TYLin

To: Jacob Katz, President - Litera Group

From: Alan Xaykongsa and Amar Lad – TYLin

Date: June 21, 2023.

Address: 140 Ann St., Suite 202
London, ON N6A 1R2

Re: **The Beaverbrook Community, London, Ontario**
323 Oxford Street West, 92 Proudfoot Lane, 825 Proudfoot Lane
Transportation Impact Study (TIS) Addendum Letter

MEMORANDUM

Introduction

TYLin (formerly, the Municipal Infrastructure Group Ltd. (TMIG), a T.Y. Lin International Company) was retained by Sam Katz Holdings Limited to prepare a Transportation Impact Study in support of a Draft Plan of Subdivision for a proposed residential subdivision to be located on 3 parcels of land; 323 Oxford Street West, 92 Proudfoot Lane, & 825 Proudfoot Lane, owned by Sam Katz Holdings Limited and situated north of Oxford Street West, generally opposite Beaverbrook Avenue in the City of London. The proposed development will contain a mix of residential densities, parklands, and open space blocks around the Mud Creek channel. The site is currently a predominantly greenfield area.

The 2023 Beaverbrook Community resubmission comprises a coordinated set of revisions in response to comments received from the City of London and various agencies throughout 2022, as well as multiple working meetings and site walks with City staff and the UTRCA, and some design considerations led by the applicant.

As seen in **Figure 1**, the major changes to the Draft Plan include the road alignment of Street A and Street B, various road dimensions and geometries, revisions to the size and dimensions of the Neighbourhood Park (Block 10), and the separation of the original Block 8 into a developable and environmental block (Block 7 and Block 8, respectively). Revisions to the Draft Plan were also driven by three design considerations. The first design consideration includes combining original Block 1 and 2 into one rapid transit corridor development block. The second includes the separation of the multi-use pathway adjacent to the channel into a dedicated Open Space / Trail Block or within the Park Block. The third includes squaring off the original Block 3 (now Block 2) to add a northern portion to Park Block 9. Additionally, Park Block 9 was re-envisioned, with direction from the city, to provide community garden spaces as part of compensation efforts and community benefits. In addition, the revised Draft Plan includes an increase in the unit count to represent higher density targets which are primarily focused on the rapid transit

corridor development (Block 1) and blocks covered by the remnant High Density Overlay. The Draft Plan comparison can be found in further detail in **Attachment 1**.

Figure 1 2021 to 2023 Draft Plan Comparison

2021 Draft Plan	2023 Draft Plan	Notes
Block 1	Block 1	Combined into one Rapid Transit Corridor Block
Block 2		
Block 3	Block 2	Shifted block number & revised block shape
Block 4	Block 3	Shifted block number
Block 5	Block 4	Shifted block number
Block 6	Block 5	Shifted block number
Block 7	Block 6	Shifted block number
Block 8	Block 7	Developable area of original block
	Block 8	Environmental Area of original block
Block 9	Block 9	Expanded block area
Block 10	Block 10	Combined due to revised block and road layout
Block 11		

2021 Draft Plan	2023 Draft Plan	Notes
Block 12	Block 13	Shifted block number
Block 13	Block 11	Open Space / Trail removed from channel
	Block 14	Channel only
Block 14	Block 12	Open Space / Trail removed from channel
	Block 15	Channel only
Block 15	Block 16	Shifted block number
Block 16	Block 17	Shifted block number
Block 17	Block 18	Shifted block number
N/A	Block 19	Added Reserve Block
N/A	Block 20	Added Reserve Block

2021 to 2023 Draft Plan Comparison June 2023

The Beaverbrook Community • London, Ontario mbtw wai

The Transportation Impact Study (TIS) Addendum Letter is part of the 2023 Beaverbrook Community resubmission package and provides an addendum to the TIS submitted in July 2021 in response to updates made to the Draft Plan and site statistics. In the July 2021 TIS, the development proposed a total of 3,462 residential units (that included a 25% bonus density for a conservative assessment) – this addendum analyzes the effects of 355 additional dwelling units on the study area road network (totaling 3,817 units). Traffic analysis was done under the future total 2035 conditions which correlates to the full build-out of the residential development. All traffic assumptions made in the July 2021 TIS remain valid. Based on the analysis enclosed in this letter, the trips generated by **the additional 355 units can be accommodated** with negligible impact across the study area traffic network.

Development Context

The latest Draft Plan, found in **Attachment 2**, includes 7 medium and high-density residential blocks (including a rapid transit corridor block and 6 neighbourhood blocks) consisting of 3,817 units, 6.09 hectares of parklands, and 7.80 hectares of open space blocks. **Figure 2** shows the updated proposed Draft Plan showing the proposed residential blocks, neighbouring lands, and future site access.

Figure 2 Updated Draft Plan

Based on the proposed subdivision plan, vehicular access to the area will be provided by the proposed northward extension of Beaverbrook Avenue from Oxford Street West to Proudfoot Lane, a westerly extension of Westfield Drive to Beaverbrook Avenue. The proposed "Street A", "Street B", private condominium streets will act as public and private local roads through the site, connecting residential blocks to the collector road. A pedestrian walkway (to be evaluated further) is proposed to connect residents from Beaverbrook Avenue to Walmer Gardens, north of the Canadian Pacific Railway Line.

Based on pre-consultation with the City of London, a 1.0% annual growth rate was agreed to and applied to Oxford Street West, Beaverbrook Avenue, Proudfoot Lane, and Wonderland Road North to 2030, and 0.5% from 2030-2035. In addition, a 0.5% annual growth rate was agreed upon and applied to Cherryhill Boulevard and Platt's Lane to 2035.

Site Generated Traffic

The updated Draft Plan of subdivision is comprised of 3,817 units across seven blocks for the full build-out condition. This results in a net increase of 355 units from the July 2021 TIS. Site traffic generated by the proposed residential subdivision was estimated by applying the trip rates found under Land Use Code (LUC) 221 & LUC 222 in the ITE Trip Generation Manual, 10th Edition, for weekday a.m. and p.m. peak hours, for mid-rise and high-rise blocks, respectively. This is consistent with the methodology utilized in the July 2021 TIS. It is noted that only the full build-out 2035 horizon was analyzed and therefore, the trip generation was not divided into separate phases. The overall non-automobile modal split of 35% was used for the 2035 planning horizon to stay consistent with the July 2021 TIS.

Table 1 summarizes the estimated total trip generation of the subject site.

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Table 1 Passenger Car Peak Hour Trips

Horizon	Blocks	Land Use	Parameters	Peak Hour Trip Generation					
				Weekday AM			Weekday PM		
				In	Out	Total	In	Out	Total
Full Build-Out (2035)	4, 5, 6	Multifamily Housing (Mid-rise) LUC 221 1,090	Fitted Curve Equation	Ln(T) = 0.98 Ln(X) – 0.98			Ln(T) = 0.96 Ln(X) – 0.63		
			Trip Distribution	26%	74%	100%	61%	39%	100%
			Net Trips	65	188	253	190	121	311
	1, 2, 3, 7	Multifamily Housing (High-rise) LUC 222 2,727 units	Fitted Curve Equation	T = 0.28 X + 12.86			T = 0.34 X + 8.56		
			Trip Distribution	24%	76%	100%	61%	39%	100%
			Net Trips	132	417	549	388	249	637
	1-7	**3,817 units**	**Total Site Trips**	**197**	**605**	**802**	**578**	**370**	**948**
	Trips from July 2021 TIS (3,462 units)			**176**	**542**	**718**	**514**	**329**	**843**
Increase in Trips from July 2021 TIS (+355 units)				**+21**	**+63**	**+84**	**+64**	**+41**	**+105**

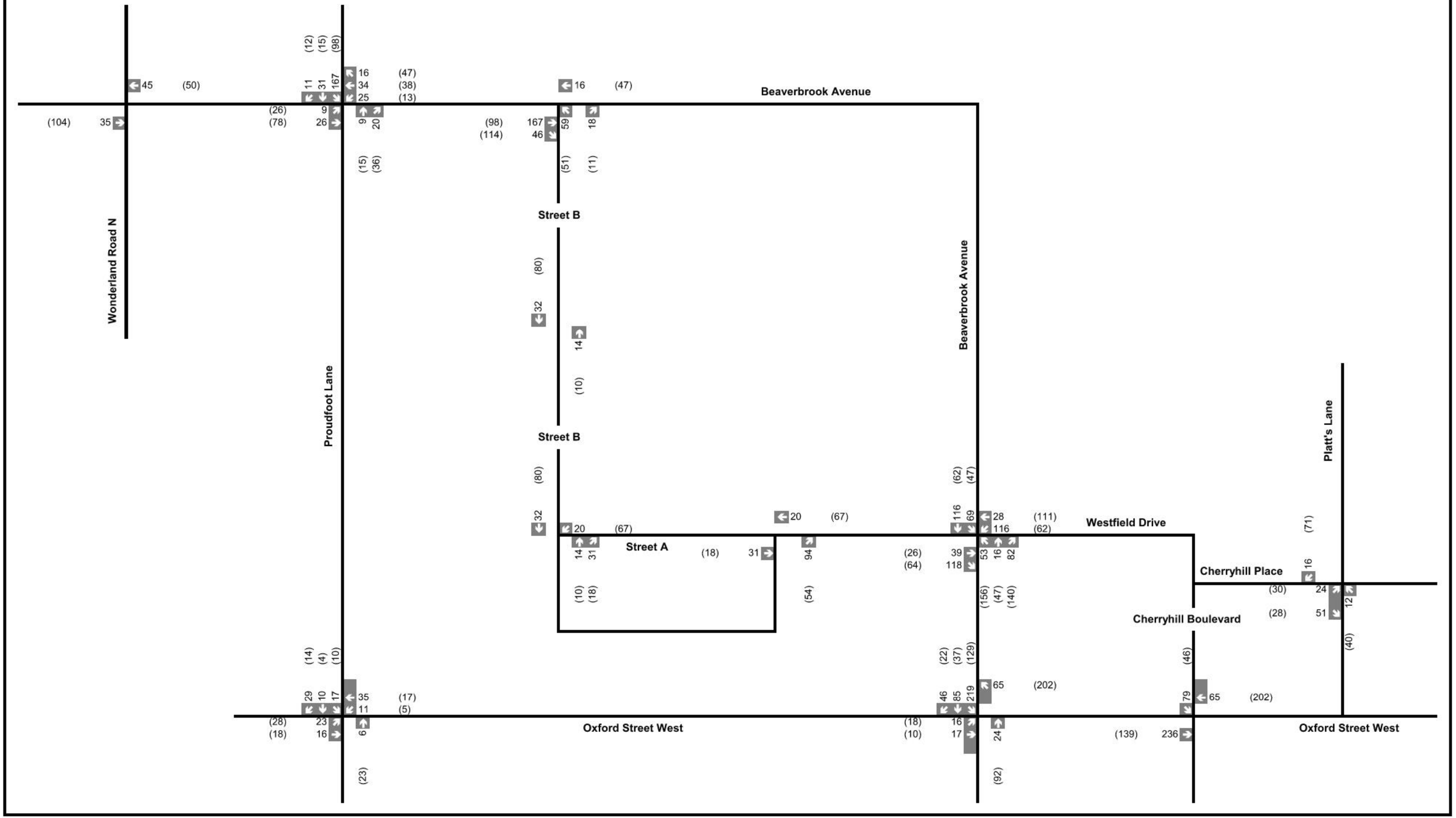
As outlined in **Table 1** during the 2035 planning horizon, the full build-out of the Draft Plan is expected to generate a total of 802 two-way vehicle trips during the a.m. peak hour, consisting of 197 inbound trips and 605 outbound trips. During the p.m. peak hour, it is expected to generate 948 two-way vehicle trips consisting of 578 inbound trips and 370 outbound trips. There is a total a.m. and p.m. increase in trips of 84 and 105 trips, respectively from the July 2021 TIS.

The site distribution and assignment were kept consistent with the July 2021 TIS. The distribution of site traffic was derived based on reasonable assumptions for the site's location in the City of London and refined in accordance with patterns observed in existing traffic data and the trip distribution methodology followed in background developments. The site traffic was assigned to the road network, accordingly, broken down by trips generated from each of the eight residential blocks within the subject site. **Table 2** summarizes the proportion of site trips distributed to the study area by direction of approach and departure for both the a.m. and p.m. peak hours.

Table 2 Site Trip Generation

Trip Orientation (To / From)	Distribution (%) AM		Distribution (%) PM	
	Inbound	Outbound	Inbound	Outbound
North	20%	10%	30%	20%
East	30%	50%	30%	50%
South	30%	35%	40%	25%
West	20%	5%	0%	5%
Total	**100%**	**100%**	**100%**	**100%**

Figure 3 illustrates the updated estimated passenger vehicle site trips generated by the proposed development that were assigned to the study road network for the ultimate 2035 horizon.



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Legend

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

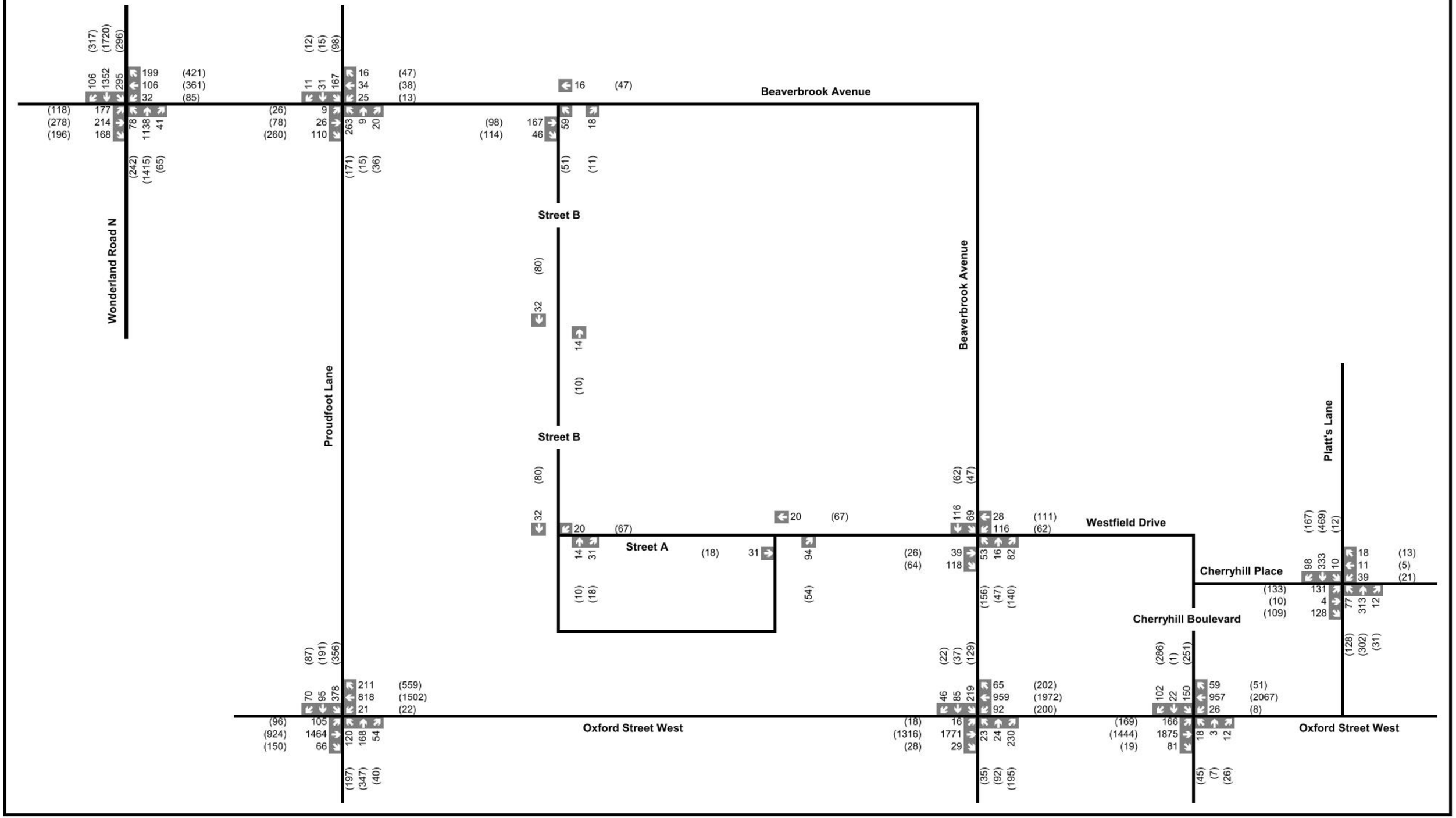
Figure 3

2035 Site Generated Traffic Volumes

Total Traffic Volumes

The future total traffic volumes were derived by combining the projected future background traffic volumes with the projected site trip assignment.

Figure 4 illustrates the future total traffic volumes for the 2035 planning horizon during the weekday a.m. and weekday p.m. peak hours.



Legend

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

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Figure 4

Future Total 2035 Traffic Volumes

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Future Total 2035 Traffic Capacity Analysis

The capacity analysis identifies how well the intersections and access driveways are operating and how they are expected to operate in the future. The analysis contained in this report utilized the Highway Capacity Manual (HCM) 2000 techniques within the Synchro Software package. The reported intersection volume-to-capacity ratios (v/c) are a measure of the saturation volume for each turning movement, while the levels-of-service (LOS) are a measure of the average delay for each turning movement.

The analysis includes identification of all intersections and for all movements; v/c ratios, and LOS indicators. 'Critical' intersections and movements include:

- Overall intersection operations, through movements or shared through/turning movements with a LOS F or v/c ratio increased to 0.90 or above; and
- V/C ratios for exclusive movements that will exceed 1.00 or LOS F

As per the July 2021 TIS, it is noted that the cycle length for the intersection of Wonderland Road North and Beaverbrook Avenue was increased to 145 seconds in the p.m. peak hour. All other intersection improvements are maintained from Future Background 2035 such as: a protected phase was added for the eastbound left movement and the signal timings were optimized for both peak hours. Additionally, a protected phase was added for the eastbound left and northbound left movements at the intersection of Oxford Street West and Proudfoot Lane under the future background 2035 conditions and was maintained under the future total 2035 conditions, and signal timings were optimized for both peak hours.

Furthermore, the signalization of the intersection of Oxford Street West and Beaverbrook Avenue was maintained from the Future Background 2026 scenario. This is also consistent with the July 2021 TIS.

Table 3 summarizes the Synchro/HCM capacity results for the study intersections during the weekday a.m. and weekday p.m. peak hours under future total 2035 traffic conditions. Detailed Synchro reports can be found in **Attachment 3**.

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Table 3 *Future Total 2035 Capacity Analysis*

Scenario	Movement of Interest	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Wonderland Road at Beaverbrook Avenue	*Overall*	*0.87*	*33*	*C*	***1.03***	*59*	***E***
	EBL	0.82	69	**E**	**0.99**	131	**F**
	EBT	0.58	47	D	0.56	46	D
	EBT	0.24	42	D	0.13	39	D
	WBL	0.21	49	D	0.44	51	D
	WBT	0.42	51	D	**0.91**	80	**F**
	WBR	0.15	48	D	0.76	64	**E**
	NBL	0.48	20	B	**1.01**	110	**F**
	NBT	0.78	34	C	0.89	45	D
	NBR	0.03	19	B	0.05	23	C
	SBL	0.83	48	D	**0.96**	90	**F**
	SBT	0.71	21	C	**1.00**	60	**E**
	SBR	0.10	12	B	0.38	25	C
Proudfoot Lane at Beaverbrook Avenue	EBLTR	0.23	10	A	0.47	12	B
	WBLTR	0.13	9	A	0.14	9	A
	NBLTR	0.45	12	B	0.33	11	B
	SBLTR	0.33	11	B	0.19	10	A
Proudfoot Lane at Oxford Street West	*Overall*	***1.03***	*40*	*D*	***1.02***	*43*	*D*
	EBL	0.39	16	B	0.84	70	E
	EBTR	0.89	31	C	0.66	26	C
	WBL	0.47	54	D	0.15	24	C
	WBT	0.55	28	C	**0.98**	46	D
	WBR	0.18	2	A	0.57	4	A
	NBL	0.49	45	D	0.56	39	D
	NBT	0.71	62	**E**	**0.97**	91	**F**
	NBR	0.04	48	D	0.03	43	D
	SBL	**1.10**	116	**F**	**1.02**	93	**F**

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Scenario	Movement of Interest	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Beaverbrook Avenue at Oxford Street West	*Overall*	***0.98***	*27*	*C*	*0.90*	*21*	*C*
	EBL	0.06	10	A	0.32	19	B
	EBTR	**0.96**	21	C	0.69	14	B
	WBL	**0.97**	155	**F**	0.72	31	C
	WBTR	0.50	7	A	0.89	16	B
	NBLT	0.22	48	D	0.66	63	**E**
	NBR	0.71	62	**E**	0.13	51	D
	SBL	0.84	67	**E**	0.66	57	**E**
	SBT	0.21	41	D	0.10	44	D
	SBR	0.03	39	D	0.01	43	D
Oxford Street West at Cherryhill Boulevard	*Overall*	*0.83*	*14*	*B*	***0.97***	*39*	*D*
	EBL	0.51	8	A	**0.90**	104	**F**
	EBTR	0.84	8	A	0.60	4	A
	WBL	0.44	32	C	0.04	10	B
	WBTR	0.52	13	B	**1.02**	49	D
	NBL	0.45	70	**E**	0.66	83	**F**
	NBTR	0.11	63	**E**	0.15	62	**E**
	SBL	0.58	60	**E**	0.69	66	**E**
	SBT	0.56	59	**E**	0.69	66	**E**
	SBR	0.08	46	D	0.85	72	**E**
Platt's Lane at Cherryhill Place (unsignalized)	EBLTR	**1.07**	115	**F**	**1.41**	263	**F**
	WBLTR	0.42	40	**E**	0.28	41	**E**
	NBL	0.08	9	A	0.15	10	A
	NBTR	0.21	0	A	0.20	0	A
	SBL	0.01	8	A	0.01	9	A
	SBTR	0.28	0	A	0.37	0	A

Scenario	Movement of Interest	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Beaverbrook Avenue at Street A/Westfield Drive (unsignalized)	EBLTR	0.24	12	B	0.14	12	B
	WBLTR	0.48	26	D	0.51	26	D
	WBLTR	0.04	3	A	0.10	4	A
	SBLTR	0.05	3	A	0.03	4	A
Street B at Beaverbrook Avenue (unsignalized)	EBTR	0.14	0	A	0.12	0	A
	WBLT	0.00	0	A	0.00	0	A
	NBLR	0.11	10	B	0.08	10	A
Street B at Street A (unsignalized)	WBLR	0.02	9	A	0.07	9	A
	NBLR	0.03	0	A	0.02	0	A
	SBLT	0.00	0	A	0.00	0	A

As seen in **Table 3**, the results of the Synchro analysis with the updated site statistics are consistent with that in the July 2021 TIS. Under 2035 future total conditions, most intersections are operating within capacity, with acceptable Levels of Service and reasonable delays for most movements.

The signalized intersection of Wonderland Road North and Beaverbrook Avenue is operating with an overall v/c of 1.03 and LOS 'E' in the p.m. peak hour, due to several movements approaching capacity and operating with LOS of 'E' or 'F'. Notably, the northbound left is operating with a v/c of 1.01 and LOS 'F', the southbound left at a v/c of 0.96 and LOS 'F', and the southbound through at a v/c of 1.00 and LOS 'E'. These movements continue to be limited due to the compounded corridor growth over 15 years and are not impacted by the introduction of site traffic, **as demonstrated in future background conditions** shown in the July 2021 TIS.

The unsignalized four-way intersection of Beaverbrook Avenue and Proudfoot Lane is operating with LOS 'B' or better, minimal delays, and considerable reserve capacity for all movements. Traffic signal and stop-control warrants were conducted, as detailed in **Section 8** of the July 2021 TIS, and an all-way stop control was warranted for this intersection.

The signalized intersection of Proudfoot Lane at Oxford Street West is operating at an overall LOS 'D' during weekday a.m. and p.m. peak hours, due to v/c of 1.03 and 1.02, respectively. In the a.m. peak hour, this is due to the southbound left operating with a v/c of 1.10 and LOS 'F' due to delays of 116 seconds. In the p.m. peak hour, the northbound through and southbound left are operating with v/c of 0.97 and 1.02, respectively, with LOS 'F' and delays of 91 and 93 seconds. These movements continue to be limited due to the compounded corridor growth over 15 years and are not impacted by the introduction of site

traffic, as demonstrated in **future background conditions** (as seen in the July 2021 TIS). All other movements are operating with sufficient reserve capacity and minimal delays.

The signalized intersection of Beaverbrook Avenue and Oxford Street West is operating at an overall LOS 'C' during weekday a.m. and p.m. peak hours. In the a.m. peak hour, the overall v/c of 0.98 is triggered by the westbound left movement's v/c of 0.97 and LOS 'F' due to delays of 155 seconds. Signal coordination along Oxford Street West, leading to better platooning of vehicles travelling eastbound and westbound, may help manage delays along the corridor and improve the flow of left turning vehicles. Other movements such as the northbound through/left, northbound right and southbound left are operating with LOS 'E' similarly due to challenges crossing with large east-west through **volumes resulting from 15 years of background corridor growth.**

The signalized intersection of Oxford Street West and Cherryhill Boulevard is generally operating with some delay, acceptable LOS, and sufficient reserve capacity during both peak hours. In the p.m. peak hour, the overall v/c of 0.97 and LOS 'D' is triggered by the eastbound left operating with a v/c of 0.90 and LOS 'F' due to turning delays of 104 seconds, and a westbound through/right operating with a v/c of 1.02 and delays of 49 seconds. Northbound and southbound movements are operating with LOS 'E' and 'F' in both peak hours due to existing cycle length limitations and splits geared towards east-west movements to **accommodate background corridor growth.**

The unsignalized intersection of Platt's Lane and Cherryhill Place is generally operating with minimal delay, acceptable LOS, and sufficient reserve capacity during both peak hours. However, the eastbound left/through/right movement is operating with v/c of 1.07 and 1.41 (compared to 1.04 and 1.34 in the July 2021 TIS), with delays of 115 and 263 seconds in the a.m. and p.m. peak hours, respectively, resulting in an LOS 'F', **primarily caused by background corridor growth**. It is understood that growth along this street would be caused by the proposed development, rather than added on top of the same, during the study horizon. The application of compounded growth of 0.5% on Cherryhill Place across the 15-year period of this study, despite the closed geography of the street should be reconsidered by the City.

All unsignalized internal stop-controlled intersections are operating with LOS 'A' or LOS 'B' for all movements, minimal delay, and considerable reserve capacity.

In comparison with the results from the July 2021 TIS, the Synchro analysis shows that the addition of 355 units does not significantly impact the v/c ratios, delays, and LOS across the study area intersections. Overall, all intersections operate within capacity and with minimal delays for most movements under 2035 future total conditions.

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Conclusions and Recommendations

Following the traffic analysis completed in this addendum, TYLin provides the following summary and recommendations based on the updated site statistics for the proposed development:

- As per the latest site plan, there are a total of 3,817 units across seven blocks proposed for the full build-out of the development by the ultimate 2035 horizon year. This is an increase 355 dwelling units from the July 2021 TIS.
- With the updated site statistics, the development is estimated to generate a total 802 two-way vehicle trips during the a.m. peak hour, consisting of 197 inbound trips and 605 outbound trips. During the p.m. peak hour, it is expected to generate 948 two-way vehicle trips consisting of 578 inbound trips and 370 outbound trips.
- Under future 2035 traffic conditions, the study area intersections are expected to predominantly operate with good operational characteristics and sufficient reserve capacity during both weekday a.m. and p.m. peak hours with no significant issues brought about by the proposed development to report. **Any poor LOS or delay for select turning movements under future conditions is a result of poor operations under existing conditions or extensive background corridor growth and not due to the addition of site generated traffic**, as detailed within the July 2021 TIS. All internal intersections within the subdivision are also anticipated to operate with good functionality and acceptable levels of service (LOS) and v/c ratios.
- It is noted that in comparison with the future total results from the July 2021 TIS, the addition of new units in the proposed development does not significantly change the capacity of the study intersections.
- Accordingly, it is TYLin's opinion that traffic from the proposed development can be accommodated by the boundary road network and can accommodate the proposed development traffic demands.
- All conclusions made in the July 2021 TIS still remain valid.

TYLin

Attachments

Attachment 1 – 2021 and 2023 Draft Plan Comparison

Attachment 2 – Draft Plan (2023-06-08)

Attachment 3 – Future Total 2035 Synchro Reports

TYLin

ATTACHMENT 1

2021 and 2023 Draft Plan Comparison

2021 Draft Plan Submission

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2023 Draft Plan Submission

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N/A	Block 20	Added Reserve Block

2021 to 2023 Draft Plan Comparison

June 2023

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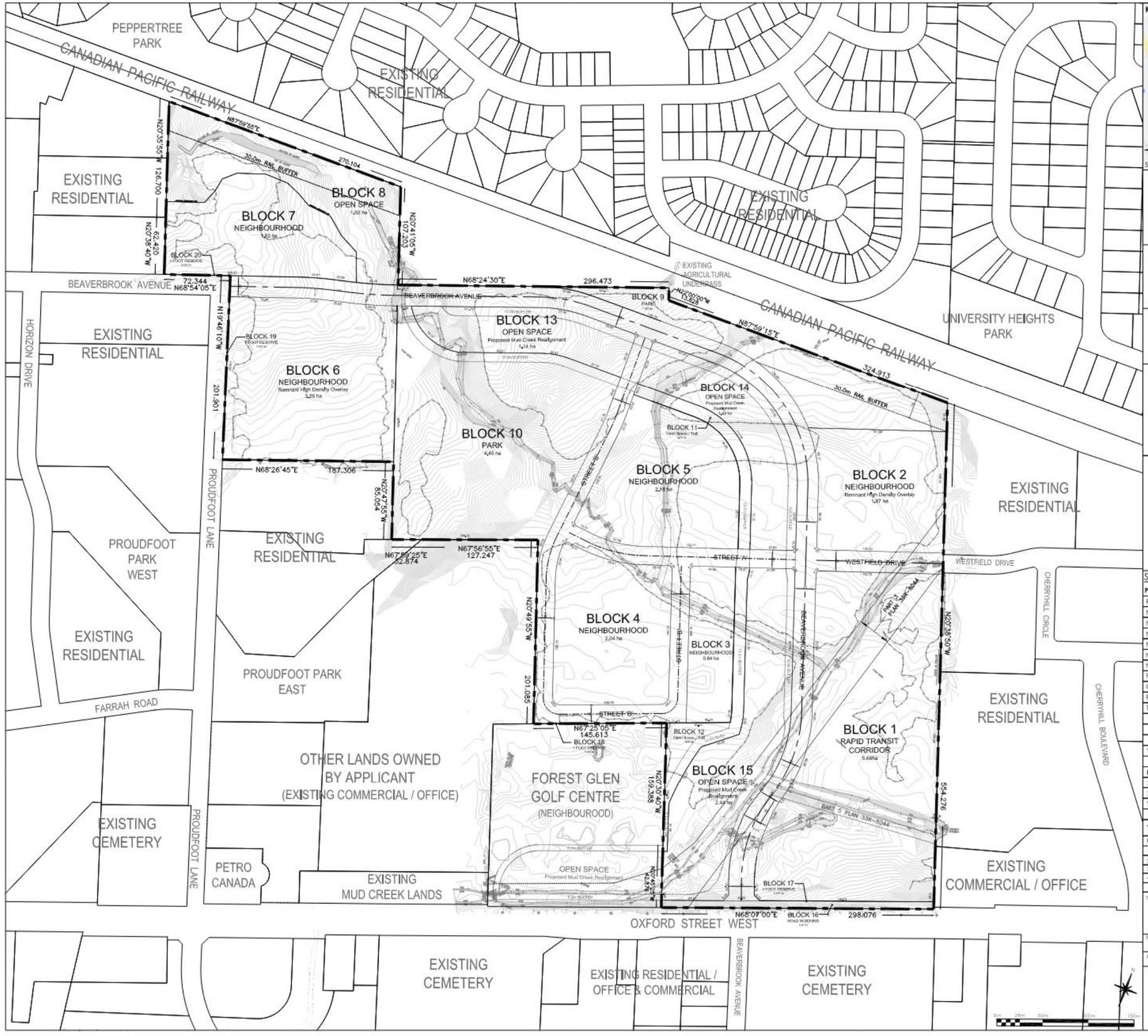
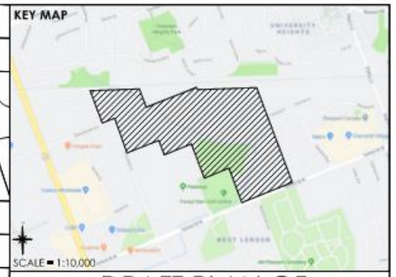
ATTACHMENT 2

Draft Plan (2023-06-08)



KEY MAP



SCALE = 1:10,000

DRAFT PLAN OF SUBDIVISION

File No. 39T87009

PART OF LOT 19, CONCESSION 2

CITY OF LONDON

COUNTY OF MIDDLESEX

OWNER'S CERTIFICATE

I, THE UNDERSIGNED, BEING THE REGISTERED OWNER OF THE SUBJECT LANDS, HEREBY AUTHORIZE THE MBTW GROUP TO PREPARE THIS DRAFT PLAN OF SUBDIVISION AND TO SUBMIT SAME TO THE CITY OF LONDON FOR APPROVAL.

DATE — Sam Katz Developments Ltd.

SURVEYOR'S CERTIFICATE

I CERTIFY THAT THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AND THEIR RELATIONSHIP TO ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DATE — MTE Ontario Land Surveyors Ltd.

ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT

a) AS SHOWN	g) AS SHOWN
b) AS SHOWN	h) MUNICIPAL WATER SUPPLY
c) REFER TO KEY PLAN	i) CLAY, LOAM SOIL
d) AS SHOWN	j) AS SHOWN
e) AS SHOWN	k) MUNICIPAL SERVICES
f) AS SHOWN	l) AS SHOWN

METRIC

DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

SUBJECT TO THE CONDITIONS, IF ANY, SET FORTH IN OUR LETTER DATED_____ DAY OF _____, 20____ THIS DRAFT PLAN IS APPROVED UNDER SECTION 51 OF THE PLANNING ACT THIS ____ DAY OF _____, 20____

STATISTICS

PROPOSED LAND USE	BLOCK	UNITS	AREA (ha)
Rapid Transit Corridor	1	1,716	5.66ha
Neighbourhood (Remnant H.D.O.)	2	452	1.87ha
Neighbourhood	3	193	0.84ha
Neighbourhood	4	134	2.04ha
Neighbourhood	5	174	2.18ha
Neighbourhood	6	782	3.26ha
Neighbourhood (Remnant H.D.O.)	7	366	1.83ha
Park	9-10	–	6.09ha
Open Space	8, 11-15	–	7.80ha
Road Widening	16	–	0.23ha
1 Foot Reserve	17-20		0.02ha
TOTAL	20	3,817	31.82ha

ROADS	STREET	LENGTH	AREA (ha)
20m ROW	n & s	980m	2.00ha
23-24m ROW	Beaverbrook Avenue, Westfield Drive	1,340m	3.14ha
TOTAL		2,320m	5.14ha
TOTAL			36.96ha

Revision #	Description	Date
1	Revised to reflect updated environmental features	March 3, 2020
2	Revised to address City comments	July 15, 2021
3	Revised to address City comments	February 14, 2023
4	Revised Block 1 Unit Count	June 8, 2023

Title:

Beaverbrook Draft Plan

Scale: 1:1250 — NOTE: Elevations Shown Hereon Relate to Canadian Geodetic Datum

Date: January 1999

Job #: EGP001 — Dwgs#: DP3

mbtw wai

255 Wicksteed Ave., Unit 1A, Toronto Ontario, Canada M4H 1G8

T: 416.649.7767 | F: 416.649.1803

www.mbtwwai.com

landscape architecture | urban design | design guidelines | architecture | infill design | leisure design

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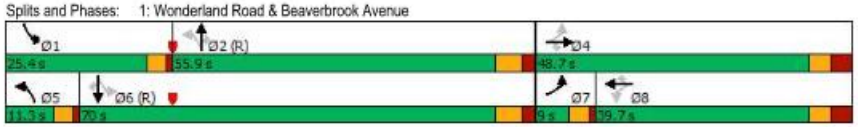
ATTACHMENT 3

Future Total 2035 Synchro Reports

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	214	168	32	106	199	78	1138	41	295	1352	106
Future Volume (vph)	177	214	168	32	106	199	78	1138	41	295	1352	106
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	7.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	9.0	39.7	39.7	39.7	39.7	39.7	9.5	32.3	32.3	9.5	32.3	32.3
Total Split (s)	9.0	48.7	48.7	39.7	39.7	39.7	11.3	55.9	55.9	25.4	70.0	70.0
Total Split (%)	6.9%	37.5%	37.5%	30.5%	30.5%	30.5%	8.7%	43.0%	43.0%	19.5%	53.8%	53.8%
Yellow Time (s)	3.0	3.3	3.3	3.3	3.3	3.3	3.0	4.1	4.1	3.0	4.1	4.1
All-Red Time (s)	1.0	3.4	3.4	3.4	3.4	3.4	1.0	2.2	2.2	1.0	2.2	2.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.7	6.7	6.7	6.7	6.7	4.0	6.3	6.3	4.0	6.3	6.3
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	31.7	29.0	29.0	20.0	20.0	20.0	69.0	59.6	59.6	90.3	76.9	76.9
Actuated g/C Ratio	0.24	0.22	0.22	0.15	0.15	0.15	0.53	0.46	0.46	0.69	0.59	0.59
v/c Ratio	0.76	0.58	0.42	0.21	0.42	0.54	0.47	0.79	0.06	0.82	0.71	0.14
Control Delay	61.7	49.2	14.1	46.1	51.6	10.1	20.5	35.9	0.2	47.7	23.5	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.7	49.2	14.1	46.1	51.6	10.1	20.5	35.9	0.2	47.7	23.5	4.9
LOS	E	D	B	D	D	B	C	D	A	D	C	A
Approach Delay		42.6			26.5			33.8			26.4	
Approach LOS		D			C			C			C	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 31.1		Intersection LOS: C	
Intersection Capacity Utilization 89.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Wonderland Road & Beaverbrook Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	214	168	32	106	199	78	1138	41	295	1352	106
Future Volume (vph)	177	214	168	32	106	199	78	1138	41	295	1352	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.0	3.5	3.3	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	4.0	6.7	6.7	6.7	6.7	6.7	4.0	6.3	6.3	4.0	6.3	6.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.95	1.00	1.00	0.94	1.00	1.00	0.94
Flpb, ped/bikes	0.98	1.00	1.00	0.99	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	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1623	1807	1478	1664	1773	1436	1531	3433	1422	1652	3500	1286
Flt Permitted	0.55	1.00	1.00	0.61	1.00	1.00	0.13	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)	933	1807	1478	1075	1773	1436	209	3433	1422	161	3500	1286
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)	192	233	183	35	115	216	85	1237	45	321	1470	115
RTOR Reduction (vph)	0	0	104	0	0	183	0	0	24	0	0	40
Lane Group Flow (vph)	192	233	79	35	115	33	85	1237	21	321	1470	75
Confl. Peds. (#/hr)	35		14	14		35	17		15	15		17
Heavy Vehicles (%)	2%	4%	5%	0%	6%	3%	10%	4%	0%	2%	2%	10%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	29.0	29.0	29.0	20.0	20.0	20.0	66.7	59.7	59.7	88.0	77.0	77.0
Effective Green, g (s)	29.0	29.0	29.0	20.0	20.0	20.0	66.7	59.7	59.7	88.0	77.0	77.0
Actuated g/C Ratio	0.22	0.22	0.22	0.15	0.15	0.15	0.51	0.46	0.46	0.68	0.59	0.59
Clearance Time (s)	4.0	6.7	6.7	6.7	6.7	6.7	4.0	6.3	6.3	4.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	234	403	329	165	272	220	178	1576	653	387	2073	761
v/s Ratio Prot	c0.03	0.13			0.06		0.03	0.36		c0.15	0.42	
v/s Ratio Perm	c0.15		0.05	0.03		0.02	0.22		0.01	c0.40		0.06
v/c Ratio	0.82	0.58	0.24	0.21	0.42	0.15	0.48	0.78	0.03	0.83	0.71	0.10
Uniform Delay, d1	48.4	45.0	41.5	48.1	49.8	47.6	17.8	29.7	19.3	34.4	18.6	11.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.1	2.0	0.4	0.6	1.1	0.3	2.0	4.0	0.1	13.7	2.1	0.3
Delay (s)	68.5	47.1	41.8	48.8	50.8	48.0	19.8	33.7	19.4	48.1	20.7	11.7
Level of Service	E	D	D	D	D	D	B	C	B	D	C	B
Approach Delay (s)		52.2			48.9			32.4			24.8	
Approach LOS		D			D			C			C	

Intersection Summary					
HCM 2000 Control Delay	33.2	HCM 2000 Level of Service	C		
HCM 2000 Volume to Capacity ratio	0.87				
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	21.0		
Intersection Capacity Utilization	89.7%	ICU Level of Service	E		
Analysis Period (min)	15				
c Critical Lane Group					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	9	26	110	25	34	16	263	9	20	167	31	11
Future Volume (vph)	9	26	110	25	34	16	263	9	20	167	31	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	28	120	27	37	17	286	10	22	182	34	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	158	81	318	228
Volume Left (vph)	10	27	286	182
Volume Right (vph)	120	17	22	12
Hadj (s)	-0.29	-0.03	0.23	0.16
Departure Headway (s)	5.2	5.6	5.1	5.2
Degree Utilization, x	0.23	0.13	0.45	0.33
Capacity (veh/h)	626	566	674	654
Control Delay (s)	9.7	9.4	12.3	10.7
Approach Delay (s)	9.7	9.4	12.3	10.7
Approach LOS	A	A	B	B

Intersection Summary			
Delay		11.0	
Level of Service		B	
Intersection Capacity Utilization	37.1%	ICU Level of Service	A
Analysis Period (min)		15	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	105	1464	21	818	211	120	168	54	378	95
Future Volume (vph)	105	1464	21	818	211	120	168	54	378	95
Turn Type	pm+pt	NA	Perm	NA	custom	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		6	3	7	4		3	8
Permitted Phases	2		6		2	4		4	8	
Detector Phase	5	2	6	6	3	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	5.0	7.0	7.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0
Minimum Split (s)	9.0	23.6	23.6	23.6	9.5	9.0	31.4	31.4	9.5	31.4
Total Split (s)	9.0	73.4	64.4	64.4	25.2	13.0	31.4	31.4	25.2	43.6
Total Split (%)	6.9%	56.5%	49.5%	49.5%	19.4%	10.0%	24.2%	24.2%	19.4%	33.5%
Yellow Time (s)	3.0	3.7	3.7	3.7	3.0	3.0	3.3	3.3	3.0	3.3
All-Red Time (s)	1.0	1.9	1.9	1.9	1.0	1.0	3.1	3.1	1.0	3.1
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)	4.0	5.6	5.6	5.6	4.0	4.0	6.4	6.4	4.0	6.4
Lead/Lag	Lead		Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	75.8	74.2	62.6	62.6	97.0	29.9	18.6	18.6	46.2	30.9
Actuated g/C Ratio	0.58	0.57	0.48	0.48	0.75	0.23	0.14	0.14	0.36	0.24
v/c Ratio	0.38	0.89	0.47	0.55	0.21	0.45	0.71	0.19	1.07	0.46
Control Delay	17.4	32.3	65.0	28.6	0.9	35.6	68.2	1.4	100.6	38.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.4	32.3	65.0	28.6	0.9	35.6	68.2	1.4	100.6	38.4
LOS	B	C	E	C	A	D	E	A	F	D
Approach Delay		31.4		23.8			46.2			81.8
Approach LOS		C		C			D			F

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 120		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.07		
Intersection Signal Delay: 38.2	Intersection LOS: D	
Intersection Capacity Utilization 98.7%	ICU Level of Service F	
Analysis Period (min) 15		

Splits and Phases: 3: Proudfoot Lane & Oxford Street West

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	1464	66	21	818	211	120	168	54	378	95	70
Future Volume (vph)	105	1464	66	21	818	211	120	168	54	378	95	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.0	3.0	3.3	3.5	3.0	3.2	3.6	3.2	3.0	3.4	3.3
Total Lost time (s)	4.0	5.6		5.6	5.6	4.0	4.0	6.4	6.4	4.0	6.4	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1685	3271		1517	3368	1418	1615	1792	1384	1644	1550	
Flt Permitted	0.21	1.00		0.06	1.00	1.00	0.64	1.00	1.00	0.35	1.00	
Satd. Flow (perm)	379	3271		102	3368	1418	1095	1792	1384	609	1550	
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)	114	1591	72	23	889	229	130	183	59	411	103	76
RTOR Reduction (vph)	0	2	0	0	0	46	0	0	51	0	22	0
Lane Group Flow (vph)	114	1661	0	23	889	183	130	183	8	411	157	0
Confl. Peds. (#/hr)	2		5	5		2	10		15	15		10
Heavy Vehicles (%)	0%	2%	6%	15%	6%	4%	6%	6%	5%	2%	19%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	6	0	0	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2			6	3	7	4		3	8	
Permitted Phases	2			6		2	4		4	8		
Actuated Green, G (s)	74.2	74.2		62.6	62.6	95.4	27.5	18.6	18.6	43.8	30.9	
Effective Green, g (s)	74.2	74.2		62.6	62.6	95.4	27.5	18.6	18.6	43.8	30.9	
Actuated g/C Ratio	0.57	0.57		0.48	0.48	0.73	0.21	0.14	0.14	0.34	0.24	
Clearance Time (s)	4.0	5.6		5.6	5.6	4.0	4.0	6.4	6.4	4.0	6.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	292	1866		49	1621	1040	267	256	198	373	368	
v/s Ratio Prot	0.02	c0.51			0.26	0.03	0.03	0.10		c0.18	0.10	
v/s Ratio Perm	0.20			0.23		0.10	0.07		0.01	c0.19		
v/c Ratio	0.39	0.89		0.47	0.55	0.18	0.49	0.71	0.04	1.10	0.43	
Uniform Delay, d1	15.2	24.3		22.6	23.7	5.3	43.9	53.2	48.0	39.4	42.0	
Progression Factor	1.00	1.00		1.22	1.11	0.42	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.9	6.9		26.4	1.2	0.1	1.4	9.1	0.1	76.9	0.8	
Delay (s)	16.1	31.2		53.9	27.6	2.3	45.3	62.3	48.1	116.3	42.8	
Level of Service	B	C		D	C	A	D	E	D	F	D	
Approach Delay (s)		30.2			23.1			54.1			94.0	
Approach LOS		C			C			D			F	

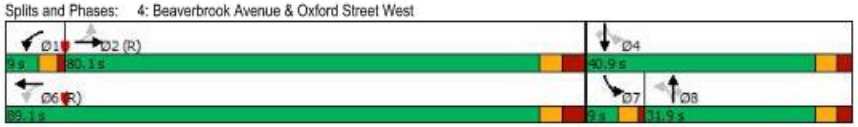
Intersection Summary				
HCM 2000 Control Delay	40.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	1.03			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	98.7%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	16	1771	92	959	23	24	230	219	85	46
Future Volume (vph)	16	1771	92	959	23	24	230	219	85	46
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		2	1	6		8		7	4	
Permitted Phases	2		6		8		8	4		4
Detector Phase	2	2	1	6	8	8	8	7	4	4
Switch Phase								4		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	41.1	41.1	9.0	41.1	31.8	31.8	31.8	9.0	31.8	31.8
Total Split (s)	80.1	80.1	9.0	89.1	31.9	31.9	31.9	9.0	40.9	40.9
Total Split (%)	61.6%	61.6%	6.9%	68.5%	24.5%	24.5%	24.5%	6.9%	31.5%	31.5%
Yellow Time (s)	3.5	3.5	3.0	3.5	3.3	3.3	3.3	3.0	3.3	3.3
All-Red Time (s)	3.6	3.6	1.0	3.6	2.5	2.5	2.5	1.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.1	4.0	7.1		5.8	5.8	4.0	5.8	5.8
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effct Green (s)	78.4	78.4	90.5	87.4		20.7	20.7	31.5	29.7	29.7
Actuated g/C Ratio	0.60	0.60	0.70	0.67		0.16	0.16	0.24	0.23	0.23
v/c Ratio	0.06	0.96	0.94	0.50		0.22	0.79	0.79	0.21	0.12
Control Delay	12.1	23.0	110.6	7.3		47.4	48.4	63.3	40.2	5.1
Queue Delay	0.0	1.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	12.1	24.0	110.6	7.3		47.4	48.4	63.3	40.2	5.1
LOS	B	C	F	A		D	D	E	D	A
Approach Delay		23.9		15.9		48.3			50.1	
Approach LOS		C		B		D			D	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 25.8		Intersection LOS: C	
Intersection Capacity Utilization 90.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Beaverbrook Avenue & Oxford Street West



HCM Signalized Intersection Capacity Analysis
4: Beaverbrook Avenue & Oxford Street West

Future Total 2035 AM Peak Hour
06-13-2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	1771	29	92	959	65	23	24	230	219	85	46
Future Volume (vph)	16	1771	29	92	959	65	23	24	230	219	85	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.3	3.3	3.0	3.5	3.5	3.3	3.3	3.3	3.7	3.7	3.7
Total Lost time (s)	7.1	7.1		4.0	7.1			5.8	5.8	4.0	5.8	5.8
Lane Util. Factor	1.00	0.95		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	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	1.00
Frt	1.00	1.00		1.00	0.99			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1789	3382		1465	3317			1739	1446	1789	1883	1601
Flt Permitted	0.24	1.00		0.05	1.00			0.83	1.00	0.61	1.00	1.00
Satd. Flow (perm)	455	3382		75	3317			1481	1446	1142	1883	1601
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	1925	32	100	1042	71	25	26	250	238	92	50
RTOR Reduction (vph)	0	1	0	0	3	0	0	0	86	0	0	39
Lane Group Flow (vph)	17	1956	0	100	1110	0	0	51	164	238	92	11
Confl. Peds. (#/hr)			7	7								
Heavy Vehicles (%)	2%	2%	6%	15%	6%	2%	0%	2%	8%	2%	2%	2%
Bus Blockages (#/hr)	0	4	0	0	4	0	0	5	0	0	0	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		2		1	6			8		7	4	
Permitted Phases	2			6			8		8	4		4
Actuated Green, G (s)	78.4	78.4		87.4	87.4			20.7	20.7	29.7	29.7	29.7
Effective Green, g (s)	78.4	78.4		87.4	87.4			20.7	20.7	29.7	29.7	29.7
Actuated g/C Ratio	0.60	0.60		0.67	0.67			0.16	0.16	0.23	0.23	0.23
Clearance Time (s)	7.1	7.1		4.0	7.1			5.8	5.8	4.0	5.8	5.8
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	274	2039		103	2230			235	230	285	430	365
v/s Ratio Prot		0.58		c0.04	0.33					c0.03	0.05	
v/s Ratio Perm	0.04			c0.61				0.03	0.11	c0.16		0.01
v/c Ratio	0.06	0.96		0.97	0.50			0.22	0.71	0.84	0.21	0.03
Uniform Delay, d1	10.6	24.3		37.1	10.5			47.6	51.8	48.3	40.7	39.0
Progression Factor	0.92	0.61		2.18	0.59			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	6.3		74.3	0.7			0.5	10.0	18.6	0.3	0.0
Delay (s)	10.0	21.1		155.1	6.9			48.1	61.9	66.9	40.9	39.0
Level of Service	A	C		F	A			D	E	E	D	D
Approach Delay (s)		21.0			19.1			59.5			56.9	
Approach LOS		C			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.9
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

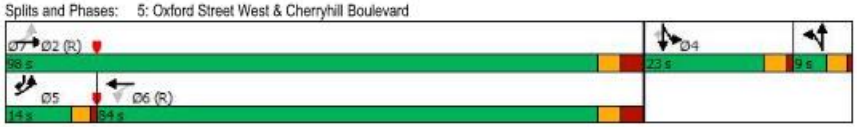
Timings
5: Oxford Street West & Cherryhill Boulevard

Future Total 2035 AM Peak Hour
06-13-2023

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	166	1875	26	957	18	3	150	22	102
Future Volume (vph)	166	1875	26	957	18	3	150	22	102
Turn Type	pm+pt	NA	Perm	NA	Split	NA	Split	NA	pm+ov
Protected Phases	5	2		6	7	7	4	4	5
Permitted Phases	2		6						4
Detector Phase	5	2	6	6	7	7	4	4	5
Switch Phase									
Minimum Initial (s)	5.0	7.0	7.0	7.0	5.0	5.0	7.0	7.0	5.0
Minimum Split (s)	9.0	41.1	41.1	41.1	9.0	9.0	22.5	22.5	9.0
Total Split (s)	14.0	98.0	84.0	84.0	9.0	9.0	23.0	23.0	14.0
Total Split (%)	10.8%	75.4%	64.6%	64.6%	6.9%	6.9%	17.7%	17.7%	10.8%
Yellow Time (s)	3.0	3.5	3.5	3.5	3.0	3.0	3.5	3.5	3.0
All-Red Time (s)	1.0	3.6	3.6	3.6	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	7.1	7.1	7.1	4.0	4.0	4.5	4.5	4.0
Lead/Lag	Lead		Lag	Lag					Lead
Lead-Lag Optimize?	Yes		Yes	Yes					Yes
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	101.9	98.8	86.2	86.2	5.8	5.8	13.6	13.6	22.8
Actuated g/C Ratio	0.78	0.76	0.66	0.66	0.04	0.04	0.10	0.10	0.18
v/c Ratio	0.49	0.83	0.44	0.52	0.27	0.24	0.57	0.56	0.34
Control Delay	7.0	8.8	42.0	13.7	69.4	39.9	68.5	67.0	8.6
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.0	8.9	42.0	13.7	69.4	39.9	68.5	67.0	8.6
LOS	A	A	D	B	E	D	E	E	A
Approach Delay		8.8		14.4		56.3		45.7	
Approach LOS		A		B		E		D	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 87.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: Oxford Street West & Cherryhill Boulevard



HCM Signalized Intersection Capacity Analysis
5: Oxford Street West & Cherryhill Boulevard

Future Total 2035 AM Peak Hour
06-13-2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	1875	81	26	957	59	18	3	12	150	22	102
Future Volume (vph)	166	1875	81	26	957	59	18	3	12	150	22	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.8	3.3	3.3	3.1	3.3	3.5	3.4	3.5	3.5	3.2	3.3	3.6
Total Lost time (s)	4.0	7.1		7.1	7.1		4.0	4.0		4.5	4.5	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.71		1.00	1.00	0.94
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.88		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.96	1.00
Satd. Flow (prot)	1661	3363		1705	3224		1665	1169		1546	1610	1341
Flt Permitted	0.20	1.00		0.05	1.00		0.95	1.00		0.95	0.96	1.00
Satd. Flow (perm)	358	3363		98	3224		1665	1169		1546	1610	1341
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)	180	2038	88	28	1040	64	20	3	13	163	24	111
RTOR Reduction (vph)	0	2	0	0	3	0	0	13	0	0	0	92
Lane Group Flow (vph)	180	2124	0	28	1101	0	20	3	0	93	94	19
Confl. Peds. (#/hr)	17		11	11		17	42		51	51		42
Heavy Vehicles (%)	11%	2%	5%	0%	6%	8%	6%	0%	0%	6%	0%	13%
Bus Blockages (#/hr)	0	4	0	0	4	0	0	0	0	0	0	0
Turn Type	pm+pt	NA		Perm	NA		Split	NA		Split	NA	pm+ov
Protected Phases	5	2			6		7	7		4	4	5
Permitted Phases	2			6								4
Actuated Green, G (s)	97.3	97.3		84.7	84.7		3.5	3.5		13.6	13.6	22.2
Effective Green, g (s)	97.3	97.3		84.7	84.7		3.5	3.5		13.6	13.6	22.2
Actuated g/C Ratio	0.75	0.75		0.65	0.65		0.03	0.03		0.10	0.10	0.17
Clearance Time (s)	4.0	7.1		7.1	7.1		4.0	4.0		4.5	4.5	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	354	2517		63	2100		44	31		161	168	229
v/s Ratio Prot	0.03	c0.63			0.34		c0.01	0.00		c0.06	0.06	0.01
v/s Ratio Perm	0.35			0.29								0.01
v/c Ratio	0.51	0.84		0.44	0.52		0.45	0.11		0.58	0.56	0.08
Uniform Delay, d1	6.8	11.2		11.1	12.0		62.3	61.7		55.5	55.4	45.3
Progression Factor	1.16	0.58		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.5	1.5		21.1	0.9		7.3	1.5		4.9	4.0	0.2
Delay (s)	8.3	8.0		32.2	12.9		69.6	63.3		60.4	59.4	45.5
Level of Service	A	A		C	B		E	E		E	E	D
Approach Delay (s)		8.0			13.4			66.8			54.5	
Approach LOS		A			B			E			D	

Intersection Summary				
HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.6	
Intersection Capacity Utilization	87.4%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
6: Platt's Lane & Cherryhill Place

Future Total 2035 AM Peak Hour
06-13-2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	4	128	39	11	18	77	313	12	10	333	98
Future Volume (Veh/h)	131	4	128	39	11	18	77	313	12	10	333	98
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	142	4	139	42	12	20	84	340	13	11	362	107
Pedestrians		16			20			25			11	
Lane Width (m)		3.7			3.7			3.1			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		1			2			2			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	998	994	456	1084	1042	378	485			373		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	998	994	456	1084	1042	378	485			373		
tC, single (s)	7.2	6.5	6.3	7.1	6.5	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.4	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	19	98	76	67	94	97	92			99		
cM capacity (veh/h)	176	217	575	126	204	655	1032			1174		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	285	74	84	353	11	469
Volume Left	142	42	84	0	11	0
Volume Right	139	20	0	13	0	107
cSH	268	175	1032	1700	1174	1700
Volume to Capacity	1.07	0.42	0.08	0.21	0.01	0.28
Queue Length 95th (m)	87.3	14.5	2.0	0.0	0.2	0.0
Control Delay (s)	114.7	39.7	8.8	0.0	8.1	0.0
Lane LOS	F	E	A		A	
Approach Delay (s)	114.7	39.7	1.7		0.2	
Approach LOS	F	E				

Intersection Summary				
Average Delay	28.6			
Intersection Capacity Utilization	56.3%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	39	118	116	28	0	53	16	82	69	116	0
Future Volume (Veh/h)	0	39	118	116	28	0	53	16	82	69	116	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	42	128	126	30	0	58	17	89	75	126	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								319				
pX, platoon unblocked												
vC, conflicting volume	468	498	126	602	454	62	126			106		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	468	498	126	602	454	62	126			106		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	90	86	59	93	100	96			95		
cM capacity (veh/h)	448	432	924	306	458	1004	1460			1485		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	170	156	164	201
Volume Left	0	126	58	75
Volume Right	128	0	89	0
cSH	721	327	1460	1485
Volume to Capacity	0.24	0.48	0.04	0.05
Queue Length 95th (m)	6.9	18.7	0.9	1.2
Control Delay (s)	11.5	25.7	2.9	3.1
Lane LOS	B	D	A	A
Approach Delay (s)	11.5	25.7	2.9	3.1
Approach LOS	B	D		

Intersection Summary				
Average Delay		10.2		
Intersection Capacity Utilization		39.8%	ICU Level of Service	A
Analysis Period (min)		15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	167	46	0	16	59	18
Future Volume (Veh/h)	167	46	0	16	59	18
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	182	50	0	17	64	20
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			232		224	207
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			232		224	207
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		92	98
cM capacity (veh/h)			1336		764	833

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	232	17	84
Volume Left	0	0	64
Volume Right	50	0	20
cSH	1700	1336	780
Volume to Capacity	0.14	0.00	0.11
Queue Length 95th (m)	0.0	0.0	2.7
Control Delay (s)	0.0	0.0	10.2
Lane LOS			B
Approach Delay (s)	0.0	0.0	10.2
Approach LOS			B

Intersection Summary				
Average Delay		2.6		
Intersection Capacity Utilization		22.1%	ICU Level of Service	A
Analysis Period (min)		15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	0	14	31	0	32
Future Volume (Veh/h)	20	0	14	31	0	32
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	0	15	34	0	35
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	67	32			49	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	67	32			49	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	100			100	
cM capacity (veh/h)	938	1042			1558	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	22	49	35
Volume Left	22	0	0
Volume Right	0	34	0
cSH	938	1700	1558
Volume to Capacity	0.02	0.03	0.00
Queue Length 95th (m)	0.5	0.0	0.0
Control Delay (s)	8.9	0.0	0.0
Lane LOS	A		
Approach Delay (s)	8.9	0.0	0.0
Approach LOS	A		

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	12.3%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	31	0	45	20	16	0	0	94	32	0	0
Future Volume (Veh/h)	0	31	0	45	20	16	0	0	94	32	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	34	0	49	22	17	0	0	102	35	0	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	39			34			162	171	34	264	162	30
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	39			34			162	171	34	264	162	30
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	90	94	100	100
cM capacity (veh/h)	1571			1578			783	700	1039	606	707	1044

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	34	88	102	35
Volume Left	0	49	0	35
Volume Right	0	17	102	0
cSH	1571	1578	1039	606
Volume to Capacity	0.00	0.03	0.10	0.06
Queue Length 95th (m)	0.0	0.7	2.5	1.4
Control Delay (s)	0.0	4.2	8.8	11.3
Lane LOS		A	A	B
Approach Delay (s)	0.0	4.2	8.8	11.3
Approach LOS			A	B

Intersection Summary				
Average Delay	6.4			
Intersection Capacity Utilization	24.8%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	77	14	0	14	32
Future Volume (Veh/h)	0	77	14	0	14	32
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	84	15	0	15	35
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	80	15			15	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	80	15			15	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			99	
cM capacity (veh/h)	914	1065			1603	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	84	15	50
Volume Left	0	0	15
Volume Right	84	0	0
cSH	1065	1700	1603
Volume to Capacity	0.08	0.01	0.01
Queue Length 95th (m)	1.9	0.0	0.2
Control Delay (s)	8.7	0.0	2.2
Lane LOS	A		A
Approach Delay (s)	8.7	0.0	2.2
Approach LOS	A		

Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	19.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1623		1023	1085

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1623		1023	1085

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	0	0	0	0
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS			A	A
Approach Delay (s)	0.0	0.0	0.0	
Approach LOS			A	

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1623				1023	1085

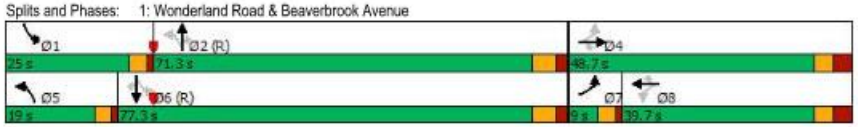
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	278	196	85	361	421	242	1415	65	296	1720	317
Future Volume (vph)	118	278	196	85	361	421	242	1415	65	296	1720	317
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	7.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	9.0	39.7	39.7	39.7	39.7	39.7	9.0	32.3	32.3	9.0	32.3	32.3
Total Split (s)	9.0	48.7	48.7	39.7	39.7	39.7	19.0	71.3	71.3	25.0	77.3	77.3
Total Split (%)	6.2%	33.6%	33.6%	27.4%	27.4%	27.4%	13.1%	49.2%	49.2%	17.2%	53.3%	53.3%
Yellow Time (s)	3.0	3.3	3.3	3.3	3.3	3.3	3.0	4.1	4.1	3.0	4.1	4.1
All-Red Time (s)	1.0	3.4	3.4	3.4	3.4	3.4	1.0	2.2	2.2	1.0	2.2	2.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.7	6.7	6.7	6.7	6.7	4.0	6.3	6.3	4.0	6.3	6.3
Lead/Lag	Lead			Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	43.0	40.3	40.3	31.3	31.3	31.3	84.0	65.1	65.1	94.0	71.0	71.0
Actuated g/C Ratio	0.30	0.28	0.28	0.22	0.22	0.22	0.58	0.45	0.45	0.65	0.49	0.49
v/c Ratio	0.96	0.56	0.35	0.44	0.91	0.85	1.00	0.89	0.10	0.95	1.00	0.45
Control Delay	114.5	49.3	6.7	56.8	82.2	40.6	102.5	45.2	0.3	84.6	59.4	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	114.5	49.3	6.7	56.8	82.2	40.6	102.5	45.2	0.3	84.6	59.4	14.0
LOS	F	D	A	E	F	D	F	D	A	F	E	B
Approach Delay		48.2			59.5			51.6			56.5	
Approach LOS		D			E			D			E	

Intersection Summary			
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 54.5		Intersection LOS: D	
Intersection Capacity Utilization 109.5%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: Wonderland Road & Beaverbrook Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	278	196	85	361	421	242	1415	65	296	1720	317
Future Volume (vph)	118	278	196	85	361	421	242	1415	65	296	1720	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.0	3.5	3.3	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	4.0	6.7	6.7	6.7	6.7	6.7	4.0	6.3	6.3	4.0	6.3	6.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.88
Flpb, ped/bikes	1.00	1.00	1.00	0.98	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	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1665	1789	1494	1615	1842	1465	1668	3535	1378	1668	3500	1290
Flt Permitted	0.15	1.00	1.00	0.52	1.00	1.00	0.06	1.00	1.00	0.06	1.00	1.00
Satd. Flow (perm)	257	1789	1494	891	1842	1465	108	3535	1378	102	3500	1290
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	118	278	196	85	361	421	242	1415	65	296	1720	317
RTOR Reduction (vph)	0	0	142	0	0	180	0	0	36	0	0	78
Lane Group Flow (vph)	118	278	54	85	361	241	242	1415	29	296	1720	239
Confl. Peds. (#/hr)	31		26	26		31	36		24	24		36
Heavy Vehicles (%)	1%	5%	2%	2%	2%	1%	1%	1%	0%	1%	2%	3%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	40.3	40.3	40.3	31.3	31.3	31.3	81.8	65.1	65.1	91.7	71.0	71.0
Effective Green, g (s)	40.3	40.3	40.3	31.3	31.3	31.3	81.8	65.1	65.1	91.7	71.0	71.0
Actuated g/C Ratio	0.28	0.28	0.28	0.22	0.22	0.22	0.56	0.45	0.45	0.63	0.49	0.49
Clearance Time (s)	4.0	6.7	6.7	6.7	6.7	6.7	4.0	6.3	6.3	4.0	6.3	6.3
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	119	497	415	192	397	316	240	1587	618	308	1713	631
v/s Ratio Prot	c0.03	0.16			0.20		0.12	0.40		c0.15	c0.49	
v/s Ratio Perm	c0.24		0.04	0.10		0.16	0.45		0.02	0.46		0.19
v/c Ratio	0.99	0.56	0.13	0.44	0.91	0.76	1.01	0.89	0.05	0.96	1.00	0.38
Uniform Delay, d1	51.6	44.8	39.2	49.3	55.5	53.3	49.3	36.7	22.5	49.0	37.0	23.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	79.6	1.4	0.1	1.6	24.0	10.4	60.2	8.0	0.1	40.7	22.7	1.7
Delay (s)	131.2	46.1	39.4	50.9	79.5	63.7	109.5	44.7	22.6	89.6	59.7	24.9
Level of Service	F	D	D	D	E	E	F	D	C	F	E	C
Approach Delay (s)		60.9			69.0			53.0			58.8	
Approach LOS		E			E			D			E	

Intersection Summary					
HCM 2000 Control Delay	58.8	HCM 2000 Level of Service		E	
HCM 2000 Volume to Capacity ratio	1.03				
Actuated Cycle Length (s)	145.0	Sum of lost time (s)		21.0	
Intersection Capacity Utilization	109.5%	ICU Level of Service		H	
Analysis Period (min)	15				
c Critical Lane Group					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	26	78	260	13	38	47	171	15	36	98	15	12
Future Volume (vph)	26	78	260	13	38	47	171	15	36	98	15	12
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	26	78	260	13	38	47	171	15	36	98	15	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	364	98	222	125
Volume Left (vph)	26	13	171	98
Volume Right (vph)	260	47	36	12
Hadj (s)	-0.34	-0.23	0.16	0.13
Departure Headway (s)	4.7	5.2	5.4	5.6
Degree Utilization, x	0.47	0.14	0.33	0.19
Capacity (veh/h)	727	624	607	584
Control Delay (s)	11.8	9.0	11.1	9.9
Approach Delay (s)	11.8	9.0	11.1	9.9
Approach LOS	B	A	B	A

Intersection Summary				
Delay			11.0	
Level of Service			B	
Intersection Capacity Utilization			45.3%	ICU Level of Service
Analysis Period (min)			15	A

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	96	924	22	1502	559	197	347	40	356	191
Future Volume (vph)	96	924	22	1502	559	197	347	40	356	191
Turn Type	pm+pt	NA	Perm	NA	custom	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	2		6	3	7	4		3	8
Permitted Phases	2		6		2	4		4	8	
Detector Phase	5	2	6	6	3	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	5.0	7.0	7.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0
Minimum Split (s)	9.0	23.6	23.6	23.6	9.0	9.0	31.4	31.4	9.0	31.4
Total Split (s)	9.0	71.6	62.6	62.6	27.0	18.0	31.4	31.4	27.0	40.4
Total Split (%)	6.9%	55.1%	48.2%	48.2%	20.8%	13.8%	24.2%	24.2%	20.8%	31.1%
Yellow Time (s)	3.0	3.7	3.7	3.7	3.0	3.0	3.3	3.3	3.0	3.3
All-Red Time (s)	1.0	1.9	1.9	1.9	1.0	1.0	3.1	3.1	1.0	3.1
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)	4.0	5.6	5.6	5.6	4.0	4.0	6.4	6.4	4.0	6.4
Lead/Lag	Lead		Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	67.6	66.0	57.0	57.0	90.6	40.6	25.0	25.0	54.4	34.8
Actuated g/C Ratio	0.52	0.51	0.44	0.44	0.70	0.31	0.19	0.19	0.42	0.27
v/c Ratio	0.83	0.66	0.15	0.98	0.57	0.53	0.97	0.11	1.01	0.60
Control Delay	67.9	25.6	25.5	46.3	3.6	32.1	92.6	0.6	87.5	45.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.9	25.6	25.5	46.3	3.6	32.1	92.6	0.6	87.5	45.6
LOS	E	C	C	D	A	C	F	A	F	D
Approach Delay		29.1		34.6			65.9			69.1
Approach LOS		C		C			E			E

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 120		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.01		
Intersection Signal Delay: 42.1	Intersection LOS: D	
Intersection Capacity Utilization 103.2%	ICU Level of Service G	
Analysis Period (min) 15		

Splits and Phases: 3: Proudfoot Lane & Oxford Street West

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	924	150	22	1502	559	197	347	40	356	191	87
Future Volume (vph)	96	924	150	22	1502	559	197	347	40	356	191	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.0	3.0	3.3	3.5	3.0	3.2	3.6	3.2	3.0	3.4	3.3
Total Lost time (s)	4.0	5.6		5.6	5.6	4.0	4.0	6.4	6.4	4.0	6.4	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.93	1.00	1.00	0.94	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00	1.00	0.99	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1620	3193		1601	3500	1383	1638	1863	1366	1665	1676	
Flt Permitted	0.07	1.00		0.20	1.00	1.00	0.56	1.00	1.00	0.14	1.00	
Satd. Flow (perm)	112	3193		333	3500	1383	967	1863	1366	242	1676	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	96	924	150	22	1502	559	197	347	40	356	191	87
RTOR Reduction (vph)	0	10	0	0	0	20	0	0	32	0	12	0
Lane Group Flow (vph)	96	1064	0	22	1502	539	197	347	8	356	266	0
Confl. Peds. (#/hr)	21		19	19		21	22		32	32		22
Heavy Vehicles (%)	4%	2%	2%	8%	2%	1%	4%	2%	4%	1%	6%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	5	0	0	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2			6	3	7	4		3	8	
Permitted Phases	2			6		2	4		4	8		
Actuated Green, G (s)	66.0	66.0		57.0	57.0	89.0	38.2	25.0	25.0	52.0	34.8	
Effective Green, g (s)	66.0	66.0		57.0	57.0	89.0	38.2	25.0	25.0	52.0	34.8	
Actuated g/C Ratio	0.51	0.51		0.44	0.44	0.68	0.29	0.19	0.19	0.40	0.27	
Clearance Time (s)	4.0	5.6		5.6	5.6	4.0	4.0	6.4	6.4	4.0	6.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	114	1621		146	1534	946	352	358	262	348	448	
v/s Ratio Prot	0.03	c0.33			c0.43	0.10	0.06	0.19		c0.18	0.16	
v/s Ratio Perm	0.39			0.07		0.29	0.11		0.01	c0.23		
v/c Ratio	0.84	0.66		0.15	0.98	0.57	0.56	0.97	0.03	1.02	0.59	
Uniform Delay, d1	29.6	23.6		21.9	35.9	10.6	36.8	52.1	42.6	39.1	41.4	
Progression Factor	1.00	1.00		1.05	0.95	0.33	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	40.1	2.1		1.1	12.0	0.4	1.9	38.9	0.0	54.2	2.1	
Delay (s)	69.7	25.7		24.1	46.0	3.8	38.8	91.0	42.7	93.4	43.5	
Level of Service	E	C		C	D	A	D	F	D	F	D	
Approach Delay (s)		29.3			34.4			70.1			71.5	
Approach LOS		C			C			E			E	

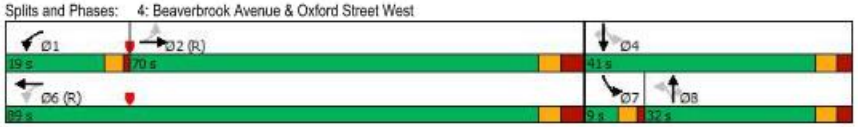
Intersection Summary				
HCM 2000 Control Delay	43.0	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	1.02			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	103.2%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	18	1316	200	1972	35	92	195	129	37	22
Future Volume (vph)	18	1316	200	1972	35	92	195	129	37	22
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		2	1	6		8		7	4	
Permitted Phases	2		6		8		8	4		4
Detector Phase	2	2	1	6	8	8	8	7	4	4
Switch Phase								4		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	41.1	41.1	9.0	41.1	31.8	31.8	31.8	9.0	31.8	31.8
Total Split (s)	70.0	70.0	19.0	89.0	32.0	32.0	32.0	9.0	41.0	41.0
Total Split (%)	53.8%	53.8%	14.6%	68.5%	24.6%	24.6%	24.6%	6.9%	31.5%	31.5%
Yellow Time (s)	3.5	3.5	3.0	3.5	3.3	3.3	3.3	3.0	3.3	3.3
All-Red Time (s)	3.6	3.6	1.0	3.6	2.5	2.5	2.5	1.0	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.1	4.0	7.1		5.8	5.8	4.0	5.8	5.8
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	C-Max	C-Max	None	C-Max	None	None	None	None	None	None
Act Effct Green (s)	75.2	75.2	95.5	92.4		15.7	15.7	26.5	24.7	24.7
Actuated g/C Ratio	0.58	0.58	0.73	0.71		0.12	0.12	0.20	0.19	0.19
v/c Ratio	0.32	0.69	0.71	0.89		0.66	0.56	0.63	0.10	0.06
Control Delay	24.9	15.4	26.5	17.2		70.5	13.0	58.5	42.0	0.3
Queue Delay	0.0	0.0	0.0	0.3		0.0	0.0	0.0	0.0	0.0
Total Delay	24.9	15.4	26.5	17.4		70.5	13.0	58.5	42.0	0.3
LOS	C	B	C	B		E	B	E	D	A
Approach Delay		15.5		18.2		35.7			48.4	
Approach LOS		B		B		D			D	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 20.0		Intersection LOS: B	
Intersection Capacity Utilization 95.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: Beaverbrook Avenue & Oxford Street West



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	1316	28	200	1972	202	35	92	195	129	37	22
Future Volume (vph)	18	1316	28	200	1972	202	35	92	195	129	37	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.3	3.3	3.0	3.5	3.5	3.3	3.3	3.3	3.7	3.7	3.7
Total Lost time (s)	7.1	7.1		4.0	7.1			5.8	5.8	4.0	5.8	5.8
Lane Util. Factor	1.00	0.95		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	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	1.00
Frt	1.00	1.00		1.00	0.99			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1789	3349		1560	3424			1750	1473	1789	1883	1601
Flt Permitted	0.05	1.00		0.12	1.00			0.89	1.00	0.44	1.00	1.00
Satd. Flow (perm)	100	3349		197	3424			1586	1473	828	1883	1601
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	18	1316	28	200	1972	202	35	92	195	129	37	22
RTOR Reduction (vph)	0	1	0	0	5	0	0	0	171	0	0	18
Lane Group Flow (vph)	18	1343	0	200	2169	0	0	127	24	129	37	4
Confl. Peds. (#/hr)			12	12								
Heavy Vehicles (%)	2%	3%	0%	8%	2%	2%	0%	2%	6%	2%	2%	2%
Bus Blockages (#/hr)	0	4	0	0	4	0	0	5	0	0	0	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm	pm+pt	NA	Perm
Protected Phases		2		1	6			8		7	4	
Permitted Phases	2			6			8		8	4		4
Actuated Green, G (s)	75.2	75.2		92.4	92.4			15.7	15.7	24.7	24.7	24.7
Effective Green, g (s)	75.2	75.2		92.4	92.4			15.7	15.7	24.7	24.7	24.7
Actuated g/C Ratio	0.58	0.58		0.71	0.71			0.12	0.12	0.19	0.19	0.19
Clearance Time (s)	7.1	7.1		4.0	7.1			5.8	5.8	4.0	5.8	5.8
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	57	1937		278	2433			191	177	194	357	304
v/s Ratio Prot		0.40		0.07	c0.63					c0.03	0.02	
v/s Ratio Perm	0.18			0.44				0.08	0.02	c0.10		0.00
v/c Ratio	0.32	0.69		0.72	0.89			0.66	0.13	0.66	0.10	0.01
Uniform Delay, d1	14.1	19.3		16.7	14.8			54.6	51.1	48.8	43.5	42.8
Progression Factor	0.68	0.67		1.72	0.96			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.7	1.4		2.4	1.5			8.4	0.3	8.3	0.1	0.0
Delay (s)	19.3	14.3		31.0	15.8			63.1	51.4	57.1	43.6	42.8
Level of Service	B	B		C	B			E	D	E	D	D
Approach Delay (s)		14.4			17.1			56.0			52.8	
Approach LOS		B			B			E			D	

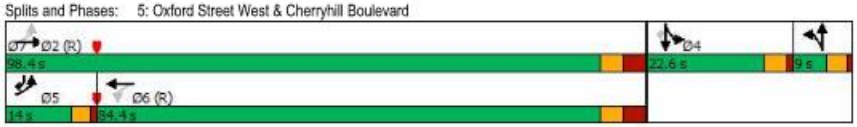
Intersection Summary				
HCM 2000 Control Delay	20.7	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.90			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.9	
Intersection Capacity Utilization	95.6%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	169	1444	8	2067	45	7	251	1	286
Future Volume (vph)	169	1444	8	2067	45	7	251	1	286
Turn Type	pm+pt	NA	Perm	NA	Split	NA	Split	NA	pm+ov
Protected Phases	5	2		6	7	7	4	4	5
Permitted Phases	2		6						4
Detector Phase	5	2	6	6	7	7	4	4	5
Switch Phase									
Minimum Initial (s)	5.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	41.1	41.1	41.1	9.0	9.0	22.5	22.5	9.0
Total Split (s)	14.0	98.4	84.4	84.4	9.0	9.0	22.6	22.6	14.0
Total Split (%)	10.8%	75.7%	64.9%	64.9%	6.9%	6.9%	17.4%	17.4%	10.8%
Yellow Time (s)	3.0	3.5	3.5	3.5	3.0	3.0	3.5	3.5	3.0
All-Red Time (s)	1.0	3.6	3.6	3.6	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	7.1	7.1	7.1	4.0	4.0	4.5	4.5	4.0
Lead/Lag	Lead		Lag	Lag					Lead
Lead-Lag Optimize?	Yes		Yes	Yes					Yes
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	98.3	95.2	80.9	80.9	6.4	6.4	14.8	14.8	25.6
Actuated g/C Ratio	0.76	0.73	0.62	0.62	0.05	0.05	0.11	0.11	0.20
v/c Ratio	0.89	0.60	0.04	1.01	0.54	0.36	0.69	0.69	0.86
Control Delay	80.6	4.4	11.9	47.2	83.6	38.1	74.5	74.3	55.6
Queue Delay	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0	0.2
Total Delay	80.6	4.4	11.9	57.8	83.6	38.1	74.5	74.3	55.8
LOS	F	A	B	E	F	D	E	E	E
Approach Delay		12.3		57.6		64.3		64.5	
Approach LOS		B		E		E		E	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 41.7		Intersection LOS: D	
Intersection Capacity Utilization 96.5%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 5: Oxford Street West & Cherryhill Boulevard



HCM Signalized Intersection Capacity Analysis
5: Oxford Street West & Cherryhill Boulevard

Future Total 2035 PM Peak Hour
06-13-2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	169	1444	19	8	2067	51	45	7	26	251	1	286
Future Volume (vph)	169	1444	19	8	2067	51	45	7	26	251	1	286
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.8	3.3	3.3	3.1	3.3	3.5	3.4	3.5	3.5	3.2	3.3	3.6
Total Lost time (s)	4.0	7.1		7.1	7.1		4.0	4.0		4.5	4.5	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.83		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00		1.00	0.88		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.95	1.00
Satd. Flow (prot)	1677	3348		1696	3376		1713	1373		1591	1614	1413
Flt Permitted	0.05	1.00		0.17	1.00		0.95	1.00		0.95	0.95	1.00
Satd. Flow (perm)	84	3348		301	3376		1713	1373		1591	1614	1413
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	169	1444	19	8	2067	51	45	7	26	251	1	286
RTOR Reduction (vph)	0	1	0	0	1	0	0	25	0	0	0	55
Lane Group Flow (vph)	169	1462	0	8	2117	0	45	8	0	125	127	231
Confl. Peds. (#/hr)	19		21	21		19	37		28	28		37
Heavy Vehicles (%)	10%	3%	11%	0%	2%	3%	3%	0%	0%	3%	0%	6%
Bus Blockages (#/hr)	0	4	0	0	4	0	0	0	0	0	0	5
Turn Type	pm+pt	NA		Perm	NA		Split	NA		Split	NA	pm+ov
Protected Phases	5	2			6		7	7		4	4	5
Permitted Phases	2			6								4
Actuated Green, G (s)	94.4	94.4		80.1	80.1		5.2	5.2		14.8	14.8	25.1
Effective Green, g (s)	94.4	94.4		80.1	80.1		5.2	5.2		14.8	14.8	25.1
Actuated g/C Ratio	0.73	0.73		0.62	0.62		0.04	0.04		0.11	0.11	0.19
Clearance Time (s)	4.0	7.1		7.1	7.1		4.0	4.0		4.5	4.5	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	187	2431		185	2080		68	54		181	183	272
v/s Ratio Prot	c0.07	0.44			c0.63		c0.03	0.01		0.08	0.08	c0.07
v/s Ratio Perm	0.58			0.03								0.10
v/c Ratio	0.90	0.60		0.04	1.02		0.66	0.15		0.69	0.69	0.85
Uniform Delay, d1	45.3	8.7		9.8	25.0		61.5	60.3		55.4	55.4	50.6
Progression Factor	1.57	0.39		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	32.5	0.8		0.4	24.3		21.6	1.3		10.8	10.8	21.2
Delay (s)	103.8	4.2		10.3	49.2		83.1	61.5		66.2	66.3	71.8
Level of Service	F	A		B	D		F	E		E	E	E
Approach Delay (s)		14.5			49.1			74.0			69.2	
Approach LOS		B			D			E			E	

Intersection Summary				
HCM 2000 Control Delay	39.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.97			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.6	
Intersection Capacity Utilization	96.5%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
6: Platt's Lane & Cherryhill Place

Future Total 2035 PM Peak Hour
06-13-2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	10	109	21	5	13	128	302	31	12	469	167
Future Volume (Veh/h)	133	10	109	21	5	13	128	302	31	12	469	167
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	133	10	109	21	5	13	128	302	31	12	469	167
Pedestrians		35			19			23			20	
Lane Width (m)		3.7			3.7			3.1			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		3			2			2			2	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1205	1220	610	1222	1288	356	671			352		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1205	1220	610	1222	1288	356	671			352		
tC, single (s)	7.2	6.5	6.3	7.1	6.5	6.2	4.2			4.7		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.4	3.5	4.0	3.3	2.3			2.7		
p0 queue free %	0	93	76	77	96	98	85			99		
cM capacity (veh/h)	121	145	459	93	132	668	858			933		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	252	39	128	333	12	636
Volume Left	133	21	128	0	12	0
Volume Right	109	13	0	31	0	167
cSH	179	138	858	1700	933	1700
Volume to Capacity	1.41	0.28	0.15	0.20	0.01	0.37
Queue Length 95th (m)	116.4	8.3	4.0	0.0	0.3	0.0
Control Delay (s)	263.0	41.1	9.9	0.0	8.9	0.0
Lane LOS	F	E	A		A	
Approach Delay (s)	263.0	41.1	2.8		0.2	
Approach LOS	F	E				

Intersection Summary				
Average Delay	49.5			
Intersection Capacity Utilization	71.5%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	26	64	62	111	0	156	47	140	47	62	0
Future Volume (Veh/h)	0	26	64	62	111	0	156	47	140	47	62	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	26	64	62	111	0	156	47	140	47	62	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								319				
pX, platoon unblocked												
vC, conflicting volume	640	655	62	662	585	117	62			187		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	640	655	62	662	585	117	62			187		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	92	94	79	70	100	90			97		
cM capacity (veh/h)	269	335	1003	297	367	935	1541			1387		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	90	173	343	109
Volume Left	0	62	156	47
Volume Right	64	0	140	0
cSH	636	339	1541	1387
Volume to Capacity	0.14	0.51	0.10	0.03
Queue Length 95th (m)	3.7	21.0	2.6	0.8
Control Delay (s)	11.6	26.2	3.9	3.5
Lane LOS	B	D	A	A
Approach Delay (s)	11.6	26.2	3.9	3.5
Approach LOS	B	D		

Intersection Summary				
Average Delay	10.2			
Intersection Capacity Utilization	48.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	98	114	0	47	51	11
Future Volume (Veh/h)	98	114	0	47	51	11
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	98	114	0	47	51	11
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			212		202	155
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			212		202	155
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		94	99
cM capacity (veh/h)			1358		787	891

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	212	47	62
Volume Left	0	0	51
Volume Right	114	0	11
cSH	1700	1358	803
Volume to Capacity	0.12	0.00	0.08
Queue Length 95th (m)	0.0	0.0	1.9
Control Delay (s)	0.0	0.0	9.9
Lane LOS			A
Approach Delay (s)	0.0	0.0	9.9
Approach LOS			A

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	22.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	67	0	10	18	0	80
Future Volume (Veh/h)	67	0	10	18	0	80
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	67	0	10	18	0	80
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	99	19			28	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	99	19			28	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	100			100	
cM capacity (veh/h)	900	1059			1585	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	67	28	80
Volume Left	67	0	0
Volume Right	0	18	0
cSH	900	1700	1585
Volume to Capacity	0.07	0.02	0.00
Queue Length 95th (m)	1.8	0.0	0.0
Control Delay (s)	9.3	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.3	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay		3.6	
Intersection Capacity Utilization		14.6%	ICU Level of Service A
Analysis Period (min)		15	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	18	0	147	67	53	0	0	54	18	0	0
Future Volume (Veh/h)	0	18	0	147	67	53	0	0	54	18	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	18	0	147	67	53	0	0	54	18	0	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	120			18			406	432	18	460	406	94
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	120			18			406	432	18	460	406	94
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			91			100	100	95	96	100	100
cM capacity (veh/h)	1468			1599			517	469	1061	452	485	963

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	18	267	54	18
Volume Left	0	147	0	18
Volume Right	0	53	54	0
cSH	1468	1599	1061	452
Volume to Capacity	0.00	0.09	0.05	0.04
Queue Length 95th (m)	0.0	2.3	1.2	0.9
Control Delay (s)	0.0	4.5	8.6	13.3
Lane LOS		A	A	B
Approach Delay (s)	0.0	4.5	8.6	13.3
Approach LOS			A	B

Intersection Summary			
Average Delay		5.3	
Intersection Capacity Utilization		35.9%	ICU Level of Service A
Analysis Period (min)		15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	62	10	0	34	80
Future Volume (Veh/h)	0	62	10	0	34	80
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	62	10	0	34	80
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	158	10			10	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	158	10			10	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	94			98	
cM capacity (veh/h)	816	1071			1610	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	62	10	114
Volume Left	0	0	34
Volume Right	62	0	0
cSH	1071	1700	1610
Volume to Capacity	0.06	0.01	0.02
Queue Length 95th (m)	1.4	0.0	0.5
Control Delay (s)	8.6	0.0	2.3
Lane LOS	A		A
Approach Delay (s)	8.6	0.0	2.3
Approach LOS	A		

Intersection Summary			
Average Delay	4.3		
Intersection Capacity Utilization	23.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1623		1023	1085

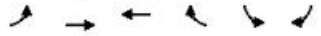
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1623		1023	1085

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	0	0	0	0
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS			A	A
Approach Delay (s)	0.0	0.0	0.0	
Approach LOS			A	

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1623				1023	1085

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		