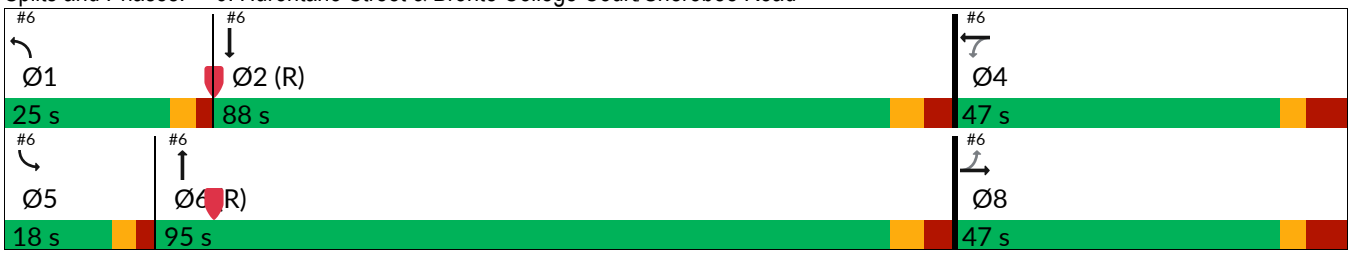


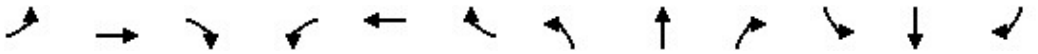
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	83	6	13	10	35	830	107	942
Future Volume (vph)	83	6	13	10	35	830	107	942
Lane Group Flow (vph)	90	217	14	106	38	910	116	1050
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
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	15.5	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)	3.0	3.0	3.0	3.0	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)	8.0	8.0	8.0	8.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	None	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	39.0	39.0	39.0	39.0	11.3	87.5	13.0	91.8
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.07	0.55	0.08	0.57
v/c Ratio	0.31	0.41	0.07	0.24	0.34	0.49	0.86	0.53
Control Delay (s/veh)	53.3	9.0	48.2	12.2	78.2	23.4	105.1	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.3	9.0	48.2	12.2	78.2	23.4	105.1	22.6
LOS	D	A	D	B	E	C	F	C
Approach Delay (s/veh)		22.0		16.4		25.6		30.8
Approach LOS		C		B		C		C
Queue Length 50th (m)	22.4	1.6	3.4	2.5	11.5	87.3	35.8	86.7
Queue Length 95th (m)	39.0	21.7	9.9	16.9	23.2	104.0	m#64.9	127.1
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)	286	530	187	449	198	1875	135	1963
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	0.31	0.41	0.07	0.24	0.19	0.49	0.86	0.53

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 3 (2%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 27.1	Intersection LOS: C
Intersection Capacity Utilization 83.1%	ICU Level of Service E
Analysis Period (min) 15	

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





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	6	193	13	10	87	35	830	7	107	942	24
Future Volume (vph)	83	6	193	13	10	87	35	830	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)	8.0	8.0		8.0	8.0		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	
Frpb, ped/bikes	1.00	0.95		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	1524		1506	1550		1589	3427		1668	3421	
Flt Permitted	0.69	1.00		0.49	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1173	1524		769	1550		1589	3427		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)	90	7	210	14	11	95	38	902	8	116	1024	26
RTOR Reduction (vph)	0	159	0	0	72	0	0	0	0	0	1	0
Lane Group Flow (vph)	90	58	0	14	34	0	38	910	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		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)	39.0	39.0		39.0	39.0		9.7	87.5		13.0	90.8	
Effective Green, g (s)	39.0	39.0		39.0	39.0		9.7	87.5		13.0	90.8	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.06	0.55		0.08	0.57	
Clearance Time (s)	8.0	8.0		8.0	8.0		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)	285	371		187	377		96	1874		135	1941	
v/s Ratio Prot		0.04			0.02		0.02	0.27		c0.07	c0.31	
v/s Ratio Perm	c0.08			0.02								
v/c Ratio	0.32	0.16		0.07	0.09		0.40	0.49		0.86	0.54	
Uniform Delay, d1	49.6	47.6		46.6	46.8		72.3	22.4		72.6	21.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.92	0.99	
Incremental Delay, d2	1.3	0.4		0.8	0.5		5.5	0.9		34.6	0.8	
Delay (s)	50.9	48.0		47.4	47.3		77.9	23.3		101.0	22.2	
Level of Service	D	D		D	D		E	C		F	C	
Approach Delay (s/veh)		48.8			47.3			25.5			30.0	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX I

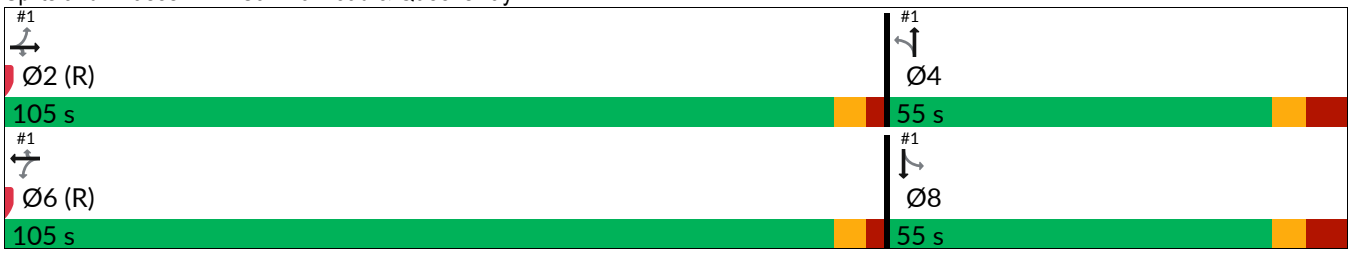
Future Background Intersection Capacity Analysis



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	37	837	77	43	668	60	53	103	104	105
Future Volume (vph)	37	837	77	43	668	60	53	103	104	105
Lane Group Flow (vph)	40	910	84	47	726	65	58	182	113	149
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Minimum Split (s)	36.2	36.2	36.2	36.2	36.2	36.2	43.1	43.1	43.1	43.1
Total Split (s)	105.0	105.0	105.0	105.0	105.0	105.0	55.0	55.0	55.0	55.0
Total Split (%)	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%	34.4%	34.4%	34.4%	34.4%
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)	2.2	2.2	2.2	2.2	2.2	2.2	5.1	5.1	5.1	5.1
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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1	9.1	9.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	98.8	98.8	98.8	98.8	98.8	98.8	45.9	45.9	45.9	45.9
Actuated g/C Ratio	0.62	0.62	0.62	0.62	0.62	0.62	0.29	0.29	0.29	0.29
v/c Ratio	0.12	0.43	0.09	0.16	0.35	0.07	0.20	0.37	0.39	0.30
Control Delay (s/veh)	3.0	5.8	0.3	14.8	15.5	2.7	45.6	42.8	50.7	43.4
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)	3.0	5.8	0.3	14.8	15.5	2.7	45.6	42.8	50.7	43.4
LOS	A	A	A	B	B	A	D	D	D	D
Approach Delay (s/veh)		5.2			14.5			43.5		46.6
Approach LOS		A			B			D		D
Queue Length 50th (m)	0.7	27.0	0.2	5.6	55.3	0.0	14.6	39.4	27.3	34.0
Queue Length 95th (m)	1.9	23.7	0.0	12.0	67.0	5.8	27.7	61.1	45.7	53.9
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)	339	2119	910	287	2079	893	287	494	289	494
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	0.12	0.43	0.09	0.16	0.35	0.07	0.20	0.37	0.39	0.30

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 97 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay (s/veh): 16.9	Intersection LOS: B
Intersection Capacity Utilization 109.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: Camilla Road & Queensway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	837	77	43	668	60	53	103	64	104	105	32
Future Volume (vph)	37	837	77	43	668	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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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	0.98	1.00	0.99		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	1406	1477	1675		1626	1700	
Flt Permitted	0.34	1.00	1.00	0.26	1.00	1.00	0.64	1.00		0.59	1.00	
Satd. Flow (perm)	549	3433	1422	466	3368	1406	1003	1675		1010	1700	
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	910	84	47	726	65	58	112	70	113	114	35
RTOR Reduction (vph)	0	0	32	0	0	25	0	14	0	0	7	0
Lane Group Flow (vph)	40	910	52	47	726	40	58	168	0	113	142	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	98.8	98.8	98.8	98.8	98.8	98.8	45.9	45.9		45.9	45.9	
Effective Green, g (s)	98.8	98.8	98.8	98.8	98.8	98.8	45.9	45.9		45.9	45.9	
Actuated g/C Ratio	0.62	0.62	0.62	0.62	0.62	0.62	0.29	0.29		0.29	0.29	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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)	339	2119	878	287	2079	868	287	480		289	487	
v/s Ratio Prot		c0.27			0.22			0.10			0.08	
v/s Ratio Perm	0.07		0.04	0.10		0.03	0.06			c0.11		
v/c Ratio	0.12	0.43	0.06	0.16	0.35	0.05	0.20	0.35		0.39	0.29	
Uniform Delay, d1	12.6	15.9	12.1	13.0	14.9	12.0	43.2	45.2		45.8	44.4	
Progression Factor	0.18	0.32	0.03	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.6	0.1	1.2	0.5	0.1	1.6	2.0		3.9	1.5	
Delay (s)	2.9	5.7	0.5	14.2	15.4	12.1	44.8	47.2		49.8	45.9	
Level of Service	A	A	A	B	B	B	D	D		D	D	
Approach Delay (s/veh)		5.2			15.1			46.6			47.6	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.6	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)	15.3
Intersection Capacity Utilization	109.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

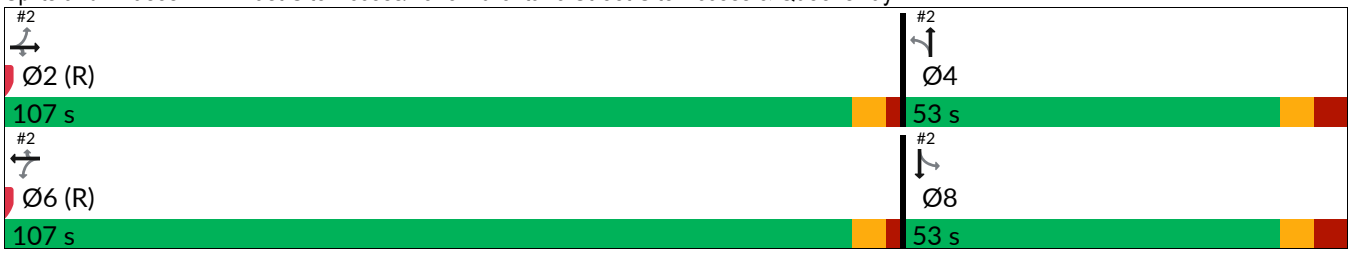


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	19	867	29	22	700	32	18	0	31	7
Future Volume (vph)	19	867	29	22	700	32	18	0	31	7
Lane Group Flow (vph)	21	942	32	24	761	35	0	79	0	65
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	43.0	43.0	43.0	43.0	43.0	43.0	47.1	47.1	47.1	47.1
Total Split (s)	107.0	107.0	107.0	107.0	107.0	107.0	53.0	53.0	53.0	53.0
Total Split (%)	66.9%	66.9%	66.9%	66.9%	66.9%	66.9%	33.1%	33.1%	33.1%	33.1%
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	4.1	4.1	4.1	4.1
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		8.1		8.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9		44.9
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28		0.28
v/c Ratio	0.06	0.30	0.03	0.08	0.36	0.04		0.17		0.16
Control Delay (s/veh)	26.3	33.2	16.8	10.4	11.3	2.1		15.6		33.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	26.3	33.2	16.8	10.4	11.3	2.1		15.6		33.2
LOS	C	C	B	B	B	A		B		C
Approach Delay (s/veh)		32.6			10.9			15.6		33.2
Approach LOS		C			B			B		C
Queue Length 50th (m)	5.4	95.2	3.8	2.1	38.8	0.1		4.3		10.5
Queue Length 95th (m)	m9.4	106.2	m9.0	5.1	44.8	1.8		16.5		22.4
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)	325	3113	964	299	2126	925		472		412
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	0.06	0.30	0.03	0.08	0.36	0.04		0.17		0.16

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 82 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.36	
Intersection Signal Delay (s/veh): 22.8	Intersection LOS: C
Intersection Capacity Utilization 69.3%	ICU Level of Service C
Analysis Period (min) 15	

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	867	29	22	700	32	18	0	54	31	7	21
Future Volume (vph)	19	867	29	22	700	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		8.1			8.1	
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	0.99		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		0.90			0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99			0.97	
Satd. Flow (prot)	1512	4932	1507	1685	3368	1445		1643			1686	
Flt Permitted	0.32	1.00	1.00	0.27	1.00	1.00		0.92			0.82	
Satd. Flow (perm)	516	4932	1507	476	3368	1445		1533			1426	
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	942	32	24	761	35	20	0	59	34	8	23
RTOR Reduction (vph)	0	0	12	0	0	13	0	42	0	0	12	0
Lane Group Flow (vph)	21	942	20	24	761	22	0	37	0	0	53	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Effective Green, g (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28			0.28	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		8.1			8.1	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	325	3113	951	300	2126	912		430			400	
v/s Ratio Prot		0.19			c0.23							
v/s Ratio Perm	0.04		0.01	0.05		0.02		0.02			c0.04	
v/c Ratio	0.06	0.30	0.02	0.08	0.36	0.02		0.09			0.13	
Uniform Delay, d1	11.3	13.4	11.0	11.5	14.1	11.0		42.4			43.0	
Progression Factor	2.22	2.45	5.83	0.84	0.77	0.62		1.00			1.00	
Incremental Delay, d2	0.3	0.2	0.0	0.5	0.5	0.0		0.4			0.7	
Delay (s)	25.5	33.1	64.3	10.1	11.3	6.9		42.8			43.7	
Level of Service	C	C	E	B	B	A		D			D	
Approach Delay (s/veh)		33.9			11.0			42.8			43.7	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.1
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

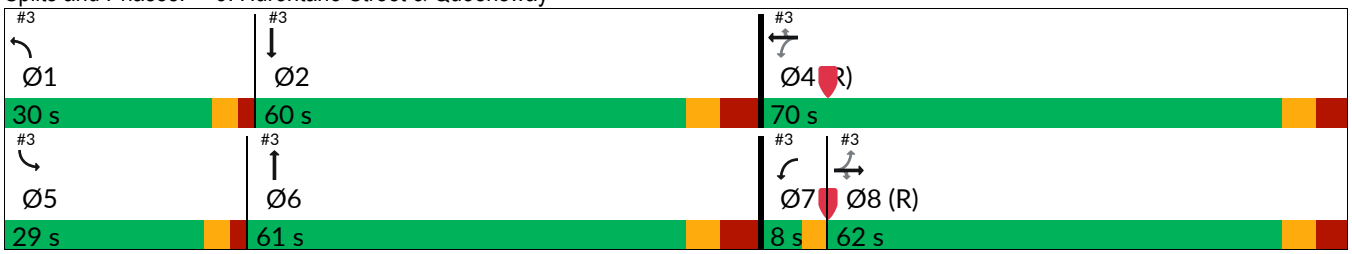


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	43	713	402	104	569	69	407	303	78	602
Future Volume (vph)	43	713	402	104	569	69	407	303	78	602
Lane Group Flow (vph)	47	775	437	113	618	75	442	461	85	834
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8		7	4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	5.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	57.0	57.0	57.0	8.0	57.0	57.0	13.0	58.0	13.0	58.0
Total Split (s)	62.0	62.0	62.0	8.0	70.0	70.0	30.0	61.0	29.0	60.0
Total Split (%)	38.8%	38.8%	38.8%	5.0%	43.8%	43.8%	18.8%	38.1%	18.1%	37.5%
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)	3.8	3.8	3.8	0.0	3.8	3.8	2.0	4.7	2.0	4.7
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)	7.8	7.8	7.8	3.0	7.8	7.8	5.0	8.7	5.0	8.7
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?				Yes						
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max
Act Effct Green (s)	54.2	54.2	54.2	67.0	62.2	62.2	24.9	60.6	15.7	51.4
Actuated g/C Ratio	0.34	0.34	0.34	0.42	0.39	0.39	0.16	0.38	0.10	0.32
v/c Ratio	0.25	0.65	0.60	0.66	0.33	0.13	0.91	0.38	0.54	0.79
Control Delay (s/veh)	42.9	48.1	9.9	65.3	42.1	18.8	78.8	30.6	80.6	54.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.9	48.1	9.9	65.3	42.1	18.8	78.8	30.6	80.6	54.3
LOS	D	D	A	E	D	B	E	C	F	D
Approach Delay (s/veh)		34.6			43.2			54.2		56.7
Approach LOS		C			D			D		E
Queue Length 50th (m)	12.7	103.5	11.3	31.9	66.5	7.0	70.1	54.0	25.3	121.0
Queue Length 95th (m)	26.5	124.8	43.6	#52.2	79.7	22.9	#99.4	70.6	41.8	145.9
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)	186	1185	733	171	1881	580	486	1213	240	1059
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.65	0.60	0.66	0.33	0.13	0.91	0.38	0.35	0.79

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 19 (12%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green		
Natural Cycle: 140		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.91		
Intersection Signal Delay (s/veh): 46.2	Intersection LOS: D	
Intersection Capacity Utilization 121.9%	ICU Level of Service H	
Analysis Period (min) 15		

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

Splits and Phases: 3: Hurontario Street & Queensway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	713	402	104	569	69	407	303	121	78	602	166
Future Volume (vph)	43	713	402	104	569	69	407	303	121	78	602	166
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)	7.8	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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	0.98	1.00	1.00	0.94	1.00	0.98		1.00	1.00	
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	0.96		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)	1283	3500	1417	1559	4839	1376	3113	3138		1604	3251	
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)	549	3500	1417	318	4839	1376	3113	3138		1604	3251	
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	775	437	113	618	75	442	329	132	85	654	180
RTOR Reduction (vph)	0	0	253	0	0	46	0	25	0	0	16	0
Lane Group Flow (vph)	47	775	184	113	618	29	442	436	0	85	818	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		8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)	54.2	54.2	54.2	62.2	62.2	62.2	24.9	60.6		15.7	51.4	
Effective Green, g (s)	54.2	54.2	54.2	62.2	62.2	62.2	24.9	60.6		15.7	51.4	
Actuated g/C Ratio	0.34	0.34	0.34	0.39	0.39	0.39	0.16	0.38		0.10	0.32	
Clearance Time (s)	7.8	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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)	185	1185	480	162	1881	534	484	1188		157	1044	
v/s Ratio Prot		0.22		c0.02	0.13		c0.14	0.14		0.05	c0.25	
v/s Ratio Perm	0.09		0.13	c0.25		0.02						
v/c Ratio	0.25	0.65	0.38	0.70	0.33	0.05	0.91	0.37		0.54	0.78	
Uniform Delay, d1	38.3	44.9	40.2	42.3	34.3	30.5	66.5	35.9		68.7	49.3	
Progression Factor	1.00	1.00	1.00	1.42	1.21	2.97	0.83	0.89		1.00	1.00	
Incremental Delay, d2	3.3	2.8	2.3	14.7	0.4	0.2	22.2	0.9		6.6	5.9	
Delay (s)	41.6	47.8	42.5	75.0	42.0	91.0	77.4	32.7		75.3	55.2	
Level of Service	D	D	D	E	D	F	E	C		E	E	
Approach Delay (s/veh)		45.7			51.2			54.6			57.0	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	51.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	121.9%	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	753	9	0	1059
Future Vol, veh/h	0	30	753	9	0	1059
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	818	10	0	1151

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	430	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	560	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	553	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	553	-
HCM Lane V/C Ratio	-	-	0.059	-
HCM Ctrl Dly (s/v)	-	-	11.9	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q (veh)	-	-	0.2	-

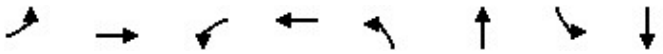
Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	743	9	0	1059
Future Vol, veh/h	0	20	743	9	0	1059
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	808	10	0	1151

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	417	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	590	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	586	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	586	-
HCM Lane V/C Ratio	-	-	0.037	-
HCM Ctrl Dly (s/v)	-	-	11.4	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q (veh)	-	-	0.1	-

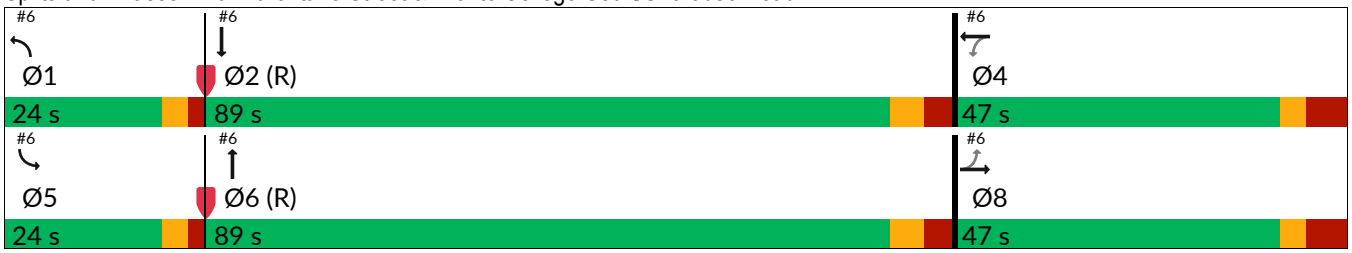


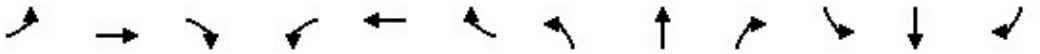
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	33	6	21	14	102	598	42	1005
Future Volume (vph)	33	6	21	14	102	598	42	1005
Lane Group Flow (vph)	36	43	23	164	111	654	46	1112
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
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)	3.0	3.0	3.0	3.0	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)	8.0	8.0	8.0	8.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	39.0	39.0	39.0	39.0	16.6	91.4	11.7	83.9
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.10	0.57	0.07	0.52
v/c Ratio	0.14	0.10	0.08	0.33	0.64	0.32	0.37	0.60
Control Delay (s/veh)	49.5	17.3	47.6	10.8	85.1	19.4	59.5	45.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.5	17.3	47.6	10.8	85.1	19.4	59.5	45.9
LOS	D	B	D	B	F	B	E	D
Approach Delay (s/veh)		31.9		15.3		28.9		46.4
Approach LOS		C		B		C		D
Queue Length 50th (m)	8.3	1.6	5.3	3.4	31.5	53.3	13.4	164.3
Queue Length 95th (m)	18.1	11.3	12.6	21.3	50.9	69.2	m18.6	184.0
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)	249	417	306	503	200	2035	200	1867
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.10	0.08	0.33	0.56	0.32	0.23	0.60

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 38 (24%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay (s/veh): 37.1	Intersection LOS: D
Intersection Capacity Utilization 84.6%	ICU Level of Service E
Analysis Period (min) 15	

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

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





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	598	4	42	1005	18
Future Volume (vph)	33	6	33	21	14	137	102	598	4	42	1005	18
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)	8.0	8.0		8.0	8.0		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	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		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	1604		1640	1603		1685	3565		1685	3559	
Flt Permitted	0.58	1.00		0.73	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1025	1604		1258	1603		1685	3565		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	650	4	46	1092	20
RTOR Reduction (vph)	0	27	0	0	113	0	0	0	0	0	1	0
Lane Group Flow (vph)	36	16	0	23	51	0	111	654	0	46	1111	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		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)	39.0	39.0		39.0	39.0		16.6	90.4		10.1	83.9	
Effective Green, g (s)	39.0	39.0		39.0	39.0		16.6	90.4		10.1	83.9	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.10	0.57		0.06	0.52	
Clearance Time (s)	8.0	8.0		8.0	8.0		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)	249	390		306	390		174	2014		106	1866	
v/s Ratio Prot		0.01			0.03		c0.07	0.18		0.03	c0.31	
v/s Ratio Perm	c0.04			0.02								
v/c Ratio	0.14	0.04		0.08	0.13		0.64	0.32		0.43	0.60	
Uniform Delay, d1	47.4	46.2		46.6	47.3		68.8	18.5		72.2	26.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.77	1.67	
Incremental Delay, d2	1.2	0.2		0.5	0.7		10.2	0.4		4.1	1.0	
Delay (s)	48.6	46.4		47.1	48.0		79.0	19.0		59.5	45.0	
Level of Service	D	D		D	D		E	B		E	D	
Approach Delay (s/veh)		47.4			47.9			27.7			45.6	
Approach LOS		D			D			C			D	

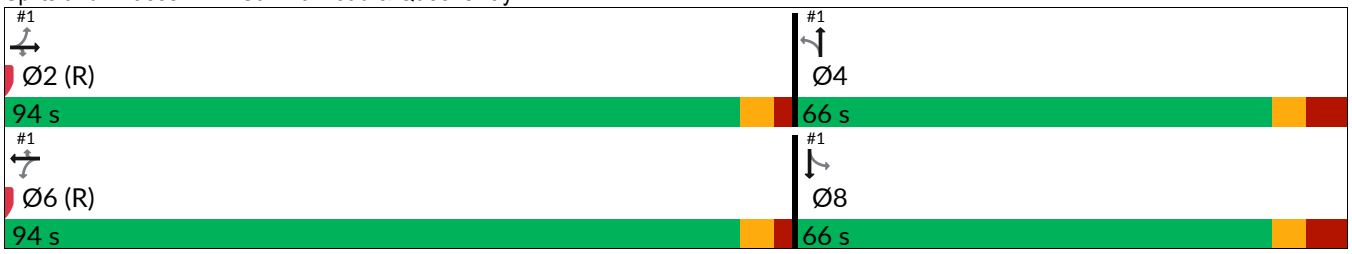
Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	84.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

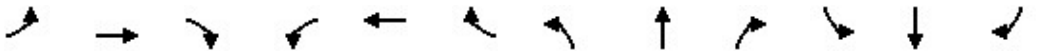


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	31	910	67	50	1040	94	34	59	74	78
Future Volume (vph)	31	910	67	50	1040	94	34	59	74	78
Lane Group Flow (vph)	34	989	73	54	1130	102	37	99	80	163
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Minimum Split (s)	36.2	36.2	36.2	36.2	36.2	36.2	43.1	43.1	43.1	43.1
Total Split (s)	94.0	94.0	94.0	94.0	94.0	94.0	66.0	66.0	66.0	66.0
Total Split (%)	58.8%	58.8%	58.8%	58.8%	58.8%	58.8%	41.3%	41.3%	41.3%	41.3%
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)	2.2	2.2	2.2	2.2	2.2	2.2	5.1	5.1	5.1	5.1
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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1	9.1	9.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	87.8	87.8	87.8	87.8	87.8	87.8	56.9	56.9	56.9	56.9
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55	0.36	0.36	0.36	0.36
v/c Ratio	0.21	0.52	0.09	0.26	0.58	0.12	0.09	0.16	0.19	0.26
Control Delay (s/veh)	6.4	7.2	0.3	23.2	25.5	3.1	35.4	29.0	37.1	30.5
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)	6.4	7.2	0.3	23.2	25.5	3.1	35.4	29.0	37.1	30.5
LOS	A	A	A	C	C	A	D	C	D	C
Approach Delay (s/veh)		6.7			23.6			30.8		32.7
Approach LOS		A			C			C		C
Queue Length 50th (m)	0.5	30.5	0.1	8.1	113.6	0.0	7.2	16.1	16.4	28.1
Queue Length 95th (m)	2.3	27.0	0.2	17.5	132.7	8.2	15.4	29.4	29.0	46.3
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)	162	1920	843	207	1939	860	401	634	428	618
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	0.21	0.52	0.09	0.26	0.58	0.12	0.09	0.16	0.19	0.26

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 94 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay (s/veh): 18.0	Intersection LOS: B
Intersection Capacity Utilization 96.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: Camilla Road & Queensway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	910	67	50	1040	94	34	59	32	74	78	72
Future Volume (vph)	31	910	67	50	1040	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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		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)	1685	3500	1478	1685	3535	1485	1677	1750		1652	1680	
Flt Permitted	0.17	1.00	1.00	0.21	1.00	1.00	0.64	1.00		0.69	1.00	
Satd. Flow (perm)	297	3500	1478	378	3535	1485	1131	1750		1205	1680	
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	989	73	54	1130	102	37	64	35	80	85	78
RTOR Reduction (vph)	0	0	33	0	0	46	0	12	0	0	21	0
Lane Group Flow (vph)	34	989	40	54	1130	56	37	87	0	80	142	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	87.8	87.8	87.8	87.8	87.8	87.8	56.9	56.9		56.9	56.9	
Effective Green, g (s)	87.8	87.8	87.8	87.8	87.8	87.8	56.9	56.9		56.9	56.9	
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55	0.36	0.36		0.36	0.36	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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)	162	1920	811	207	1939	814	402	622		428	597	
v/s Ratio Prot		0.28			c0.32			0.05			c0.08	
v/s Ratio Perm	0.11		0.03	0.14		0.04	0.03			0.07		
v/c Ratio	0.21	0.52	0.05	0.26	0.58	0.07	0.09	0.14		0.19	0.24	
Uniform Delay, d1	18.4	22.7	16.7	19.0	23.9	16.9	34.3	35.0		35.6	36.3	
Progression Factor	0.18	0.27	0.02	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.8	1.0	0.1	3.0	1.3	0.2	0.5	0.5		1.0	0.9	
Delay (s)	6.1	7.1	0.5	22.1	25.2	17.1	34.8	35.4		36.5	37.2	
Level of Service	A	A	A	C	C	B	C	D		D	D	
Approach Delay (s/veh)		6.6			24.5			35.2			37.0	
Approach LOS		A			C			D			D	

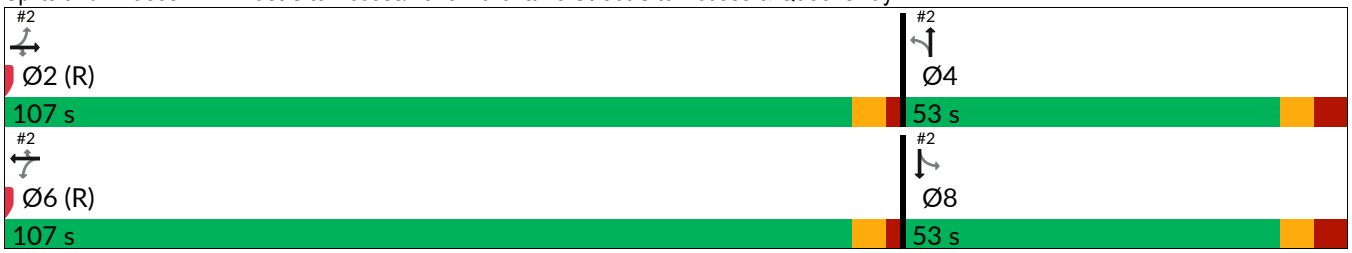
Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.3
Intersection Capacity Utilization	96.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	16	932	66	74	1044	28	9	2	27	9
Future Volume (vph)	16	932	66	74	1044	28	9	2	27	9
Lane Group Flow (vph)	17	1013	72	80	1135	30	0	66	0	57
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	43.0	43.0	43.0	43.0	43.0	43.0	47.1	47.1	47.1	47.1
Total Split (s)	107.0	107.0	107.0	107.0	107.0	107.0	53.0	53.0	53.0	53.0
Total Split (%)	66.9%	66.9%	66.9%	66.9%	66.9%	66.9%	33.1%	33.1%	33.1%	33.1%
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	4.1	4.1	4.1	4.1
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		8.1		8.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9		44.9
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28		0.28
v/c Ratio	0.08	0.32	0.07	0.29	0.51	0.03		0.13		0.13
Control Delay (s/veh)	21.7	27.5	13.0	7.5	5.9	0.2		14.1		33.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	21.7	27.5	13.0	7.5	5.9	0.2		14.1		33.8
LOS	C	C	B	A	A	A		B		C
Approach Delay (s/veh)		26.5			5.9			14.1		33.8
Approach LOS		C			A			B		C
Queue Length 50th (m)	3.6	91.5	9.3	2.9	22.1	0.1		2.6		9.4
Queue Length 95th (m)	m5.7	102.3	m17.4	5.0	25.0	m0.2		13.7		20.4
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)	215	3174	976	275	2231	925		490		425
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	0.08	0.32	0.07	0.29	0.51	0.03		0.13		0.13

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 97 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay (s/veh): 15.9	Intersection LOS: B
Intersection Capacity Utilization 65.6%	ICU Level of Service C
Analysis Period (min) 15	

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	932	66	74	1044	28	9	2	50	27	9	17
Future Volume (vph)	16	932	66	74	1044	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		8.1			8.1	
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	1.00		1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00			1.00	
Frt	1.00	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	1445		1659			1719	
Flt Permitted	0.19	1.00	1.00	0.25	1.00	1.00		0.96			0.84	
Satd. Flow (perm)	342	5029	1507	436	3535	1445		1608			1483	
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	1013	72	80	1135	30	10	2	54	29	10	18
RTOR Reduction (vph)	0	0	25	0	0	11	0	39	0	0	10	0
Lane Group Flow (vph)	17	1013	47	80	1135	19	0	27	0	0	47	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Effective Green, g (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28			0.28	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		8.1			8.1	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	215	3174	951	275	2231	912		451			416	
v/s Ratio Prot		0.20			c0.32							
v/s Ratio Perm	0.05		0.03	0.18		0.01		0.02			c0.03	
v/c Ratio	0.08	0.32	0.05	0.29	0.51	0.02		0.06			0.11	
Uniform Delay, d1	11.4	13.6	11.2	13.3	16.0	11.0		42.1			42.8	
Progression Factor	1.77	1.99	4.88	0.37	0.32	0.06		1.00			1.00	
Incremental Delay, d2	0.5	0.2	0.1	2.3	0.7	0.0		0.3			0.5	
Delay (s)	20.8	27.4	54.9	7.2	5.8	0.6		42.4			43.3	
Level of Service	C	C	D	A	A	A		D			D	
Approach Delay (s/veh)		29.1			5.8			42.4			43.3	
Approach LOS		C			A			D			D	

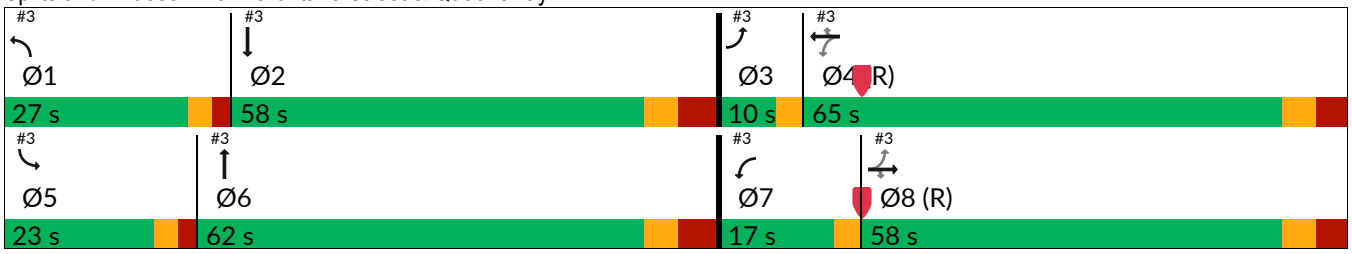
Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.1
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

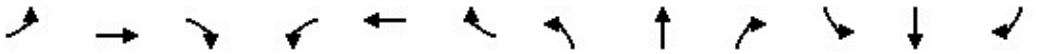


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	42	731	388	142	847	76	316	352	89	604
Future Volume (vph)	42	731	388	142	847	76	316	352	89	604
Lane Group Flow (vph)	46	795	422	154	921	83	343	588	97	772
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases	3	8		7	4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	3	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	8.0	57.0	57.0	8.0	57.0	57.0	13.0	58.0	13.0	58.0
Total Split (s)	10.0	58.0	58.0	17.0	65.0	65.0	27.0	62.0	23.0	58.0
Total Split (%)	6.3%	36.3%	36.3%	10.6%	40.6%	40.6%	16.9%	38.8%	14.4%	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)	0.0	3.8	3.8	0.0	3.8	3.8	2.0	4.7	2.0	4.7
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)	3.0	7.8	7.8	3.0	7.8	7.8	5.0	8.7	5.0	8.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes			Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max
Act Effct Green (s)	62.4	50.6	50.6	72.0	59.2	59.2	21.3	55.8	15.5	50.0
Actuated g/C Ratio	0.39	0.32	0.32	0.45	0.37	0.37	0.13	0.35	0.10	0.31
v/c Ratio	0.24	0.72	0.62	0.62	0.49	0.14	0.80	0.50	0.60	0.72
Control Delay (s/veh)	28.8	52.8	14.8	46.8	49.6	18.5	75.4	66.1	84.6	52.4
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)	28.8	52.8	14.8	46.8	49.6	18.5	75.4	66.1	84.6	52.4
LOS	C	D	B	D	D	B	E	E	F	D
Approach Delay (s/veh)		39.3			47.0			69.6		56.0
Approach LOS		D			D			E		E
Queue Length 50th (m)	9.1	111.4	22.1	41.1	103.6	8.3	52.1	86.4	27.8	106.9
Queue Length 95th (m)	18.2	134.0	57.1	63.2	117.1	23.5	67.1	105.8	46.3	129.3
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)	188	1108	683	251	1897	591	444	1172	187	1079
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.72	0.62	0.61	0.49	0.14	0.77	0.50	0.52	0.72

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 39 (24%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green		
Natural Cycle: 140		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.80		
Intersection Signal Delay (s/veh): 51.5	Intersection LOS: D	
Intersection Capacity Utilization 117.3%	ICU Level of Service H	
Analysis Period (min) 15		

Splits and Phases: 3: Hurontario Street & Queensway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	731	388	142	847	76	316	352	189	89	604	106
Future Volume (vph)	42	731	388	142	847	76	316	352	189	89	604	106
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)	3.0	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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	0.98	1.00	1.00	0.96	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	0.95		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	1456	1667	5129	1441	3236	3236		1668	3423	
Flt Permitted	0.25	1.00	1.00	0.17	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	370	3500	1456	290	5129	1441	3236	3236		1668	3423	
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	795	422	154	921	83	343	383	205	97	657	115
RTOR Reduction (vph)	0	0	223	0	0	53	0	44	0	0	9	0
Lane Group Flow (vph)	46	795	199	154	921	30	343	544	0	97	763	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	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)	56.2	50.6	50.6	67.2	58.6	58.6	21.3	55.8		15.5	50.0	
Effective Green, g (s)	56.2	50.6	50.6	67.2	58.6	58.6	21.3	55.8		15.5	50.0	
Actuated g/C Ratio	0.35	0.32	0.32	0.42	0.37	0.37	0.13	0.35		0.10	0.31	
Clearance Time (s)	3.0	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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)	165	1106	460	238	1878	527	430	1128		161	1069	
v/s Ratio Prot	0.01	c0.23		c0.05	0.18		c0.11	0.17		0.06	c0.22	
v/s Ratio Perm	0.09		0.14	0.22		0.02						
v/c Ratio	0.28	0.72	0.43	0.65	0.49	0.06	0.80	0.48		0.60	0.71	
Uniform Delay, d1	35.0	48.4	43.3	33.0	39.2	32.8	67.3	40.8		69.3	48.7	
Progression Factor	1.00	1.00	1.00	1.37	1.24	3.81	0.91	1.76		1.00	1.00	
Incremental Delay, d2	1.9	4.0	3.0	7.1	0.8	0.2	10.9	1.4		9.0	4.1	
Delay (s)	37.0	52.4	46.3	52.2	49.4	125.3	72.4	73.3		78.3	52.7	
Level of Service	D	D	D	D	D	F	E	E		E	D	
Approach Delay (s/veh)		49.8			55.2			73.0			55.6	
Approach LOS		D			E			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	57.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	117.3%	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	797	8	0	1083
Future Vol, veh/h	0	13	797	8	0	1083
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	866	9	0	1177

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	459	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	554	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	545	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	545	-
HCM Lane V/C Ratio	-	-	0.026	-
HCM Ctrl Dly (s/v)	-	-	11.8	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q (veh)	-	-	0.1	-

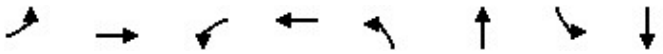
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	799	14	0	1083
Future Vol, veh/h	0	5	799	14	0	1083
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	868	15	0	1177

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	465	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	550	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	540	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	540	-
HCM Lane V/C Ratio	-	-	0.01	-
HCM Ctrl Dly (s/v)	-	-	11.7	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q (veh)	-	-	0	-

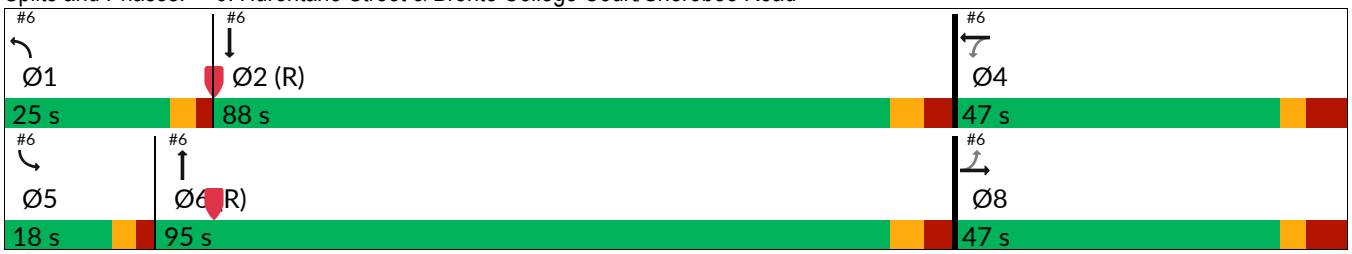


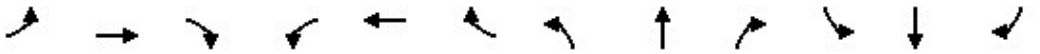
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	83	6	13	10	35	658	107	964
Future Volume (vph)	83	6	13	10	35	658	107	964
Lane Group Flow (vph)	90	217	14	106	38	723	116	1074
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
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)	3.0	3.0	3.0	3.0	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)	8.0	8.0	8.0	8.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	39.0	39.0	39.0	39.0	11.3	87.5	13.0	91.8
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.07	0.55	0.08	0.57
v/c Ratio	0.31	0.41	0.07	0.24	0.34	0.39	0.86	0.55
Control Delay (s/veh)	53.3	9.0	48.2	12.2	78.2	21.6	131.9	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.3	9.0	48.2	12.2	78.2	21.6	131.9	12.4
LOS	D	A	D	B	E	C	F	B
Approach Delay (s/veh)		22.0		16.4		24.4		24.1
Approach LOS		C		B		C		C
Queue Length 50th (m)	22.4	1.6	3.4	2.5	11.5	64.6	33.4	120.0
Queue Length 95th (m)	39.0	21.7	9.9	16.9	23.2	78.6	m#61.5	146.0
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)	286	530	187	449	198	1873	135	1963
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	0.31	0.41	0.07	0.24	0.19	0.39	0.86	0.55

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 3 (2%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 23.5	Intersection LOS: C
Intersection Capacity Utilization 83.7%	ICU Level of Service E
Analysis Period (min) 15	

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





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	6	193	13	10	87	35	658	7	107	964	24
Future Volume (vph)	83	6	193	13	10	87	35	658	7	107	964	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)	8.0	8.0		8.0	8.0		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	
Frpb, ped/bikes	1.00	0.95		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	1524		1506	1550		1589	3426		1668	3421	
Flt Permitted	0.69	1.00		0.49	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1173	1524		769	1550		1589	3426		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)	90	7	210	14	11	95	38	715	8	116	1048	26
RTOR Reduction (vph)	0	159	0	0	72	0	0	0	0	0	1	0
Lane Group Flow (vph)	90	58	0	14	34	0	38	723	0	116	1073	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		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)	39.0	39.0		39.0	39.0		9.7	87.5		13.0	90.8	
Effective Green, g (s)	39.0	39.0		39.0	39.0		9.7	87.5		13.0	90.8	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.06	0.55		0.08	0.57	
Clearance Time (s)	8.0	8.0		8.0	8.0		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)	285	371		187	377		96	1873		135	1941	
v/s Ratio Prot		0.04			0.02		0.02	0.21		c0.07	c0.31	
v/s Ratio Perm	c0.08			0.02								
v/c Ratio	0.32	0.16		0.07	0.09		0.40	0.39		0.86	0.55	
Uniform Delay, d1	49.6	47.6		46.6	46.8		72.3	20.8		72.6	21.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.34	0.52	
Incremental Delay, d2	2.9	0.9		0.8	0.5		5.5	0.6		33.3	0.8	
Delay (s)	52.5	48.5		47.4	47.3		77.9	21.4		130.9	12.2	
Level of Service	D	D		D	D		E	C		F	B	
Approach Delay (s/veh)		49.6			47.3			24.2			23.8	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

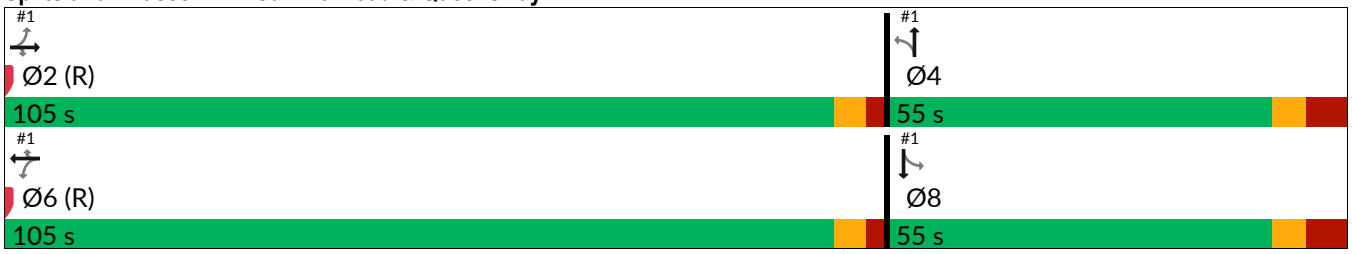
APPENDIX J

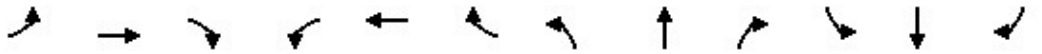
Future Total Intersection Capacity Analysis

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	37	874	77	43	675	60	53	103	104	105
Future Volume (vph)	37	874	77	43	675	60	53	103	104	105
Lane Group Flow (vph)	40	950	84	47	734	65	58	182	113	149
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Minimum Split (s)	36.2	36.2	36.2	36.2	36.2	36.2	43.1	43.1	43.1	43.1
Total Split (s)	105.0	105.0	105.0	105.0	105.0	105.0	55.0	55.0	55.0	55.0
Total Split (%)	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%	34.4%	34.4%	34.4%	34.4%
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)	2.2	2.2	2.2	2.2	2.2	2.2	5.1	5.1	5.1	5.1
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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1	9.1	9.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	98.8	98.8	98.8	98.8	98.8	98.8	45.9	45.9	45.9	45.9
Actuated g/C Ratio	0.62	0.62	0.62	0.62	0.62	0.62	0.29	0.29	0.29	0.29
v/c Ratio	0.12	0.45	0.09	0.17	0.35	0.07	0.20	0.37	0.39	0.30
Control Delay (s/veh)	4.4	7.3	0.4	15.1	15.6	2.7	45.6	42.8	50.7	43.4
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)	4.4	7.3	0.4	15.1	15.6	2.7	45.6	42.8	50.7	43.4
LOS	A	A	A	B	B	A	D	D	D	D
Approach Delay (s/veh)		6.7			14.5			43.5		46.6
Approach LOS		A			B			D		D
Queue Length 50th (m)	1.3	27.3	0.0	5.7	56.0	0.0	14.6	39.4	27.3	34.0
Queue Length 95th (m)	2.9	23.7	0.3	12.2	68.0	5.8	27.7	61.1	45.7	53.9
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)	335	2119	910	271	2079	893	287	494	289	494
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	0.12	0.45	0.09	0.17	0.35	0.07	0.20	0.37	0.39	0.30

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 97 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay (s/veh): 17.4	Intersection LOS: B
Intersection Capacity Utilization 109.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: Camilla Road & Queensway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	874	77	43	675	60	53	103	64	104	105	32
Future Volume (vph)	37	874	77	43	675	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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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	0.98	1.00	0.99		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	1406	1477	1675		1626	1700	
Flt Permitted	0.33	1.00	1.00	0.25	1.00	1.00	0.64	1.00		0.59	1.00	
Satd. Flow (perm)	544	3433	1422	440	3368	1406	1003	1675		1010	1700	
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	950	84	47	734	65	58	112	70	113	114	35
RTOR Reduction (vph)	0	0	32	0	0	25	0	14	0	0	7	0
Lane Group Flow (vph)	40	950	52	47	734	40	58	168	0	113	142	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	98.8	98.8	98.8	98.8	98.8	98.8	45.9	45.9		45.9	45.9	
Effective Green, g (s)	98.8	98.8	98.8	98.8	98.8	98.8	45.9	45.9		45.9	45.9	
Actuated g/C Ratio	0.62	0.62	0.62	0.62	0.62	0.62	0.29	0.29		0.29	0.29	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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)	335	2119	878	271	2079	868	287	480		289	487	
v/s Ratio Prot		c0.28			0.22			0.10			0.08	
v/s Ratio Perm	0.07		0.04	0.11		0.03	0.06			c0.11		
v/c Ratio	0.12	0.45	0.06	0.17	0.35	0.05	0.20	0.35		0.39	0.29	
Uniform Delay, d1	12.6	16.2	12.1	13.1	15.0	12.0	43.2	45.2		45.8	44.4	
Progression Factor	0.29	0.41	0.08	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.7	0.1	1.4	0.5	0.1	1.6	2.0		3.9	1.5	
Delay (s)	4.3	7.3	1.0	14.5	15.4	12.1	44.8	47.2		49.8	45.9	
Level of Service	A	A	A	B	B	B	D	D		D	D	
Approach Delay (s/veh)		6.7			15.1			46.6			47.6	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.0	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)	15.3
Intersection Capacity Utilization	109.4%	ICU Level of Service	H
Analysis Period (min)	15		

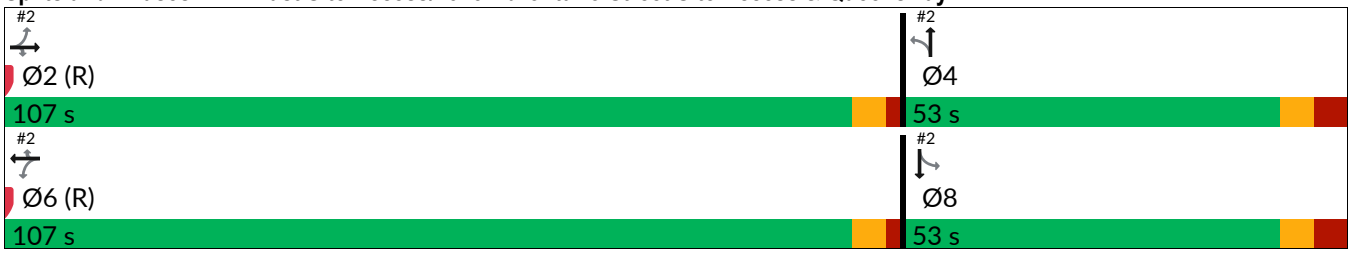
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	19	867	46	29	700	32	59	0	31	7
Future Volume (vph)	19	867	46	29	700	32	59	0	31	7
Lane Group Flow (vph)	21	942	50	32	761	35	0	163	0	65
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	43.0	43.0	43.0	43.0	43.0	43.0	47.1	47.1	47.1	47.1
Total Split (s)	107.0	107.0	107.0	107.0	107.0	107.0	53.0	53.0	53.0	53.0
Total Split (%)	66.9%	66.9%	66.9%	66.9%	66.9%	66.9%	33.1%	33.1%	33.1%	33.1%
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	4.1	4.1	4.1	4.1
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		8.1		8.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9		44.9
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28		0.28
v/c Ratio	0.06	0.30	0.05	0.11	0.36	0.04		0.37		0.16
Control Delay (s/veh)	26.1	33.0	16.7	10.7	11.3	2.1		34.9		33.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	26.1	33.0	16.7	10.7	11.3	2.1		34.9		33.3
LOS	C	C	B	B	B	A		C		C
Approach Delay (s/veh)		32.0			10.9			34.9		33.3
Approach LOS		C			B			C		C
Queue Length 50th (m)	5.4	94.6	6.4	2.8	38.7	0.1		26.9		10.6
Queue Length 95th (m)	m9.4	106.0	m13.8	6.1	44.7	1.8		47.3		22.5
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)	325	3113	969	299	2126	925		440		400
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	0.06	0.30	0.05	0.11	0.36	0.04		0.37		0.16

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 82 (51%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay (s/veh): 23.8	Intersection LOS: C
Intersection Capacity Utilization 69.3%	ICU Level of Service C
Analysis Period (min) 15	

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	867	46	29	700	32	59	0	91	31	7	21
Future Volume (vph)	19	867	46	29	700	32	59	0	91	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		8.1			8.1	
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	0.99		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		0.92			0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.98			0.97	
Satd. Flow (prot)	1512	4932	1507	1685	3368	1445		1680			1686	
Flt Permitted	0.32	1.00	1.00	0.27	1.00	1.00		0.84			0.80	
Satd. Flow (perm)	516	4932	1507	476	3368	1445		1447			1384	
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	942	50	32	761	35	64	0	99	34	8	23
RTOR Reduction (vph)	0	0	18	0	0	13	0	35	0	0	12	0
Lane Group Flow (vph)	21	942	32	32	761	22	0	128	0	0	53	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Effective Green, g (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28			0.28	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		8.1			8.1	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	325	3113	951	300	2126	912		406			388	
v/s Ratio Prot		0.19			c0.23							
v/s Ratio Perm	0.04		0.02	0.07		0.02		c0.09			0.04	
v/c Ratio	0.06	0.30	0.03	0.11	0.36	0.02		0.32			0.14	
Uniform Delay, d1	11.3	13.4	11.1	11.7	14.1	11.0		45.4			43.0	
Progression Factor	2.20	2.43	6.11	0.83	0.77	0.62		1.00			1.00	
Incremental Delay, d2	0.3	0.2	0.1	0.7	0.5	0.0		2.0			0.7	
Delay (s)	25.3	32.8	67.9	10.3	11.2	6.9		47.5			43.8	
Level of Service	C	C	E	B	B	A		D			D	
Approach Delay (s/veh)		34.4			11.0			47.5			43.8	
Approach LOS		C			B			D			D	

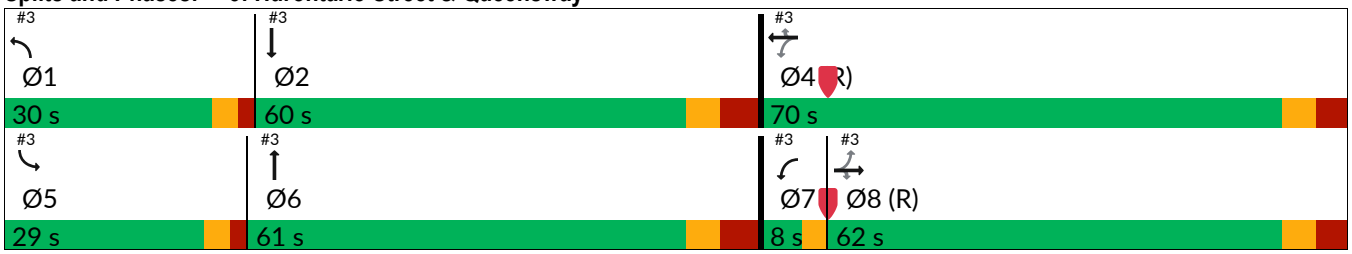
Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.1
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

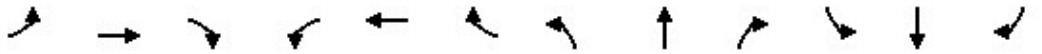
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	43	726	402	109	605	69	407	337	82	602
Future Volume (vph)	43	726	402	109	605	69	407	337	82	602
Lane Group Flow (vph)	47	789	437	118	658	75	442	498	89	834
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8		7	4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	5.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	57.0	57.0	57.0	8.0	57.0	57.0	13.0	58.0	13.0	58.0
Total Split (s)	62.0	62.0	62.0	8.0	70.0	70.0	30.0	61.0	29.0	60.0
Total Split (%)	38.8%	38.8%	38.8%	5.0%	43.8%	43.8%	18.8%	38.1%	18.1%	37.5%
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)	3.8	3.8	3.8	0.0	3.8	3.8	2.0	4.7	2.0	4.7
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)	7.8	7.8	7.8	3.0	7.8	7.8	5.0	8.7	5.0	8.7
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?				Yes						
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max
Act Effct Green (s)	54.2	54.2	54.2	67.0	62.2	62.2	24.9	60.2	16.1	51.4
Actuated g/C Ratio	0.34	0.34	0.34	0.42	0.39	0.39	0.16	0.38	0.10	0.32
v/c Ratio	0.26	0.67	0.60	0.71	0.35	0.13	0.91	0.41	0.55	0.79
Control Delay (s/veh)	43.5	48.5	10.1	67.5	40.7	17.2	78.8	32.4	80.8	54.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.5	48.5	10.1	67.5	40.7	17.2	78.8	32.4	80.8	54.3
LOS	D	D	B	E	D	B	E	C	F	D
Approach Delay (s/veh)		35.1			42.4			54.2		56.8
Approach LOS		D			D			D		E
Queue Length 50th (m)	12.7	106.0	11.8	31.9	67.8	6.3	70.0	60.5	26.5	121.0
Queue Length 95th (m)	26.7	127.4	44.3	#58.1	80.6	20.8	#99.3	78.0	43.7	145.9
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)	178	1185	731	166	1881	580	486	1210	240	1059
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	0.67	0.60	0.71	0.35	0.13	0.91	0.41	0.37	0.79

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 19 (12%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green		
Natural Cycle: 140		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.91		
Intersection Signal Delay (s/veh): 46.2	Intersection LOS: D	
Intersection Capacity Utilization 121.9%	ICU Level of Service H	
Analysis Period (min) 15		

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

Splits and Phases: 3: Hurontario Street & Queensway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	726	402	109	605	69	407	337	121	82	602	166
Future Volume (vph)	43	726	402	109	605	69	407	337	121	82	602	166
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)	7.8	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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	0.98	1.00	1.00	0.94	1.00	0.98		1.00	1.00	
Flpb, ped/bikes	0.98	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	0.97	
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)	1285	3500	1417	1559	4839	1376	3113	3160		1604	3251	
Flt Permitted	0.39	1.00	1.00	0.19	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	528	3500	1417	307	4839	1376	3113	3160		1604	3251	
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	789	437	118	658	75	442	366	132	89	654	180
RTOR Reduction (vph)	0	0	252	0	0	46	0	21	0	0	16	0
Lane Group Flow (vph)	47	789	185	118	658	29	442	477	0	89	818	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		8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)	54.2	54.2	54.2	62.2	62.2	62.2	24.9	60.2		16.1	51.4	
Effective Green, g (s)	54.2	54.2	54.2	62.2	62.2	62.2	24.9	60.2		16.1	51.4	
Actuated g/C Ratio	0.34	0.34	0.34	0.39	0.39	0.39	0.16	0.38		0.10	0.32	
Clearance Time (s)	7.8	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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)	178	1185	480	158	1881	534	484	1188		161	1044	
v/s Ratio Prot		0.23		c0.02	0.14		c0.14	0.15		0.06	c0.25	
v/s Ratio Perm	0.09		0.13	c0.27		0.02						
v/c Ratio	0.26	0.67	0.39	0.75	0.35	0.05	0.91	0.40		0.55	0.78	
Uniform Delay, d1	38.4	45.2	40.2	43.7	34.6	30.5	66.5	36.7		68.5	49.3	
Progression Factor	1.00	1.00	1.00	1.35	1.16	2.71	0.83	0.90		1.00	1.00	
Incremental Delay, d2	3.6	3.0	2.3	19.7	0.5	0.2	22.2	1.0		6.8	5.9	
Delay (s)	42.0	48.1	42.6	78.4	40.6	82.8	77.5	33.9		75.3	55.2	
Level of Service	D	D	D	E	D	F	E	C		E	E	
Approach Delay (s/veh)		46.0			49.5			54.4			57.1	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	51.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	121.9%	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	787	9	0	1064
Future Vol, veh/h	0	30	787	9	0	1064
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	855	10	0	1157

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	449	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	544	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	537	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	537	-
HCM Lane V/C Ratio	-	-	0.061	-
HCM Ctrl Dly (s/v)	-	-	12.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q (veh)	-	-	0.2	-

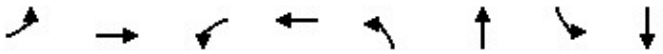
Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	54	743	39	0	1064
Future Vol, veh/h	0	54	743	39	0	1064
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	59	808	42	0	1157

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	433	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	576	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	572	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	572	-
HCM Lane V/C Ratio	-	-	0.103	-
HCM Ctrl Dly (s/v)	-	-	12	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q (veh)	-	-	0.3	-

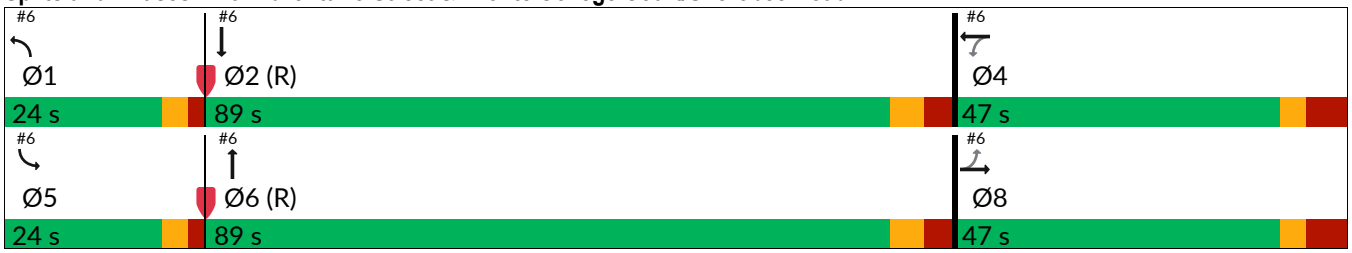


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	33	6	21	14	102	627	42	1010
Future Volume (vph)	33	6	21	14	102	627	42	1010
Lane Group Flow (vph)	36	43	23	165	111	686	46	1118
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
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)	3.0	3.0	3.0	3.0	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)	8.0	8.0	8.0	8.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	39.0	39.0	39.0	39.0	16.6	91.4	11.7	83.9
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.10	0.57	0.07	0.52
v/c Ratio	0.14	0.10	0.08	0.33	0.64	0.34	0.37	0.60
Control Delay (s/veh)	49.5	17.3	47.6	10.8	85.1	19.6	59.9	45.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.5	17.3	47.6	10.8	85.1	19.6	59.9	45.7
LOS	D	B	D	B	F	B	E	D
Approach Delay (s/veh)		31.9		15.3		28.7		46.3
Approach LOS		C		B		C		D
Queue Length 50th (m)	8.3	1.6	5.3	3.4	31.5	56.6	13.3	165.3
Queue Length 95th (m)	18.1	11.3	12.6	21.3	50.9	72.9	m18.0	184.9
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)	249	417	306	504	200	2035	200	1867
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.10	0.08	0.33	0.56	0.34	0.23	0.60

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 38 (24%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay (s/veh): 36.9	Intersection LOS: D
Intersection Capacity Utilization 84.8%	ICU Level of Service E
Analysis Period (min) 15	

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	6	33	21	14	138	102	627	4	42	1010	18
Future Volume (vph)	33	6	33	21	14	138	102	627	4	42	1010	18
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)	8.0	8.0		8.0	8.0		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	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		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	1604		1640	1603		1685	3565		1685	3559	
Flt Permitted	0.58	1.00		0.73	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1022	1604		1258	1603		1685	3565		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	150	111	682	4	46	1098	20
RTOR Reduction (vph)	0	27	0	0	113	0	0	0	0	0	1	0
Lane Group Flow (vph)	36	16	0	23	52	0	111	686	0	46	1117	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		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)	39.0	39.0		39.0	39.0		16.6	90.4		10.1	83.9	
Effective Green, g (s)	39.0	39.0		39.0	39.0		16.6	90.4		10.1	83.9	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.10	0.57		0.06	0.52	
Clearance Time (s)	8.0	8.0		8.0	8.0		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)	249	390		306	390		174	2014		106	1866	
v/s Ratio Prot		0.01			0.03		c0.07	0.19		0.03	c0.31	
v/s Ratio Perm	c0.04			0.02								
v/c Ratio	0.14	0.04		0.08	0.13		0.64	0.34		0.43	0.60	
Uniform Delay, d1	47.4	46.2		46.6	47.3		68.8	18.7		72.2	26.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.77	1.66	
Incremental Delay, d2	1.2	0.2		0.5	0.7		10.2	0.5		4.1	1.0	
Delay (s)	48.6	46.4		47.1	48.0		79.0	19.2		59.9	44.9	
Level of Service	D	D		D	D		E	B		E	D	
Approach Delay (s/veh)		47.4			47.9			27.5			45.4	
Approach LOS		D			D			C			D	

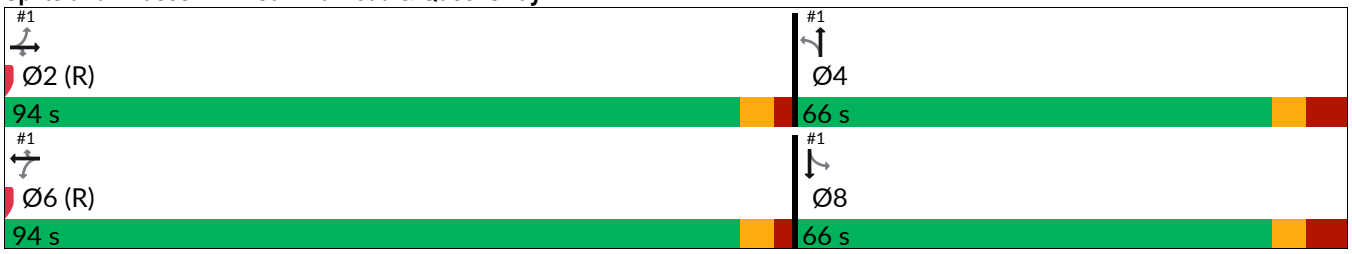
Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	31	938	67	50	1056	94	34	59	74	78
Future Volume (vph)	31	938	67	50	1056	94	34	59	74	78
Lane Group Flow (vph)	34	1020	73	54	1148	102	37	99	80	163
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Minimum Split (s)	36.2	36.2	36.2	36.2	36.2	36.2	43.1	43.1	43.1	43.1
Total Split (s)	94.0	94.0	94.0	94.0	94.0	94.0	66.0	66.0	66.0	66.0
Total Split (%)	58.8%	58.8%	58.8%	58.8%	58.8%	58.8%	41.3%	41.3%	41.3%	41.3%
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)	2.2	2.2	2.2	2.2	2.2	2.2	5.1	5.1	5.1	5.1
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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1	9.1	9.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	87.8	87.8	87.8	87.8	87.8	87.8	56.9	56.9	56.9	56.9
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55	0.36	0.36	0.36	0.36
v/c Ratio	0.22	0.53	0.09	0.27	0.59	0.12	0.09	0.16	0.19	0.26
Control Delay (s/veh)	7.4	8.0	0.3	23.9	25.7	3.1	35.4	29.0	37.1	30.5
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)	7.4	8.0	0.3	23.9	25.7	3.1	35.4	29.0	37.1	30.5
LOS	A	A	A	C	C	A	D	C	D	C
Approach Delay (s/veh)		7.5			23.9			30.8		32.7
Approach LOS		A			C			C		C
Queue Length 50th (m)	0.9	30.7	0.3	8.2	116.4	0.0	7.2	16.1	16.4	28.1
Queue Length 95th (m)	2.9	26.7	0.6	17.8	135.8	8.2	15.4	29.4	29.0	46.3
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)	157	1920	843	197	1939	860	401	634	428	618
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	0.22	0.53	0.09	0.27	0.59	0.12	0.09	0.16	0.19	0.26

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 94 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay (s/veh): 18.4	Intersection LOS: B
Intersection Capacity Utilization 96.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: Camilla Road & Queensway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	938	67	50	1056	94	34	59	32	74	78	72
Future Volume (vph)	31	938	67	50	1056	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)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		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)	1685	3500	1478	1685	3535	1485	1677	1750		1652	1680	
Flt Permitted	0.16	1.00	1.00	0.20	1.00	1.00	0.64	1.00		0.69	1.00	
Satd. Flow (perm)	287	3500	1478	359	3535	1485	1131	1750		1205	1680	
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	1020	73	54	1148	102	37	64	35	80	85	78
RTOR Reduction (vph)	0	0	33	0	0	46	0	12	0	0	21	0
Lane Group Flow (vph)	34	1020	40	54	1148	56	37	87	0	80	142	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	87.8	87.8	87.8	87.8	87.8	87.8	56.9	56.9		56.9	56.9	
Effective Green, g (s)	87.8	87.8	87.8	87.8	87.8	87.8	56.9	56.9		56.9	56.9	
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55	0.36	0.36		0.36	0.36	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2	6.2	9.1	9.1		9.1	9.1	
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	1920	811	197	1939	814	402	622		428	597	
v/s Ratio Prot		0.29			c0.32			0.05			c0.08	
v/s Ratio Perm	0.12		0.03	0.15		0.04	0.03			0.07		
v/c Ratio	0.22	0.53	0.05	0.27	0.59	0.07	0.09	0.14		0.19	0.24	
Uniform Delay, d1	18.5	23.0	16.7	19.2	24.1	16.9	34.3	35.0		35.6	36.3	
Progression Factor	0.22	0.30	0.04	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.0	1.0	0.1	3.4	1.3	0.2	0.5	0.5		1.0	0.9	
Delay (s)	7.0	8.0	0.7	22.6	25.5	17.1	34.8	35.4		36.5	37.2	
Level of Service	A	A	A	C	C	B	C	D		D	D	
Approach Delay (s/veh)		7.5			24.7			35.2			37.0	
Approach LOS		A			C			D			D	

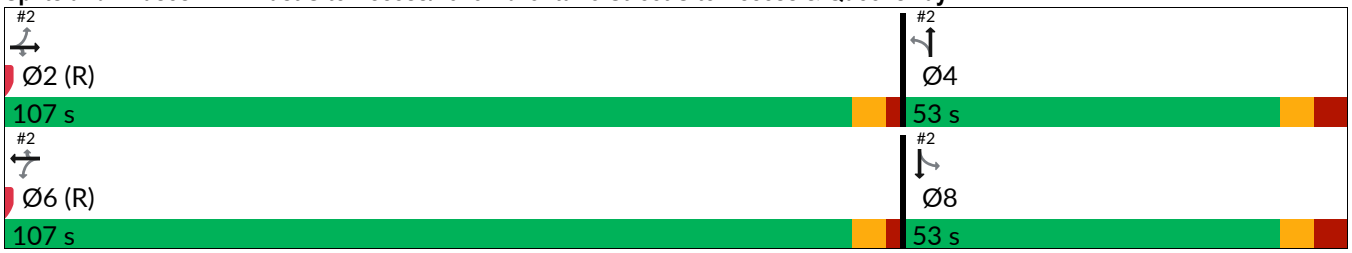
Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.3
Intersection Capacity Utilization	96.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	16	932	102	90	1044	28	41	2	27	9
Future Volume (vph)	16	932	102	90	1044	28	41	2	27	9
Lane Group Flow (vph)	17	1013	111	98	1135	30	0	132	0	57
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases		2			6			4		8
Permitted Phases	2		2	6		6	4		8	
Detector Phase	2	2	2	6	6	6	4	4	8	8
Switch Phase										
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	43.0	43.0	43.0	43.0	43.0	43.0	47.1	47.1	47.1	47.1
Total Split (s)	107.0	107.0	107.0	107.0	107.0	107.0	53.0	53.0	53.0	53.0
Total Split (%)	66.9%	66.9%	66.9%	66.9%	66.9%	66.9%	33.1%	33.1%	33.1%	33.1%
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	4.1	4.1	4.1	4.1
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		8.1		8.1
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9		44.9
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28		0.28
v/c Ratio	0.08	0.32	0.11	0.36	0.51	0.03		0.29		0.14
Control Delay (s/veh)	21.1	27.0	13.3	8.2	5.8	0.2		26.9		33.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	21.1	27.0	13.3	8.2	5.8	0.2		26.9		33.9
LOS	C	C	B	A	A	A		C		C
Approach Delay (s/veh)		25.6			5.9			26.9		33.9
Approach LOS		C			A			C		C
Queue Length 50th (m)	3.6	91.0	15.4	3.5	21.8	0.1		16.8		9.4
Queue Length 95th (m)	m5.5	102.0	m25.7	5.9	24.7	m0.2		34.2		20.4
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)	215	3174	989	275	2231	925		462		412
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	0.08	0.32	0.11	0.36	0.51	0.03		0.29		0.14

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 97 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay (s/veh): 16.2	Intersection LOS: B
Intersection Capacity Utilization 65.6%	ICU Level of Service C
Analysis Period (min) 15	

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	932	102	90	1044	28	41	2	78	27	9	17
Future Volume (vph)	16	932	102	90	1044	28	41	2	78	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		8.1			8.1	
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	1.00		1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00			1.00	
Frt	1.00	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	1445		1687			1719	
Flt Permitted	0.19	1.00	1.00	0.25	1.00	1.00		0.88			0.81	
Satd. Flow (perm)	342	5029	1507	436	3535	1445		1502			1434	
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	1013	111	98	1135	30	45	2	85	29	10	18
RTOR Reduction (vph)	0	0	38	0	0	11	0	41	0	0	10	0
Lane Group Flow (vph)	17	1013	73	98	1135	19	0	91	0	0	47	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		2			6			4			8	
Permitted Phases	2		2	6		6	4			8		
Actuated Green, G (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Effective Green, g (s)	101.0	101.0	101.0	101.0	101.0	101.0		44.9			44.9	
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63		0.28			0.28	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0		8.1			8.1	
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)	215	3174	951	275	2231	912		421			402	
v/s Ratio Prot		0.20			c0.32							
v/s Ratio Perm	0.05		0.05	0.22		0.01		c0.06			0.03	
v/c Ratio	0.08	0.32	0.08	0.36	0.51	0.02		0.22			0.12	
Uniform Delay, d1	11.4	13.6	11.4	14.0	16.0	11.0		44.1			42.8	
Progression Factor	1.72	1.96	5.79	0.35	0.32	0.05		1.00			1.00	
Incremental Delay, d2	0.5	0.2	0.1	3.0	0.7	0.0		1.2			0.6	
Delay (s)	20.2	26.9	66.2	7.9	5.8	0.6		45.2			43.4	
Level of Service	C	C	E	A	A	A		D			D	
Approach Delay (s/veh)		30.6			5.8			45.2			43.4	
Approach LOS		C			A			D			D	

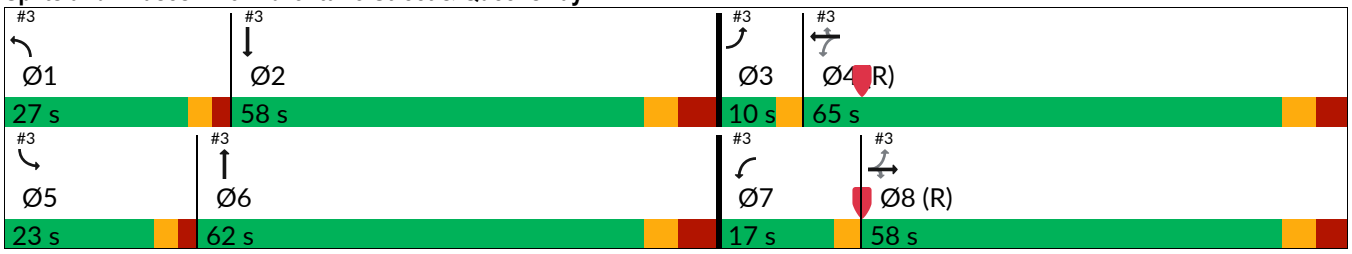
Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.1
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

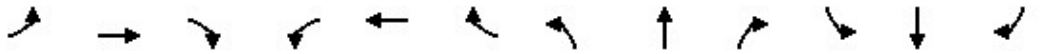


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	42	758	388	146	875	76	316	378	98	604
Future Volume (vph)	42	758	388	146	875	76	316	378	98	604
Lane Group Flow (vph)	46	824	422	159	951	83	343	616	107	772
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Prot	NA
Protected Phases	3	8		7	4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	3	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	5.0	8.0	8.0	5.0	8.0	8.0	8.0	8.0	8.0	8.0
Minimum Split (s)	8.0	57.0	57.0	8.0	57.0	57.0	13.0	58.0	13.0	58.0
Total Split (s)	10.0	58.0	58.0	17.0	65.0	65.0	27.0	62.0	23.0	58.0
Total Split (%)	6.3%	36.3%	36.3%	10.6%	40.6%	40.6%	16.9%	38.8%	14.4%	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)	0.0	3.8	3.8	0.0	3.8	3.8	2.0	4.7	2.0	4.7
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)	3.0	7.8	7.8	3.0	7.8	7.8	5.0	8.7	5.0	8.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes			Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max
Act Effct Green (s)	62.4	50.6	50.6	72.0	59.2	59.2	21.3	55.3	16.0	50.0
Actuated g/C Ratio	0.39	0.32	0.32	0.45	0.37	0.37	0.13	0.35	0.10	0.31
v/c Ratio	0.25	0.74	0.62	0.67	0.50	0.14	0.80	0.53	0.64	0.72
Control Delay (s/veh)	29.1	54.0	15.2	48.9	48.7	17.4	74.9	67.7	86.9	52.4
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)	29.1	54.0	15.2	48.9	48.7	17.4	74.9	67.7	86.9	52.4
LOS	C	D	B	D	D	B	E	E	F	D
Approach Delay (s/veh)		40.4			46.6			70.3		56.6
Approach LOS		D			D			E		E
Queue Length 50th (m)	9.1	116.7	23.4	41.7	104.8	7.9	52.5	91.8	30.7	106.9
Queue Length 95th (m)	18.2	139.7	58.4	62.5	117.5	22.2	67.3	111.9	50.2	129.3
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)	181	1107	680	241	1897	591	444	1160	187	1079
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.74	0.62	0.66	0.50	0.14	0.77	0.53	0.57	0.72

Intersection Summary		
Cycle Length: 160		
Actuated Cycle Length: 160		
Offset: 39 (24%), Referenced to phase 4:WBTL and 8:EBTL, Start of Green		
Natural Cycle: 140		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.80		
Intersection Signal Delay (s/veh): 52.0	Intersection LOS: D	
Intersection Capacity Utilization 117.5%	ICU Level of Service H	
Analysis Period (min) 15		

Splits and Phases: 3: Hurontario Street & Queensway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	758	388	146	875	76	316	378	189	98	604	106
Future Volume (vph)	42	758	388	146	875	76	316	378	189	98	604	106
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)	3.0	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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	0.98	1.00	1.00	0.96	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	0.95		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	1456	1667	5129	1441	3236	3248		1668	3423	
Flt Permitted	0.24	1.00	1.00	0.15	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	351	3500	1456	264	5129	1441	3236	3248		1668	3423	
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	824	422	159	951	83	343	411	205	107	657	115
RTOR Reduction (vph)	0	0	220	0	0	53	0	38	0	0	9	0
Lane Group Flow (vph)	46	824	202	159	951	30	343	578	0	107	763	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	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)	56.2	50.6	50.6	67.2	58.6	58.6	21.3	55.3		16.0	50.0	
Effective Green, g (s)	56.2	50.6	50.6	67.2	58.6	58.6	21.3	55.3		16.0	50.0	
Actuated g/C Ratio	0.35	0.32	0.32	0.42	0.37	0.37	0.13	0.35		0.10	0.31	
Clearance Time (s)	3.0	7.8	7.8	3.0	7.8	7.8	5.0	8.7		5.0	8.7	
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)	159	1106	460	230	1878	527	430	1122		166	1069	
v/s Ratio Prot	0.01	c0.24		c0.06	0.19		c0.11	0.18		0.06	c0.22	
v/s Ratio Perm	0.09		0.14	0.23		0.02						
v/c Ratio	0.29	0.75	0.44	0.69	0.51	0.06	0.80	0.52		0.64	0.71	
Uniform Delay, d1	35.1	48.9	43.4	33.6	39.4	32.8	67.3	41.7		69.3	48.7	
Progression Factor	1.00	1.00	1.00	1.34	1.21	3.57	0.91	1.72		1.00	1.00	
Incremental Delay, d2	2.1	4.6	3.0	9.7	0.9	0.2	10.8	1.6		11.2	4.1	
Delay (s)	37.2	53.5	46.5	54.6	48.6	117.3	71.9	73.5		80.4	52.7	
Level of Service	D	D	D	D	D	F	E	E		F	D	
Approach Delay (s/veh)		50.6			54.2			72.9			56.1	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	57.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	117.5%	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	823	8	0	1087
Future Vol, veh/h	0	13	823	8	0	1087
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	895	9	0	1182

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	473	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	543	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	534	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	534	-
HCM Lane V/C Ratio	-	-	0.026	-
HCM Ctrl Dly (s/v)	-	-	11.9	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q (veh)	-	-	0.1	-

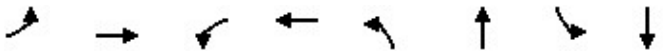
Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	31	799	93	0	1087
Future Vol, veh/h	0	31	799	93	0	1087
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	34	868	101	0	1182

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	508	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	515	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	506	-	-	-	-
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	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	506	-
HCM Lane V/C Ratio	-	-	0.067	-
HCM Ctrl Dly (s/v)	-	-	12.6	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q (veh)	-	-	0.2	-

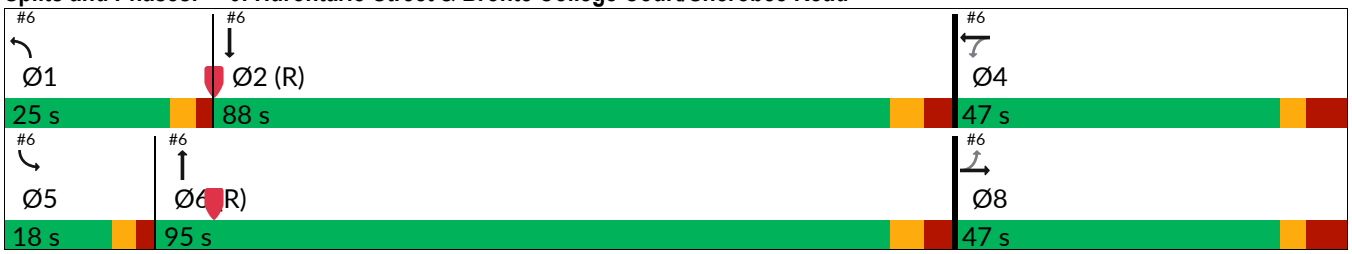


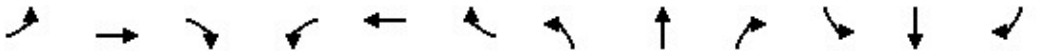
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	83	6	13	10	35	731	107	968
Future Volume (vph)	83	6	13	10	35	731	107	968
Lane Group Flow (vph)	90	217	14	112	38	803	116	1078
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
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)	3.0	3.0	3.0	3.0	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)	8.0	8.0	8.0	8.0	5.0	7.5	5.0	7.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	39.0	39.0	39.0	39.0	11.3	87.5	13.0	91.8
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.07	0.55	0.08	0.57
v/c Ratio	0.32	0.41	0.07	0.25	0.34	0.43	0.86	0.55
Control Delay (s/veh)	53.4	9.0	48.2	11.8	78.2	22.3	131.5	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.4	9.0	48.2	11.8	78.2	22.3	131.5	12.6
LOS	D	A	D	B	E	C	F	B
Approach Delay (s/veh)		22.0		15.8		24.8		24.2
Approach LOS		C		B		C		C
Queue Length 50th (m)	22.4	1.6	3.4	2.5	11.5	74.0	33.6	120.0
Queue Length 95th (m)	39.0	21.7	9.9	17.6	23.2	89.0	m#61.6	147.6
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)	283	530	187	453	198	1875	135	1963
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	0.41	0.07	0.25	0.19	0.43	0.86	0.55

Intersection Summary	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 3 (2%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 23.7	Intersection LOS: C
Intersection Capacity Utilization 83.8%	ICU Level of Service E
Analysis Period (min) 15	

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





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	6	193	13	10	93	35	731	7	107	968	24
Future Volume (vph)	83	6	193	13	10	93	35	731	7	107	968	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)	8.0	8.0		8.0	8.0		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	
Frpb, ped/bikes	1.00	0.95		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	0.86		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)	1618	1524		1506	1548		1589	3426		1668	3421	
Flt Permitted	0.68	1.00		0.49	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1166	1524		769	1548		1589	3426		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)	90	7	210	14	11	101	38	795	8	116	1052	26
RTOR Reduction (vph)	0	159	0	0	76	0	0	0	0	0	1	0
Lane Group Flow (vph)	90	58	0	14	36	0	38	803	0	116	1077	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		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)	39.0	39.0		39.0	39.0		9.7	87.5		13.0	90.8	
Effective Green, g (s)	39.0	39.0		39.0	39.0		9.7	87.5		13.0	90.8	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.06	0.55		0.08	0.57	
Clearance Time (s)	8.0	8.0		8.0	8.0		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)	284	371		187	377		96	1873		135	1941	
v/s Ratio Prot		0.04			0.02		0.02	0.23		c0.07	c0.31	
v/s Ratio Perm	c0.08			0.02								
v/c Ratio	0.32	0.16		0.07	0.09		0.40	0.43		0.86	0.55	
Uniform Delay, d1	49.6	47.6		46.6	46.8		72.3	21.5		72.6	21.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.34	0.53	
Incremental Delay, d2	2.9	0.9		0.8	0.5		5.5	0.7		33.1	0.8	
Delay (s)	52.5	48.5		47.4	47.3		77.9	22.2		130.5	12.4	
Level of Service	D	D		D	D		E	C		F	B	
Approach Delay (s/veh)		49.7			47.3			24.7			23.9	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

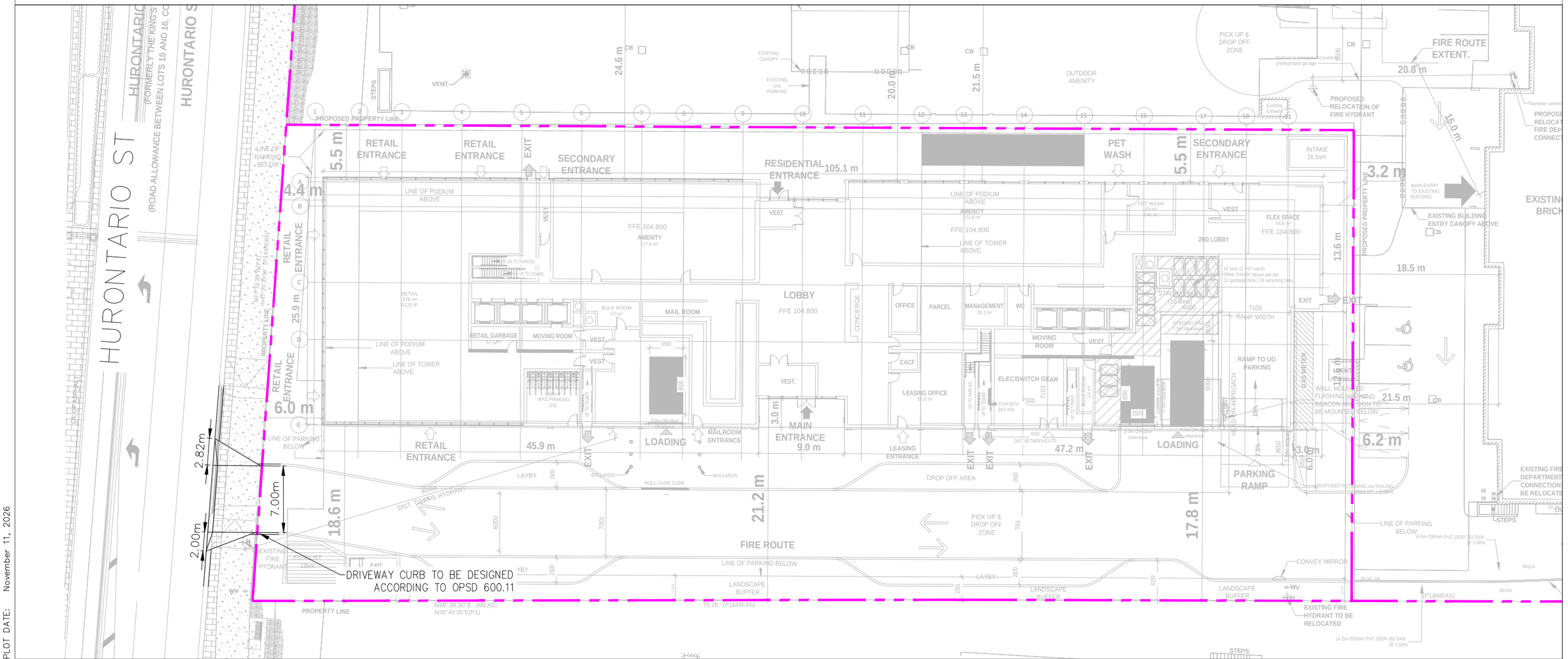
c Critical Lane Group

APPENDIX K

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.



PLOT DATE: November 11, 2026

DRAWN BY: E.C.

LEA Consulting Ltd. Consulting Engineers and Planners www.LEA.ca	N	Project No. 25123 Date NOV 12, 2026	NOT FOR CONSTRUCTION	2233-2235 HURONTARIO ST MISSISSAUGA ONTARIO 3 0 3 6 9m 1:300	ACCESS DESIGN REVIEW	Drawing No. 001

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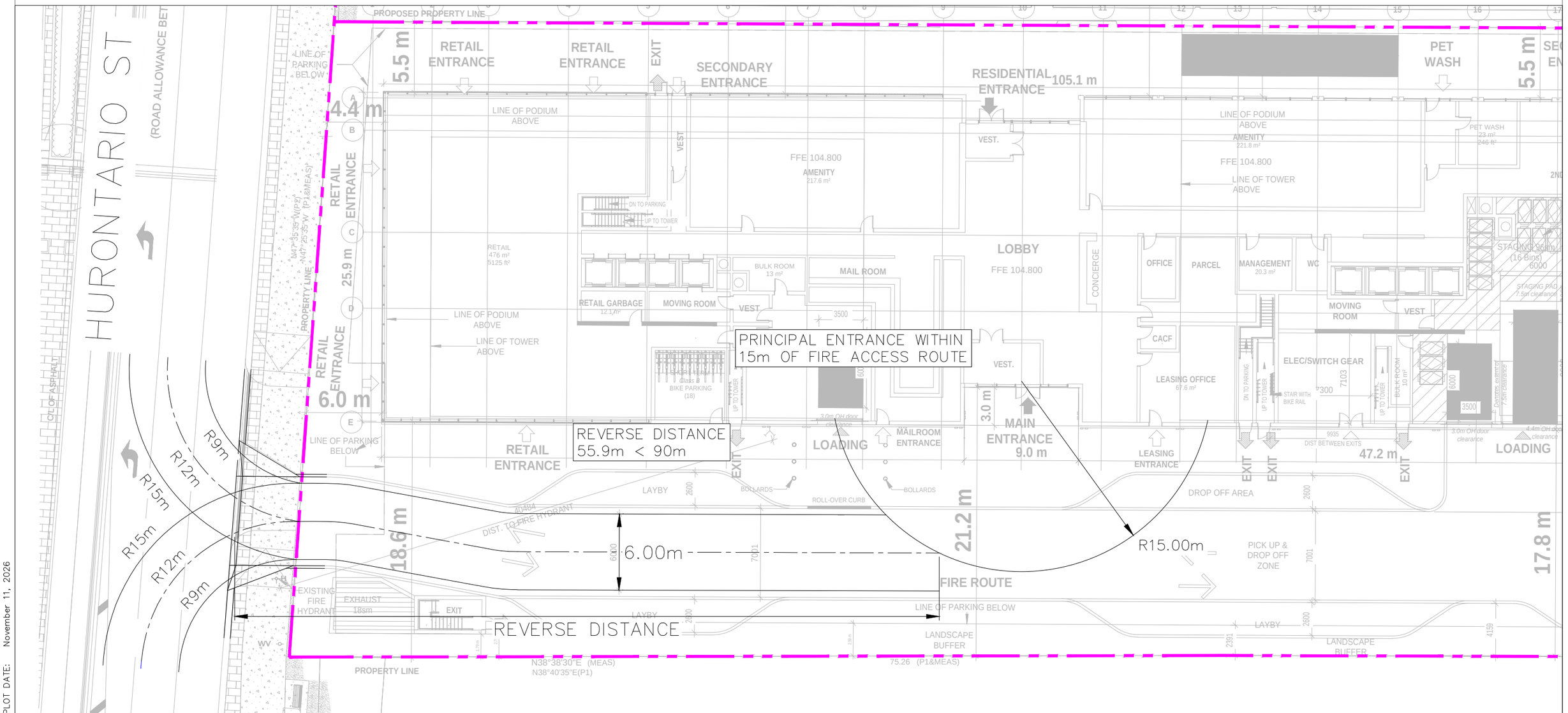
NOTES:

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



PLOT DATE: November 11, 2026

DRAWN BY: E.C.

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Project No. 25123

Date NOV 12, 2026

NOT FOR CONSTRUCTION

2233–2235 HURONTARIO ST
MISSISSAUGA ONTARIO

3 0 3 6 9m
1:300

FIRE ROUTE REVIEW

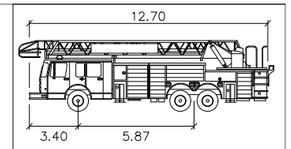
Drawing No. 002

DRAWING NAME: C:\Users\HSami\AppData\Local\Temp\AcPublish_11068\25123WF010.dwg

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



Fire Truck– ON

	meters
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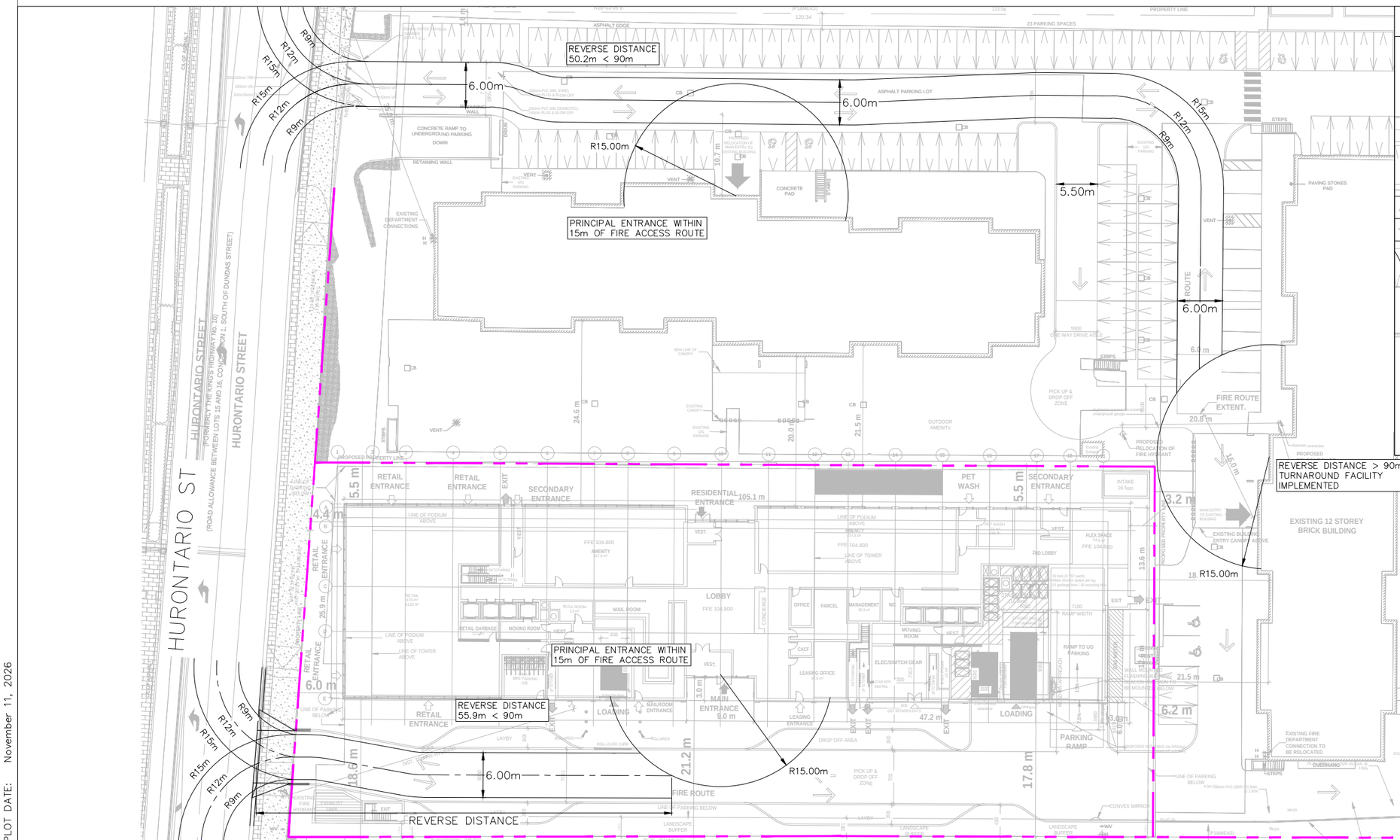
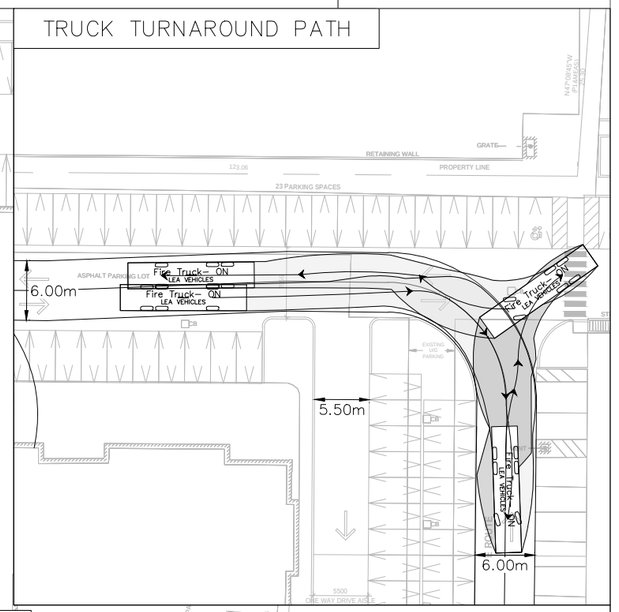
Track	: 2.54
Lock to Lock Time	: 6.0
Steering Angle	: 29.2





PLOT DATE: November 11, 2026

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Project No. 25123

Date NOV 12, 2026

NOT FOR CONSTRUCTION

2233–2235 HURONTARIO ST
MISSISSAUGA ONTARIO

6 0 6 12 18m
1:600

EXISTING BUILDINGS
FIRE ROUTE REVIEW

Drawing No. 003

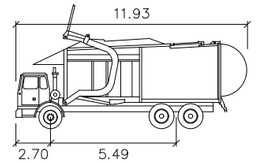
DRAWING NAME: C:\Users\HSami\AppData\Local\Temp\AcPublish_11068\25123WF010.dwg

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. 10m^2 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 710 UNITS, 710/45 = 16 3–YD3/ BINS ARE REQUIRED (REFER TO APPENDIX 7) – EACH 3–YD3/ BIN RESERVES 2mx3m SPACE, TOTAL STAGING AREA = 96m^2.
   - 7.3. GARBAGE STAGING AREA CONFIGURATION SUBJECTED TO THE APPROVAL OF REGION OF PEEL'S WASTE MANAGEMENT DEPARTMENT.

WATCH FOR TURNING TRUCKS WHEN FLASHING

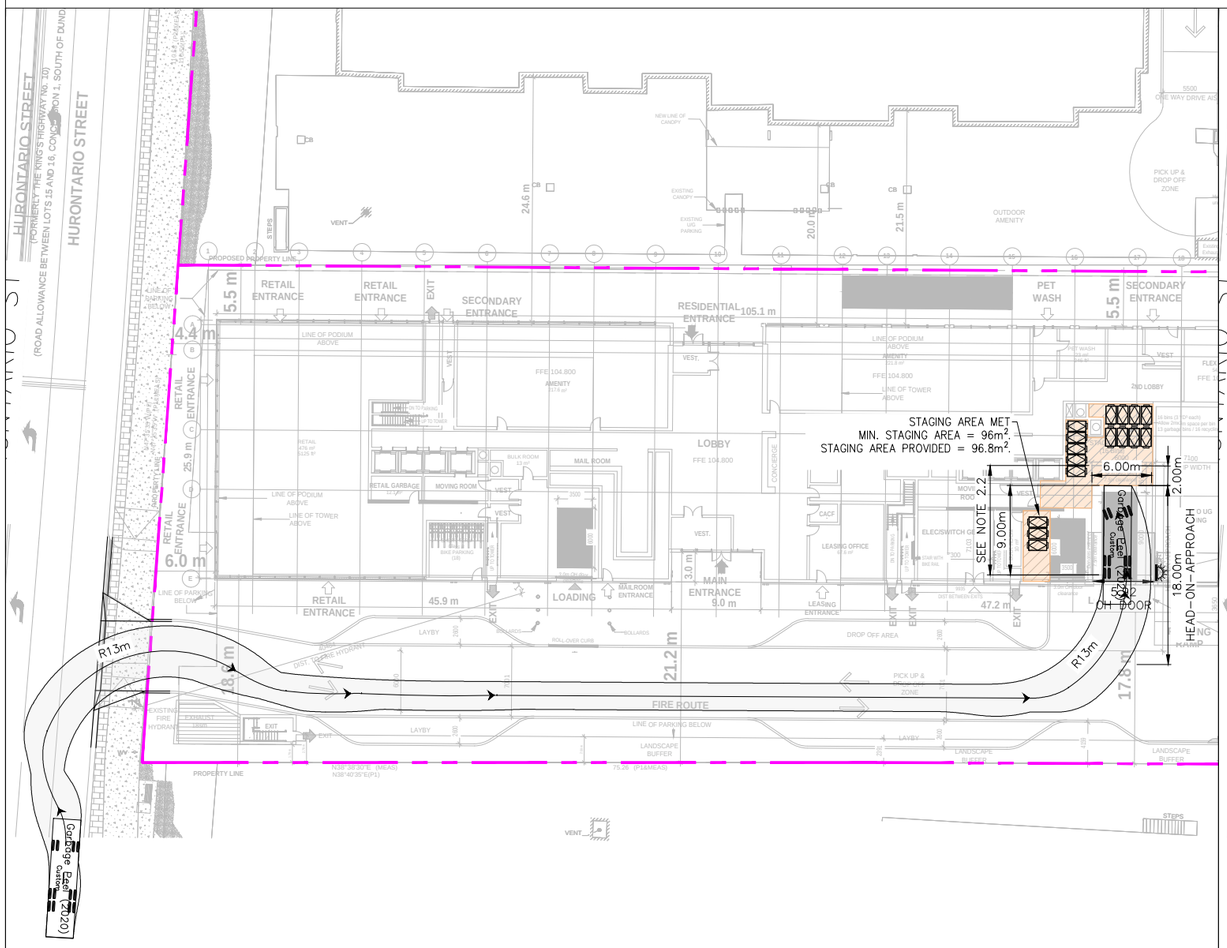
(600x300) BLACK LEGEND & BORDER, WHITE REFL. BACKGROUND.



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

PLOT DATE: November 11, 2026

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Project No. 25123

Date NOV 12, 2026

NOT FOR CONSTRUCTION

2233–2235 HURONTARIO ST
MISSISSAUGA ONTARIO

6 0 6 12 18m
1:600

LOADING REVIEW
PEEL GARBAGE TRUCK
ENTRY AND EXIT PATHS

Drawing No. 004

DRAWING NAME: C:\Users\HSami\AppData\Local\Temp\AcPublish_11068\25123WF010.dwg

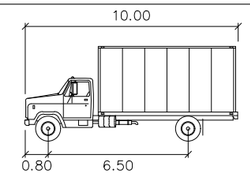
NOTES:

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

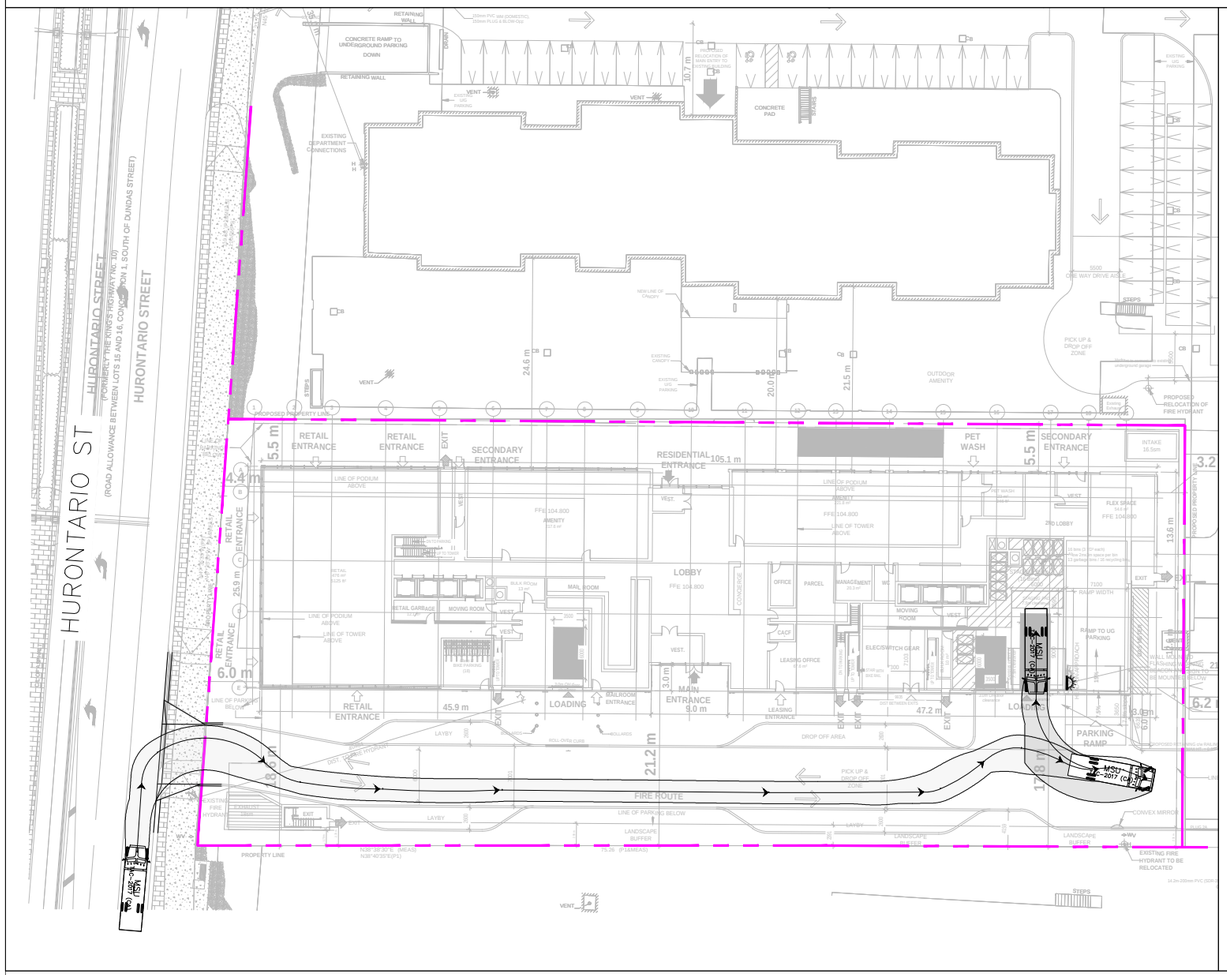
(600x300)
BLACK LEGEND & BORDER,
WHITE REFL. BACKGROUND.



MSU

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

REVERSE IN
FORWARD OUT



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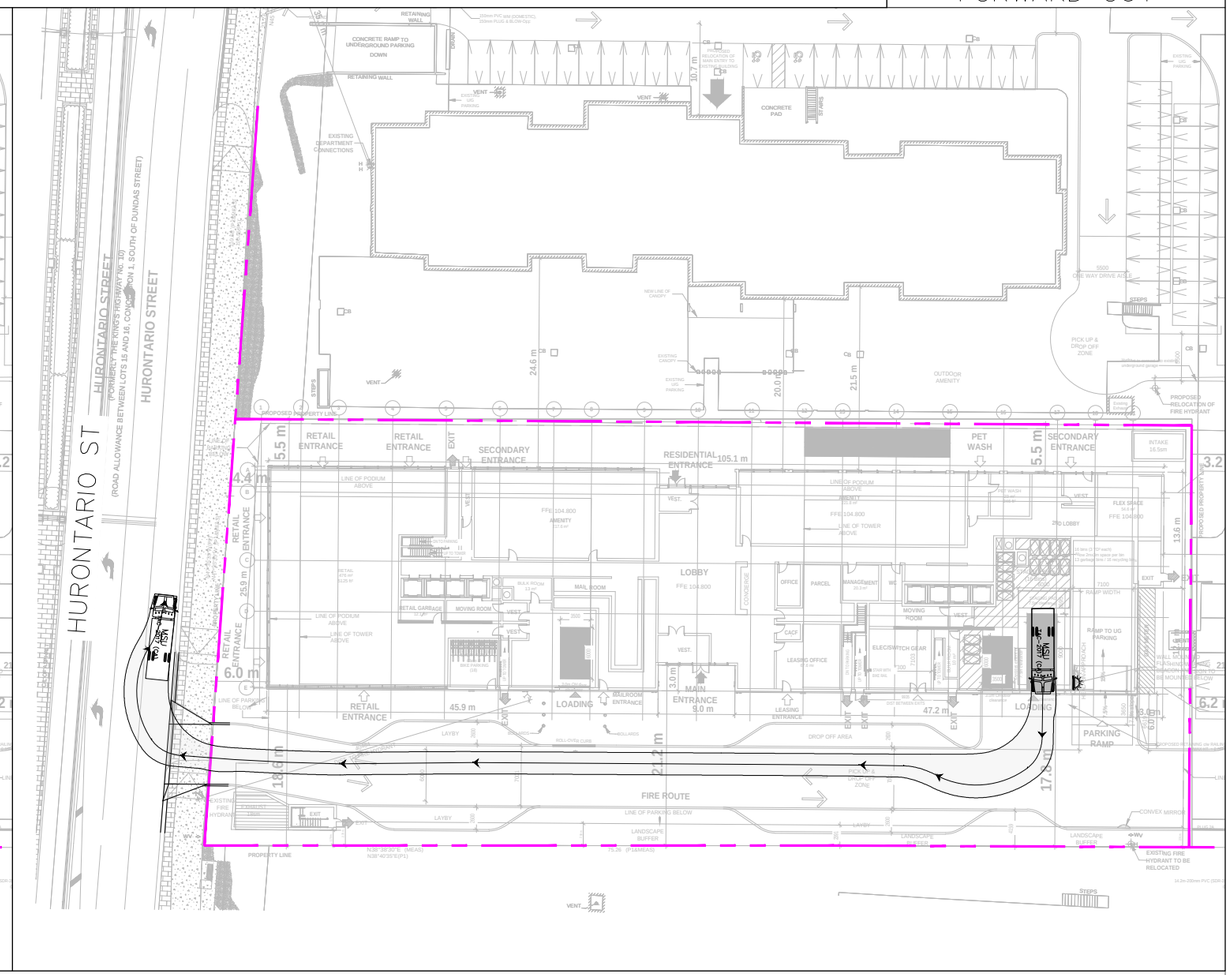

EXIT PATH

PLOT DATE: November 11, 2026

DRAWN BY: E.C.

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Project No.	Drawing No.
25123	005
Date: NOV 12, 2026	

NOT FOR CONSTRUCTION

2233-2235 HURONTARIO ST
MISSISSAUGA ONTARIO

7 0 7 14 21m
1:700

LOADING REVIEW
MSU (DELIVERY) TRUCK
ENTRY AND EXIT PATHS

DRAWING NAME: C:\Users\HSami\AppData\Local\Temp\AcPublish_11068\25123WF010.dwg

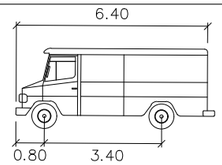
NOTES:

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

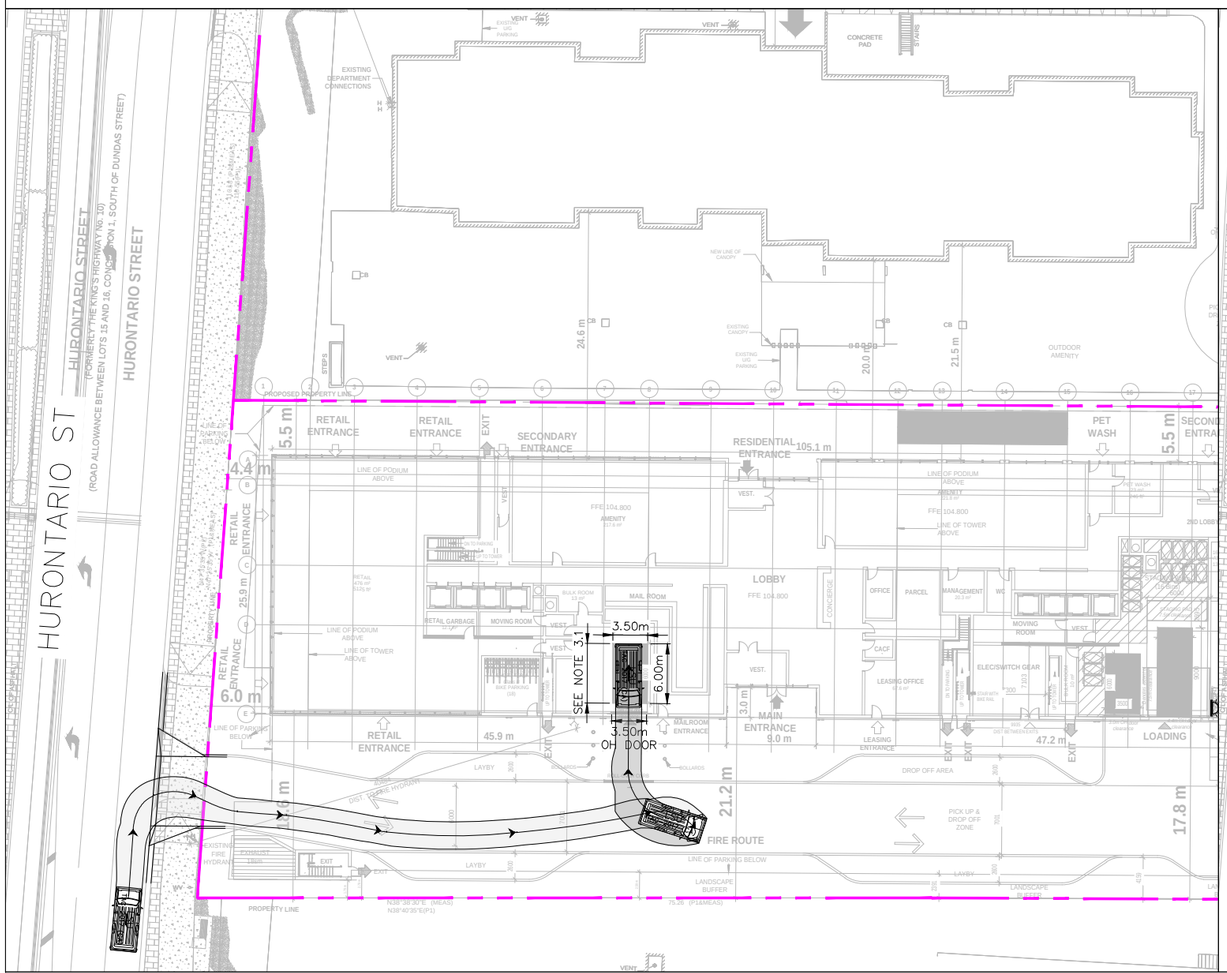
(600x300) BLACK LEGEND & BORDER, WHITE REFL. BACKGROUND.



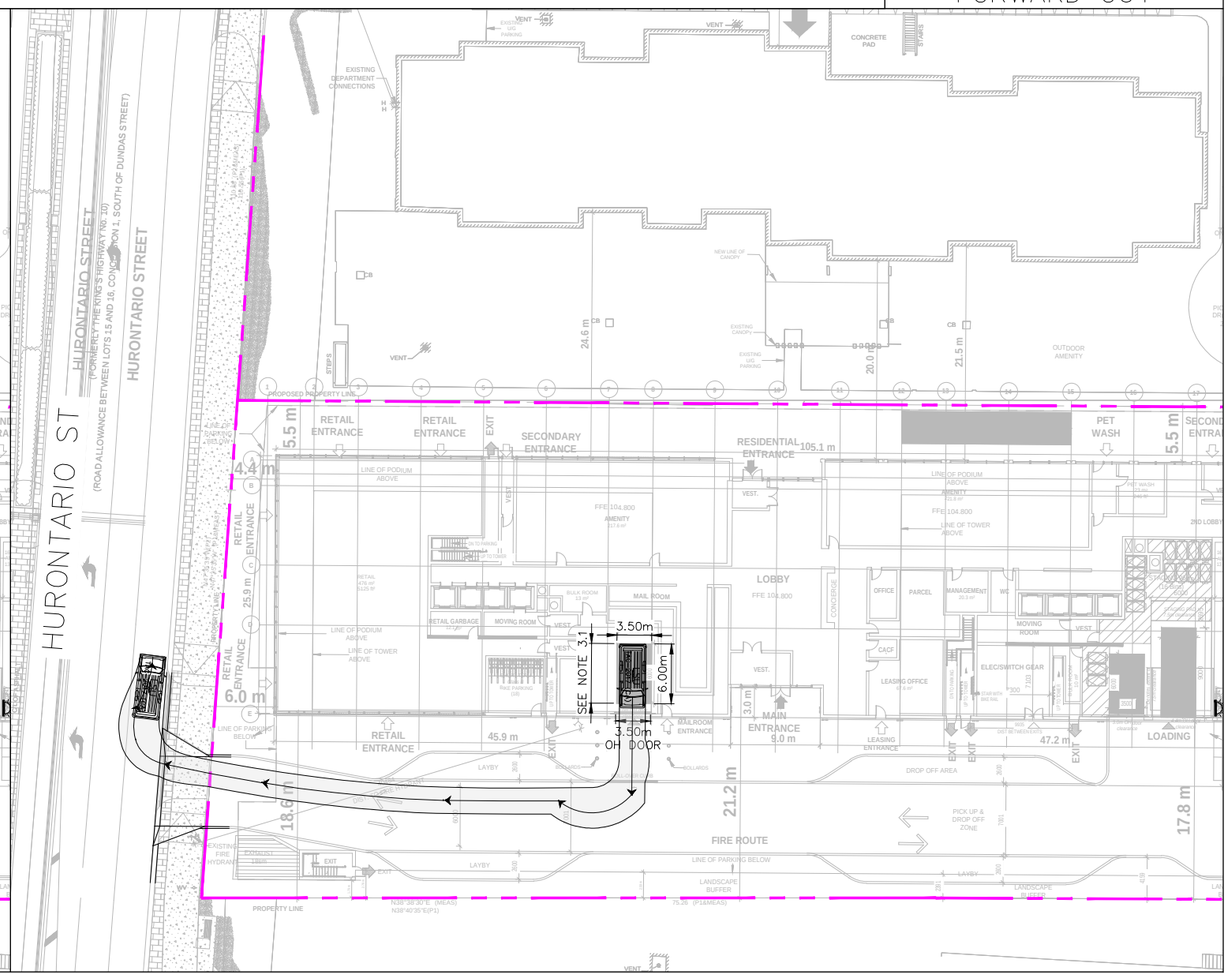
LSU

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

REVERSE IN FORWARD OUT



ENTRY PATH



EXIT PATH

PLOT DATE: November 11, 2026

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Project No. 25123

Date NOV 12, 2026

NOT FOR CONSTRUCTION

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

DRAWING NAME: C:\Users\HSami\AppData\Local\Temp\AcPublish_11068\25123WF010.dwg

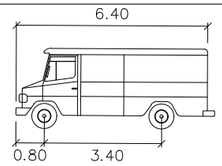
NOTES:

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

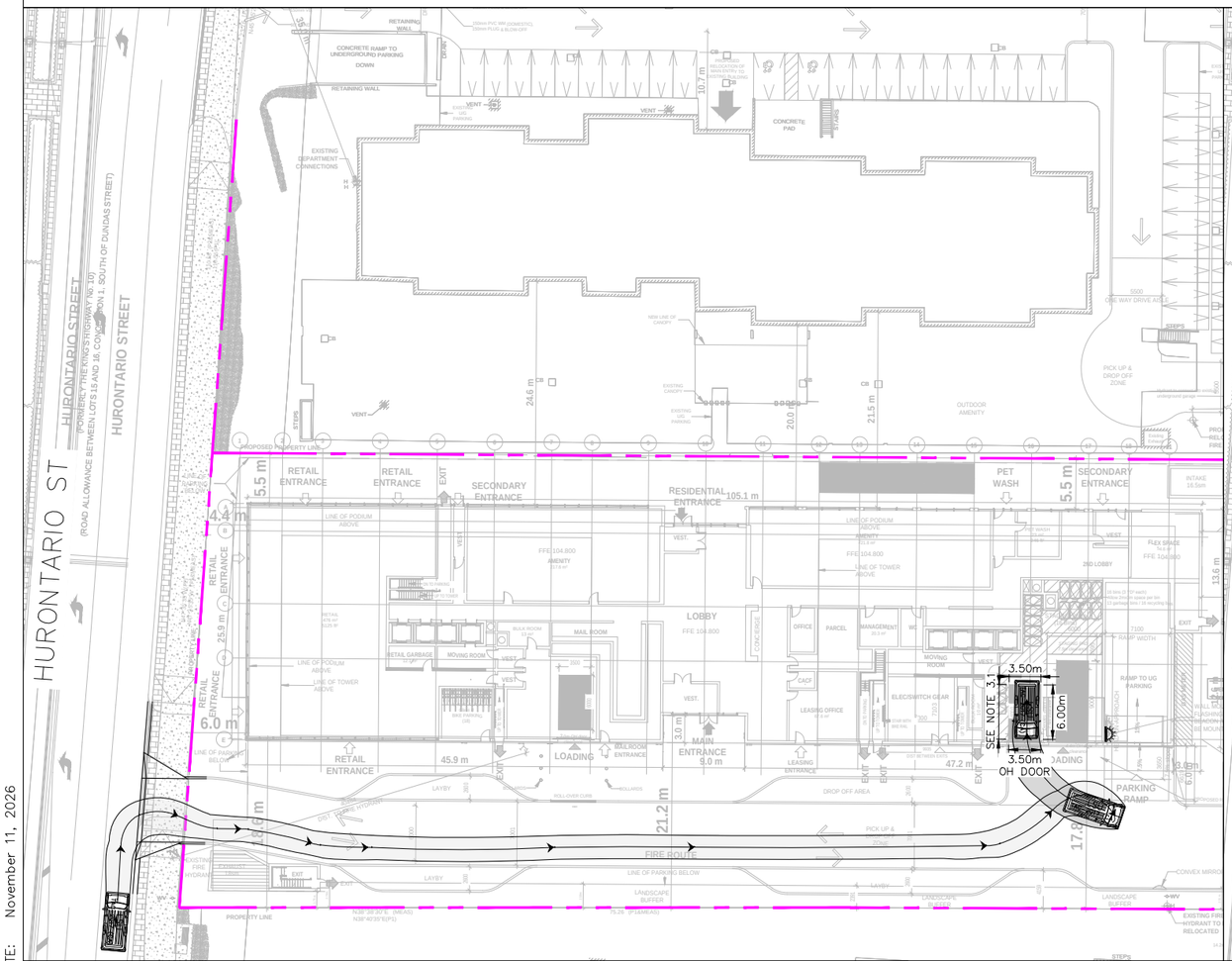
(600x300) BLACK LEGEND & BORDER, WHITE REFL. BACKGROUND.



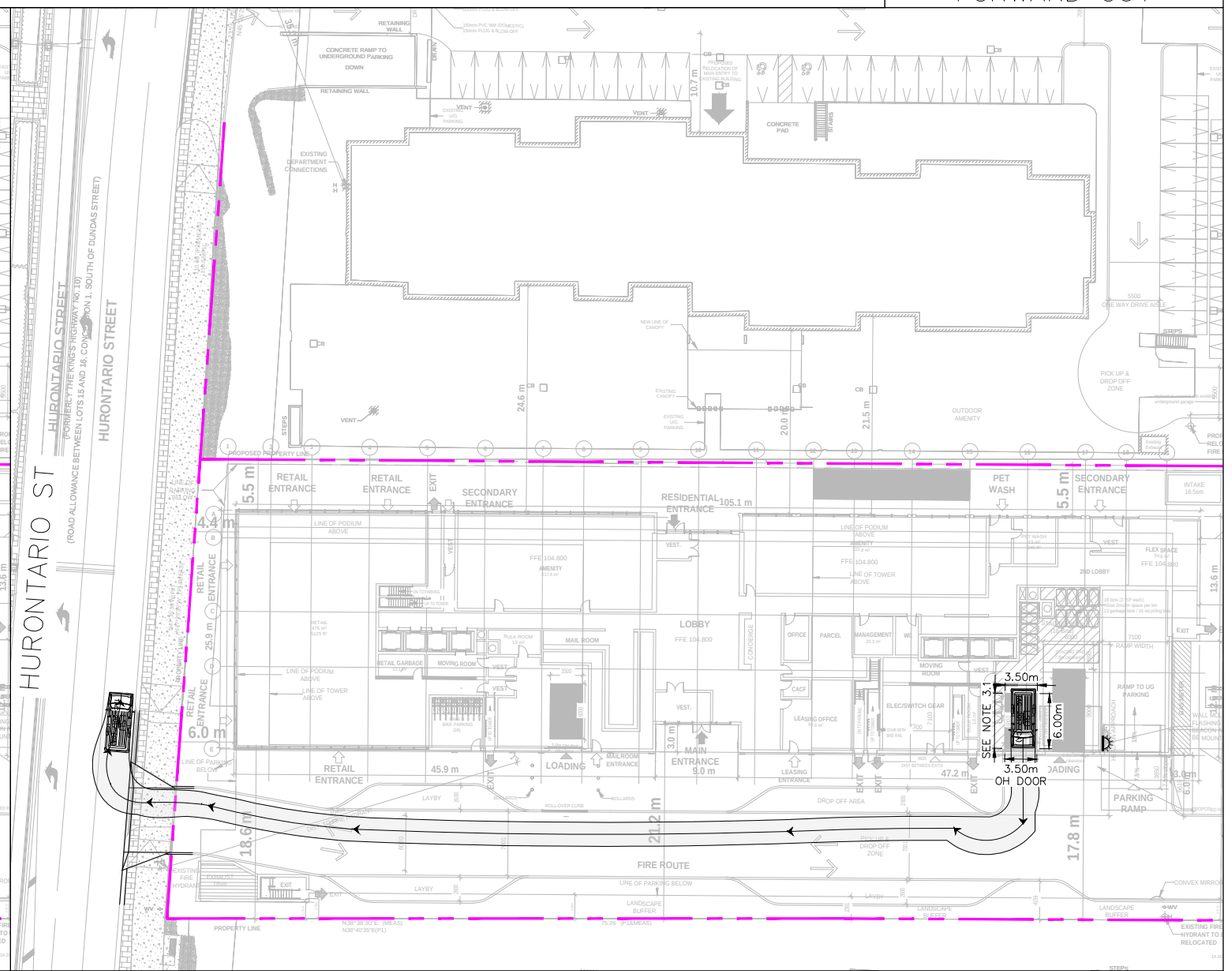
LSU

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

REVERSE IN FORWARD OUT



ENTRY PATH



EXIT PATH

PLOT DATE: November 11, 2026

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Project No. 25123

Date NOV 12, 2026

NOT FOR CONSTRUCTION

2233-2235 HURONTARIO ST
MISSISSAUGA ONTARIO

4 0 4 8 12m
1:400

LOADING REVIEW
LSU TRUCK
ENTRY AND EXIT PATHS EAST

Drawing No. 007

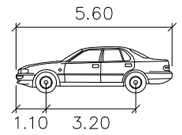
DRAWING NAME: C:\Users\HSami\AppData\Local\Temp\AcPublish_11068\25123WF010.dwg

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.

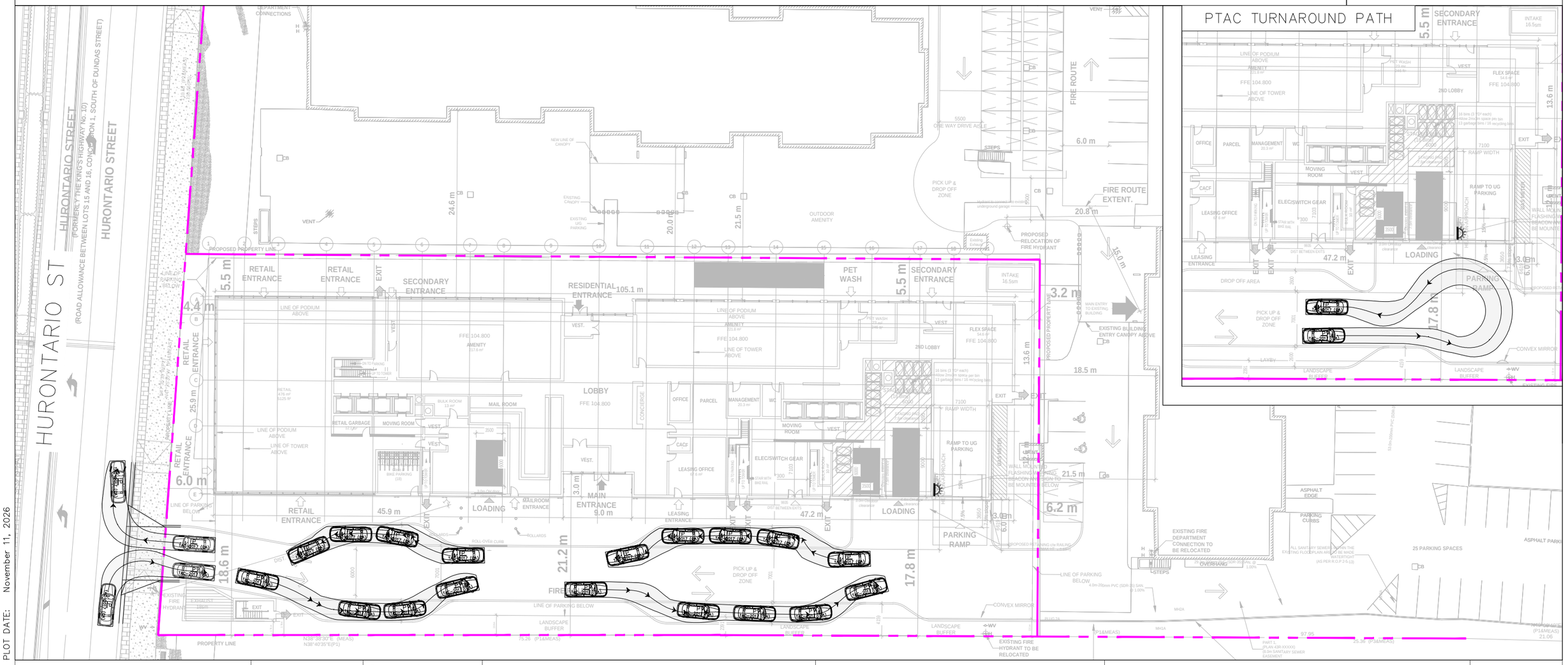


(600x300)
BLACK LEGEND & BORDER,
WHITE REFL. BACKGROUND.



P

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



PLOT DATE: November 11, 2026

DRAWN BY: E.C.

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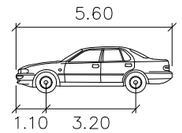
DRAWING NAME: C:\Users\HSami\AppData\Local\Temp\AcPublish_11068\25123WF010.dwg

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.

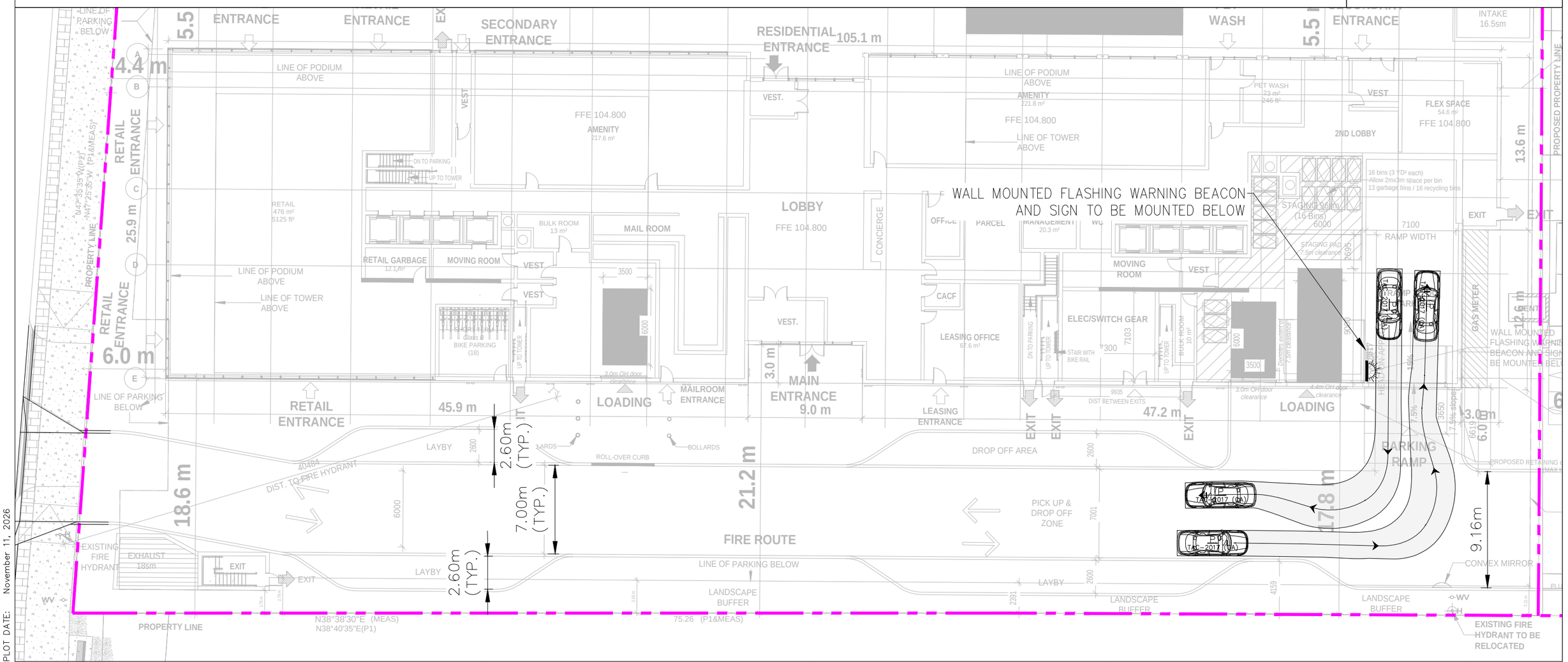
WATCH FOR TURNING TRUCKS WHEN FLASHING

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



P

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



PLOT DATE: November 11, 2026

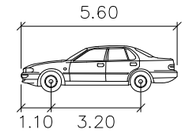
DRAWN BY: E.C.

LEA Consulting Ltd. Consulting Engineers and Planners www.LEA.ca		Project No. 25123 Date NOV 12, 2026	NOT FOR CONSTRUCTION	2233-2235 HURONTARIO ST MISSISSAUGA ONTARIO 3 0 3 6 9m 1: 300	GENERAL PARKING REVIEW	Drawing No. 009

DRAWING NAME: C:\Users\HSami\AppData\Local\Temp\AcPublish_11068\25123WF010.dwg

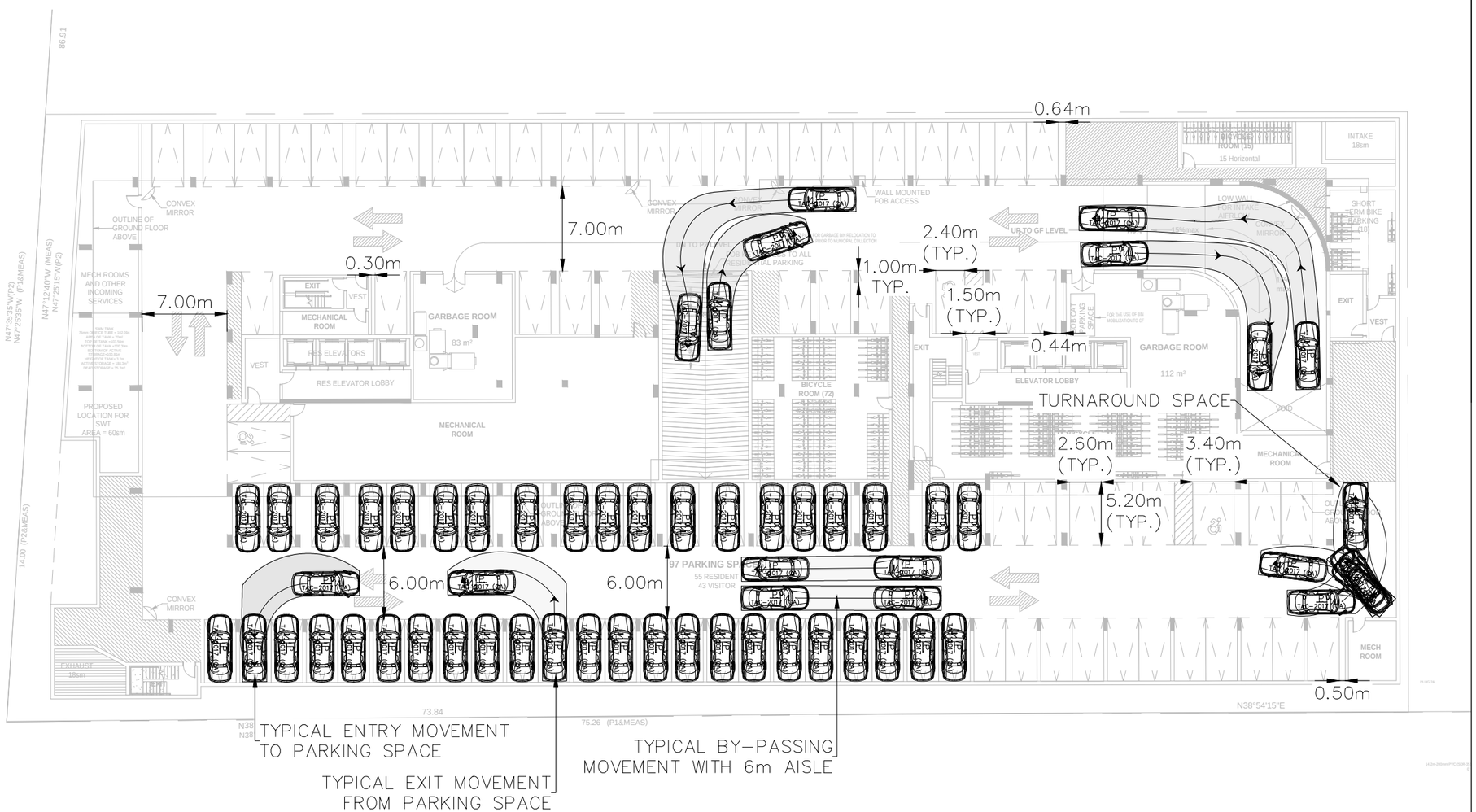
NOTES:

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

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



PLOT DATE: November 11, 2026

DRAWN BY: E.C.

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Project No.	Drawing No.
25123	010
Date: NOV 12, 2026	

NOT FOR CONSTRUCTION

2233–2235 HURONTARIO ST
MISSISSAUGA ONTARIO

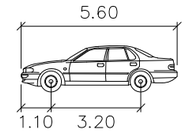
4 0 4 8 12m
1:400

GENERAL PARKING REVIEW
P1

DRAWING NAME: C:\Users\HSami\AppData\Local\Temp\AcPublish_11068\25123WF010.dwg

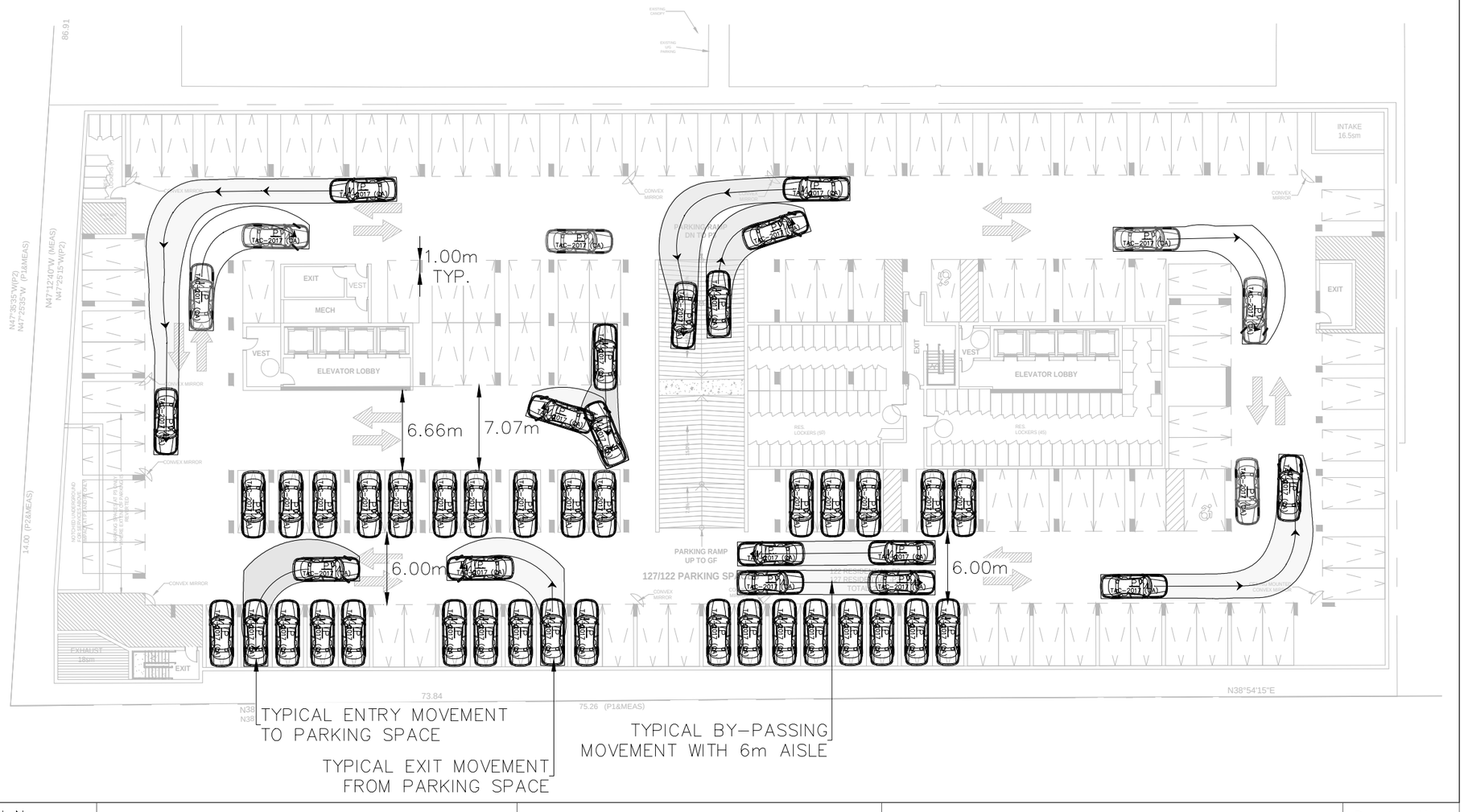
NOTES:

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

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



PLOT DATE: November 11, 2026

DRAWN BY: E.C.

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

Project No. 25123

Date NOV 12, 2026

NOT FOR CONSTRUCTION

2233-2235 HURONTARIO ST
MISSISSAUGA ONTARIO

4 0 4 8 12m
1:400

GENERAL PARKING REVIEW
P2

Drawing No. 011

DRAWING NAME: C:\Users\HSami\AppData\Local\Temp\AcPublish_11068\25123WF010.dwg

APPENDIX L

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: October 23, 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	TDM Plan prepared that targets a 10% reduction in peak hour trips using forecast trip generation with status quo travel characteristics	✔			
E2	Building owner/tenant will provide a ride matching service for car/vanpooling		✔		
E3	Building owner/tenant will provide emergency ride home options			✔	
E4	Building owner/tenant will provide subsidized transit passes for all occupants for a period of at least two years		✔		
E5	Building owner/tenant will charge for parking as an unbundled cost to occupants	✔			
E6	Building owner/tenant will reduce cost for users of car/van pool, bicycle, moped/motorcycle/minicar spaces			✔	
E7	Building owner/tenant will become a member of a local TMA and appoint a TDM Coordinator to oversee and coordinate promotional opportunities and events on site		✔		
	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%	