APPENDICES

APPENDIX A:
Reduced Scale Architectural Plans

340-376 Dufferin St.

Toronto, Ontario

OWNER:
Hullmark
474 Wellington St W Suite 200
Toronto, ON M5V 1E3
contact:Charles Arbez
e: charles@hullmark.ca
t: 614-510-1700

ARCHITECT:
Sweeny &Co Architects Inc.
134 Peter St., Suite 1601
Toronto, ON M5V 2H2
contact: Hai Ho
e: Hai@sweenyandco.com
t: 416-971-6252 (x289)

MECHANICAL:
Smith and Anderson Consulting Engineering
1100 - 100 Sheppard Ave. East
Toronto, ON M2N 6N5
contact: Sean Carson
e: sean.carson@smithandandersen.com
t: 416-320-2735

ELECTRICAL:
Smith and Anderson Consulting Engineering
1100 - 100 Sheppard Ave. East
Toronto, ON M2N 6N5
contact: Bram Atlin
e: bram.atlin@smithandandersen.com
t: 416-895-9825

CIVIL:
R. V. Anderson and Associates
2001 Sheppard Ave E suite 300,
North York, ON M2J 4Z8
contact: David Stafford
e: DStafford@rvanderson.com
t: 416-497-8600

LANDSCAPE ARCHITECT:
Land Art Design
52 Mimico Ave,
Etobicoke, ON M8V 1R1
contact: Jackie VanderVelde
e: jvv@ladesign.ca
t: 416-871-0874

TRANSPORTATION:
BA Group
45 St Clair Ave W
Toronto, ON M4V 1K9
contact: Steve Krossey
e: krossey@bagroup.com
t: 416-961-7110 (x153)

HERITAGE:
ERA Architects
625 Church St #600,
Toronto, ON M4Y 2G1
contact:Samantha Irvine
e: Samanthai@eraarch.ca
t: 416-963-4497 (x348)

GEOTECH & ENVIRONMENTAL:
Grounded Engineering
1 Banigan Dr,
East York, ON M4H 1G3
contact: Suvish Melanta
e: smelanta@groundedeng.ca
t: 647-265-0909

URBAN PLANNING:
Bousfield Inc.
3 Church Street, Suite 200
Toronto, ON M5E 1M2
contact: Mike Bissett
e: mbissett@bousfields.ca
t: 416-903-6950

ISSUED FOR REZONING

ZBL Drawing List & Issuance Log

No.	Name	
AZ000	Cover Page	
AZ001	Context Plan & Project Statistics	
AZ002	GFA Diagrams	
AZ003	GFA Diagrams	
AZ004	GFA Diagrams	
AZ101-A	Site Plan	Phase 1
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AZ202-A	Ground Level Plan	Phase 1
AZ202-B	Ground Level Plan	Phase 2
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AZ216	Level 23-25	
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AZ451	1 to 50 Detailed Elevations	
AZ452	1 to 50 Detailed Elevations	
AZ453	1 to 50 Detailed Elevations	
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AZ455	Elevations - TGS Bird Friendly Glazing Calculations	
AZ501	Building Sections_North-South - Phase 1	
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AZ503	Building Sections_East-West (North Tower)	
AZ504	Building Sections_East-West (South Tower)	
AZ505	Building Sections_East-West (South Podium)	
AZ600	Renderings	
AZ601	Renderings	

ISSUED

2022-07-15	Issued for OPA/ZBA/SPA

Sweeny&Co Architects

134 PETER STREET | SUITE 1601
TORONTO, ONTARIO | M5V 2H2 | CANADA
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PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Cover Page

DATE : 2022-07-15
SCALE :
DRAWN : AR
CHECKED : AG
PROJ. No. : 2102 DWG No.
AZ000

GENERAL

Project:	The Radiator
Address :	340-370 Dufferin St.
District:	Toronto. Ontario
Site Area :	7,444 m^2 80,122 SF
Parking spaces:	330

ZONING

By-law :	City of Toronto Zoning By-Law 569-2013
Height limit :	14.0 m
Gross Floor Area :	44,470 m^2
Density :	5.97
Building height :	82.50 m (incl. MPH)

UNDERGROUND – HEIGHT / TFA / GFA - City of Toronto Zoning By-Law 569-2013

UNDERGROUND	HEIGHT		TFA		RESIDENTIAL		FLEX		COMMERCIAL		GFA TOTAL	
	Storeys	Metres	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF
PARKING												
Level -1	1	4.00 m	1,230.04 m^2	13,240 SF	967.71 m^2	10,416 SF	--	--	--	--	967.71 m^2	10,416 SF
Level -2	1	4.00 m	417.33 m^2	4,492 SF	218.75 m^2	2,355 SF	--	--	--	--	218.75 m^2	2,355 SF
PARKING TOTAL	2	8.00 m	1,647.37 m^2	17,732 SF	1,186.46 m^2	12,771 SF	--	--	--	--	1,186.46 m^2	12,771 SF
U/G TOTAL	**2**	**8.00 m**	**1,647.37 m^2**	**17,732 SF**	**1,186.46 m^2**	**12,771 SF**	--	--	--	--	**1,186.46 m^2**	**12,771 SF**

UNDERGROUND – AMENITY / SALEABLE / RENTABLE

UNDERGROUND	INDOOR AMENITY		OUTDOOR AMENITY		SALEABLE / RENTABLE RESIDENTIAL		SALEABLE / RENTABLE FLEX		SALEABLE / RENTABLE COMMERCIAL	
	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF
PARKING										
Level -1	--	--	--	--	--	--	--	--	--	--
Level -2	--	--	--	--	--	--	--	--	--	--
PARKING TOTAL	--	--	--	--	--	--	--	--	--	--
U/G TOTAL	--	--	--	--	--	--	--	--	--	--

ABOVE GRADE – HEIGHT / TFA / GFA - City of Toronto Zoning By-Law 569-2013

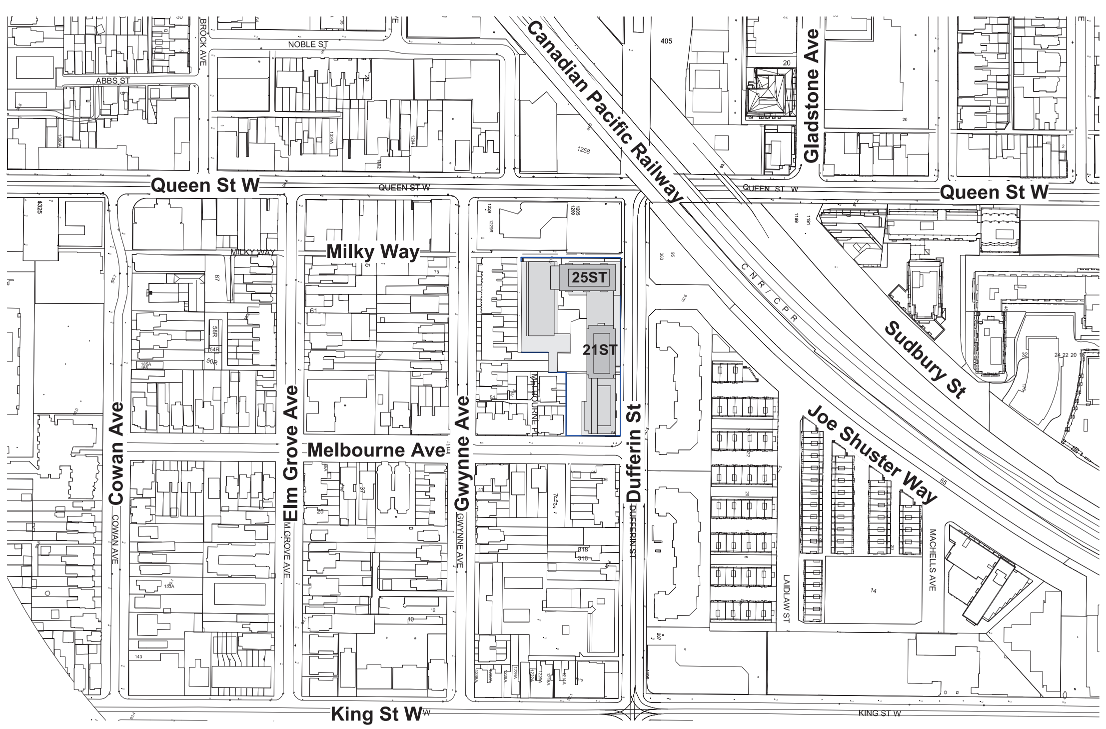
ABOVE GRADE	HEIGHT		TFA		RESIDENTIAL		FLEX		COMMERCIAL		GFA TOTAL	
	Storeys	Metres	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF
PHASE 1 - GROUND FLOOR												
Level 1	1	4.50 m	3,578.82 m^2	38,522 SF	776.39 m^2	8,357 SF	1,400.21 m^2	15,072 SF	833.57 m^2	8,972 SF	3,010.18 m^2	32,401 SF
Level 2	1	4.00 m	2,533.96 m^2	27,275 SF	123.83 m^2	1,333 SF	528.70 m^2	5,691 SF	--	--	652.53 m^2	7,024 SF
SUBTOTAL	2	8.50 m	6,112.78 m^2	65,797 SF	900.22 m^2	9,690 SF	1,928.92 m^2	20,763 SF	833.57 m^2	8,972 SF	3,662.71 m^2	39,425 SF
PHASE 1 - PODIUM + TOWERS												
Level 3	1	3.00 m	3,266.35 m^2	35,159 SF	2,507.53 m^2	26,991 SF	--	--	--	--	2,507.53 m^2	26,991 SF
Level 4	1	3.00 m	3,048.01 m^2	32,808 SF	2,795.22 m^2	30,088 SF	--	--	--	--	2,795.22 m^2	30,088 SF
Level 5	1	3.00 m	2,639.14 m^2	28,407 SF	2,368.11 m^2	25,490 SF	--	--	--	--	2,368.11 m^2	25,490 SF
Level 6	1	3.00 m	2,553.30 m^2	27,483 SF	2,362.29 m^2	25,428 SF	--	--	--	--	2,362.29 m^2	25,428 SF
Level 7	1	3.00 m	1,608.12 m^2	17,310 SF	1,489.58 m^2	16,034 SF	--	--	--	--	1,489.58 m^2	16,034 SF
Level 8	1	3.00 m	1,608.12 m^2	17,310 SF	1,489.58 m^2	16,034 SF	--	--	--	--	1,489.58 m^2	16,034 SF
Level 9	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 10	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 11	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 12	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 13	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 14	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 15	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 16	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 17	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 18	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 19	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 20	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 21	1	3.00 m	1,501.04 m^2	16,157 SF	1,385.62 m^2	14,915 SF	--	--	--	--	1,385.62 m^2	14,915 SF
Level 22 / MPH South	1	3.00 m	1,102.09 m^2	11,863 SF	694.81 m^2	7,479 SF	--	--	--	--	694.81 m^2	7,479 SF
Level 23	1	3.00 m	750.80 m^2	8,082 SF	691.20 m^2	7,440 SF	--	--	--	--	691.20 m^2	7,440 SF
Level 24	1	3.00 m	750.80 m^2	8,082 SF	691.20 m^2	7,440 SF	--	--	--	--	691.20 m^2	7,440 SF
Level 26	1	3.00 m	750.80 m^2	8,082 SF	691.20 m^2	7,440 SF	--	--	--	--	691.20 m^2	7,440 SF
MPH North	-	5.00 m	364.02 m^2	3,918 SF	6.84 m^2	74 SF	--	--	--	--	6.84 m^2	74 SF
SUBTOTAL	23	74.00 m	37,955.00 m^2	408,544 SF	33,800.57 m^2	363,826 SF	--	--	--	--	33,800.57 m^2	363,826 SF
TOTAL PHASE 1	*23*	*74.00 m*	*44,067.79 m^2*	*474,342 SF*	*34,700.79 m^2*	*373,516 SF*	*1,928.92 m^2*	*20,763 SF*	*833.57 m^2*	*8,972 SF*	*37,463.28 m^2*	*403,251 SF*
PHASE 2 - GROUND FLOOR												
Level 1	1	4.50 m	1,021.51 m^2	10,995 SF	245.36 m^2	2,641 SF	--	--	687.85 m^2	7,404 SF	933.22 m^2	10,045 SF
Level 2	1	4.00 m	55.42 m^2	597 SF	7.97 m^2	86 SF	--	--	--	--	7.97 m^2	86 SF
SUBTOTAL	2	8.50 m	1,076.93 m^2	11,592 SF	253.33 m^2	2,727 SF	--	--	687.85 m^2	7,404 SF	941.18 m^2	10,131 SF
PHASE 2 - PODIUM												
Level 3	1	3.00 m	911.40 m^2	9,810 SF	861.04 m^2	9,268 SF	--	--	--	--	861.04 m^2	9,268 SF
Level 4	1	3.00 m	911.29 m^2	9,809 SF	860.93 m^2	9,267 SF	--	--	--	--	860.93 m^2	9,267 SF
Level 5	1	3.00 m	820.52 m^2	8,832 SF	770.17 m^2	8,290 SF	--	--	--	--	770.17 m^2	8,290 SF
Level 6	1	3.00 m	822.27 m^2	8,851 SF	771.92 m^2	8,309 SF	--	--	--	--	771.92 m^2	8,309 SF
Level 7	1	3.00 m	820.52 m^2	8,832 SF	770.17 m^2	8,290 SF	--	--	--	--	770.17 m^2	8,290 SF
Level 8	1	3.00 m	651.28 m^2	7,010 SF	600.93 m^2	6,468 SF	--	--	--	--	600.93 m^2	6,468 SF
Level 9	1	3.00 m	651.28 m^2	7,010 SF	600.93 m^2	6,468 SF	--	--	--	--	600.93 m^2	6,468 SF
Level 10	1	3.00 m	504.56 m^2	5,431 SF	412.85 m^2	4,444 SF	--	--	--	--	412.85 m^2	4,444 SF
Level 11	1	3.00 m	504.71 m^2	5,433 SF	413.00 m^2	4,445 SF	--	--	--	--	413.00 m^2	4,445 SF
MPH Midrise	-	5.00 m	278.60 m^2	2,999 SF	3.63 m^2	39 SF	--	--	--	--	3.63 m^2	39 SF
SUBTOTAL	9	32.00 m	6,876.43 m^2	74,017 SF	6,065.56 m^2	65,289 SF	--	--	--	--	6,065.56 m^2	65,289 SF
TOTAL PHASE 2	*9*	*32.00 m*	*7,953.36 m^2*	*85,609 SF*	*6,318.89 m^2*	*68,016 SF*	--	--	*687.85 m^2*	*7,404 SF*	*7,006.74 m^2*	*75,420 SF*
A/G TOTAL	**25**	**82.5 m**	**52,021.14 m^2**	**559,951 SF**	**41,019.68 m^2**	**441,532 SF**	**1,928.92 m^2**	**20,763 SF**	**1,521.42 m^2**	**16,376 SF**	**44,470.02 m^2**	**478,671 SF**
	HEIGHT		TFA		RESIDENTIAL		FLEX		COMMERCIAL		GFA TOTAL	

ABOVE GRADE – AMENITY / SALEABLE / RENTABLE

ABOVE GRADE	INDOOR AMENITY		OUTDOOR AMENITY		SALEABLE / RENTABLE RESIDENTIAL		SALEABLE / RENTABLE FLEX		SALEABLE / RENTABLE COMMERCIAL	
	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF
PHASE 1 - GROUND FLOOR										
Level 1	--	--	--	--	--	--	1,400.21 m^2	15,072 SF	833.57 m^2	8,972 SF
Level 2	1,327.80 m^2	14,292 SF	--	--	--	--	528.70 m^2	5,691 SF	--	--
SUBTOTAL	1,327.80 m^2	14,292 SF	--	--	--	--	1,928.92 m^2	20,763 SF	833.57 m^2	8,972 SF
PHASE 1 - PODIUM + TOWERS										
Level 3	552.06 m^2	5,942 SF	68.61 m^2	739 SF	2,320.90 m^2	24,982 SF	--	--	--	--
Level 4	--	--	--	--	2,497.64 m^2	26,884 SF	--	--	--	--
Level 5	77.56 m^2	835 SF	413.82 m^2	4,454 SF	2,141.79 m^2	23,054 SF	--	--	--	--
Level 6	--	--	--	--	2,159.52 m^2	23,245 SF	--	--	--	--
Level 7	--	--	--	--	1,383.08 m^2	14,887 SF	--	--	--	--
Level 8	--	--	--	--	1,383.08 m^2	14,887 SF	--	--	--	--
Level 9	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 10	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 11	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 12	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 13	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 14	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 15	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 16	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 17	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 18	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 19	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 20	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 21	--	--	--	--	1,283.74 m^2	13,818 SF	--	--	--	--
Level 22 / MPH South	--	--	--	--	636.41 m^2	6,850 SF	--	--	--	--
Level 23	--	--	--	--	636.41 m^2	6,850 SF	--	--	--	--
Level 24	--	--	--	--	636.41 m^2	6,850 SF	--	--	--	--
Level 26	--	--	--	--	636.41 m^2	6,850 SF	--	--	--	--
MPH North	--	--	--	--	--	--	--	--	--	--
SUBTOTAL	629.62 m^2	6,777 SF	482.43 m^2	5,193 SF	31,120.32 m^2	334,976 SF	--	--	--	--
TOTAL PHASE 1	*1,957.43 m^2*	*21,070 SF*	*482.43 m^2*	*5,193 SF*	*31,120.32 m^2*	*334,976 SF*	*1,928.92 m^2*	*20,763 SF*	*833.57 m^2*	*8,972 SF*
PHASE 2 - GROUND FLOOR										
Level 1	--	--	--	--	--	--	--	--	687.85 m^2	7,404 SF
Level 2	--	--	--	--	--	--	--	--	--	--
SUBTOTAL	--	--	--	--	--	--	--	--	687.85 m^2	7,404 SF
PHASE 2 - PODIUM										
Level 3	--	--	--	--	804.87 m^2	8,664 SF	--	--	--	--
Level 4	--	--	--	--	804.80 m^2	8,663 SF	--	--	--	--
Level 5	--	--	--	--	711.92 m^2	7,663 SF	--	--	--	--
Level 6	--	--	--	--	711.92 m^2	7,663 SF	--	--	--	--
Level 7	--	--	--	--	711.92 m^2	7,663 SF	--	--	--	--
Level 8	--	--	--	--	542.68 m^2	5,841 SF	--	--	--	--
Level 9	--	--	--	--	542.68 m^2	5,841 SF	--	--	--	--
Level 10	34.06 m^2	367 SF	159.44 m^2	1,716 SF	361.32 m^2	3,889 SF	--	--	--	--
Level 11	--	--	--	--	361.47 m^2	3,891 SF	--	--	--	--
MPH Midrise	--	--	--	--	--	--	--	--	--	--
SUBTOTAL	34.06 m^2	367 SF	159 SF	1,716 SF	5,553.57 m^2	59,778 SF	--	--	--	--
TOTAL PHASE 2	*34.06 m^2*	*367 SF*	*159.44 m^2*	*1,716 SF*	*5,553.57 m^2*	*59,778 SF*	--	--	*687.85 m^2*	*7,404 SF*
A/G TOTAL	**1,991.49 m^2**	**21,436 SF**	**641.87 m^2**	**6,909 SF**	**36,673.89 m^2**	**394,755 SF**	**1,928.92 m^2**	**20,763 SF**	**1,521.42 m^2**	**16,376 SF**
	INDOOR AMENITY		OUTDOOR AMENITY		RESIDENTIAL		FLEX		COMMERCIAL	

TOTAL RESIDENTIAL UNIT COUNT

ABOVE GRADE	BACH	1BD	1BD+D	2BD	2BD+D	3BD	3BD+D	TOTAL
PHASE 1 - GROUND FLOOR								
Level 1	-	-	-	-	-	-	-	-
Level 2	-	-	-	-	-	-	-	-
SUBTOTAL	-	-	-	-	-	-	-	-
PHASE 1 - PODIUM + TOWERS								
Level 3	2	12	27	6	-	4	-	51
Level 4	9	8	4	7	1	2	-	31
Level 5	-	17	-	9	-	8	-	34
Level 6	1	17	1	10	-	7	-	36
Level 7	-	18	-	6	-	2	-	26
Level 8	-	18	-	6	-	2	-	26
Level 9	-	17	-	5	-	2	-	24
Level 10	-	17	-	5	-	2	-	24
Level 11	-	17	-	5	-	2	-	24
Level 12	-	17	-	5	-	2	-	24
Level 13	-	17	-	5	-	2	-	24
Level 14	-	17	-	5	-	2	-	24
Level 15	-	17	-	5	-	2	-	24
Level 16	-	17	-	5	-	2	-	24
Level 17	-	17	-	5	-	2	-	24
Level 18	-	17	-	5	-	2	-	24
Level 19	-	17	-	5	-	2	-	24
Level 20	-	17	-	5	-	2	-	24
Level 21	-	17	-	5	-	2	-	24
Level 22 / MPH South	-	8	-	3	-	1	-	12
Level 23	-	8	-	3	-	1	-	12
Level 24	-	8	-	3	-	1	-	12
Level 26	-	8	-	3	-	1	-	12
MPH North	-	-	-	-	-	-	-	-
SUBTOTAL	12	343	32	121	1	55	-	564
	2.1%	60.8%	5.7%	21.5%	0.2%	9.8%	-	
PHASE 2 - GROUND FLOOR								
Level 1	-	-	-	-	-	-	-	-
Level 2	-	-	-	-	-	-	-	-
SUBTOTAL	-	-	-	-	-	-	-	-
PHASE 2 - PODIUM								
Level 3	-	4	-	3	-	4	-	11
Level 4	-	4	-	3	-	4	-	11
Level 5	-	5	-	6	-	1	-	12
Level 6	-	5	-	6	-	1	-	12
Level 7	-	5	-	6	-	1	-	12
Level 8	-	6	-	4	-	-	-	10
Level 9	-	6	-	4	-	-	-	10
Level 10	-	8	-	-	-	-	-	8
Level 11	-	8	-	-	-	-	-	8
MPH Midrise	-	-	-	-	-	-	-	-
SUBTOTAL	-	51	-	32	-	11	-	94
	-	54.3%	-	34.0%	-	11.7%	-	
A/G TOTAL	12	394	32	153	1	66	-	658
	12	**426**		**154**		**66**		**658**
	1.8%	64.7%		23.4%		10.0%		



1 Context Plan
1 : 2500

RESIDENTIAL AMENITY AREA						
REQUIRED by Zoning By-law 569-2013	INDOOR AMENITY		OUTDOOR AMENITY		TOTAL	
	2.0	*m^2 / unit*	*No requirement*		*4.0*	*m^2 / unit*
	Area m^2	Area SF			Area m^2	Area SF
	1316.0	14165.3			2632.0	28330.6
PROVIDED	Area m^2	Area SF	Area m^2	Area SF	Area m^2	Area SF
Level 2	1327.8	14292.4	0.0	0.0	1327.8	14292.4
Level 3	552.1	5942.3	68.6	738.6	620.7	6680.9
Level 5	77.6	834.9	413.8	4454.3	491.4	5289.1
Level 10	34.1	366.7	159.4	1716.2	193.5	2082.9
TOTAL PROVIDED	**1991.5**	21436.2	**641.9**	6909.1	**2633.4**	28345.3
	3.0	**m^2 / unit**	**1.0**	**m^2 / unit**	**4.0**	**m^2 / unit**

PARKING			
CAR			
PROVIDED	***SHORT TERM***	***LONG TERM***	***TOTAL***
Level -1	62	31	93
Level -2	0	139	139
TOTAL PROVIDED	**62**	**170**	**232**
RATIO	**0.09 Space/Unit**	**0.26 Space/Unit**	**0.35 Space/Unit**
BICYCLE			
REQUIRED	***SHORT TERM*** *(0.1 SPACES / UNIT)*	***LONG TERM*** *(0.9 SPACES / UNIT)*	***TOTAL***
Total Required	*66*	*593*	*659*
PROVIDED			
Level -1	48	304	352
Level 1	18	30	48
Level 2	0	259	259
TOTAL PROVIDED	**66**	**593**	**659**
COMMERCIAL			
	SHORT TERM		**LONG TERM**
Commercial area	1521.42		1521.42
100 m2	15		15
3 + 0.3 every 100 m2	7.59	0.2 every 100 m2	3.06
REQUIRED	**8**	**REQUIRED**	**4**
PROVIDED	**8**	**PROVIDED**	**4**
FLEX			
	SHORT TERM		**LONG TERM**
Flex area	1928.92		1928.92
100 m2	19		19
3 + 0.2 every 100 m2	6.86	0.2 every 100 m2	3.86
REQUIRED	**7**	**REQUIRED**	**4**
PROVIDED	**7**	**PROVIDED**	**4**

TORONTO

Statistics Template – Toronto Green Standard Version 4.0

Mid to High Rise Residential and all New Non-Residential Development

The Toronto Green Standard Version 4.0 Statistics Template is submitted with Site Plan Control Applications and stand-alone Zoning Bylaw Amendment applications. Complete the table and copy it directly onto the Site Plan submitted as part of the application.

For Zoning Bylaw Amendment applications: complete General Project Description and Section 1.
For Site Plan Control applications: complete General Project Description, Section 1 and Section 2.
For further information, please visit www.toronto.ca/greendevelopment

General Project Description	Proposed
Total Gross Floor Area	44,470 m^2
Breakdown of project components (m^2):	
Residential	41,020 m^2
Retail	N/A
Commercial	1,521 m^2
Industrial	N/A
Institutional/Other	1,929 m^2
Total number of residential units	658

Section 1: For Stand Alone Zoning Bylaw Amendment Applications and Site Plan Control Applications

Low Emissions Transportation	Required	Proposed	Proposed %
Number of Parking Spaces		232	100%
Number of parking spaces with EVSE (residential)	232	232	100%
Number of parking spaces with EVSE (non-residential)	N/A	N/A	N/A

Cycling Infrastructure	Required	Proposed	Proposed %
Number of long-term bicycle parking spaces (all-uses)	601	601	100%
Number of long-term bicycle parking located on:			
a) first storey of building	N/A	30	-
b) second storey of building	N/A	259	-
c) first level below-ground	N/A	312	-
d) second level below-ground	N/A	N/A	N/A
e) other levels below-ground	N/A	N/A	N/A

311 toronto at your service

Page 1 of 3

TORONTO

Statistics Template – Toronto Green Standard Version 4.0

Mid to High Rise Residential and all New Non-Residential Development

Cycling Infrastructure	Required	Proposed	Proposed %
Number of short-term bicycle parking spaces	66	66	100%
Number of shower and change facilities (non-residential)			

Tree Canopy	Required	Proposed	Proposed %
Total Soil Volume (40% of the site area ÷ 66 m2 x 30 m^3)	1354	820	
Soil volume provided within the site area (m^3)			
Soil Volume provided within the public boulevard (m^3)			

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Sweeny&Co Architects

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PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Context Plan & Project Statistics

DATE :	2022-07-15
SCALE :	1 : 2500
DRAWN :	AR
CHECKED :	AG
PROJ. No. :	2102

DWG No.
AZ001

NOTES:

1. "NO PARKING - LOADING ZONE" SIGNS TO BE PROVIDED ADJACENT TO LOADING SPACES.

2. ACCESS DRIVEWAYS USED BY COLLECTION VEHICLES TO BE LEVEL (+/-2%) AND HAVE A MINIMUM VERTICAL CLEARANCE OF 4.4M, A MINIMUM WIDTH OF 4.5M THROUGHOUT, AND A WIDTH OF 6M AT POINT OF INGRESS AND EGRESS.

3. OVERHEAD DOOR FOR THE COLLECTION VEHICLE WILL HAVE A MINIMUM WIDTH OF 4 METRES AND A MINIMUM OVERHEAD CLEARANCE OF 4.4 METRES.

4. TYPE G LOADING AND STAGING AREAS TO BE LEVEL (+-2%) WITH AN UNENCUMBERED VERTICAL CLEARANCE OF 6.1M AND CONSTRUCTED OF A MINIMUM OF 200MM REINFORCED CONCRETE SLAB.

5. TURNING RADII ENTERING, EXITING AND TRAVELLING THROUGHOUT THE SITE AND THE TYPE G LOADING SPACE MUST BE MINIMUM 9.5m INSIDE AND 14m OUTSIDE.

6. GARBAGE COLLECTION STAFF NOTE: A TRAINED ON-SITE STAFF MEMBER WILL BE AVAILABLE TO MANEUVER BINS FOR THE COLLECTION DRIVER AND ALSO ACT AS FLAGMAN BY CONTROLLING THE TRUCK, CYCLING, PEDESTRIAN AND OTHER VEHICLE MOVEMENTS IN THE AREA. THE ON-SITE STAFF WILL MANEUVER THE BINS OUT OF THE WAY FOR THE COLLECTION VEHICLE TO EXIT FORWARD. IN THE EVENT THE ON-SITE STAFF 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.

7. A WARNING SYSTEM TO CAUTION MOTORISTS LEAVING THE PARKING GARAGE OF HEAVY VEHICLES WHEN LOADING OPERATION ARE OCCURRING IS TO BE PROVIDED. THIS WARNING SYSTEM TO INCLUDE BOTH LIGHTS AND SIGNS.

8. THE NON-RESIDENTIAL WASTE COMPONENT WILL ONLY SCHEDULE USE OF THE TYPE G LOADING SPACE ON DIFFERENT DAYS FROM THE COLLECTION DAYS OF THE RESIDENTIAL COMPONENT TO ENSURE THAT THE TYPE G LOADING SPACE WILL BE VACANT FOR CITYWASTE COLLECTION.

9. THE BINS THAT WILL BE USED FOR THE NON-RESIDENTIAL WASTE WILL BE LABELLED SEPARATELY FROM THE BINS FOR THE RESIDENTIAL WASTE.

10. IN ALL CASES WHERE A COLLECTION VEHICLES IS REQUIRED TO DRIVE ONTO OR OVER A SUPPORTED STRUCTURE (SUCH AS AN UNDERGROUND PARKING GARAGE, INTAKE/OUTAKE GRILLS, ETC.) THE STRUCTURE MUST BE DESIGNED TO SAFELY SUPPORT A FULLY LOADED COLLECTION VEHICLE (35,000 KG) AND CONFORMS TO THE FOLLOWING:

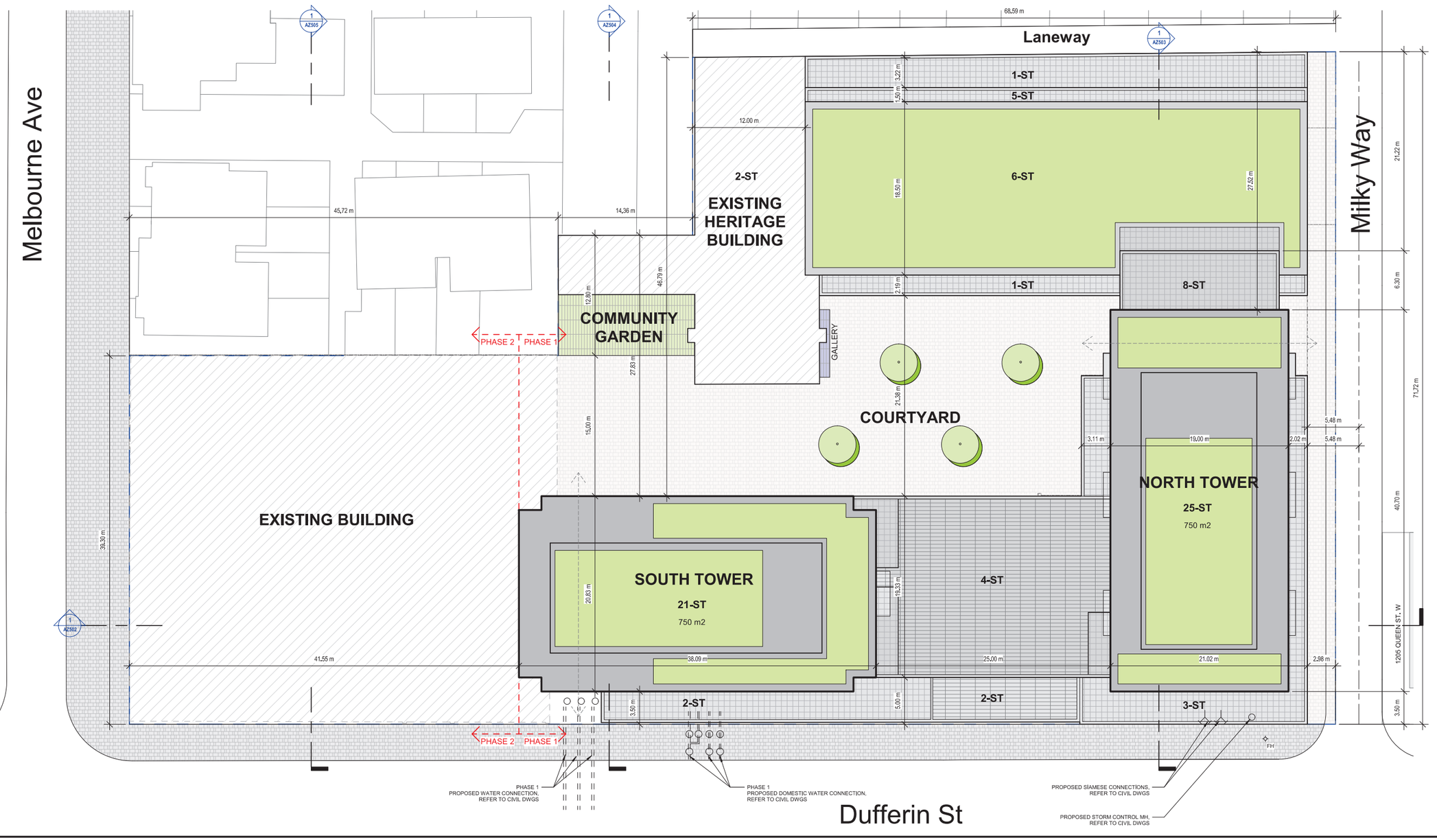
A) DESIGN CODE - ONTARIO BUILDING CODE
B) DESIGN LOAD - CITY BULK LIFT VEHICLE IN ADDITIONAL BUILDING CODE REQUIREMENTS.
C) IMPACT FACTOR - 5% FOR MAXIMUM VEHICULAR SPEEDS TO 15 km/h AND 30% FOR HIGHER SPEED.

11. ALL METAL GRATES TO HAVE MAXIMUM POROSITY OF 40mm x 10mm AT GROUND LEVEL AND MEETING STRUCTURAL REQUIREMENTS OF NOTE 10 ABOVE.

12. CONCRETE CURB, CONCRETE SIDEWALK AND ALL RESTORATION ALONG FRONTING ROADWAYS TO THE SITE TO COMPLY WITH CITY OF TORONTO STANDARDS. SEE LANDSCAPE DRAWINGS.

13. DARK SKY COMPLIANT EXTERIOR LIGHT FIXTURES TO BE SPECIFIED.

14. PEDESTRIAN-SCALED LIGHTING TO BE SPECIFIED.



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Sweeny&Co Architects

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E: info@andco.com | www.sweenyandco.com

PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Site Plan
Phase 1

DATE : 2022-07-15
SCALE : 1 : 200
DRAWN : AR, MDL
CHECKED : HH
PROJ. No. : 2102
DWG No.
AZ101-A

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NOTES:

1. "NO PARKING - LOADING ZONE" SIGNS TO BE PROVIDED ADJACENT TO LOADING SPACES.

2. ACCESS DRIVEWAYS USED BY COLLECTION VEHICLES TO BE LEVEL (+/-2%) AND HAVE A MINIMUM VERTICAL CLEARANCE OF 4.4M, A MINIMUM WIDTH OF 4.5M THROUGHOUT, AND A WIDTH OF 6M AT POINT OF INGRESS AND EGRESS.

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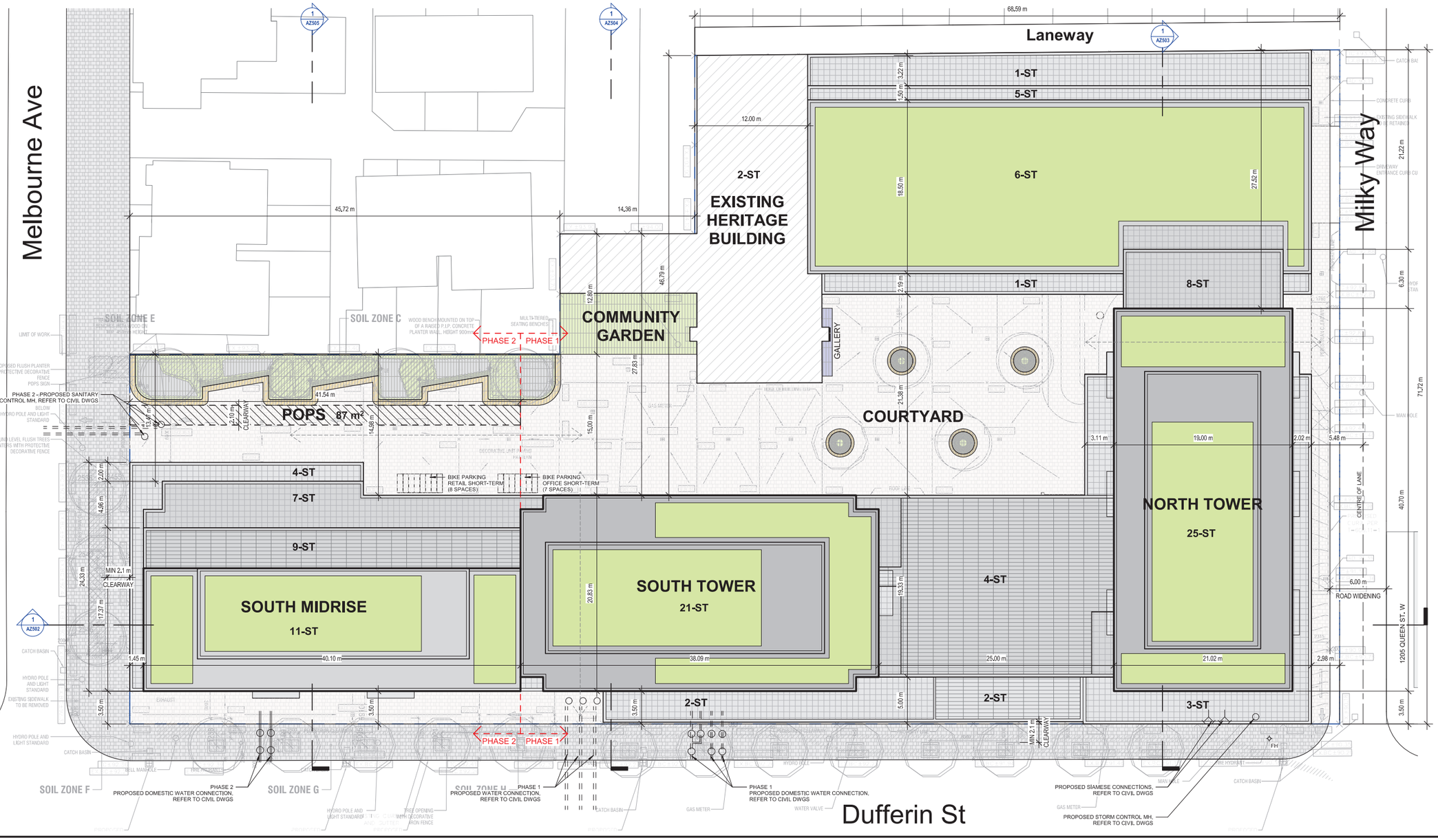

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Sweeny&Co Architects

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PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Site Plan
Phase 2

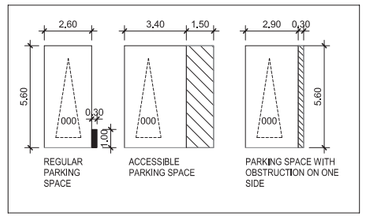
DATE :	2022-07-15
SCALE :	1 : 200
DRAWN :	AR, MDL
CHECKED :	HH
PROJ. No. :	2102

DWG No.
AZ101-B

NOTES:

1. CAR PARKING COUNT: 139 RESIDENTIAL SPACES.

2. ALL LONG TERM RESIDENTIAL PARKING SPACES TO INCLUDE AN ENERGIZED OUTLET CAPABLE OF PROVIDING LEVEL 2 CHARGING OR HIGHER TO THE PARKING SPACE.



TYPES OF CAR PARKING SPACE

1 AZ200 Car Parking Space Types

1 : 150

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PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Parking Level -2

DATE : 2022-07-15
SCALE : As indicated
DRAWN : AR, MDL
CHECKED : HH
PROJ. No. : 2102
DWG No. **AZ200**

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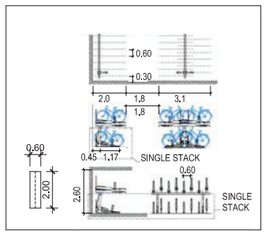
NOTES:

1. CAR PARKING COUNT: 93 SPACES (31 RESIDENTIAL, 62 NON RESIDENTIAL).
2. ALL LONG TERM RESIDENTIAL PARKING SPACES TO INCLUDE AN ENERGIZED OUTLET CAPABLE OF PROVIDING LEVEL 2 CHARGING OR HIGHER TO THE PARKING SPACE.
3. 25% OF NON RESIDENRIAL PARKING SPACES SHALL INCLUDE AN ENERGIZED OUTLET CAPABLE OF PROVIDING LEVEL 2 CHARGING OR HIGHER.
4. BIKE PARKING COUNT: 352 RESIDENTIAL SPACES (304 LONG TERM, 48 SHORT TERM); 8 NON RESIDENTIAL LONG TERM SPACES (4 COMMERCIAL, 4 FLEX).
5. 15% OF LONG-TERM BICYCLE PARKING SPACES SHALL INCLUDE AN ENERGIZED OUTLET (120 V) ADJACENT TO THE BICYCLE RACK.



TYPE H - HORIZONTAL STACK
PRODUCT: SINGLE PARKER BY JOSTA OR EQUIV.
INSTALLATION: FLOOR MOUNTED

1 / AZ201 Horizontal Stacked Bicycle Space

1 : 150

1 AZ502

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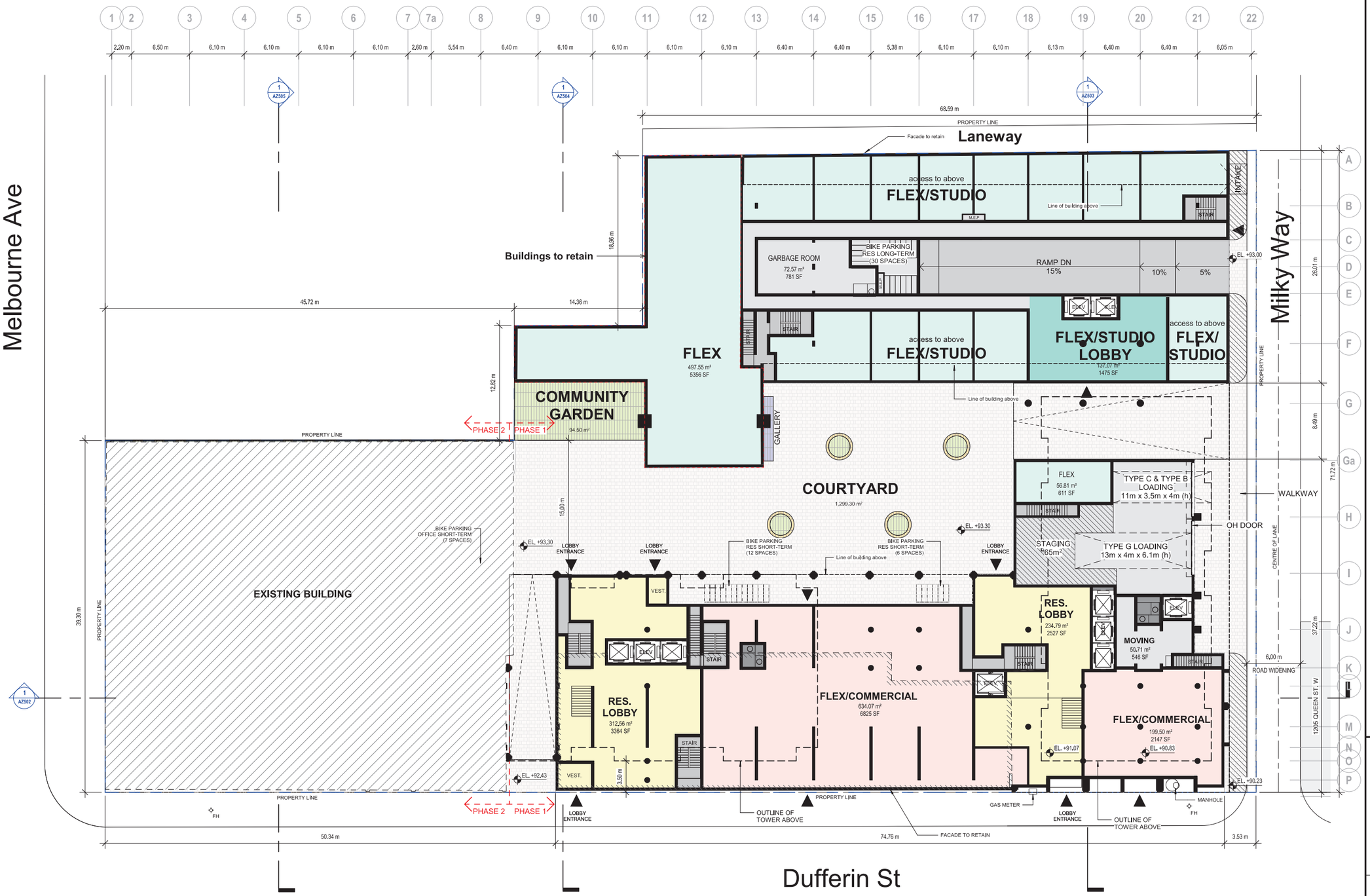
PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Parking Level -1

DATE :	2022-07-15
SCALE :	As indicated
DRAWN :	AR, MDL
CHECKED :	HH
PROJ. No. :	2102

DWG No.
AZ201



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PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Ground Level Plan
Phase 1

DATE :	2022-07-15
SCALE :	1 : 200
DRAWN :	AR, MDL
CHECKED :	HH
PROJ. No. :	2102

DWG No.
AZ202-A

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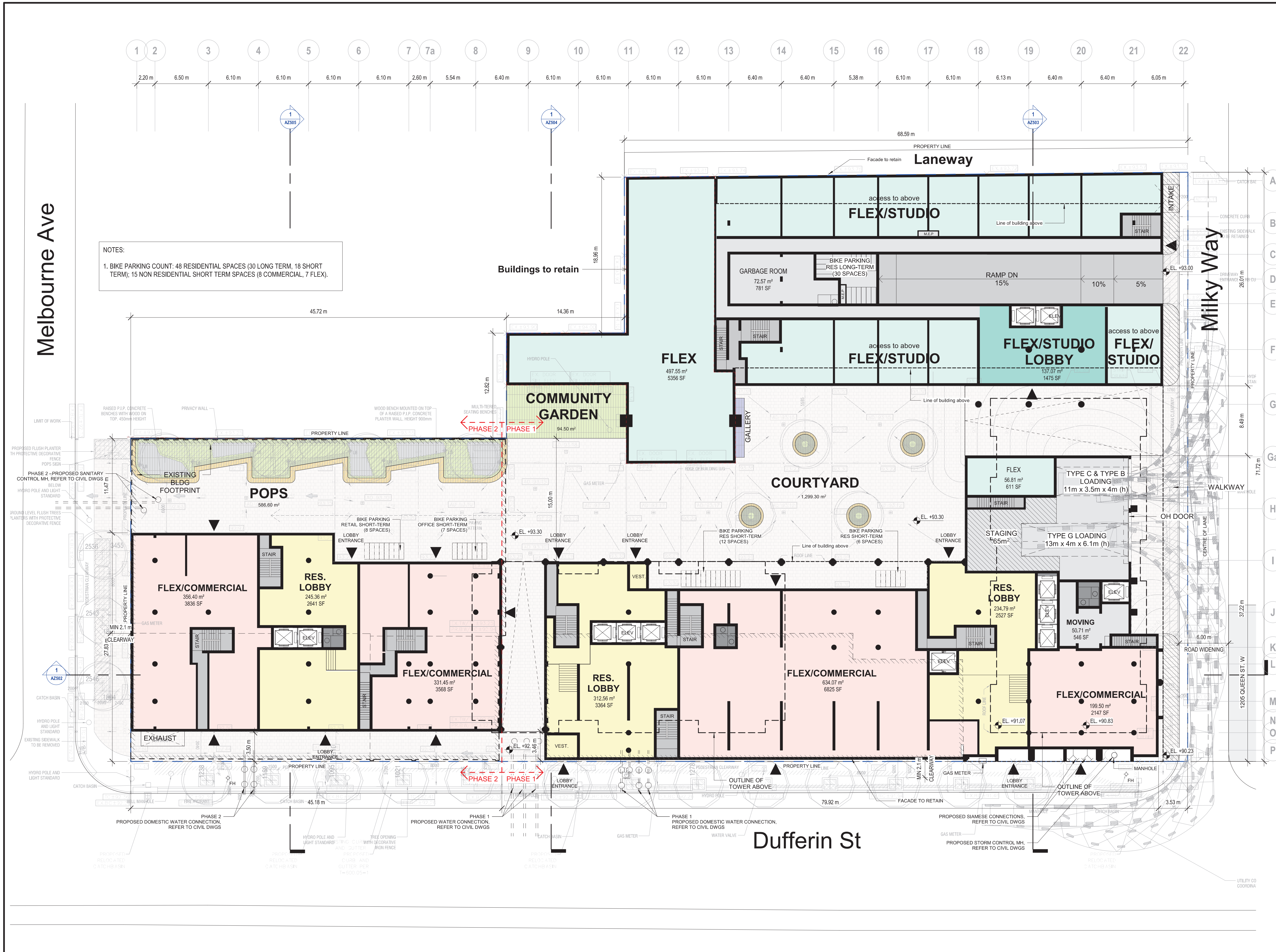
Melbourne Ave
Laneway
Milky Way
Dufferin St
Buildings to retain
Facade to retain
PROPERTY LINE
68.59 m
45.72 m
14.36 m
FLEX/STUDIO
access to above
GARBAGE ROOM
72.57 m²
781 SF
BIKE PARKING RES LONG-TERM (30 SPACES)
RAMP DN
15%
10%
5%
INTAKE
FLEX
497.55 m²
5356 SF
FLEX/STUDIO LOBBY
137.07 m²
1475 SF
FLEX/ STUDIO
COMMUNITY GARDEN
94.50 m²
PHASE 2
PHASE 1
GALLERY
POPS
586.60 m²
EXISTING BLDG FOOTPRINT
COURTYARD
1,299.30 m²
FLEX
56.81 m²
611 SF
TYPE C & TYPE B LOADING
11m x 3.5m x 4m (h)
WALKWAY
STAGING
65m²
TYPE G LOADING
13m x 4m x 6.1m (h)
OH DOOR
FLEX/COMMERCIAL
356.40 m²
3836 SF
RES. LOBBY
245.36 m²
2641 SF
FLEX/COMMERCIAL
331.45 m²
3568 SF
RES. LOBBY
312.56 m²
3364 SF
FLEX/COMMERCIAL
634.07 m²
6825 SF
RES. LOBBY
234.79 m²
2527 SF
MOVING
50.71 m²
546 SF
FLEX/COMMERCIAL
199.50 m²
2147 SF
EXHAUST
LOBBY ENTRANCE
STAIR
ELEV
VEST.
OUTLINE OF TOWER ABOVE
ROAD WIDENING
45.18 m
79.92 m
PHASE 2 PROPOSED DOMESTIC WATER CONNECTION, REFER TO CIVIL DWGS
PHASE 1 PROPOSED WATER CONNECTION, REFER TO CIVIL DWGS
PHASE 1 PROPOSED DOMESTIC WATER CONNECTION, REFER TO CIVIL DWGS
PROPOSED SIAMESE CONNECTIONS, REFER TO CIVIL DWGS
PROPOSED STORM CONTROL MH, REFER TO CIVIL DWGS

NOTES:

1. BIKE PARKING COUNT: 48 RESIDENTIAL SPACES (30 LONG TERM, 18 SHORT TERM); 15 NON RESIDENTIAL SHORT TERM SPACES (8 COMMERCIAL, 7 FLEX).

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PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Ground Level Plan
Phase 2

DATE : 2022-07-15
SCALE : 1 : 200
DRAWN : AR, MDL
CHECKED : HH
PROJ. No. : 2102
DWG No.
AZ202-B

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PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Level 2

DATE : 2022-07-15
SCALE : 1 : 200
DRAWN : AR, MDL
CHECKED : HH
PROJ. No. : 2102
DWG No.
AZ203

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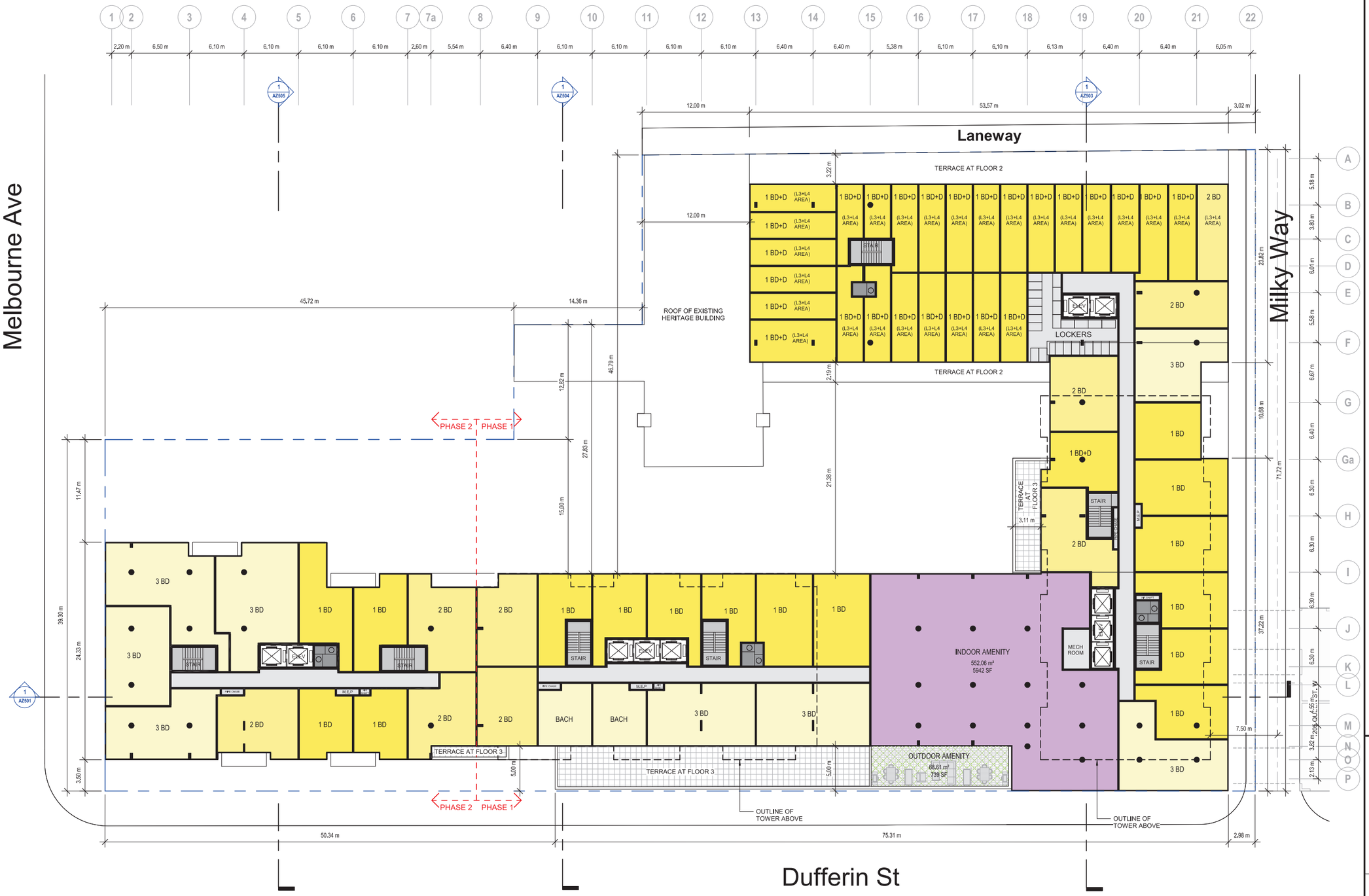

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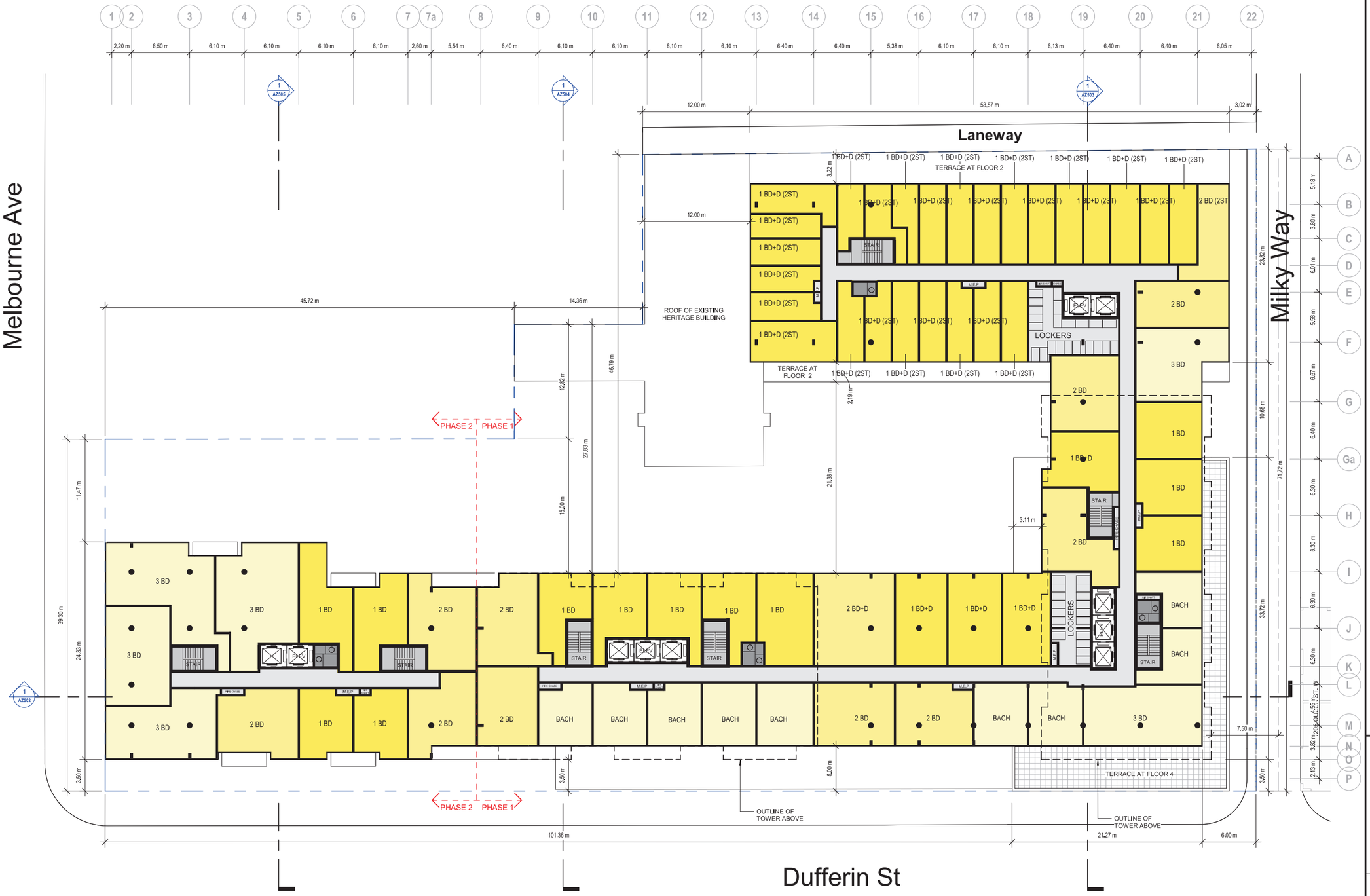
PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Level 3

DATE : 2022-07-15
SCALE : 1 : 200
DRAWN : AR, MDL
CHECKED : HH
PROJ. No. : 2102

DWG No.
AZ204



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PROJ. NAME
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Toronto, Ontario

OWNER
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DWG TITLE
Level 4

DATE :	2022-07-15
SCALE :	1 : 200
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CHECKED :	HH
PROJ. No. :	2102

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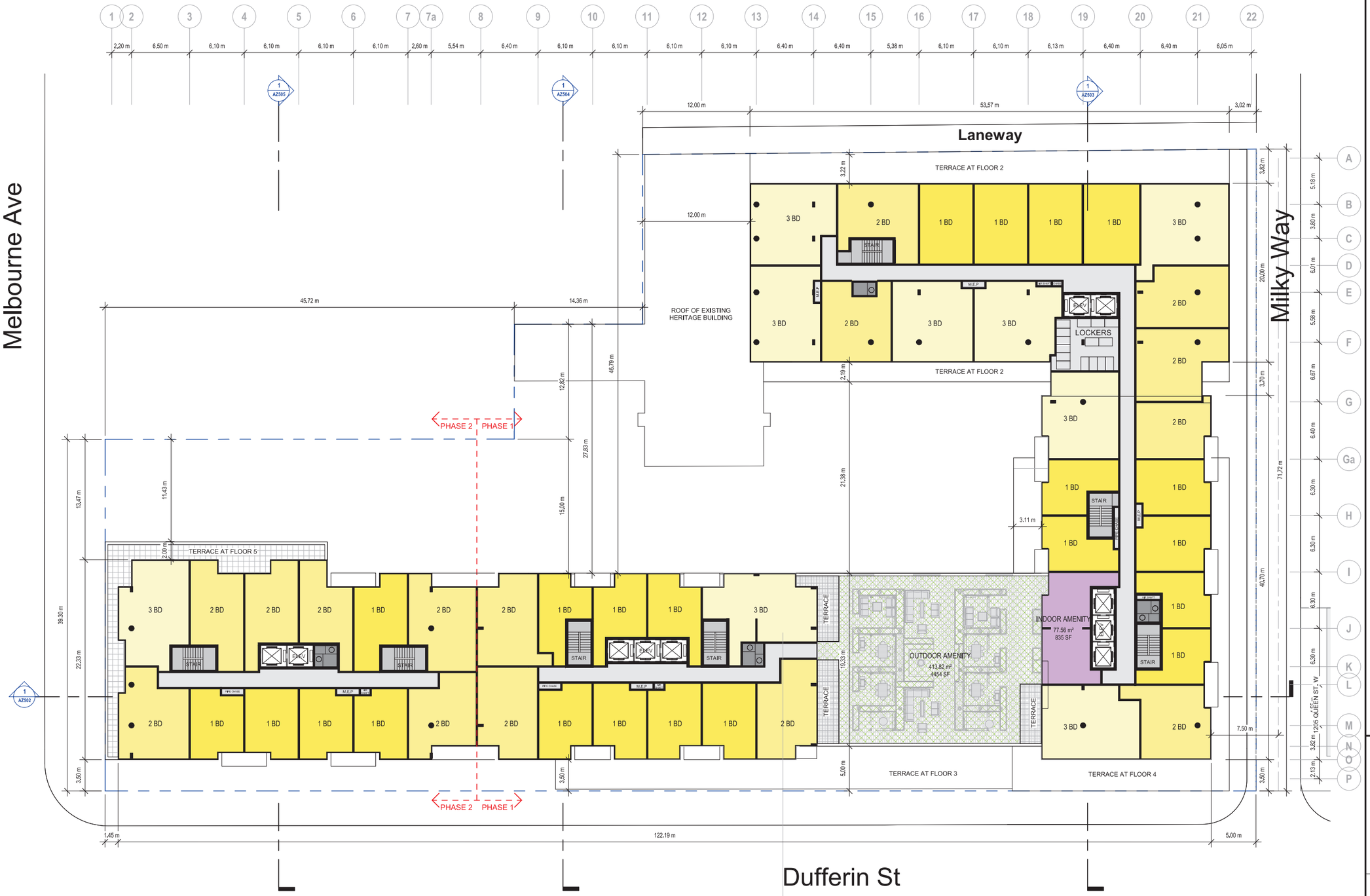

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PROJ. NAME
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DWG TITLE
Level 5

DATE :	2022-07-15
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CHECKED :	HH
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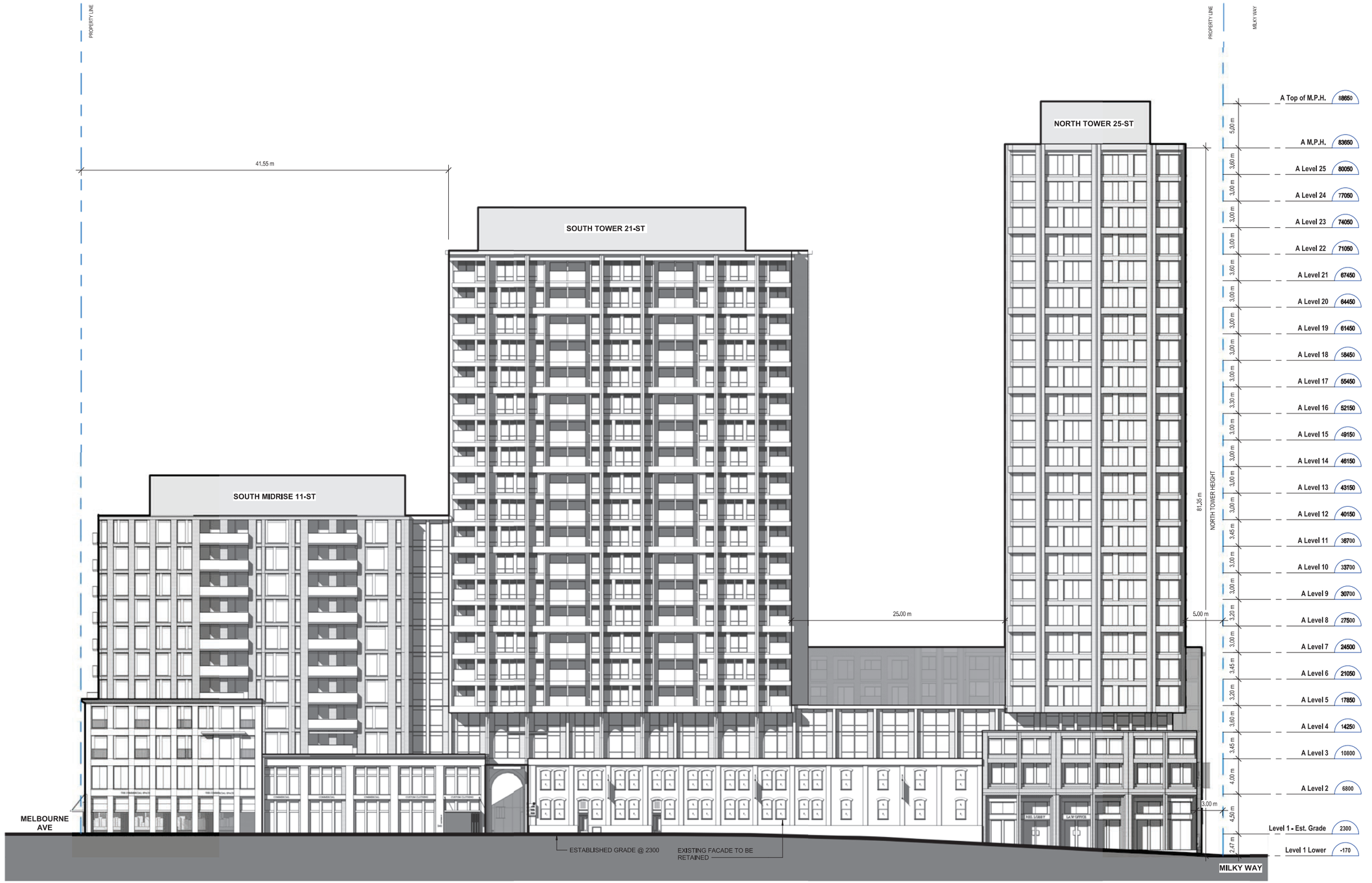

1 / AZ401 ZBL/SPA_Building Elev_East

1 : 200

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PROJ. NAME
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DWG TITLE
Building Elevations

DATE : 2022-07-15
SCALE : 1 : 200
DRAWN : MDL
CHECKED : HH
PROJ. No. : 2102
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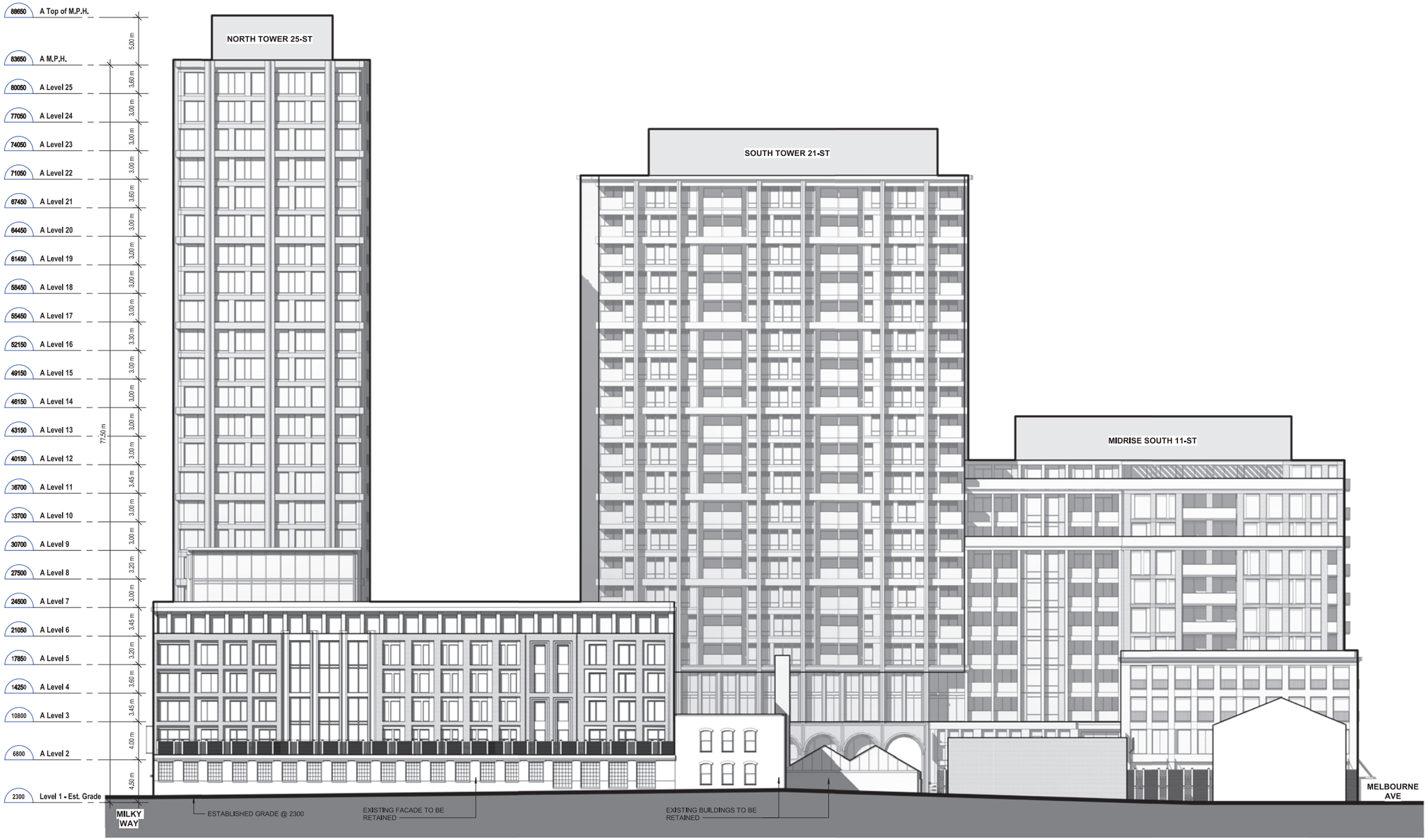

1 AZ402 ZBL/SPA_Building Elev_West

1 : 200

DRAWING NOT TO BE SCALED

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DWG TITLE
Building Elevations

DATE : 2022-07-15
SCALE : 1 : 200
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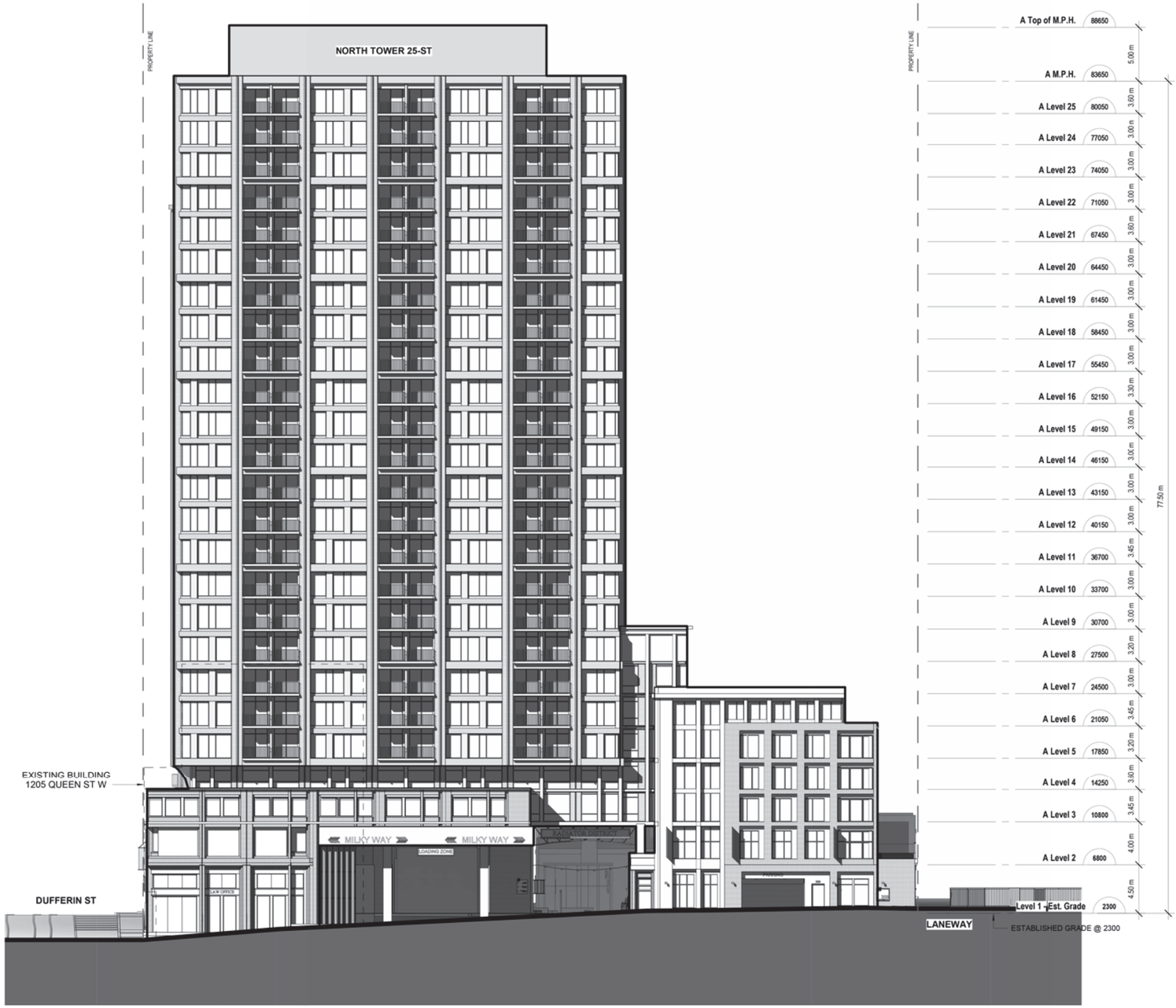

1 / AZ403 ZBL/SPA_Building Elev_North

1 : 200

DRAWING NOT TO BE SCALED

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PROJ. NAME
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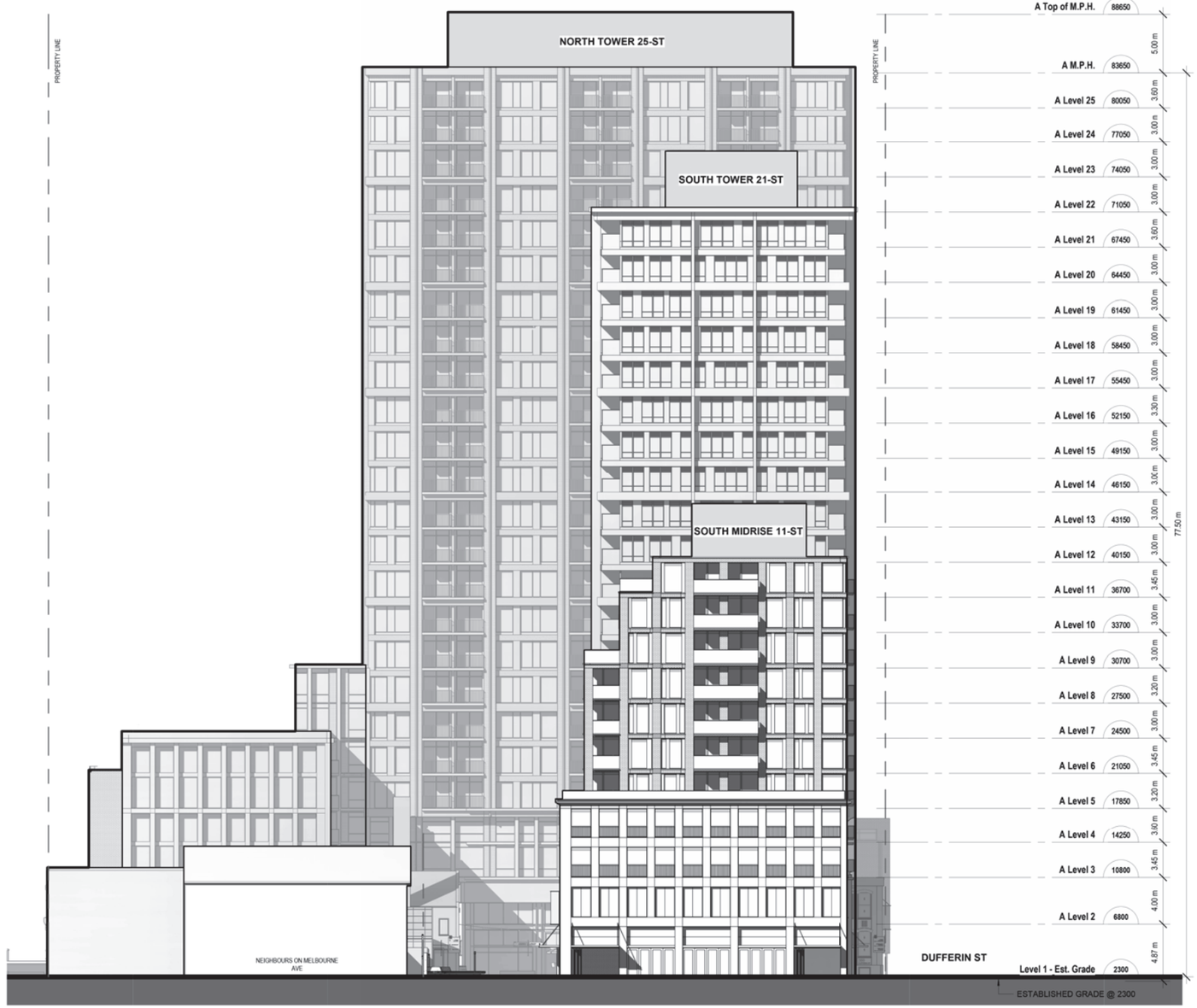
DWG TITLE
Building Elevations

DATE : 2022-07-15
SCALE : 1 : 200
DRAWN : MDL
CHECKED : HH
PROJ. No. : 2102
DWG No. AZ403



1 / AZ404 ZBL/SPA_Building Elev_South

1 : 200

DRAWING NOT TO BE SCALED

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PROJ. NAME
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OWNER
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DWG TITLE
Building Elevations

DATE : 17-06-20
SCALE : 1 : 200
DRAWN : MDL
CHECKED : HH
PROJ. No. : 2102
DWG No. AZ404

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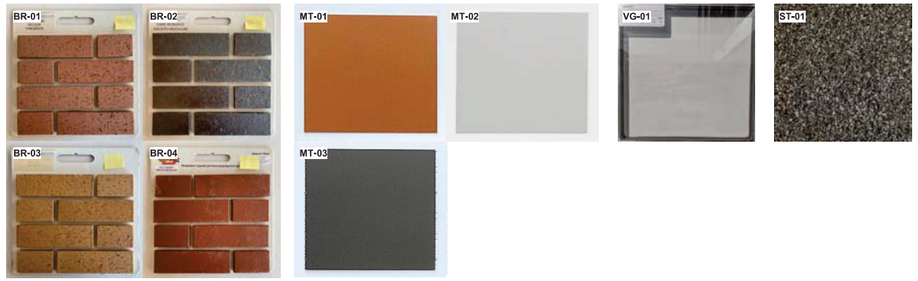
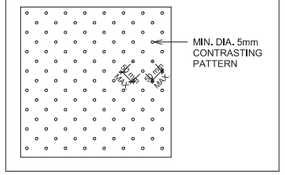


MATERIALS LEGEND

Material Tag	Material Description
BR-01	Brick - Light Brown
BR-02	Brick - Dark Grey
BR-03	Brick - Buff
BR-04	Brick - Red
MT-01	Metal Panel - Bronze
MT-02	Metal Panel - Light Grey
MT-03	Metal Panel/Mullion - Dark Grey
ST-01	Stone - Granite
VG-01	Vision Glass

VISUAL MARKER ON BIRD-FRIENDLY GLAZING
PATTERN TO CONFORM TO TORONTO GREEN STANDARD CHECKLIST. SEE BELOW.



1 / AZ450 South Elevation - Melbourne Avenue
1 : 50

DRAWING NOT TO BE SCALED

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PROJ. NAME
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Toronto, Ontario

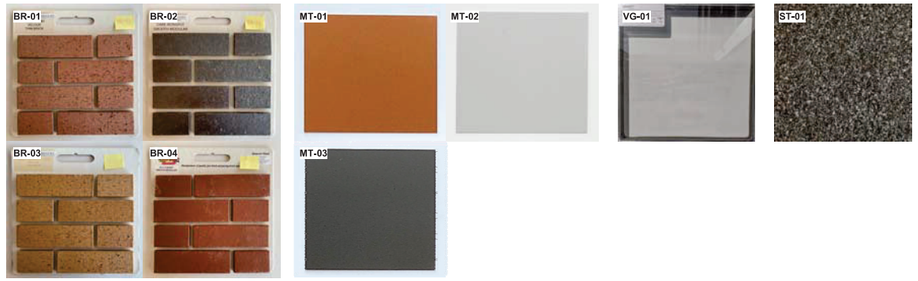
OWNER
Hullmark

DWG TITLE
1 to 50 Detailed Elevations

DATE :	2022-07-15
SCALE :	As indicated
DRAWN :	AR, JF
CHECKED :	AG
PROJ. No. :	2102

DWG No. **AZ450**

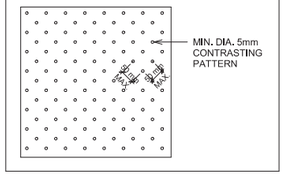
MATERIAL BOARD



MATERIALS LEGEND

Material Tag	Material Description
BR-01	Brick - Light Brown
BR-02	Brick - Dark Grey
BR-03	Brick - Buff
BR-04	Brick - Red
MT-01	Metal Panel - Bronze
MT-02	Metal Panel - Light Grey
MT-03	Metal Panel/Mullion - Dark Grey
ST-01	Stone - Granite
VG-01	Vision Glass

VISUAL MARKER ON BIRD-FRIENDLY GLAZING
PATTERN TO CONFORM TO TORONTO GREEN STANDARD CHECKLIST. SEE BELOW.



1 / AZ451 East Elevation - Dufferin Avenue - Detail 1
1 : 50

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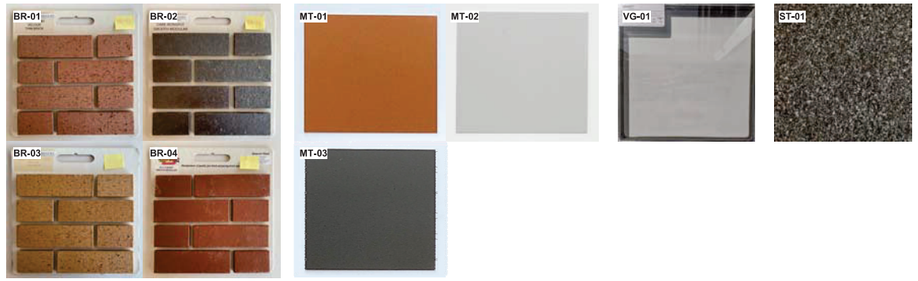
DWG TITLE
1 to 50 Detailed Elevations

DATE : 2022-07-15
SCALE : As indicated
DRAWN : JF
CHECKED : AR
PROJ. No. : 2102
DWG No. AZ451

MATERIAL BOARD



MATERIALS LEGEND

Material Tag	Material Description
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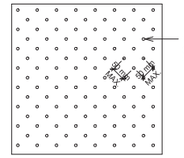
BR-02	Brick - Dark Grey
BR-03	Brick - Buff
BR-04	Brick - Red
MT-01	Metal Panel - Bronze
MT-02	Metal Panel - Light Grey
MT-03	Metal Panel/Mullion - Dark Grey
ST-01	Stone - Granite
VG-01	Vision Glass

VISUAL MARKER ON BIRD-FRIENDLY GLAZING
PATTERN TO CONFORM TO TORONTO GREEN STANDARD CHECKLIST. SEE BELOW.



1 / AZ452 East Elevation - Dufferin Avenue - Detail 2
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PROJ. NAME
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Toronto, Ontario

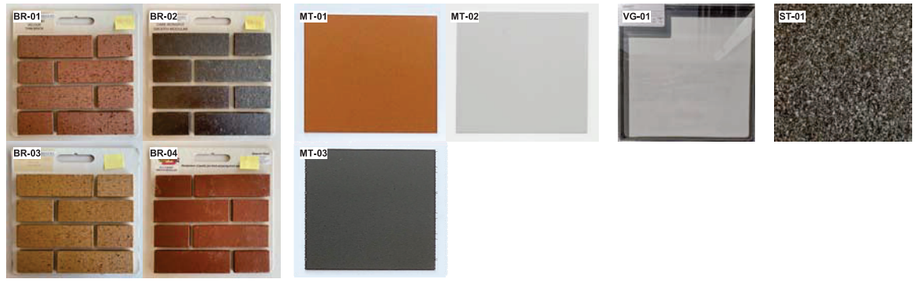
OWNER
Hullmark

DWG TITLE
1 to 50 Detailed Elevations

DATE :	2022-07-15
SCALE :	As indicated
DRAWN :	JF
CHECKED :	AR
PROJ. No. :	2102

DWG No.
AZ452

MATERIAL BOARD



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Material Tag	Material Description
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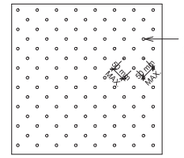
BR-02	Brick - Dark Grey
BR-03	Brick - Buff
BR-04	Brick - Red
MT-01	Metal Panel - Bronze
MT-02	Metal Panel - Light Grey
MT-03	Metal Panel/Mullion - Dark Grey
ST-01	Stone - Granite
VG-01	Vision Glass

VISUAL MARKER ON BIRD-FRIENDLY GLAZING
PATTERN TO CONFORM TO TORONTO GREEN STANDARD CHECKLIST. SEE BELOW.



1 / AZ453 East Elevation - Dufferin Avenue - Detail 3
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PROJ. NAME
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OWNER
Hullmark

DWG TITLE
1 to 50 Detailed Elevations

DATE : 2022-07-15
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PROJ. No. : 2102
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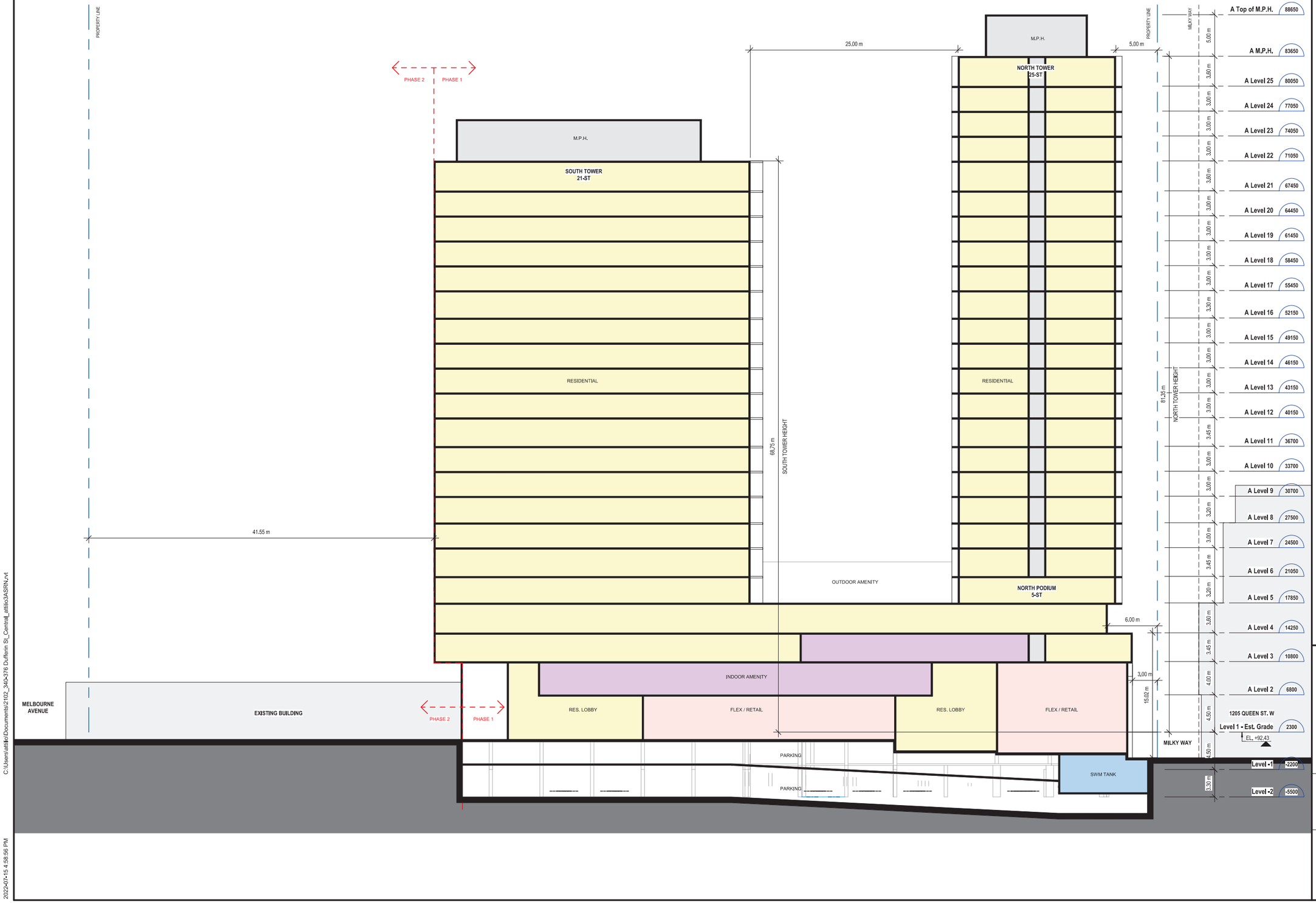

DRAWING NOT TO BE SCALED

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PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Building Sections_North-South - Phase 1

DATE : 2022-07-15
SCALE : 1 : 200
DRAWN : AR, MDL
CHECKED : HH
PROJ. No. : 2102
DWG No.
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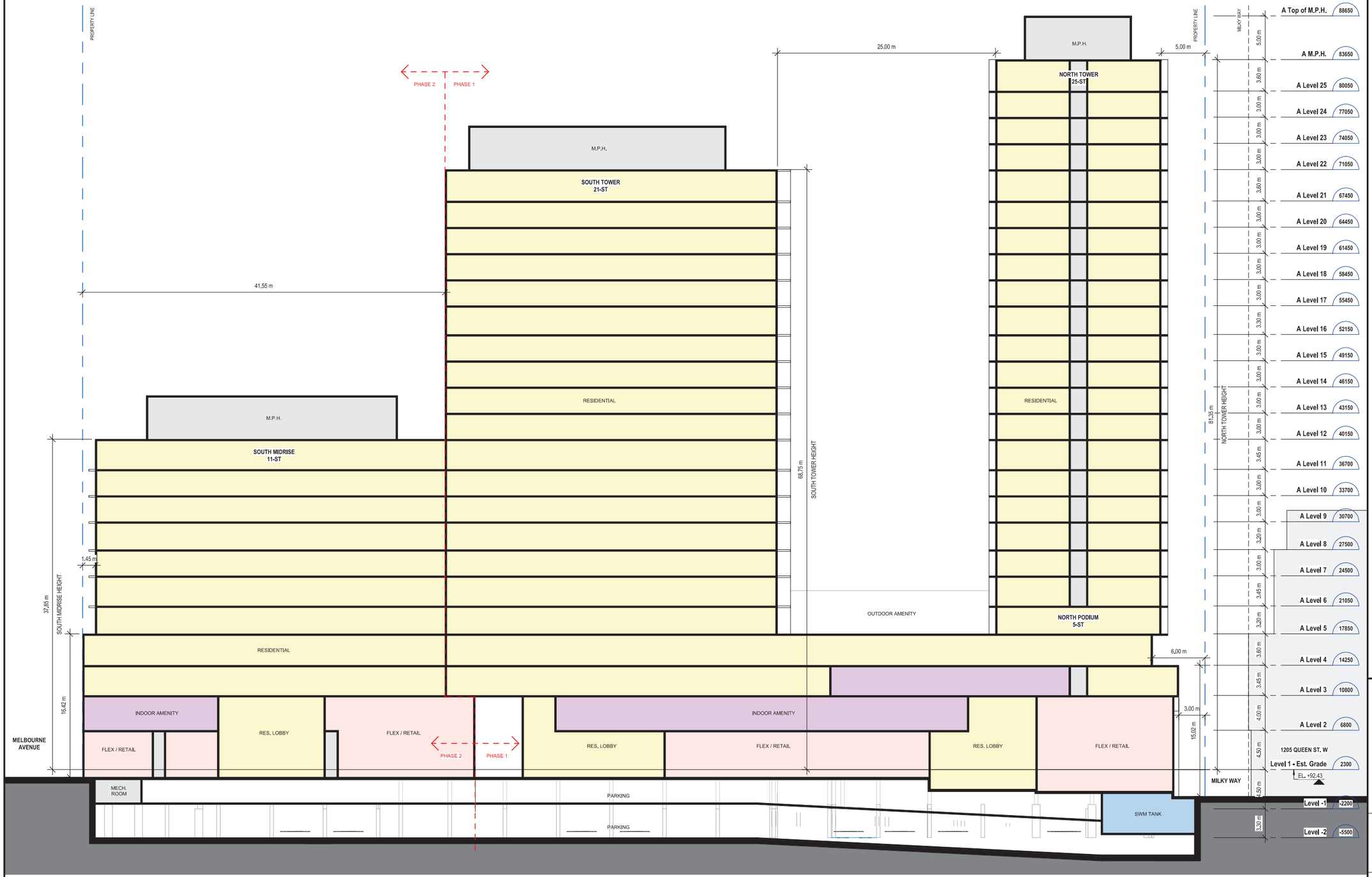

DRAWING NOT TO BE SCALED

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PROJ. NAME
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OWNER
Hullmark

DWG TITLE
Building Sections_North-South - Phase 2

DATE : 2022-07-15
SCALE : 1 : 200
DRAWN : AR, MDL
CHECKED : HH
PROJ. No. : 2102
DWG No.
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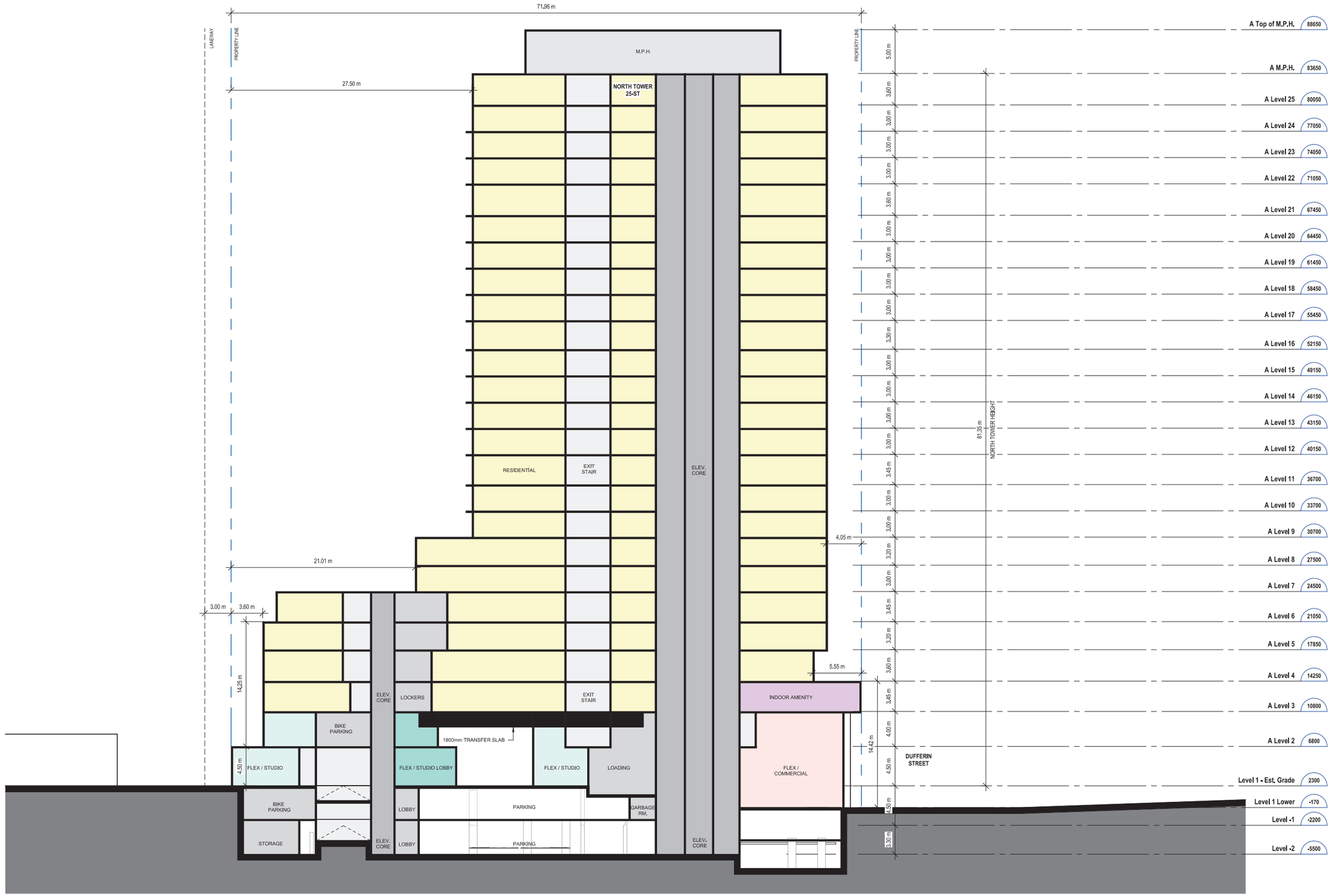

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PROJ. NAME
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OWNER
Hullmark

DWG TITLE
Building Sections_East-West (North Tower)

DATE : 2022-07-15
SCALE : 1 : 200
DRAWN : AR, MDL
CHECKED : HH
PROJ. No. : 2102
DWG No.
AZ503

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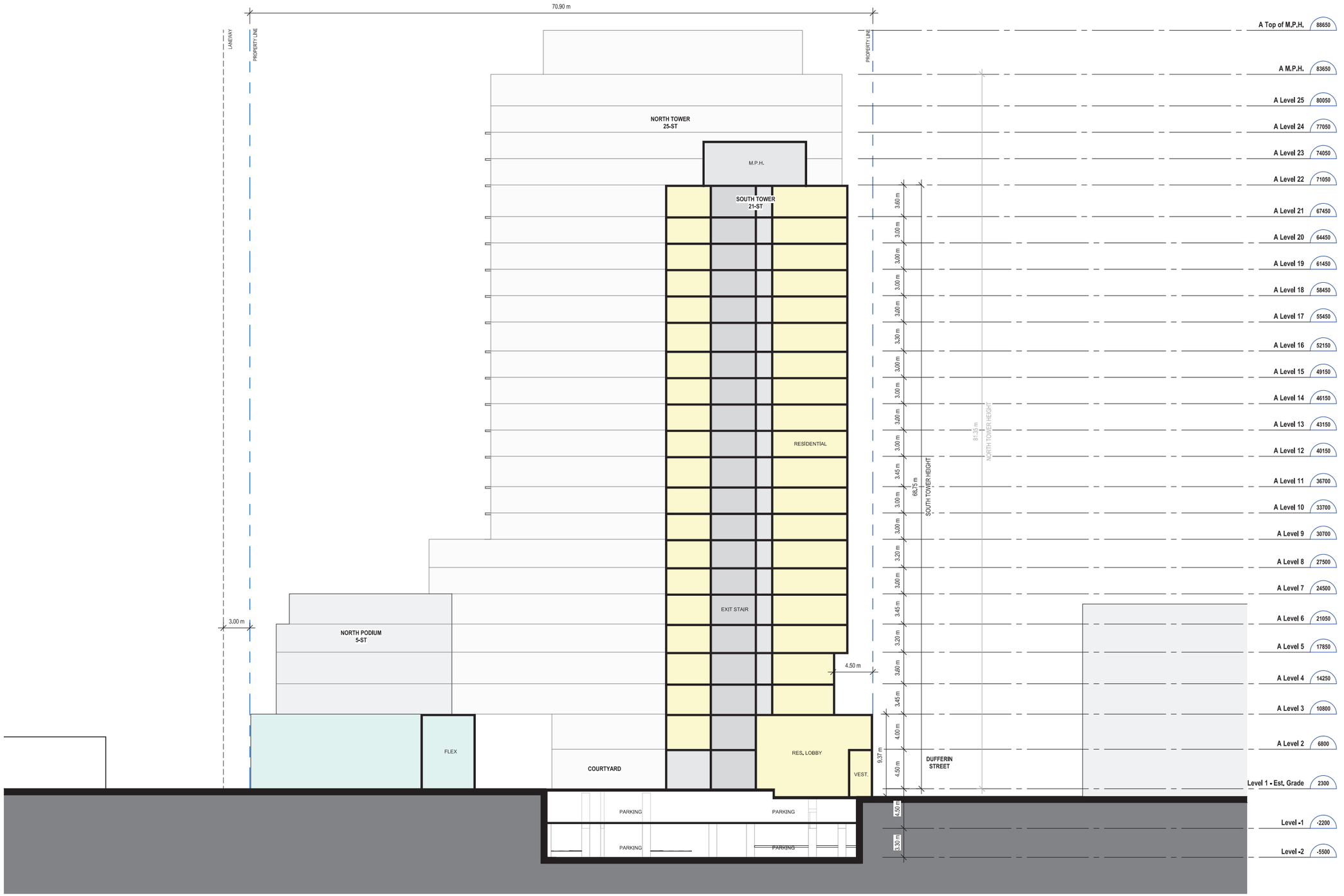

DRAWING NOT TO BE SCALED

Contractor must check and verify all dimensions on the job and report any discrepancies to the architect before proceeding with the work.

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E: info@andco.com | www.sweenyandco.com

PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Building Sections_East-West (South Tower)

DATE : 2022-07-15
SCALE : 1 : 200
DRAWN : AR, MDL
CHECKED : HH
PROJ. No. : 2102
DWG No.
AZ504

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E: info@andco.com | www.sweenyandco.com

PROJ. NAME
340-376 Dufferin St.
Toronto, Ontario

OWNER
Hullmark

DWG TITLE
Building Sections_East-West (South Podium)

DATE : 2022-07-15
SCALE : 1 : 200
DRAWN : Author
CHECKED : Checker
PROJ. No. : 2102
DWG No.
AZ505

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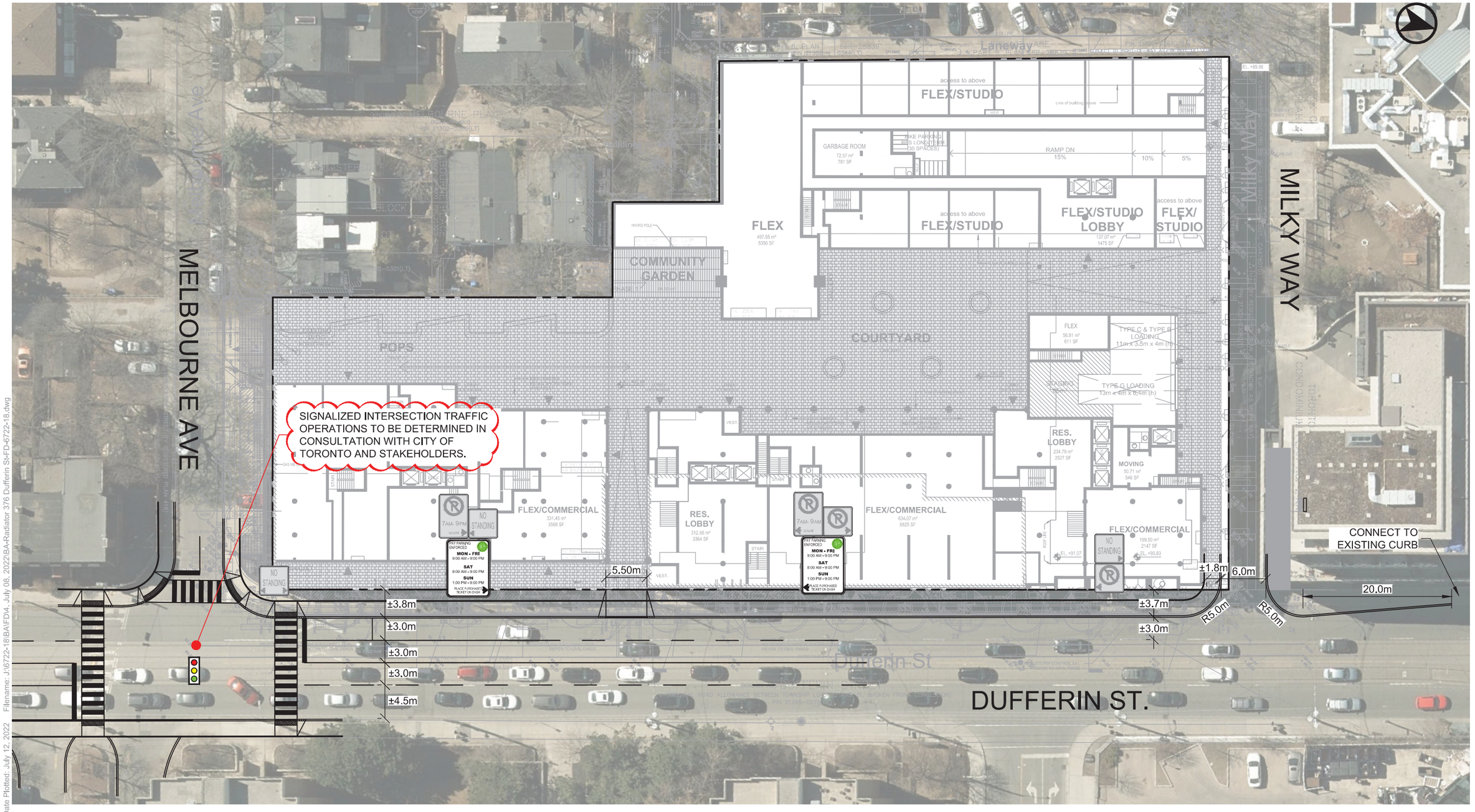
2022-07-15 4:59:01 PM

APPENDIX B:
Conceptual Functional Design (including Dufferin Street / Melbourne Avenue intersection)



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Date Plotted: July 12, 2022

BA Group

376 DUFFERIN
CONCEPT FUNCTIONAL ROAD DESIGN

Project:	376 DUFFERIN
Project No.	6722-18
Date:	July 12, 2022
Revised:	–

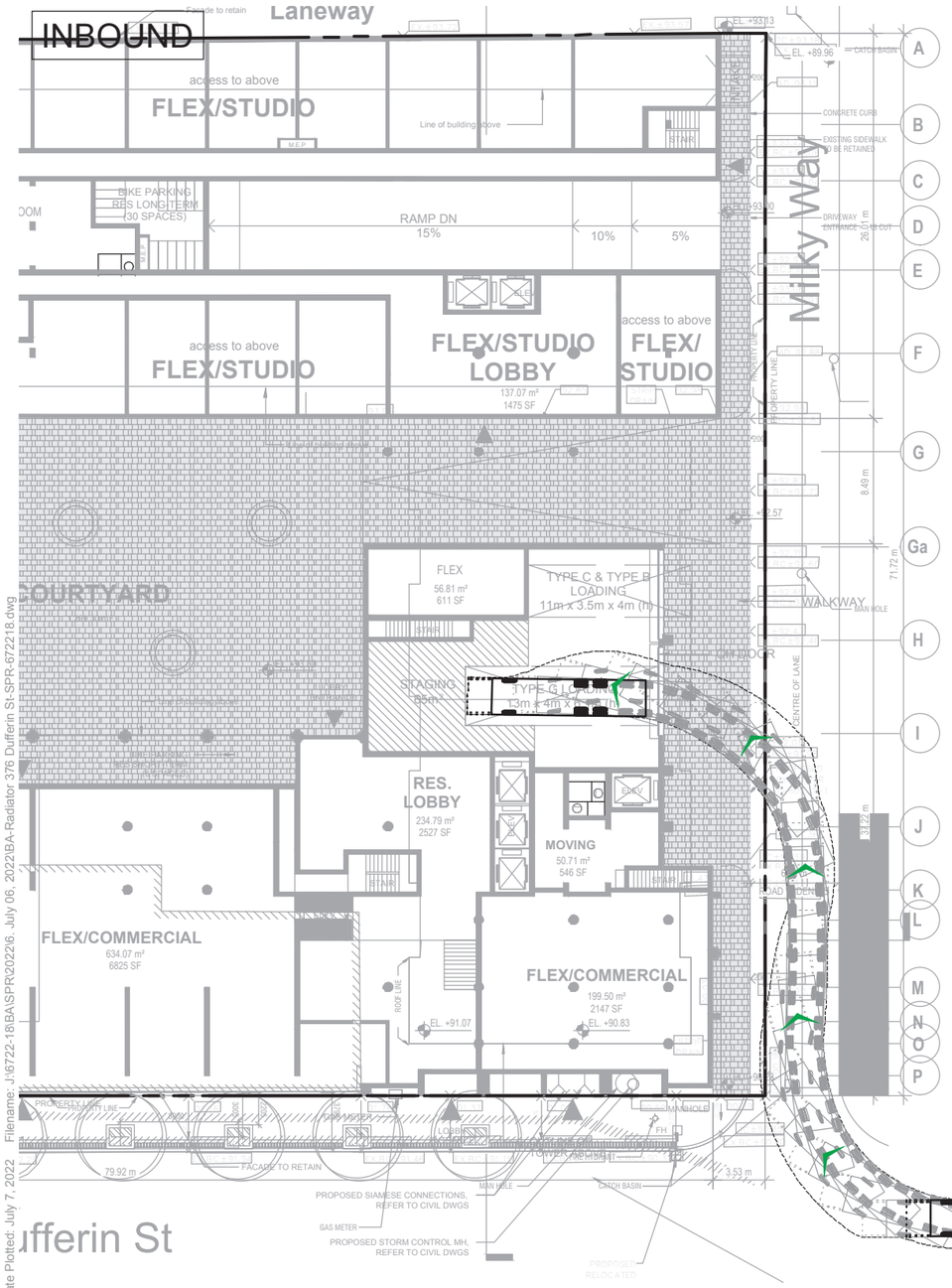
Scale 1:500 — 0 5 10 15 20m

Drawing No. FD-01

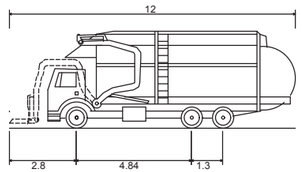
APPENDIX C:
Vehicle Manoeuvring Diagrams

INBOUND

OUTBOUND



Design Vehicle - CITY OF TORONTO
(Front Loading Refuse Collection Vehicle)



Overall Length (Forks Down)	12.00m
Overall Length (Forks Up)	10.00m*
Overall Width	2.45m
Overall Body Height	4.10m
Outside Turning Radius	14.00m
Inside Turning Radius	9.50m

(Dimensions as per City of Toronto Requirements for Garbage, Recycling and Organics Collection Services for New Developments and Redevelopments, May 2012)

* Field measured by BA Group, Aug. 8/11

Filename: J:\6722-18\BA\SPR\20226. July 06, 2022\BA-Radiator 376 Dufferin St-SPR-672218.dwg

Date Plotted: July 7, 2022

BA Group

376 Dufferin Street

Loadingon Ground Floor

Vehicle Manoeuvre Diagram

Type G - Toronto Front Loading Garbage Truck

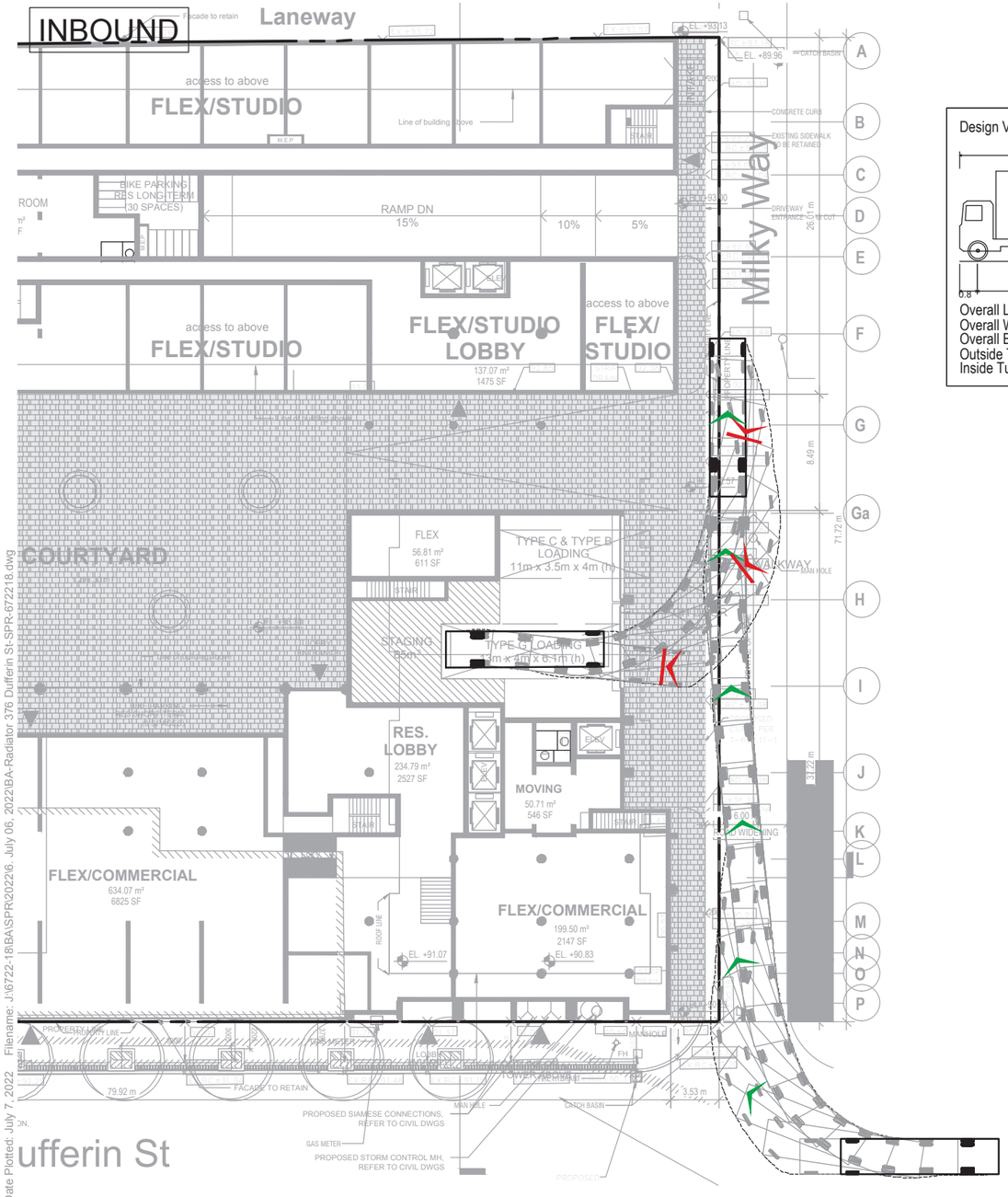
Project:	Radiator
Project No.	6722-18
Date:	July 7, 2022
Revised:	--

Scale 1:400 (0 2 4 6 8 10 20m)

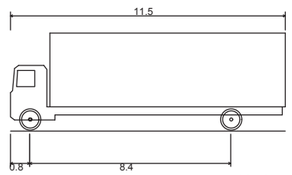
Drawing No. VMD-01

INBOUND

OUTBOUND



Design Vehicle - TAC HSU (Heavy Single Unit)



Overall Length	11.50m
Overall Width	2.60m
Overall Body Height	4.11m
Outside Turning Radius	14.56m
Inside Turning Radius	8.69m

Filename: J:\6722-18\BA\SPR20226_July 06, 2022\BA-Radiator 376 Dufferin St-SPR-672218.dwg

Date Plotted: July 7, 2022

BA Group

376 Dufferin Street

Loadingon Ground Floor

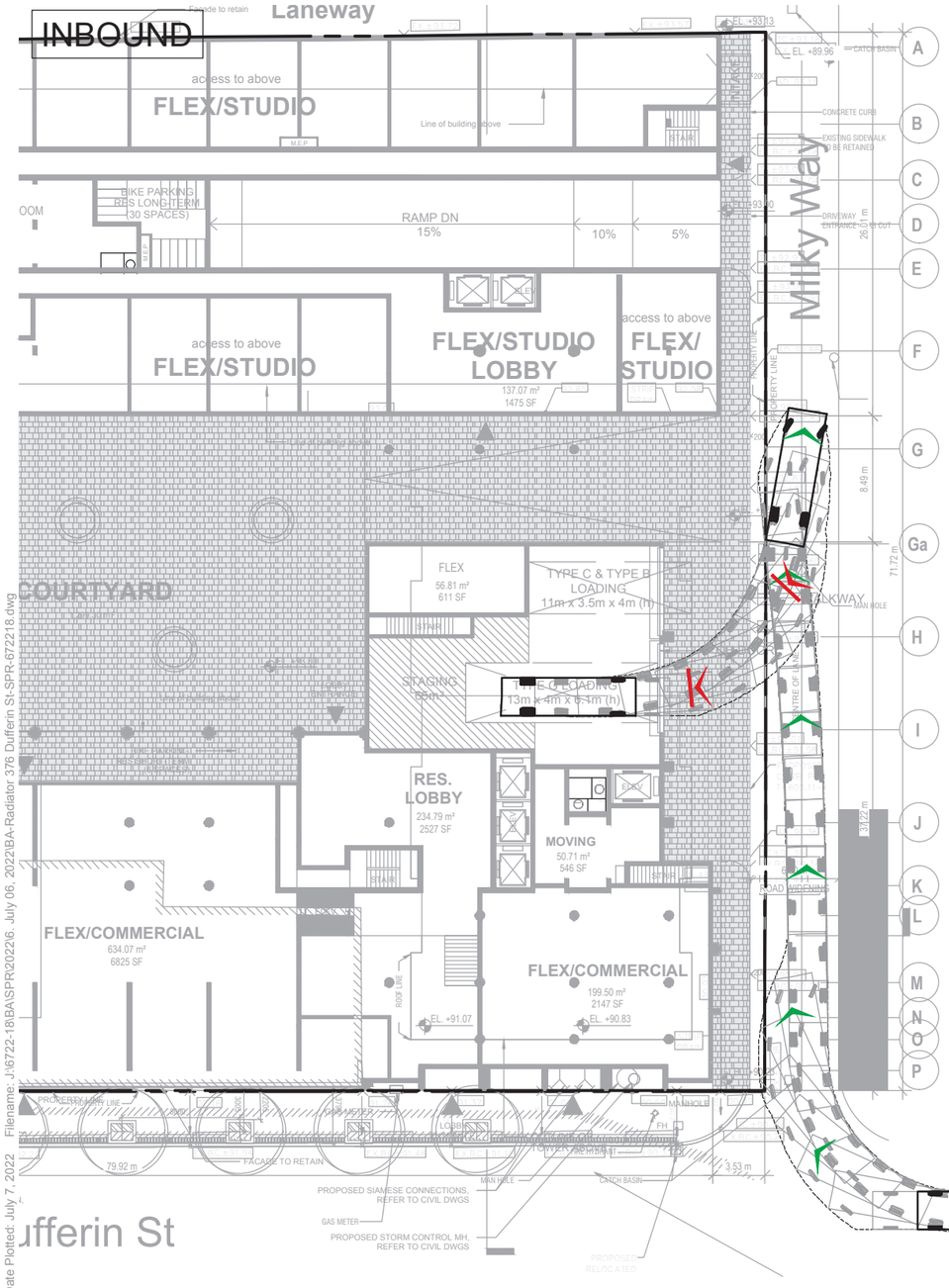
Vehicle Manoeuvre Diagram

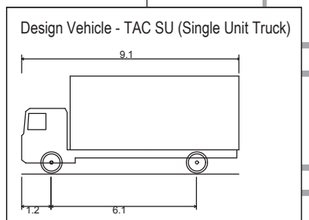
Type G - TAC Heavy Single Unit (HSU)

Project:	Radiator
Project No.	6722-18
Date:	July 7, 2022
Revised:	--

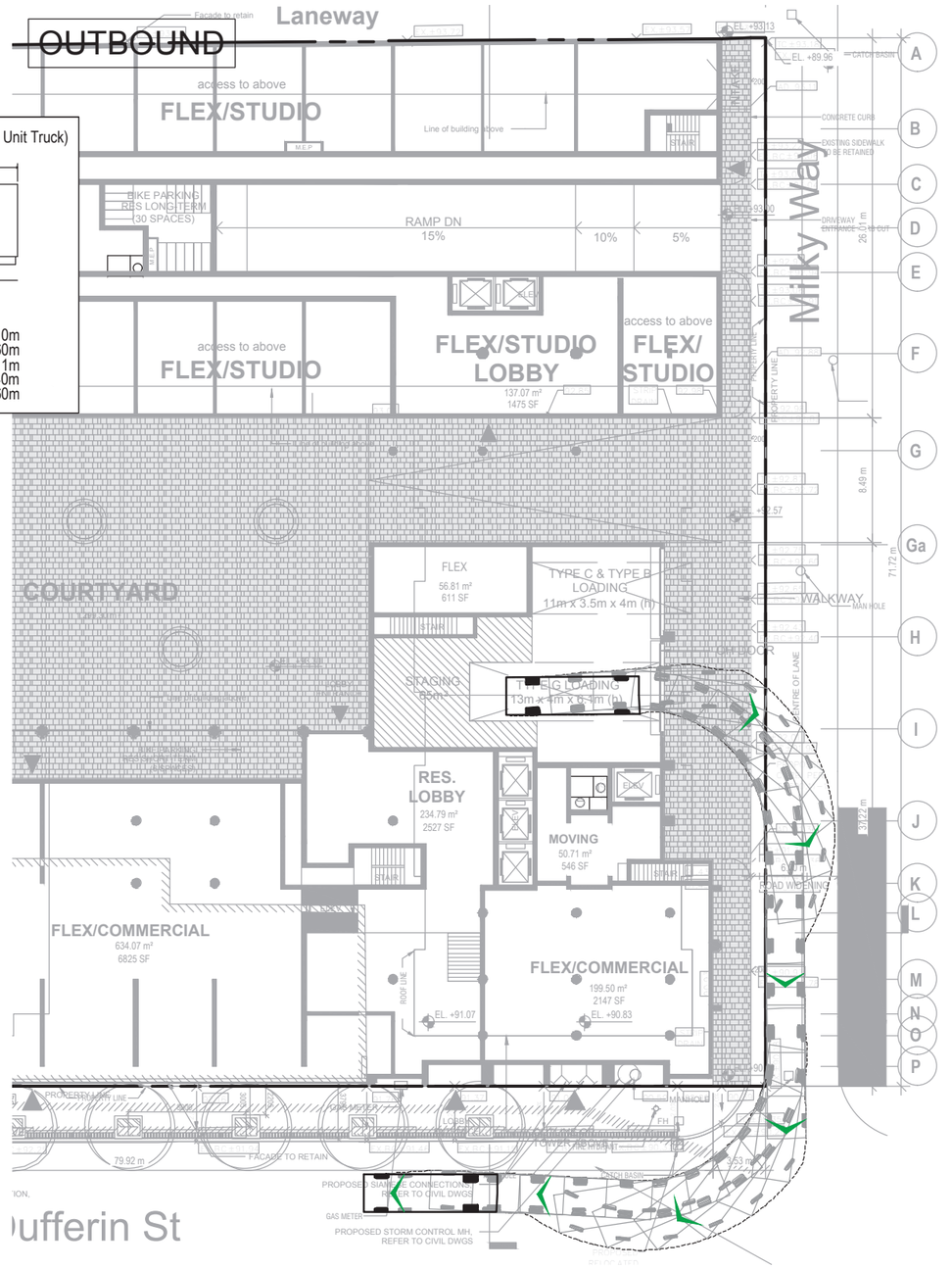
Scale 1:400 — 0 2 4 6 8 10 20m

Drawing No. VMD-02





Overall Length	9.10m
Overall Width	2.60m
Overall Body Height	4.11m
Outside Turning Radius	13.40m
Inside Turning Radius	8.60m



Filename: J:\6722-18\BA\SPR20221\6. July 06, 2022\BA-Radiator 376 Dufferin St-SPR-672218.dwg

Date Plotted: July 7, 2022

BA Group

376 Dufferin Street

Loadingon Ground Floor

Vehicle Manoeuvre Diagram

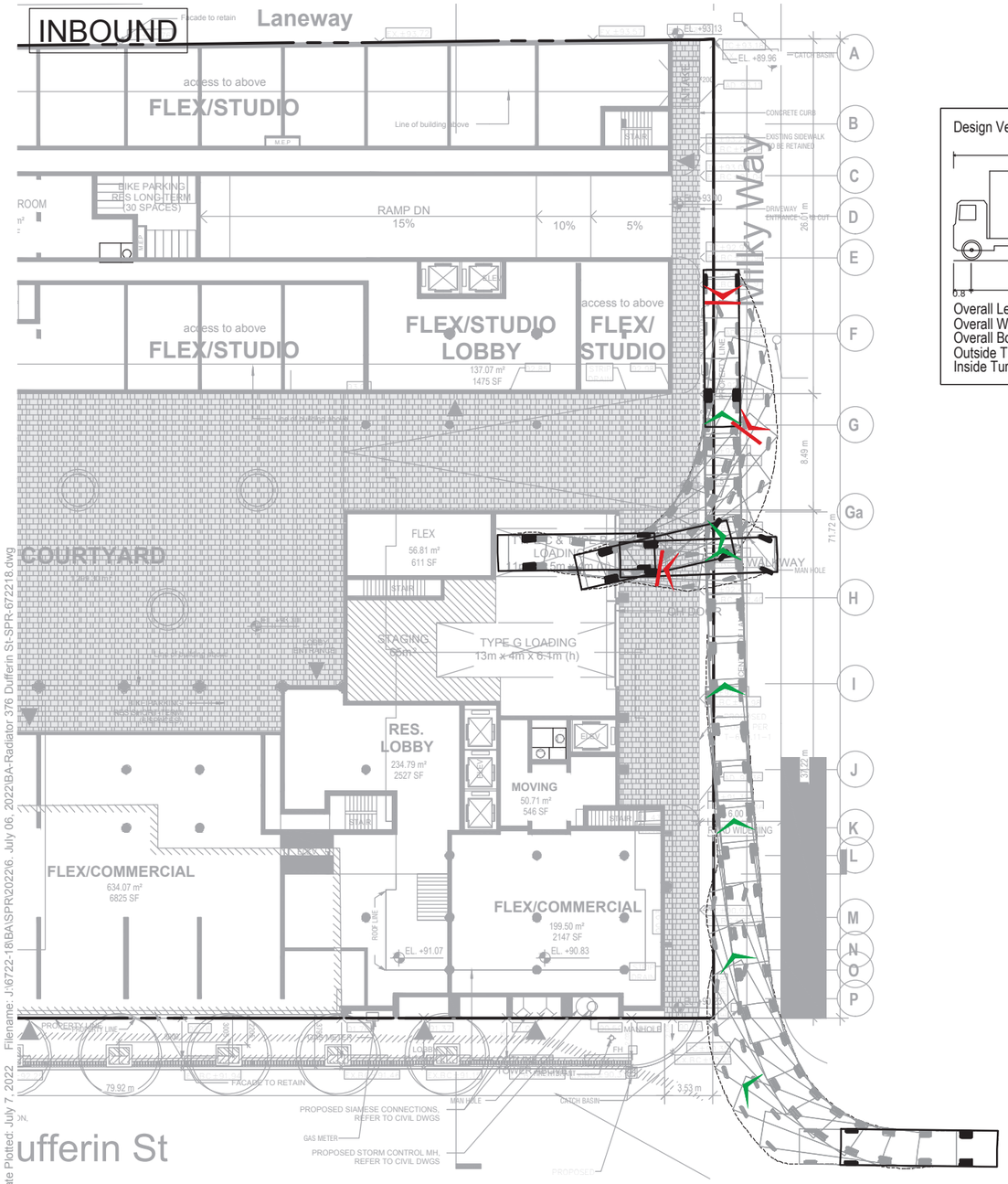
Type G - TAC Single Unit (SU)

Project:	Radiator
Project No.	6722-18
Date:	July 7, 2022
Revised:	--

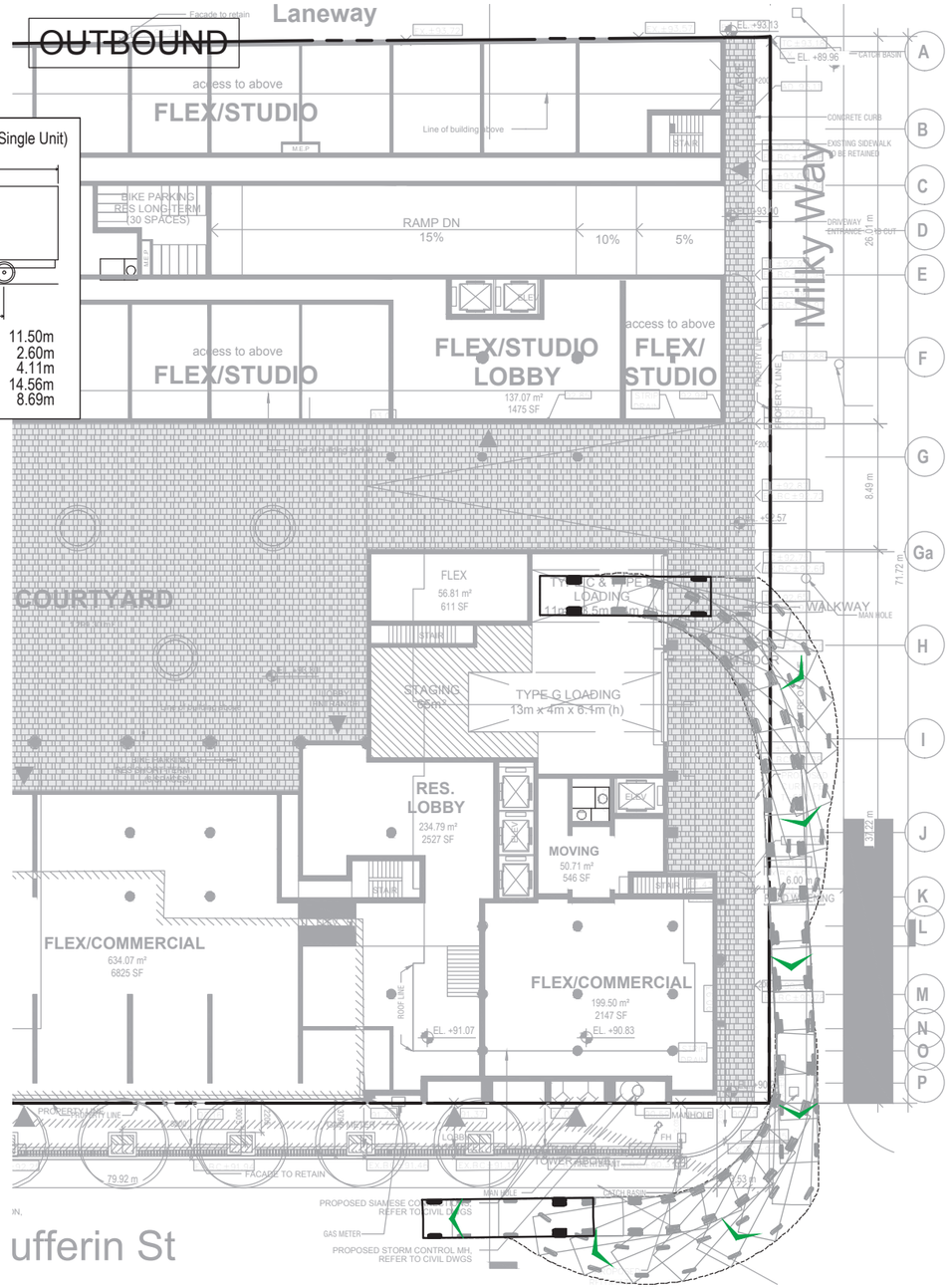
Scale 1:400 (0 2 4 6 8 10 20m)

Drawing No. VMD-03

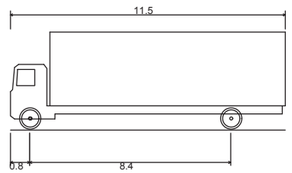
INBOUND



OUTBOUND



Design Vehicle - TAC HSU (Heavy Single Unit)



Overall Length	11.50m
Overall Width	2.60m
Overall Body Height	4.11m
Outside Turning Radius	14.56m
Inside Turning Radius	8.69m

Date Plotted: July 7, 2022 Filename: J:\6722-18\BA\SPR\2022\6. July 06, 2022\BA-Radiator 376 Dufferin St-SPR-672218.dwg

BA Group

376 Dufferin Street

Loadingon Ground Floor

Vehicle Manoeuvre Diagram

Type B - TAC Heavy Single Unit (HSU)

Project:	Radiator
Project No.	6722-18
Date:	July 7, 2022
Revised:	--

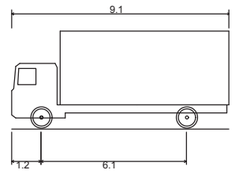
Scale 1:400 (0 2 4 6 8 10 20m)

Drawing No. VMD-04

INBOUND

OUTBOUND

Design Vehicle - TAC SU (Single Unit Truck)



Overall Length	9.10m
Overall Width	2.60m
Overall Body Height	4.11m
Outside Turning Radius	13.40m
Inside Turning Radius	8.60m

Filename: J:\6722-18\BA\SPR\2022\6. July 06, 2022\BA-Radiator 376 Dufferin St-SPR-6722i18.dwg
Date Plotted: July 7, 2022

376 Dufferin Street

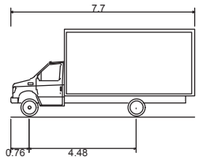
Loadingon Ground Floor
Vehicle Manoeuvre Diagram
Type B - TAC Single Unit (SU)

Project:	Radiator
Project No.	6722-18
Date:	July 7, 2022
Revised:	--

Scale 1:400 (0 2 4 6 8 10 20m)

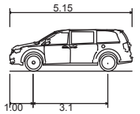
Drawing No. VMD-05

Design Vehicle - CUBEVAN (Ford E350)



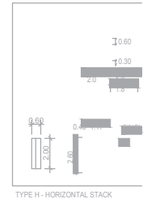
Overall Length	7.70m
Overall Width	2.45m
Overall Body Height	3.66m
Outside Turning Radius	9.49m
Inside Turning Radius	5.68m

Design Vehicle - 2012 DODGE GRAND CARAVAN (95% Passenger Vehicle)



Overall Length	5.15m
Overall Width	2.01m
Overall Body Height	1.74m
Outside Turning Radius	*6.50m
Inside Turning Radius	*3.40m

*Field Measurements By BA Group



Date Plotted: July 7, 2022 Filename: J:\6722-18\BA\SPR20226\ July 06, 2022\BA-Radiator 376 Dufferin St-SPR-672218.dwg

BA Group

376 Dufferin Street

Loading on P1

Vehicle Manoeuvre Diagram

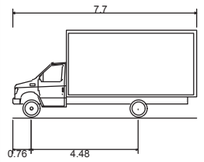
Cube Van (Inbound) & Dodge Grand Caravan (Outbound)

Project:	Radiator
Project No.	6722-18
Date:	July 7, 2022
Revised:	--

Scale 1:400 (0 2 4 6 8 10 20m)

Drawing No. VMD-06

Design Vehicle - CUBEVAN (Ford E350)



Overall Length	7.70m
Overall Width	2.45m
Overall Body Height	3.66m
Outside Turning Radius	9.49m
Inside Turning Radius	5.68m

Car parking count: 93 spaces
Bike parking count: 353 spaces

BIKE PARKING RES LONG-TERM (36 SPACES)
BIKE PARKING RES LONG-TERM (202 SPACES)
INTAKE 10 m²
NORTH PODIUM SUB-ELEC RM.
LOBBY
NON-RESIDENTIAL 62 SPACES
BUILDING ABOVE
RAMP UP 15%
RAMP DN 15%
7.5%
EL. +88.63
UNEXCAVATED AREA BELOW RETAINED BUILDINGS
BIKE PARKING RES SHORT-TERM (18 SPACES)
BIKE PARKING RES LONG-TERM (67 SPACES)
BIKE PARKING RES SHORT-TERM (30 SPACES)
PHASE 2
PHASE 1
PHASE 2 COMMS ROOM
EXISTING BUILDING ABOVE AT PHASE 1
SOUTH PODIUM SUB-ELEC ROOM 30m²
STAIR
LOBBY
MOVING
GARBAGE ROOM 44.51 m² 479 SF
TYPE C LOADING 6m x 3.5m x 3sq(m)
KNOCK OUT PANELS
SOUTH TOWER MAIN ELECTRICAL ROOM 65.79m²
GARBAGE ROOM 162.79 m² 1752 SF
BULK STORAGE 100m²
PHASE 1 COMMS ROOM
NORTH TOWER MAIN ELEC ROOM
GARBAGE ROOM 145.04 m² 1561 SF
RESIDENTIAL 31 SPACES
RAMP 5.0%
EL. +85.16
SWM TANK
MECH. ROOM
EXHAUST 10m²
TYPE H - HORIZONTAL STACK
PRODUCT: SINGLE PARKER BY JOSTA
INSTALLATION: FLOOR MOUNTED

Date Plotted: July 7, 2022 Filename: J:\6722-18\BA\SPR2022\6. July 06, 2022\BA-Radiator 376 Dufferin St-SPR-672218.dwg

BA Group

376 Dufferin Street

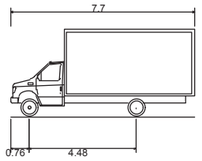
Loading on P1
Vehicle Manoeuvre Diagram
Cube Van (Outbound)

Project:	Radiator
Project No.	6722-18
Date:	July 7, 2022
Revised:	--

Scale 1:400 (0 2 4 6 8 10 20m)

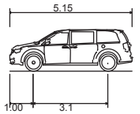
Drawing No. VMD-07

Design Vehicle - CUBEVAN (Ford E350)



Overall Length	7.70m
Overall Width	2.45m
Overall Body Height	3.66m
Outside Turning Radius	9.49m
Inside Turning Radius	5.68m

Design Vehicle - 2012 DODGE GRAND CARAVAN (95% Passenger Vehicle)



Overall Length	5.15m
Overall Width	2.01m
Overall Body Height	1.74m
Outside Turning Radius	*6.50m
Inside Turning Radius	*3.40m

*Field Measurements By BA Group

TYPE H - HORIZONTAL STACK
PRODUCT: SINGLE PARKER BY JOSTA
INSTALLATION: FLOOR MOUNTED

Date Plotted: July 7, 2022 Filename: J:\6722-18\BA\SPR20226\ July 06, 2022\BA-Radiator 376 Dufferin St-SPR-672218.dwg

BA Group

376 Dufferin Street

Loading on P1

Vehicle Manoeuvre Diagram

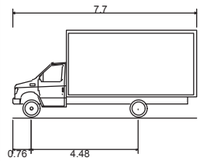
Cube Van (Inbound) & Dodge Grand Caravan (Outbound)

Project:	Radiator
Project No.	6722-18
Date:	July 7, 2022
Revised:	--

Scale 1:400 (0 2 4 6 8 10 20m)

Drawing No. VMD-08

Design Vehicle - CUBEVAN (Ford E350)



Overall Length	7.70m
Overall Width	2.45m
Overall Body Height	3.66m
Outside Turning Radius	9.49m
Inside Turning Radius	5.68m

Car parking count: 93 spaces
Bike parking count: 353 spaces

BIKE PARKING RES LONG-TERM (36 SPACES)
BIKE PARKING RES LONG-TERM (202 SPACES)
INTAKE 10 m²
RAMP UP 15%
RAMP DN 15%
7.5%
NORTH PODIUM SUB-ELEC RM.
LOBBY
NON-RESIDENTIAL 62 SPACES
BUILDING ABOVE
UNEXCAVATED AREA BELOW RETAINED BUILDINGS
BIKE PARKING RES SHORT-TERM (18 SPACES)
BIKE PARKING RES LONG-TERM (67 SPACES)
BIKE PARKING RES SHORT-TERM (30 SPACES)
PHASE 2
PHASE 1
PHASE 2 COMMS ROOM
EXISTING BUILDING ABOVE (TO REMAIN)
SOUTH PODIUM SUB-ELEC ROOM 30m²
STAIR
MOVING
LOBBY
GARBAGE ROOM 44.51 m² 479 SF
KNOCK OUT PANELS
SOUTH TOWER MAIN ELECTRICAL ROOM 65.79m²
TYPE C LOADING 6m x 3.5m x 3sq(m)
BULK STORAGE 10m²
PHASE 1 COMMS ROOM
GARBAGE ROOM 162.79 m² 1752 SF
GARBAGE ROOM 145.04 m² 1561 SF
NORTH TOWER MAIN ELEC ROOM
RESIDENTIAL 31 SPACES
RAMP 5.0%
SWM TANK
MECH. ROOM
EXHAUST 10m²
EL. +88.63
EL. +85.16

TYPE H - HORIZONTAL STACK
PRODUCT: SINGLE PARKER BY JOSTA
INSTALLATION: FLOOR MOUNTED

Date Plotted: July 7, 2022 Filename: J:\6722-18\BA\SPR20220\6. July 06, 2022\BA-Radiator 376 Dufferin St-SPR-672218.dwg

BA Group

376 Dufferin Street

Loading on P1
Vehicle Manoeuvre Diagram
Cube Van (Outbound)

Project:	Radiator
Project No.	6722-18
Date:	July 7, 2022
Revised:	--

Scale 1:400 — 0 2 4 6 8 10 20m

Drawing No. VMD-09

APPENDIX D:
Turning Movement Counts and Signal Timing Plans

Spectrum

Turning Movement Count
Location Name: DUFFERIN ST & 340-360 DUFFERIN ST ACCESS
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (4 . DUFFERIN ST & 340-360 DUFFERIN ST ACCESS)

Start Time	N Approach DUFFERIN ST					S Approach DUFFERIN ST					W Approach 340 DUFFERIN SITE DRIVEWAY					Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	UTurn N:N	Peds N:	Approach Total	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:30:00	0	104	0	0	104	83	0	0	1	83	0	0	0	6	0	187	
07:45:00	0	135	0	0	135	77	0	0	0	77	0	0	0	9	0	212	
08:00:00	0	124	0	0	124	82	0	0	1	82	0	0	0	7	0	206	
08:15:00	0	148	0	0	148	109	1	0	2	110	0	0	0	6	0	258	863
08:30:00	0	159	0	0	159	120	0	0	1	120	0	0	0	13	0	279	955
08:45:00	2	157	0	1	159	100	1	1	0	102	0	0	0	17	0	261	1004
09:00:00	2	122	0	0	124	102	2	0	1	104	0	0	0	12	0	228	1026
09:15:00	0	99	0	0	99	95	1	0	0	96	0	0	0	13	0	195	963
BREAK																	
16:00:00	0	141	0	1	141	120	0	0	0	120	1	0	0	20	1	262	
16:15:00	0	116	0	0	116	154	0	0	0	154	0	2	0	21	2	272	
16:30:00	0	128	0	2	128	151	0	0	0	151	0	4	0	12	4	283	
16:45:00	0	117	0	0	117	149	0	0	1	149	0	0	0	15	0	266	1083
17:00:00	0	119	0	1	119	146	1	1	3	148	0	3	0	19	3	270	1091
17:15:00	0	103	0	2	103	133	1	0	4	134	0	0	0	16	0	237	1056
17:30:00	0	104	0	0	104	147	0	0	2	147	1	0	0	22	1	252	1025
17:45:00	1	96	0	2	97	136	0	0	1	136	0	1	0	16	1	234	993
Grand Total	5	1972	0	9	1977	1904	7	2	17	1913	2	10	0	224	12	**3902**	-
Approach%	0.3%	99.7%	0%		-	99.5%	0.4%	0.1%		-	16.7%	83.3%	0%		-	**-**	-
Totals %	0.1%	50.5%	0%		50.7%	48.8%	0.2%	0.1%		49%	0.1%	0.3%	0%		0.3%	**-**	-
Heavy	0	118	0		-	165	0	0		-	0	0	0		-	**-**	-
Heavy %	0%	6%	0%		-	8.7%	0%	0%		-	0%	0%	0%		-	**-**	-
Bicycles	1	18	0		-	15	0	0		-	1	0	0		-	**-**	-
Bicycle %	20%	0.9%	0%		-	0.8%	0%	0%		-	50%	0%	0%		-	**-**	-

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

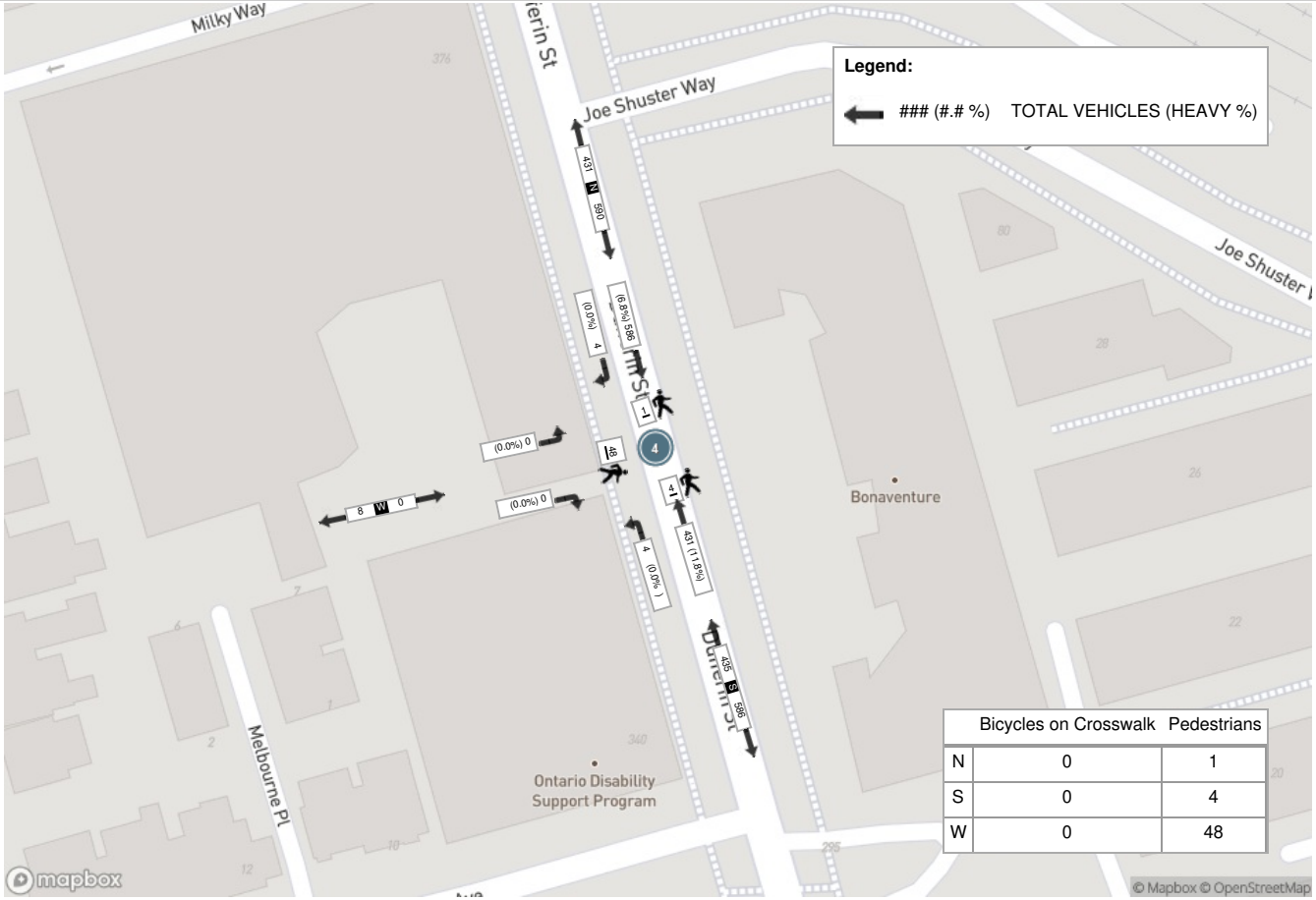
Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-2.01 °C)

Start Time	N Approach DUFFERIN ST					S Approach DUFFERIN ST					W Approach 340 DUFFERIN SITE DRIVEWAY					Int. Total (15 min)
	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	
08:15:00	0	148	0	0	148	109	1	0	2	110	0	0	0	6	0	258
08:30:00	0	159	0	0	159	120	0	0	1	120	0	0	0	13	0	279
08:45:00	2	157	0	1	159	100	1	1	0	102	0	0	0	17	0	261
09:00:00	2	122	0	0	124	102	2	0	1	104	0	0	0	12	0	228
Grand Total	4	586	0	1	590	431	4	1	4	436	0	0	0	48	0	**1026**
Approach%	0.7%	99.3%	0%		-	98.9%	0.9%	0.2%		-	0%	0%	0%		-	**-**
Totals %	0.4%	57.1%	0%		57.5%	42%	0.4%	0.1%		42.5%	0%	0%	0%		0%	**-**
PHF	0.5	0.92	0		0.93	0.9	0.5	0.25		0.91	0	0	0		0	**-**
Heavy	0	40	0		40	51	0	0		51	0	0	0		0	**-**
Heavy %	0%	6.8%	0%		6.8%	11.8%	0%	0%		11.7%	0%	0%	0%		0%	**-**
Lights	4	546	0		550	380	4	1		385	0	0	0		0	**-**
Lights %	100%	93.2%	0%		93.2%	88.2%	100%	100%		88.3%	0%	0%	0%		0%	**-**
Single-Unit Trucks	0	18	0		18	8	0	0		8	0	0	0		0	**-**
Single-Unit Trucks %	0%	3.1%	0%		3.1%	1.9%	0%	0%		1.8%	0%	0%	0%		0%	**-**
Buses	0	20	0		20	40	0	0		40	0	0	0		0	**-**
Buses %	0%	3.4%	0%		3.4%	9.3%	0%	0%		9.2%	0%	0%	0%		0%	**-**
Articulated Trucks	0	2	0		2	3	0	0		3	0	0	0		0	**-**
Articulated Trucks %	0%	0.3%	0%		0.3%	0.7%	0%	0%		0.7%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	1	-	-	-	-	4	-	-	-	-	48	-	**-**
Pedestrians%	-	-	-	1.9%		-	-	-	7.5%		-	-	-	90.6%		**-**
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**
Bicycles on Road	1	4	0	0	-	3	0	0	0	-	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (2.58 °C)

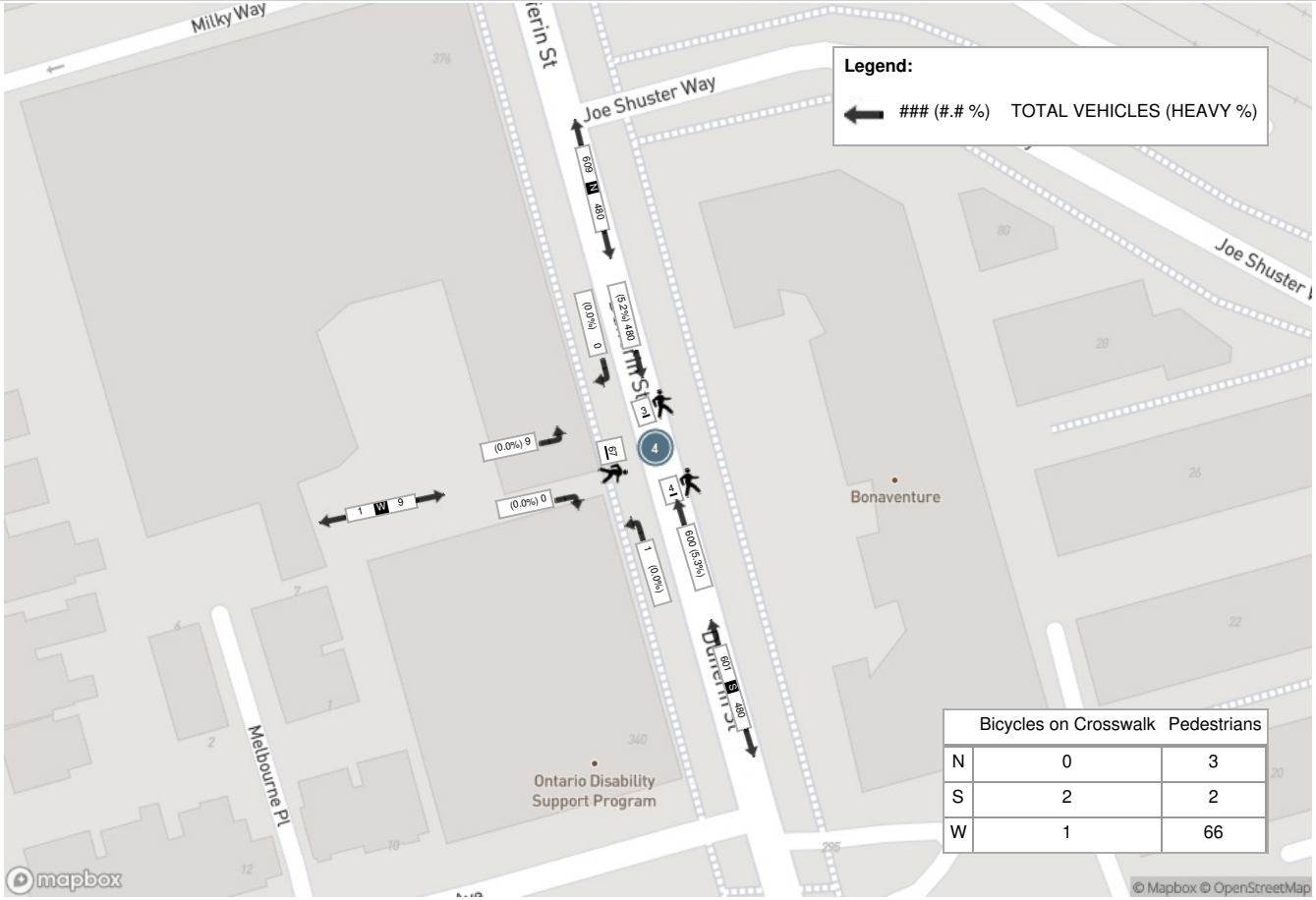
Start Time	N Approach DUFFERIN ST					S Approach DUFFERIN ST					W Approach 340 DUFFERIN SITE DRIVEWAY					Int. Total (15 min)
	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	
16:15:00	0	116	0	0	116	154	0	0	0	154	0	2	0	21	2	272
16:30:00	0	128	0	2	128	151	0	0	0	151	0	4	0	12	4	283
16:45:00	0	117	0	0	117	149	0	0	1	149	0	0	0	15	0	266
17:00:00	0	119	0	1	119	146	1	1	3	148	0	3	0	19	3	270
Grand Total	0	480	0	3	480	600	1	1	4	602	0	9	0	67	9	**1091**
Approach%	0%	100%	0%		-	99.7%	0.2%	0.2%		-	0%	100%	0%		-	**-**
Totals %	0%	44%	0%		44%	55%	0.1%	0.1%		55.2%	0%	0.8%	0%		0.8%	**-**
PHF	0	0.94	0		0.94	0.97	0.25	0.25		0.98	0	0.56	0		0.56	**-**
Heavy	0	25	0		25	32	0	0		32	0	0	0		0	**-**
Heavy %	0%	5.2%	0%		5.2%	5.3%	0%	0%		5.3%	0%	0%	0%		0%	**-**
Lights	0	455	0		455	568	1	1		570	0	9	0		9	**-**
Lights %	0%	94.8%	0%		94.8%	94.7%	100%	100%		94.7%	0%	100%	0%		100%	**-**
Single-Unit Trucks	0	7	0		7	9	0	0		9	0	0	0		0	**-**
Single-Unit Trucks %	0%	1.5%	0%		1.5%	1.5%	0%	0%		1.5%	0%	0%	0%		0%	**-**
Buses	0	18	0		18	23	0	0		23	0	0	0		0	**-**
Buses %	0%	3.8%	0%		3.8%	3.8%	0%	0%		3.8%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	3	-	-	-	-	2	-	-	-	-	66	-	**-**
Pedestrians%	-	-	-	4.1%		-	-	-	2.7%		-	-	-	89.2%		**-**
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	2	-	-	-	-	1	-	**-**
Bicycles on Crosswalk%	-	-	-	0%		-	-	-	2.7%		-	-	-	1.4%		**-**
Bicycles on Road	0	9	0	0	-	3	0	0	0	-	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-2.01 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	1
S	0	4
W	0	48

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (2.58 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	3
S	2	2
W	1	66

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (3 . DUFFERIN ST & JOE SHUSTER WAY)

Start Time	N Approach DUFFERIN ST					E Approach JOE SHUSTER WAY					S Approach DUFFERIN ST					Int. Total (15 min)	Int. Total (1 hr)
	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	UTurn S:S	Peds S:	Approach Total		
07:30:00	91	5	0	1	96	17	6	0	12	23	1	77	0	0	78	197	
07:45:00	137	7	0	1	144	17	3	0	18	20	2	74	0	0	76	240	
08:00:00	123	13	0	0	136	17	3	0	30	20	2	85	0	0	87	243	
08:15:00	137	16	0	1	153	18	10	0	41	28	5	97	0	0	102	283	963
08:30:00	151	20	0	1	171	15	4	0	41	19	7	108	0	0	115	305	1071
08:45:00	161	22	0	2	183	15	3	0	44	18	14	97	0	2	111	312	1143
09:00:00	119	23	0	1	142	10	6	0	44	16	5	95	0	0	100	258	1158
09:15:00	92	21	0	0	113	17	6	0	19	23	2	95	0	1	97	233	1108
BREAK																	
16:00:00	132	17	0	1	149	12	6	0	34	18	11	112	0	1	123	290	
16:15:00	115	21	0	2	136	26	2	0	30	28	9	143	0	0	152	316	
16:30:00	129	13	0	1	142	21	0	0	37	21	5	151	0	0	156	319	
16:45:00	115	23	0	3	138	19	2	0	58	21	9	136	0	0	145	304	1229
17:00:00	112	18	1	0	131	18	6	0	39	24	13	141	0	0	154	309	1248
17:15:00	102	16	0	1	118	18	3	0	51	21	7	127	0	0	134	273	1205
17:30:00	102	16	0	3	118	22	1	0	43	23	13	124	0	1	137	278	1164
17:45:00	96	25	0	1	121	14	1	0	56	15	17	126	0	3	143	279	1139
Grand Total	1914	276	1	19	2191	276	62	0	597	338	122	1788	0	8	1910	**4439**	-
Approach%	87.4%	12.6%	0%		-	81.7%	18.3%	0%		-	6.4%	93.6%	0%		-	**-**	-
Totals %	43.1%	6.2%	0%		49.4%	6.2%	1.4%	0%		7.6%	2.7%	40.3%	0%		43%	**-**	-
Heavy	117	3	0		-	1	1	0		-	1	164	0		-	**-**	-
Heavy %	6.1%	1.1%	0%		-	0.4%	1.6%	0%		-	0.8%	9.2%	0%		-	**-**	-
Bicycles	17	5	0		-	14	0	0		-	0	16	0		-	**-**	-
Bicycle %	0.9%	1.8%	0%		-	5.1%	0%	0%		-	0%	0.9%	0%		-	**-**	-

Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-2.01 °C)

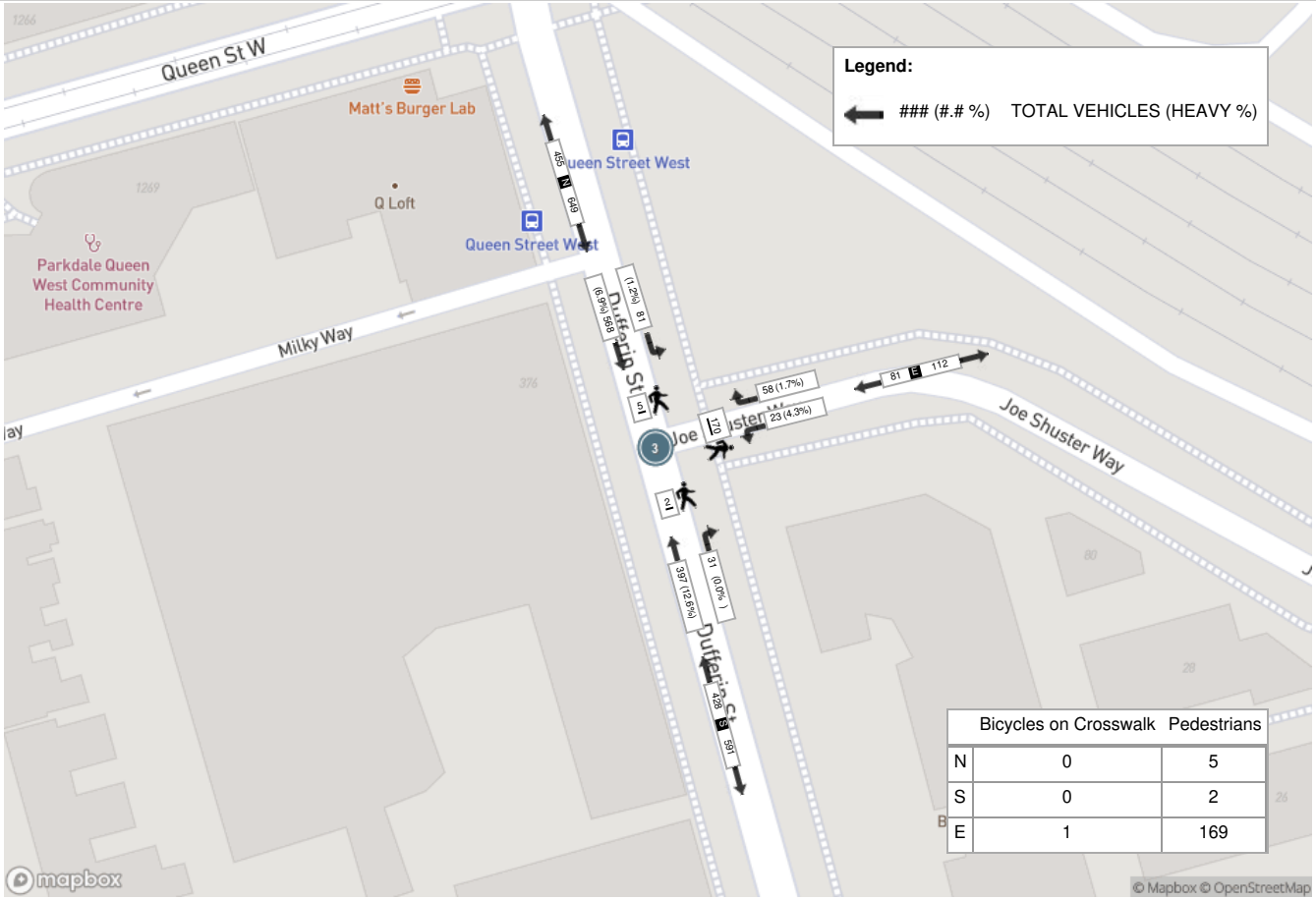
Start Time	N Approach DUFFERIN ST					E Approach JOE SHUSTER WAY					S Approach DUFFERIN ST					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
08:15:00	137	16	0	1	153	18	10	0	41	28	5	97	0	0	102	283
08:30:00	151	20	0	1	171	15	4	0	41	19	7	108	0	0	115	305
08:45:00	161	22	0	2	183	15	3	0	44	18	14	97	0	2	111	312
09:00:00	119	23	0	1	142	10	6	0	44	16	5	95	0	0	100	258
Grand Total	568	81	0	5	649	58	23	0	170	81	31	397	0	2	428	**1158**
Approach%	87.5%	12.5%	0%		-	71.6%	28.4%	0%		-	7.2%	92.8%	0%		-	**-**
Totals %	49.1%	7%	0%		56%	5%	2%	0%		7%	2.7%	34.3%	0%		37%	**-**
PHF	0.88	0.88	0		0.89	0.81	0.58	0		0.72	0.55	0.92	0		0.93	**-**
Heavy	39	1	0		40	1	1	0		2	0	50	0		50	**-**
Heavy %	6.9%	1.2%	0%		6.2%	1.7%	4.3%	0%		2.5%	0%	12.6%	0%		11.7%	**-**
Lights	529	80	0		609	57	22	0		79	31	347	0		378	**-**
Lights %	93.1%	98.8%	0%		93.8%	98.3%	95.7%	0%		97.5%	100%	87.4%	0%		88.3%	**-**
Single-Unit Trucks	17	0	0		17	1	1	0		2	0	7	0		7	**-**
Single-Unit Trucks %	3%	0%	0%		2.6%	1.7%	4.3%	0%		2.5%	0%	1.8%	0%		1.6%	**-**
Buses	21	1	0		22	0	0	0		0	0	40	0		40	**-**
Buses %	3.7%	1.2%	0%		3.4%	0%	0%	0%		0%	0%	10.1%	0%		9.3%	**-**
Articulated Trucks	1	0	0		1	0	0	0		0	0	3	0		3	**-**
Articulated Trucks %	0.2%	0%	0%		0.2%	0%	0%	0%		0%	0%	0.8%	0%		0.7%	**-**
Pedestrians	-	-	-	5	-	-	-	-	169	-	-	-	-	2	-	**-**
Pedestrians%	-	-	-	2.8%		-	-	-	95.5%		-	-	-	1.1%		**-**
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	0%		-	-	-	0.6%		-	-	-	0%		**-**
Bicycles on Road	5	0	0	0	-	0	0	0	0	-	0	3	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (2.58 °C)

Start Time	N Approach DUFFERIN ST					E Approach JOE SHUSTER WAY					S Approach DUFFERIN ST					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
16:15:00	115	21	0	2	136	26	2	0	30	28	9	143	0	0	152	316
16:30:00	129	13	0	1	142	21	0	0	37	21	5	151	0	0	156	319
16:45:00	115	23	0	3	138	19	2	0	58	21	9	136	0	0	145	304
17:00:00	112	18	1	0	131	18	6	0	39	24	13	141	0	0	154	309
Grand Total	471	75	1	6	547	84	10	0	164	94	36	571	0	0	607	**1248**
Approach%	86.1%	13.7%	0.2%		-	89.4%	10.6%	0%		-	5.9%	94.1%	0%		-	**-**
Totals %	37.7%	6%	0.1%		43.8%	6.7%	0.8%	0%		7.5%	2.9%	45.8%	0%		48.6%	**-**
PHF	0.91	0.82	0.25		0.96	0.81	0.42	0		0.84	0.69	0.95	0		0.97	**-**
Heavy	25	0	0		25	0	0	0		0	1	31	0		32	**-**
Heavy %	5.3%	0%	0%		4.6%	0%	0%	0%		0%	2.8%	5.4%	0%		5.3%	**-**
Lights	446	75	1		522	84	10	0		94	35	540	0		575	**-**
Lights %	94.7%	100%	100%		95.4%	100%	100%	0%		100%	97.2%	94.6%	0%		94.7%	**-**
Single-Unit Trucks	7	0	0		7	0	0	0		0	1	8	0		9	**-**
Single-Unit Trucks %	1.5%	0%	0%		1.3%	0%	0%	0%		0%	2.8%	1.4%	0%		1.5%	**-**
Buses	18	0	0		18	0	0	0		0	0	23	0		23	**-**
Buses %	3.8%	0%	0%		3.3%	0%	0%	0%		0%	0%	4%	0%		3.8%	**-**
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	6	-	-	-	-	164	-	-	-	-	0	-	**-**
Pedestrians%	-	-	-	3.5%		-	-	-	96.5%		-	-	-	0%		**-**
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**
Bicycles on Road	8	2	0	0	-	3	0	0	0	-	0	3	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

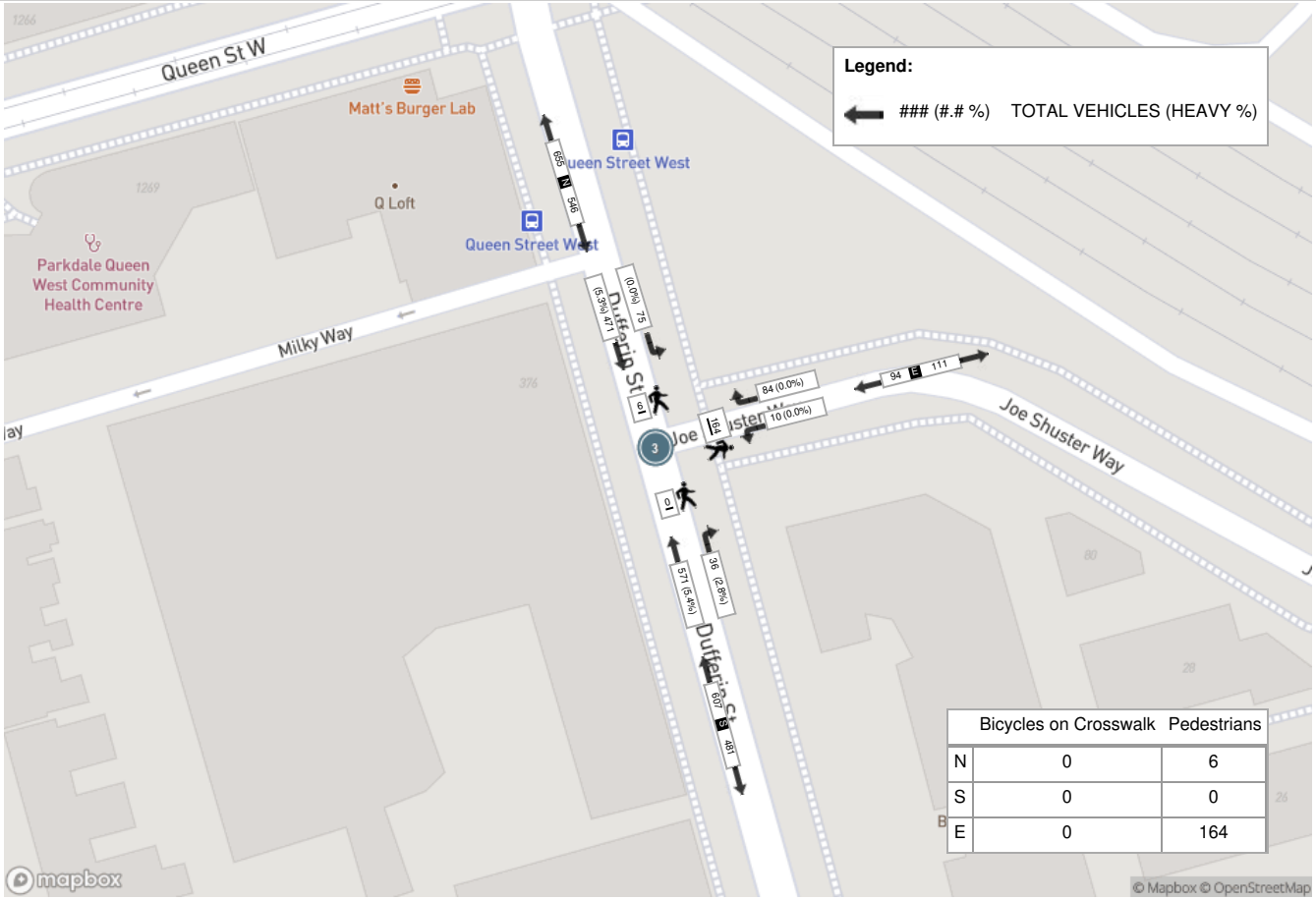
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-2.01 °C)



BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (2.58 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	6
S	0	0
E	0	164

Spectrum

Turning Movement Count
Location Name: DUFFERIN S & KING ST W
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (6 . DUFFERIN S & KING ST W)

Start Time	N Approach DUFFERIN ST						E Approach KING ST W						S Approach DUFFERIN ST						W Approach KING ST W						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:30:00	29	62	12	0	29	103	20	47	10	0	22	77	5	28	1	0	51	34	1	31	30	0	11	62	276	
07:45:00	49	77	15	0	32	141	11	42	9	0	38	62	14	49	0	0	47	63	6	31	17	0	13	54	320	
08:00:00	30	89	13	0	27	132	17	45	13	0	46	75	15	46	1	0	87	62	4	41	14	0	32	59	328	
08:15:00	30	96	22	0	23	148	18	42	8	0	35	68	12	62	1	0	51	75	5	55	28	0	7	88	379	1303
08:30:00	40	96	18	0	37	154	18	60	8	0	45	86	20	66	2	0	54	88	7	63	27	1	20	98	426	1453
08:45:00	24	110	23	0	49	157	16	44	7	0	63	67	15	60	3	0	64	78	2	46	18	0	19	66	368	1501
09:00:00	26	78	18	0	51	122	15	38	9	0	47	62	8	55	5	0	45	68	3	41	25	0	16	69	321	1494
09:15:00	26	55	14	0	46	95	17	33	10	0	27	60	15	56	3	0	48	74	2	64	22	0	22	88	317	1432
BREAK																										
16:00:00	38	75	22	0	58	135	17	60	3	0	48	80	7	89	6	0	64	102	5	44	13	0	44	62	379	
16:15:00	26	71	18	0	69	115	24	59	7	0	64	90	8	106	14	0	55	128	4	45	23	0	24	72	405	
16:30:00	19	89	21	0	61	129	20	62	8	0	51	90	8	95	7	0	48	110	4	39	14	0	25	57	386	
16:45:00	22	65	17	0	53	104	16	68	12	0	58	96	11	101	6	0	75	118	2	51	30	0	27	83	401	1571
17:00:00	38	68	25	0	62	131	26	72	10	0	46	108	10	89	7	0	54	106	7	44	19	0	37	70	415	1607
17:15:00	26	54	18	0	43	98	23	67	11	0	46	101	14	87	6	0	40	107	5	46	17	0	26	68	374	1576
17:30:00	23	51	14	0	61	88	20	79	7	0	65	106	10	103	10	0	62	123	4	38	22	0	30	64	381	1571
17:45:00	20	61	23	0	69	104	18	76	7	0	45	101	12	77	7	0	59	96	3	36	18	0	37	57	358	1528
Grand Total	466	1197	293	0	770	1956	296	894	139	0	746	1329	184	1169	79	0	904	1432	64	715	337	1	390	1117	**5834**	-
Approach%	23.8%	61.2%	15%	0%		-	22.3%	67.3%	10.5%	0%		-	12.8%	81.6%	5.5%	0%		-	5.7%	64%	30.2%	0.1%		-	**-**	-
Totals %	8%	20.5%	5%	0%		33.5%	5.1%	15.3%	2.4%	0%		22.8%	3.2%	20%	1.4%	0%		24.5%	1.1%	12.3%	5.8%	0%		19.1%	**-**	-
Heavy	9	98	11	0		-	67	11	63	0		-	66	89	1	0		-	4	65	9	0		-	**-**	-
Heavy %	1.9%	8.2%	3.8%	0%		-	22.6%	1.2%	45.3%	0%		-	35.9%	7.6%	1.3%	0%		-	6.3%	9.1%	2.7%	0%		-	**-**	-
Bicycles	2	3	1	0		-	1	39	0	0		-	0	2	1	0		-	2	41	2	0		-	**-**	-
Bicycle %	0.4%	0.3%	0.3%	0%		-	0.3%	4.4%	0%	0%		-	0%	0.2%	1.3%	0%		-	3.1%	5.7%	0.6%	0%		-	**-**	-

Spectrum

Turning Movement Count
Location Name: DUFFERIN S & KING ST W
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:00 AM - 09:00 AM Weather: Broken Clouds (-2.01 °C)

Start Time	N Approach DUFFERIN ST						E Approach KING ST W						S Approach DUFFERIN ST						W Approach KING ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:00:00	30	89	13	0	27	132	17	45	13	0	46	75	15	46	1	0	87	62	4	41	14	0	32	59	328
08:15:00	30	96	22	0	23	148	18	42	8	0	35	68	12	62	1	0	51	75	5	55	28	0	7	88	379
08:30:00	40	96	18	0	37	154	18	60	8	0	45	86	20	66	2	0	54	88	7	63	27	1	20	98	426
08:45:00	24	110	23	0	49	157	16	44	7	0	63	67	15	60	3	0	64	78	2	46	18	0	19	66	368
Grand Total	124	391	76	0	136	591	69	191	36	0	189	296	62	234	7	0	256	303	18	205	87	1	78	311	**1501**
Approach%	21%	66.2%	12.9%	0%		-	23.3%	64.5%	12.2%	0%		-	20.5%	77.2%	2.3%	0%		-	5.8%	65.9%	28%	0.3%		-	**-**
Totals %	8.3%	26%	5.1%	0%		39.4%	4.6%	12.7%	2.4%	0%		19.7%	4.1%	15.6%	0.5%	0%		20.2%	1.2%	13.7%	5.8%	0.1%		20.7%	**-**
PHF	0.78	0.89	0.83	0		0.94	0.96	0.8	0.69	0		0.86	0.78	0.89	0.58	0		0.86	0.64	0.81	0.78	0.25		0.79	**-**
Heavy	5	29	6	0		40	22	2	17	0		41	23	24	1	0		48	1	17	3	0		21	**-**
Heavy %	4%	7.4%	7.9%	0%		6.8%	31.9%	1%	47.2%	0%		13.9%	37.1%	10.3%	14.3%	0%		15.8%	5.6%	8.3%	3.4%	0%		6.8%	**-**
Lights	119	362	70	0		551	47	189	19	0		255	39	210	6	0		255	17	188	84	1		290	**-**
Lights %	96%	92.6%	92.1%	0%		93.2%	68.1%	99%	52.8%	0%		86.1%	62.9%	89.7%	85.7%	0%		84.2%	94.4%	91.7%	96.6%	100%		93.2%	**-**
Single-Unit Trucks	2	11	4	0		17	4	1	1	0		6	6	2	1	0		9	0	2	2	0		4	**-**
Single-Unit Trucks %	1.6%	2.8%	5.3%	0%		2.9%	5.8%	0.5%	2.8%	0%		2%	9.7%	0.9%	14.3%	0%		3%	0%	1%	2.3%	0%		1.3%	**-**
Buses	3	18	2	0		23	18	1	16	0		35	17	19	0	0		36	1	15	1	0		17	**-**
Buses %	2.4%	4.6%	2.6%	0%		3.9%	26.1%	0.5%	44.4%	0%		11.8%	27.4%	8.1%	0%	0%		11.9%	5.6%	7.3%	1.1%	0%		5.5%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	1.3%	0%	0%		1%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	134	-	-	-	-	-	187	-	-	-	-	-	256	-	-	-	-	-	77	-	**-**
Pedestrians%	-	-	-	-	20.3%		-	-	-	-	28.4%		-	-	-	-	38.8%		-	-	-	-	11.7%		**-**
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0.3%		-	-	-	-	0.3%		-	-	-	-	0%		-	-	-	-	0.2%		**-**
Bicycles on Road	1	0	0	0	0	-	0	1	0	0	0	-	0	0	0	0	0	-	0	8	0	0	0	-	**-**
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Spectrum

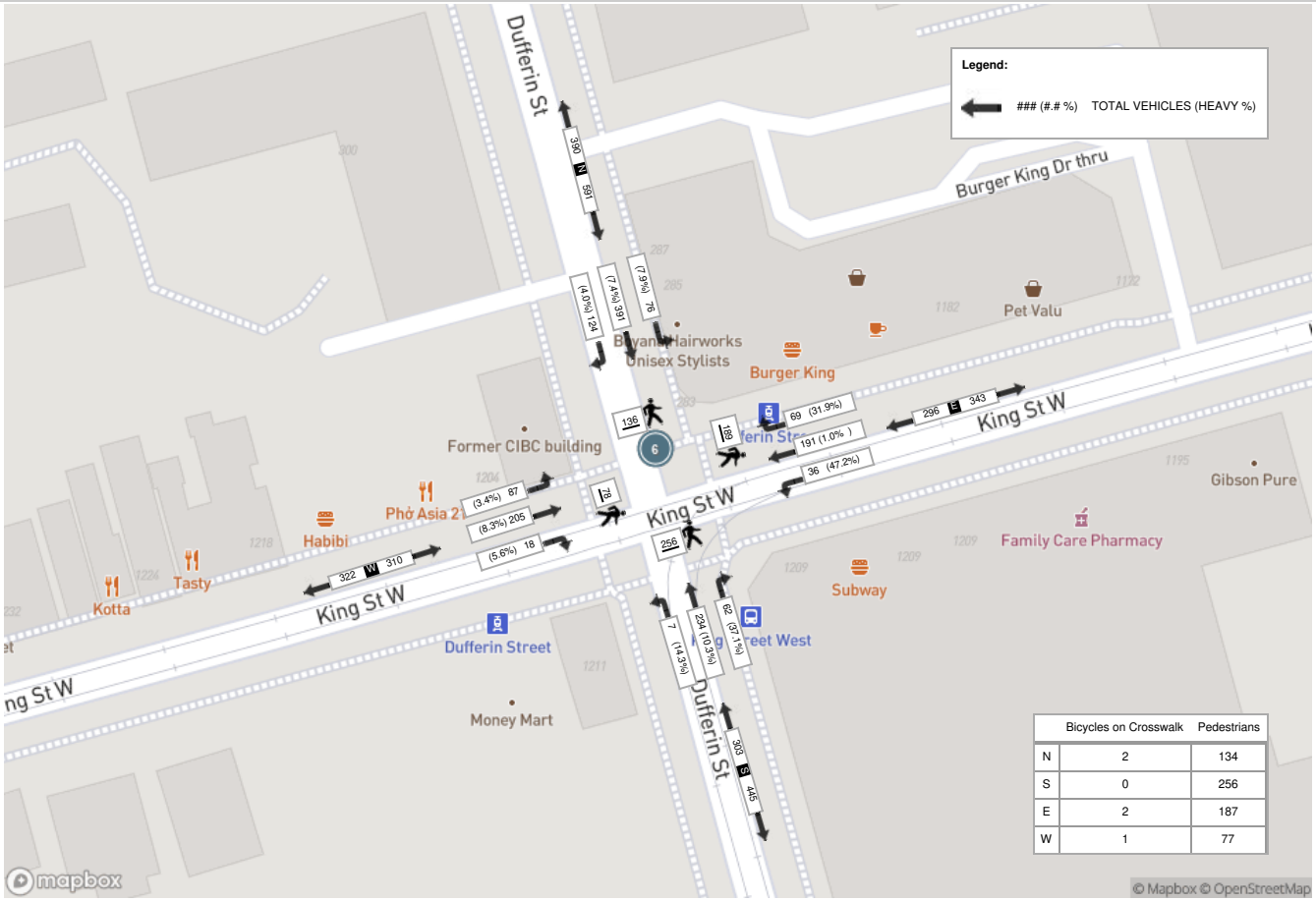
Turning Movement Count
Location Name: DUFFERIN S & KING ST W
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

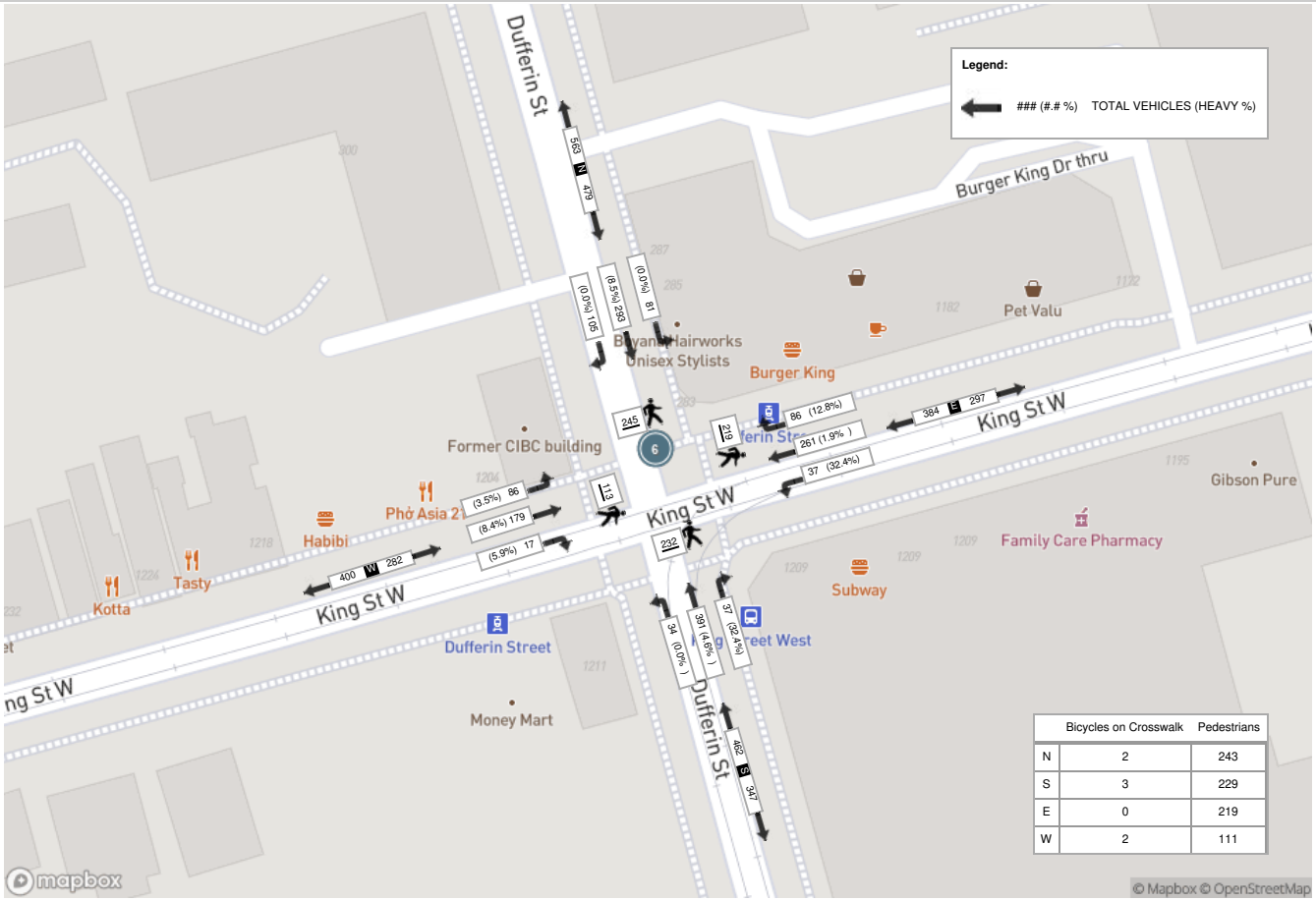
Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (2.58 °C)

Start Time	N Approach DUFFERIN ST						E Approach KING ST W						S Approach DUFFERIN ST						W Approach KING ST W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
16:15:00	26	71	18	0	69	115	24	59	7	0	64	90	8	106	14	0	55	128	4	45	23	0	24	72	405
16:30:00	19	89	21	0	61	129	20	62	8	0	51	90	8	95	7	0	48	110	4	39	14	0	25	57	386
16:45:00	22	65	17	0	53	104	16	68	12	0	58	96	11	101	6	0	75	118	2	51	30	0	27	83	401
17:00:00	38	68	25	0	62	131	26	72	10	0	46	108	10	89	7	0	54	106	7	44	19	0	37	70	415
Grand Total	105	293	81	0	245	479	86	261	37	0	219	384	37	391	34	0	232	462	17	179	86	0	113	282	**1607**
Approach%	21.9%	61.2%	16.9%	0%		-	22.4%	68%	9.6%	0%		-	8%	84.6%	7.4%	0%		-	6%	63.5%	30.5%	0%		-	**-**
Totals %	6.5%	18.2%	5%	0%		29.8%	5.4%	16.2%	2.3%	0%		23.9%	2.3%	24.3%	2.1%	0%		28.7%	1.1%	11.1%	5.4%	0%		17.5%	**-**
PHF	0.69	0.82	0.81	0		0.91	0.83	0.91	0.77	0		0.89	0.84	0.92	0.61	0		0.9	0.61	0.88	0.72	0		0.85	**-**
Heavy	0	25	0	0		25	11	5	12	0		28	12	18	0	0		30	1	15	3	0		19	**-**
Heavy %	0%	8.5%	0%	0%		5.2%	12.8%	1.9%	32.4%	0%		7.3%	32.4%	4.6%	0%	0%		6.5%	5.9%	8.4%	3.5%	0%		6.7%	**-**
Lights	105	268	81	0		454	75	256	25	0		356	25	373	34	0		432	16	164	83	0		263	**-**
Lights %	100%	91.5%	100%	0%		94.8%	87.2%	98.1%	67.6%	0%		92.7%	67.6%	95.4%	100%	0%		93.5%	94.1%	91.6%	96.5%	0%		93.3%	**-**
Single-Unit Trucks	0	8	0	0		8	1	2	0	0		3	0	5	0	0		5	1	3	3	0		7	**-**
Single-Unit Trucks %	0%	2.7%	0%	0%		1.7%	1.2%	0.8%	0%	0%		0.8%	0%	1.3%	0%	0%		1.1%	5.9%	1.7%	3.5%	0%		2.5%	**-**
Buses	0	17	0	0		17	10	2	12	0		24	12	13	0	0		25	0	12	0	0		12	**-**
Buses %	0%	5.8%	0%	0%		3.5%	11.6%	0.8%	32.4%	0%		6.3%	32.4%	3.3%	0%	0%		5.4%	0%	6.7%	0%	0%		4.3%	**-**
Articulated Trucks	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0.4%	0%	0%		0.3%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	243	-	-	-	-	-	219	-	-	-	-	-	229	-	-	-	-	-	111	-	**-**
Pedestrians%	-	-	-	-	30%		-	-	-	-	27.1%		-	-	-	-	28.3%		-	-	-	-	13.7%		**-**
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	2	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0.2%		-	-	-	-	0%		-	-	-	-	0.4%		-	-	-	-	0.2%		**-**
Bicycles on Road	0	2	0	0	0	-	0	20	0	0	0	-	0	2	0	0	0	-	0	9	1	0	0	-	**-**
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Peak Hour: 08:00 AM - 09:00 AM **Weather: Broken Clouds (-2.01 °C)**



Peak Hour: 04:15 PM - 05:15 PM **Weather: Overcast Clouds (2.58 °C)**



	Bicycles on Crosswalk	Pedestrians
N	2	243
S	3	229
E	0	219
W	2	111

Spectrum

Turning Movement Count
Location Name: DUFFERIN ST & MELBOURNE AVE / BONAVENTURE CHILD CARE ACCESS (295-345 DUFFERIN ST)
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (5 . DUFFERIN ST & MELBOURNE AVE / BONAVENTURE CHILD CARE ACCESS (295-345 DUFFERIN ST))

Start Time	N Approach DUFFERIN ST						E Approach BONAVENTURE CHILD CARE ACCESS (295-345 DUFFERIN ST						S Approach DUFFERIN ST						W Approach MELBOURNE AVE						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:30:00	0	97	2	0	0	99	3	1	2	0	13	6	0	81	1	0	3	82	2	0	0	0	4	2	189	
07:45:00	2	134	3	0	0	139	2	0	3	0	20	5	1	75	1	0	5	77	5	1	0	0	4	6	227	
08:00:00	0	119	5	0	0	124	5	0	8	0	18	13	3	75	1	0	9	79	2	0	1	0	11	3	219	
08:15:00	4	140	3	0	1	147	7	0	4	1	15	12	6	104	0	0	3	110	4	0	1	0	9	5	274	909
08:30:00	3	148	5	0	0	156	8	1	4	0	28	13	3	111	0	0	15	114	3	0	2	0	9	5	288	1008
08:45:00	1	152	6	0	1	159	6	0	5	0	29	11	5	89	0	0	9	94	5	1	4	0	9	10	274	1055
09:00:00	4	115	4	0	1	123	6	1	3	0	16	10	3	93	0	0	6	96	3	0	5	0	8	8	237	1073
09:15:00	4	94	0	0	1	98	6	0	1	0	19	7	4	89	2	0	7	95	2	1	1	0	8	4	204	1003
BREAK																										
16:00:00	2	132	5	0	0	139	4	2	7	0	36	13	5	113	2	0	15	120	2	0	2	0	28	4	276	
16:15:00	3	110	4	2	1	119	3	0	3	0	28	6	1	151	0	0	6	152	3	0	5	0	17	8	285	
16:30:00	1	121	8	0	0	130	6	0	4	0	28	10	5	137	1	0	18	143	4	0	1	0	13	5	288	
16:45:00	3	109	5	0	1	117	3	0	8	0	46	11	2	142	1	0	7	145	7	0	4	0	14	11	284	1133
17:00:00	3	110	2	2	2	117	4	1	0	0	29	5	2	137	3	0	12	142	4	1	6	0	21	11	275	1132
17:15:00	3	102	1	0	1	106	4	0	0	0	27	4	2	126	1	0	2	129	5	0	5	0	11	10	249	1096
17:30:00	3	94	9	0	0	106	6	1	1	0	28	8	4	144	1	0	5	149	9	0	2	0	17	11	274	1082
17:45:00	1	91	4	0	1	96	8	0	3	0	25	11	1	120	1	0	8	122	2	0	1	0	20	3	232	1030
Grand Total	37	1868	66	4	10	1975	81	7	56	1	405	145	47	1787	15	0	130	1849	62	4	40	0	203	106	**4075**	-
Approach%	1.9%	94.6%	3.3%	0.2%		-	55.9%	4.8%	38.6%	0.7%		-	2.5%	96.6%	0.8%	0%		-	58.5%	3.8%	37.7%	0%		-	-	-
Totals %	0.9%	45.8%	1.6%	0.1%		48.5%	2%	0.2%	1.4%	0%		3.6%	1.2%	43.9%	0.4%	0%		45.4%	1.5%	0.1%	1%	0%		2.6%	-	-
Heavy	1	115	1	0		-	1	0	1	0		-	1	164	0	0		-	3	0	0	0		-	-	-
Heavy %	2.7%	6.2%	1.5%	0%		-	1.2%	0%	1.8%	0%		-	2.1%	9.2%	0%	0%		-	4.8%	0%	0%	0%		-	-	-
Bicycles	6	9	0	0		-	0	0	0	0		-	0	14	0	0		-	0	0	2	0		-	-	-
Bicycle %	16.2%	0.5%	0%	0%		-	0%	0%	0%	0%		-	0%	0.8%	0%	0%		-	0%	0%	5%	0%		-	-	-

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-2.01 °C)

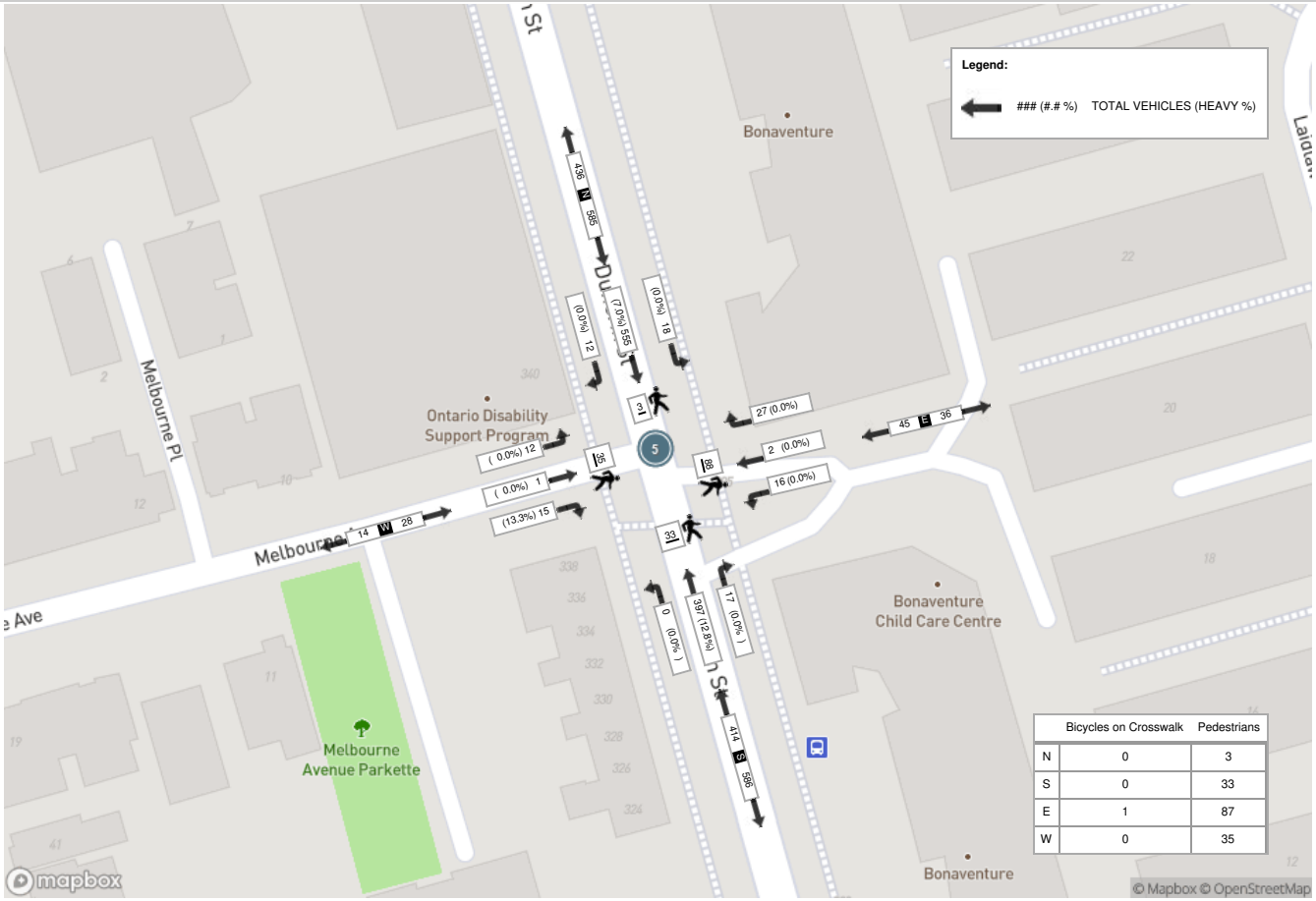
Start Time	N Approach DUFFERIN ST						E Approach BONAVENTURE CHILD CARE ACCESS (295-345 DUFFERIN ST						S Approach DUFFERIN ST						W Approach MELBOURNE AVE						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:15:00	4	140	3	0	1	147	7	0	4	1	15	12	6	104	0	0	3	110	4	0	1	0	9	5	274
08:30:00	3	148	5	0	0	156	8	1	4	0	28	13	3	111	0	0	15	114	3	0	2	0	9	5	288
08:45:00	1	152	6	0	1	159	6	0	5	0	29	11	5	89	0	0	9	94	5	1	4	0	9	10	274
09:00:00	4	115	4	0	1	123	6	1	3	0	16	10	3	93	0	0	6	96	3	0	5	0	8	8	237
Grand Total	12	555	18	0	3	585	27	2	16	1	88	46	17	397	0	0	33	414	15	1	12	0	35	28	**1073**
Approach%	2.1%	94.9%	3.1%	0%		-	58.7%	4.3%	34.8%	2.2%		-	4.1%	95.9%	0%	0%		-	53.6%	3.6%	42.9%	0%		-	**-**
Totals %	1.1%	51.7%	1.7%	0%		54.5%	2.5%	0.2%	1.5%	0.1%		4.3%	1.6%	37%	0%	0%		38.6%	1.4%	0.1%	1.1%	0%		2.6%	**-**
PHF	0.75	0.91	0.75	0		0.92	0.84	0.5	0.8	0.25		0.88	0.71	0.89	0	0		0.91	0.75	0.25	0.6	0		0.7	**-**
Heavy	0	39	0	0		39	0	0	0	0		0	0	51	0	0		51	2	0	0	0		2	**-**
Heavy %	0%	7%	0%	0%		6.7%	0%	0%	0%	0%		0%	0%	12.8%	0%	0%		12.3%	13.3%	0%	0%	0%		7.1%	**-**
Lights	12	516	18	0		546	27	2	16	1		46	17	346	0	0		363	13	1	12	0		26	**-**
Lights %	100%	93%	100%	0%		93.3%	100%	100%	100%	100%		100%	100%	87.2%	0%	0%		87.7%	86.7%	100%	100%	0%		92.9%	**-**
Single-Unit Trucks	0	17	0	0		17	0	0	0	0		0	0	8	0	0		8	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	3.1%	0%	0%		2.9%	0%	0%	0%	0%		0%	0%	2%	0%	0%		1.9%	0%	0%	0%	0%		0%	**-**
Buses	0	20	0	0		20	0	0	0	0		0	0	40	0	0		40	1	0	0	0		1	**-**
Buses %	0%	3.6%	0%	0%		3.4%	0%	0%	0%	0%		0%	0%	10.1%	0%	0%		9.7%	6.7%	0%	0%	0%		3.6%	**-**
Articulated Trucks	0	2	0	0		2	0	0	0	0		0	0	3	0	0		3	1	0	0	0		1	**-**
Articulated Trucks %	0%	0.4%	0%	0%		0.3%	0%	0%	0%	0%		0%	0%	0.8%	0%	0%		0.7%	6.7%	0%	0%	0%		3.6%	**-**
Pedestrians	-	-	-	-	3	-	-	-	-	-	87	-	-	-	-	-	33	-	-	-	-	-	35	-	**-**
Pedestrians%	-	-	-	-	1.9%		-	-	-	-	54.7%		-	-	-	-	20.8%		-	-	-	-	22%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0.6%		-	-	-	-	0%		-	-	-	-	0%		**-**
Bicycles on Road	1	2	0	0	0	-	0	0	0	0	0	-	0	2	0	0	0	-	0	0	1	0	0	-	**-**
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:00 PM - 05:00 PM Weather: Overcast Clouds (2.58 °C)

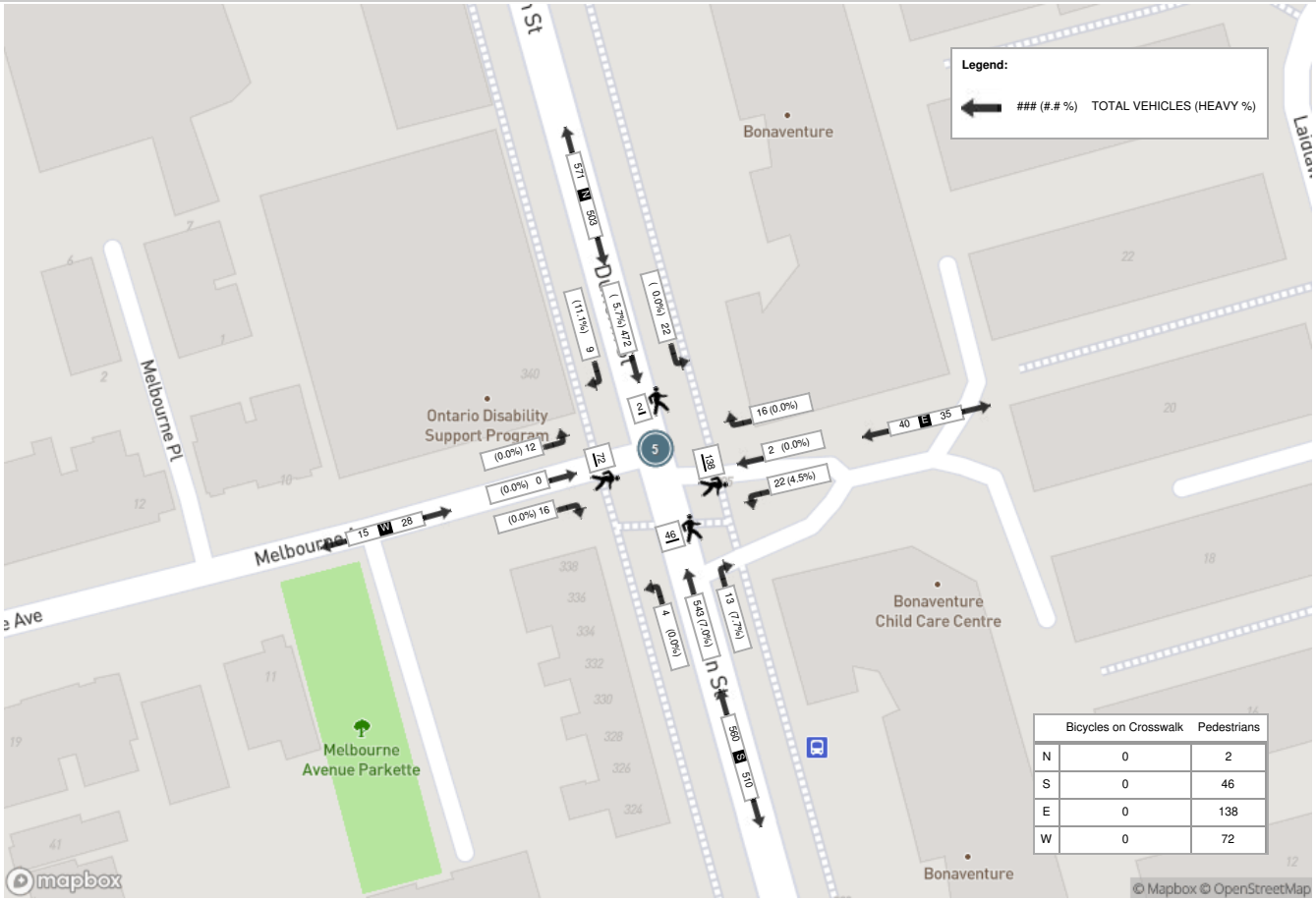
Start Time	N Approach DUFFERIN ST						E Approach BONAVENTURE CHILD CARE ACCESS (295-345 DUFFERIN ST						S Approach DUFFERIN ST						W Approach MELBOURNE AVE						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
16:00:00	2	132	5	0	0	139	4	2	7	0	36	13	5	113	2	0	15	120	2	0	2	0	28	4	276
16:15:00	3	110	4	2	1	119	3	0	3	0	28	6	1	151	0	0	6	152	3	0	5	0	17	8	285
16:30:00	1	121	8	0	0	130	6	0	4	0	28	10	5	137	1	0	18	143	4	0	1	0	13	5	288
16:45:00	3	109	5	0	1	117	3	0	8	0	46	11	2	142	1	0	7	145	7	0	4	0	14	11	284
Grand Total	9	472	22	2	2	505	16	2	22	0	138	40	13	543	4	0	46	560	16	0	12	0	72	28	**1133**
Approach%	1.8%	93.5%	4.4%	0.4%		-	40%	5%	55%	0%		-	2.3%	97%	0.7%	0%		-	57.1%	0%	42.9%	0%		-	**-**
Totals %	0.8%	41.7%	1.9%	0.2%		44.6%	1.4%	0.2%	1.9%	0%		3.5%	1.1%	47.9%	0.4%	0%		49.4%	1.4%	0%	1.1%	0%		2.5%	**-**
PHF	0.75	0.89	0.69	0.25		0.91	0.67	0.25	0.69	0		0.77	0.65	0.9	0.5	0		0.92	0.57	0	0.6	0		0.64	**-**
Heavy	1	27	0	0		28	0	0	1	0		1	1	38	0	0		39	0	0	0	0		0	**-**
Heavy %	11.1%	5.7%	0%	0%		5.5%	0%	0%	4.5%	0%		2.5%	7.7%	7%	0%	0%		7%	0%	0%	0%	0%		0%	**-**
Lights	8	445	22	2		477	16	2	21	0		39	12	505	4	0		521	16	0	12	0		28	**-**
Lights %	88.9%	94.3%	100%	100%		94.5%	100%	100%	95.5%	0%		97.5%	92.3%	93%	100%	0%		93%	100%	0%	100%	0%		100%	**-**
Single-Unit Trucks	0	9	0	0		9	0	0	1	0		1	1	11	0	0		12	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	1.9%	0%	0%		1.8%	0%	0%	4.5%	0%		2.5%	7.7%	2%	0%	0%		2.1%	0%	0%	0%	0%		0%	**-**
Buses	1	18	0	0		19	0	0	0	0		0	0	27	0	0		27	0	0	0	0		0	**-**
Buses %	11.1%	3.8%	0%	0%		3.8%	0%	0%	0%	0%		0%	0%	5%	0%	0%		4.8%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	2	-	-	-	-	-	138	-	-	-	-	-	46	-	-	-	-	-	72	-	**-**
Pedestrians%	-	-	-	-	0.8%		-	-	-	-	53.5%		-	-	-	-	17.8%		-	-	-	-	27.9%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**
Bicycles on Road	3	4	0	0	0	-	0	0	0	0	0	-	0	3	0	0	0	-	0	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Peak Hour: 08:15 AM - 09:15 AM **Weather: Broken Clouds (-2.01 °C)**



	Bicycles on Crosswalk	Pedestrians
N	0	3
S	0	33
E	1	87
W	0	35

Peak Hour: 04:00 PM - 05:00 PM **Weather: Overcast Clouds (2.58 °C)**



	Bicycles on Crosswalk	Pedestrians
N	0	2
S	0	46
E	0	138
W	0	72

Spectrum

Turning Movement Count
Location Name: DUFFERIN ST & MILKY WAY
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (2 . DUFFERIN ST & MILKY WAY)

Start Time	N Approach DUFFERIN ST					S Approach DUFFERIN ST					W Approach MILKY WAY					Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	UTurn N:N	Peds N:	Approach Total	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:30:00	0	102	0	0	102	101	0	0	0	101	0	0	0	9	0	203	
07:45:00	0	135	0	1	135	93	1	0	0	94	1	0	0	10	1	230	
08:00:00	0	138	0	0	138	95	1	0	0	96	1	0	0	7	1	235	
08:15:00	1	158	0	1	159	120	1	0	0	121	0	0	0	9	0	280	948
08:30:00	1	173	0	0	174	121	1	0	0	122	1	1	0	16	2	298	1043
08:45:00	3	170	0	1	173	105	0	0	0	105	2	0	0	20	2	280	1093
09:00:00	0	143	0	0	143	112	0	0	1	112	0	0	0	12	0	255	1113
09:15:00	1	120	0	1	121	108	0	0	0	108	1	0	0	18	1	230	1063
BREAK																	
16:00:00	1	154	0	0	155	125	0	0	1	125	1	0	0	21	1	281	
16:15:00	0	130	0	0	130	163	2	0	2	165	0	0	0	21	0	295	
16:30:00	0	141	0	1	141	162	2	0	0	164	0	0	0	13	0	305	
16:45:00	0	138	0	0	138	159	0	0	1	159	0	1	0	21	1	298	1179
17:00:00	1	137	0	0	138	164	0	0	0	164	0	0	0	19	0	302	1200
17:15:00	3	106	1	0	110	142	1	0	1	143	3	1	0	16	4	257	1162
17:30:00	1	118	0	1	119	133	1	1	1	135	2	0	0	24	2	256	1113
17:45:00	2	123	0	0	125	152	1	0	1	153	1	0	0	13	1	279	1094
Grand Total	14	2186	1	6	2201	2055	11	1	8	2067	13	3	0	249	16	**4284**	-
Approach%	0.6%	99.3%	0%		-	99.4%	0.5%	0%		-	81.3%	18.8%	0%		-	**-**	-
Totals %	0.3%	51%	0%		51.4%	48%	0.3%	0%		48.2%	0.3%	0.1%	0%		0.4%	**-**	-
Heavy	0	122	0		-	164	0	0		-	0	0	0		-	**-**	-
Heavy %	0%	5.6%	0%		-	8%	0%	0%		-	0%	0%	0%		-	**-**	-
Bicycles	0	20	0		-	26	2	0		-	1	0	0		-	**-**	-
Bicycle %	0%	0.9%	0%		-	1.3%	18.2%	0%		-	7.7%	0%	0%		-	**-**	-

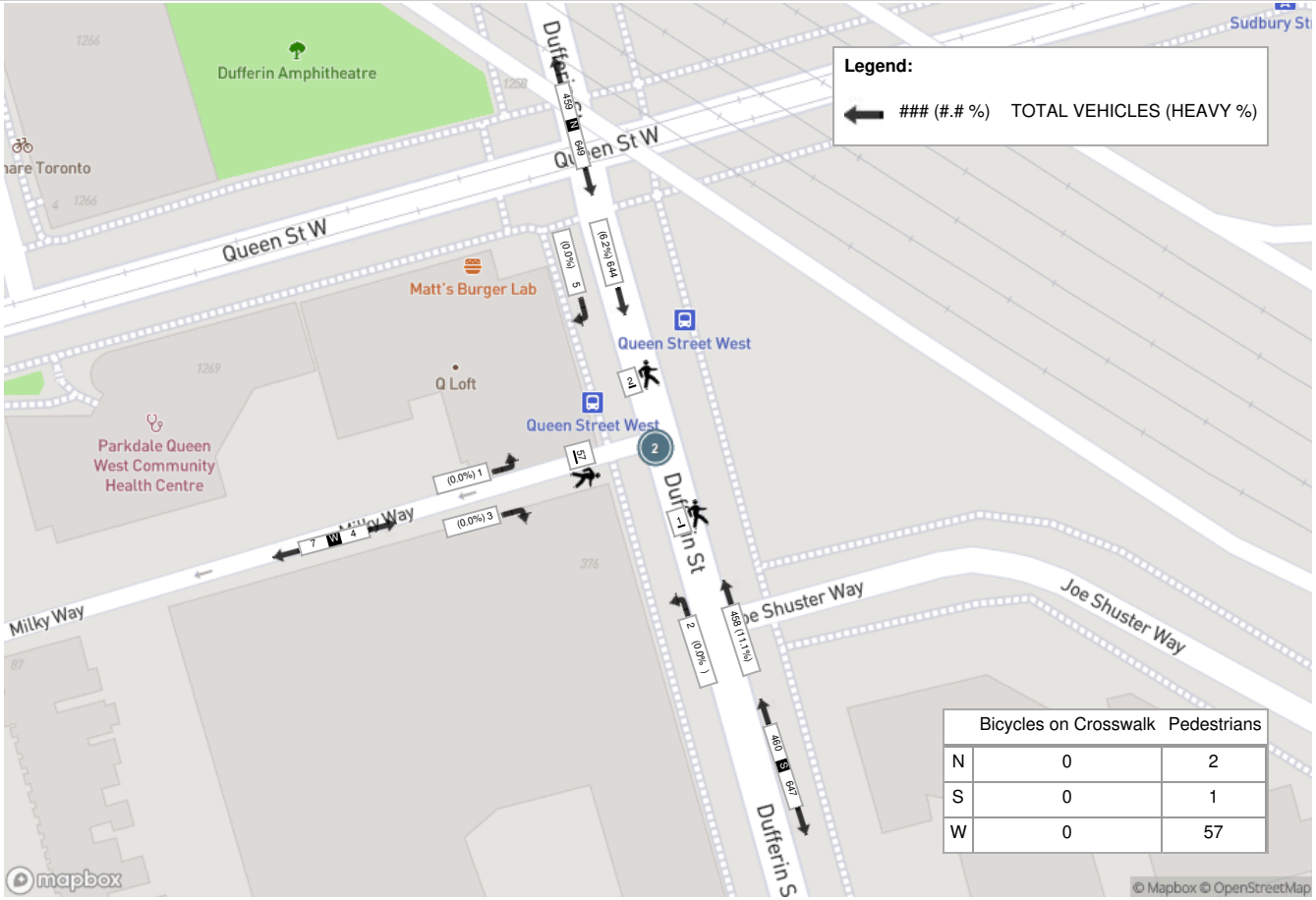
Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-2.01 °C)

Start Time	N Approach DUFFERIN ST					S Approach DUFFERIN ST					W Approach MILKY WAY					Int. Total (15 min)
	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	
08:15:00	1	158	0	1	159	120	1	0	0	121	0	0	0	9	0	280
08:30:00	1	173	0	0	174	121	1	0	0	122	1	1	0	16	2	298
08:45:00	3	170	0	1	173	105	0	0	0	105	2	0	0	20	2	280
09:00:00	0	143	0	0	143	112	0	0	1	112	0	0	0	12	0	255
Grand Total	5	644	0	2	649	458	2	0	1	460	3	1	0	57	4	**1113**
Approach%	0.8%	99.2%	0%		-	99.6%	0.4%	0%		-	75%	25%	0%		-	**-**
Totals %	0.4%	57.9%	0%		58.3%	41.2%	0.2%	0%		41.3%	0.3%	0.1%	0%		0.4%	**-**
PHF	0.42	0.93	0		0.93	0.95	0.5	0		0.94	0.38	0.25	0		0.5	**-**
Heavy	0	40	0		40	51	0	0		51	0	0	0		0	**-**
Heavy %	0%	6.2%	0%		6.2%	11.1%	0%	0%		11.1%	0%	0%	0%		0%	**-**
Lights	5	604	0		609	407	2	0		409	3	1	0		4	**-**
Lights %	100%	93.8%	0%		93.8%	88.9%	100%	0%		88.9%	100%	100%	0%		100%	**-**
Single-Unit Trucks	0	17	0		17	8	0	0		8	0	0	0		0	**-**
Single-Unit Trucks %	0%	2.6%	0%		2.6%	1.7%	0%	0%		1.7%	0%	0%	0%		0%	**-**
Buses	0	21	0		21	40	0	0		40	0	0	0		0	**-**
Buses %	0%	3.3%	0%		3.2%	8.7%	0%	0%		8.7%	0%	0%	0%		0%	**-**
Articulated Trucks	0	2	0		2	3	0	0		3	0	0	0		0	**-**
Articulated Trucks %	0%	0.3%	0%		0.3%	0.7%	0%	0%		0.7%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	2	-	-	-	-	1	-	-	-	-	57	-	**-**
Pedestrians%	-	-	-	3.3%		-	-	-	1.7%		-	-	-	95%		**-**
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**
Bicycles on Road	0	4	0	0	-	3	0	0	0	-	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (2.58 °C)

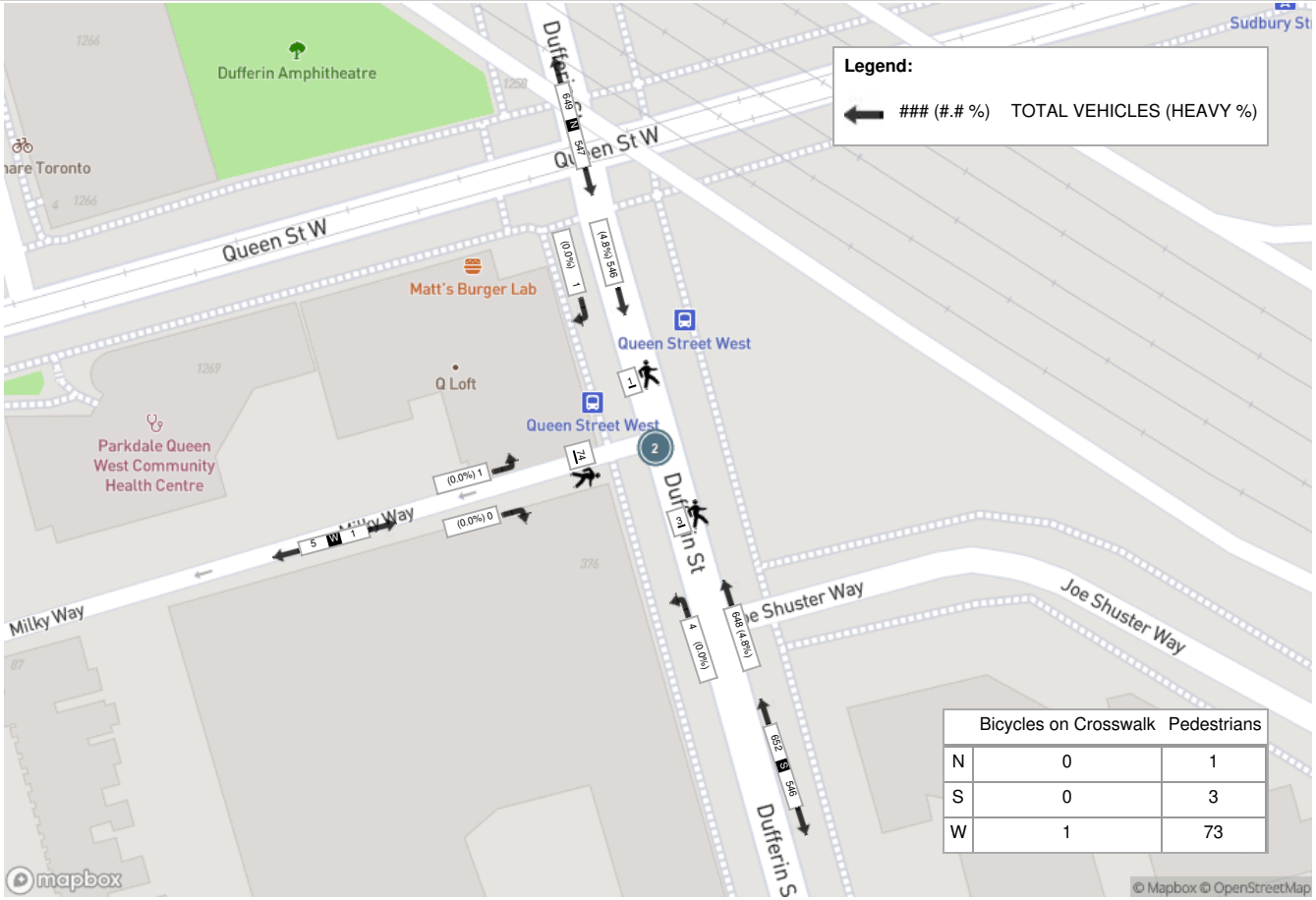
Start Time	N Approach DUFFERIN ST					S Approach DUFFERIN ST					W Approach MILKY WAY					Int. Total (15 min)
	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	
16:15:00	0	130	0	0	130	163	2	0	2	165	0	0	0	21	0	295
16:30:00	0	141	0	1	141	162	2	0	0	164	0	0	0	13	0	305
16:45:00	0	138	0	0	138	159	0	0	1	159	0	1	0	21	1	298
17:00:00	1	137	0	0	138	164	0	0	0	164	0	0	0	19	0	302
Grand Total	1	546	0	1	547	648	4	0	3	652	0	1	0	74	1	**1200**
Approach%	0.2%	99.8%	0%		-	99.4%	0.6%	0%		-	0%	100%	0%		-	**-**
Totals %	0.1%	45.5%	0%		45.6%	54%	0.3%	0%		54.3%	0%	0.1%	0%		0.1%	**-**
PHF	0.25	0.97	0		0.97	0.99	0.5	0		0.99	0	0.25	0		0.25	**-**
Heavy	0	26	0		26	31	0	0		31	0	0	0		0	**-**
Heavy %	0%	4.8%	0%		4.8%	4.8%	0%	0%		4.8%	0%	0%	0%		0%	**-**
Lights	1	520	0		521	617	4	0		621	0	1	0		1	**-**
Lights %	100%	95.2%	0%		95.2%	95.2%	100%	0%		95.2%	0%	100%	0%		100%	**-**
Single-Unit Trucks	0	8	0		8	8	0	0		8	0	0	0		0	**-**
Single-Unit Trucks %	0%	1.5%	0%		1.5%	1.2%	0%	0%		1.2%	0%	0%	0%		0%	**-**
Buses	0	18	0		18	23	0	0		23	0	0	0		0	**-**
Buses %	0%	3.3%	0%		3.3%	3.5%	0%	0%		3.5%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	1	-	-	-	-	3	-	-	-	-	73	-	**-**
Pedestrians%	-	-	-	1.3%		-	-	-	3.8%		-	-	-	93.6%		**-**
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	**-**
Bicycles on Crosswalk%	-	-	-	0%		-	-	-	0%		-	-	-	1.3%		**-**
Bicycles on Road	0	12	0	0	-	8	0	0	0	-	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-2.01 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	2
S	0	1
W	0	57

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (2.58 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	1
S	0	3
W	1	73

Spectrum

Turning Movement Count
Location Name: GWYNNE AVE & MELBOURNE AVE
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (9 . GWYNNE AVE & MELBOURNE AVE)

Start Time	N Approach GWYNNE AVE						E Approach MELBOURNE AVE						S Approach GWYNNE AVE						W Approach MELBOURNE AVE						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:30:00	0	8	3	0	3	11	0	0	2	0	2	2	0	0	0	0	2	0	1	0	0	0	3	1	14	
07:45:00	0	12	2	0	7	14	0	0	3	0	3	3	0	0	0	0	4	0	0	3	0	0	3	3	20	
08:00:00	0	10	1	0	1	11	0	0	1	0	6	1	0	0	0	0	3	0	1	1	0	0	4	2	14	
08:15:00	0	12	1	0	3	13	0	0	3	0	4	3	0	0	0	0	2	0	5	3	0	0	6	8	24	72
08:30:00	0	17	6	0	7	23	0	0	4	0	3	4	0	0	0	0	6	0	2	0	0	0	3	2	29	87
08:45:00	0	22	3	0	6	25	0	0	0	0	5	0	0	0	0	0	4	0	9	4	1	0	4	14	39	106
09:00:00	0	18	4	0	7	22	0	1	4	0	5	5	0	0	0	0	4	0	6	5	0	0	3	11	38	130
09:15:00	0	10	0	0	8	10	0	0	4	0	4	4	0	0	0	0	3	0	8	2	0	0	6	10	24	130
BREAK																										
16:00:00	0	15	2	0	6	17	0	0	7	0	10	7	0	0	0	0	5	0	6	4	0	0	4	10	34	
16:15:00	0	9	2	0	4	11	0	0	3	0	4	3	0	0	0	0	3	0	3	4	0	0	12	7	21	
16:30:00	0	13	2	0	8	15	0	0	1	0	14	1	0	0	0	0	10	0	1	3	0	0	7	4	20	
16:45:00	0	11	9	0	3	20	0	1	3	0	4	4	0	0	0	0	4	0	5	4	0	0	6	9	33	108
17:00:00	0	27	6	0	5	33	0	0	5	0	7	5	0	0	0	0	9	0	8	2	0	0	9	10	48	122
17:15:00	0	26	5	0	2	31	0	0	4	0	5	4	0	0	0	0	9	0	4	7	0	0	9	11	46	147
17:30:00	0	15	8	0	6	23	0	0	6	0	4	6	0	0	0	0	6	0	3	3	0	0	8	6	35	162
17:45:00	0	15	1	0	10	16	0	0	2	0	5	2	0	0	0	0	8	0	3	2	0	0	3	5	23	152
Grand Total	0	240	55	0	86	295	0	2	52	0	85	54	0	0	0	0	82	0	65	47	1	0	90	113	**462**	-
Approach%	0%	81.4%	18.6%	0%		-	0%	3.7%	96.3%	0%		-	0%	0%	0%	0%		-	57.5%	41.6%	0.9%	0%		-	-	-
Totals %	0%	51.9%	11.9%	0%		63.9%	0%	0.4%	11.3%	0%		11.7%	0%	0%	0%	0%		0%	14.1%	10.2%	0.2%	0%		24.5%	-	-
Heavy	0	9	0	0		-	0	0	1	0		-	0	0	0	0		-	0	3	0	0		-	-	-
Heavy %	0%	3.8%	0%	0%		-	0%	0%	1.9%	0%		-	0%	0%	0%	0%		-	0%	6.4%	0%	0%		-	-	-
Bicycles	1	16	0	0		-	0	2	5	0		-	0	4	0	0		-	2	3	2	0		-	-	-
Bicycle %	0%	6.7%	0%	0%		-	0%	100%	9.6%	0%		-	0%	0%	0%	0%		-	3.1%	6.4%	200%	0%		-	-	-

Spectrum

Turning Movement Count
Location Name: GWYNNE AVE & MELBOURNE AVE
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM Weather: Broken Clouds (-2.01 °C)

Start Time	N Approach GWYNNE AVE						E Approach MELBOURNE AVE						S Approach GWYNNE AVE						W Approach MELBOURNE AVE						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:30:00	0	17	6	0	7	23	0	0	4	0	3	4	0	0	0	0	6	0	2	0	0	0	3	2	29
08:45:00	0	22	3	0	6	25	0	0	0	0	5	0	0	0	0	0	4	0	9	4	1	0	4	14	39
09:00:00	0	18	4	0	7	22	0	1	4	0	5	5	0	0	0	0	4	0	6	5	0	0	3	11	38
09:15:00	0	10	0	0	8	10	0	0	4	0	4	4	0	0	0	0	3	0	8	2	0	0	6	10	24
Grand Total	0	67	13	0	28	80	0	1	12	0	17	13	0	0	0	0	17	0	25	11	1	0	16	37	**130**
Approach%	0%	83.8%	16.3%	0%		-	0%	7.7%	92.3%	0%		-	0%	0%	0%	0%		-	67.6%	29.7%	2.7%	0%		-	**-**
Totals %	0%	51.5%	10%	0%		61.5%	0%	0.8%	9.2%	0%		10%	0%	0%	0%	0%		0%	19.2%	8.5%	0.8%	0%		28.5%	**-**
PHF	0	0.76	0.54	0		0.8	0	0.25	0.75	0		0.65	0	0	0	0		0	0.69	0.55	0.25	0		0.66	**-**
Heavy	0	5	0	0		5	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	**-**
Heavy %	0%	7.5%	0%	0%		6.3%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	9.1%	0%	0%		2.7%	**-**
Lights	0	62	13	0		75	0	1	12	0		13	0	0	0	0		0	25	10	1	0		36	**-**
Lights %	0%	92.5%	100%	0%		93.8%	0%	100%	100%	0%		100%	0%	0%	0%	0%		0%	100%	90.9%	100%	0%		97.3%	**-**
Single-Unit Trucks	0	3	0	0		3	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	4.5%	0%	0%		3.8%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Buses	0	2	0	0		2	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Buses %	0%	3%	0%	0%		2.5%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	9.1%	0%	0%		2.7%	**-**
Pedestrians	-	-	-	-	28	-	-	-	-	-	17	-	-	-	-	-	17	-	-	-	-	-	16	-	**-**
Pedestrians%	-	-	-	-	35.9%		-	-	-	-	21.8%		-	-	-	-	21.8%		-	-	-	-	20.5%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**
Bicycles on Road	0	2	0	0	0	-	0	0	1	0	0	-	0	0	0	0	0	-	0	1	0	0	0	-	**-**
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Spectrum

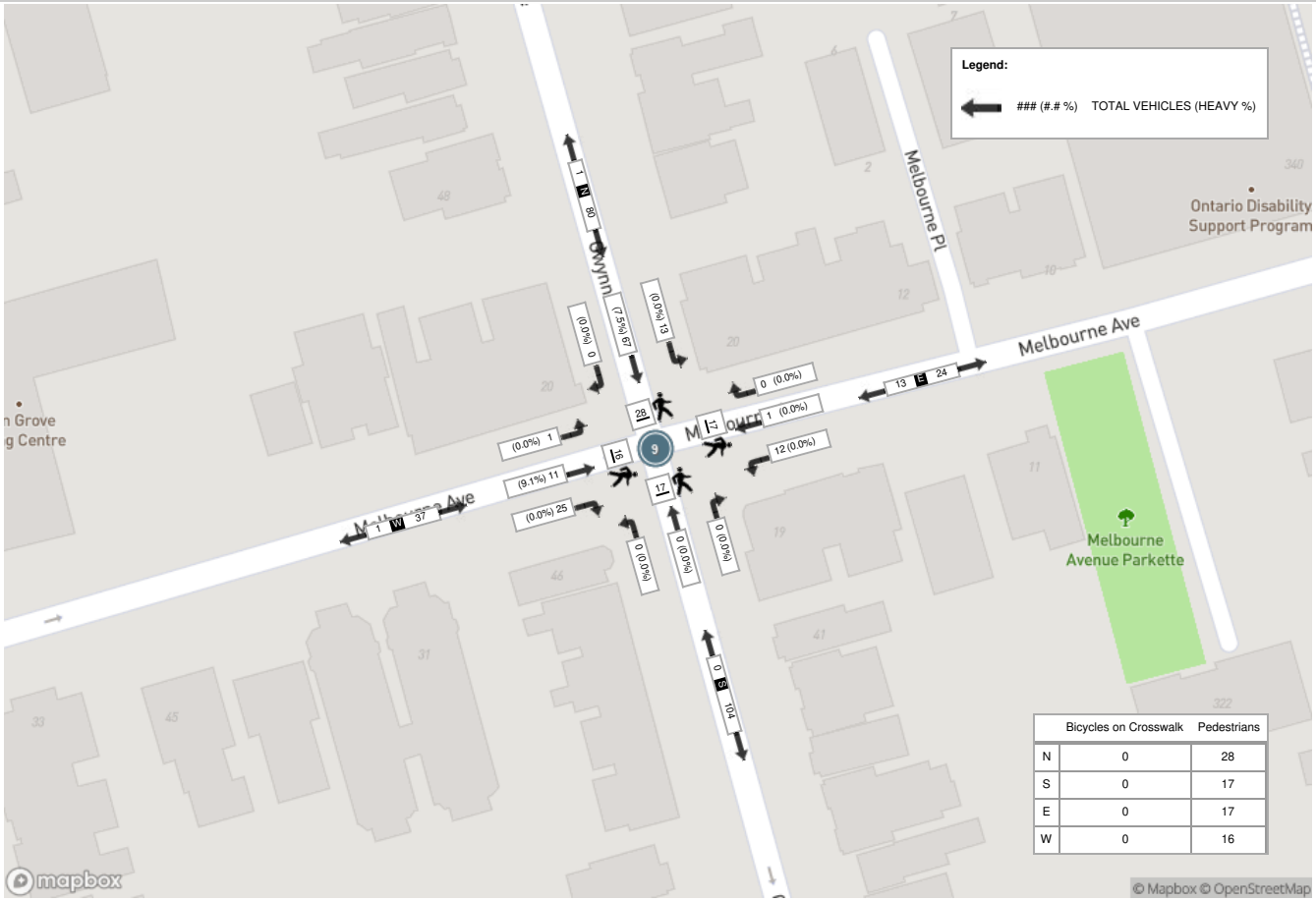
Turning Movement Count
Location Name: GWYNNE AVE & MELBOURNE AVE
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (2.58 °C)

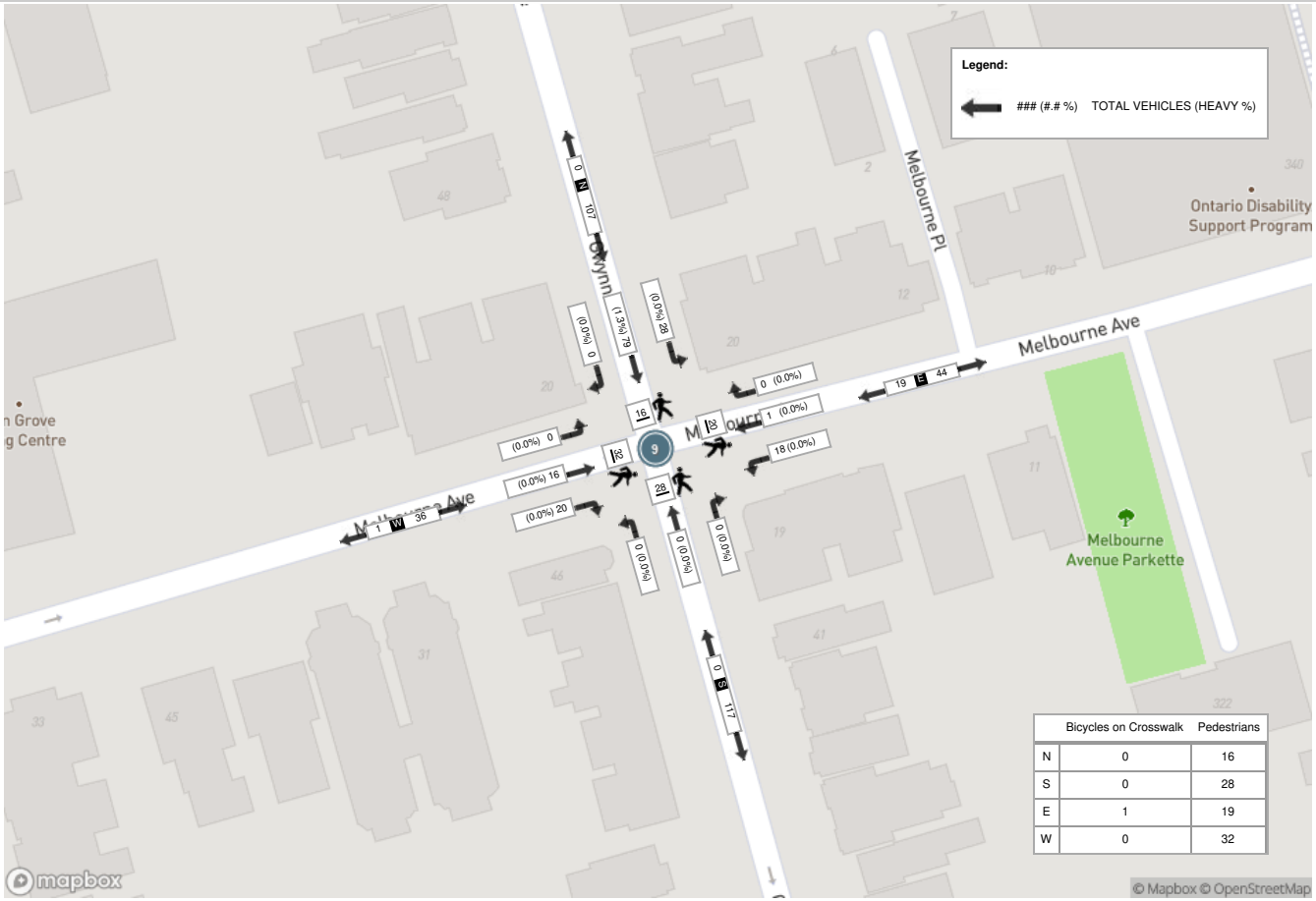
Start Time	N Approach GWYNNE AVE						E Approach MELBOURNE AVE						S Approach GWYNNE AVE						W Approach MELBOURNE AVE						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
16:45:00	0	11	9	0	3	20	0	1	3	0	4	4	0	0	0	0	4	0	5	4	0	0	6	9	33
17:00:00	0	27	6	0	5	33	0	0	5	0	7	5	0	0	0	0	9	0	8	2	0	0	9	10	48
17:15:00	0	26	5	0	2	31	0	0	4	0	5	4	0	0	0	0	9	0	4	7	0	0	9	11	46
17:30:00	0	15	8	0	6	23	0	0	6	0	4	6	0	0	0	0	6	0	3	3	0	0	8	6	35
Grand Total	0	79	28	0	16	107	0	1	18	0	20	19	0	0	0	0	28	0	20	16	0	0	32	36	**162**
Approach%	0%	73.8%	26.2%	0%		-	0%	5.3%	94.7%	0%		-	0%	0%	0%	0%		-	55.6%	44.4%	0%	0%		-	**-**
Totals %	0%	48.8%	17.3%	0%		66%	0%	0.6%	11.1%	0%		11.7%	0%	0%	0%	0%		0%	12.3%	9.9%	0%	0%		22.2%	**-**
PHF	0	0.73	0.78	0		0.81	0	0.25	0.75	0		0.79	0	0	0	0		0	0.63	0.57	0	0		0.82	**-**
Heavy	0	1	0	0		1	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Heavy %	0%	1.3%	0%	0%		0.9%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Lights	0	78	28	0		106	0	1	18	0		19	0	0	0	0		0	20	16	0	0		36	**-**
Lights %	0%	98.7%	100%	0%		99.1%	0%	100%	100%	0%		100%	0%	0%	0%	0%		0%	100%	100%	0%	0%		100%	**-**
Single-Unit Trucks	0	1	0	0		1	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	1.3%	0%	0%		0.9%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Buses	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	16	-	-	-	-	-	19	-	-	-	-	-	28	-	-	-	-	-	32	-	**-**
Pedestrians%	-	-	-	-	16.7%		-	-	-	-	19.8%		-	-	-	-	29.2%		-	-	-	-	33.3%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	1%		-	-	-	-	0%		-	-	-	-	0%		**-**
Bicycles on Road	0	5	0	0	0	-	0	1	3	0	0	-	0	3	0	0	0	-	2	0	2	0	0	-	**-**
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Peak Hour: 08:30 AM - 09:30 AM **Weather: Broken Clouds (-2.01 °C)**



	Bicycles on Crosswalk	Pedestrians
N	0	28
S	0	17
E	0	17
W	0	16

Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (2.58 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	16
S	0	28
E	1	19
W	0	32

Spectrum

Turning Movement Count
Location Name: GWYNNE AVE & MILKY WAY
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (8 . GWYNNE AVE & MILKY WAY)

Start Time	N Approach GWYNNE AVE						E Approach MILKY WAY						S Approach GWYNNE AVE						W Approach MILKY WAY						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:30:00	0	11	0	0	2	11	0	0	0	0	7	0	0	0	0	0	2	0	1	0	0	0	4	1	12	
07:45:00	0	12	1	0	0	13	0	1	0	0	5	1	0	0	0	0	2	0	0	0	0	0	1	0	14	
08:00:00	0	11	0	0	0	11	0	0	1	0	8	1	0	0	0	0	4	0	0	0	0	0	3	0	12	
08:15:00	0	12	1	0	2	13	0	0	1	0	7	1	0	0	0	0	0	0	0	0	0	0	8	0	14	52
08:30:00	0	24	2	0	1	26	0	1	1	0	5	2	0	0	0	0	1	0	0	0	0	0	5	0	28	68
08:45:00	0	25	1	0	2	26	0	0	0	0	8	0	0	0	0	0	2	0	0	0	0	0	4	0	26	80
09:00:00	0	21	3	0	4	24	0	0	0	0	8	0	0	0	0	0	2	0	1	0	0	0	8	1	25	93
09:15:00	0	9	2	0	1	11	0	0	0	0	6	0	0	0	0	0	3	0	0	0	0	0	5	0	11	90
BREAK																										
16:00:00	0	14	0	0	6	14	0	0	2	0	12	2	0	0	0	0	6	0	1	0	0	0	6	1	17	
16:15:00	1	12	2	0	0	15	0	0	0	0	10	0	0	0	0	0	4	0	0	0	0	0	10	0	15	
16:30:00	2	15	0	0	4	17	0	1	0	0	10	1	0	0	0	0	3	0	0	0	0	0	11	0	18	
16:45:00	1	21	1	0	4	23	0	0	0	0	11	0	0	0	0	0	4	0	0	0	0	0	8	0	23	73
17:00:00	1	27	0	0	3	28	0	0	4	0	7	4	0	0	0	0	1	0	0	0	0	0	11	0	32	88
17:15:00	1	28	0	0	4	29	0	2	1	0	10	3	0	0	0	0	2	0	0	0	0	0	8	0	32	105
17:30:00	0	21	0	0	11	21	1	0	3	0	11	4	0	0	0	0	4	0	0	0	0	0	8	0	25	112
17:45:00	0	14	0	0	4	14	1	0	2	0	10	3	0	0	0	0	5	0	0	0	0	0	8	0	17	106
Grand Total	6	277	13	0	48	296	2	5	15	0	135	22	0	0	0	0	45	0	3	0	0	0	108	3	**321**	-
Approach%	2%	93.6%	4.4%	0%		-	9.1%	22.7%	68.2%	0%		-	0%	0%	0%	0%		-	100%	0%	0%	0%		-	**-**	-
Totals %	1.9%	86.3%	4%	0%		92.2%	0.6%	1.6%	4.7%	0%		6.9%	0%	0%	0%	0%		0%	0.9%	0%	0%	0%		0.9%	**-**	-
Heavy	2	8	0	0		-	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	**-**	-
Heavy %	33.3%	2.9%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	**-**	-
Bicycles	1	18	3	0		-	0	1	1	0		-	1	4	1	0		-	0	0	0	0		-	**-**	-
Bicycle %	16.7%	6.5%	23.1%	0%		-	0%	20%	6.7%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	**-**	-

Spectrum

Turning Movement Count
Location Name: GWYNNE AVE & MILKY WAY
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-2.01 °C)

Start Time	N Approach GWYNNE AVE						E Approach MILKY WAY						S Approach GWYNNE AVE						W Approach MILKY WAY						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:15:00	0	12	1	0	2	13	0	0	1	0	7	1	0	0	0	0	0	0	0	0	0	0	8	0	14
08:30:00	0	24	2	0	1	26	0	1	1	0	5	2	0	0	0	0	1	0	0	0	0	0	5	0	28
08:45:00	0	25	1	0	2	26	0	0	0	0	8	0	0	0	0	0	2	0	0	0	0	0	4	0	26
09:00:00	0	21	3	0	4	24	0	0	0	0	8	0	0	0	0	0	2	0	1	0	0	0	8	1	25
Grand Total	0	82	7	0	9	89	0	1	2	0	28	3	0	0	0	0	5	0	1	0	0	0	25	1	**93**
Approach%	0%	92.1%	7.9%	0%		-	0%	33.3%	66.7%	0%		-	0%	0%	0%	0%		-	100%	0%	0%	0%		-	**-**
Totals %	0%	88.2%	7.5%	0%		95.7%	0%	1.1%	2.2%	0%		3.2%	0%	0%	0%	0%		0%	1.1%	0%	0%	0%		1.1%	**-**
PHF	0	0.82	0.58	0		0.86	0	0.25	0.5	0		0.38	0	0	0	0		0	0.25	0	0	0		0.25	**-**
Heavy	0	6	0	0		6	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Heavy %	0%	7.3%	0%	0%		6.7%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Lights	0	76	7	0		83	0	1	2	0		3	0	0	0	0		0	1	0	0	0		1	**-**
Lights %	0%	92.7%	100%	0%		93.3%	0%	100%	100%	0%		100%	0%	0%	0%	0%		0%	100%	0%	0%	0%		100%	**-**
Single-Unit Trucks	0	4	0	0		4	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	4.9%	0%	0%		4.5%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Buses	0	2	0	0		2	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Buses %	0%	2.4%	0%	0%		2.2%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	9	-	-	-	-	-	28	-	-	-	-	-	5	-	-	-	-	-	25	-	**-**
Pedestrians%	-	-	-	-	13.4%		-	-	-	-	41.8%		-	-	-	-	7.5%		-	-	-	-	37.3%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**
Bicycles on Road	0	3	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Spectrum

Turning Movement Count
Location Name: GWYNNE AVE & MILKY WAY
Date: Tue, Mar 08, 2022 Deployment Lead: Tasos Issaaakidis

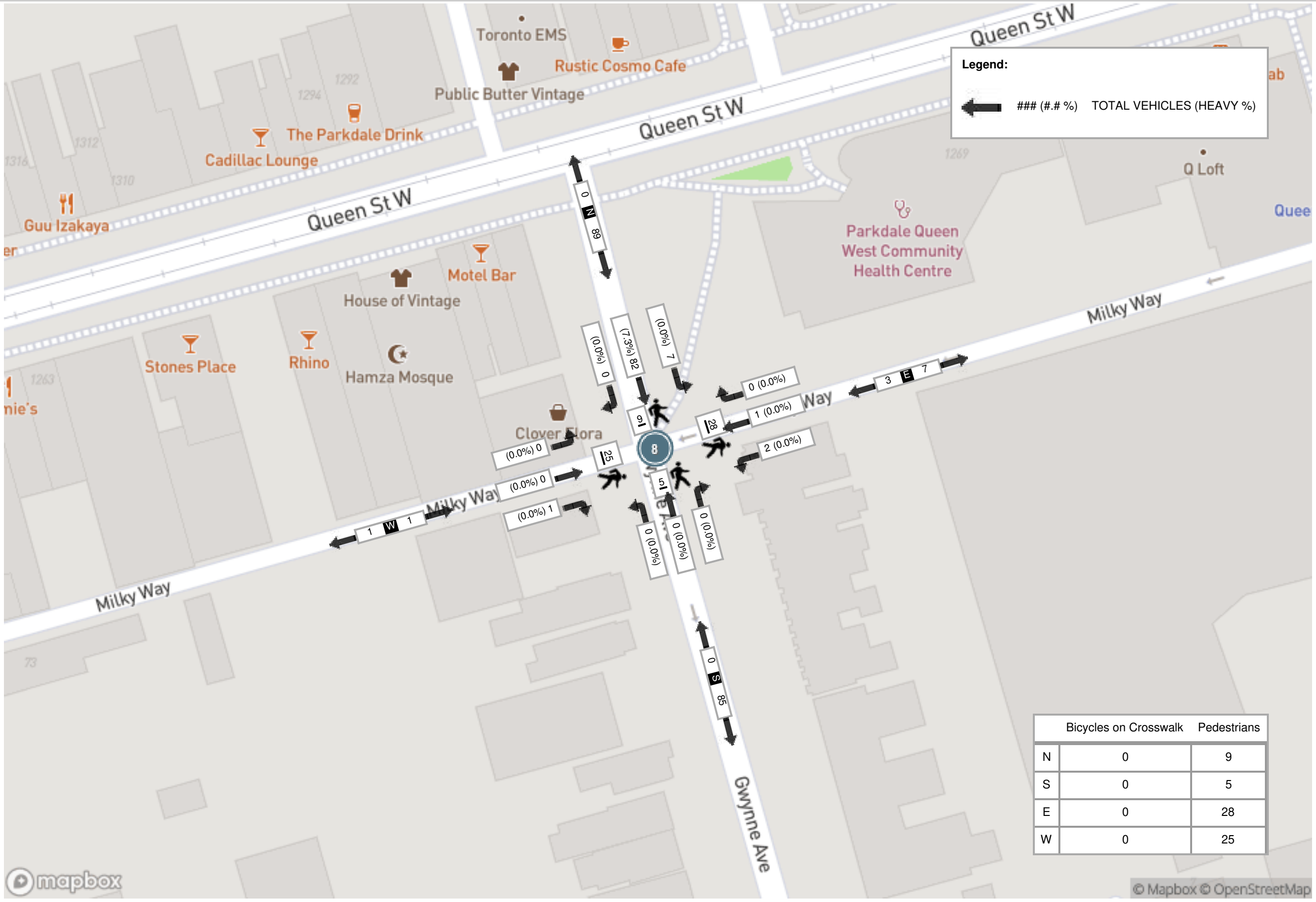
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (2.58 °C)

Start Time	N Approach GWYNNE AVE						E Approach MILKY WAY						S Approach GWYNNE AVE						W Approach MILKY WAY						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
16:45:00	1	21	1	0	4	23	0	0	0	0	11	0	0	0	0	0	4	0	0	0	0	0	8	0	23
17:00:00	1	27	0	0	3	28	0	0	4	0	7	4	0	0	0	0	1	0	0	0	0	0	11	0	32
17:15:00	1	28	0	0	4	29	0	2	1	0	10	3	0	0	0	0	2	0	0	0	0	0	8	0	32
17:30:00	0	21	0	0	11	21	1	0	3	0	11	4	0	0	0	0	4	0	0	0	0	0	8	0	25
Grand Total	3	97	1	0	22	101	1	2	8	0	39	11	0	0	0	0	11	0	0	0	0	0	35	0	**112**
Approach%	3%	96%	1%	0%		-	9.1%	18.2%	72.7%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	**-**
Totals %	2.7%	86.6%	0.9%	0%		90.2%	0.9%	1.8%	7.1%	0%		9.8%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
PHF	0.75	0.87	0.25	0		0.87	0.25	0.25	0.5	0		0.69	0	0	0	0		0	0	0	0	0		0	**-**
Heavy	0	1	0	0		1	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Heavy %	0%	1%	0%	0%		1%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Lights	3	96	1	0		100	1	2	8	0		11	0	0	0	0		0	0	0	0	0		0	**-**
Lights %	100%	99%	100%	0%		99%	100%	100%	100%	0%		100%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Single-Unit Trucks	0	1	0	0		1	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	1%	0%	0%		1%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Buses	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	21	-	-	-	-	-	38	-	-	-	-	-	11	-	-	-	-	-	32	-	**-**
Pedestrians%	-	-	-	-	19.6%		-	-	-	-	35.5%		-	-	-	-	10.3%		-	-	-	-	29.9%		**-**
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0.9%		-	-	-	-	0.9%		-	-	-	-	0%		-	-	-	-	2.8%		**-**
Bicycles on Road	0	4	1	0	0	-	0	1	0	0	0	-	0	2	0	0	0	-	0	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

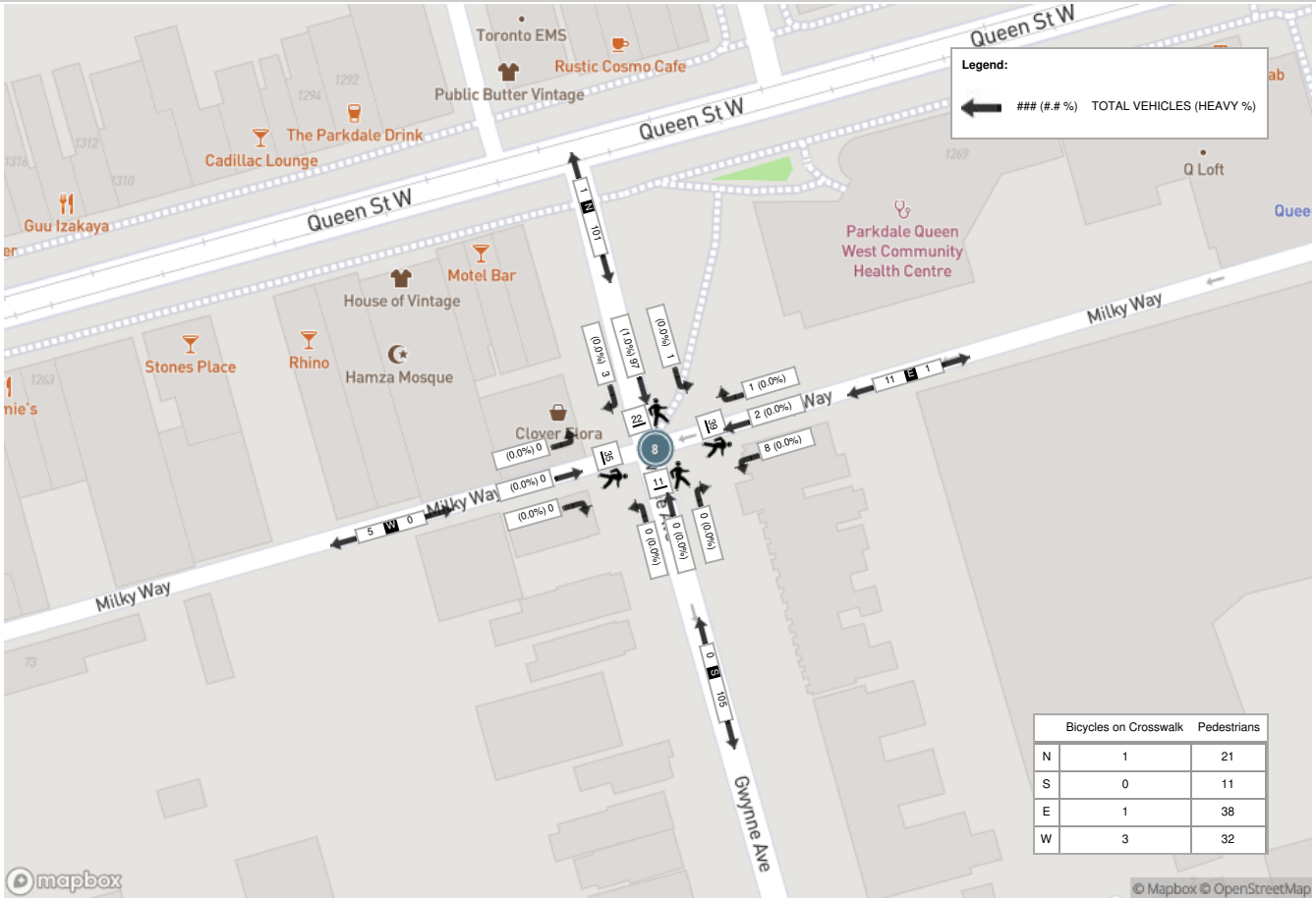
Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-2.01 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	9
S	0	5
E	0	28
W	0	25

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:45 PM - 05:45 PM **Weather: Overcast Clouds (2.58 °C)**



	Bicycles on Crosswalk	Pedestrians
N	1	21
S	0	11
E	1	38
W	3	32

Turning Movement Count (5 . QUEEN ST W & DUFFERIN ST)

Start Time	N Approach DUFFERIN ST						E Approach QUEEN ST W						S Approach DUFFERIN ST						W Approach QUEEN ST W						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	U-Turn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	U-Turn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	U-Turn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	U-Turn W:W	Peds W:	Approach Total		
07:30:00	5	83	12	0	13	100	4	66	30	0	16	100	26	73	5	0	24	104	11	107	15	0	20	133	437	
07:45:00	4	108	10	0	22	122	4	80	42	0	17	126	32	85	9	0	32	126	16	110	7	0	26	133	507	
08:00:00	5	111	6	0	11	122	13	92	40	0	34	145	19	80	7	0	31	106	8	137	10	0	13	155	528	
08:15:00	11	102	8	0	31	121	5	89	56	0	51	150	32	76	6	0	54	114	17	129	11	0	48	157	542	2014
08:30:00	16	113	7	0	35	136	4	79	50	0	36	133	25	78	12	0	52	115	16	146	19	0	44	181	565	2142
08:45:00	8	132	9	0	32	149	3	60	45	0	33	108	30	82	10	0	68	122	14	134	11	0	51	159	538	2173
09:00:00	9	147	17	0	42	173	7	59	35	0	22	101	21	74	12	0	52	107	27	136	10	0	45	173	554	2199
09:15:00	6	107	15	0	32	128	4	80	34	0	12	118	34	78	7	0	40	119	21	135	16	0	47	172	537	2194
BREAK																										
16:00:00	17	71	15	0	47	103	6	139	49	0	39	194	28	115	17	0	67	160	22	69	14	0	37	105	562	
16:15:00	12	84	7	0	55	103	12	131	31	0	26	174	23	95	9	0	52	127	18	90	12	0	38	120	524	
16:30:00	11	80	11	0	60	102	5	162	40	0	31	207	33	110	9	0	77	152	15	78	8	0	51	101	562	
16:45:00	8	90	13	0	65	111	11	99	29	0	37	139	36	120	11	0	50	167	16	80	12	0	48	108	525	2173
17:00:00	18	77	18	0	67	113	12	155	35	0	36	202	22	127	10	0	83	159	18	82	16	0	71	116	590	2201
17:15:00	10	93	7	0	63	110	5	147	32	0	26	184	36	130	12	0	65	178	30	89	21	0	37	140	612	2289
17:30:00	14	112	9	0	76	135	9	142	33	0	40	184	27	124	9	0	81	160	24	84	12	0	79	120	599	2326
17:45:00	18	102	13	0	68	133	13	146	34	0	37	193	26	112	10	0	99	148	15	80	15	0	56	110	584	2385
Grand Total	172	1612	177	0	719	1961	117	1726	615	0	493	2458	450	1560	155	0	927	2164	288	1686	209	0	711	2183	**8766**	-
Approach%	8.8%	82.2%	9%	0%		-	4.8%	70.2%	25%	0%		-	20.8%	72.1%	7.2%	0%		-	13.2%	77.2%	9.6%	0%		-	-	-
Totals %	2%	18.4%	2%	0%		22.4%	1.3%	19.7%	7%	0%		28%	5.1%	17.8%	1.8%	0%		24.7%	3.3%	19.2%	2.4%	0%		24.9%	-	-
Heavy	8	96	2	0		-	3	102	29	0		-	21	92	6	0		-	7	96	12	0		-	-	-
Heavy %	4.7%	6%	1.1%	0%		-	2.6%	5.9%	4.7%	0%		-	4.7%	5.9%	3.9%	0%		-	2.4%	5.7%	5.7%	0%		-	-	-
Bicycles	1	9	1	0		-	0	30	2	0		-	7	5	0	0		-	4	46	0	0		-	-	-
Bicycle %	0.6%	0.6%	0.6%	0%		-	0%	1.7%	0.3%	0%		-	1.6%	0.3%	0%	0%		-	1.4%	2.7%	0%	0%		-	-	-

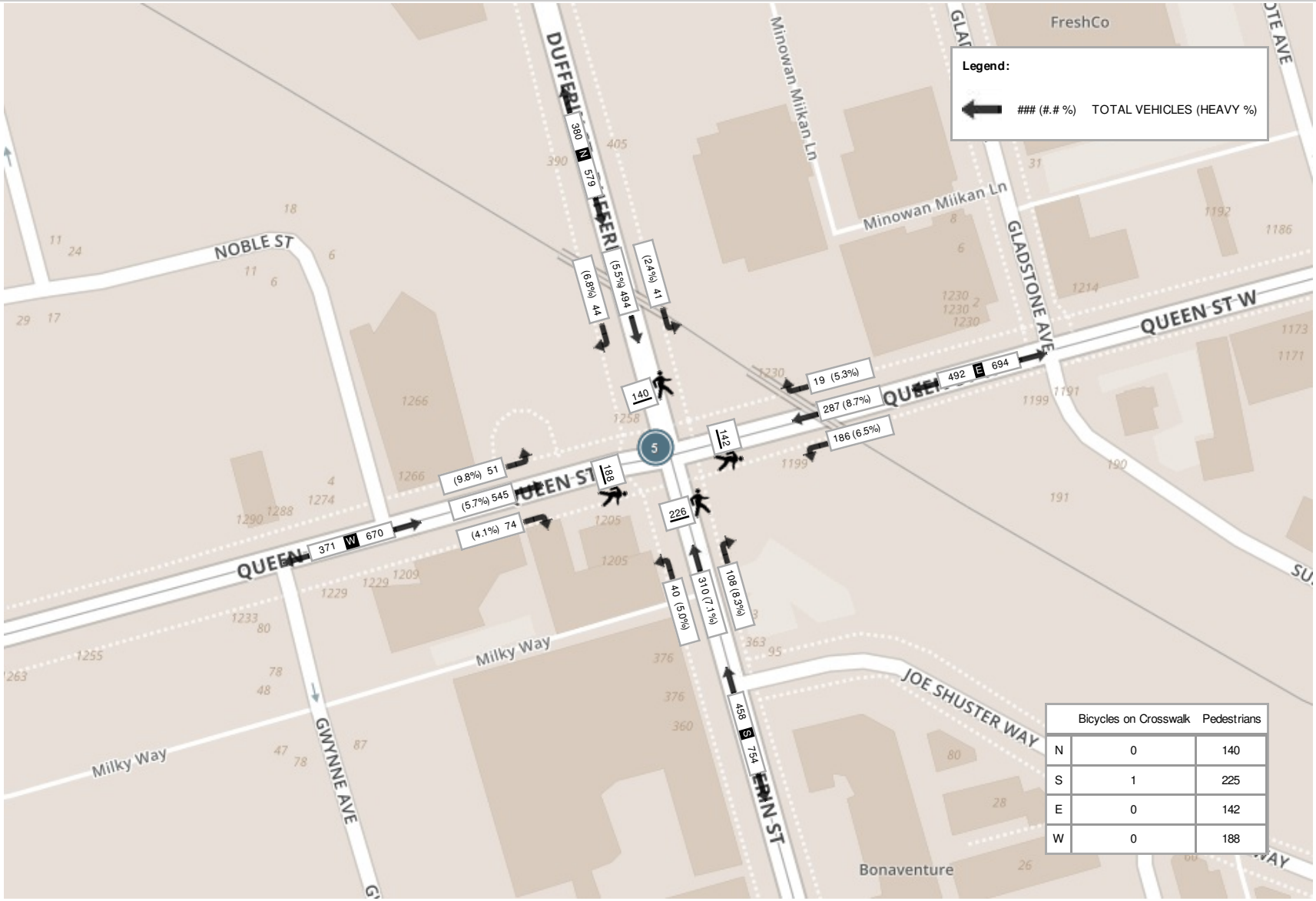
Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (2.6 °C)

Start Time	N Approach DUFFERIN ST						E Approach QUEEN ST W						S Approach DUFFERIN ST						W Approach QUEEN ST W						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
08:15:00	11	102	8	0	31	121	5	89	56	0	51	150	32	76	6	0	54	114	17	129	11	0	48	157	542
08:30:00	16	113	7	0	35	136	4	79	50	0	36	133	25	78	12	0	52	115	16	146	19	0	44	181	565
08:45:00	8	132	9	0	32	149	3	60	45	0	33	108	30	82	10	0	68	122	14	134	11	0	51	159	538
09:00:00	9	147	17	0	42	173	7	59	35	0	22	101	21	74	12	0	52	107	27	136	10	0	45	173	554
Grand Total	44	494	41	0	140	579	19	287	186	0	142	492	108	310	40	0	226	458	74	545	51	0	188	670	**2199**
Approach%	7.6%	85.3%	7.1%	0%		-	3.9%	58.3%	37.8%	0%		-	23.6%	67.7%	8.7%	0%		-	11%	81.3%	7.6%	0%		-	**-**
Totals %	2%	22.5%	1.9%	0%		26.3%	0.9%	13.1%	8.5%	0%		22.4%	4.9%	14.1%	1.8%	0%		20.8%	3.4%	24.8%	2.3%	0%		30.5%	**-**
PHF	0.69	0.84	0.6	0		0.84	0.68	0.81	0.83	0		0.82	0.84	0.95	0.83	0		0.94	0.69	0.93	0.67	0		0.93	**-**
Heavy	3	27	1	0		31	1	25	12	0		38	9	22	2	0		33	3	31	5	0		39	**-**
Heavy %	6.8%	5.5%	2.4%	0%		5.4%	5.3%	8.7%	6.5%	0%		7.7%	8.3%	7.1%	5%	0%		7.2%	4.1%	5.7%	9.8%	0%		5.8%	**-**
Lights	41	467	40	0		548	18	262	174	0		454	99	288	38	0		425	71	514	46	0		631	**-**
Lights %	93.2%	94.5%	97.6%	0%		94.6%	94.7%	91.3%	93.5%	0%		92.3%	91.7%	92.9%	95%	0%		92.8%	95.9%	94.3%	90.2%	0%		94.2%	**-**
Single-Unit Trucks	2	11	1	0		14	1	6	9	0		16	6	12	1	0		19	3	11	4	0		18	**-**
Single-Unit Trucks %	4.5%	2.2%	2.4%	0%		2.4%	5.3%	2.1%	4.8%	0%		3.3%	5.6%	3.9%	2.5%	0%		4.1%	4.1%	2%	7.8%	0%		2.7%	**-**
Buses	1	16	0	0		17	0	18	3	0		21	2	9	1	0		12	0	20	0	0		20	**-**
Buses %	2.3%	3.2%	0%	0%		2.9%	0%	6.3%	1.6%	0%		4.3%	1.9%	2.9%	2.5%	0%		2.6%	0%	3.7%	0%	0%		3%	**-**
Articulated Trucks	0	0	0	0		0	0	1	0	0		1	1	1	0	0		2	0	0	1	0		1	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0.3%	0%	0%		0.2%	0.9%	0.3%	0%	0%		0.4%	0%	0%	2%	0%		0.1%	**-**
Pedestrians	-	-	-	-	140	-	-	-	-	-	142	-	-	-	-	-	225	-	-	-	-	-	188	-	**-**
Pedestrians%	-	-	-	-	20.1%		-	-	-	-	20.4%		-	-	-	-	32.3%		-	-	-	-	27%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0.1%		-	-	-	-	0%		**-**
Bicycles on Road	1	2	0	0	0	-	0	2	0	0	0	-	1	2	0	0	0	-	1	23	0	0	0	-	**-**
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Peak Hour: 05:00 PM - 06:00 PM Weather: Few Clouds (3.39 °C)

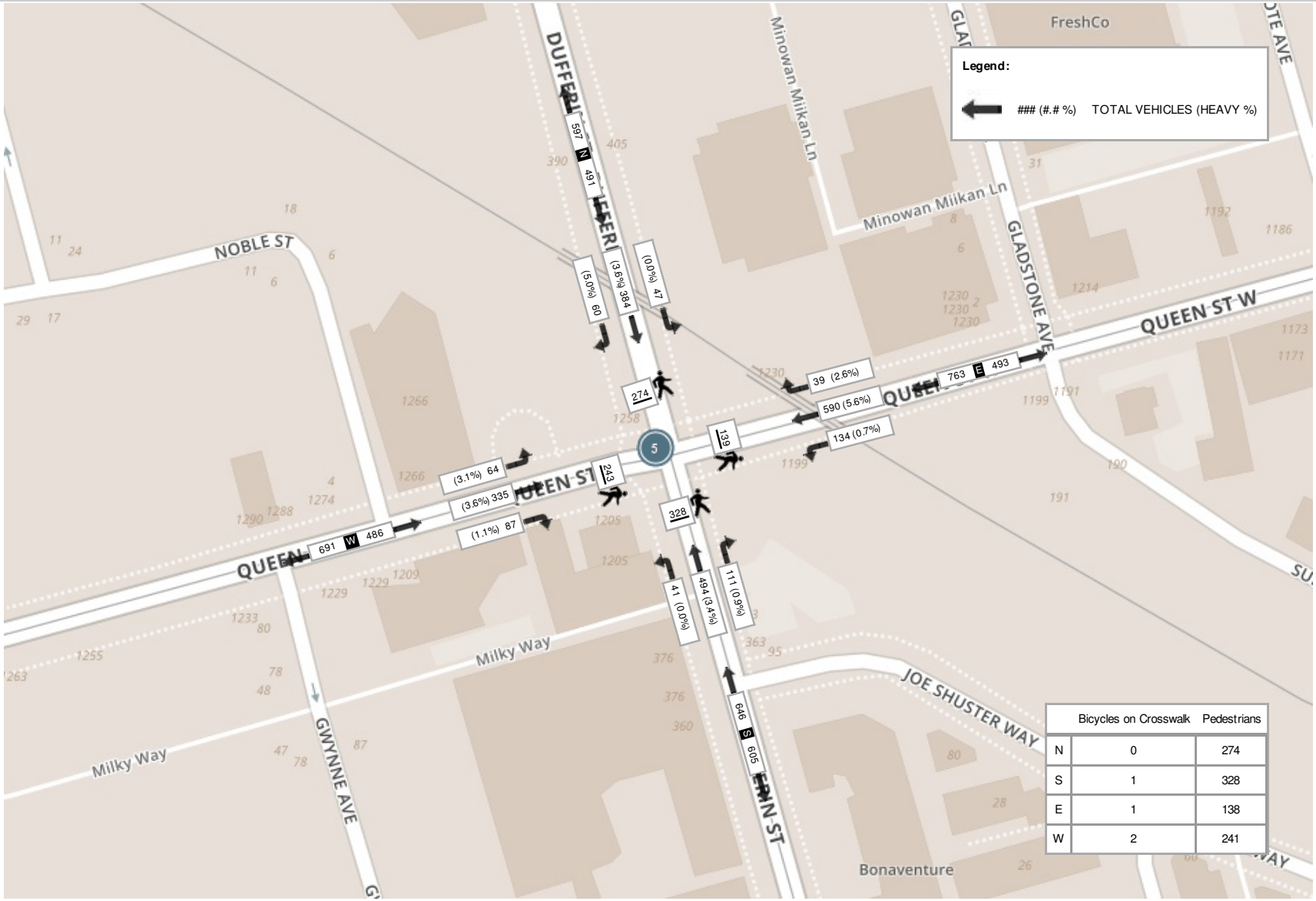
Start Time	N Approach DUFFERIN ST						E Approach QUEEN ST W						S Approach DUFFERIN ST						W Approach QUEEN ST W						Int. Total (15 min)
	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	Right	Thru	Left	U-Turn	Peds	Approach Total	
17:00:00	18	77	18	0	67	113	12	155	35	0	36	202	22	127	10	0	83	159	18	82	16	0	71	116	590
17:15:00	10	93	7	0	63	110	5	147	32	0	26	184	36	130	12	0	65	178	30	89	21	0	37	140	612
17:30:00	14	112	9	0	76	135	9	142	33	0	40	184	27	124	9	0	81	160	24	84	12	0	79	120	599
17:45:00	18	102	13	0	68	133	13	146	34	0	37	193	26	112	10	0	99	148	15	80	15	0	56	110	584
Grand Total	60	384	47	0	274	491	39	590	134	0	139	763	111	494	41	0	328	645	87	335	64	0	243	486	**2385**
Approach%	12.2%	78.2%	9.6%	0%		-	5.1%	77.3%	17.6%	0%		-	17.2%	76.6%	6.4%	0%		-	17.9%	68.9%	13.2%	0%		-	-
Totals %	2.5%	16.1%	2%	0%		20.6%	1.6%	24.7%	5.6%	0%		32%	4.7%	20.7%	1.7%	0%		27%	3.6%	14%	2.7%	0%		20.4%	-
PHF	0.83	0.86	0.65	0		0.91	0.75	0.95	0.96	0		0.94	0.77	0.95	0.85	0		0.91	0.73	0.94	0.76	0		0.87	-
Heavy	3	14	0	0		17	1	33	1	0		35	1	17	0	0		18	1	12	2	0		15	-
Heavy %	5%	3.6%	0%	0%		3.5%	2.6%	5.6%	0.7%	0%		4.6%	0.9%	3.4%	0%	0%		2.8%	1.1%	3.6%	3.1%	0%		3.1%	-
Lights	57	370	47	0		474	38	557	133	0		728	110	476	41	0		627	86	323	62	0		471	-
Lights %	95%	96.4%	100%	0%		96.5%	97.4%	94.4%	99.3%	0%		95.4%	99.1%	96.4%	100%	0%		97.2%	98.9%	96.4%	96.9%	0%		96.9%	-
Single-Unit Trucks	3	1	0	0		4	1	16	1	0		18	0	3	0	0		3	1	2	1	0		4	-
Single-Unit Trucks %	5%	0.3%	0%	0%		0.8%	2.6%	2.7%	0.7%	0%		2.4%	0%	0.6%	0%	0%		0.5%	1.1%	0.6%	1.6%	0%		0.8%	-
Buses	0	13	0	0		13	0	17	0	0		17	1	14	0	0		15	0	10	1	0		11	-
Buses %	0%	3.4%	0%	0%		2.6%	0%	2.9%	0%	0%		2.2%	0.9%	2.8%	0%	0%		2.3%	0%	3%	1.6%	0%		2.3%	-
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	-
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	-	274	-	-	-	-	-	138	-	-	-	-	-	327	-	-	-	-	-	241	-	-
Pedestrians%	-	-	-	-	27.8%		-	-	-	-	14%		-	-	-	-	33.2%		-	-	-	-	24.5%		-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	2	-	-
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0.1%		-	-	-	-	0.1%		-	-	-	-	0.2%		-
Bicycles on Road	0	3	0	0	0	-	0	16	0	0	0	-	3	1	0	0	0	-	2	10	0	0	0	-	-
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-

Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (2.6 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	140
S	1	225
E	0	142
W	0	188

Peak Hour: 05:00 PM - 06:00 PM Weather: Few Clouds (3.39 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	274
S	1	328
E	1	138
W	2	241

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (7 . QUEEN ST W & GWYNNE AVE)

Start Time	E Approach QUEEN ST W					S Approach GWYNNE AVE					W Approach QUEEN ST W					Int. Total (15 min)	Int. Total (1 hr)
	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	UTurn W:W	Peds W:	Approach Total		
07:30:00	71	6	0	0	77	0	0	0	7	0	5	135	0	2	140	217	
07:45:00	63	9	0	2	72	0	0	0	16	0	2	151	0	0	153	225	
08:00:00	65	6	0	1	71	0	0	0	19	0	5	166	0	1	171	242	
08:15:00	65	7	0	1	72	0	0	0	24	0	6	174	0	0	180	252	936
08:30:00	88	12	0	0	100	0	0	0	23	0	14	161	0	0	175	275	994
08:45:00	84	14	0	1	98	0	0	0	22	0	12	178	0	1	190	288	1057
09:00:00	74	9	0	1	83	0	0	0	16	0	15	153	0	0	168	251	1066
09:15:00	58	7	0	0	65	0	0	0	11	0	4	153	0	1	157	222	1036
BREAK																	
16:00:00	115	5	0	1	120	0	0	0	45	0	8	92	0	4	100	220	
16:15:00	106	10	0	1	116	0	0	0	43	0	5	106	1	6	112	228	
16:30:00	117	8	0	4	125	0	0	0	47	0	9	85	1	9	95	220	
16:45:00	135	13	0	5	148	0	0	0	24	0	11	96	0	10	107	255	923
17:00:00	94	17	0	1	111	0	0	0	34	0	11	97	1	1	109	220	923
17:15:00	119	15	0	1	134	0	0	0	36	0	14	105	0	12	119	253	948
17:30:00	117	9	0	0	126	0	1	0	49	1	12	106	0	5	118	245	973
17:45:00	111	9	0	2	120	1	0	0	56	1	6	101	0	2	107	228	946
Grand Total	1482	156	0	21	1638	1	1	0	472	2	139	2059	3	54	2201	**3841**	-
Approach%	90.5%	9.5%	0%		-	50%	50%	0%		-	6.3%	93.5%	0.1%		-	**-**	-
Totals %	38.6%	4.1%	0%		42.6%	0%	0%	0%		0.1%	3.6%	53.6%	0.1%		57.3%	**-**	-
Heavy	160	3	0		-	0	0	0		-	7	136	0		-	**-**	-
Heavy %	10.8%	1.9%	0%		-	0%	0%	0%		-	5%	6.6%	0%		-	**-**	-
Bicycles	43	8	0		-	2	1	0		-	13	50	0		-	**-**	-
Bicycle %	2.9%	5.1%	0%		-	200%	100%	0%		-	9.4%	2.4%	0%		-	**-**	-

Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-2.01 °C)

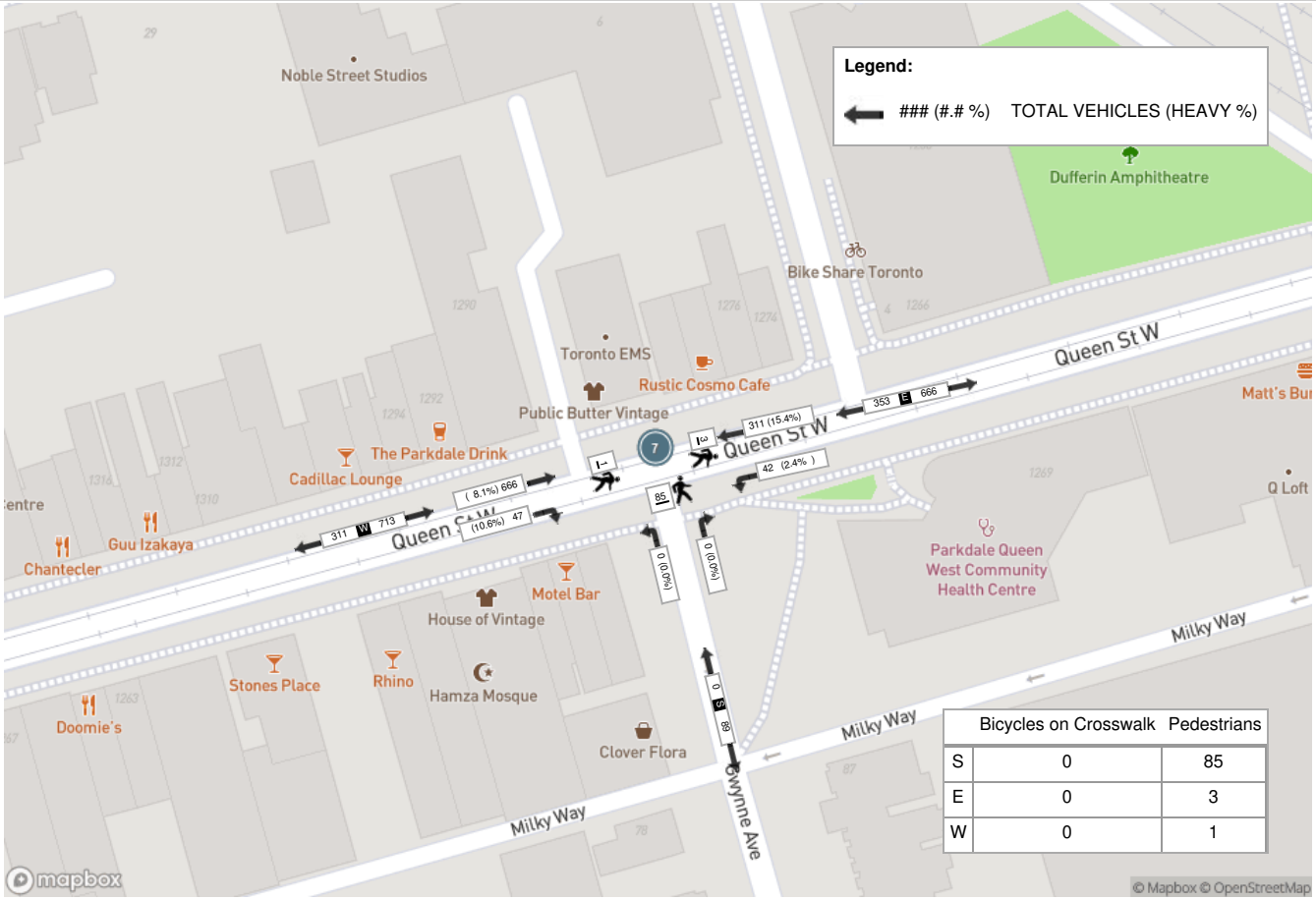
Start Time	E Approach QUEEN ST W					S Approach GWYNNE AVE					W Approach QUEEN ST W					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
08:15:00	65	7	0	1	72	0	0	0	24	0	6	174	0	0	180	252
08:30:00	88	12	0	0	100	0	0	0	23	0	14	161	0	0	175	275
08:45:00	84	14	0	1	98	0	0	0	22	0	12	178	0	1	190	288
09:00:00	74	9	0	1	83	0	0	0	16	0	15	153	0	0	168	251
Grand Total	311	42	0	3	353	0	0	0	85	0	47	666	0	1	713	**1066**
Approach%	88.1%	11.9%	0%		-	0%	0%	0%		-	6.6%	93.4%	0%		-	**-**
Totals %	29.2%	3.9%	0%		33.1%	0%	0%	0%		0%	4.4%	62.5%	0%		66.9%	**-**
PHF	0.88	0.75	0		0.88	0	0	0		0	0.78	0.94	0		0.94	**-**
Heavy	48	1	0		49	0	0	0		0	5	54	0		59	**-**
Heavy %	15.4%	2.4%	0%		13.9%	0%	0%	0%		0%	10.6%	8.1%	0%		8.3%	**-**
Lights	263	41	0		304	0	0	0		0	42	612	0		654	**-**
Lights %	84.6%	97.6%	0%		86.1%	0%	0%	0%		0%	89.4%	91.9%	0%		91.7%	**-**
Single-Unit Trucks	11	1	0		12	0	0	0		0	3	35	0		38	**-**
Single-Unit Trucks %	3.5%	2.4%	0%		3.4%	0%	0%	0%		0%	6.4%	5.3%	0%		5.3%	**-**
Buses	37	0	0		37	0	0	0		0	2	19	0		21	**-**
Buses %	11.9%	0%	0%		10.5%	0%	0%	0%		0%	4.3%	2.9%	0%		2.9%	**-**
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	3	-	-	-	-	85	-	-	-	-	1	-	**-**
Pedestrians%	-	-	-	3.4%		-	-	-	95.5%		-	-	-	1.1%		**-**
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**
Bicycles on Road	2	0	0	0	-	0	0	0	0	-	4	9	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (2.58 °C)

Start Time	E Approach QUEEN ST W					S Approach GWYNNE AVE					W Approach QUEEN ST W					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
16:45:00	135	13	0	5	148	0	0	0	24	0	11	96	0	10	107	255
17:00:00	94	17	0	1	111	0	0	0	34	0	11	97	1	1	109	220
17:15:00	119	15	0	1	134	0	0	0	36	0	14	105	0	12	119	253
17:30:00	117	9	0	0	126	0	1	0	49	1	12	106	0	5	118	245
Grand Total	465	54	0	7	519	0	1	0	143	1	48	404	1	28	453	**973**
Approach%	89.6%	10.4%	0%		-	0%	100%	0%		-	10.6%	89.2%	0.2%		-	**-**
Totals %	47.8%	5.5%	0%		53.3%	0%	0.1%	0%		0.1%	4.9%	41.5%	0.1%		46.6%	**-**
PHF	0.86	0.79	0		0.88	0	0.25	0		0.25	0.86	0.95	0.25		0.95	**-**
Heavy	34	1	0		35	0	0	0		0	0	17	0		17	**-**
Heavy %	7.3%	1.9%	0%		6.7%	0%	0%	0%		0%	0%	4.2%	0%		3.8%	**-**
Lights	431	53	0		484	0	1	0		1	48	387	1		436	**-**
Lights %	92.7%	98.1%	0%		93.3%	0%	100%	0%		100%	100%	95.8%	100%		96.2%	**-**
Single-Unit Trucks	8	1	0		9	0	0	0		0	0	3	0		3	**-**
Single-Unit Trucks %	1.7%	1.9%	0%		1.7%	0%	0%	0%		0%	0%	0.7%	0%		0.7%	**-**
Buses	26	0	0		26	0	0	0		0	0	14	0		14	**-**
Buses %	5.6%	0%	0%		5%	0%	0%	0%		0%	0%	3.5%	0%		3.1%	**-**
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	6	-	-	-	-	141	-	-	-	-	28	-	**-**
Pedestrians%	-	-	-	3.4%		-	-	-	79.2%		-	-	-	15.7%		**-**
Bicycles on Crosswalk	-	-	-	1	-	-	-	-	2	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	0.6%		-	-	-	1.1%		-	-	-	0%		**-**
Bicycles on Road	18	4	0	0	-	1	0	0	0	-	2	18	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

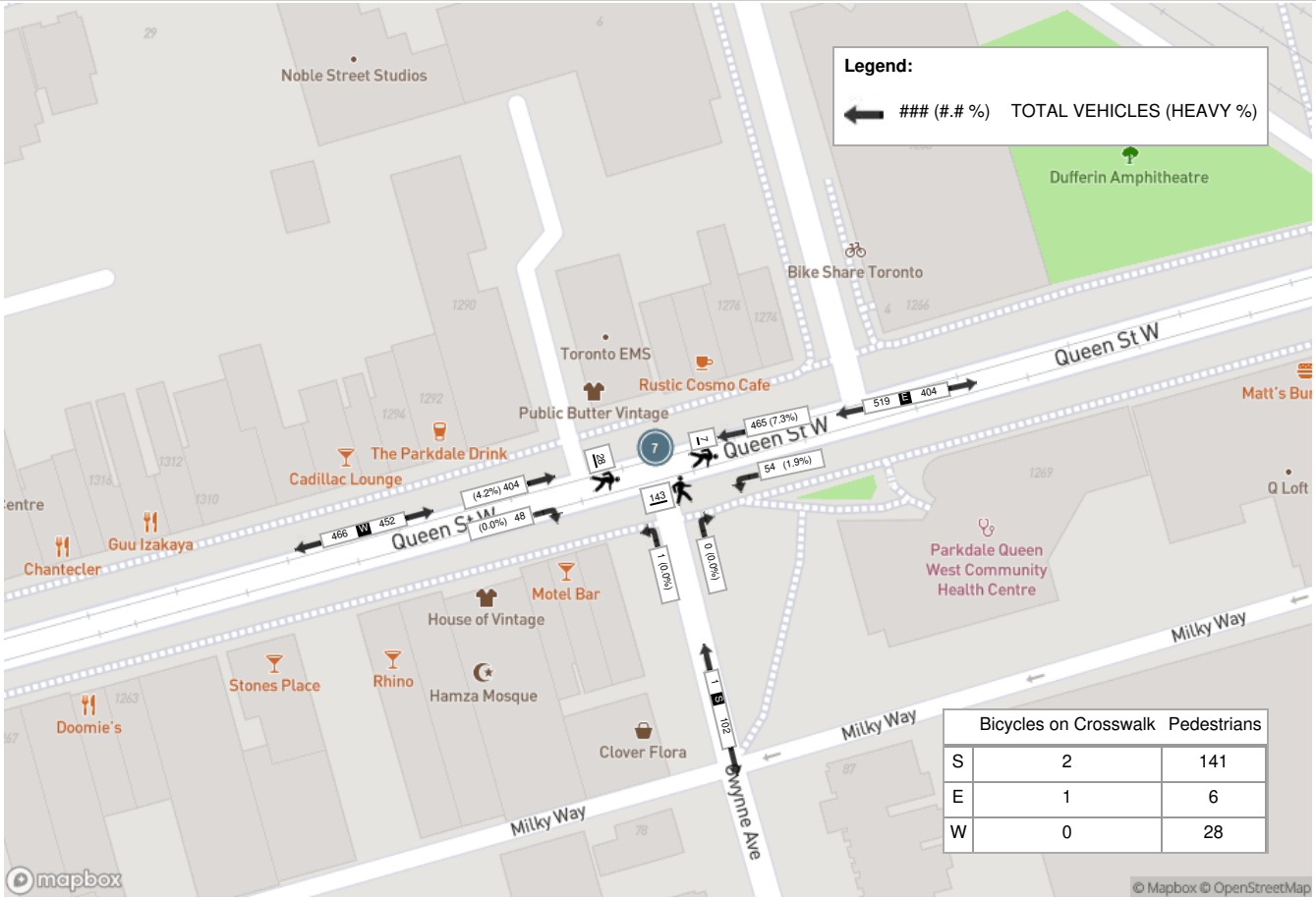
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-2.01 °C)



	Bicycles on Crosswalk	Pedestrians
S	0	85
E	0	3
W	0	1

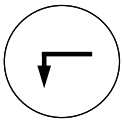
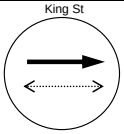
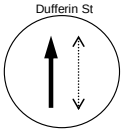
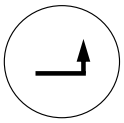
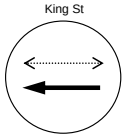
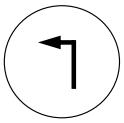
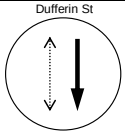
Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (2.58 °C)



	Bicycles on Crosswalk	Pedestrians
S	2	141
E	1	6
W	0	28

LOCATION:	**King St & Dufferin St**	**ATO / DISTRICT / WARD:**	**Area 1 / Toronto & East York / Ward 4 & 10**
MODE/COMMENT:	**SA1 with TSP**	**COMPUTER SYSTEM:**	**TransSuite**
TCS:	**539**	**CONTROLLER/CABINET TYPE:**	**Peek ATC-1000 / TS2T1**
PREPARED BY / DATE:	**RanaJamil Iftikhar / Jaunary 13, 2021**	**CONFLICT FLASH:**	**Red & Red**
CHECKED BY / DATE:		**DESIGN WALK SPEED:**	**0.9 m/s (FDW based on full crossing at 1.1 m/s)**
IMPLEMENTATION DATE:	**January 13, 2021**	**CHANNEL/DROP:**	**4026/18**
		CONTROLLER/FIRMWARE:	**3.018.1.2976**

N

NEMA Phase		OFF All Other Times	AM 06:30-09:30 M-F	PM 15:00-19:00 M-F	NGHT 23:00-06:30 Daily	WKND 10:00-19:00 Sat/Sun	Caribana TBD	Phase Mode (Fixed/Demanded or Callable)	Remarks
	Local Plan	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6		
	Split Table	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6		
1 	WLK FDW MIN 10 MAX1 10 AMB 3 ALR 6 SPLIT	0	0	0	0	0	0	Protected/Permissive WBLTGA Callable by WBLT streetcars via interrogator (Max extension of 10 secs in WBLA)	Pedestrian Minimums: EWWK = 8 sec, EWFD = 15 sec NSWK = 8 sec, NSFD = 15 sec Left Turn Passage Time = 2 sec See back for TSP instructions. ~~TSP enabled on June 23, 2015~~ Due to restrictions in ATC-1000 firmware version 3.18.2976, phase 2 & 6 splits must be programmed as at least 30 during all patterns at this intersection. TSP temporarily disabled on January 13, 2021 during bus replacement for 504 King routes.
2 King St 	WLK 8 FDW 15 MIN 23 MAX1 26 AMB 3.3 ALR 2.2 SPLIT	32	41	35	33	33	35	Fixed POZ activated by Request Loop (Max extension of 16 secs in Green/SDW)	
3 NOT USED	WLK FDW MIN MAX1 AMB ALR SPLIT								
4 Dufferin St 	WLK 8 FDW 15 MIN 23 MAX1 40 AMB 3.3 ALR 2.2 SPLIT	46	39	45	31	47	45	Fixed POZ activated by Request Loop (Max extension of 16 secs in Green/SDW)	
5 	WLK FDW MIN 6 MAX1 6 AMB 3.3 ALR 4.0 SPLIT							Demanded (In Shared Thru-Left Lane) **Reserved for Future Use** Times to be Determined	
6 King St 	WLK 8 FDW 15 MIN 23 MAX1 26 AMB 3.3 ALR 2.2 SPLIT	32	41	35	33	33	35	Fixed POZ activated by Request Loop (Max extension of 16 secs in Green/SDW)	
7 	WLK FDW MIN 6 MAX1 6 AMB 3.3 ALR 3.9 SPLIT	14		14		14	14	Demanded (In Shared Thru-Left Lane)	
8 Dufferin St 	WLK 8 FDW 15 MIN 23 MAX1 26 AMB 3.3 ALR 2.2 SPLIT	32	39	31	31	33	31	Fixed POZ activated by Request Loop (Max extension of 16 secs in Green/SDW)	
	CL OF	78 53	80 24	80 29	64 29	80 45	80 46		

Note:

LOCATION:	**Queen St W & Dufferin St**	***DISTRICT:***	**Toronto & East York**
MODE/COMMENT:	**FXT with LPI & TSP*, with 2 Wire Polara APS****	***COMPUTER SYSTEM:***	**TransSuite**
TCS:	**1329**	***CONTROLLER/CABINET TYPE:***	**Peek ATC-1000 / TS2 T1**
PREPARED/CHECKED BY:	***CIMA+/AD***	***CONFLICT FLASH:***	**Red & Red**
PREPARATION DATE:	**June 25, 2018**	***DESIGN WALK SPEED:***	**1.0 m/s (FDW based on full crossing at 1.2 m/s)**
IMPLEMENTATION DATE:	**August 8, 2018**	***CHANNEL/DROP:***	**4003/35**
		CONTROLLER FIRMWARE:	**3.018.1.2976**

N

NEMA Phase		OFF	AM	PM	NGHT	WKND	Event	Phase Mode	Remarks
		All Other Times	06:30-09:30 M-F	15:00-19:00 M-F	23:00 - 06:30 Daily	10:00-19:00 Sat & Sun	TBD	(Fixed/Demanded or Callable)	
	Local Plan	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 16		
	Split Table	Split 1	Split 2	Split 3	Split 4	Split 5	Split 16		
1	WLK							Fixed POZ activated by Request Loop All times except NGHT plan (max extension of 13 secs in Green)	Pedestrian Minimums: EWWK = 7 sec, EWFD = 18 sec NSWK = 7 sec, NSFD = 13 sec
	FDW								NS Leading Pedestrian Interval 5 secs - NSWK comes up 5 secs before NS vehicle green.
	MIN 6								*See back for TSP instructions
	MAX1 7								TSP activated for WBLT, EB/WB through phases on June 15, 2017. NB/SB TSP enabled on January 10, 2018.
	AMB 3								Activated APS on for FULL Walk during EW & NS walk periods when no arrow is displayed.
	ALR 1								Extended Push Activation= 3 seconds
	SPLIT	11	11	11		11	11		**APS pending third party activation
Queen St W 2	WLK 7							Fixed POZ activated by Request Loop (max extension of 16 secs in Green/SDW)	
	FDW 18								
	MIN 25								
	MAX1 26								
	AMB 3								
	ALR 4								
	SPLIT	33	37	33	33	34	38		
3 NOT USED	WLK								
	FDW								
	MIN								
	MAX1								
	AMB								
	ALR								
	SPLIT								
Dufferin St 4	ADV WLK 5							Fixed POZ activated by Request Loop Split shown includes 5 secs of NS LPI (max extension of 16 secs in Green/SDW)	
	WLK 7								
	FDW 12								
	MIN 19								
	MAX1 20								
	AMB 4								
	ALR 2								
	SPLIT	32	32	36	31	35	31		
5 NOT USED	WLK								
	FDW								
	MIN								
	MAX1								
	AMB								
	ALR								
	SPLIT								
Queen St W 6	WLK 7							Fixed POZ activated by Request Loop (max extension of 16 secs in Green/SDW)	
	FDW 18								
	MIN 25								
	MAX1 37								
	AMB 3								
	ALR 4								
	SPLIT	44	48	44	33	45	49		
7 NOT USED	WLK								
	FDW								
	MIN								
	MAX1								
	AMB								
	ALR								
	SPLIT								
Dufferin St 8	ADV WLK 5							Fixed POZ activated by Request Loop (max extension of 16 secs in Green/SDW)	
	WLK 7								
	FDW 12								
	MIN 19								
	MAX1 20								
	AMB 4								
	ALR 2								
	SPLIT	32	32	36	31	35	31		
	CL	76	80	80	64	80	80		
	OF	69	69	51	10	56	28		

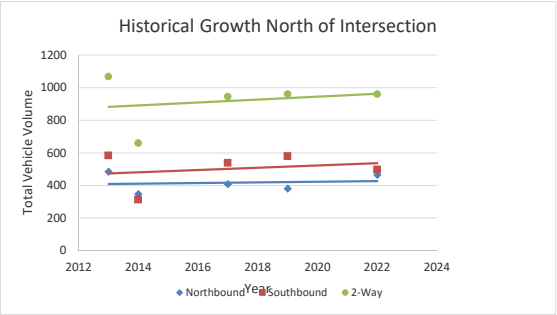
Notes:

APPENDIX E:
Corridor Growth Calculations

Project:	Radiator
Project ID:	6722-18
Intersection	Queen Street West / Dufferin Street
Peak Hour	AM Peak

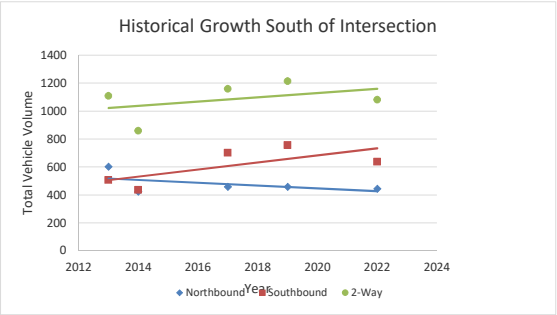
North of Intersection				
Date	**Year**	**Northbound**	**Southbound**	**2-Way**
	2022	464	496	960
	2019	380	579	959
	2017	407	537	944
	2014	346	312	658
	2013	484	583	1067
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0

Trend Point at start		426.0	535.7	961.7
Trend Point at end		408.3	474.0	882.3
Slope		2.0	6.9	8.8
Annual Growth		**0.5%**	**1.4%**	**1.0%**



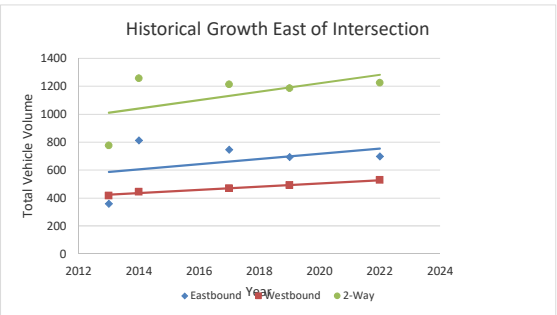
South of Intersection				
Date	**Year**	**Northbound**	**Southbound**	**2-Way**
	2022	443	637	1080
	2019	458	754	1212
	2017	457	701	1158
	2014	422	435	857
	2013	602	505	1107
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0

Trend Point at start		444.7	657.7	1102.4
Trend Point at end		459.6	732.0	1191.6
Slope		-3.0	-14.9	-17.8
Annual Growth		**-0.7%**	**-2.1%**	**-1.5%**



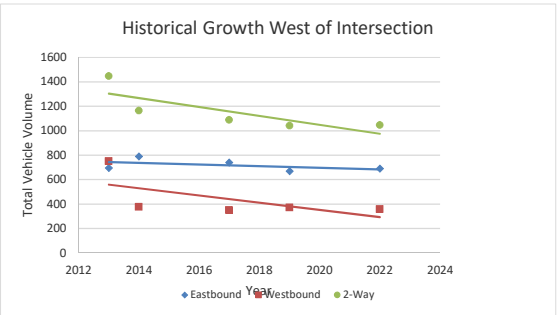
East of Intersection				
Date	**Year**	**Eastbound**	**Westbound**	**2-Way**
	2022	697	528	1225
	2019	694	492	1186
	2017	745	469	1214
	2014	812	444	1256
	2013	359	416	775
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0

Trend Point at start		688.6	527.8	1216.5
Trend Point at end		732.4	468.8	1201.2
Slope		-8.8	11.8	3.1
Annual Growth		**-1.2%**	**2.4%**	**0.3%**



West of Intersection				
Date	**Year**	**Eastbound**	**Westbound**	**2-Way**
	2022	689	358	1047
	2019	670	371	1041
	2017	739	349	1088
	2014	790	375	1165
	2013	696	751	1447
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0

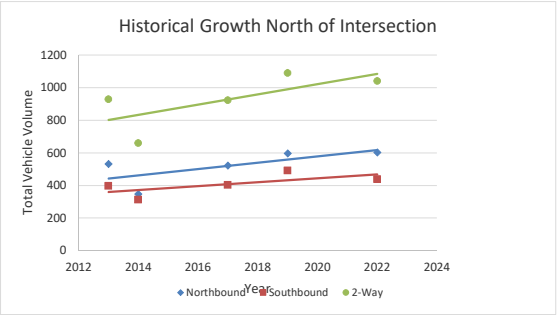
Trend Point at start		676.1	362.8	1038.9
Trend Point at end		719.7	356.3	1075.9
Slope		-8.7	1.3	-7.4
Annual Growth		**-1.2%**	**0.4%**	**-0.7%**



Project:	Radiator
Project ID:	6722-18
Intersection	Queen Street West / Dufferin Street
Peak Hour	PM Peak

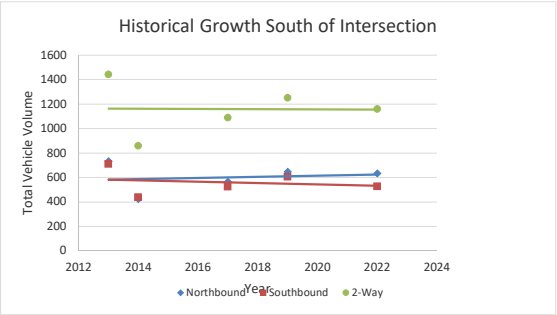
North of Intersection				
Date	**Year**	**Northbound**	**Southbound**	**2-Way**
	2022	603	437	1040
	2019	597	491	1088
	2017	522	401	923
	2014	346	312	658
	2013	531	396	927
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0

Trend Point at start		616.7	467.3	1084.1
Trend Point at end		442.2	359.5	801.7
Slope		19.4	12.0	31.4
Annual Growth		**3.8%**	**3.0%**	**3.4%**



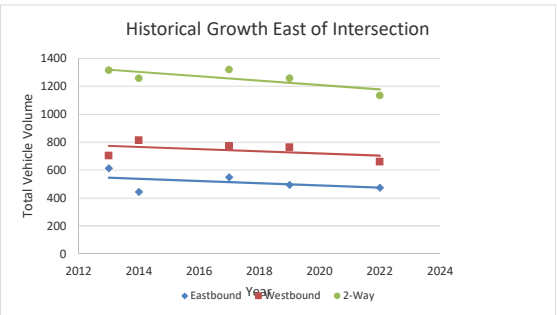
South of Intersection				
Date	**Year**	**Northbound**	**Southbound**	**2-Way**
	2022	632	526	1158
	2019	646	605	1251
	2017	565	523	1088
	2014	422	435	857
	2013	733	708	1441
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0

Trend Point at start		646.3	547.3	1193.5
Trend Point at end		586.4	554.9	1141.3
Slope		12.0	-1.5	10.4
Annual Growth		**2.0%**	**-0.3%**	**0.9%**



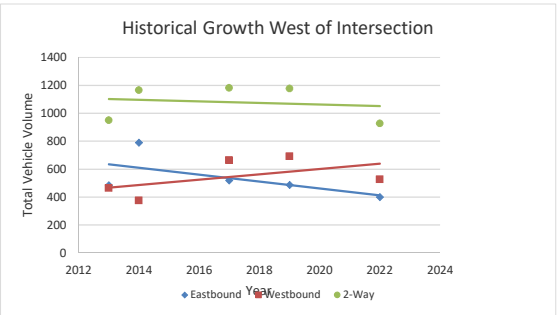
East of Intersection				
Date	**Year**	**Eastbound**	**Westbound**	**2-Way**
	2022	474	660	1134
	2019	493	763	1256
	2017	548	771	1319
	2014	444	812	1256
	2013	612	703	1315
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0

Trend Point at start		467.3	669.6	1136.9
Trend Point at end		538.0	785.4	1323.3
Slope		-14.1	-23.2	-37.3
Annual Growth		**-2.8%**	**-3.1%**	**-3.0%**



West of Intersection				
Date	**Year**	**Eastbound**	**Westbound**	**2-Way**
	2022	400	526	926
	2019	486	691	1177
	2017	519	663	1182
	2014	790	375	1165
	2013	484	465	949
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0

Trend Point at start		403.8	547.8	951.6
Trend Point at end		524.8	695.7	1220.4
Slope		-24.2	-29.6	-53.8
Annual Growth		**-5.1%**	**-4.7%**	**-4.9%**



APPENDIX F:
Transportation Tomorrow Survey (TTS) Details

TRANSIT DISTRIBUTION QUERIES

Thu Apr 28 2022 15:46:19 GMT+0200 (Central European Summer Time) - Run Time: 1308ms

Cross Tabulation Query Form - Transit - 2016 v1.1

Row: Planning district of destination - pd_dest
Column: Route used on link #1 - route_1

Filters:
Start time of trip - start_time In 600-859
and
Trip purpose of origin - purp_orig In H
and
2006 GTA zone of origin - gta06_orig In 110

Tran 2016
Table:

	T029	T047	T501	T504	T514
PD 1 of Toronto	52	0	101	1551	80
PD 2 of Toronto	0	84	0	444	0
PD 3 of Toronto	0	46	0	71	0
PD 4 of Toronto	0	0	0	136	0
PD 5 of Toronto	0	0	0	45	0
PD 6 of Toronto	0	21	0	0	0
PD 7 of Toronto	0	0	120	0	0
PD 8 of Toronto	148	0	0	0	0
PD 9 of Toronto	0	0	0	40	0
PD 10 of Toronto	90	0	0	145	0
PD 11 of Toronto	0	0	0	30	0
PD 12 of Toronto	26	0	0	0	0
PD 15 of Toronto	0	0	0	21	0
Markham	0	0	0	13	0
Mississauga	0	0	0	50	0
Richmond Hill	0	0	0	37	0

Directions from site MASTER LIST

N or S	E or W		NS T029	NS T047	EW T501	EW T504
North	East	PD 1 of Toronto	52	0	101	1551
North	West	PD 2 of Toronto	0	84	0	444
North	West	PD 3 of Toronto	0	46	0	71
North	East	PD 4 of Toronto	0	0	0	136
North	East	PD 5 of Toronto	0	0	0	45
North	East	PD 6 of Toronto	0	21	0	0
South	West	PD 7 of Toronto	0	0	120	0
North	West	PD 8 of Toronto	148	0	0	0
North	West	PD 9 of Toronto	0	0	0	40
North	West	PD 10 of Toronto	90	0	0	145
North	East	PD 11 of Toronto	0	0	0	30
North	East	PD 12 of Toronto	26	0	0	0
North	East	PD 15 of Toronto	0	0	0	21
North	East	Markham	0	0	0	13
North	West	Mississauga	0	0	0	50
North	East	Richmond Hill	0	0	0	37

T029	29 Dufferin
T047	47 Lansdowne
T501	501 Queen
T504	504 King
T596	Line 2 - Bloor Danforth

29 Dufferin	North	316	10%
	South	0	0%
47 Lansdowne	North	151	5%
	South	0	0%
501 Queen	East	101	3%
	West	120	4%
504 King	East	1833	56%
	West	750	23%
Line 2 - Bloor Danforth	East	0	0%
	West	0	0%
TOTAL		**3271**	**100%**

Thu Apr 28 2022 16:06:50 GMT+0200 (Central European Summer Time) - Run Time: 963ms

Cross Tabulation Query Form - Transit - 2016 v1.1

Row: Planning district of origin - pd_orig
Column: Route used on link #1 - route_1

Filters:
Start time of trip - start_time In 1500-1759
and
Trip purpose of destination - purp_dest In H
and
2006 GTA zone of destination - gta06_dest In 110
and
Number of transit links used - n_route In 1

Tran 2016
Table:

	T501	T504	T514
PD 1 of Toronto	33	838	30
PD 2 of Toronto	11	359	0
PD 6 of Toronto	0	28	0
PD 7 of Toronto	93	0	0

Thu Apr 28 2022 16:07:10 GMT+0200 (Central European Summer Time) - Run Time: 959ms

Cross Tabulation Query Form - Transit - 2016 v1.1

Row: Planning district of origin - pd_orig
Column: Route used on link #2 - route_2

Filters:
Start time of trip - start_time In 1500-1759
and
Trip purpose of destination - purp_dest In H
and
2006 GTA zone of destination - gta06_dest In 110
and
Number of transit links used - n_route In 2

Tran 2016
Table:

	T029	T047	T504	T514	T596
PD 1 of Toronto	23	28	640	25	0
PD 2 of Toronto	0	0	69	0	0
PD 4 of Toronto	0	0	45	0	0
PD 6 of Toronto	0	0	51	0	0
PD 8 of Toronto	40	0	0	0	0
PD 11 of Toronto	0	0	0	0	16
Mississauga	0	0	0	0	16

MASTER LIST

	2	3	4	5	6	7
		T501	T504	T514		
PD 1 of Toronto			33	838	30	
PD 2 of Toronto			11	359	0	
PD 6 of Toronto			0	28	0	
PD 7 of Toronto			93	0	0	

	T029	T047	T504	T514	T596	
PD 1 of Toronto	23	28	640	25	0	
PD 2 of Toronto	0	0	69	0	0	
PD 4 of Toronto	0	0	45	0	0	
PD 6 of Toronto	0	0	51	0	0	
PD 8 of Toronto	40	0	0	0	0	
PD 11 of Toronto	0	0	0	0	16	
Mississauga	0	0	0	0	16	

	T029	T504	T596
PD 1 of Toronto	19	6	0
PD 2 of Toronto	0	6	0
PD 3 of Toronto	0	6	0
PD 4 of Toronto	6	37	0
PD 5 of Toronto	46	0	0
PD 7 of Toronto	0	44	0
PD 8 of Toronto	108	0	0
PD 9 of Toronto	43	10	0
PD 15 of Toronto	0	21	0
Markham	0	7	6
Mississauga	0	50	0

	T029	T504
PD 4 of Toronto	19	131
PD 5 of Toronto	0	45
PD 6 of Toronto	27	0
PD 10 of Toronto	23	96
Richmond Hill	0	37

	T029
PD 12 of Toronto	26

Directions from site CONSOLIDATED MASTER LIST

N or S	E or W		NS	NS	EW	EW	EW
			T029	T047	T501	T504	T596
North	East	PD 1 of Toronto	42	28	33	1484	0
North	West	PD 2 of Toronto	0	0	11	434	0
North	West	PD 3 of Toronto	0	0	0	6	0
North	East	PD 4 of Toronto	25	0	0	213	0
North	East	PD 5 of Toronto	46	0	0	45	0
North	East	PD 6 of Toronto	27	0	0	79	0
South	West	PD 7 of Toronto	0	0	93	44	0
North	West	PD 8 of Toronto	148	0	0	0	0
North	West	PD 9 of Toronto	43	0	0	10	0
North	West	PD 10 of Toronto	23	0	0	96	0
North	East	PD 11 of Toronto	0	0	0	0	16
North	East	PD 12 of Toronto	26	0	0	0	0
North	East	PD 15 of Toronto	0	0	0	21	0
North	East	Markham	0	0	0	7	0
North	West	Mississauga	0	0	0	50	16
North	East	Richmond Hill	0	0	0	37	0
		TOTAL	**380**	**28**	**137**	**2526**	**32**

T029	29 Dufferin
T047	47 Lansdowne
T501	501 Queen
T504	504 King
T596	Line 2 - Bloor Danforth

TRIP DISTRIBUTION QUERIES

OUTBOUND TRIP DISTRIBUTION

DESTINATION	ORIGIN	Total	Route Selection						Trip Distribution					
			N Dufferin	S Dufferin	E Queen	E King	W Queen	W King	N Dufferin	S Dufferin	E Queen	E King	W Queen	W King
PD 2 of Toronto	-	0							0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
89	114	114				100%			0.0%	0.0%	0.0%	2.2%	0.0%	0.0%
91	0	0			100%				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
93	30	30	50%		50%				0.3%	0.0%	0.3%	0.0%	0.0%	0.0%
94	0	0	50%		50%				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
95	15	15	75%		25%				0.2%	0.0%	0.1%	0.0%	0.0%	0.0%
97	0	0	50%		50%				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
98	21	21	25%		75%				0.1%	0.0%	0.3%	0.0%	0.0%	0.0%
101	0	0	100%						0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
105	137	137	100%						2.6%	0.0%	0.0%	0.0%	0.0%	0.0%
107	6	6	80%				20%		0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
108	0	0	100%						0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
109	16	16					100%		0.0%	0.0%	0.0%	0.0%	0.3%	0.0%
110	489	489						100%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%
113	37	37					100%		0.0%	0.0%	0.0%	0.0%	0.7%	0.0%
114	12	12					100%		0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
115	27	27	20%				80%		0.1%	0.0%	0.0%	0.0%	0.4%	0.0%
116	4	4	80%				20%		0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
120	0	0					100%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
123	0	0					100%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
126	0	0					100%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PD 1 of Toronto	1216	1216	20%	20%	30%	30%			4.7%	4.7%	7.0%	7.0%	0.0%	0.0%
PD 3 of Toronto	133	133	100%						2.6%	0.0%	0.0%	0.0%	0.0%	0.0%
PD 4 of Toronto	201	201	100%						3.9%	0.0%	0.0%	0.0%	0.0%	0.0%
PD 5 of Toronto	140	140		100%					0.0%	2.7%	0.0%	0.0%	0.0%	0.0%
PD 6 of Toronto	91	91		100%					0.0%	1.8%	0.0%	0.0%	0.0%	0.0%
PD 7 of Toronto	42	42		50%			50%		0.0%	0.4%	0.0%	0.0%	0.4%	0.0%
PD 8 of Toronto	226	226		50%			50%		0.0%	2.2%	0.0%	0.0%	2.2%	0.0%
PD 9 of Toronto	235	235		100%					0.0%	4.5%	0.0%	0.0%	0.0%	0.0%
PD 10 of Toronto	138	138	75%	25%					2.0%	0.7%	0.0%	0.0%	0.0%	0.0%
PD 11 of Toronto	84	84		100%					0.0%	1.6%	0.0%	0.0%	0.0%	0.0%
PD 12 of Toronto	142	142		100%					0.0%	2.7%	0.0%	0.0%	0.0%	0.0%
PD 13 of Toronto	86	86		100%					0.0%	1.7%	0.0%	0.0%	0.0%	0.0%
PD 15 of Toronto	18	18		100%					0.0%	0.3%	0.0%	0.0%	0.0%	0.0%
PD 16 of Toronto	22	22		100%					0.0%	0.4%	0.0%	0.0%	0.0%	0.0%
Ancaster	0	0		50%				50%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Brampton	284	284		80%			20%		0.0%	4.4%	0.0%	0.0%	1.1%	0.0%
Burlington	24	24		50%				50%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%
Caledon	0	0		50%				50%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
City of Guelph	17	17		50%				50%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%
East Gwillimbury	23	23		50%				50%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%
Georgina	21	21	50%	50%					0.2%	0.2%	0.0%	0.0%	0.0%	0.0%
Hamilton	20	20		50%				50%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%
Kitchener	31	31		50%				50%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%
Markham	177	177		50%				50%	0.0%	1.7%	0.0%	0.0%	0.0%	1.7%
Milton	6	6		50%				50%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%
Mississauga	500	500		50%				50%	0.0%	4.8%	0.0%	0.0%	0.0%	4.8%
Niagara Falls	27	27		50%				50%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%
Oakville	106	106		50%				50%	0.0%	1.0%	0.0%	0.0%	0.0%	1.0%
Richmond Hill	0	0	50%	50%					0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Uxbridge	6	6		100%					0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Vaughan	249	249	50%	25%				25%	2.4%	1.2%	0.0%	0.0%	0.0%	1.2%
Waterloo	12	12		50%				50%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%
Whitby	0	0		100%					0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	**5185**	**5185**							19.2%	38.7%	7.7%	9.2%	5.4%	19.7%
								Rounded	**20.0%**	**37.5%**	**7.5%**	**10.0%**	**5.0%**	**20.0%**
								Adopted	20.0%	37.5%	7.5%	10.0%	5.0%	20.0%

INBOUND TRIP DISTRIBUTION

ORIGIN	ESITINATIO	Total	Route Selection						Trip Distribution					
			N Dufferin	S Dufferin	E Queen	E King	W Queen	W King	N Dufferin	S Dufferin	E Queen	E King	W Queen	W King
PD 2 of Toronto	-	0							0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
89	0	0				100%			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
91	4	4			100%				0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
93	0	0	50%		50%				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
94	7	7	50%		50%				0.1%	0.0%	0.1%	0.0%	0.0%	0.0%
95	7	7	75%		25%				0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
97	6	6	50%		50%				0.1%	0.0%	0.1%	0.0%	0.0%	0.0%
98	0	0	25%		75%				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
101	102	102	100%						2.6%	0.0%	0.0%	0.0%	0.0%	0.0%
105	0	0	100%						0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
107	0	0	80%				20%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
108	22	22	100%						0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
109	0	0					100%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
110	80	80					100%		0.0%	0.0%	0.0%	0.0%	2.0%	0.0%
113	37	37					100%		0.0%	0.0%	0.0%	0.0%	0.9%	0.0%
114	30	30					100%		0.0%	0.0%	0.0%	0.0%	0.8%	0.0%
115	27	27	20%				80%		0.1%	0.0%	0.0%	0.0%	0.5%	0.0%
116	0	0	80%				20%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
120	36	36					100%		0.0%	0.0%	0.0%	0.0%	0.9%	0.0%
123	11	11					100%		0.0%	0.0%	0.0%	0.0%	0.3%	0.0%
126	43	43					100%		0.0%	0.0%	0.0%	0.0%	1.1%	0.0%
PD 1 of Toronto	946	946	20%	20%	30%	30%			4.8%	4.8%	7.2%	7.2%	0.0%	0.0%
PD 3 of Toronto	102	102	100%						2.6%	0.0%	0.0%	0.0%	0.0%	0.0%
PD 4 of Toronto	145	145	100%						3.7%	0.0%	0.0%	0.0%	0.0%	0.0%
PD 5 of Toronto	48	48		100%					0.0%	1.2%	0.0%	0.0%	0.0%	0.0%
PD 6 of Toronto	99	99		100%					0.0%	2.5%	0.0%	0.0%	0.0%	0.0%
PD 7 of Toronto	69	69		50%			50%		0.0%	0.9%	0.0%	0.0%	0.9%	0.0%
PD 8 of Toronto	330	330		50%			50%		0.0%	4.2%	0.0%	0.0%	4.2%	0.0%
PD 9 of Toronto	382	382		100%					0.0%	9.6%	0.0%	0.0%	0.0%	0.0%
PD 10 of Toronto	122	122	75%	25%					2.3%	0.8%	0.0%	0.0%	0.0%	0.0%
PD 11 of Toronto	44	44		100%					0.0%	1.1%	0.0%	0.0%	0.0%	0.0%
PD 12 of Toronto	84	84		100%					0.0%	2.1%	0.0%	0.0%	0.0%	0.0%
PD 13 of Toronto	35	35		100%					0.0%	0.9%	0.0%	0.0%	0.0%	0.0%
PD 15 of Toronto	0	0		100%					0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PD 16 of Toronto	22	22		100%					0.0%	0.6%	0.0%	0.0%	0.0%	0.0%
Ancaster	20	20		100%					0.0%	0.5%	0.0%	0.0%	0.0%	0.0%
Brampton	281	281		100%					0.0%	7.1%	0.0%	0.0%	0.0%	0.0%
Burlington	4	4		100%					0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Caledon	20	20		100%					0.0%	0.5%	0.0%	0.0%	0.0%	0.0%
City of Guelph	0	0		100%					0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
East Gwillimbury	0	0		100%					0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Georgina	0	0	50%	50%					0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hamilton	0	0		100%					0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kitchener	0	0		100%					0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Markham	120	120		100%					0.0%	3.0%	0.0%	0.0%	0.0%	0.0%
Milton	0	0		100%					0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Mississauga	320	320		100%					0.0%	8.1%	0.0%	0.0%	0.0%	0.0%
Niagara Falls	0	0		100%					0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Oakville	96	96		100%					0.0%	2.4%	0.0%	0.0%	0.0%	0.0%
Richmond Hill	20	20		100%					0.0%	0.5%	0.0%	0.0%	0.0%	0.0%
Uxbridge	0	0		100%					0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Vaughan	216	216		100%					0.0%	5.4%	0.0%	0.0%	0.0%	0.0%
Waterloo	0	0		50%				50%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Whitby	27	27		100%					0.0%	0.7%	0.0%	0.0%	0.0%	0.0%
Total	**3964**	**3964**							16.9%	56.9%	7.5%	7.2%	11.6%	0.0%
								Rounded	**15.0%**	**57.5%**	**7.5%**	**7.5%**	**12.5%**	**0.0%**
								Adopted	15.0%	57.5%	7.5%	7.5%	10.0%	2.5%

APPENDIX G:
Synchro 11 Capacity Analysis Results

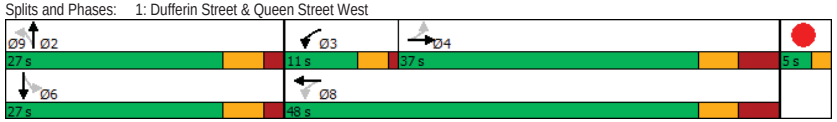
Timings
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	Ø9
Lane Configurations									
Traffic Volume (vph)	50	535	185	290	40	310	40	500	
Future Volume (vph)	50	535	185	290	40	310	40	500	
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	
Protected Phases		4	3	8		2		6	9
Permitted Phases	4		8		2		6		
Detector Phase	4	4	3	8	2	2	6	6	
Switch Phase									
Minimum Initial (s)	25.0	25.0	6.0	25.0	19.0	19.0	19.0	19.0	1.0
Minimum Split (s)	33.0	33.0	10.0	33.0	25.0	25.0	25.0	25.0	3.0
Total Split (s)	37.0	37.0	11.0	48.0	27.0	27.0	27.0	27.0	5.0
Total Split (%)	46.3%	46.3%	13.8%	60.0%	33.8%	33.8%	33.8%	33.8%	6%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	2.0
All-Red Time (s)	4.0	4.0	1.0	4.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0	
Total Lost Time (s)		8.0		8.0		6.0		6.0	
Lead/Lag	Lag	Lag	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes						
Recall Mode	None	None	None	None	Max	Max	Max	Max	None
Act Effct Green (s)		26.3		26.3		21.0		21.0	
Actuated g/C Ratio		0.43		0.43		0.34		0.34	
v/c Ratio		0.57		0.61		0.51		0.60	
Control Delay		14.9		16.9		16.9		19.9	
Queue Delay		0.0		0.0		0.0		0.0	
Total Delay		14.9		16.9		16.9		19.9	
LOS		B		B		B		B	
Approach Delay		14.9		16.9		16.9		19.9	
Approach LOS		B		B		B		B	

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 61.3			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 17.1		Intersection LOS: B	
Intersection Capacity Utilization 97.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Dufferin Street & Queen Street West



Queues
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	681	511	474	602
v/c Ratio	0.57	0.61	0.51	0.60
Control Delay	14.9	16.9	16.9	19.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.9	16.9	16.9	19.9
Queue Length 50th (m)	28.1	21.9	18.5	27.3
Queue Length 95th (m)	41.6	35.2	35.7	48.8
Internal Link Dist (m)	100.9	102.5	22.6	84.2
Turn Bay Length (m)				
Base Capacity (vph)	1346	1278	929	999
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.51	0.40	0.51	0.60

Intersection Summary

HCM Signalized Intersection Capacity Analysis
1: Dufferin Street & Queen Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	535	75	185	290	20	40	310	110	40	500	45
Future Volume (vph)	50	535	75	185	290	20	40	310	110	40	500	45
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			6.0			6.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.98			1.00			0.97			0.99	
Flpb, ped/bikes		1.00			0.98			0.99			1.00	
Frt		0.98			0.99			0.96			0.99	
Flt Protected		1.00			0.98			1.00			1.00	
Satd. Flow (prot)		3218			3131			3070			3260	
Flt Permitted		0.86			0.61			0.86			0.89	
Satd. Flow (perm)		2794			1959			2642			2908	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	52	552	77	191	299	21	41	320	113	41	515	46
RTOR Reduction (vph)	0	11	0	0	5	0	0	34	0	0	7	0
Lane Group Flow (vph)	0	670	0	0	506	0	0	440	0	0	595	0
Confl. Peds. (#/hr)	140		226	226		140	188		142	142		188
Heavy Vehicles (%)	10%	6%	4%	7%	9%	5%	5%	7%	8%	2%	6%	7%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.3			26.3			21.0			21.0	
Effective Green, g (s)		26.3			26.3			21.0			21.0	
Actuated g/C Ratio		0.43			0.43			0.34			0.34	
Clearance Time (s)		8.0			8.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1198			840			905			996	
v/s Ratio Prot												
v/s Ratio Perm		0.24			c0.26			0.17			c0.20	
v/c Ratio		0.56			0.60			0.49			0.60	
Uniform Delay, d1		13.1			13.5			15.9			16.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			1.2			1.9			2.6	
Delay (s)		13.7			14.7			17.8			19.3	
Level of Service		B			B			B			B	
Approach Delay (s)		13.7			14.7			17.8			19.3	
Approach LOS		B			B			B			B	

Intersection Summary				
HCM 2000 Control Delay	16.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.69			
Actuated Cycle Length (s)	61.3	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	97.8%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Unsignalized Intersection Capacity Analysis
2: Dufferin Street & Milky Way

06/22/2022

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	460	755	5
Future Volume (Veh/h)	0	0	0	460	755	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	0	0	0	495	812	5
Pedestrians	57			1	2	
Lane Width (m)	0.0			3.5	3.5	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				332	47	
pX, platoon unblocked	0.87	0.87	0.87			
vC, conflicting volume	1121	466	874			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	839	87	555			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	268	835	892			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	165	330	541	276
Volume Left	0	0	0	0
Volume Right	0	0	0	5
cSH	892	1700	1700	1700
Volume to Capacity	0.00	0.19	0.32	0.16
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				
Approach Delay (s)	0.0		0.0	
Approach LOS				

Intersection Summary				
Average Delay		0.0		
Intersection Capacity Utilization		31.4%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
3: Dufferin Street & Joe Shuster Way

06/22/2022

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	25	60	400	30	80	675
Future Volume (Veh/h)	25	60	400	30	80	675
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	27	65	430	32	86	726
Pedestrians	170		2			5
Lane Width (m)	3.0		3.5			3.5
Walking Speed (m/s)	1.1		1.1			1.1
Percent Blockage	13		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			301			77
pX, platoon unblocked	0.88					
vC, conflicting volume	1153	406			632	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	899	406			632	
tC, single (s)	*6.0	6.9			4.1	
tC, 2 stage (s)						
tF (s)	*3.0	3.3			2.2	
p0 queue free %	90	87			90	
cM capacity (veh/h)	259	512			825	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	27	65	287	175	328	484
Volume Left	27	0	0	0	86	0
Volume Right	0	65	0	32	0	0
cSH	259	512	1700	1700	825	1700
Volume to Capacity	0.10	0.13	0.17	0.10	0.10	0.28
Queue Length 95th (m)	2.6	3.3	0.0	0.0	2.6	0.0
Control Delay (s)	20.5	13.1	0.0	0.0	3.5	0.0
Lane LOS	C	B			A	
Approach Delay (s)	15.2		0.0		1.4	
Approach LOS	C					

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	49.2%	ICU Level of Service	A	
Analysis Period (min)	15			

* User Entered Value

HCM Unsignalized Intersection Capacity Analysis
4: Dufferin Street & Existing Site Driveway

06/22/2022

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	5	430	695	5
Future Volume (Veh/h)	0	0	5	430	695	5
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	0	5	467	755	5
Pedestrians	48			4	1	
Lane Width (m)	3.0			3.5	3.5	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	4			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				253	126	
pX, platoon unblocked	0.92	0.92	0.92			
vC, conflicting volume	1050	432	808			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	878	205	614			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	99			
cM capacity (veh/h)	256	711	862			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	0	161	311	503	257
Volume Left	0	5	0	0	0
Volume Right	0	0	0	0	5
cSH	1700	862	1700	1700	1700
Volume to Capacity	0.00	0.01	0.18	0.30	0.15
Queue Length 95th (m)	0.0	0.1	0.0	0.0	0.0
Control Delay (s)	0.0	0.3	0.0	0.0	0.0
Lane LOS	A	A			
Approach Delay (s)	0.0	0.1		0.0	
Approach LOS	A				

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	30.6%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access 06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	15	15	0	25	0	400	15	20	665	10
Future Volume (Veh/h)	10	0	15	15	0	25	0	400	15	20	665	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	11	0	16	16	0	27	0	430	16	22	715	11
Pedestrians		35			88			33			3	
Lane Width (m)		3.5			3.5			3.5			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		3			8			3			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								190			189	
pX, platoon unblocked	0.96	0.96	0.96	0.96	0.96		0.96					
vC, conflicting volume	1044	1334	431	976	1331	314	761			534		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	962	1263	323	891	1261	314	666			534		
tC, single (s)	7.5	6.5	7.2	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.4	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	100	97	91	100	96	100			98		
cM capacity (veh/h)	170	143	578	179	143	630	866			959		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	27	43	215	231	380	368
Volume Left	11	16	0	0	22	0
Volume Right	16	27	0	16	0	11
cSH	292	326	866	1700	959	1700
Volume to Capacity	0.09	0.13	0.00	0.14	0.02	0.22
Queue Length 95th (m)	2.3	3.4	0.0	0.0	0.5	0.0
Control Delay (s)	18.6	17.7	0.0	0.0	0.8	0.0
Lane LOS	C	C			A	
Approach Delay (s)	18.6	17.7	0.0		0.4	
Approach LOS	C	C				

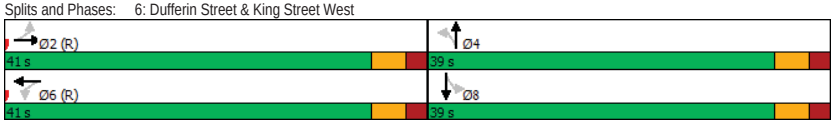
Intersection Summary					
Average Delay	1.2				
Intersection Capacity Utilization	50.0%	ICU Level of Service	A		
Analysis Period (min)	15				

Timings
6: Dufferin Street & King Street West 06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	85	205	35	190	5	260	90	450
Future Volume (vph)	85	205	35	190	5	260	90	450
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
Minimum Split (s)	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
Total Split (s)	41.0	41.0	41.0	41.0	39.0	39.0	39.0	39.0
Total Split (%)	51.3%	51.3%	51.3%	51.3%	48.8%	48.8%	48.8%	48.8%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
All-Red Time (s)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.5		5.5		5.5		5.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		35.5		35.5		33.5		33.5
Actuated g/C Ratio		0.44		0.44		0.42		0.42
v/c Ratio		0.33		0.29		0.32		0.70
Control Delay		15.0		12.0		14.6		21.9
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		15.0		12.0		14.6		21.9
LOS		B		B		B		C
Approach Delay		15.0		12.0		14.6		21.9
Approach LOS		B		B		B		C

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 27 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 17.3		Intersection LOS: B	
Intersection Capacity Utilization 97.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Dufferin Street & King Street West



Queues
6: Dufferin Street & King Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	353	336	369	789
v/c Ratio	0.33	0.29	0.32	0.70
Control Delay	15.0	12.0	14.6	21.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.0	12.0	14.6	21.9
Queue Length 50th (m)	17.0	12.8	16.7	46.7
Queue Length 95th (m)	25.7	20.8	25.6	64.6
Internal Link Dist (m)	99.8	94.3	85.5	166.1
Turn Bay Length (m)				
Base Capacity (vph)	1083	1149	1170	1120
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.33	0.29	0.32	0.70

Intersection Summary

HCM Signalized Intersection Capacity Analysis
6: Dufferin Street & King Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	205	20	35	190	70	5	260	60	90	450	155
Future Volume (vph)	85	205	20	35	190	70	5	260	60	90	450	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)		5.5			5.5			5.5			5.5	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.98			0.96			0.96			0.98	
Flpb, ped/bikes		0.98			0.98			1.00			0.98	
Frt		0.99			0.96			0.97			0.97	
Flt Protected		0.99			0.99			1.00			0.99	
Satd. Flow (prot)		3137			2841			2900			3106	
Flt Permitted		0.76			0.88			0.94			0.83	
Satd. Flow (perm)		2430			2506			2736			2595	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	97	233	23	40	216	80	6	295	68	102	511	176
RTOR Reduction (vph)	0	6	0	0	37	0	0	24	0	0	33	0
Lane Group Flow (vph)	0	347	0	0	299	0	0	345	0	0	756	0
Confl. Peds. (#/hr)	136		256	256		136	78		189	189		78
Heavy Vehicles (%)	3%	8%	6%	47%	1%	32%	14%	10%	37%	8%	7%	4%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		35.5			35.5			33.5			33.5	
Effective Green, g (s)		35.5			35.5			33.5			33.5	
Actuated g/C Ratio		0.44			0.44			0.42			0.42	
Clearance Time (s)		5.5			5.5			5.5			5.5	
Lane Grp Cap (vph)		1078			1112			1145			1086	
v/s Ratio Prot												
v/s Ratio Perm		c0.14			0.12			0.13			c0.29	
v/c Ratio		0.32			0.27			0.30			0.70	
Uniform Delay, d1		14.4			14.1			15.5			19.1	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.8			0.6			0.7			3.7	
Delay (s)		15.2			14.6			16.1			22.8	
Level of Service		B			B			B			C	
Approach Delay (s)		15.2			14.6			16.1			22.8	
Approach LOS		B			B			B			C	

Intersection Summary					
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.50				
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.0		
Intersection Capacity Utilization	97.0%	ICU Level of Service	F		
Analysis Period (min)	15				

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
7: King Street West & Gwynne Avenue

06/22/2022

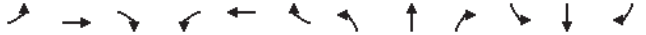
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	270	350	0	40	80
Future Volume (Veh/h)	0	270	350	0	40	80
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	293	380	0	43	87
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			124			
pX, platoon unblocked						
vC, conflicting volume	380				526	190
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	380				526	190
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				91	89
cM capacity (veh/h)	1190				486	826

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	98	195	253	127	130
Volume Left	0	0	0	0	43
Volume Right	0	0	0	0	87
cSH	1190	1700	1700	1700	671
Volume to Capacity	0.00	0.11	0.15	0.07	0.19
Queue Length 95th (m)	0.0	0.0	0.0	0.0	5.4
Control Delay (s)	0.0	0.0	0.0	0.0	11.7
Lane LOS					B
Approach Delay (s)	0.0		0.0		11.7
Approach LOS					B

Intersection Summary				
Average Delay		1.9		
Intersection Capacity Utilization		23.5%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
8: Gwynne Avenue & Melbourne Avenue

06/22/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	10	25	10	0	0	0	0	0	15	85	0
Future Volume (vph)	0	10	25	10	0	0	0	0	0	15	85	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	12	30	12	0	0	0	0	0	18	102	0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	42	12	0	120
Volume Left (vph)	0	12	0	18
Volume Right (vph)	30	0	0	0
Hadj (s)	-0.38	0.20	0.00	0.15
Departure Headway (s)	3.8	4.4	4.1	4.2
Degree Utilization, x	0.04	0.01	0.00	0.14
Capacity (veh/h)	914	789	866	852
Control Delay (s)	7.0	7.5	7.1	7.8
Approach Delay (s)	7.0	7.5	0.0	7.8
Approach LOS	A	A	A	A

Intersection Summary				
Delay		7.6		
Level of Service		A		
Intersection Capacity Utilization		33.9%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
9: Gwynne Avenue & Milky Way 06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	100	0
Future Volume (Veh/h)	0	0	0	0	0	0	0	0	0	0	100	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	120	0
Pedestrians		25			28			5			9	
Lane Width (m)		3.0			3.0			0.0			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		2			2			0			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	154	173	150	153	173	37	145			28		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	154	173	150	153	173	37	145			28		
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	100	100	100	100	100	100			100		
cM capacity (veh/h)	769	694	884	775	694	1009	1421			1563		

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	0	0	120
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.07
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A	A	
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A	A	

Intersection Summary					
Average Delay			0.0		
Intersection Capacity Utilization			28.0%	ICU Level of Service	A
Analysis Period (min)			15		

HCM Unsignalized Intersection Capacity Analysis
10: Gwynne Avenue & Queen Street West 06/22/2022

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	660	65	35	340	0	0
Future Volume (Veh/h)	660	65	35	340	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	680	67	36	351	0	0
Pedestrians	1			1	109	
Lane Width (m)	3.5			3.5	0.0	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)				125		
pX, platoon unblocked						
vC, conflicting volume			856		1071	484
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			856		1071	484
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			95		100	100
cM capacity (veh/h)			793		209	534

Direction, Lane #	EB 1	EB 2	WB 1	WB 2
Volume Total	453	294	153	234
Volume Left	0	0	36	0
Volume Right	0	67	0	0
cSH	1700	1700	793	1700
Volume to Capacity	0.27	0.17	0.05	0.14
Queue Length 95th (m)	0.0	0.0	1.1	0.0
Control Delay (s)	0.0	0.0	2.7	0.0
Lane LOS			A	
Approach Delay (s)	0.0		1.1	
Approach LOS				

Intersection Summary					
Average Delay			0.4		
Intersection Capacity Utilization			44.9%	ICU Level of Service	A
Analysis Period (min)			15		

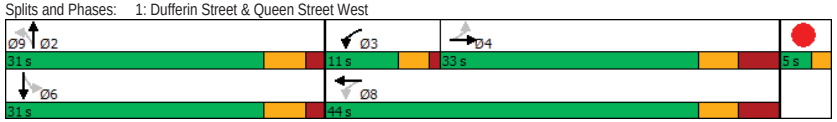
Timings
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	Ø9
Lane Configurations									
Traffic Volume (vph)	65	335	135	570	40	495	45	385	
Future Volume (vph)	65	335	135	570	40	495	45	385	
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	
Protected Phases		4	3	8		2		6	9
Permitted Phases	4		8		2		6		
Detector Phase	4	4	3	8	2	2	6	6	
Switch Phase									
Minimum Initial (s)	25.0	25.0	6.0	25.0	19.0	19.0	19.0	19.0	1.0
Minimum Split (s)	33.0	33.0	10.0	33.0	25.0	25.0	25.0	25.0	3.0
Total Split (s)	33.0	33.0	11.0	44.0	31.0	31.0	31.0	31.0	5.0
Total Split (%)	41.3%	41.3%	13.8%	55.0%	38.8%	38.8%	38.8%	38.8%	6%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	2.0
All-Red Time (s)	4.0	4.0	1.0	4.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0	
Total Lost Time (s)		8.0		8.0		6.0		6.0	
Lead/Lag	Lag	Lag	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes						
Recall Mode	None	None	None	None	Max	Max	Max	Max	None
Act Effct Green (s)		29.7		29.7		25.1		25.1	
Actuated g/C Ratio		0.43		0.43		0.36		0.36	
v/c Ratio		0.49		0.73		0.62		0.50	
Control Delay		14.7		20.4		20.9		19.3	
Queue Delay		0.0		0.0		0.0		0.0	
Total Delay		14.7		20.4		20.9		19.3	
LOS		B		C		C		B	
Approach Delay		14.7		20.4		20.9		19.3	
Approach LOS		B		C		C		B	

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 68.9			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 19.2		Intersection LOS: B	
Intersection Capacity Utilization 100.9%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: Dufferin Street & Queen Street West



Queues
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	500	768	664	505
v/c Ratio	0.49	0.73	0.62	0.50
Control Delay	14.7	20.4	20.9	19.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.7	20.4	20.9	19.3
Queue Length 50th (m)	21.5	40.5	33.4	24.3
Queue Length 95th (m)	33.3	59.1	57.5	43.3
Internal Link Dist (m)	100.9	102.5	22.6	84.2
Turn Bay Length (m)				
Base Capacity (vph)	1016	1286	1078	1003
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.49	0.60	0.62	0.50

Intersection Summary

HCM Signalized Intersection Capacity Analysis
1: Dufferin Street & Queen Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	335	85	135	570	40	40	495	110	45	385	60
Future Volume (vph)	65	335	85	135	570	40	40	495	110	45	385	60
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			6.0			6.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.95			0.99			0.97			0.97	
Flpb, ped/bikes		0.99			0.98			0.99			1.00	
Frt		0.97			0.99			0.97			0.98	
Flt Protected		0.99			0.99			1.00			1.00	
Satd. Flow (prot)		3147			3222			3267			3235	
Flt Permitted		0.74			0.75			0.89			0.84	
Satd. Flow (perm)		2333			2446			2920			2729	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	67	345	88	139	588	41	41	510	113	46	397	62
RTOR Reduction (vph)	0	19	0	0	5	0	0	20	0	0	13	0
Lane Group Flow (vph)	0	481	0	0	763	0	0	644	0	0	492	0
Confl. Peds. (#/hr)	274		328	328		274	243		139	139		243
Heavy Vehicles (%)	3%	4%	1%	1%	6%	3%	0%	3%	1%	0%	4%	5%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		29.7			29.7			25.1			25.1	
Effective Green, g (s)		29.7			29.7			25.1			25.1	
Actuated g/C Ratio		0.43			0.43			0.36			0.36	
Clearance Time (s)		8.0			8.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1007			1055			1065			995	
v/s Ratio Prot												
v/s Ratio Perm		0.21			c0.31			c0.22			0.18	
v/c Ratio		0.48			0.72			0.60			0.49	
Uniform Delay, d1		14.0			16.2			17.8			16.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.4			2.5			2.6			1.8	
Delay (s)		14.4			18.6			20.4			18.7	
Level of Service		B			B			C			B	
Approach Delay (s)		14.4			18.6			20.4			18.7	
Approach LOS		B			B			C			B	

Intersection Summary				
HCM 2000 Control Delay	18.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.75			
Actuated Cycle Length (s)	68.8	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	100.9%	ICU Level of Service	G	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Unsignalized Intersection Capacity Analysis
2: Dufferin Street & Milky Way

06/22/2022

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	5	645	600	5
Future Volume (Veh/h)	0	0	5	645	600	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	0	0	5	658	612	5
Pedestrians	74			3	1	
Lane Width (m)	0.0			3.5	3.5	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				332	47	
pX, platoon unblocked	0.91	0.91	0.91			
vC, conflicting volume	1028	386	691			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	829	121	458			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	283	828	1012			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	224	439	408	209
Volume Left	5	0	0	0
Volume Right	0	0	0	5
cSH	1012	1700	1700	1700
Volume to Capacity	0.00	0.26	0.24	0.12
Queue Length 95th (m)	0.1	0.0	0.0	0.0
Control Delay (s)	0.2	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.1		0.0	
Approach LOS				

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	32.3%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
3: Dufferin Street & Joe Shuster Way

06/22/2022

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	10	85	565	35	75	525
Future Volume (Veh/h)	10	85	565	35	75	525
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	10	87	577	36	77	536
Pedestrians	164					6
Lane Width (m)	3.0					3.5
Walking Speed (m/s)	1.1					1.1
Percent Blockage	13					1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			301			77
pX, platoon unblocked	0.92					
vC, conflicting volume	1181	476			777	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1026	476			777	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	81			90	
cM capacity (veh/h)	168	467			738	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	10	87	385	228	256	357
Volume Left	10	0	0	0	77	0
Volume Right	0	87	0	36	0	0
cSH	168	467	1700	1700	738	1700
Volume to Capacity	0.06	0.19	0.23	0.13	0.10	0.21
Queue Length 95th (m)	1.4	5.1	0.0	0.0	2.6	0.0
Control Delay (s)	27.8	14.5	0.0	0.0	4.0	0.0
Lane LOS	D	B			A	
Approach Delay (s)	15.8		0.0		1.7	
Approach LOS	C					

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	49.0%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
4: Dufferin Street & Existing Site Driveway

06/22/2022

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	0	0	590	535	0
Future Volume (Veh/h)	10	0	0	590	535	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	10	0	0	615	557	0
Pedestrians	67			4	3	
Lane Width (m)	3.0			3.5	3.5	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	5			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				253	126	
pX, platoon unblocked	0.99	0.99	0.99			
vC, conflicting volume	934	350	624			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	906	314	592			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	100	100			
cM capacity (veh/h)	260	640	928			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	10	205	410	371	186
Volume Left	10	0	0	0	0
Volume Right	0	0	0	0	0
cSH	260	928	1700	1700	1700
Volume to Capacity	0.04	0.00	0.24	0.22	0.11
Queue Length 95th (m)	0.9	0.0	0.0	0.0	0.0
Control Delay (s)	19.4	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	19.4	0.0		0.0	
Approach LOS	C				

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	27.6%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access 06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	0	25	20	0	15	5	555	15	20	500	15
Future Volume (Veh/h)	20	0	25	20	0	15	5	555	15	20	500	15
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	20	0	26	20	0	15	5	566	15	20	510	15
Pedestrians		72			138			46			2	
Lane Width (m)		3.7			3.5			3.5			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		7			13			4			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								190			189	
pX, platoon unblocked	0.97	0.97		0.97	0.97	0.97				0.97		
vC, conflicting volume	940	1358	380	1088	1358	430	597			719		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	879	1311	380	1033	1311	355	597			652		
tC, single (s)	7.5	6.5	6.9	7.6	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	89	100	95	83	100	97	99			97		
cM capacity (veh/h)	179	122	555	118	122	547	920			800		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	46	35	288	298	275	270
Volume Left	20	20	5	0	20	0
Volume Right	26	15	0	15	0	15
cSH	291	178	920	1700	800	1700
Volume to Capacity	0.16	0.20	0.01	0.18	0.03	0.16
Queue Length 95th (m)	4.2	5.4	0.1	0.0	0.6	0.0
Control Delay (s)	19.7	30.1	0.2	0.0	1.0	0.0
Lane LOS	C	D	A		A	
Approach Delay (s)	19.7	30.1	0.1		0.5	
Approach LOS	C	D				

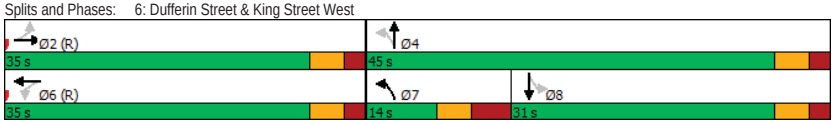
Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	47.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Timings
6: Dufferin Street & King Street West 06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	85	180	35	260	35	405	90	335
Future Volume (vph)	85	180	35	260	35	405	90	335
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		2		6	7	4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	7	4	8	8
Switch Phase								
Minimum Initial (s)	23.0	23.0	23.0	23.0	6.0	23.0	23.0	23.0
Minimum Split (s)	28.5	28.5	28.5	28.5	13.2	28.5	28.5	28.5
Total Split (s)	35.0	35.0	35.0	35.0	14.0	45.0	31.0	31.0
Total Split (%)	43.8%	43.8%	43.8%	43.8%	17.5%	56.3%	38.8%	38.8%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
All-Red Time (s)	2.2	2.2	2.2	2.2	3.9	2.2	2.2	2.2
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.5		5.5		5.5		5.5
Lead/Lag					Lead		Lag	Lag
Lead-Lag Optimize?					Yes		Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		29.5		29.5		39.5		25.5
Actuated g/C Ratio		0.37		0.37		0.49		0.32
v/c Ratio		0.34		0.38		0.33		0.70
Control Delay		19.1		17.2		12.5		27.4
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		19.1		17.2		12.5		27.4
LOS		B		B		B		C
Approach Delay		19.1		17.2		12.5		27.4
Approach LOS		B		B		B		C

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 27 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 19.5		Intersection LOS: B	
Intersection Capacity Utilization 95.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Dufferin Street & King Street West



Queues
6: Dufferin Street & King Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	289	392	490	562
v/c Ratio	0.34	0.38	0.33	0.70
Control Delay	19.1	17.2	12.5	27.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	19.1	17.2	12.5	27.4
Queue Length 50th (m)	15.8	19.2	21.4	35.7
Queue Length 95th (m)	25.5	30.4	31.0	53.6
Internal Link Dist (m)	99.8	94.3	85.5	166.1
Turn Bay Length (m)				
Base Capacity (vph)	855	1022	1475	799
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.34	0.38	0.33	0.70

Intersection Summary

HCM Signalized Intersection Capacity Analysis
6: Dufferin Street & King Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	180	15	35	260	85	35	405	35	90	335	120
Future Volume (vph)	85	180	15	35	260	85	35	405	35	90	335	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)		5.5			5.5			5.5			5.5	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.99			0.94			0.98			0.97	
Flpb, ped/bikes		0.96			0.99			1.00			0.98	
Frt		0.99			0.97			0.99			0.97	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		3086			2969			3234			3093	
Flt Permitted		0.74			0.90			0.89			0.77	
Satd. Flow (perm)		2307			2684			2901			2406	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	88	186	15	36	268	88	36	418	36	93	345	124
RTOR Reduction (vph)	0	5	0	0	33	0	0	7	0	0	33	0
Lane Group Flow (vph)	0	284	0	0	359	0	0	483	0	0	529	0
Confl. Peds. (#/hr)	245		232	232		245	113		219	219		113
Heavy Vehicles (%)	4%	8%	6%	32%	2%	13%	0%	5%	32%	0%	9%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		2			6		7	4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		29.5			29.5			39.5			25.5	
Effective Green, g (s)		29.5			29.5			39.5			25.5	
Actuated g/C Ratio		0.37			0.37			0.49			0.32	
Clearance Time (s)		5.5			5.5			5.5			5.5	
Lane Grp Cap (vph)		850			989			1460			766	
v/s Ratio Prot								c0.03				
v/s Ratio Perm		0.12			c0.13			0.14			c0.22	
v/c Ratio		0.33			0.36			0.33			0.69	
Uniform Delay, d1		18.2			18.4			12.3			23.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.1			1.0			0.6			5.1	
Delay (s)		19.2			19.4			12.9			28.9	
Level of Service		B			B			B			C	
Approach Delay (s)		19.2			19.4			12.9			28.9	
Approach LOS		B			B			B			C	

Intersection Summary					
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C		
HCM 2000 Volume to Capacity ratio	0.52				
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.2		
Intersection Capacity Utilization	95.0%	ICU Level of Service	F		
Analysis Period (min)	15				

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
7: King Street West & Gwynne Avenue

06/22/2022

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	245	415	0	35	80
Future Volume (Veh/h)	0	245	415	0	35	80
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	266	451	0	38	87
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			124			
pX, platoon unblocked						
vC, conflicting volume	451				584	226
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	451				584	226
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				92	89
cM capacity (veh/h)	1120				447	784

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	89	177	301	150	125
Volume Left	0	0	0	0	38
Volume Right	0	0	0	0	87
cSH	1120	1700	1700	1700	638
Volume to Capacity	0.00	0.10	0.18	0.09	0.20
Queue Length 95th (m)	0.0	0.0	0.0	0.0	5.5
Control Delay (s)	0.0	0.0	0.0	0.0	12.0
Lane LOS					B
Approach Delay (s)	0.0		0.0		12.0
Approach LOS					B

Intersection Summary				
Average Delay	1.8			
Intersection Capacity Utilization	25.0%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
8: Gwynne Avenue & Melbourne Avenue

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	15	20	20	0	0	0	0	0	30	75	0
Future Volume (vph)	0	15	20	20	0	0	0	0	0	30	75	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	0	18	24	24	0	0	0	0	0	36	89	0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	42	24	0	125
Volume Left (vph)	0	24	0	36
Volume Right (vph)	24	0	0	0
Hadj (s)	-0.34	0.20	0.00	0.07
Departure Headway (s)	3.9	4.4	4.2	4.1
Degree Utilization, x	0.05	0.03	0.00	0.14
Capacity (veh/h)	898	787	848	859
Control Delay (s)	7.0	7.6	7.2	7.8
Approach Delay (s)	7.0	7.6	0.0	7.8
Approach LOS	A	A	A	A

Intersection Summary				
Delay	7.6			
Level of Service	A			
Intersection Capacity Utilization	38.3%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
9: Gwynne Avenue & Milky Way 06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	10	0	0	0	0	0	0	95	5
Future Volume (Veh/h)	0	0	0	10	0	0	0	0	0	0	95	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	0	0	0	11	0	0	0	0	0	0	108	6
Pedestrians		35			39			11			22	
Lane Width (m)		3.0			3.0			0.0			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		3			3			0			2	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	168	185	157	161	188	61	149			39		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	168	185	157	161	188	61	149			39		
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	100	100	99	100	100	100			100		
cM capacity (veh/h)	729	672	869	749	669	959	1405			1535		

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	0	11	114
Volume Left	0	11	0
Volume Right	0	0	6
cSH	1700	749	1700
Volume to Capacity	0.00	0.01	0.07
Queue Length 95th (m)	0.0	0.3	0.0
Control Delay (s)	0.0	9.9	0.0
Lane LOS	A	A	
Approach Delay (s)	0.0	9.9	0.0
Approach LOS	A	A	

Intersection Summary					
Average Delay		0.9			
Intersection Capacity Utilization	30.6%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
10: Gwynne Avenue & Queen Street West 06/22/2022

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	485	50	50	620	0	0
Future Volume (Veh/h)	485	50	50	620	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	500	52	52	639	0	0
Pedestrians	9			2	220	
Lane Width (m)	3.5			3.5	0.0	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	1			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)				125		
pX, platoon unblocked					0.88	
vC, conflicting volume			772		1178	498
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			772		934	498
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			94		100	100
cM capacity (veh/h)			839		220	522

Direction, Lane #	EB 1	EB 2	WB 1	WB 2
Volume Total	333	219	265	426
Volume Left	0	0	52	0
Volume Right	0	52	0	0
cSH	1700	1700	839	1700
Volume to Capacity	0.20	0.13	0.06	0.25
Queue Length 95th (m)	0.0	0.0	1.5	0.0
Control Delay (s)	0.0	0.0	2.4	0.0
Lane LOS			A	
Approach Delay (s)	0.0		0.9	
Approach LOS				

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	48.3%	ICU Level of Service		A
Analysis Period (min)	15			

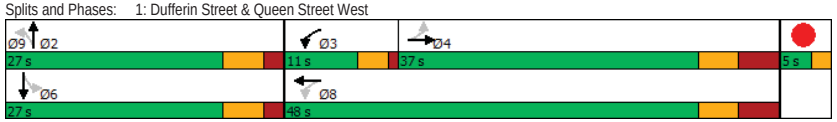
Timings
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	Ø9
Lane Configurations									
Traffic Volume (vph)	50	550	185	295	40	315	40	505	
Future Volume (vph)	50	550	185	295	40	315	40	505	
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	
Protected Phases		4	3	8		2		6	9
Permitted Phases	4		8		2		6		
Detector Phase	4	4	3	8	2	2	6	6	
Switch Phase									
Minimum Initial (s)	25.0	25.0	6.0	25.0	19.0	19.0	19.0	19.0	1.0
Minimum Split (s)	33.0	33.0	10.0	33.0	25.0	25.0	25.0	25.0	3.0
Total Split (s)	37.0	37.0	11.0	48.0	27.0	27.0	27.0	27.0	5.0
Total Split (%)	46.3%	46.3%	13.8%	60.0%	33.8%	33.8%	33.8%	33.8%	6%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	2.0
All-Red Time (s)	4.0	4.0	1.0	4.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0	
Total Lost Time (s)		8.0		8.0		6.0		6.0	
Lead/Lag	Lag	Lag	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes						
Recall Mode	None	None	None	None	Max	Max	Max	Max	None
Act Effct Green (s)		26.4		26.4		21.0		21.0	
Actuated g/C Ratio		0.43		0.43		0.34		0.34	
v/c Ratio		0.58		0.62		0.52		0.61	
Control Delay		15.1		17.1		17.2		20.1	
Queue Delay		0.0		0.0		0.0		0.0	
Total Delay		15.1		17.1		17.2		20.1	
LOS		B		B		B		C	
Approach Delay		15.1		17.1		17.2		20.1	
Approach LOS		B		B		B		C	

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 61.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 17.3		Intersection LOS: B	
Intersection Capacity Utilization 98.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Dufferin Street & Queen Street West



Queues
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	696	516	479	608
v/c Ratio	0.58	0.62	0.52	0.61
Control Delay	15.1	17.1	17.2	20.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.1	17.1	17.2	20.1
Queue Length 50th (m)	28.9	22.2	18.8	27.6
Queue Length 95th (m)	42.7	35.7	36.7	50.0
Internal Link Dist (m)	100.9	102.5	22.6	84.2
Turn Bay Length (m)				
Base Capacity (vph)	1350	1268	928	997
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.52	0.41	0.52	0.61

Intersection Summary

HCM Signalized Intersection Capacity Analysis
1: Dufferin Street & Queen Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	550	75	185	295	20	40	315	110	40	505	45
Future Volume (vph)	50	550	75	185	295	20	40	315	110	40	505	45
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			6.0			6.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.98			1.00			0.97			0.99	
Flpb, ped/bikes		1.00			0.98			0.99			1.00	
Frt		0.98			0.99			0.96			0.99	
Flt Protected		1.00			0.98			1.00			1.00	
Satd. Flow (prot)		3221			3134			3072			3261	
Flt Permitted		0.87			0.61			0.86			0.89	
Satd. Flow (perm)		2799			1947			2644			2908	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	52	567	77	191	304	21	41	325	113	41	521	46
RTOR Reduction (vph)	0	11	0	0	5	0	0	33	0	0	7	0
Lane Group Flow (vph)	0	685	0	0	511	0	0	446	0	0	601	0
Confl. Peds. (#/hr)	140		226	226		140	188		142	142		188
Heavy Vehicles (%)	10%	6%	4%	7%	9%	5%	5%	7%	8%	2%	6%	7%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.4			26.4			21.0			21.0	
Effective Green, g (s)		26.4			26.4			21.0			21.0	
Actuated g/C Ratio		0.43			0.43			0.34			0.34	
Clearance Time (s)		8.0			8.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1203			837			904			994	
v/s Ratio Prot												
v/s Ratio Perm		0.24			c0.26			0.17			c0.21	
v/c Ratio		0.57			0.61			0.49			0.61	
Uniform Delay, d1		13.2			13.5			16.0			16.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			1.3			1.9			2.7	
Delay (s)		13.8			14.9			17.9			19.5	
Level of Service		B			B			B			B	
Approach Delay (s)		13.8			14.9			17.9			19.5	
Approach LOS		B			B			B			B	

Intersection Summary				
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	61.4	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	98.0%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Unsignalized Intersection Capacity Analysis
2: Dufferin Street & Milky Way

06/22/2022

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	465	760	5
Future Volume (Veh/h)	0	0	0	465	760	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	0	0	0	500	817	5
Pedestrians	57			1	2	
Lane Width (m)	0.0			3.5	3.5	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				332	47	
pX, platoon unblocked	0.87	0.87	0.87			
vC, conflicting volume	1128	469	879			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	843	82	555			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	266	838	890			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	167	333	545	277
Volume Left	0	0	0	0
Volume Right	0	0	0	5
cSH	890	1700	1700	1700
Volume to Capacity	0.00	0.20	0.32	0.16
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				
Approach Delay (s)	0.0		0.0	
Approach LOS				

Intersection Summary				
Average Delay		0.0		
Intersection Capacity Utilization		31.5%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
3: Dufferin Street & Joe Shuster Way 06/22/2022

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	25	60	405	30	80	680
Future Volume (Veh/h)	25	60	405	30	80	680
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	27	65	435	32	86	731
Pedestrians	170		2			5
Lane Width (m)	3.0		3.5			3.5
Walking Speed (m/s)	1.1		1.1			1.1
Percent Blockage	13		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			301			77
pX, platoon unblocked	0.88					
vC, conflicting volume	1160	408			637	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	902	408			637	
tC, single (s)	*6.0	6.9			4.1	
tC, 2 stage (s)						
tF (s)	*3.0	3.3			2.2	
p0 queue free %	90	87			90	
cM capacity (veh/h)	257	510			821	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	27	65	290	177	330	487
Volume Left	27	0	0	0	86	0
Volume Right	0	65	0	32	0	0
cSH	257	510	1700	1700	821	1700
Volume to Capacity	0.10	0.13	0.17	0.10	0.10	0.29
Queue Length 95th (m)	2.6	3.3	0.0	0.0	2.7	0.0
Control Delay (s)	20.6	13.1	0.0	0.0	3.5	0.0
Lane LOS	C	B			A	
Approach Delay (s)	15.3		0.0		1.4	
Approach LOS	C					

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	49.3%	ICU Level of Service	A	
Analysis Period (min)	15			

* User Entered Value

HCM Unsignalized Intersection Capacity Analysis
4: Dufferin Street & Existing Site Driveway 06/22/2022

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	5	435	700	5
Future Volume (Veh/h)	0	0	5	435	700	5
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	0	5	473	761	5
Pedestrians	48			4	1	
Lane Width (m)	3.0			3.5	3.5	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	4			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				253	126	
pX, platoon unblocked	0.92	0.92	0.92			
vC, conflicting volume	1059	435	814			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	881	200	614			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	99			
cM capacity (veh/h)	254	715	860			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	0	163	315	507	259
Volume Left	0	5	0	0	0
Volume Right	0	0	0	0	5
cSH	1700	860	1700	1700	1700
Volume to Capacity	0.00	0.01	0.19	0.30	0.15
Queue Length 95th (m)	0.0	0.1	0.0	0.0	0.0
Control Delay (s)	0.0	0.3	0.0	0.0	0.0
Lane LOS	A	A			
Approach Delay (s)	0.0	0.1		0.0	
Approach LOS	A				

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	30.8%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	15	15	0	25	0	405	15	20	670	10
Future Volume (Veh/h)	10	0	15	15	0	25	0	405	15	20	670	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	11	0	16	16	0	27	0	435	16	22	720	11
Pedestrians		35			88			33			3	
Lane Width (m)		3.5			3.5			3.5			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		3			8			3			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								190			189	
pX, platoon unblocked	0.96	0.96	0.96	0.96	0.96		0.96					
vC, conflicting volume	1052	1344	434	984	1341	316	766			539		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	963	1268	317	892	1265	316	664			539		
tC, single (s)	7.5	6.5	7.2	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.4	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	93	100	97	91	100	96	100			98		
cM capacity (veh/h)	169	141	581	179	142	628	865			955		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	27	43	218	234	382	371
Volume Left	11	16	0	0	22	0
Volume Right	16	27	0	16	0	11
cSH	292	324	865	1700	955	1700
Volume to Capacity	0.09	0.13	0.00	0.14	0.02	0.22
Queue Length 95th (m)	2.3	3.4	0.0	0.0	0.5	0.0
Control Delay (s)	18.6	17.8	0.0	0.0	0.8	0.0
Lane LOS	C	C			A	
Approach Delay (s)	18.6	17.8	0.0		0.4	
Approach LOS	C	C				

Intersection Summary				
Average Delay	1.2			
Intersection Capacity Utilization	50.1%	ICU Level of Service	A	
Analysis Period (min)	15			

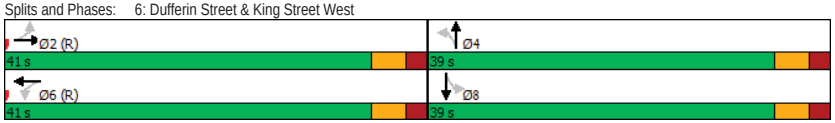
Timings
6: Dufferin Street & King Street West

06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	85	205	35	190	5	265	90	455
Future Volume (vph)	85	205	35	190	5	265	90	455
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
Minimum Split (s)	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
Total Split (s)	41.0	41.0	41.0	41.0	39.0	39.0	39.0	39.0
Total Split (%)	51.3%	51.3%	51.3%	51.3%	48.8%	48.8%	48.8%	48.8%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
All-Red Time (s)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.5		5.5		5.5		5.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		35.5		35.5		33.5		33.5
Actuated g/C Ratio		0.44		0.44		0.42		0.42
v/c Ratio		0.33		0.29		0.32		0.71
Control Delay		15.0		12.0		14.7		22.1
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		15.0		12.0		14.7		22.1
LOS		B		B		B		C
Approach Delay		15.0		12.0		14.7		22.1
Approach LOS		B		B		B		C

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 27 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 17.4		Intersection LOS: B	
Intersection Capacity Utilization 97.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Dufferin Street & King Street West



Queues
6: Dufferin Street & King Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	353	336	375	795
v/c Ratio	0.33	0.29	0.32	0.71
Control Delay	15.0	12.0	14.7	22.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.0	12.0	14.7	22.1
Queue Length 50th (m)	17.0	12.8	17.1	47.5
Queue Length 95th (m)	25.7	20.8	26.1	65.5
Internal Link Dist (m)	99.8	94.3	85.5	166.1
Turn Bay Length (m)				
Base Capacity (vph)	1083	1149	1172	1118
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.33	0.29	0.32	0.71

Intersection Summary

HCM Signalized Intersection Capacity Analysis
6: Dufferin Street & King Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	205	20	35	190	70	5	265	60	90	455	155
Future Volume (vph)	85	205	20	35	190	70	5	265	60	90	455	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)		5.5			5.5			5.5			5.5	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.98			0.96			0.96			0.98	
Flpb, ped/bikes		0.98			0.98			1.00			0.99	
Frt		0.99			0.96			0.97			0.97	
Flt Protected		0.99			0.99			1.00			0.99	
Satd. Flow (prot)		3137			2841			2905			3108	
Flt Permitted		0.76			0.88			0.94			0.83	
Satd. Flow (perm)		2430			2506			2741			2594	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	97	233	23	40	216	80	6	301	68	102	517	176
RTOR Reduction (vph)	0	6	0	0	37	0	0	24	0	0	33	0
Lane Group Flow (vph)	0	347	0	0	299	0	0	351	0	0	762	0
Confl. Peds. (#/hr)	136		256	256		136	78		189	189		78
Heavy Vehicles (%)	3%	8%	6%	47%	1%	32%	14%	10%	37%	8%	7%	4%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		35.5			35.5			33.5			33.5	
Effective Green, g (s)		35.5			35.5			33.5			33.5	
Actuated g/C Ratio		0.44			0.44			0.42			0.42	
Clearance Time (s)		5.5			5.5			5.5			5.5	
Lane Grp Cap (vph)		1078			1112			1147			1086	
v/s Ratio Prot												
v/s Ratio Perm		c0.14			0.12			0.13			c0.29	
v/c Ratio		0.32			0.27			0.31			0.70	
Uniform Delay, d1		14.4			14.1			15.5			19.1	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.8			0.6			0.7			3.8	
Delay (s)		15.2			14.6			16.2			22.9	
Level of Service		B			B			B			C	
Approach Delay (s)		15.2			14.6			16.2			22.9	
Approach LOS		B			B			B			C	

Intersection Summary					
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.51				
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.0		
Intersection Capacity Utilization	97.1%	ICU Level of Service	F		
Analysis Period (min)	15				

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
7: King Street West & Gwynne Avenue

06/22/2022

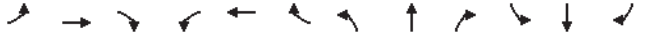
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	270	350	0	40	80
Future Volume (Veh/h)	0	270	350	0	40	80
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	293	380	0	43	87
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			124			
pX, platoon unblocked						
vC, conflicting volume	380				526	190
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	380				526	190
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				91	89
cM capacity (veh/h)	1190				486	826

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	98	195	253	127	130
Volume Left	0	0	0	0	43
Volume Right	0	0	0	0	87
cSH	1190	1700	1700	1700	671
Volume to Capacity	0.00	0.11	0.15	0.07	0.19
Queue Length 95th (m)	0.0	0.0	0.0	0.0	5.4
Control Delay (s)	0.0	0.0	0.0	0.0	11.7
Lane LOS					B
Approach Delay (s)	0.0		0.0		11.7
Approach LOS					B

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	23.5%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
8: Gwynne Avenue & Melbourne Avenue

06/22/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	10	25	10	0	0	0	0	0	15	85	0
Future Volume (vph)	0	10	25	10	0	0	0	0	0	15	85	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	12	30	12	0	0	0	0	0	18	102	0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	42	12	0	120
Volume Left (vph)	0	12	0	18
Volume Right (vph)	30	0	0	0
Hadj (s)	-0.38	0.20	0.00	0.15
Departure Headway (s)	3.8	4.4	4.1	4.2
Degree Utilization, x	0.04	0.01	0.00	0.14
Capacity (veh/h)	914	789	866	852
Control Delay (s)	7.0	7.5	7.1	7.8
Approach Delay (s)	7.0	7.5	0.0	7.8
Approach LOS	A	A	A	A

Intersection Summary				
Delay	7.6			
Level of Service	A			
Intersection Capacity Utilization	33.9%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
9: Gwynne Avenue & Milky Way 06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	100	0
Future Volume (Veh/h)	0	0	0	0	0	0	0	0	0	0	100	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	120	0
Pedestrians		25			28			5			9	
Lane Width (m)		3.0			3.0			0.0			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		2			2			0			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	154	173	150	153	173	37	145			28		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	154	173	150	153	173	37	145			28		
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	100	100	100	100	100	100			100		
cM capacity (veh/h)	769	694	884	775	694	1009	1421			1563		

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	0	0	120
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.07
Queue Length 95th (m)	0.0	0.0	0.0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A	A	
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A	A	

Intersection Summary					
Average Delay			0.0		
Intersection Capacity Utilization			28.0%	ICU Level of Service	A
Analysis Period (min)			15		

HCM Unsignalized Intersection Capacity Analysis
10: Gwynne Avenue & Queen Street West 06/22/2022

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	675	65	35	345	0	0
Future Volume (Veh/h)	675	65	35	345	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	696	67	36	356	0	0
Pedestrians	1			1	109	
Lane Width (m)	3.5			3.5	0.0	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)				125		
pX, platoon unblocked						
vC, conflicting volume			872		1090	492
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			872		1090	492
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			95		100	100
cM capacity (veh/h)			782		203	528

Direction, Lane #	EB 1	EB 2	WB 1	WB 2
Volume Total	464	299	155	237
Volume Left	0	0	36	0
Volume Right	0	67	0	0
cSH	1700	1700	782	1700
Volume to Capacity	0.27	0.18	0.05	0.14
Queue Length 95th (m)	0.0	0.0	1.1	0.0
Control Delay (s)	0.0	0.0	2.7	0.0
Lane LOS			A	
Approach Delay (s)	0.0		1.0	
Approach LOS				

Intersection Summary					
Average Delay			0.4		
Intersection Capacity Utilization			45.5%	ICU Level of Service	A
Analysis Period (min)			15		

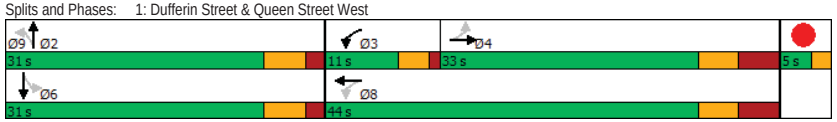
Timings
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	Ø9
Lane Configurations									
Traffic Volume (vph)	65	345	135	580	40	550	45	430	
Future Volume (vph)	65	345	135	580	40	550	45	430	
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	
Protected Phases		4	3	8		2		6	9
Permitted Phases	4		8		2		6		
Detector Phase	4	4	3	8	2	2	6	6	
Switch Phase									
Minimum Initial (s)	25.0	25.0	6.0	25.0	19.0	19.0	19.0	19.0	1.0
Minimum Split (s)	33.0	33.0	10.0	33.0	25.0	25.0	25.0	25.0	3.0
Total Split (s)	33.0	33.0	11.0	44.0	31.0	31.0	31.0	31.0	5.0
Total Split (%)	41.3%	41.3%	13.8%	55.0%	38.8%	38.8%	38.8%	38.8%	6%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	2.0
All-Red Time (s)	4.0	4.0	1.0	4.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0	
Total Lost Time (s)		8.0		8.0		6.0		6.0	
Lead/Lag	Lag	Lag	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes						
Recall Mode	None	None	None	None	Max	Max	Max	Max	None
Act Effct Green (s)		30.3		30.3		25.1		25.1	
Actuated g/C Ratio		0.44		0.44		0.36		0.36	
v/c Ratio		0.50		0.73		0.67		0.56	
Control Delay		14.8		20.4		22.6		20.7	
Queue Delay		0.0		0.0		0.0		0.0	
Total Delay		14.8		20.4		22.6		20.7	
LOS		B		C		C		C	
Approach Delay		14.8		20.4		22.6		20.7	
Approach LOS		B		C		C		C	

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 69.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 20.0		Intersection LOS: B	
Intersection Capacity Utilization 102.8%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: Dufferin Street & Queen Street West



Queues
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	511	778	721	551
v/c Ratio	0.50	0.73	0.67	0.56
Control Delay	14.8	20.4	22.6	20.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.8	20.4	22.6	20.7
Queue Length 50th (m)	22.2	41.3	39.2	28.6
Queue Length 95th (m)	34.2	60.1	63.8	48.2
Internal Link Dist (m)	100.9	102.5	22.6	84.2
Turn Bay Length (m)				
Base Capacity (vph)	1029	1273	1072	984
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.50	0.61	0.67	0.56

Intersection Summary

HCM Signalized Intersection Capacity Analysis
1: Dufferin Street & Queen Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	345	85	135	580	40	40	550	110	45	430	60
Future Volume (vph)	65	345	85	135	580	40	40	550	110	45	430	60
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			6.0			6.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.95			0.99			0.97			0.97	
Flpb, ped/bikes		0.99			0.98			0.99			1.00	
Frt		0.97			0.99			0.98			0.98	
Flt Protected		0.99			0.99			1.00			1.00	
Satd. Flow (prot)		3152			3224			3283			3251	
Flt Permitted		0.74			0.75			0.89			0.83	
Satd. Flow (perm)		2338			2442			2932			2703	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	67	356	88	139	598	41	41	567	113	46	443	62
RTOR Reduction (vph)	0	18	0	0	5	0	0	18	0	0	11	0
Lane Group Flow (vph)	0	493	0	0	773	0	0	703	0	0	540	0
Confl. Peds. (#/hr)	274		328	328		274	243		139	139		243
Heavy Vehicles (%)	3%	4%	1%	1%	6%	3%	0%	3%	1%	0%	4%	5%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.3			30.3			25.1			25.1	
Effective Green, g (s)		30.3			30.3			25.1			25.1	
Actuated g/C Ratio		0.44			0.44			0.36			0.36	
Clearance Time (s)		8.0			8.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1020			1066			1060			977	
v/s Ratio Prot												
v/s Ratio Perm		0.21			c0.32			c0.24			0.20	
v/c Ratio		0.48			0.73			0.66			0.55	
Uniform Delay, d1		14.0			16.1			18.6			17.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.4			2.5			3.3			2.2	
Delay (s)		14.3			18.6			21.9			19.9	
Level of Service		B			B			C			B	
Approach Delay (s)		14.3			18.6			21.9			19.9	
Approach LOS		B			B			C			B	

Intersection Summary				
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	69.4	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	102.8%	ICU Level of Service	G	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Unsignalized Intersection Capacity Analysis
2: Dufferin Street & Milky Way

06/22/2022

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	5	700	645	5
Future Volume (Veh/h)	0	0	5	700	645	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	0	0	5	714	658	5
Pedestrians	74			3	1	
Lane Width (m)	0.0			3.5	3.5	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				332	47	
pX, platoon unblocked	0.89	0.89	0.89			
vC, conflicting volume	1102	408	737			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	874	96	464			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	99			
cM capacity (veh/h)	260	844	989			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	243	476	439	224
Volume Left	5	0	0	0
Volume Right	0	0	0	5
cSH	989	1700	1700	1700
Volume to Capacity	0.01	0.28	0.26	0.13
Queue Length 95th (m)	0.1	0.0	0.0	0.0
Control Delay (s)	0.2	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.1		0.0	
Approach LOS				

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	33.8%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
3: Dufferin Street & Joe Shuster Way

06/22/2022

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	10	85	620	35	75	570
Future Volume (Veh/h)	10	85	620	35	75	570
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	10	87	633	36	77	582
Pedestrians	164					6
Lane Width (m)	3.0					3.5
Walking Speed (m/s)	1.1					1.1
Percent Blockage	13					1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			301			77
pX, platoon unblocked	0.90					
vC, conflicting volume	1260	504			833	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1075	504			833	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	81			89	
cM capacity (veh/h)	152	448			703	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	10	87	422	247	271	388
Volume Left	10	0	0	0	77	0
Volume Right	0	87	0	36	0	0
cSH	152	448	1700	1700	703	1700
Volume to Capacity	0.07	0.19	0.25	0.15	0.11	0.23
Queue Length 95th (m)	1.6	5.4	0.0	0.0	2.8	0.0
Control Delay (s)	30.3	15.0	0.0	0.0	4.0	0.0
Lane LOS	D	B			A	
Approach Delay (s)	16.5		0.0		1.6	
Approach LOS	C					

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	51.7%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
4: Dufferin Street & Existing Site Driveway

06/22/2022

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	0	0	645	580	0
Future Volume (Veh/h)	10	0	0	645	580	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	10	0	0	672	604	0
Pedestrians	67			4	3	
Lane Width (m)	3.0			3.5	3.5	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	5			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				253	126	
pX, platoon unblocked	0.96	0.96	0.96			
vC, conflicting volume	1010	373	671			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	861	250	562			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	100	100			
cM capacity (veh/h)	272	681	922			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	10	224	448	403	201
Volume Left	10	0	0	0	0
Volume Right	0	0	0	0	0
cSH	272	922	1700	1700	1700
Volume to Capacity	0.04	0.00	0.26	0.24	0.12
Queue Length 95th (m)	0.9	0.0	0.0	0.0	0.0
Control Delay (s)	18.8	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	18.8	0.0		0.0	
Approach LOS	C				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	29.1%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	0	25	20	0	15	5	610	15	20	545	15
Future Volume (Veh/h)	20	0	25	20	0	15	5	610	15	20	545	15
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	20	0	26	20	0	15	5	622	15	20	556	15
Pedestrians		72			138			46			2	
Lane Width (m)		3.7			3.5			3.5			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		7			13			4			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								190			189	
pX, platoon unblocked	0.95	0.95		0.95	0.95	0.95				0.95		
vC, conflicting volume	1014	1460	404	1168	1460	458	643			775		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	913	1383	404	1075	1383	330	643			663		
tC, single (s)	7.5	6.5	6.9	7.6	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	88	100	95	81	100	97	99			97		
cM capacity (veh/h)	166	108	536	107	108	556	884			777		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	46	35	316	326	298	293
Volume Left	20	20	5	0	20	0
Volume Right	26	15	0	15	0	15
cSH	272	164	884	1700	777	1700
Volume to Capacity	0.17	0.21	0.01	0.19	0.03	0.17
Queue Length 95th (m)	4.5	5.9	0.1	0.0	0.6	0.0
Control Delay (s)	20.9	32.8	0.2	0.0	0.9	0.0
Lane LOS	C	D	A		A	
Approach Delay (s)	20.9	32.8	0.1		0.5	
Approach LOS	C	D				

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	48.5%	ICU Level of Service	A	
Analysis Period (min)	15			

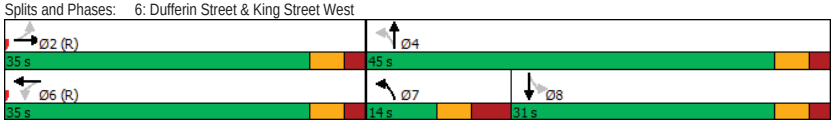
Timings
6: Dufferin Street & King Street West

06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	85	180	35	260	35	460	90	380
Future Volume (vph)	85	180	35	260	35	460	90	380
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		2		6	7	4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	7	4	8	8
Switch Phase								
Minimum Initial (s)	23.0	23.0	23.0	23.0	6.0	23.0	23.0	23.0
Minimum Split (s)	28.5	28.5	28.5	28.5	13.2	28.5	28.5	28.5
Total Split (s)	35.0	35.0	35.0	35.0	14.0	45.0	31.0	31.0
Total Split (%)	43.8%	43.8%	43.8%	43.8%	17.5%	56.3%	38.8%	38.8%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
All-Red Time (s)	2.2	2.2	2.2	2.2	3.9	2.2	2.2	2.2
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.5		5.5		5.5		5.5
Lead/Lag					Lead		Lag	Lag
Lead-Lag Optimize?					Yes		Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		29.5		29.5		39.5		25.5
Actuated g/C Ratio		0.37		0.37		0.49		0.32
v/c Ratio		0.34		0.38		0.37		0.77
Control Delay		19.1		17.2		12.9		30.5
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		19.1		17.2		12.9		30.5
LOS		B		B		B		C
Approach Delay		19.1		17.2		12.9		30.5
Approach LOS		B		B		B		C

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 27 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 20.6		Intersection LOS: C	
Intersection Capacity Utilization 95.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Dufferin Street & King Street West



Queues
6: Dufferin Street & King Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	289	392	546	609
v/c Ratio	0.34	0.38	0.37	0.77
Control Delay	19.1	17.2	12.9	30.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	19.1	17.2	12.9	30.5
Queue Length 50th (m)	15.8	19.2	24.4	40.5
Queue Length 95th (m)	25.5	30.4	34.9	60.0
Internal Link Dist (m)	99.8	94.3	85.5	166.1
Turn Bay Length (m)				
Base Capacity (vph)	855	1022	1477	794
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.34	0.38	0.37	0.77

Intersection Summary

HCM Signalized Intersection Capacity Analysis
6: Dufferin Street & King Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	180	15	35	260	85	35	460	35	90	380	120
Future Volume (vph)	85	180	15	35	260	85	35	460	35	90	380	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)		5.5			5.5			5.5			5.5	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.99			0.94			0.98			0.97	
Flpb, ped/bikes		0.96			0.99			1.00			0.98	
Frt		0.99			0.97			0.99			0.97	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		3086			2969			3251			3111	
Flt Permitted		0.74			0.90			0.89			0.77	
Satd. Flow (perm)		2307			2684			2904			2403	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	88	186	15	36	268	88	36	474	36	93	392	124
RTOR Reduction (vph)	0	5	0	0	33	0	0	7	0	0	29	0
Lane Group Flow (vph)	0	284	0	0	359	0	0	539	0	0	580	0
Confl. Peds. (#/hr)	245		232	232		245	113		219	219		113
Heavy Vehicles (%)	4%	8%	6%	32%	2%	13%	0%	5%	32%	0%	9%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		2			6		7	4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		29.5			29.5			39.5			25.5	
Effective Green, g (s)		29.5			29.5			39.5			25.5	
Actuated g/C Ratio		0.37			0.37			0.49			0.32	
Clearance Time (s)		5.5			5.5			5.5			5.5	
Lane Grp Cap (vph)		850			989			1463			765	
v/s Ratio Prot								c0.03				
v/s Ratio Perm		0.12			c0.13			0.15			c0.24	
v/c Ratio		0.33			0.36			0.37			0.76	
Uniform Delay, d1		18.2			18.4			12.5			24.5	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.1			1.0			0.7			7.0	
Delay (s)		19.2			19.4			13.3			31.4	
Level of Service		B			B			B			C	
Approach Delay (s)		19.2			19.4			13.3			31.4	
Approach LOS		B			B			B			C	

Intersection Summary				
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.2	
Intersection Capacity Utilization	95.0%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
7: King Street West & Gwynne Avenue

06/22/2022

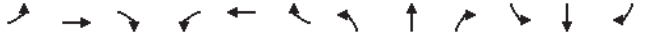
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	245	415	0	35	80
Future Volume (Veh/h)	0	245	415	0	35	80
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	266	451	0	38	87
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			124			
pX, platoon unblocked						
vC, conflicting volume	451				584	226
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	451				584	226
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				92	89
cM capacity (veh/h)	1120				447	784

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	89	177	301	150	125
Volume Left	0	0	0	0	38
Volume Right	0	0	0	0	87
cSH	1120	1700	1700	1700	638
Volume to Capacity	0.00	0.10	0.18	0.09	0.20
Queue Length 95th (m)	0.0	0.0	0.0	0.0	5.5
Control Delay (s)	0.0	0.0	0.0	0.0	12.0
Lane LOS					B
Approach Delay (s)	0.0		0.0		12.0
Approach LOS					B

Intersection Summary				
Average Delay		1.8		
Intersection Capacity Utilization		25.0%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
8: Gwynne Avenue & Melbourne Avenue

06/22/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	15	20	20	0	0	0	0	0	30	75	0
Future Volume (vph)	0	15	20	20	0	0	0	0	0	30	75	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	0	18	24	24	0	0	0	0	0	36	89	0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	42	24	0	125
Volume Left (vph)	0	24	0	36
Volume Right (vph)	24	0	0	0
Hadj (s)	-0.34	0.20	0.00	0.07
Departure Headway (s)	3.9	4.4	4.2	4.1
Degree Utilization, x	0.05	0.03	0.00	0.14
Capacity (veh/h)	898	787	848	859
Control Delay (s)	7.0	7.6	7.2	7.8
Approach Delay (s)	7.0	7.6	0.0	7.8
Approach LOS	A	A	A	A

Intersection Summary				
Delay		7.6		
Level of Service		A		
Intersection Capacity Utilization		38.3%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
9: Gwynne Avenue & Milky Way 06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	10	0	0	0	0	0	0	95	5
Future Volume (Veh/h)	0	0	0	10	0	0	0	0	0	0	95	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	0	0	0	11	0	0	0	0	0	0	108	6
Pedestrians		35			39			11			22	
Lane Width (m)		3.0			3.0			0.0			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		3			3			0			2	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	168	185	157	161	188	61	149			39		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	168	185	157	161	188	61	149			39		
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	100	100	99	100	100	100			100		
cM capacity (veh/h)	729	672	869	749	669	959	1405			1535		

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	0	11	114
Volume Left	0	11	0
Volume Right	0	0	6
cSH	1700	749	1700
Volume to Capacity	0.00	0.01	0.07
Queue Length 95th (m)	0.0	0.3	0.0
Control Delay (s)	0.0	9.9	0.0
Lane LOS	A	A	
Approach Delay (s)	0.0	9.9	0.0
Approach LOS	A	A	

Intersection Summary					
Average Delay		0.9			
Intersection Capacity Utilization	30.6%	ICU Level of Service	A		
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
10: Gwynne Avenue & Queen Street West 06/22/2022

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	495	50	50	630	0	0
Future Volume (Veh/h)	495	50	50	630	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	510	52	52	649	0	0
Pedestrians	9			2	220	
Lane Width (m)	3.5			3.5	0.0	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	1			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)				125		
pX, platoon unblocked					0.88	
vC, conflicting volume			782		1194	503
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			782		944	503
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			94		100	100
cM capacity (veh/h)			832		216	518

Direction, Lane #	EB 1	EB 2	WB 1	WB 2
Volume Total	340	222	268	433
Volume Left	0	0	52	0
Volume Right	0	52	0	0
cSH	1700	1700	832	1700
Volume to Capacity	0.20	0.13	0.06	0.25
Queue Length 95th (m)	0.0	0.0	1.5	0.0
Control Delay (s)	0.0	0.0	2.4	0.0
Lane LOS			A	
Approach Delay (s)	0.0		0.9	
Approach LOS				

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	48.9%	ICU Level of Service		A
Analysis Period (min)	15			

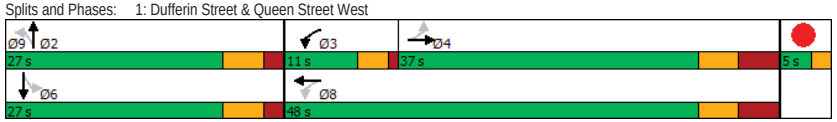
Timings
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	Ø9
Lane Configurations									
Traffic Volume (vph)	50	550	185	295	45	325	40	510	
Future Volume (vph)	50	550	185	295	45	325	40	510	
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	
Protected Phases		4	3	8		2		6	9
Permitted Phases	4		8		2		6		
Detector Phase	4	4	3	8	2	2	6	6	
Switch Phase									
Minimum Initial (s)	25.0	25.0	6.0	25.0	19.0	19.0	19.0	19.0	1.0
Minimum Split (s)	33.0	33.0	10.0	33.0	25.0	25.0	25.0	25.0	3.0
Total Split (s)	37.0	37.0	11.0	48.0	27.0	27.0	27.0	27.0	5.0
Total Split (%)	46.3%	46.3%	13.8%	60.0%	33.8%	33.8%	33.8%	33.8%	6%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	2.0
All-Red Time (s)	4.0	4.0	1.0	4.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0	
Total Lost Time (s)		8.0		8.0		6.0		6.0	
Lead/Lag	Lag	Lag	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes						
Recall Mode	None	None	None	None	Max	Max	Max	Max	None
Act Effct Green (s)		26.4		26.4		21.0		21.0	
Actuated g/C Ratio		0.43		0.43		0.34		0.34	
v/c Ratio		0.58		0.62		0.55		0.62	
Control Delay		15.1		17.1		17.8		20.3	
Queue Delay		0.0		0.0		0.0		0.0	
Total Delay		15.1		17.1		17.8		20.3	
LOS		B		B		B		C	
Approach Delay		15.1		17.1		17.8		20.3	
Approach LOS		B		B		B		C	

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 61.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 17.5		Intersection LOS: B	
Intersection Capacity Utilization 98.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Dufferin Street & Queen Street West



Queues
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	701	516	500	613
v/c Ratio	0.58	0.62	0.55	0.62
Control Delay	15.1	17.1	17.8	20.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.1	17.1	17.8	20.3
Queue Length 50th (m)	29.1	22.2	20.1	28.0
Queue Length 95th (m)	43.0	35.7	38.8	50.5
Internal Link Dist (m)	100.9	102.5	22.6	84.2
Turn Bay Length (m)				
Base Capacity (vph)	1348	1263	914	995
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.52	0.41	0.55	0.62

Intersection Summary

HCM Signalized Intersection Capacity Analysis
1: Dufferin Street & Queen Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	550	80	185	295	20	45	325	115	40	510	45
Future Volume (vph)	50	550	80	185	295	20	45	325	115	40	510	45
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			6.0			6.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.98			1.00			0.97			0.99	
Flpb, ped/bikes		1.00			0.98			0.99			1.00	
Frt		0.98			0.99			0.96			0.99	
Flt Protected		1.00			0.98			1.00			1.00	
Satd. Flow (prot)		3215			3135			3069			3263	
Flt Permitted		0.87			0.61			0.85			0.89	
Satd. Flow (perm)		2795			1942			2607			2903	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	52	567	82	191	304	21	46	335	119	41	526	46
RTOR Reduction (vph)	0	11	0	0	5	0	0	33	0	0	7	0
Lane Group Flow (vph)	0	690	0	0	511	0	0	467	0	0	606	0
Confl. Peds. (#/hr)	140		226	226		140	188		142	142		188
Heavy Vehicles (%)	10%	6%	4%	7%	9%	5%	5%	7%	8%	2%	6%	7%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		26.4			26.4			21.0			21.0	
Effective Green, g (s)		26.4			26.4			21.0			21.0	
Actuated g/C Ratio		0.43			0.43			0.34			0.34	
Clearance Time (s)		8.0			8.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1201			834			891			992	
v/s Ratio Prot												
v/s Ratio Perm		0.25			c0.26			0.18			c0.21	
v/c Ratio		0.57			0.61			0.52			0.61	
Uniform Delay, d1		13.2			13.5			16.2			16.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.7			1.3			2.2			2.8	
Delay (s)		13.9			14.9			18.4			19.6	
Level of Service		B			B			B			B	
Approach Delay (s)		13.9			14.9			18.4			19.6	
Approach LOS		B			B			B			B	

Intersection Summary				
HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	61.4	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	98.1%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Unsignalized Intersection Capacity Analysis
2: Dufferin Street & Milky Way

06/22/2022

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	25	485	755	20
Future Volume (Veh/h)	0	0	25	485	755	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	0	0	27	522	812	22
Pedestrians	57			1	2	
Lane Width (m)	0.0			3.5	3.5	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				332	47	
pX, platoon unblocked	0.87	0.87	0.87			
vC, conflicting volume	1197	475	891			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	918	84	564			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	97			
cM capacity (veh/h)	230	835	881			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	201	348	541	293
Volume Left	27	0	0	0
Volume Right	0	0	0	22
cSH	881	1700	1700	1700
Volume to Capacity	0.03	0.20	0.32	0.17
Queue Length 95th (m)	0.7	0.0	0.0	0.0
Control Delay (s)	1.5	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.6		0.0	
Approach LOS				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
3: Dufferin Street & Joe Shuster Way

06/22/2022

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	25	60	450	30	80	675
Future Volume (Veh/h)	25	60	450	30	80	675
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	27	65	484	32	86	726
Pedestrians	170		2			5
Lane Width (m)	3.0		3.5			3.5
Walking Speed (m/s)	1.1		1.1			1.1
Percent Blockage	13		0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			301			77
pX, platoon unblocked	0.88					
vC, conflicting volume	1207	433			686	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	957	433			686	
tC, single (s)	*6.0	6.9			4.1	
tC, 2 stage (s)						
tF (s)	*3.0	3.3			2.2	
p0 queue free %	89	87			89	
cM capacity (veh/h)	238	491			787	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	27	65	323	193	328	484
Volume Left	27	0	0	0	86	0
Volume Right	0	65	0	32	0	0
cSH	238	491	1700	1700	787	1700
Volume to Capacity	0.11	0.13	0.19	0.11	0.11	0.28
Queue Length 95th (m)	2.9	3.4	0.0	0.0	2.8	0.0
Control Delay (s)	22.0	13.4	0.0	0.0	3.6	0.0
Lane LOS	C	B			A	
Approach Delay (s)	16.0		0.0		1.5	
Approach LOS	C					

Intersection Summary				
Average Delay		1.9		
Intersection Capacity Utilization	49.7%	ICU Level of Service		A
Analysis Period (min)		15		

* User Entered Value

HCM Unsignalized Intersection Capacity Analysis
5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	0	45	15	0	25	0	420	15	20	670	10
Future Volume (Veh/h)	35	0	45	15	0	25	0	420	15	20	670	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	38	0	48	16	0	27	0	452	16	22	720	11
Pedestrians		35			88			33			3	
Lane Width (m)		3.5			3.5			3.5			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		3			8			3			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								190			189	
pX, platoon unblocked	0.96	0.96	0.96	0.96	0.96		0.96					
vC, conflicting volume	1060	1360	434	1033	1358	325	766			556		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	980	1292	327	951	1290	325	673			556		
tC, single (s)	7.5	6.5	7.2	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.4	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	77	100	92	90	100	96	100			98		
cM capacity (veh/h)	165	137	574	153	138	620	861			941		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	86	43	226	242	382	371
Volume Left	38	16	0	0	22	0
Volume Right	48	27	0	16	0	11
cSH	274	290	861	1700	941	1700
Volume to Capacity	0.31	0.15	0.00	0.14	0.02	0.22
Queue Length 95th (m)	9.9	3.9	0.0	0.0	0.5	0.0
Control Delay (s)	24.0	19.5	0.0	0.0	0.8	0.0
Lane LOS	C	C			A	
Approach Delay (s)	24.0	19.5	0.0		0.4	
Approach LOS	C	C				

Intersection Summary				
Average Delay		2.4		
Intersection Capacity Utilization	51.6%	ICU Level of Service		A
Analysis Period (min)		15		

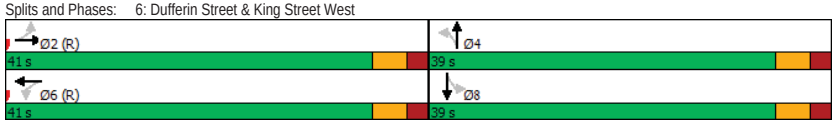
Timings
6: Dufferin Street & King Street West

06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	85	210	35	190	5	275	95	480
Future Volume (vph)	85	210	35	190	5	275	95	480
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
Minimum Split (s)	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5
Total Split (s)	41.0	41.0	41.0	41.0	39.0	39.0	39.0	39.0
Total Split (%)	51.3%	51.3%	51.3%	51.3%	48.8%	48.8%	48.8%	48.8%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
All-Red Time (s)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.5		5.5		5.5		5.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		35.5		35.5		33.5		33.5
Actuated g/C Ratio		0.44		0.44		0.42		0.42
v/c Ratio		0.33		0.30		0.33		0.75
Control Delay		15.1		11.8		14.9		23.4
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		15.1		11.8		14.9		23.4
LOS		B		B		B		C
Approach Delay		15.1		11.8		14.9		23.4
Approach LOS		B		B		B		C

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 27 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 18.1		Intersection LOS: B	
Intersection Capacity Utilization 97.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Dufferin Street & King Street West



Queues
6: Dufferin Street & King Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	359	341	387	829
v/c Ratio	0.33	0.30	0.33	0.75
Control Delay	15.1	11.8	14.9	23.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.1	11.8	14.9	23.4
Queue Length 50th (m)	17.3	12.8	17.9	51.0
Queue Length 95th (m)	26.2	20.9	27.2	70.2
Internal Link Dist (m)	99.8	94.3	85.5	166.1
Turn Bay Length (m)				
Base Capacity (vph)	1086	1147	1175	1110
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.33	0.30	0.33	0.75

Intersection Summary

HCM Signalized Intersection Capacity Analysis
6: Dufferin Street & King Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	210	20	35	190	75	5	275	60	95	480	155
Future Volume (vph)	85	210	20	35	190	75	5	275	60	95	480	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)		5.5			5.5			5.5			5.5	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.98			0.96			0.96			0.98	
Flpb, ped/bikes		0.98			0.98			1.00			0.99	
Frt		0.99			0.96			0.97			0.97	
Flt Protected		0.99			0.99			1.00			0.99	
Satd. Flow (prot)		3141			2826			2915			3115	
Flt Permitted		0.76			0.88			0.94			0.82	
Satd. Flow (perm)		2434			2493			2750			2579	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	97	239	23	40	216	85	6	312	68	108	545	176
RTOR Reduction (vph)	0	6	0	0	41	0	0	23	0	0	30	0
Lane Group Flow (vph)	0	353	0	0	300	0	0	364	0	0	799	0
Confl. Peds. (#/hr)	136		256	256		136	78		189	189		78
Heavy Vehicles (%)	3%	8%	6%	47%	1%	32%	14%	10%	37%	8%	7%	4%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		35.5			35.5			33.5			33.5	
Effective Green, g (s)		35.5			35.5			33.5			33.5	
Actuated g/C Ratio		0.44			0.44			0.42			0.42	
Clearance Time (s)		5.5			5.5			5.5			5.5	
Lane Grp Cap (vph)		1080			1106			1151			1079	
v/s Ratio Prot												
v/s Ratio Perm		c0.15			0.12			0.13			c0.31	
v/c Ratio		0.33			0.27			0.32			0.74	
Uniform Delay, d1		14.5			14.1			15.6			19.6	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.8			0.6			0.7			4.6	
Delay (s)		15.3			14.7			16.3			24.2	
Level of Service		B			B			B			C	
Approach Delay (s)		15.3			14.7			16.3			24.2	
Approach LOS		B			B			B			C	

Intersection Summary				
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.0	
Intersection Capacity Utilization	97.9%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
7: King Street West & Gwynne Avenue

06/22/2022

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	270	350	0	45	90
Future Volume (Veh/h)	0	270	350	0	45	90
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	293	380	0	49	98
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			124			
pX, platoon unblocked						
vC, conflicting volume	380				526	190
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	380				526	190
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				90	88
cM capacity (veh/h)	1190				486	826

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	98	195	253	127	147
Volume Left	0	0	0	0	49
Volume Right	0	0	0	0	98
cSH	1190	1700	1700	1700	670
Volume to Capacity	0.00	0.11	0.15	0.07	0.22
Queue Length 95th (m)	0.0	0.0	0.0	0.0	6.3
Control Delay (s)	0.0	0.0	0.0	0.0	11.9
Lane LOS					B
Approach Delay (s)	0.0		0.0		11.9
Approach LOS					B

Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	24.4%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
8: Gwynne Avenue & Melbourne Avenue 06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	10	25	10	0	0	0	0	0	70	100	0
Future Volume (vph)	0	10	25	10	0	0	0	0	0	70	100	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	12	30	12	0	0	0	0	0	84	120	0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	42	12	0	204
Volume Left (vph)	0	12	0	84
Volume Right (vph)	30	0	0	0
Hadj (s)	-0.38	0.20	0.00	0.16
Departure Headway (s)	4.0	4.6	4.2	4.2
Degree Utilization, x	0.05	0.02	0.00	0.24
Capacity (veh/h)	854	733	838	849
Control Delay (s)	7.2	7.7	7.2	8.5
Approach Delay (s)	7.2	7.7	0.0	8.5
Approach LOS	A	A	A	A

Intersection Summary				
Delay			8.2	
Level of Service			A	
Intersection Capacity Utilization			36.2%	ICU Level of Service
Analysis Period (min)			15	A

HCM Unsignalized Intersection Capacity Analysis
9: Gwynne Avenue & Milky Way 06/22/2022

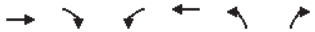
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	70	0	0	0	0	0	0	100	0
Future Volume (Veh/h)	0	0	0	70	0	0	0	0	0	0	100	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	0	0	84	0	0	0	0	0	0	120	0
Pedestrians		25			28			5			9	
Lane Width (m)		3.0			3.0			0.0			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		2			2			0			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	154	173	150	153	173	37	145			28		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	154	173	150	153	173	37	145			28		
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	100	100	89	100	100	100			100		
cM capacity (veh/h)	769	694	884	775	694	1009	1421			1563		

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	0	84	120
Volume Left	0	84	0
Volume Right	0	0	0
cSH	1700	775	1700
Volume to Capacity	0.00	0.11	0.07
Queue Length 95th (m)	0.0	2.8	0.0
Control Delay (s)	0.0	10.2	0.0
Lane LOS	A	B	
Approach Delay (s)	0.0	10.2	0.0
Approach LOS	A	B	

Intersection Summary				
Average Delay			4.2	
Intersection Capacity Utilization			28.6%	ICU Level of Service
Analysis Period (min)			15	A

HCM Unsignalized Intersection Capacity Analysis
10: Gwynne Avenue & Queen Street West

06/22/2022



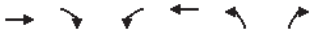
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	680	65	35	350	0	0
Future Volume (Veh/h)	680	65	35	350	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	701	67	36	361	0	0
Pedestrians	1			1	109	
Lane Width (m)	3.5			3.5	0.0	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)				125		
pX, platoon unblocked						
vC, conflicting volume			877		1097	494
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			877		1097	494
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			95		100	100
cM capacity (veh/h)			779		201	526

Direction, Lane #	EB 1	EB 2	WB 1	WB 2
Volume Total	467	301	156	241
Volume Left	0	0	36	0
Volume Right	0	67	0	0
cSH	1700	1700	779	1700
Volume to Capacity	0.27	0.18	0.05	0.14
Queue Length 95th (m)	0.0	0.0	1.1	0.0
Control Delay (s)	0.0	0.0	2.6	0.0
Lane LOS			A	
Approach Delay (s)	0.0		1.0	
Approach LOS				

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	45.8%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
11: Site Driveway (Future) & Milky Way

06/22/2022



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	40	0	70	0
Future Volume (Veh/h)	0	0	40	0	70	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	43	0	76	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		86	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		86	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 %			97		92	100
cM capacity (veh/h)			1636		896	1091

Direction, Lane #	WB 1	NB 1
Volume Total	43	76
Volume Left	43	76
Volume Right	0	0
cSH	1636	896
Volume to Capacity	0.03	0.08
Queue Length 95th (m)	0.6	2.1
Control Delay (s)	7.3	9.4
Lane LOS	A	A
Approach Delay (s)	7.3	9.4
Approach LOS		A

Intersection Summary				
Average Delay	8.6			
Intersection Capacity Utilization	13.9%	ICU Level of Service	A	
Analysis Period (min)	15			

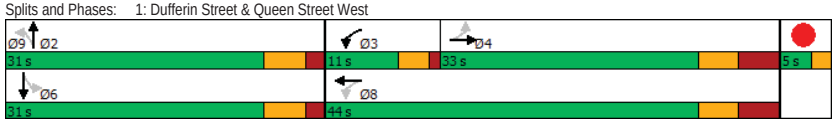
Timings
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	Ø9
Lane Configurations									
Traffic Volume (vph)	65	345	140	580	40	550	45	445	
Future Volume (vph)	65	345	140	580	40	550	45	445	
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	
Protected Phases		4	3	8		2		6	9
Permitted Phases	4		8		2		6		
Detector Phase	4	4	3	8	2	2	6	6	
Switch Phase									
Minimum Initial (s)	25.0	25.0	6.0	25.0	19.0	19.0	19.0	19.0	1.0
Minimum Split (s)	33.0	33.0	10.0	33.0	25.0	25.0	25.0	25.0	3.0
Total Split (s)	33.0	33.0	11.0	44.0	31.0	31.0	31.0	31.0	5.0
Total Split (%)	41.3%	41.3%	13.8%	55.0%	38.8%	38.8%	38.8%	38.8%	6%
Yellow Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	2.0
All-Red Time (s)	4.0	4.0	1.0	4.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0	
Total Lost Time (s)		8.0		8.0		6.0		6.0	
Lead/Lag	Lag	Lag	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes						
Recall Mode	None	None	None	None	Max	Max	Max	Max	None
Act Effct Green (s)		30.6		30.6		25.1		25.1	
Actuated g/C Ratio		0.44		0.44		0.36		0.36	
v/c Ratio		0.50		0.73		0.68		0.58	
Control Delay		14.7		20.6		22.9		21.3	
Queue Delay		0.0		0.0		0.0		0.0	
Total Delay		14.7		20.6		22.9		21.3	
LOS		B		C		C		C	
Approach Delay		14.7		20.6		22.9		21.3	
Approach LOS		B		C		C		C	

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 69.8			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 20.2		Intersection LOS: C	
Intersection Capacity Utilization 103.6%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: Dufferin Street & Queen Street West



Queues
1: Dufferin Street & Queen Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	516	783	727	567
v/c Ratio	0.50	0.73	0.68	0.58
Control Delay	14.7	20.6	22.9	21.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.7	20.6	22.9	21.3
Queue Length 50th (m)	22.4	41.9	40.1	30.1
Queue Length 95th (m)	34.6	60.9	64.4	49.9
Internal Link Dist (m)	100.9	102.5	22.6	84.2
Turn Bay Length (m)				
Base Capacity (vph)	1033	1260	1065	979
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.50	0.62	0.68	0.58

Intersection Summary

HCM Signalized Intersection Capacity Analysis
1: Dufferin Street & Queen Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	345	90	140	580	40	40	550	115	45	445	60
Future Volume (vph)	65	345	90	140	580	40	40	550	115	45	445	60
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			6.0			6.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.95			0.99			0.97			0.97	
Flpb, ped/bikes		0.99			0.98			0.99			1.00	
Frt		0.97			0.99			0.98			0.98	
Flt Protected		0.99			0.99			1.00			1.00	
Satd. Flow (prot)		3141			3222			3277			3256	
Flt Permitted		0.74			0.75			0.89			0.83	
Satd. Flow (perm)		2331			2424			2921			2699	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	67	356	93	144	598	41	41	567	119	46	459	62
RTOR Reduction (vph)	0	19	0	0	5	0	0	19	0	0	11	0
Lane Group Flow (vph)	0	497	0	0	778	0	0	708	0	0	556	0
Confl. Peds. (#/hr)	274		328	328		274	243		139	139		243
Heavy Vehicles (%)	3%	4%	1%	1%	6%	3%	0%	3%	1%	0%	4%	5%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.6			30.6			25.1			25.1	
Effective Green, g (s)		30.6			30.6			25.1			25.1	
Actuated g/C Ratio		0.44			0.44			0.36			0.36	
Clearance Time (s)		8.0			8.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1023			1064			1051			971	
v/s Ratio Prot												
v/s Ratio Perm		0.21			c0.32			c0.24			0.21	
v/c Ratio		0.49			0.73			0.67			0.57	
Uniform Delay, d1		13.9			16.2			18.8			18.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.4			2.6			3.5			2.5	
Delay (s)		14.3			18.8			22.3			20.4	
Level of Service		B			B			C			C	
Approach Delay (s)		14.3			18.8			22.3			20.4	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.79			
Actuated Cycle Length (s)	69.7	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	103.6%	ICU Level of Service	G	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Unsignalized Intersection Capacity Analysis
2: Dufferin Street & Milky Way

06/22/2022

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	50	705	645	30
Future Volume (Veh/h)	0	0	50	705	645	30
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	0	0	51	719	658	31
Pedestrians	74			3	1	
Lane Width (m)	0.0			3.5	3.5	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				332	47	
pX, platoon unblocked	0.89	0.89	0.89			
vC, conflicting volume	1210	422	763			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	982	92	477			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	95			
cM capacity (veh/h)	210	843	971			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	291	479	439	250
Volume Left	51	0	0	0
Volume Right	0	0	0	31
cSH	971	1700	1700	1700
Volume to Capacity	0.05	0.28	0.26	0.15
Queue Length 95th (m)	1.3	0.0	0.0	0.0
Control Delay (s)	2.0	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.8		0.0	
Approach LOS				

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
3: Dufferin Street & Joe Shuster Way 06/22/2022

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	10	85	670	35	75	570
Future Volume (Veh/h)	10	85	670	35	75	570
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	10	87	684	36	77	582
Pedestrians	164					6
Lane Width (m)	3.0					3.5
Walking Speed (m/s)	1.1					1.1
Percent Blockage	13					1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)			301			77
pX, platoon unblocked	0.91	0.99			0.99	
vC, conflicting volume	1311	530			884	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1109	517			873	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	80			89	
cM capacity (veh/h)	144	438			676	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	10	87	456	264	271	388
Volume Left	10	0	0	0	77	0
Volume Right	0	87	0	36	0	0
cSH	144	438	1700	1700	676	1700
Volume to Capacity	0.07	0.20	0.27	0.16	0.11	0.23
Queue Length 95th (m)	1.7	5.6	0.0	0.0	2.9	0.0
Control Delay (s)	31.8	15.3	0.0	0.0	4.1	0.0
Lane LOS	D	C			A	
Approach Delay (s)	17.0		0.0		1.7	
Approach LOS	C					

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	53.1%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access 06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	0	45	20	0	15	5	655	15	20	545	15
Future Volume (Veh/h)	35	0	45	20	0	15	5	655	15	20	545	15
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	36	0	46	20	0	15	5	668	15	20	556	15
Pedestrians		72			138			46			2	
Lane Width (m)		3.7			3.5			3.5			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		7			13			4			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								190			189	
pX, platoon unblocked	0.94	0.94		0.94	0.94	0.94				0.94		
vC, conflicting volume	1036	1506	404	1234	1506	482	643			821		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	907	1408	404	1117	1408	316	643			678		
tC, single (s)	7.5	6.5	6.9	7.6	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	78	100	91	79	100	97	99			97		
cM capacity (veh/h)	165	103	536	95	103	560	884			756		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	82	35	339	349	298	293
Volume Left	36	20	5	0	20	0
Volume Right	46	15	0	15	0	15
cSH	270	147	884	1700	756	1700
Volume to Capacity	0.30	0.24	0.01	0.21	0.03	0.17
Queue Length 95th (m)	9.4	6.7	0.1	0.0	0.6	0.0
Control Delay (s)	24.0	37.0	0.2	0.0	1.0	0.0
Lane LOS	C	E	A		A	
Approach Delay (s)	24.0	37.0	0.1		0.5	
Approach LOS	C	E				

Intersection Summary				
Average Delay	2.6			
Intersection Capacity Utilization	49.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Timings
6: Dufferin Street & King Street West

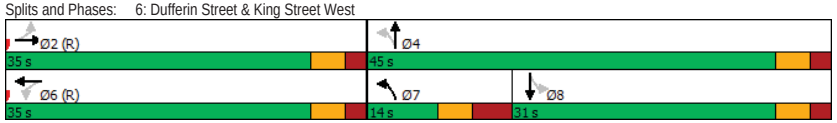
06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	85	180	35	260	35	500	90	400
Future Volume (vph)	85	180	35	260	35	500	90	400
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		2		6	7	4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	7	4	8	8
Switch Phase								
Minimum Initial (s)	23.0	23.0	23.0	23.0	6.0	23.0	23.0	23.0
Minimum Split (s)	28.5	28.5	28.5	28.5	13.2	28.5	28.5	28.5
Total Split (s)	35.0	35.0	35.0	35.0	14.0	45.0	31.0	31.0
Total Split (%)	43.8%	43.8%	43.8%	43.8%	17.5%	56.3%	38.8%	38.8%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
All-Red Time (s)	2.2	2.2	2.2	2.2	3.9	2.2	2.2	2.2
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.5		5.5		5.5		5.5
Lead/Lag					Lead		Lag	Lag
Lead-Lag Optimize?					Yes		Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		29.5		29.5		39.5		25.5
Actuated g/C Ratio		0.37		0.37		0.49		0.32
v/c Ratio		0.34		0.39		0.40		0.80
Control Delay		19.1		17.1		13.2		32.5
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		19.1		17.1		13.2		32.5
LOS		B		B		B		C
Approach Delay		19.1		17.1		13.2		32.5
Approach LOS		B		B		B		C

Intersection Summary

Cycle Length: 80
Actuated Cycle Length: 80
Offset: 27 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 21.3 — Intersection LOS: C
Intersection Capacity Utilization 95.0% — ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 6: Dufferin Street & King Street West



Queues
6: Dufferin Street & King Street West

06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	289	397	587	629
v/c Ratio	0.34	0.39	0.40	0.80
Control Delay	19.1	17.1	13.2	32.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	19.1	17.1	13.2	32.5
Queue Length 50th (m)	15.8	19.3	26.8	42.7
Queue Length 95th (m)	25.5	30.6	37.8	#68.8
Internal Link Dist (m)	99.8	94.3	85.5	166.1
Turn Bay Length (m)				
Base Capacity (vph)	854	1021	1476	787
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.34	0.39	0.40	0.80

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
6: Dufferin Street & King Street West

06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	180	15	35	260	90	35	500	35	90	400	120
Future Volume (vph)	85	180	15	35	260	90	35	500	35	90	400	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)		5.5			5.5			5.5			5.5	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frpb, ped/bikes		0.99			0.94			0.99			0.97	
Flpb, ped/bikes		0.96			0.99			1.00			0.99	
Frt		0.99			0.96			0.99			0.97	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		3087			2955			3262			3118	
Flt Permitted		0.73			0.90			0.89			0.76	
Satd. Flow (perm)		2303			2673			2898			2387	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	88	186	15	36	268	93	36	515	36	93	412	124
RTOR Reduction (vph)	0	5	0	0	36	0	0	6	0	0	27	0
Lane Group Flow (vph)	0	284	0	0	361	0	0	581	0	0	602	0
Confl. Peds. (#/hr)	245		232	232		245	113		219	219		113
Heavy Vehicles (%)	4%	8%	6%	32%	2%	13%	0%	5%	32%	0%	9%	0%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		2			6		7	4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		29.5			29.5			39.5			25.5	
Effective Green, g (s)		29.5			29.5			39.5			25.5	
Actuated g/C Ratio		0.37			0.37			0.49			0.32	
Clearance Time (s)		5.5			5.5			5.5			5.5	
Lane Grp Cap (vph)		849			985			1461			760	
v/s Ratio Prot								c0.03				
v/s Ratio Perm		0.12			c0.14			0.16			c0.25	
v/c Ratio		0.33			0.37			0.40			0.79	
Uniform Delay, d1		18.2			18.4			12.8			24.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.1			1.1			0.8			8.3	
Delay (s)		19.2			19.5			13.6			33.1	
Level of Service		B			B			B			C	
Approach Delay (s)		19.2			19.5			13.6			33.1	
Approach LOS		B			B			B			C	

Intersection Summary				
HCM 2000 Control Delay	22.1	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.57			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.2	
Intersection Capacity Utilization	95.0%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
7: King Street West & Gwynne Avenue

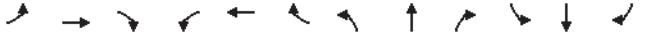
06/22/2022

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	245	415	0	35	90
Future Volume (Veh/h)	0	245	415	0	35	90
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	266	451	0	38	98
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			124			
pX, platoon unblocked						
vC, conflicting volume	451				584	226
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	451				584	226
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				92	87
cM capacity (veh/h)	1120				447	784

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	89	177	301	150	136
Volume Left	0	0	0	0	38
Volume Right	0	0	0	0	98
cSH	1120	1700	1700	1700	648
Volume to Capacity	0.00	0.10	0.18	0.09	0.21
Queue Length 95th (m)	0.0	0.0	0.0	0.0	6.0
Control Delay (s)	0.0	0.0	0.0	0.0	12.0
Lane LOS					B
Approach Delay (s)	0.0		0.0		12.0
Approach LOS					B

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	25.6%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
8: Gwynne Avenue & Melbourne Avenue 06/22/2022

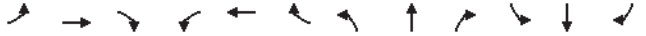


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	15	20	20	0	0	0	0	0	65	85	0
Future Volume (vph)	0	15	20	20	0	0	0	0	0	65	85	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	0	18	24	24	0	0	0	0	0	77	101	0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	42	24	0	178
Volume Left (vph)	0	24	0	77
Volume Right (vph)	24	0	0	0
Hadj (s)	-0.34	0.20	0.00	0.10
Departure Headway (s)	4.0	4.5	4.2	4.1
Degree Utilization, x	0.05	0.03	0.00	0.20
Capacity (veh/h)	860	757	836	854
Control Delay (s)	7.2	7.7	7.2	8.2
Approach Delay (s)	7.2	7.7	0.0	8.2
Approach LOS	A	A	A	A

Intersection Summary				
Delay			8.0	
Level of Service			A	
Intersection Capacity Utilization			39.2%	ICU Level of Service
Analysis Period (min)			15	A

HCM Unsignalized Intersection Capacity Analysis
9: Gwynne Avenue & Milky Way 06/22/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	55	0	0	0	0	0	0	95	5
Future Volume (Veh/h)	0	0	0	55	0	0	0	0	0	0	95	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	0	0	0	62	0	0	0	0	0	0	108	6
Pedestrians		35			39			11			22	
Lane Width (m)		3.0			3.0			0.0			3.5	
Walking Speed (m/s)		1.1			1.1			1.1			1.1	
Percent Blockage		3			3			0			2	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	168	185	157	161	188	61	149			39		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	168	185	157	161	188	61	149			39		
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	100	100	92	100	100	100			100		
cM capacity (veh/h)	729	672	869	749	669	959	1405			1535		

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	0	62	114
Volume Left	0	62	0
Volume Right	0	0	6
cSH	1700	749	1700
Volume to Capacity	0.00	0.08	0.07
Queue Length 95th (m)	0.0	2.1	0.0
Control Delay (s)	0.0	10.2	0.0
Lane LOS	A	B	
Approach Delay (s)	0.0	10.2	0.0
Approach LOS	A	B	

Intersection Summary				
Average Delay			3.6	
Intersection Capacity Utilization			30.6%	ICU Level of Service
Analysis Period (min)			15	A

HCM Unsignalized Intersection Capacity Analysis
10: Gwynne Avenue & Queen Street West

06/22/2022

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	500	50	50	630	0	0
Future Volume (Veh/h)	500	50	50	630	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	515	52	52	649	0	0
Pedestrians	9			2	220	
Lane Width (m)	3.5			3.5	0.0	
Walking Speed (m/s)	1.1			1.1	1.1	
Percent Blockage	1			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (m)				125		
pX, platoon unblocked					0.88	
vC, conflicting volume			787		1198	506
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			787		950	506
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			94		100	100
cM capacity (veh/h)			828		214	516

Direction, Lane #	EB 1	EB 2	WB 1	WB 2
Volume Total	343	224	268	433
Volume Left	0	0	52	0
Volume Right	0	52	0	0
cSH	1700	1700	828	1700
Volume to Capacity	0.20	0.13	0.06	0.25
Queue Length 95th (m)	0.0	0.0	1.5	0.0
Control Delay (s)	0.0	0.0	2.4	0.0
Lane LOS			A	
Approach Delay (s)	0.0		0.9	
Approach LOS				

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	49.0%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
11: Site Driveway (Future) & Milky Way

06/22/2022

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	70	10	45	0
Future Volume (Veh/h)	0	0	70	10	45	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	76	11	49	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		163	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		163	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 %			95		94	100
cM capacity (veh/h)			1636		794	1091

Direction, Lane #	WB 1	NB 1
Volume Total	87	49
Volume Left	76	49
Volume Right	0	0
cSH	1636	794
Volume to Capacity	0.05	0.06
Queue Length 95th (m)	1.1	1.5
Control Delay (s)	6.4	9.8
Lane LOS	A	A
Approach Delay (s)	6.4	9.8
Approach LOS		A

Intersection Summary				
Average Delay	7.7			
Intersection Capacity Utilization	14.4%	ICU Level of Service	A	
Analysis Period (min)	15			

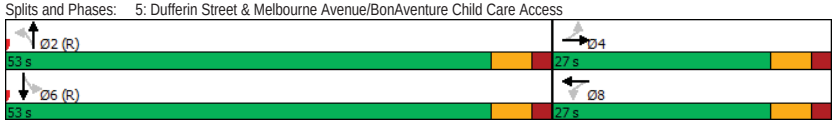
Timings with new signal

5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access 06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	10	0	15	0	405	20	670
Future Volume (vph)	10	0	15	0	405	20	670
Turn Type	Perm	NA	Perm	NA	NA	Perm	NA
Protected Phases		4		8	2		6
Permitted Phases	4		8			6	
Detector Phase	4	4	8	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	27.0	27.0	27.0	27.0	53.0	53.0	53.0
Total Split (%)	33.8%	33.8%	33.8%	33.8%	66.3%	66.3%	66.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0		0.0
Total Lost Time (s)		6.0		6.0	6.0		6.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		21.0		21.0	47.0		47.0
Actuated g/C Ratio		0.26		0.26	0.59		0.59
v/c Ratio		0.07		0.10	0.24		0.41
Control Delay		5.4		8.8	4.8		9.8
Queue Delay		0.0		0.0	0.0		0.0
Total Delay		5.4		8.8	4.8		9.8
LOS		A		A	A		A
Approach Delay		5.4		8.8	4.8		9.8
Approach LOS		A		A	A		A

Intersection Summary		
Cycle Length: 80		
Actuated Cycle Length: 80		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 50		
Control Type: Pretimed		
Maximum v/c Ratio: 0.41		
Intersection Signal Delay: 7.9	Intersection LOS: A	
Intersection Capacity Utilization 58.3%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access



Queues with new signal

5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access 06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	27	43	451	753
v/c Ratio	0.07	0.10	0.24	0.41
Control Delay	5.4	8.8	4.8	9.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.4	8.8	4.8	9.8
Queue Length 50th (m)	0.0	0.2	7.1	29.7
Queue Length 95th (m)	4.0	7.4	13.2	40.8
Internal Link Dist (m)	99.8	13.1	166.1	38.8
Turn Bay Length (m)				
Base Capacity (vph)	400	431	1843	1827
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.07	0.10	0.24	0.41

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	15	15	0	25	0	405	15	20	670	10
Future Volume (vph)	10	0	15	15	0	25	0	405	15	20	670	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.7	3.5	3.7	3.0	3.5	3.7	3.7	3.5	3.0
Total Lost time (s)		6.0			6.0			6.0			6.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		0.97			0.99			0.99			1.00	
Flpb, ped/bikes		1.00			0.98			1.00			1.00	
Frt		0.92			0.92			0.99			1.00	
Flt Protected		0.98			0.98			1.00			1.00	
Satd. Flow (prot)		1519			1645			3132			3319	
Flt Permitted		0.91			0.91			1.00			0.93	
Satd. Flow (perm)		1412			1530			3132			3106	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	0	16	16	0	27	0	435	16	22	720	11
RTOR Reduction (vph)	0	20	0	0	30	0	0	3	0	0	1	0
Lane Group Flow (vph)	0	7	0	0	13	0	0	448	0	0	752	0
Confl. Peds. (#/hr)	3		33	33		3	35		88	88		35
Heavy Vehicles (%)	0%	0%	13%	0%	0%	0%	0%	13%	0%	0%	7%	0%
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		21.0			21.0			47.0			47.0	
Effective Green, g (s)		21.0			21.0			47.0			47.0	
Actuated g/C Ratio		0.26			0.26			0.59			0.59	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		370			401			1840			1824	
v/s Ratio Prot								0.14				
v/s Ratio Perm		0.01			c0.01						c0.24	
v/c Ratio		0.02			0.03			0.24			0.41	
Uniform Delay, d1		21.9			21.9			7.9			9.0	
Progression Factor		1.00			1.00			0.57			1.00	
Incremental Delay, d2		0.1			0.1			0.3			0.7	
Delay (s)		22.0			22.1			4.8			9.7	
Level of Service		C			C			A			A	
Approach Delay (s)		22.0			22.1			4.8			9.7	
Approach LOS		C			C			A			A	

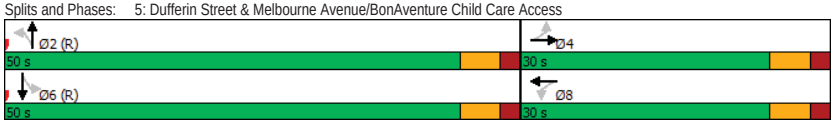
Intersection Summary				
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	20	0	20	0	5	610	20	545
Future Volume (vph)	20	0	20	0	5	610	20	545
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	30.0	30.0	30.0	30.0	50.0	50.0	50.0	50.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	62.5%	62.5%	62.5%	62.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		6.0		6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		24.0		24.0		44.0		44.0
Actuated g/C Ratio		0.30		0.30		0.55		0.55
v/c Ratio		0.09		0.08		0.37		0.35
Control Delay		8.5		6.6		9.3		10.7
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		8.5		6.6		9.3		10.7
LOS		A		A		A		B
Approach Delay		8.5		6.6		9.3		10.7
Approach LOS		A		A		A		B

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 9.8		Intersection LOS: A	
Intersection Capacity Utilization 55.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access



Queues with new signal

5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access 06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	46	35	642	591
v/c Ratio	0.09	0.08	0.37	0.35
Control Delay	8.5	6.6	9.3	10.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	8.5	6.6	9.3	10.7
Queue Length 50th (m)	0.5	0.0	35.8	24.1
Queue Length 95th (m)	7.5	5.4	51.3	34.2
Internal Link Dist (m)	99.8	15.9	166.1	38.8
Turn Bay Length (m)				
Base Capacity (vph)	486	459	1727	1693
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.09	0.08	0.37	0.35

Intersection Summary

HCM Signalized Intersection Capacity Analysis with new signal

5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access 06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	0	25	20	0	15	5	610	15	20	545	15
Future Volume (vph)	20	0	25	20	0	15	5	610	15	20	545	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.7	3.0	3.7	3.5	3.7	3.0	3.5	3.7	3.7	3.5	3.0
Total Lost time (s)		6.0			6.0			6.0			6.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		0.96			0.99			0.99			1.00	
Flpb, ped/bikes		1.00			0.97			1.00			1.00	
Frt		0.92			0.94			1.00			1.00	
Flt Protected		0.98			0.97			1.00			1.00	
Satd. Flow (prot)		1664			1608			3298			3323	
Flt Permitted		0.90			0.87			0.95			0.92	
Satd. Flow (perm)		1526			1435			3138			3075	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	20	0	26	20	0	15	5	622	15	20	556	15
RTOR Reduction (vph)	0	29	0	0	25	0	0	2	0	0	2	0
Lane Group Flow (vph)	0	17	0	0	11	0	0	640	0	0	589	0
Confl. Peds. (#/hr)	2		46	46		2	72		138	138		72
Heavy Vehicles (%)	0%	0%	0%	5%	0%	0%	0%	7%	8%	0%	6%	11%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		24.0			24.0			44.0			44.0	
Effective Green, g (s)		24.0			24.0			44.0			44.0	
Actuated g/C Ratio		0.30			0.30			0.55			0.55	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		457			430			1725			1691	
v/s Ratio Prot												
v/s Ratio Perm		c0.01			0.01			c0.20			0.19	
v/c Ratio		0.04			0.02			0.37			0.35	
Uniform Delay, d1		19.8			19.7			10.2			10.0	
Progression Factor		1.00			1.00			0.85			1.00	
Incremental Delay, d2		0.2			0.1			0.6			0.6	
Delay (s)		20.0			19.8			9.3			10.6	
Level of Service		B			B			A			B	
Approach Delay (s)		20.0			19.8			9.3			10.6	
Approach LOS		B			B			A			B	

Intersection Summary					
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.25				
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0		
Intersection Capacity Utilization	55.3%	ICU Level of Service	B		
Analysis Period (min)	15				

c Critical Lane Group

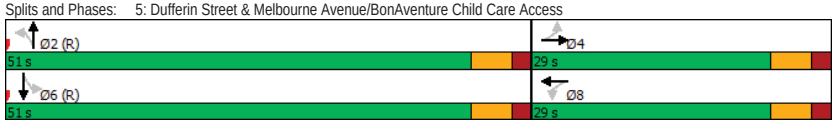
Timings with new signal

5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access 06/22/2022

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	35	0	15	0	420	20	670
Future Volume (vph)	35	0	15	0	420	20	670
Turn Type	Perm	NA	Perm	NA	NA	Perm	NA
Protected Phases		4		8	2		6
Permitted Phases	4		8			6	
Detector Phase	4	4	8	8	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	29.0	29.0	29.0	29.0	51.0	51.0	51.0
Total Split (%)	36.3%	36.3%	36.3%	36.3%	63.8%	63.8%	63.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0	0.0		0.0
Total Lost Time (s)		6.0		6.0	6.0		6.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		23.0		23.0	45.0		45.0
Actuated g/C Ratio		0.29		0.29	0.56		0.56
v/c Ratio		0.20		0.09	0.27		0.43
Control Delay		12.8		8.2	6.7		11.0
Queue Delay		0.0		0.0	0.0		0.0
Total Delay		12.8		8.2	6.7		11.0
LOS		B		A	A		B
Approach Delay		12.8		8.2	6.7		11.0
Approach LOS		B		A	A		B

Intersection Summary		
Cycle Length: 80		
Actuated Cycle Length: 80		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 50		
Control Type: Pretimed		
Maximum v/c Ratio: 0.43		
Intersection Signal Delay: 9.6	Intersection LOS: A	
Intersection Capacity Utilization 58.3%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access



Queues with new signal

5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access 06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	86	43	468	753
v/c Ratio	0.20	0.09	0.27	0.43
Control Delay	12.8	8.2	6.7	11.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	12.8	8.2	6.7	11.0
Queue Length 50th (m)	4.2	0.2	10.1	31.8
Queue Length 95th (m)	14.3	7.1	16.1	43.9
Internal Link Dist (m)	99.8	13.1	166.1	38.8
Turn Bay Length (m)				
Base Capacity (vph)	426	463	1765	1747
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.20	0.09	0.27	0.43

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	0	45	15	0	25	0	420	15	20	670	10
Future Volume (vph)	35	0	45	15	0	25	0	420	15	20	670	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.7	3.5	3.7	3.0	3.5	3.7	3.7	3.5	3.0
Total Lost time (s)		6.0			6.0			6.0			6.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		0.97			0.99			0.99			1.00	
Flpb, ped/bikes		1.00			0.99			1.00			1.00	
Frt		0.92			0.92			0.99			1.00	
Flt Protected		0.98			0.98			1.00			1.00	
Satd. Flow (prot)		1533			1647			3133			3319	
Flt Permitted		0.87			0.90			1.00			0.93	
Satd. Flow (perm)		1363			1512			3133			3104	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	38	0	48	16	0	27	0	452	16	22	720	11
RTOR Reduction (vph)	0	34	0	0	29	0	0	3	0	0	1	0
Lane Group Flow (vph)	0	52	0	0	14	0	0	465	0	0	752	0
Confl. Peds. (#/hr)	3		33	33		3	35		88	88		35
Heavy Vehicles (%)	0%	0%	13%	0%	0%	0%	0%	13%	0%	0%	7%	0%
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0			45.0			45.0	
Effective Green, g (s)		23.0			23.0			45.0			45.0	
Actuated g/C Ratio		0.29			0.29			0.56			0.56	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		391			434			1762			1746	
v/s Ratio Prot								0.15				
v/s Ratio Perm		c0.04			0.01						c0.24	
v/c Ratio		0.13			0.03			0.26			0.43	
Uniform Delay, d1		21.1			20.5			9.0			10.1	
Progression Factor		1.00			1.00			0.71			1.00	
Incremental Delay, d2		0.7			0.1			0.4			0.8	
Delay (s)		21.8			20.6			6.7			10.9	
Level of Service		C			C			A			B	
Approach Delay (s)		21.8			20.6			6.7			10.9	
Approach LOS		C			C			A			B	

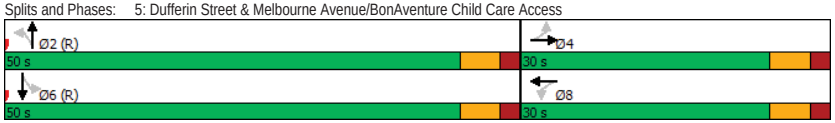
Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	35	0	20	0	5	655	20	545
Future Volume (vph)	35	0	20	0	5	655	20	545
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	30.0	30.0	30.0	30.0	50.0	50.0	50.0	50.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	62.5%	62.5%	62.5%	62.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		6.0		6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		24.0		24.0		44.0		44.0
Actuated g/C Ratio		0.30		0.30		0.55		0.55
v/c Ratio		0.17		0.08		0.40		0.35
Control Delay		12.1		6.6		9.3		10.7
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		12.1		6.6		9.3		10.7
LOS		B		A		A		B
Approach Delay		12.1		6.6		9.3		10.7
Approach LOS		B		A		A		B

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 10.0		Intersection LOS: A	
Intersection Capacity Utilization 55.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access



Queues with new signal

5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access 06/22/2022

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	82	35	688	591
v/c Ratio	0.17	0.08	0.40	0.35
Control Delay	12.1	6.6	9.3	10.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	12.1	6.6	9.3	10.7
Queue Length 50th (m)	3.9	0.0	39.0	24.2
Queue Length 95th (m)	13.5	5.4	55.1	34.2
Internal Link Dist (m)	99.8	15.9	166.1	38.8
Turn Bay Length (m)				
Base Capacity (vph)	479	453	1729	1688
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.17	0.08	0.40	0.35

Intersection Summary

HCM Signalized Intersection Capacity Analysis with new signal

5: Dufferin Street & Melbourne Avenue/BonAventure Child Care Access 06/22/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	0	45	20	0	15	5	655	15	20	545	15
Future Volume (vph)	35	0	45	20	0	15	5	655	15	20	545	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.7	3.0	3.7	3.5	3.7	3.0	3.5	3.7	3.7	3.5	3.0
Total Lost time (s)		6.0			6.0			6.0			6.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		0.96			0.99			0.99			1.00	
Flpb, ped/bikes		1.00			0.97			1.00			1.00	
Frt		0.92			0.94			1.00			1.00	
Flt Protected		0.98			0.97			1.00			1.00	
Satd. Flow (prot)		1665			1611			3300			3325	
Flt Permitted		0.88			0.85			0.95			0.92	
Satd. Flow (perm)		1493			1416			3141			3068	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	36	0	46	20	0	15	5	668	15	20	556	15
RTOR Reduction (vph)	0	32	0	0	25	0	0	2	0	0	2	0
Lane Group Flow (vph)	0	50	0	0	11	0	0	686	0	0	589	0
Confl. Peds. (#/hr)	2		46	46		2	72		138	138		72
Heavy Vehicles (%)	0%	0%	0%	5%	0%	0%	0%	7%	8%	0%	6%	11%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		24.0			24.0			44.0			44.0	
Effective Green, g (s)		24.0			24.0			44.0			44.0	
Actuated g/C Ratio		0.30			0.30			0.55			0.55	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		447			424			1727			1687	
v/s Ratio Prot												
v/s Ratio Perm		c0.03			0.01			c0.22			0.19	
v/c Ratio		0.11			0.02			0.40			0.35	
Uniform Delay, d1		20.3			19.7			10.4			10.0	
Progression Factor		1.00			1.00			0.83			1.00	
Incremental Delay, d2		0.5			0.1			0.6			0.6	
Delay (s)		20.8			19.9			9.2			10.6	
Level of Service		C			B			A			B	
Approach Delay (s)		20.8			19.9			9.2			10.6	
Approach LOS		C			B			A			B	

Intersection Summary					
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.30				
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0		
Intersection Capacity Utilization	55.3%	ICU Level of Service	B		
Analysis Period (min)	15				

c Critical Lane Group